ELISA E. KONOFAGOU, Ph.D.

Robert and Margaret Hariri Professor of Biomedical Engineering
Professor of Radiology (Physics)
Columbia University

WORK ADDRESS:
Department of Biomedical Engineering
351 Engineering Terrace, Mail Code 8904
1210 Amsterdam Avenue
New York, NY 10027
Tel: 212-342-0863, 212-854-9661
Fax: 212-342-5773
E-mail: ek2191@columbia.edu
Website: https://ueil.bme.columbia.edu/

HOME ADDRESS:
130 West 67th Street
Apt. 16A
New York, NY 10023
Tel: 917-476-8804

A. FIELD OF SPECIALIZATION

My topics of research are as follows: Ultrasound imaging, ultrasound therapy, elasticity imaging, signal and image processing, soft tissue mechanics.

My research program has four main focus areas:

1) Development of novel elasticity imaging techniques for the noninvasive early detection and screening of the early onset of cardiovascular disease and myocardial infarction.

2) Unveiling the mechanism of ultrasound-induced opening of the blood-brain barrier for facilitation of noninvasive and localized brain drug delivery.

3) Design and implementation of an all-ultrasound system for both detection, monitoring and generation of ablative therapy for noninvasive, extracorporeal tumor treatment.

4) Pioneering Electromechanical Wave Imaging and Pulse Wave Imaging for mapping spontaneously generated waves in the heart and vessels of humans for assessment of mechanical and electrical properties of tissues.

5) Pioneering novel methodologies for noninvasive and deep brain stimulation as well as peripheral nerve modulation for the treatment of psychiatric and motor neuron diseases.

B.1. Universities attended and degrees obtained

- May 1992 *Université de Pierre et Marie Curie, Paris VI, Paris, France*
  - ***B.S. in Chemical Physics***

- October 1993 *Imperial College of Science, Engineering and Medicine,*
  - *University of London, London, UK.*
  - ***M.S. in Biomedical Engineering***

- August 1999 *University of Texas Heath Sciences Center and University of Houston, Houston, TX, USA.*
  - ***Ph.D. in Biomedical Engineering***

B.2. Dissertation title, whether published, and name of sponsor

- B.S. thesis title (not published): Concentrational dependence of adenosine 5'-monophosphate self-association studied by Raman spectroscopy. Sponsor: P. Turpin, Ph.D.
- M.S. dissertation title (published): Edge-detection techniques in echocardiography of premature newborn infants. Sponsors: M.J. Lever, Ph.D. and S. Bignall, M.D.
- Ph.D. dissertation title (published): Estimation and Imaging of Three-dimensional Motion and Poisson's Ratio in Elastography. Sponsor: J. Ophir, Ph.D.

B.3. Honors and fellowships received, society memberships

- ***Major honors and awards:***
- Graduate student achievement award, Sigma Xi society-UH chapter, April 1999.
- RWB Stephens Student prize, Joint Ultrasound International Meeting and World Conference in Ultrasound, Copenhagen, Denmark, June 1999.
- Distinguished Contribution, The BF Goodrich Collegiate Inventors Program, 1999 National Competition with Jonathan Ophir.
- Best Non-Clinical Paper Award, Journal of Ultrasound in Medicine and Biology in 1998 from the World Federation of Ultrasound in Medicine and Biology (WFUMB), February 2000.
- Young Investigator Award, Acoustical Society of America, May 2002.
- Wallace H. Coulter Early Career Award, June 2005.
- New Investigator Award, American Institute of Ultrasound in Medicine (AIUM), Washington, DC, March 2006.
- National Science Foundation Career Award, June 2007.
- Wallace H. Coulter Early Career Award (Phase 2), June 2007.
- National Institutes of Health - National Institute of Biomedical Imaging and Bioengineering (NIBIB) Nagy Award, June 2007.
- Nominated for the 2006 World Technology Award in 'Health and Medicine', 2006 World Technology Summit, San Francisco, CA, Nov. 2006.
- Nominated for the Presidential Early Career Award in Science and Engineering (PECASE) by the National Institutes of Health (NIH), 2006.
- Nominated for the Presidential Early Career Award in Science and Engineering (PECASE) by the National Science Foundation (NSF), 2007.
- Fulbright Award as mentor to Asawinee Danpinid, Chiang Mai University, Thailand, January 2008.
- Diversity Research Fellowship Award, Columbia University, January 2008.
- New Investigator Award, American Institute of Ultrasound in Medicine (AIUM), New York, NY, March 2009 (with Wei-Ning Lee).
- Coulter Fellow Award, Wallace H. Coulter Foundation, August 2009.
- Fred Lizzi Early Career Award, International Society of Therapeutic Ultrasound (ISTU), Sept. 2009.
- Nominated for the Marcy Speer Award, National Institutes of Health, 2009
- Elected to the Board of Governors, American Institute of Ultrasound In Medicine, 2012.
- Elected fellow, American Institute for Medical and Biological Engineering (AIMBE), 2014
- Invited Moderator and Organizer, Biomedical Imaging Session, Japan-USA, 2014

- Frontiers of Engineering (JAFOE), National Academy of Engineering, Tokyo, Japan, 2014.
- Award for Best Paper published in the Artery Research journal (with Danial Shahmirzadi), 2014.
- Honored Paper in Computers in Biology and Medicine (with Jean Provost), 2015.
- Elected fellow, Acoustical Society of America, 2017.
- Bodossaki Distinguished Young Scientist Award in Applied Science, Bodossaki Foundation, 2017.
- IEEE Carl Hellmuth Hertz Ultrasonics Award (2018)
- Fulbright Senior Faculty Award (2019)
- Janette and Armen Avanessians Diversity Award (2019)
- Elisabeth Papazoglou Inspired Leadership Award (2019)
- IEEE EMBS Technological Achievement award (2019)
- Zagzebski-Carson Distinguished Lectureship Award (2021)
- U.S. National Academy of Medicine election (2021)
- IEEE Fellow election (2021)
- President of the Focused Ultrasound Symposium (2022)

- ***Invitations from outside Columbia University:***
- Plenary lecturer at the Imaging Viscoelastic Phenomena, Allerton Conference for Ultrasonics in Biophysics and Bioengineering, University of Illinois - Urbana Champaign, Urbana, IL, June 2001.
- Seminar lecturer, Department of Biomedical Engineering, University of Rochester, March 2002.
- Seminar lecturer, Department of Electrical Engineering, George Washington University, April 2002.
- Seminar lecturer, Department of Biomedical Engineering, Duke University, April 2002.
- Seminar lecturer, Siemens Medical Ultrasound Group, Issaquah, WA, May 2002.
- Seminar lecturer, Philips Medical Systems, White Plains, NY, June 2002.
- Seminar lecturer, Department of Biomedical Engineering, Pennsylvania State University, June 2002.
- Seminar lecturer, School of Biomedical Engineering, Science and Health Systems, Drexel University, April 2003.
- Seminar lecturer, Siemens Medical Imaging, Princeton, NJ, July 2004.
- Seminar lecturer, Department of Applied Mathematics, University of Crete, Greece, October 2004.
- SIAM conference, New Orleans, LA, USA, July 2005.
- Department of Mechanical Engineering, Chiang Mai University, Chiang Mai, Thailand, August 2005.
- Department of Mechanical Engineering, University of Houston, Houston, Texas, October 2005.
- Tutorial instructor on 'Latest Advances in Medical Ultrasonics', IEEE Conference of the International Society of Biomedical Imaging (ISBI), April 2006.
- Department of Mechanical Engineering, Rutgers University, April 2006.
- Department of Biomedical Engineering, University of Patras, Patras, Greece, July 2006.
- Invited speaker, 5th International Conference on Ultrasonic Biomedical Microscanning, Corsica, France, Sept 2006.
- Invited lecturer, International Congress in Ultrasonics, Technical University of Vienna, Austria, April 2007.
- Invited lecturer at the 'Advances in Medical Imaging Techniques, Applications,

and Target Organs: The Four Dimensional Future' by the New York Academy of Science, New York, April 19-20, 2007.

- Invited speaker on the 'Noninvasive and reversible opening of the blood-brain barrier using focused ultrasound' at Leading Edge Symposium in Atlantic City, NJ, May 2007.
- Invited lecturer, State-of-the-art workshop on 'Integration of Minimally Invasive Energy Transfer Modalities for Parkinson's Disease' organized by Andrew Grove (Intel founder), Kinetics foundation, Stanford University, July 2007.
- Invited lecturer, Dept. of Biomedical Engineering, City College of New York, New York, NY, September 2007.
- Plenary co-lecturer, IEEE-UFFC 2007 Conference in New York, NY (with Van C. Mow), October 2007.
- Invited lecturer, Dept. of Electrical Engineering, University of Illinois at Urbana-Champaign, November 2007.
- Invited lecturer, Drug Delivery Workshop in Parkinson's disease, M.J. Fox Foundation, Palo Alto, CA, January 2008.
- American Institute for Medical and Biological Engineering (AIMBE), The Next Best Innovation: Leading Innovations, Technology Transfer, Entrepreneurship and the Future of Medical and Biological Engineering, Washington, D.C., February 2008.
- Symposium on Bio- and Nano- Electronics 2008, Sendai, Japan, March 2008.
- Invited speaker, Joint Acoustical Society of America and Euroacoustics Meeting, Paris, France, July 2008.
- Invited speaker, 4th International Summer School on Emerging Technologies in Biomedicine, Patras, Greece, July 2008.
- Invited speaker, Applications of Ultrasound to Biomechanical Imaging, SIAM Life Sciences meeting, Montreal, Canada, August 2008.
- Invited speaker, Ultrasound Biomicroscopy meeting, Pasadena, CA, September 2008.
- Invited lecturer, Fall Seminar Series, Brain and Cognitive Sciences department, MIT, Cambridge, MA, October 2008.
- Invited lecturer, EHRLICH II, 2nd World Conference on Magic Bullets, Nurnberg, Germany, October 2008.
- Invited lecturer, "New Trends in Ultrasound Imaging" session, International Congress on Acoustics, Santiago, Chile, January 2009.
- Invited categorical course instructor, "Elastography - What is Elastography or How Elastography Works", American Institute of Ultrasound in Medicine, New York, NY, April 2009.
- Invited panel session speaker, International Symposium on Biomedical Simulation (ISBMS10), Phoenix, AZ, January 2010.
- Invited categorical course instructor, "Ultrasound Therapy: From Theory to Applications", American Institute of Ultrasound in Medicine, San Diego, CA, March 2010.
- Invited workshop instructor, "Principles of Ultrasound Imaging", International Society of Biomedical Imaging, Rotterdam, Netherlands, April 2010.
- Invited lecturer, 'Special Session Cellular Bioeffects' session, Acoustical Society of America Meeting, Baltimore, MD, April 2010.
- Invited speaker, Monitoring of HIFU, International Society of Therapeutic Ultrasound (ISTU), Tokyo, Japan, June 2010.
- Invited speaker, Mechanistic Visco-Elastic Modeling of Biological Systems, SIAM Life Sciences meeting, Pittsburgh, PA, July 2010.
- Invited lecturer at Université de Montreal and Ecole Polytechnique de Montreal, Sept. 2010.

- Invited speaker, High frequency imaging session, American Institute of Ultrasound in Medicine, New York, NY, April 2011.
- Invited speaker, IP/RPI workshop on Biomechanical Imaging, Rensselaer Polytechnic Institute, Rensselaer, NY, April 2011.
- Invited speaker, Acoustical Society of America Meeting, Seattle, WA, May 2011.
- Invited speaker, Department of Biophysics, Mayo Clinic, Rochester, MN, May 2011.
- Invited participant, Frontiers of Engineering, National Academy of Engineering, Palo Alto, CA, Sept. 2011.
- Invited lecturer, Dept of Biomedical Engineering, Cleveland Clinic, Cleveland, OH, Aug. 2011.
- Invited lecturer as part of the Symposium on the 'Barriers of the Brain and the challenge of getting therapeutics into the brain for the treatment of disease'' by the New York Academy of Science, New York, NY, Oct. 2011.
- Invited lecturer, "Brain FUS workshop", FUS foundation, Charlottesville, VA, Oct. 2011.
- Invited speaker, IEEE International Ultrasonics Symposium, Orlando, FL, Oct. 2011.
- Invited speaker, TEDx at Columbia conference, Nov. 2011.
- Invited speaker, Dept. of Biomedical Engineering, University of Virginia, April 2012.
- Invited speaker, Dept. of Biomedical Engineering, UNC-NC State, April 2012.
- Invited speaker, Dept of Mechanical and Biomedical engineering, University of Washington, April. 2012.
- Invited speaker, Chicago Symposium on Translational Neuroscience, University of Chicago, May 2012.
- Invited speaker, Biomedical Engineering seminar series, University of Washington, June 2012.
- Invited speaker, Ultrasound brainstorming session, Unilever, July 2012.
- Invited speaker, Biomedical Engineering seminar series, University of Virginia, November 2012.
- Invited speaker, ViSE seminar series, Vanderbilt University, November 2012.
- Invited speaker, School of Bioengineering and Health Systems, Drexel University, January 2013.
- Panel Member, Womensphere Conference, New York, March 2013
- Invited co-organizer, 2014 Japan-America Frontiers of Engineering committee, National Academy of Engineering, June 2014.
- Invited speaker, 2nd Annual Next Generation of Medical Imaging Workshop: with special section on the BRAIN Mapping Initiative, Carnegie Mellon University, Sept. 25-26, 2013.
- Invited speaker, Acoustical Society of America Meeting, Dec. 2-7, 2013.
- Invited speaker, American Institute of Ultrasound In Medicine, Las Vegas, NV, March 29 - April 2, 2014.
- Invited speaker,2014 Barriers of the CNS Gordon Research Conference, New London, NH, June 14-15, 2014.
- Invited speaker, Inaugural Women In Ultrasonics Luncheon, IEEE International Ultrasonics Symposium, Chicago IL, Sept. 2014.
- Invited speaker, Arrhythmias Gordon Research Conference, Pisa, Italy, March 21-25, 2015.
- Invited speaker, Leading Edge Symposium, Atlantic City, NJ, April 28-30, 2015.
- Invited speaker, International Society of Therapeutic Ultrasound Meeting, Tel Aviv, Israel, March 2016.

- Plenary speaker, Ultrasound Transducer Conference, Seattle WA, April 2016.
- Plenary speaker, International Tissue Elasticity Conference, Ferlee, Vermont, Oct. 17-21, 2016.
- Invited speaker, Ultrasound contrast agents and drug delivery, Nijmegen, Netherlands, January 18-20, 2017.
- Invited speaker, American Institute of Ultrasound in Medicine (AIUM), Orlando, Florida, March 25-29, 2017.
- Invited speaker, American Society of America Meeting, Boston, MA, June 26-30, 2017.
- Invited speaker, Artery 2017 Conference, Pisa, Italy, Oct. 12–14 2017.
- Commencement speaker, School of Biomedical Engineering, Drexel university, Philadelphia, PA, June 13, 2019.
- Plenary speaker, Functional imaging of the heart conference, Bordeaux, France, June 19-22, 2019.
- Keynote speaker, IEEE International Ultrasonics Symposium, Glasgow, Scotland, Oct. 6-9, 2019.
- Invited speaker, High frame rate cardiac imaging, San Diego, CA, Dec. 2-7, 2019.
- Plenary speaker, Nanotexnology, Thessaloniki, Greece, July 7-11, 2020.\
- Invited speaker, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2021.
- Invited panelist, Women in Focused Ultrasound, Focused Ultrasound foundation, Jan. 15, 2021.
- Invited speaker, EMBS chapter and Fulbright chapter, Greece, Jan. 21, 2021.
- Invited speaker, Department of Medical Engineering, California Institute of Technology, Feb. 4, 2021.
- Invited speaker, IEEE EMBS Artificial Intelligence webinar, March 2021.
- Plenary speaker, Radiology grand rounds, Washington University-St. Louis, March 9, 2021.
- Invited speaker, 10th International IEEE EMBS Conference on Neural Engineering, May 4-6, 2021.
- Plenary speaker, ASCE EMI 2021, New York City, May 26-28, 2021.
- Invited speaker in Session Neural Engineering IX: Ultrasound, World Congress of Society for Brain Mapping and Therapeutics, July 9-11, 2021
- Zagzebski-Carson Distinguished Lecture, American Association of Physicists in Medicine, July 2021.
- Invited speaker, Cardiovascular Informatics session, IEEE EMBC, October 2021
- Plenary speaker, IEEE International Society of Biomedical Imaging (ISBI), March 2022.
- Invited speaker, Cardiovascular Implant Durability Conference, Monterrey, CA, April -7, 42022.
- Invited speaker, Neuroengineering Symposium at Rice University, May 12-14 2022.
- Invited speaker, Neuromodulation using ultrasound, 2022 Gordon Research Conference (GRC) on In Vivo Ultrasound Imaging, August 14-19, 2022.
- Special session speaker, ACNP, Phoenix, AZ, Dec. 7-9, 2022.
- Keynote speaker, 4th International Conference on MEDICAL IMAGING & THERAPEUTICS, Dec 7-8, 2022 (virtual).
- Keynote speaker, Inaugural ISBUS meeting, Pasadena, CA, Dec. 8-11, 2022
- Invited speaker, Tissue Microstructure Imaging Gordon Research Conference (GRC), July 2023.

- ***Invitations from within Columbia University:***
- Workshop on Inverse Problems, Columbia University, New York City, New York, May 2007.
- Plenary Lecturer at the Alumni Reunion of the School of Engineering and Applied Science (SEAS) of Columbia University, June 2007.
- Plenary Lecturer on "*Engineering Lecture: "Imaging and Treating Live Organs at the Speed of Sound*," at the Alumni Reunion of the School of Engineering and Applied Science (SEAS) of Columbia University, June 2008.
- Invited lecturer, Breast Service and Surgical Oncology Center, Columbia-Presbyterian Medical Center, New York, NY, November 2007.
- Invited lecturer, Columbia CTSA DNMR meeting, New York, NY, July 2008.
- Invited lecturer, Columbia Engineering Women's Forum, New York, NY, February 2009.
- Invited lecturer, Radiology lecture series, New York, NY, March 2009.
- Invited lecturer, Clinical and Translational Science Award Imaging series, New York, NY, Feb 2011.
- Invited lecturer, Department of Medicine, CUMC, Dec. 2014.
- Plenary speaker, Brain Series, Zuckerman Mind, Brain, Behavioral Institute, May 2016.
- Invited speaker, Columbia Translational Neuroscience Initiative, Oct. 2016.
- Invited speaker, Grand Rounds Neurology, Dec. 2017
- Invited speaker, Columbia Translational Neuroinitiative, Nov. 2020

- ***Fellowships:***
- University of Texas, Graduate fellowship, 1994-1999.
- Hellenic Professional Society of Texas Scholarship, October 1997.
- Herbert Irving fellowship, NIH-CTSA (Center for Translational and Scientific Award) grant, NIH Roadmap, November 2006.

- ***Memberships:***
  - Acoustical Society of America
  - American Association for the Advancement of Science
  - American Heart Association
  - American Institute of Ultrasound in Medicine (Member of the Technical Standards Committee of the AIUM conference)
  - Eta Kappa Nu
  - Faculty of 1000
  - Hellenic Bioscientific Society in the USA (HBS-USA)
  - Houston Society for Engineering in Medicine and Biology
  - Institute of Electrical and Electronic Engineering (IEEE) Society for Ultrasonics, Ferroelectrics and Frequency Control
  - Institute of Electrical and Electronic Engineering (IEEE) Engineering in Medicine and Biology (EMBS)
  - Institute of Electrical and Electronic Engineering (IEEE) Women in Engineering
  - International Society of Therapeutic Ultrasound (ISTU)
  - New York Academy of Sciences
  - National Council for Research, Technology and Innovation, Greece (ESETEK)
  - Sigma Xi
  - SPIE optical engineering society
  - Society of Neuroscience
  - Society of Women in Engineering
  - World Technology Network

- ***Honors/Awards won by Konofagou's group investigators***
  - Honorable mention, International Society of Therapeutic Ultrasound, Boston, MA, October 2005 (Ph.D. student James Choi; Role: thesis advisor).
  - Second Place Award, National Design Competition for VitalSense group, July 2007. (Role: Design project advisor).
  - FQRNT Canadian doctoral research scholarship (equivalent to NSF predoctoral fellowship from Quebec, Canada), September 2007 (Ph.D. student: Jean Provost; Role: thesis advisor).
  - Best Student Paper Award, IEEE International Ultrasound Symposium, New York, NY, October 2007 (Ph.D. student: James Choi; Role: thesis advisor).
  - Fulbright Scholarship, Thailand section, January 2008 (Ph.D. student Asawinee Danpinid from Chiang Mai University; Role: thesis co-advisor).
  - IEEE Travel Support to attend the International Ultrasonics Symposium in Beijing, China, November 2008 (Ph.D. student: Wei-Ning Lee; Role: thesis advisor).
  - NIH CTSA support for Gravity Neutral Orthotic Device for design teams in 2007-08 and 2008-09 years, July 2008 Role: Design project advisor).
  - Student Award (2^{nd} place) at the 2008 Student Competition Award at the International Society for Therapeutic Ultrasound (ISTU) in Minneapolis, Minnesota, August 2008 (Ph.D. student: Caroline Maleke; Role: thesis advisor).
  - Selection for the 2008 Student Competition Award at the International Society for Therapeutic Ultrasound (ISTU) in Minneapolis, Minnesota, August 2008 (Ph.D. student: James Choi; thesis advisor).
  - 2009 New Investigator Award Winner at the American Institute of Ultrasound in Medicine (AIUM) in New York, NY, April 2009 (Ph.D. student: Wei-Ning Lee, Role: thesis advisor).
  - NSERC (Natural Sciences and Engineering Research Council; Canadian NSF) predoctoral fellowship winner, April 2009 (Ph.D. student: Jean Provost, Role: thesis advisor).
  - Editorial board member appointment, Journal of Ultrasound in Medicine, April 2009 (Postdoctoral fellow: Jianwen Luo, Role: postdoctoral advisor).
  - Summer Undergraduate Research Fellowship (SURF) awardees: Mohammed Ashraf (summer 2004), Imran Quyyum (summer 2006), Asif Quyyum (summer 2006), Layla Houshmand (summer 2007), Jaimie Lee (summer 2009), Jennifer Hui (summer 2009).
  - BMEidea Stipend Award Finalist, Biomedical Engineering Competition, National Collegiate Inventors and Innovators Alliance, Feb. 2009. (Role: Design project advisor).
  - American Heart Association predoctoral fellowship award, June 2009 (Ph.D. student: Jean Provost, Role: thesis advisor).
  - IEEE Travel Support to attend the International Ultrasonics Symposium in Rome, Italy, September 2009 (Ph.D. student: Jean Provost; Role: thesis advisor).
  - Pre-doctoral fellowship, Clinical and Translational Award (CTSA), April 2010 (Ph.D. student: Stanley Okrasinski; Role: thesis advisor).
  - IEEE Travel Support to attend the International Ultrasonics Symposium in San Diego, CA, October 2010 (Ph.D. student: Yao-Sheng Tung; Role: thesis advisor).
  - Third Prize in Student competition the International Elasticity Imaging Conference in Snow Bird, Utah, October 2010 (Ph.D. student: Jean Provost; Role: thesis advisor).
  - Finalist in Student competition the International Elasticity Imaging Conference

in Snow Bird, Utah, October 2010 (Ph.D. student: Stanley Okrasinski, III; Role: thesis advisor).

- Poster Award, Barriers Symposium, New York Academy of Sciences, Sept. 2011 (Ph.D. student: Yao-Sheng Tung; Role: thesis advisor).
- Second Prize in Student competition the International Elasticity Imaging Conference in Snow Bird, Utah, October 2011 (Ph.D. student: Ronny Li; Role: thesis advisor).
- Frederick V. Hunt Postdoctoral Research Fellowship in Acoustics, December 2010 (Ph.D. student: James Choi; Role: thesis advisor).
- Marie Curie Postdoctoral Research Fellowship, December 2011 (Ph.D. student: Jean Provost; Role: thesis advisor).
- Heart Rhythm Society Postdoctoral Research Fellowship, March 2012 (Ph.D. student: Jean Provost; Role: thesis advisor).
- Yuen-huo Hung & Chao-chin Huang Award in Biomedical Engineering, April 2012 (Ph.D. student: Yao-Sheng Tung; Role: thesis advisor).
- PhD dissertation with distinction, May 2012 (Ph.D. student: Yao-Sheng Tung; Role: thesis advisor).
- PhD dissertation with distinction, June 2012 (Ph.D. student: Jean Provost; Role: thesis advisor).
- International Society Therapeutic Ultrasound Travel Award, May 2012 (Ph.D. student: Shih-Ying Wu; Role: thesis advisor).
- Government Scholarship to Study Abroad (GSSA), Taiwan government, May 2013 (Ph.D. student: Shih-Ying Wu; Role: thesis advisor).
- 2013-2014-Postdoctoral fellowship, Fondacion Alfonso Martin Escudero Foundation, Spain, Nov. 2012 (Postdoctoral research scientist: Carlos Sierra-Sanchez; Role: postdoc advisor)
- 2014-2015-Postdoctoral fellowship, Pedro Barrié de la Maza Foundation, Spain, Nov. 2012 (Postdoctoral research scientist: Carlos Sierra-Sanchez; Role: postdoc advisor)
- Best Poster Presentation, Kavli Futures Symposium, Nov. 2015 (Ph.D. student: Hermes Kamimura; Role: internship advisor).
- Fulbright scholarship (host) for Prof. Camarena from University of Valencia, Spain, June-Aug. 2016.
- Fulbright scholarship (host) for Prof. Golemati from University of Athens, Greece, Sept. –Dec. 2016.
- 2nd Best Student Paper, April 2015 (Ph.D. student: Mathew Downs; Role: doctoral thesis advisor).
- 2nd Best Student Paper, Inter. Tissue Elas. Conf., Oct. 2016 (Ph.D. student: Vincent Sayseng; Role: doctoral thesis advisor).
- 3rd Best Student Paper, Inter. Tissue Elas. Conf., Oct. 2016 (Ph.D. student: Lea Melki; Role: doctoral thesis advisor).
- 1st Best Student Paper, Inter. Tissue Elas. Conf., March 2017 (Ph.D. student: Marilena Karakatsani; Role: doctoral thesis advisor).
- 1st Best Student Paper, Columbia Biomed. Eng. Symp., Feb. 2019 (Ph.D. student: Marilena Karakatsani; Role: doctoral thesis advisor).
- Wu, Shih-Ying, IEEE International Ultrasound Symposium Student Travel Award, Chicago, IL, 2014.
- Best Poster Award, Kavli Neuroinitiatives, Salles Kamimura, Hermes, Columbia University, 2014.
- Best Student Paper Award, Downs, Matthew, International Society of Therapeutic Ultrasound Student Award, Utrecht, Netherlands, 2015.
- Honored paper for Computers in Biology and Medicine, Provost, Jean and Konofagou, Elisa, 2015.

- Student Paper Award finalist, Bunting, Ethan, IEEE International Ultrasound Symposium, Tours, France, 2016.
- IEEE International Ultrasound Symposium Student Travel Award, Bunting, Ethan, Tours, France, 2016.
- Finalist in Best Research by Young Electrophysiologists session,Wan, Elaine, Cardiostimulatory EHRA EuroPace, Nice, France, 2016.
- 2nd place Student Award, Sayseng, Vincent, International Tissue Elasticity Conference, Fairlee, Vermont, 2016.
- 3rd place Student Award, Melki, Lea, International Tissue Elasticity Conference, Fairlee, Vermont, 2016.
- Student Paper Award finalist, Melki, Lea, IEEE International Ultrasound Symposium, Washington, DC, 2017.
- Karakatsani, Maria Eleni, Best Student Paper Award, International Society of Therapeutic Ultrasound Student Award, Haifa, Israel, 2016.
- Young Investigator Award, Karakatsani, Maria Eleni, Focused Ultrasound Foundation Meeting, Washington DC, 2017.
- IEEE International Ultrasound Symposium Student Travel Award, Ji, Robin, Nashville, TN, 2018.
- IEEE International Ultrasound Symposium Student Travel Award, Kugelman, Tara, Nashville, TN, 2018.
- Student Paper Award winner, Lee, Stephen, IEEE International Ultrasound conference, Glasgow, Scotland, 2019.
- Student Paper Award finalist, Aurup, Christian, IEEE International Ultrasound conference, Las Vegas, NV, 2020.
- Karageorgos, Grigorios, Student Paper Award finalist, International Tissue Elasticity Conference, Avignon, France, 2020.
- AAAS/Science Program for Excellence in Science free membership, Lee, Stephen, 2020
-

B.4. Research appointments held

- *1991* – Summer research intern, Department of Biophysics, University of Paris 6, Paris, France (6/91-8/91)
- *1992* – Summer research intern, Department of Physics, Charles University, Prague, Czechia (6/92-8/92)
- *1993* – Summer research intern, Department of Bioengineering, Imperial College of Science, Engineering and Medicine, University of London, London, UK
- *1994* – University of Texas Medical School, Houston, Texas and Bioengineering Program, Department of Electrical Engineering, University of Houston (11/94-8/99)
- *1999* – Research fellow, Brigham and Women's Hospital, Harvard Medical School
- *2002* – Instructor, Brigham and Women's Hospital, Harvard Medical School
- *2003* – Assistant Professor of Biomedical Engineering, Columbia University
- *2003* – Visiting Scientist, Brigham and Women's Hospital, Harvard Medical School
- *2003* – Director, Ultrasound and Elasticity Imaging Laboratory
- *2004* – Assistant Professor of Radiology, Columbia University
- *2009* – Associate Professor of Biomedical Engineering (without tenure), Columbia University
- *2009* – Associate Professor of Radiology (without tenure), Columbia University
- *2010* – Associate Professor of Biomedical Engineering (tenured), Columbia University

- *2010* – Associate Professor of Radiology (tenured), Columbia University
- *2014* – Professor of Biomedical Engineering, Columbia University
- *2014* – Professor of Radiology, Columbia University
- *2016* – Robert and Margaret Hariri Professor of Biomedical Engineering, Columbia University

TEACHING EXPERIENCE

C.1. Courses which the nominee has taught and their enrollments

- **BMEN 4410:** Diagnostic Ultrasound Imaging (Instructor) – Enrollment: 18 (Spring 2004), 16 (Spring 2005), 18 (Spring 2006), 9 (Spring 2007), 23 (Spring 2008), 20 (Spring 2009), 3 (given as a special research course for a limited number of students; Spring 2010), 14 (Spring 2011), 14 (Fall 2012), 17 (Spring 2014), 17 (Spring 2015), 16 (Spring 2016), 20 (Spring 2017), 25 (Spring 2018), 28 (Fall 2019), 20 (Spring 2021-2023).
- **BMEN 3830:** BME Lab III (Instructor) – Enrollment: 59 (Spring 2005), 72 (Spring 2006), 53 (Spring 2007), 48 (Spring 2008), 51 (Spring 2009), 48 (Spring 2010; one module), 45 (Fall 2011; one module), 42 (Fall 2012; one module), 35 (Fall 2013; one module), 37 (Fall 2014; one module), 35 (Fall 2015), 40 (Spring 2016)
- **BMEN 3820:** BME Lab II (one module) – Enrollment: 72 (Spring 2004), 37 (Spring 2017; one module), 35 (Spring 2018), 40 (Spring 2019)
- **BMEN 3840:** BME Lab IV - Enrollment: 60 (Spring 2004)
- **BMEN 3810:** BME Lab I (one module) – Enrollment: 72 (Spring 2005), 64 (Spring 2006) and 42 (Spring 2007)
- **BMEN 6001:** BME Computational Modeling of Physiologic Systems (one module) – Enrollment: 35 (Spring 2008)
- **BMEN 3910:** BME Design I (advisor) – Enrollment: 59 (Spring 2005), 72 (Fall 2006), 53 (Fall 2007), 52 (Fall 2008).
- **BMEN 3920:** BME Design II (advisor) – Enrollment: 72 (Spring 2007) and 53 (Spring 2008)
- **BMEN 4000:** Special topics in biomedical engineering– Enrollment: 3 (Spring 2010).
- **BMEN 4410 (CVN):** Columbia Video Network – Enrollment: 2 (Spring 2007) and 1 (Spring 2009).
- **CHEN E4520:** BioColloid Engineering Design – Lecture on the use of microbubbles in ultrasound therapy – Enrollment: 16 (Spring 2008) and 15 (Spring 2009).
- **BMEN 6003:** BME Computational Modeling of Physiologic Systems (one module) – Enrollment: 16 (Fall 2008), 18 (Fall 2009), 20 (Fall 2010), 21 (Fall 2011), 40 (Fall 2012), 41 (Fall 2013), 45 (Fall 2014), 46 (Fall 2015), 40 (Spring 2016), 57 (Spring 2017).65 (Spring 2019), 63 (Fall 2019), 98 (Spring 2021).
- **BMEN 1001:** Pre-professional course in biomedical engineering– Enrollment: 40 (Fall 2004;seminar), 25 (Fall 2008; seminar), 72 (Fall 2010; instructor), 75 (Fall 2011; seminar),90 (Fall 2012; co-instructor).
- **ENGI E1002:** Gateway Laboratory (Intro to Biomedical Engineering)- Enrollment: 60 (Spring 2004), 40 (Spring 2009).

C.2. Research training and mentoring (*students from outside the Konofagou lab are italicized*)

- **Graduated Ph.D. Students Supervised**

Name	Start date	Completion date	Present position
1. Wei-Ning Lee, PhD	2004	2009	Faculty, Hong Kong University, China
2. James Choi, PhD	2004	2010	Faculty, Imperial College, UK
3. Caroline Maleke, PhD	2005	2010	Senior R&D Engineer, Siemens
4. Yao-Sheng Tung, PhD	Sept. 2007	August 2012	Senior Engineer, Verasonics, Inc.
5. Jean Provost, PhD	Sept. 2007	June 2012	Faculty, Ecole Polytechnique
6. Gary Hou, PhD	Sept. 2008	Dec. 2013	Industry
7. Mania Samiotaki, PhD	Sept. 2009	Dec. 2014	Industry
8. Adam Nover, PhD (co-advised with Prof. Hung)	Sept. 2010	Nov. 2015	Industry
9. Matthew Downs, PhD (co-advised with Prof. Ferrera)	Jan. 2012	July 2015	Industry
10. Stanley Okrasinski, PhD	Sept. 2009	June 2014	Industry
11. Ronny Li, PhD	July 2010	Oct. 2015	industry
12. Alexandre Costet, PhD	June 2011	Sept. 2016	Industry
13. Shih-Ying Wu, PhD	Aug. 2011	Feb. 2017	Industry
14. Ethan Bunting, PhD	June 2011	March 2017	Finance
15. Yang Han, PhD	Aug. 2012	Dec 2017	Industry
16. Iason Apostolakis, PhD.	Aug. 2012	June 2017	Industry
17. Maria Karakatsani, PhD	Aug. 2014	Feb 2020	Postdoctoral fellow
18. Vincent Sayseng, PhD	Aug. 2014	June 2020	Industry
19. Lea Melki, PhD	Aug. 2015	June 2020	Industry
20. Christian Aurup, PhD	Aug. 2015	Dec 2022	Postdoctoral fellow
21. Niloufar Saharkhiz, PhD	Aug. 2016	Sept 2022	Postdoctoral fellow
22. Stephen Lee, PhD	Aug. 2016	July 2022	Postdoctoral fellow
23. Grigorios Karageorgos, PhD	June 2017	June 2022	Industry
24. Paul Kemper, PhD	Aug. 2016	Jan 2023	Industry
25. Alina Kline-Shoder, PhD	Sept. 2018	May 2023	Industry
26. Jad El Harake, PhD	Sept. 2018	Feb. 2024	Faculty, Vanderbilt

- **Current Ph.D. Students Supervised**

Name	Start date	Completion date	Present position
27. Judy Li, MS	Sept. 2018	June 2023	PhD student
28. Melina Tourni, MS	Sept. 2019	June 2024	PhD student

29. Rebecca Noel, MS	Sept. 2019	June 2024	PhD student
30. Alec Batts, MS	Sept. 2019	June 2024	PhD student
31. Erica McCune, MS	Sept. 2020	June 2025	MS/PhD student
32. Parth Gami	July 2021	June 2026	MS/PhD student
33. Cosima Liang	July 2021	June 2026	MS/PhD student
34. Yangpei Liu, MS	August 2021	June 2026	PhD student
35. Seongyoon Kim, MS	Sept. 2022	June 2027	PhD student
36. Samuel Blackman	Sept. 2022	June 2027	PhD student
37. Hannah Schlosser	Sept. 2022	June 2027	PhD student
38. Christina Proestaki	Sept. 2023	June 2028	PhD student
39. Shiqi Xu	Sept. 2023	June 2028	PhD student
40. Moshe Willner	Sept. 2023	June 2027	PhD student
41. Fotis Tsitsos	Jan. 2023	Dec 2027	PhD student
42. Daniella Jimenez	Jan. 2024	Dec 2028	PhD student

-Postdoctoral Fellows and Research Associate Scientists Supervised

Fellow's name	**Start date**	**Completion date**	**Present position**
1. Mathieu Pernot, PhD	December 2004	December 2005	Senior research scientist, CNRS, France
2. Jianwen Luo, PhD	September 2005	August 2011	Associate Professor, Tsinghua U., China
3. Kana Fujikura, MD, PhD	September 2005	December 2009	Interventional radiology fellow, Columbia
4. Phrut Sakulchangsatjatai, PhD	March 2006	June 2006	Assistant professor, Chiang Mai U.
5. Shougang Wang, PhD	December 2006	August 2008	System Development Engineer, Philips
6. Jonathan Vappou, PhD	January 2008	December 2010	Associate professor, U. de Strasbourg, France
7. Thomas Deffieux, PhD	January 2009	December 2009	Research scientist, CNRS, France
8. Fotis Vlachos, PhD	March 2009	February 2011	Chief engineer, General Electric
9. Fabrice Marquet, PhD	December 2009	November 2012	Consultant, BCG, France
10. James Choi, PhD	February 2010	June 2010	Faculty, Imperial College, UK
11. Caroline Maleke, PhD	February 2010	March 2010	Industry
12. Jiangang Chen, PhD	January 2012	January 2013	Industry
13. Jean Provost, PhD	July 2012	Oct. 2013	Faculty, Ecole Polytechnique, Montreal, Canada
14. Danial Shahmirzadi, PhD	November 2010	October 2013	Industry
15. Sacha Nadlall, PhD	February 2011	February 2015	DARPA, Canada
16. Cherry Chen, PhD	August 2011	February 2014	Industry
17.Shutao Wang, MD, PhD	November 2011	August 2016	MD Fellowship
18.Julien Grondin, PhD	November 2011	March 2022	Industry

19. Hong Chen, PhD	Sept.2012	July 2015	Faculty, Wash U
20.Carlos Sierra-Sanchez, PhD	Jan. 2013	Dec. 2018	Industry
21. Mania Samiotaki, PhD	March 2015	July 2015	Industry
22. Thomas Payen, PhD	Feb. 2014	Feb. 2017	Researcher, INSERM
23. Matt McGarry, PhD	Oct. 2014	Sept. 2017	Assistant Professor, Dartmouth
25. Clement Papadacci, PhD	Feb. 2015	July 2016	Researcher, INSERM
26. Matthew Downs, PhD	Aug 2015	Sept. 2017	Industry
27. Adriaan Campos, PhD	Aug. 2015	Sept. 2018	Researcher, Belgium
28. Hermes Kamimura, PhD	Jan. 2018	Ongoing	Res. Assoc. Scientist
28. Antonis Pouliopoulos, PhD	Feb. 2017	Oct. 2021	Faculty, King's College
29. Shih-Ying Wu, PhD	Dec. 2016	July 2018	Industry
30. Ethan Bunting, PhD	April 2017	July 2017	Consultant firm
28. Alireza Nabavizadeh, PhD	Nov. 2016	April 2020	Postdoctoral fellow
24. Pierre Nauleau, PhD	Oct. 2014	Jan. 2020	Editor
26. Mark Burgess, PhD	Jan. 2016	Jan. 2020	Faculty, MSKCC
27. Min Gon Kim, PhD	June 2017	Dec. 2019	Postdoctoral fellow
28. Vittorio Gatti, PhD	June 2018	Sept. 2019	Postdoctoral fellow
29. Marilena Karakatsani, PhD	Feb. 2019	Oct. 2019	Postdoctoral fellow
30. Murad Hussain, PhD	Sept. 2019	Nov. 2022	Faculty, Univ. Hawaii
31. Nirvedh Meshram, PhD	May 2019	Dec. 2021	Industry
32. Omid Youssefian, PhD	Jan. 2020	March 2022	Industry
33. Sua Bae, PhD	November 2020	Ongoing	Postdoctoral fellow
34. Nima Mobadersany, PhD	December 2020	Ongoing	Postdoctoral fellow
35. Robin Ji, PhD	December 2021	Ongoing	Postdoctoral fellow
36. Sergio Jimenez, PhD	December 2021	Ongoing	Postdoctoral fellow
36. Aparna Singh, PhD	June 2022	June 2023	Industry
37. Chunqi Li, PhD	April 2023	Ongoing	Postdoctoral fellow
38. Tuhin Roy, PhD	March 2023	Ongoing	Postdoctoral fellow
39. Chagla Orzoy, PhD	August 2024		Postdoctoral fellow

- **Medical Fellows/Faculty Supervised/Co-advised**

Name	**Start date**	**Completion date**	**Present position**
1. Todd Pulweritz, M.D.	May 2004	Aug. 2006	Private practice
2. Kana Fujikura, M.D.	May 2004	Aug. 2006	Faculty
3. Juan-Carlos Brenes, MD	Sept. 2007	June 2008	Private practice
4. John Afthinos, M.D.	Sept. 2007	Aug. 2009	Resident
5. Jawad Latif, M.D.	Jan. 2008	Aug. 2009	Resident
6. Leslie Tyrie, M.D.	Sept. 2006	July 2007	Private practice
7. Deepak Saluja, M.D.	Sept. 2006	Aug. 2009	Faculty
8. Elaine Wan, M.D.	July 2008	July 2014	Faculty
9. Yukiko Oe, M.D.	Dec. 2010	May 2011	Fellow
10. Alok Gambhir, M.D., Ph.D.	Dec. 2009	Aug. 2014	Private practice
11. Litsa Lambrakos, MD	July 2012	Aug. 2015	Fellow
12. Pavithran Guttipatti, BS	Jan 2021	Aug 2021	Medical student
13. Moshe Willner, BS	July 2022	Aug 2022	MD/PhD
14. Nina Yoh, MD	July 2022	Ongoing	Resident
15. Cheng-Chia Wu, MD	July 2020	Ongoing	HICCC faculty

- **M.S. Students Supervised**

Name	Start date	Completion date	Present position
1. Caroline Maleke	May 2004	Aug. 2005	Industry
2. Louis Morda	May 2004	Dec. 2004	Industry
3. Wei-Keat Lim	Sept. 2004	Jan. 2005	Industry
4. Simon Fung-Kee-Fung	Sept. 2004	Sept. 2006	MD
5. Amin Katouzian	Jan. 2005	Dec. 2006	Academia
6. Gilberto Hung	Sept. 2005	Aug. 2006	Industry
7. Daniel Ginat	Sept. 2005	Aug. 2006	MD
8. Paul Chao	May 2006	Aug. 2006	Industry
9. Ioannis Zervantonakis	Nov. 2006	Aug. 2007	Assistant Prof. (UPitt)
10. Sinan Biro	Sept. 2007	May 2008	Healthcare
11. Siddhi Desai	Sept. 2007	Dec. 2008	Industry
12. Ann Lee	Sept. 2007	Dec. 2008	Industry
13. Sharmilee Ramcharan	Sept. 2007	Dec. 2008	Industry (Merck)
14. Babak Baseri	Apr. 2008	Aug. 2009	M.D.
15. Bharat Ramachandran	Jan. 2009	Feb. 2010	Industry (Philips)
16. Naiteek Sangani	May 2009	Aug. 2009	M.S. student
17. William Qadish	Sept. 2011	Aug. 2012	M.S. student
18. Isaac Jourard	May 2012	Ongoing	M.S. student
19. Tao Sun	August 2012	August 2014	Postdoc
20. Anushree Srivastava	November 2012	August 2014	Technician
21. Kristin Salomon	May 2012	August 2014	Intern
22. Prathyush Narayanan	August 2012	September 2014	Engineer
23. Fani Hountala	August 2014	May 2015	M.S. student
24. Christine Fung	January 2015	Ongoing	M.S. graduate
25. Christian Ayrup	Sept. 2014	May 2015	PhD student
26. Kay Ingwe	January 2015	Dec. 2015	Industry
27. Salah Mahmoudi	Sept. 2018	Sept 2020	Industry
28. Tara Kugelman, MS	June 2017	Jan 2022	Industry
29. Ethan Bendau, MS	June 2018	June 2022	K-12 education
43. Nikolas Papadopoulos, MS	Sept. 2022	June 2027	PhD student
28. Stephane Thiebaut (research internship from Ecole Centrale, France)	*June 2010*	*Dec. 2010*	*Postdoc*
29. Thanh-Hieu Nguyen (research internship from EPFL, Switzerland)	*Sept. 2010*	*June 2011*	*Postdoc*
30. Diego Legrand (research internship from Ecole Centrale, France)	*Jan. 2011*	*June 2011*	*Postdoc*
32. Niels Petterson (research internship from Einthoven University, Netherlands)	*Sept. 2012*	*Dec. 2012*	*Postdoc*
33. Lea Melki (research internship from U. Strasbourg, France)	*June 2014*	*Aug. 2014*	*Postdoc*
34. Paul Kemper (research internship from Einthoven University, Netherlands)	*April 2015*	*Sept. 2015*	*Postdoc*

35. Erik Vidman (PhD internship from Karolinska Technical University, Sweden)	*August 2014*	*April 2015*	*Industry*
36. Koen Hobelman (research internship from Einthoven University, Netherlands)	*April 2016*	*July 2016*	*Postdoc*

- **B.S. Students Supervised**

Name	**Start date**	**Completion date**	**Present position**
1. Mohammad Firaz Ashraf	May 2004	Aug. 2004	Finance
2. Viktor Gamarnik	May 2005	July 2009	M.D./Ph.D. student
3. Maggie Jan	May 2005	Aug. 2005	Industry
4. Layla Houshmand	May 2005	Aug. 2007	Ph.D. student
5. Ken Tang	May 2005	Aug. 2005	Industry
6. Imran Quyyum	May 2005	Aug. 2005	M.D. student
7. Asif Quyyum	May 2005	Aug. 2005	M.D. student
8. Andrew Hsu	May 2006	Aug. 2006	PhD student
9. Marina Daskalopoulos	Jan. 2006	May 2007	PhD student
10. Sujan Doshi	May 2007	Aug. 2007	Junior
11. Eugenia Kwan	June 2007	Aug. 2008	Junior
12. Jaimie Lee	May 2008	Sept. 2010	Senior
13. Jennifer Hui	May 2008	Sept. 2009	Senior
14. Mania Samiotaki	Feb 2009	Sept. 2009	PhD student
15. Adam Nover	June 2009	Aug. 2009	Senior
16. Linda Gao	June 2009	Aug. 2009	Sophomore
17. Julio Herrera-Estrada	May 2010	Aug. 2010	PhD Student (Princeton)
18. Chinenyenwa Stephanie Mpamaugo	May 2011	Aug. 2011	Unknown
19. Robert DiMatteo	May 2012	Aug. 2012	Senior
20. Nida Dangra	May 2011	May 2012	MS student (Columbia)
21. Amanda Buch	August 2012	August 2015	Research Assistant
22. Kathleen Fan	February 2014	August 2016	Senior
23. Georgiana Yang	February 2014	May 2017	Senior
24. Wenlan Zheng	February 2014	August 2017	Med. School
29. Diana Kim	Sept. 2016	Ongoing	Medical School
30. Andrew Tieu	May 2016	May 2019	Medical School
31. Stephen Lee	June 2019	June 2021	Fellowship

- **High School Students Supervised**

Name	**Start date**	**Completion date**	**Prior position**
1. Layla Houshmand	May 2005	Aug. 2007	PhD graduate(Michigan)
2. Jeong Choi	May 2005	May 2006	Junior (MIT)
3. Eugenia Kwan	May 2006	Aug. 2008	Sophomore (UC)
4. Richard Witter	Sept. 2007	Aug. 2008	Freshman (CCNY)
5. Kristen Kim	May 2007	Aug. 2007	Undergrad (Princeton)

6. Kevin Mu	Sept. 2008	May 2009	Undergrad (Princeton)
25. Diana Kim	Sept. 2016	Ongoing	Junior
26. Andrew Tieu	May 2016	May 2017	Junior
27. Diana Kim	Sept. 2016	Ongoing	Junior
28. Andrew Tieu	May 2016	May 2017	Junior
7. Kevin Cho	July 2010	August 2010	Rising high school senior
8. Abhiraj Modi	June 2007	August 2007	Senior consultant, Blackstone Group
9. Lotanna Adjaero	July 2012	August 2012	Unknown
10. Eilleen Maysek	July 2013	July 2013	Villanova
11. Paige Murphy	July 2013	July 2013	U.Conn

- **Visiting Faculty hosted in Konofagou's laboratory**

Name	**Start date**	**Completion date**	**Present position**
1. Francisco Camarena, Ph.D.	Sept. 2010	Dec. 2010	Associate professor, Polytechnic University of Valencia (Spain)
2. Emilie Francechini, Ph.D.	Oct. 2011	Dec. 2011	Research Scientist, Centre National de Recherche Scientifique (CNRS), France
3. Spyretta Golemati, PhD	March 2013	June 2013	Assistant professor, University of Athens, Greece
4. Francisco Camarena, Ph.D.	June 2016	Sept. 2016	Associate professor, Polytechnic University of Valencia (Spain)
5. Spyretta Golemati, PhD	Sept. 2016	Dec. 2016	Assistant professor, University of Athens, Greece

a. Qualifying Exam committees

i. **Spring 2004-** Andjela Azabajic (Advisor: T.R. Brown)
ii. **Spring 2004-** Qi Duan (Advisor: A.F. Laine)
iii. **Spring 2004-** James Masciotti (Advisor: A.H. Hielscher)
iv. **Spring 2004-** Susan Herz (Advisor: J.W. Holmes)
v. **Spring 2004-** Yingli Yang (Advisor: T.R. Brown)
vi. **Spring 2005-** Marios Philiastides (Advisor: P. Sajda)
vii. **Spring 2006-** James Choi (Advisor: E.E. Konofagou)
viii. **Spring 2006-** Shreedevi Dasgupta (Advisor: E.E. Konofagou)
ix. **Spring 2006-** Wei-Ning Lee (Advisor: E.E. Konofagou)
x. **Spring 2006-** Melvyn Ooi (Advisor: T.R. Brown)
xi. **Spring 2007-** Ajna Borgovac (Advisor: T.R. Brown)
xii. **Spring 2007-** Stanley Huang (Advisor: E. Olson)

xiii. **Spring 2007-** Caroline Maleke (Advisor: E.E. Konofagou)
xiv. **Spring 2007-** Noah Lee (Advisor: A.H. Hielscher)
xv. **Spring 2007-** Yang Li (Advisor: T.R. Brown)
xvi. **Spring 2008-** Sean Burgess (Advisor: E.H. Hillman)
xvii. **Spring 2008-** Amin Katouzian (Advisor: E.E. Konofagou)
xviii. **Spring 2008-** Nora Khanarian (Advisor: H.H. Lu)
xix. **Spring 2009-** Jean Provost (Advisor: E.E. Konofagou)
xx. **Spring 2009-** Yao-Sheng Tung (Advisor: E.E. Konofagou)
xxi. **Spring 2009-** Mohamed Reza Tehrani (Advisor: T.R. Brown)
xxii. **Spring 2009-** Molly Flexman (Advisor: A.H. Hielscher)
xxiii. **Spring 2009-** Hamed Mojahed (Advisor: T.R. Brown)
xxiv. **Spring 2009-** Jennifer Walz (Advisor: P. Sajda)
xxv. **Spring 2010-** Gary Hou (Advisor: E.E. Konofagou)
xxvi. **Spring 2010-** Roger Goldman (Advisor: G. Ateshian and S. Simaan)
xxvii. **Spring 2010-** Amandine Godier-Furnémont (Advisor: G. Vunjak-Novakovic)
xxviii. **Spring 2010-** Michael Khalil (Advisor: A.H. Hielscher)
xxix. **Spring 2010-** Xiaowei Zou (Advisor: T.R. Brown)
xxx. **Spring 2010-** George Eng (Advisor: G. Vunjak-Novakovic)
xxxi. **Spring 2010-** Sagaw Prateepchinda (Advisor: H.H. Lu)
xxxii. **Fall 2010-** Emmanuel Montagnon (Advisor: G. Cloutier, U. of Montreal, Canada)
xxxiii. **Spring 2011-** Sagaw Prateepchinda (Advisor: H.H. Lu)
xxxiv. **Spring 2011-** Jordan Muraskin (Advisor: P. Sajda)
xxxv. **Spring 2011-** Gethismani Samiotaki (Advisor: E.E. Konofagou)
xxxvi. **Spring 2011-** Stanley Okrasinski (Advisor: E.E. Konofagou)
xxxvii. **Spring 2011-** Andrew Kang (Advisor: B. Morrison)
xxxviii. **Spring 2011-** Sarah De Leo (Advisor: E.M.C. Hillman)
xxxix. **Spring 2011-** Auranuch Lorsakul (Advisor: A.F. Laine)
xl. **Spring 2012-** Auranuch Lorsakul (Advisor: A.F. Laine)
xli. **Spring 2012-** Ronny Li (Advisor: E.E. Konofagou)
xlii. **Spring 2012-**Chris Fong (Advisor: A.H.Hielscher)
xliii. **Spring 2012-**Christopher Hue (Advisor: B.Morrison)
xliv. **Spring 2012-**Adam Nover (Advisor: C. Hung, Co-advisor: E.E.Konofagou)
xlv. **Spring 2013-** Shih-Ying Wu (Advisor: E.E. Konofagou)
xlvi. **Spring 2013-** Ethan Bunting (Advisor: E.E. Konofagou)
xlvii. **Spring 2013-** Alexandre Costet (Advisor: E.E. Konofagou)
xlviii. **Spring 2013-** Jacqueline Gunter (Advisor: A. Hielscher)
xlix. **Spring 2013-** Viktor Gamarnik (Advisor: A.F. Laine)
l. **Spring 2014-** Guillaume David (Advisor: A.F. Laine)
li. **Spring 2014-** Tao Sun (Advisor: E.E. Konofagou)
lii. **Spring 2014-** Iason Apostolakis (Advisor: E.E. Konofagou)
liii. **Spring 2014-** Yang Han (Advisor: E.E. Konofagou)
liv. **Spring 2015-** Bradley Beattie (Advisor: A. Hielscher)
lv. **Spring 2015-** Mohammed Shaik (Advisor: E. Hillman)
lvi. **Spring 2016-** Vincent Sayseng (Advisor: E.E. Konofagou)
lvii. **Spring 2016-** Marilena Karakatsani (Advisor: E.E. Konofagou)
lviii. **Spring 2016-** Charles Rodenkirch (Advisor: Q. Wang)
lix. **Spring 2017-** Lea Melki (Advisor: E.E. Konofagou)
lx. **Spring 2017-** Robin Ji (Advisor: E.E. Konofagou)
lxi. **Spring 2017-** Christian Aurup (Advisor: E.E. Konofagou)
lxii. **Spring 2018-** Niloufar Saharkhiz (Advisor: E.E. Konofagou)
lxiii. **Spring 2019-** Grigoris Karageorgos (Advisor: E.E. Konofagou)
lxiv. **Spring 2019-** Tara Kugelman (Advisor: E.E. Konofagou)
lxv. **Spring 2020-** Salah Mahmoudi (Advisor: E.E. Konofagou)

lxvi. **Spring 2020-** Jad El Harake (Advisor: E.E. Konofagou)
lxvii. **Spring 2021 –** Melina Tourni (Advisor: E.E. Konofagou)
lxviii. **Spring 2022-** Erica McCune (Advisor: E.E. Konofagou)
lxix. **Spring 2023-** Yangei Liu (Advisor: E.E. Konofagou)
lxx. **Spring 2023-** Cosima Liang (Advisor: E.E. Konofagou)
lxxi. **Spring 2023-** Parth Gami (Advisor: E.E. Konofagou)
lxxii. **Spring 2024-** Sam Blackman (Advisor: E.E. Konofagou)
lxxiii. **Spring 2024-** Seongyeon Kim (Advisor: E.E. Konofagou)
lxxiv. **Spring 2024-** Hannah Schleifer (Advisor: E.E. Konofagou)
lxxv. **Spring 2024-** Fotios Tsitsos (Advisor: E.E. Konofagou)

b. Proposal Defense Committees

i. **Spring 2005-** Shuyan Du (Advisor: P. Sajda)
ii. **Spring 2005-** Joe Lasker (Advisor: A.H. Hielscher)
iii. **Spring 2006-** Qi Duan (Advisor: A.F. Laine)
iv. **Spring 2007-** Jeffrey Spalazzi (Advisor: H.H. Lu)
v. **Fall 2007-** Christopher Ingrassia (Advisor: K. D. Costa)
vi. **Fall 2007 –** Yingli Yang (Advisor: T.R. Brown)
vii. **Spring 2008-** Ajna Borgovac (Advisor: T.R. Brown)
viii. **Spring 2008-** James Masciotti (Advisor: A.H. Hielscher)
ix. **Spring 2008-** Melvyn Oi (Advisor: T.R. Brown)
x. **Spring 2008-** Wei-Ning Lee (Advisor: E.E. Konofagou)
xi. **Fall 2008-** James Choi (Advisor: E.E. Konofagou)
xii. **Fall 2008-** Caroline Maleke (Advisor: E.E. Konofagou)
xiii. **Spring 2009-** Amin Katouzian (Advisor: A.F. Laine, Co-advisor: E.E. Konofagou)
xiv. **Spring 2009-** Kristen Moffat (Advisor: H.H. Lu)
xv. **Fall 2009-** Robert Maidhof (Advisor: G. Vunjak-Novakovic)
xvi. **Fall 2009-** Sean Burgess (Advisor: E.M.C.Hillman)
xvii. **Spring 2010-** Roger Goldman (Advisor: Nabil Simaan, Mechanical Engineering)
xviii. **Spring 2011-** Nora Khanarian (Advisor: H.H. Lu)
xix. **Spring 2011-** Yao-Sheng Tung (Advisor: E.E. Konofagou)
xx. **Spring 2011-** Molly Flexman (Advisor: A. H. Hielscher)
xxi. **Spring 2011-** Jean Provost (Advisor: E.E. Konofagou)
xxii. **Spring 2011-** Jameel Feshitan (Advisors: Mark Borden/E.E. Konofagou)
xxiii. **Spring 2012**- Ilyana Atanasova (Advisor: A.F.Laine)
xxiv. **Fall 2012**- Michael Khalil (Advisor: A. H. Hielscher)
xxv. **Fall 2012**- Gary Hou (Advisor: E.E. Konofagou)
xxvi. **Fall 2012**- Jack Po (Advisor: A.F. Laine)
xxvii. **Spring 2013**- Xiaowei Zou (Advisor: P. Sajda/T.R. Brown)
xxviii. **Fall 2013** – Gesthimani Samiotaki (Advisor: E.E. Konofagou)
xxix. **Fall 2013** – Amandine Godier (Advisor: G. Vunjak-Novakovic)
xxx. **Spring 2014** – Matthew Downs (Advisor: E.E. Konofagou)
xxxi. **Fall 2014**-Viktor Gamarnik (Advisor: A.F. Laine)
xxxii. **Fall 2014**-Adam Nover (Advisors: C.T. Hung/G.Ateshian/E.E. Konofagou)
xxxiii. **Fall 2015**-Shih-Ying Wu (Advisor: E.E. Konofagou)
xxxiv. **Fall 2015**-Alexandre Costet (Advisors: E.E. Konofagou)
xxxv. **Fall 2015**-Ethan Bunting (Advisor: E.E. Konofagou)
xxxvi. **Fall 2016**-Yang Han (Advisor: E.E. Konofagou)
xxxvii. **Fall 2016**-Iason Apostolakis (Advisor: E.E. Konofagou)
xxxviii. **Fall 2016**-Theresa Huang Lye (Advisor: C. Fleming)
xxxix. **Fall 2016**-Brad Beattie (Advisor: A.H. Hielscher)
xl. **Spring 2020**-John Stanton (Advisor: K. Shepard)

xli. **Summer 2020**-Christian Aurup (Advisor: E.E. Konofagou)
xlii. **Summer 2020**-Robin Ji (Advisor: E.E. Konofagou)
xliii. **Fall 2020**- Kelley Swanberg (Advisor: C. Juchem)
xliv. **Spring 2021**- Crystal Collier (Advisor: C. Troy, Neurology)
xlv. **Summer 2021**- Niloufar Saharkhiz (Advisor: E.E. Konofagou)
xlvi. **Summer 2021**- Grigorios Karageorgos (Advisor: E.E. Konofagou)
xlvii. **Summer 2021**- Christian Aurup (Advisor: E.E. Konofagou)
xlviii. **Fall 2021** –Stephen Lee (Advisor: E.E. Konofagou)
xlix. **Spring 2022**-Paul Kemper (Advisor: E.E. Konofagou)
l. **Fall 2022**-Jad El Harake (Advisor: E.E. Konofagou)

c. Doctoral Thesis Defense Committees

i. **Spring 2006-** Shuyan Du (Advisor: P. Sajda)
ii. **Spring 2005-** Joe Lasker (Advisor: A.H. Hielscher)
iii. **Spring 2007-** Heikki Nieminen (Advisor: J. Jurvelin; Univ. of Kuopio, Finland)
iv. **Fall 2007-** Qi Duan (Advisor: A.F. Laine)
v. **Fall 2007-** Matthew Neimark (Advisor: A.F. Laine)
vi. **Spring 2008-** Chunguang Xi (Advisor: N. Sharpley, Dept. of Chem. Eng, Columbia)
vii. **Spring 2008-** Alexia Giannoula (Advisor: R. C. Cobbold; U. of Toronto, Canada)
viii. **Spring 2008-** James Masciotti (Advisor: A.H. Hielscher)
ix. **Spring 2008-** Joseph Lasker (Chair; Advisor: A. H. Hielscher)
x. **Spring 2008-** Jeffrey Spalazzi (Advisor: H.H. Lu)
xi. **Summer 2008 –** Yingli Yang (Advisor: T.R. Brown)
xii. **Fall 2008-** Christopher Ingrassia (Advisor: K.D. Costa)
xiii. **Spring 2009-** Melvyn Oi (Advisor: T.R. Brown)
xiv. **Spring 2009-** Jiawei Li (MPhil; Outside examiner; Advisor: Y.P. Zheng, Hong Kong Technical Univ., China)
xv. **Summer 2009-** Ajna Borogovac (Chair; Advisor: A.F. Laine)
xvi. **Fall 2009-** Wei-Ning Lee (Advisor: E.E. Konofagou)
xvii. **Fall 2009-** James J. Choi (Advisor: E.E. Konofagou)
xviii. **Fall 2009-** Caroline Maleke (Advisor: E.E. Konofagou)
xix. **Spring 2010-** Asawinee Danpinid (Co-advisor; Advisor: P. Terdtoon, Chiang Mai University, Thailand)
xx. **Spring 2010-** Kristen Moffat (Advisor: H.H. Lu)
xxi. **Spring 2010-** Robert Maidhof (Advisor: G. Vunjak-Novakovic)
xxii. **Spring 2011-** Amin Katouzian (Advisor: A.F. Laine; Co-advisor: E.E. Konofagou)
xxiii. **Spring 2011-** Roger Goldman (Advisor: Nabil Simaan, Mechanical Engineering)
xxiv. **Spring 2011-** Cherry Chen (Advisor: Mark Borden, Chemical Engineering)
xxv. **Spring 2011-** Tipapon Khamdeng (Co-advisor; Advisor: P. Terdtoon, Chiang Mai University, Thailand)
40. **Spring 2012-** Nora Khanarian (Advisor: H.H. Lu)
41. **Spring 2012-** Yao-Sheng Tung (Advisor: E.E. Konofagou)
42. **Spring 2012-** Molly Flexman (Advisor: A. H. Hielscher)
43. **Summer 2012-** Jean Provost (Advisor: E.E. Konofagou)
44. **Spring 2012-** Jameel Feshitan (Advisor: Mark Borden, Co-advisor: E.E. Konofagou)
45. **Fall 2012**- Ilyana Atanasova (Advisor: A.F.Laine)
46. **Fall 2012**- Ouri Cohen (Advisor: A.F.Laine)
47. **Spring 2013**- Huang Yanping (Advisor: Y.P.Zheng, HKUST, Hong Kong, China)
48. **Spring 2013**- Tormod Selbekk (Advisor: T. Hernes, NTNU, Trondheim, Norway)
49. **Fall 2013** – Gary Hou (Advisor: E.E. Konofagou)
50. **Spring 2014**- Michael Khalil (Advisor: A. H. Hielscher)

51. **Spring 2014**- - Jack Po (Advisor: A.F. Laine)
52. **Spring 2014**- - Xiaowei Zou (Advisor: P. Sajda/T.R. Brown)
53. **Summer 2014** – Amandine Godier (Advisor: G. Vunjak-Novakovic)
54. **Fall 2014**- Mania Samiotaki (Advisor: E.E. Konofagou)
55. **Summer 2015**-Matthew Downs (Advisors: E.E. Konofagou&V. P. Ferrera)
56. **Fall 2015**-Sebastien Salles (Advisor: H. Liebgott, Université de Lyon, France)
57. **Fall 2015**-Tobias Erlov (Advisor: M. Cinthio, Lund University, Sweden)
58. **Fall 2015**-Viktor Gamarnik (Advisor: A.F. Laine)
59. **Fall 2015**-Adam Nover (Advisors: C.T. Hung/G.Ateshian/E.E. Konofagou)
60. **Spring 2016** – Ioanna Malatra (Advisor: John Saxman, Teacher's College)
61. **Fall 2016** – Alex Costet (Advisor: E.E. Konofagou)
62. **Fall 2016** – Shih-Ying Wu (Advisor: E.E. Konofagou)
63. **Spring 2017** – Ethan Bunting (Advisor: E.E. Konofagou)
64. **Spring 2017** – Chris Fong (Advisor: AA Hielscher)
65. **Summer 2017** - Sofie Snipstad (Advisor: C. de Lange Davies, NTNU, Norway)
66. **Summer 2018**- Apostolakis, I. (Advisor: E.E. Konofagou)
67. **Fall 2018**- Han Y., (Advisor: E.E. Konofagou)
68. **Spring 2020-** Marilena Karakatsani M (Advisor: E.E. Konofagou)
69. **Summer 2020-** Lea Melki (Advisor: E.E. Konofagou)
70. **Summer 2020-** Vincent Sayseng (Advisor: E.E. Konofagou)
71. **Summer 2020-** Mirella Altoe (Advisor: A.H. Hielscher)
72. **Fall 2020-**Jeffrey Elloian (Advisor: K. Shepard, EE)
73. **Summer 2022**- Niloufar Saharkhiz (Advisor: E.E. Konofagou)
74. **Summer 2022**- Grigorios Karageorgos (Advisor: E.E. Konofagou)
75. **Summer 2022**- Stephen Lee (Advisor: E.E. Konofagou)
76. **Fall 2022** – Christian Aurup (Advisor: E.E. Konofagou)
77. **Spring 2023**- Paul Kemper (Advisor: E.E. Konofagou)
78. **Spring 2023** –Alina Kline-Schoder (Advisor: E.E. Konofagou)
79. **Spring 2024**-Jad El Harake (Advisor: E.E. Konofagou)

D. EMPLOYMENT RECORD

1. 11/93-10/94 **Biomedical engineer**
Onassis Cardiac Surgery Center and N.C.S.R. Demokritos, Athens, Greece

2. 8/99- 10/99 **Postdoctoral fellow**
Department of Radiology, University of Texas Medical School, Houston, TX.

3. 11/99-6/02 **Research fellow**
Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.

4. 7/02-9/03 **Instructor**
Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.

5. 10/03-02/09 **Assistant Professor**
Department of Biomedical Engineering, Columbia University, New York, NY

6. 5/04-02/09 **Assistant Professor**
Department of Radiology, Columbia University, New York, NY

7. 03/09-present **Associate Professor**
Department of Biomedical Engineering, Columbia University, New York, NY

8. 03/09**-**present **Associate Professor**
Department of Radiology, Columbia University, New York, NY

9. 01/14-06/16 **Professor**
Department of Biomedical Engineering, Columbia University, New York, NY

10. 01/14**-**present **Professor**

Department of Radiology, Columbia University, New York, NY

9. 007/16-present **Robert and Margaret Hariri Professor of Biomedical Engineering**
Department of Biomedical Engineering, Columbia University, New York, NY

E.PUBLICATIONS

[GOOGLE SCHOLAR: Citations: 20,713 citations; h-index: 78; i10-index: 269) in peer-reviewed literature as of February 9, 2024; SCOPUS: Documents by author: 494; Citations: 14,329 by 7,271 documents; h-index: 69] ORCID: **0000-0002-9636-7936, *SCOPUS:* 7005877325]**

E.1. All published work

Peer-reviewed Journal Articles:

1. **Konofagou E.E.**, Dutta, P., Ophir, J. and Cespedes, I., Reduction of Stress Nonuniformities by Apodization of Compressor Displacement in Elastography, Ultrasound in Medicine and Biology 22(9), 1229-1236, 1996.
2. **Konofagou E.E.**, Ophir, J., Kallel, F. and Varghese, T., Elastographic Dynamic Range Expansion using Variable Applied Strains, Ultrasonic Imaging 19, 145-166, 1997.
3. **Konofagou E.E.**, Varghese, T. and Ophir, T., Variable Compressions with RF and Baseband Processing for Dynamic Range Expansion of Elastograms, Journal of Medical Ultrasonics (Japan) 24(5) 753-760, 1997. [Invited].
4. Alam S.K., Ophir, J. and **Konofagou E.E.**, An Adaptive Stretching Estimator for Elastography, IEEE Transactions of Ultrasonics, Ferroelectrics and Frequency Control 45(2), 461-472, 1998.
5. **Konofagou E.E.** and Ophir, J., A New Elastographic Method for Estimation and Imaging of Lateral Strains, Corrected Axial Strains and Poison's Ratios in Tissues, Ultrasound in Medicine and Biology 24(8), 1183-1199, 1998.
6. Ophir J., Alam S. K., Garra B., Kallel F., **Konofagou E.E.**, Krouskop T. and Varghese T., Elastography: Ultrasonic estimation and imaging of elastic properties of tissues, Journal of Engineering in Medicine, Proceedings of the Institute of Mechanical Engineers 213(H), 203-233, 1999. [Invited].
7. **Konofagou E.E.**, Varghese T., Ophir J. and Alam S. K., Incoherent and Direct Spectral Strain Estimators in Elastography, Ultrasound in Medicine and Biology 25 (7), 1115-1129, 1999.
8. Kallel F., Price R., **Konofagou E.E.** and Ophir J., Elastographic Imaging of the Dog Prostate In-Vitro, Ultrasonic Imaging 21(3), 201-215, 1999.
9. **Konofagou E.E.**, Harrigan T. and Ophir J., Shear Strain Estimation and Lesion Mobility Assessment in Elastography, Ultrasonics 38(1-8), 400-404, 2000.
10. **Konofagou E.E.**, Varghese T. and Ophir J., Spectral Estimators in Elastography, Ultrasonics 38(1-8), 412-416, 2000.
11. Ophir J., Garra B., Kallel F., **Konofagou E.E.**, Krouskop T., Righetti R. and Varghese T., Elastographic imaging, Ultrasound in Medicine and Biology 26 Suppl. 1, 23-29, 2000.
12. **Konofagou E.E.** and Ophir J., Precision Estimation and Imaging of the Three-Dimensional Normal and Shear Strain Tensor Principal Components, Physics in Medicine and Biology 45(6), 1553-63, 2000 [Invited].
13. Varghese, T., **Konofagou E.E.**, Ophir, J. and Alam, S.K., Direct Strain Estimation in Elastography Using Spectral Cross-correlation, Ultrasound in Medicine and Biology 26(9), 1525-37, 2000.
14. **Konofagou E.E.**, Varghese T. and Ophir J., A Fundamental Limit on the Estimation of Transverse Displacement, Transverse Strain and Poisson's Ratio in Elastography, Ultrasonic Imaging 22(3), 153-177, 2000.
15. Ophir J., Kallel F., Varghese T., **Konofagou E.E.**, Alam S. K., Garra B., Krouskop T.

and Righetti R., Elastography, Optical and Acoustic Imaging of Acoustic Media, C.R. Acad. Sci. Paris, Tome 2, Serie IV, No. 8, 1193-1212, 2001. [Invited].

16. **Konofagou E.E.**, Thierman J. and Hynynen K., A New Focused Ultrasound Method for Dual Diagnostic and Therapeutic Applications – A Simulation Study, Physics in Medicine and Biology 46(11): 2967-2984, 2001.

17. **Konofagou E.E.**, Harrigan T., Ophir J. and Krouskop T., Poroelastography: Estimation and Imaging of the Poroelastic Properties of Tissues, Ultrasound in Medicine and Biology 27(10): 1387-1397, 2001.

18. Varghese T., **Konofagou E.E.**, Ophir, J., Kallel F., and Righetti, R., Fundamentals of Elastographic Imaging, Ultrasonic Imaging 23:216-248, 2001.

19. **Konofagou E.E.**, D'hooge J. and Ophir J., Myocardial Elastography – An In Vivo Feasibility Study, Ultrasound in Medicine and Biology 28(4), 475-482, 2002.

20. D'hooge J., **Konofagou E.E.**, Jamal F., Heimdal A., Barrios L., Bijmens B., Thoen J., Van de Werf F., Sutherland G. and Suetens P., Two-dimensional Strain Rate Measurement of the Human Heart In Vivo, IEEE Transactions in Ultrasonics, Ferroelectrics and Frequency Control 49, 281-286, 2002.

21. **Konofagou E.E.,** Thierman J. Karjalainen T. and Hynynen K., The Temperature Dependence of Ultrasound-Stimulated Acoustic Emission, Ultrasound in Medicine and Biology 28(3), 331-338, 2002.

22. Ophir J., Alam S.K., Garra B., Kallel F., **Konofagou E.E.**, Krouskop T., Merritt C.R.B., Righetti, R., Souchon, R., Srinivasan, S. and Varghese T., Elastography: Imaging the Elastic Properties of soft Tissues with Ultrasound, Journal of the Japan Society of Ultrasonics in Medicine 29: 155-171, 2002 [Invited].

23. **Konofagou E.E.**, Thierman J. and Hynynen K., The Use of USAE Frequency Shift in the Monitoring of Modulus Changes with Temperature, Ultrasonics 41(5): 337-45, 2003.

24. **Konofagou E.E.** and Hynynen K., Localized Harmonic Motion Imaging: Theory, Simulations and Experiments, Ultrasound in Medicine and Biology 29: 1405-13, 2003.

25. **Konofagou E.E.** Ottensmeyer M., Dawson S.L. and Hynynen K., Estimating localized oscillatory tissue motion for assessment of the underlying mechanical modulus, Ultrasonics 42, 951-956, 2004.

26. **Konofagou E.E.**, Quo vadis Elasticity Imaging?, Ultrasonics 42, 331-336, 2004 [Invited].

27. Harrigan T. and **Konofagou E.E.**, Estimation of material elastic moduli in elastography: A local method, and an investigation of Poisson ratio sensitivity, Journal of Biomechanics 37(8), 1215-1221, 2004.

28. Langevin H.M., **Konofagou E.E.**, Badger G. J., Churchill D. L., Fox J.R. , Ophir J. and Garra B. S., Displacement Imaging During Acupuncture Using Elastographic Techniques, Ultras. Med. Biol. 30(9), 1173-1183, 2004.

29. **Konofagou E.E.** and Langevin H.M. Using Ultrasound To Understand Acupuncture, IEEE Engineering in Medicine and Biology Magazine 24(2), 41-46, 2005 [Invited].

30. Spalazzi J.P., Gallina J., Fung-kee-Fung S., **Konofagou E.E.** and Lu H.H., Elastographic Imaging of Strain Distribution in the Anterior Cruciate Ligament and at the Ligament-Bone Insertions, Journal of Orthopedics Research 24(10):2001-10, 2006.

31. Morda L.S., Lim W.-K. and **Konofagou E.E.,** Left-Ventricular Segmentation Using Autocovariance Techniques, Ultrasonic Imaging 28(3), 159-78, 2006.

32. Maleke, C., Pernot, M. and **Konofagou E.E.,** A Single-Element Focused Transducer Method for Harmonic Motion Imaging,Ultrasonic Imaging 28(3), 144-58, 2006 [Invited].

33. Choi J.J., Pernot M., Small S., and **Konofagou E.E.,** Non-invasive, Transcranial, and Localized Opening of the Blood-Brain Barrier in Mice using Focused Ultrasound – A Feasibility Study, Ultrasound in Med. Biol. 33: 95-104, 2007.

34. Zervantonakis I. K., Fung-kee-Fung S.D., Lee W.-N. and **Konofagou E.E.,** A Novel View-Independent Method for Strain Estimation in Myocardial Elastography - Eliminating Angle- and Centroid-Dependence, Phys. Med. Biol. 52, 4063-4080, 2007.

35. Pernot M., Fujikura K., Fung-kee-Fung S. and **Konofagou E.E.**, ECG-synchronized, ultrafast ultrasound imaging of cardiovascular tissues in intact mice, Ultras. Med. Biol. 33(7):1075-85, 2007.

36. Luo J., Fujikura K., Homma S. and **Konofagou E.E.**, Myocardial Elastography at both High Temporal and Spatial Resolution for the Detection of Murine Infarcts, Ultras. Med. Biol., Vol. 33, No. 8, pp. 1206–1223, 2007.

37. Langevin H.M., Rizzo D.M., Fox J.R., Stevens-Tuttle D., **Konofagou E.E.**, Bouffard N.A., Badger G.J., and Krag M.H., Dynamic morphometric characterization of local connective tissue network structure in humans using ultrasound, BMC Systems Biology 5;1:25. 2007.

38. Choi J.J., Pernot M., Brown T.R., Small S., and **Konofagou E.E.,** A Spatio-temporal analysis of molecular delivery through the blood-brain barrier using focused ultrasound, Phys. Med. Biol. 52: 5509-5530, 2007.

39. Lee W-N., Ingrassia C., Fung-kee-Fung S., Costa K.D. Holmes, J.W. and **Konofagou E.E**. A Theoretical Framework for Quality Assessment in Myocardial Elastography, IEEE Trans. Ultras. Ferroel. Freq. Control., Vol. 54, No.11, 2233-2245, 2007.

40. Fujikura K., Luo J., Gamarnik V., Pernot M., Fukumoto R., Homma S., Tilson III M.D. and **Konofagou E.E.,** A Novel Non-Invasive Technique for Pulse-wave Imaging and Characterization of Vascular Mechanical Properties In-Vivo, Ultrasonic Imaging 29, 137-154, 2007.

41. Luo J. and **Konofagou E.E.,** High Frame-Rate, Full-View Myocardial Elastography With Automated Contour Tracking In Vivo, IEEE Trans. Ultras. Ferroel. Freq. Control., Vol. 55, No. 1, 240-248, 2008.

42. Maleke C. and **Konofagou E.E.**, Harmonic Motion Imaging For Focused Ultrasound (HMIFU): A Fully Integrated Technique For Sonication And Monitoring Of Thermal Ablation In Tissues, Phys. Med. Biol., Vol. 53, No. 6, 1773-1793, 2008.

43. Katouzian A., Baseri B., **Konofagou E.E.,** and Carlier S.G., Challenges in Atherosclerotic Plaque Characterization with Intravascular Ultrasound (IVUS): From Data Collection to Classification, IEEE Information Technology in Biomedicine, Vol. 12, No. 3, 315-327, 2008.

44. Shan B, Pelegri AA, Maleke C, **Konofagou E.E.** A mechanical model to compute elastic modulus of tissues for harmonic motion imaging. J Biomech. 41(10):2150-2158, 2008.

45. Lee W-N. and **Konofagou E.E.,** Angle-Independent and Multi-Dimensional Myocardial Elastography: From Theory to Clinical Validation, Ultrasonics 48(6-7):563-7, 2008 [Invited].

46. Wang S., Lee W-N, Provost J, Luo J. and **Konofagou E.E.,** A Composite High-Frame-Rate System For Clinical Cardiovascular Imaging, IEEE Trans. Ultras. Ferroel. Freq. Control., 55: 2221-2233, 2008.

47. Lee W-N., Qian Z., Tosti C.L., Brown, T.R., Metaxas D.N. and **Konofagou E.E.**. Preliminary Validation Of Angle-Independent Myocardial Elastography Using MR Tagging In A Clinical Setting, Ultras. Med. Biol. 34(12):1980-97, 2008.

48. Choi J.J., Wang S., Brown T.R., Small S.A., Duff K.E. and **Konofagou E.E.,** Noninvasive and Transient Blood-Brain Barrier Opening in the Hippocampus of Alzheimer's Double Transgenic Mice Using Pulsed Focused Ultrasound, Ultrasonic Imaging 30, 189-200, 2008.

49. Luo J., Fujikura K., Tyrie L., Tilson III M.D. and **Konofagou E.E.,** Pulse Wave Imaging of Normal and Aneurysmal Abdominal Aortas In Vivo, IEEE Trans. Med. Imag. 28, 477-486, 2009.

50. Vappou J., Maleke, C., and **Konofagou, E.E.,** Quantitative viscoelastic parameters measured by Harmonic Motion Imaging, Phys. Med. Biol. 54(11):3579-94, 2009.
51. Luo J. and **Konofagou E.E.**, Effects of Various Parameters on Lateral Displacement Estimation in Ultrasound Elastography, Ultras. Med. Biol. 35 (8), 1352–1366, 2009.
52. Luo J., Lee W-N, and **Konofagou E.E.**, Fundamental Performance Assessment of 2-D Myocardial Elastography in a Phased Array Configuration, IEEE Trans. Ultras. Ferroel Freq. Control 2009.
53. Maleke C. and **Konofagou E.E.**, In Vivo Feasibility of Harmonic Motion Imaging for Therapeutic Ultrasound, IEEE Trans. In Biomed. Eng. 57(1), 7-11, 2010.
54. Choi, J.J., Feshitan J., Wang S., Baseri B., Borden M., **Konofagou, E.E.,** Microbubble-size dependence on focused ultrasound-induced blood-brain barrier opening in mice, IEEE Trans Biomed Eng 57(1), 145-154, 2010.
55. Choi, J.J., Wang S., Morrison B., **Konofagou, E.E.,** Molecules of multiple pharmacologically-relevant sizes can cross the ultrasound-induced blood-brain barrier opening in vivo, Ultras. Med. Biol. 36 (1), 58–67, 2010.
56. Konofagou E.E., Luo J., Saluja D., Cervantes D., Coromilas J. and Fujikura K., Noninvasive electromechanical wave imaging and conduction-relevant velocity estimation in vivo, Ultrasonics 50, 208–215, 2010 [Invited]. NIHMS155400
57. Provost J., Lee W-N., Fujikura K., Wang J. and **Konofagou E.E.**, Electromechanical Wave Imaging of Normal and Ischemic Hearts in Vivo, IEEE Trans. In Med. Imag. 29(3), 625-635, 2010.
58. Vappou J., Luo, J., and **Konofagou, E.E.,** Pulse Wave Imaging for noninvasive and quantitative measurement of arterial stiffness, Amer. J. of Hypertens., 23(4), 393-398, 2010.
59. Danpinid A., Luo J., Vappou J., Terdtoon P. and **Konofagou E.E.**, Characterization of the Stress-Strain Relationship of the Abdominal Aortic Wall In Vivo, Ultrasonics, 50, 654–665, 2010.
60. Tung Y., Choi J., Baseri B. and **Konofagou E.E.**, Identifying the Inertial Cavitation Threshold and Skull Effects in a Vessel Phantom Using Focused Ultrasound and Microbubbles, Ultras. Med. Biol. 36(5), 840-852, 2010.
61. Luo, J. and **Konofagou, E.E.,** Fast Normalized Cross-Correlation Calculation with Exhaustive Search for Motion Estimation, IEEE-UFFC Trans. 57(6): 1347-1356, 2010.
62. Baseri B. Choi J., Tung Y., and **Konofagou E.E.**, Multi-Modality Safety Assessment of Blood-Brain Barrier Opening Using Focused Ultrasound and Definity Microbubbles: A Short-Term Study, Ultras. Med. Biol. 36(9), 1445–1459, 2010.
63. Vlachos F., Tung Y.S. and **Konofagou, E.E.,** Permeability assessment of the focused ultrasound-induced blood-brain barrier opening using dynamic contrast-enhanced MRI, Phys Med Biol 55, 5451-5466,2010.
64. Maleke, C., Luo J., Gamarnik V., Lu X. and **Konofagou, E.E.,** Amplitude-modulated (AM) Harmonic Motion Imaging (HMI) - A Simulation Study with Experimental Validation, Ultrasonic Imaging, 32, 154-176, 2010.
65. Choi J., Selert K., Gao Z., Samiotaki G., Baseri B., and **Konofagou E.E.**, Noninvasive and localized blood-brain barrier disruption using focused ultrasound can be achieved at short pulse lengths and low pulse repetition frequencies, Journal of Cerebral Flow and Metabolism, 31(2), 725-737, 2011.
66. Tung Y., Vlachos, F., Selert K. and **Konofagou E.E.**, In vivo Transcranial Cavitation Threshold Detection during Ultrasound-Induced Blood-Brain Barrier Opening, Phys. Med. Biol, 55(20): 6141-6155, 2010.
67. Deffieux T and **Konofagou, E.E.,** Numerical study and experimental validation of a simple transcranial focused ultrasound system applied to Blood-Brain Barrier Opening, IEEE-UFFC Trans. 57(12): 2637-53, 2010.
68. Marquet F, Tung Y-S, **Konofagou E.E.** Feasibility Study Of A Clinical Blood-Brain Opening Ultrasound System, Nano Life Vol. 1, Nos. 3 & 4, 309-322, 2010 [Invited].

69. Lee W-N, Provost J, Fujikura K, Wang J and **Konofagou E.E.** In Vivo Validation of Strain Estimates at Variable Levels of Coronary Flow, Phys. Med. Biol. 56, 1155-1172, 2011. PMID:21285479

70. Tung Y., Marquet M., Teichert T., Ferrera V. and **Konofagou E.E.**, Feasibility of noninvasive cavitation-guided blood-brain barrier opening using focused ultrasound and microbubbles in nonhuman primates, Applied Physics Letters 98, 163704, 2011.

71. Provost J, Gurev V, Trayanova N., and **Konofagou E.E.**, Mapping of Cardiac Electrical Activation with Electromechanical Wave Imaging: An in silico-in vivo Reciprocity Study 8(5):752-9, Heart Rhythm, 2011. PMC3100212

72. Konofagou, E.E., Maleke, C., and Vappou J., Harmonic Motion Imaging (HMI) for Tumor Imaging and Treatment Monitoring, Current Medical Imaging Reviews (CMIR), 477-506, 2011.

73. Vlachos F., Tung Y.S., Feshitan J., Borden, M.A. and **Konofagou, E.E.,** Quantitative permeability assessment of the focused ultrasound-induced blood-brain barrier opening using DCE-MRI, Magnetic Resonance in Medicine, 66(3):821-30,2011.

74. Luo J and **Konofagou E.E.**, Simultaneous Imaging of Wall Motion and Blood Flow Velocity in the Heart and Vessels in vivo: A Feasibility Study, Ultras. Med. Biol. 37(6):980-95,2011.

75. Vappou J., Luo, J., Okajima K. and **Konofagou, E.E.,** Aortic Pulse Wave Velocity Measured By Pulse Wave Imaging (PWI): A Comparison With Applanation Tonometry, Artery Research, Artery Research **5**(2): 65-71, 2011.

76. Provost J, Lee W-N, Fujikura K, and **Konofagou E.E.**, Imaging the Electromechanical Activity of the Heart In Vivo, Proceedings of the National Academy of Sciences (PNAS) 108(21):8565-70, 2011. PMC3102378

77. Konofagou E.E, Lee W-N, Luo, J., Provost J, and Vappou J., Physiologic Cardiovascular Strain and Intrinsic Wave Imaging, Annu. Rev. Biomed. Eng. 13:477–505, 2011.

78. Langevin H M, Fox J R, Koptiuch C, Badger GJ, Greenan-Naumann AC, Bouffard NA, **Konofagou EE**, Lee W-N, Triano JJ and Henry SM.Reduced thoracolumbar fascia shear strain in human chronic low back pain, BMC Musculoskeletal Disorders, BMC Musculoskeletal Disorders 12:203, 2011.

79. Vappou, J., Luo, J., Okajima K., Di Tullio M. **and Konofagou, E**. J. Non-Invasive Measurement of Local Pulse Pressure by Pulse-Wave-based Ultrasound Manometry (PWUM) Physiol. Meas., 2010, Vol. 32(10), pp. 1653-62, 2011.

80. Feshitan JA, Vlachos F, Sirsi SR, **Konofagou EE**, Borden MA. Theranostic Gd(III)-lipid microbubbles for MRI-guided focused ultrasound surgery. Biomaterials. 2011 Oct 10. [Epub ahead of print]

81. Marquet F, Tung Y-S, Teichert T., Ferrera V., **Konofagou E.E.** Noninvasive, transient and selective blood-brain barrier opening in non-human primates in vivo, PLoS One 6(7):e225982011, 2011.

82. Choi J., Selert K., Vlachos F., Wong A., and **Konofagou E.E.**, Noninvasive and localized neuronal delivery using short ultrasonic pulses and microbubbles, Proceedings of the National Academy of Sciences (PNAS) 108(40), 16539-16544, 2011.

83. Tung, Y-S, Vlachos F., Feshitan J., Borden M.A., **Konofagou E.E.** The Mechanism Of The Interaction Between Focused Ultrasound And Microbubbles In Blood-Brain Barrier Opening In Mice, J. Acous. Soc. Amer 108(40), 130 (5), 3059-3067, 2011.

84. Provost J, Nguyen VT, Legrand D, Okrasinski S, Costet A, Gambhir A, Garan H, **Konofagou EE**., Electromechanical wave imaging for arrhythmias, Phys Med Biol. Nov 21;56(22):L1-11, 2011.

85. Feshitan JA, Vlachos F, Sirsi SR, **Konofagou EE**, Borden MA. Theranostic Gd(III)-lipid microbubbles for MRI-guided focused ultrasound surgery. Biomaterials. 33(1):247-55, 2012.

86. Samiotaki, M, Vlachos F., Tung Y-S, Feshitan J., Borden M**, Konofagou E.E.** A

Quantitative Pressure and Microbubble-Size Dependence Study of Focused Ultrasound-Induced Blood-Brain Barrier Opening Reversibility In Vivo Using MRI, , Magn Reson Med. Magn Reson Med. Mar;67(3):769-77. 2012. PMC3658823

87. Hou Y., Luo, J., Marquet F., Maleke C., Vappou J., **Konofagou E.E.** Performance Assessment Of HIFU Lesion Detection By Harmonic Motion Imaging For Focused Ultrasound (HMIFU): A 3-D Finite-Element-Based Framework With Experimental Validation, Ultras. Med. Biol., 2012.

88. Luo J., Li R. and **Konofagou E.E.**, Pulse Wave Imaging (PWI) of the Human Carotid Artery: An In Vivo Feasibility Study, IEEE Trans. Ultras. Ferroel. Freq Control,;59(1):174-81, 2012.

89. Khamdaeng T., Luo J., Vappou J., Terdtoon P**., Konofagou E.E**., Arterial stiffness identification of the human carotid artery using the stress–strain relationship in vivo, Ultrasonics, 52(3): 402-411, 2012.

90. Konofagou, E.E. and Provost J., Electromechanical Wave Imaging for Noninvasive Mapping of the 3D Electrical Activation Sequence in Canines and Humans in vivo, J. Biomech. 15;45(5):856-64, 2012 [Invited]. NIHMS353135

91. Provost J. Thiebault S., Luo J. and **Konofagou, E.E.** and Single-heartbeat electromechanical wave imaging with optimal strain estimation using temporally unequispaced acquisition sequences, Phys Med Biol, 57(4):1095-112, 2012. NIHMS375306

92. Baseri B., Choi J.J., Deffieux T., Samiotaki G., Tung Y-S.,Olumolade O., Small, S.A., Morrison B. III, **Konofagou E.E.**, Activation of signaling pathways following localized delivery of systemically administered neurotrophic factors across the blood–brain barrier using focused ultrasound and microbubbles, Phys. Med. Biol. 57, N65–N81, 2012. NIHMS375337

93. Hariharan, V., Provost, J., Shah, S., **Konofagou, E.E.**, and Huang, H. Elevated Strain and Structural Disarray Occur at the Right Ventricular Apex, Cardiovascular Engineering and Technology, Cardiovascular Engineering and Technology, Volume 3, Issue 1, pp 52-61, 2012.

94. Maidhof R, Tandon N, Lee EJ, Luo J, Duan Y, Yeager K, Konofagou E, Vunjak-Novakovic G.Biomimetic perfusion and electrical stimulation applied in concert improved the assembly of engineered cardiac tissue. J Tissue Eng Regen Med. Nov;6(10):e12-23, 2012.

95. Shahmirzadi D, **Konofagou EE**. Detection of Aortic Wall Inclusion Using Regional Pulse Wave Propagation and Velocity In Silico. Artery Research, **5**(2): 65-71, 2012. NIHMS382500

96. Okrasinski SJ, Ramachandran B, **Konofagou E.E.** Assessment of myocardial elastography performance in phantoms under combined physiologic motion configurations with preliminary in vivo feasibility, Phys. Med. Biol., 7;57(17):5633-50, 2012.

97. Katouzian A, Karamalis A, Sheet D, **Konofagou EE**, Baseri B, Carlier SG, Eslami A, König A, Navab N, Laine AF. Iterative self-organizing atherosclerotic tissue labeling in intravascular ultrasound images and comparison with virtual histology. IEEE Trans Biomed Eng. 59(11):3039-49, 2012.

98. Konofagou EE, Tung YS, Choi J, Deffieux T, Baseri B, Vlachos F. "Ultrasound-induced blood-brain barrier opening." Curr Pharm Biotechnol. 2012 Jun;**13**(7):1332-45. Review. PMID: 22201586 [Invited]

99. Konofagou EE.. "Optimization of the ultrasound-induced blood-brain barrier opening." Theranostics. 2012; **2**(12):1223-37. PMID: 23382778 [Invited]

100. Shahmirzadi D, **Konofagou EE**. Pulse-Wave Propagation in Straight-Geometry Vessels for Stiffness Estimation: Theory, Simulations, Phantoms and In Vitro Findings, J. Biomech Eng., 134(11): 114502, 2012.

101. Marsano A, Maidhof R, Luo J, Fujikura K, **Konofagou EE**, Banfi A, Vunjak-

Novakovic G. The effect of controlled expression of VEGF by transduced myoblasts in a cardiac patch on vascularization in a mouse model of myocardial infarction. Biomaterials. 34(2):393-401, 2013. PMC3490044

102. Chen C, Wu, SY, Finan, J, Morrison III, B. and **Konofagou EE**. An Experimental Study on the Stiffness of Size-Isolated Microbubbles Using Atomic Force Microscopy, IEEE Trans. Ultras. Ferroel. Freq. Control, 60 (3), 524-534, 2013.

103. Provost J., Gambhir A., Garan H. and **Konofagou E.E.**, A Clinical Feasibility Study of Atrial and Ventricular Electromechanical Wave Imaging, Heart Rhythm 10(6), 856-862, 2013.

104. Li R., Luo J., Balaram S., Chaudhry F., Lantis J., Shahmirzadi D. and Konofagou EE, Pulse wave imaging in normal, hypertensive and aneurysmal human aortas in vivo: a feasibility study, Phys. Med. Biol. 58, 4549-4562, 2013.

105. Shahmirzadi D, Narayanan P, Li RX, Qaqish WW and **Konofagou EE**, Mapping the longitudinal wall stiffness heterogeneities within intact canine aortas using Pulse Wave Imaging (PWI) ex vivo, J. Biomech 46(11), 1866-1874, 2013.

106. Shahmirzadi D, Hou Y, Chen J., and **Konofagou EE**, Ex Vivo Characterization Of Canine Liver Tissue Viscoelasticity After High-Intensity Focused Ultrasound Ablation, Ultras. Med. Biol., 2013.

107. Samiotaki, G. and **Konofagou, E**, Dependence of the Reversibility of Focused- Ultrasound Induced Blood-Brain Barrier Opening on Pressure and Pulse Length, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, Volume 60, Number 11, Pages 2257-2265, November 2013.

108. Chen C.C., Sheeran P. S., Wu S.Y, Olumolade O. O., Dayton P. S., **Konofagou, E.** Targeted Drug Delivery with Focused Ultrasound-induced Blood-Brain Barrier Opening using Acoustically-activated Nanodroplets, J. Cont. Release, Volume 172, Number 3, Pages 795-804, 2013.

109. Alexandre Costet, Jean Provost, Alok Gambhir, Yevgeniy Bobkov, Peter Danilo Jr., Gerard J. J. Boink, Michael R. Rosen, Elisa E. Konofagou, Electromechanical Wave Imaging of Biologically And Electrically Paced Canine Hearts In Vivo, Ultrasound in Medicine and Biology, Volume 40, Number 1, Pages 177-187, January 2014

110. Wang S., Samiotaki, G. and **Konofagou, E**, Microbubble Type and Distribution Dependence of Focused Ultrasound Induced Blood Brain Barrier Opening, Ultrasound Med Biol. Volume 40, Number 1, Pages 130-137, January 2014

111. Fabrice Marquet, Tobias Teichert, Shih-Ying Wu, Yao-Sheng Tung, Matthew E. Downs, Shutao Wang, Cherry C. Chen, Vincent P. Ferrera, Elisa E. **Konofagou**, Real-Time, Transcranial Monitoring of Safe Blood-Brain Barrier Opening in Non- Human Primates, PLoS One, Volume 9, Number 2, February 2014

112. Hou Yi, Fabrice Marquet, Shutao Wang, Elisa E. **Konofagou**,Multi-parametric monitoring and assessment of high-intensity focused ultrasound (HIFU) boiling by harmonic motion imaging for focused ultrasound (HMIFU): an ex vivo feasibility study, Physics in Medicine and Biology, Volume 59, Pages 1121-1145, February 2014

113. Danial Shahmirzadi, Yi Hou, Jiangang Chen, Elisa E. **Konofagou**, Ex Vivo Characterization of Canine Liver Tissue Viscoelasticity After High-Intensity Focused Ultrasound Ablation, Ultrasound in Medicine and Biology, 2014

114. Shih-Ying Wu, Yao-Sheng Tung, Fabrice Marquet, Matthew E. Downs, Carlos J. Sierra Sánchez, Cherry C. Chen, Vincent P. Ferrera, Elisa E. **Konofagou**, Transcranial Cavitation Detection in Primates during Blood-Brain Barrier Opening - A Performance Assessment Study, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014 Jun;61(6):966-78.

115. Chen H. and **Konofagou E.**E., The size of BBB opening induced by FUS is

dictated by the acoustic pressure, J. Cereb. Flow and Metab., 2014 Jul;34(7):1197-204.

116. Nandlall SD, Goldklang MP, Kalashian A, Dangra NA, D'Armiento JM, **Konofagou** EE. Monitoring and staging abdominal aortic aneurysm disease with pulse wave imaging. Ultrasound Med Biol. 2014 Oct;40(10):2404-14.

117. Hou G, Provost J, Grondin J, Wang S, Marquet F, Bunting E, **Konofagou E.** Sparse matrix beamforming and image reconstruction for real-time 2D HIFU monitoring using Harmonic Motion Imaging for Focused Ultrasound (HMIFU) with in vitro validation. IEEE Trans Med Imaging. 2014 Jun 20.

118. Shahmirzadi D, **Konofagou** EE. Quantification of Arterial Wall Inhomogeneity Size, Distribution, and Modulus Contrast Using FSI Numerical Pulse Wave Propagation. Artery Res. 2014 Jun 1;8(2):57-65.

119. Sacha D. Nandlall, Monica P. Goldklang, Aubrey Kalashian, Nida A. Dangra, Jeanine M. d'Armiento, Elisa E. **Konofagou**, Monitoring and staging abdominal aortic aneurysm disease with pulse wave imaging, Ultrasound in Medicine and Biology, Volume 40, Number 10, Pages 2404-2414, October 2014.

120. Yi Hou, Jean Provost, Julien L. Grondin, Shutao Wang, Fabrice Marquet, Ethan A. Bunting, Elisa E. **Konofagou**, IEEE Transactions on Medical Imaging, Volume 33, Number 11, Pages 2107-2117, November 2014.

121. Bunting, E, Provost J., and **Konofagou** EE, Performance Analysis of Two-Dimensional Cardiac Strain Estimation Using Novel SequencesDifferent Beamforming and Temporal Resolution in Vivo, Phys. Med. Biol. 2014;59(22):6841- 58.

122. Chen H, **Konofagou** EE. The size of blood-brain barrier opening induced by focused ultrasound is dictated by the acoustic pressure. Journal of cerebral blood flow and. 2014;34(7):1197-204. PMCID: PMCPmc4083385.

123. Chen H, Chen CC, Acosta C, Wu SY, Sun T, **Konofagou** EE. A new brain drug delivery strategy: focused ultrasound-enhanced intranasal drug delivery. PLoS One. 2014 e108880. doi: 10.1371/journal.pone.0108880. [PMCID in process]

124. Grondin J, **Konofagou** EE, Intracardiac Myocardial Elastography in vivo, IEEE Trans. Ultras. Ferroel. Freq. Control, Volume 62, Number 2, Pages 337-349,2015.

125. Costet, A; Bunting, E; Grondin, J; Gambhir, A; **Konofagou**, EE, Atrial Electromechanical Cycle Length Mapping in Paced Canine Hearts In Vivo, IEEE Trans. Ultras. Ferroel. Freq. Control, 2015 Jul;62(7):1277-87.

126. Vappou Jonathan, Gary Y Hou, Fabrice Marquet, Danial Shahmirzadi, Julien Grondin, and Elisa E **Konofagou**, Non-contact, ultrasound-based indentation method for measuring elastic properties of biological tissues using harmonic motion imaging (HMI), Phys. Med. Biol. 2015.

127. Hou GY, Marquet F, Wang S, Apostolakis IZ, **Konofagou** EE. High-intensity focused ultrasound monitoring using harmonic motion imaging for focused ultrasound (HMIFU) under boiling or slow denaturation conditions. IEEE Trans Ultrason Ferroelectr Freq Control. 2015 Jul;62(7):1308-19.

128. Wang S, Olumolade O, Sun T, Samiotaki G, **Konofagou** EE. Non-invasive, neuron-specific gene therapy can be facilitated by focused ultrasound and recombinant adeno-associated virus, Gene Therapy 2015 Jan;22(1):104-10. [PMCID in process]

129. Samiotaki, G., Acosta C., Wang S. and **Konofagou**, E, Enhanced Delivery and Bioeffects of the Neurturin (NTN) Neurotrophic Factor through Focused Ultrasound– Mediated Blood-Brain Barrier Opening in vivo, J Cereb Blood Flow Metab. 2015 Mar 31;35(4):611-22.

130. Wu S-W, Chen C., Tung Y-S., Olumolade O., **Konofagou** EE, Effects of the

microbubble shell physicochemical properties on ultrasound-mediated drug delivery to the brain. Journal of Controlled Release 212: 30–40, 2015.

131. Chen H, Hou GY, Han Y, Payen T, Palermo CF, Olive KP, **Konofagou** EE. Harmonic motion imaging for abdominal tumor detection and high-intensity focused ultrasound ablation monitoring: an in vivo feasibility study in a transgenic mouse model of pancreatic cancer. IEEE Trans Ultrason Ferroelectr Freq Control. 2015 Sep;62(9):1662-73.

132. Han Y, Hou GY, Wang S, **Konofagou E.** High intensity focused ultrasound (HIFU) focal spot localization using harmonic motion imaging (HMI). Phys Med Biol. 2015 Aug 7;60(15):5911-24.

133. Chen J, Hou GY, Marquet F, Han Y, Camarena F, **Konofagou E.** Radiation-force-based estimation of acoustic attenuation using harmonic motion imaging (HMI) in phantoms and in vitro livers before and after HIFU ablation. Phys Med Biol. 2015 Oct 7;60(19):7499-512.

134. Sun T, Samiotaki G, Wang S, Acosta C, Chen CC, **Konofagou** EE. Acoustic cavitation-based monitoring of the reversibility and permeability of ultrasound-induced blood-brain barrier opening. Phys Med Biol. 2015 Nov 12;60(23):9079-9094.

135. Grondin J, Payen T, Wang S, **Konofagou** EE. Real-time Monitoring of High Intensity Focused Ultrasound (HIFU) Ablation of In Vitro Canine Livers Using Harmonic Motion Imaging for Focused Ultrasound (HMIFU). J Vis Exp. 2015 Nov 3;(105). doi: 10.3791/53050.

136. Kamimura HA, Wang S, Wu SY, Karakatsani ME, Acosta C, Carneiro AA, **Konofagou** EE. Chirp- and random-based coded ultrasonic excitation for localized blood-brain barrier opening. Phys Med Biol. 2015 Sep 22;60(19):7695-7712.

137. Provost J, Costet A, Wan E, Gambhir A, Whang W, Garan H, **Konofagou** EE. Assessing the atrial electromechanical coupling during atrial focal tachycardia, flutter, and fibrillation using electromechanical wave imaging in humans, Comput Biol Med. 2015 Oct 1;65:161-7.

138. Li, R.X., Qaqish, W.W., Konofagou, E.E. "Performance assessment of Pulse Wave Imaging using conventional ultrasound in canine aortas ex vivo and normal human arteries in vivo." Artery Research. Volume 11, Pages 19–28, 2015.

139. Downs ME, Buch A, Sierra C, Karakatsani ME, Teichert T, Chen S, Konofagou EE, Ferrera VP. Long-Term Safety of Repeated Blood-Brain Barrier Opening via Focused Ultrasound with Microbubbles in Non-Human Primates Performing a Cognitive Task. PloS one. 2015;10(6):e0130860. Epub 2015/06/19. PMCID: PMCPmc4472352.

140. Downs ME, Buch A, Karakatsani ME, Konofagou EE, Ferrera VP. Blood-Brain Barrier Opening in Behaving Non-Human Primates via Focused Ultrasound with Systemically Administered Microbubbles.Sci Rep. 2015 Oct 26;5:15076.

141. Apostolakis I-Z, Sacha D. Nandlall, Elisa E. **Konofagou**, Adaptive stiffness mapping in murine atherosclerotic and aneurysmal aortas using Pulse Wave Imaging (PWI) in vivo, IEEE Trans. Med. Imag., IEEE Trans Med Imaging 35(1):13-28, 2016.

142. Nover AB, Hou GY, Han Y, Wang S, O'Connell GD, Ateshian GA, **Konofagou EE**, Hung CT. High intensity focused ultrasound as a tool for tissue engineering: Application to cartilage. Med Eng Phys. 2016 Feb;38(2):192-8. doi: 10.1016/j.medengphy.2015.11.016. Epub 2015 Dec 24.

143. Wang S, Karakatsani ME, Fung C, Sun T, Acosta C, **Konofagou E.** Direct brain

infusion can be enhanced with focused ultrasound and microbubbles.J Cereb Blood Flow Metab. 2016 Mar 11. pii: 0271678X16637881. [Epub ahead of print]

144. Engell S, Triano JJ, Fox JR, Langevin HM, Konofagou EE. Differential displacement of soft tissue layers from manual therapy loading. Clin Biomech (Bristol, Avon). 2016 Feb 23;33:66-72. doi: 10.1016/j.clinbiomech.2016.02.011.

145. Han Y, Wang S, Hibshoosh H, Taback B, **Konofagou E.** Tumor characterization and treatment monitoring of postsurgical human breast specimens using harmonic motion imaging (HMI).Breast Cancer Res. 2016;18(1):46.

146. Nandlall S and **Konofagou E.**E., Assessing the Stability of Aortic Aneurysms with Pulse Wave Imaging, Radiology, Radiology. 2016 Jun 8:151407. [Epub ahead of print].

147. Chen H, Yang GZ, Getachew H, Acosta C, Sierra Sánchez C, Konofagou EE. Focused ultrasound-enhanced intranasal brain delivery of brain-derived neurotrophic factor. Sci Rep. 2016 Jun 27;6:28599. doi: 10.1038/srep28599.

148. Payen T, Palermo CT, Sastra S, Chen H, Yang H, Olive KP and **Konofagou E.**E., Elasticity mapping of murine abdominal organs in vivo using harmonic motion imaging (HMI), Physics in Medicine & Biology, 2016 Jul 12;61(15):5741-5754.

149. McGarry, M., Li, R., Apostolakis, I., Nauleau, P., & Konofagou, E. E. An inverse approach to determining spatially varying arterial compliance using ultrasound imaging. Physics in Medicine and Biology, 61(15), 5486-5507, 2016.

150. Jimenez Noe, Camarena Francisco, Redondo Javier, Sanchez-Morcillo Victor, Hou Yi, Konofagou Elisa E., Time-domain simulation of ultrasound propagation in a tissue-like medium based on the resolution of the nonlinear acoustic constitutive relations, Acta Acustica, 2016.

151. Muleki-Seya P, Guillermin R, Guglielmi J, Chen J, Pourcher T, Konofagou E, Franceschini E. High Frequency Quantitative Ultrasound Spectroscopy of Excised Canine Livers and Mouse Tumors using the Structure Factor Model. IEEE Trans Ultrason Ferroelectr Freq Control. 2016 (accepted).

152. Olumolade OO, Wang S, Samiotaki G, Konofagou EE. Longitudinal Motor and Behavioral Assessment of Blood-Brain Barrier Opening with Transcranial Focused Ultrasound. Ultrasound Med Biol. 2016 Jun 20. pii: S0301-5629(16)30061-8.

153. Bunting E., Lambrakos L., Kemper P., Whang W., Garan H., **Konofagou E.**E., Imaging the propagation of the electromechanical wave in heart failure patients with cardiac resynchronization therapy, Pacing Clin Electrophysiol 40(1):35-45, 2017.

154. Papadacci C., Bunting E., Wan E.Y., Nauleau P., **Konofagou E.**E. 3D quasi-static ultrasound elastography with plane wave in vivo, IEEE Trans. Med. Imag. 2017 Feb;36(2):357-365.

155. Papadacci C., Bunting E., Wan E.Y., Nauleau P., **Konofagou E.**E. 3D Myocardial Elastography In Vivo, IEEE Trans. Med. Imag, Feb;36(2):618-627.

156. Grondin J., Costet A., Bunting E., Gambhir A., Wan E.Y., **Konofagou E.**E., Validation of Electromechanical Wave Imaging in a canine model during pacing and sinus rhythm, Heart Rhythm, Heart Rhythm. 2016 Nov;13(11):2221-2227.

157. Wu SY, Sanchez CS, Samiotaki G, Buch A, Ferrera VP, **Konofagou** EE. Characterizing Focused-Ultrasound Mediated Drug Delivery to the Heterogeneous Primate Brain In Vivo with Acoustic Monitoring. Sci Rep. 2016 Nov 17;6:37094. doi: 10.1038/srep37094.

158. Kamimura HA, Wang S, Chen H, Wang Q, Aurup C, Acosta C, Carneiro AA, Konofagou EE.Focused ultrasound neuromodulation of cortical and subcortical brain structures using 1.9 MHz. Med Phys. 2016 Oct;43(10):5730.

159. Costet A, Wan E, Bunting E, Grondin J, Garan H, **Konofagou E.** Electromechanical wave imaging (EWI) validation in all four cardiac chambers with 3D electroanatomic mapping in canines in vivo .Phys Med Biol. 2016 Nov 21;61(22):8105-8119.

160. Laksari K, Shahmirzadi D, Acosta CJ, **Konofagou E.**Energy-based constitutive modelling of local material properties of canine aortas.R Soc Open Sci. 2016 Sep 21;3(9):160365.

161. Suomi V, Han Y, **Konofagou** E, Cleveland RO.The effect of temperature dependent tissue parameters on acoustic radiation force induced displacements.Phys Med Biol. 2016 Oct 21;61(20):7427-7447.

162. Samiotaki G, Karakatsani ME, Buch A, Papadopoulos S, Wu SY, Jambawalikar S, Konofagou EE. Pharmacokinetic analysis and drug delivery efficiency of the focused ultrasound-induced blood-brain barrier opening in non-human primates. Magn Reson Imaging. 2016 Dec 1. pii: S0730-725X(16)30236-3. doi: 10.1016/j.mri.2016.11.023.

163. Wang Shutao, Amanda Buch, Camilo Acosta, Oluyemi Olumolade, Syed, H, Duff K, Elisa Konofagou, Non-invasive, Focused Ultrasound-Facilitated Gene Delivery for Optogenetics, Scientific Reports 2017; 7:39955.

164. Han Y, Wang S, Payen T, **Konofagou E.**Fast lesion mapping during HIFU treatment using harmonic motion imaging guided focused ultrasound (HMIgFUS) in vitro and in vivo. Phys Med Biol. 2017 Apr 21;62(8):3111-3123. doi: 10.1088/1361-6560/aa6024. Epub 2017 Mar 21.

165. Karakatsani ME, Samiotaki G, Downs M, Ferrera V, **Konofagou E.**Targeting Effects on the Volume of the Focused Ultrasound Induced Blood-Brain Barrier Opening in Non-Human Primates in vivo. IEEE Trans Ultrason Ferroelectr Freq Control. 2017 Mar 13. doi: 10.1109/TUFFC.2017.2681695. [Epub ahead of print]

166. Sanz-Miralles EC, Li R, Momen-Heravi F, Mendieta C, Konofagou EE, Papapanou PN.Assessment of arterial stiffness in periodontitis using a novel pulse wave imaging methodology. J Clin Periodontol. 2017 Mar 9. doi: 10.1111/jcpe.12717. [Epub ahead of print]

167. Grondin J, Waase M, Gambhir A, Bunting E, Sayseng V, Konofagou EE. Evaluation of Coronary Artery Disease Using Myocardial Elastography with Diverging Wave Imaging: Validation against Myocardial Perfusion Imaging and Coronary Angiography. Ultrasound Med Biol. 2017 Feb 28. pii: S0301-5629(17)30007-8. doi: 10.1016/j.ultrasmedbio.2017.01.001.

168. Han Y, Wang S, Payen T, **Konofagou E.**Fast lesion mapping during HIFU treatment using harmonic motion imaging guided focused ultrasound (HMIgFUS) in vitro and in vivo. Phys Med Biol. 2017 Apr 21;62(8):3111-3123.

169. Nauleau P, Melki L, Wan E, **Konofagou E.** A 3-D rendering algorithm for electromechanical wave imaging of a beating heart. Med Phys. 2017 Sep;44(9):4766-4772. doi: 10.1002/mp.12411. Epub 2017 Jul 28.

170. Melki L, Costet A, Konofagou EE.Reproducibility and Angle Independence of Electromechanical Wave Imaging for the Measurement of Electromechanical Activation during Sinus Rhythm in Healthy Humans.Ultrasound Med Biol. 2017 Oct;43(10):2256-2268. doi: 10.1016/j.ultrasmedbio.2017.06.019. Epub 2017 Aug 1.

171. Grondin J, Sayseng V, Konofagou EE.Cardiac Strain Imaging With Coherent Compounding of Diverging Waves.IEEE Trans Ultrason Ferroelectr Freq Control. 2017 Aug;64(8):1212-1222. doi: 10.1109/TUFFC.2017.2717792. Epub 2017 Jun 20.

172. Apostolakis IZ, Nauleau P, Papadacci C, McGarry MD, Konofagou EE.Feasibility and Validation of 4-D Pulse Wave Imaging in Phantoms and In Vivo.IEEE Trans Ultrason Ferroelectr Freq Control. 2017 Sep;64(9):1305-1317. doi: 10.1109/TUFFC.2017.2735381. Epub 2017 Aug 3.

173. Samiotaki G, Karakatsani ME, Buch A, Papadopoulos S, Wu SY, Jambawalikar S, Konofagou EE. Pharmacokinetic analysis and drug delivery efficiency of the focused ultrasound-induced blood-brain barrier opening in non-human primates. Magn Reson Imaging. 2017 Apr;37:273-281.

174. Bunting E., Papadacci C., Wan E.Y., Grondin J., **Konofagou E.**E. Intracardiac

lesion quantification in cardiac radiofrequency ablation, IEEE Trans. Ultras. Ferroel. Freq. Control, 2017. [Invited].

175. Downs ME, Teichert T, Buch A, Karakatsani ME, Sierra C, Chen S, Konofagou EE and Ferrera VP (2017), Toward a Cognitive Neural Prosthesis Using Focused Ultrasound. Front. Neurosci. 11:607.doi: 10.3389/fnins.2017.00607

176. Wu, Shih-Ying; Fix, Samantha; Arena, Christopher; Chen, Cherry; Zheng, Wenlan; Olumolade, Oluyemi; Papadopoulou, Virginie; Novell, Anthony; Dayton, Paul; Konofagou, Elisa, Focused Ultrasound-Facilitated Brain Drug Delivery Using Optimized Nanodroplets: Vaporization Efficiency Dictates Large Molecular Delivery, Phys. Med. Biol. Jan 22;63(3):035002, 2018

177. Han Y, Payen T, Wang S, **Konofagou E.** Focused Ultrasound Steering for Harmonic Motion Imaging. IEEE Trans Ultrason Ferroelectr Freq Control. 2018 Feb;65(2):292- 294. doi: 10.1109/TUFFC.2017.2781188.

178. Bunting E, Papadacci C, Wan E, Sayseng V, Grondin J, Konofagou EE.Cardiac Lesion Mapping In Vivo Using Intracardiac Myocardial Elastography. IEEE Trans Ultrason Ferroelectr Freq Control. 2018 Jan;65(1):14-20.

179. Han Y, Payen T, Wang S, **Konofagou E.** Focused Ultrasound Steering for Harmonic Motion Imaging. IEEE Trans Ultrason Ferroelectr Freq Control. 2018 Feb;65(2):292- 294.

180. Burgess MT, Apostolakis I, Konofagou EE. Power cavitation-guided blood-brain barrier opening with focused ultrasound and microbubbles.Phys Med Biol. 2018 Mar 15;63(6):065009.

181. Nauleau P, Apostolakis IZ, McGarry M, Konofagou EE. Cross-correlation analysis of pulse wave propagation in arteries: in vitro validation and in vivo feasibility. Phys Med Biol. 2018 Apr 16.

182. Munoz F, Aurup C, Konofagou EE, Ferrera VP. Modulation of Brain Function and Behavior by Focused Ultrasound.Ultrasound Med Biol. 2019 Feb;45(2):353-366.Curr Behav Neurosci Rep. 2018 Jun;5(2):153-164. doi: 10.1007/s40473-018-0156-7. Epub 2018 May 9.

183. Nabavizadeh A, Payen T, Saharkhiz N, McGarry M, Olive KP, Konofagou EE. Technical Note: In vivo Young's modulus mapping of pancreatic ductal adenocarcinoma during HIFU ablation using harmonic motion elastography (HME) Med Phys. 2018 Nov;45(11):5244-5250. doi: 10.1002/mp.13170. Epub 2018 Oct 1

184. Downs ME, Lee SA, Yang G, Kim S, Wang Q, Konofagou EE. Non-invasive peripheral nerve stimulation via focused ultrasound in vivo.Phys Med Biol. 2018 Jan 26;63(3):035011.

185. Costet A, Wan E, Melki L, Bunting E, Grondin J, Garan H, **Konofagou E.** Non- invasive Characterization of Focal Arrhythmia with Electromechanical Wave Imaging in Vivo.Ultrasound Med Biol. 2018 Nov;44(11):2241-2249.

186. Pouliopoulos AN, Burgess MT, Konofagou EE. Pulse inversion enhances the passive mapping of microbubble-based ultrasound therapy.Appl Phys Lett. 2018 Jul 23;113(4):044102. doi: 10.1063/1.5036516. Epub 2018 Jul 24.

187. Wu SY, Aurup C, Sanchez CS, Grondin J, Zheng W, Kamimura H, Ferrera VP, Konofagou EE.Efficient Blood-Brain Barrier Opening in Primates with Neuronavigation-Guided Ultrasound and Real-Time Acoustic Mapping.Sci Rep. 2018 May 22;8(1):7978. doi: 10.1038/s41598-018-25904-9.

188. Sayseng V, Grondin J, Konofagou EE. Optimization of Transmit Parameters in Cardiac Strain Imaging With Full and Partial Aperture Coherent Compounding.IEEE Trans Ultrason Ferroelectr Freq Control. 2018 May;65(5):684-696.

189. Campo A, McGarry MD, Panis T, Dirckx J, **Konofagou E.** Effect of local

Neck Anatomy on Localized 1D-Measurements of Arterial Stiffness: a FEM Study. J Biomech Eng. 2019 Mar 1;141(3).

190. Li RX, Apostolakis IZ, Kemper P, McGarry MDJ, Ip A, Connolly ES, McKinsey JF, Konofagou EE. Pulse Wave Imaging in Carotid Artery Stenosis Human Patients in Vivo. Phys Med Biol. 2019 Jan 10;64(2):025013.

191. Chen Y, Liu J, Grondin J, Konofagou EE, Luo J.Compressed sensing reconstruction of synthetic transmit aperture dataset for volumetric diverging wave imaging. Phys Med Biol. 2019 Jan 10;64(2):025013.

192. Grondin J, Wang D, Grubb CS, Trayanova N, Konofagou EE. 4D cardiac electromechanical activation imaging. Comput Biol Med. 2019 Oct;113:103382.

193. Burgess MT, Konofagou EE. Fast qualitative two-dimensional mapping of ultrasound fields with acoustic cavitation-enhanced ultrasound imaging. J Acoust Soc Am. 2019 Aug;146(2):EL158.

194. Karakatsani ME, Kugelman T, Ji R, Murillo M, Wang S, Niimi Y, Small SA, Duff KE, Konofagou EE. Unilateral Focused Ultrasound-Induced Blood-Brain Barrier Opening Reduces Phosphorylated Tau from The rTg4510 Mouse Model. Theranostics. 2019 Jul 13;9(18):5396-5411.

195. Lopez-Gomez C, Hewan H, Sierra C, Akman HO, Sanchez-Quintero MJ, Juanola-Falgarona M, Tadesse S, Tanji K, Konofagou EE, Hirano M. Bioavailability and cytosolic kinases modulate response to deoxynucleoside therapy in TK2 deficiency. EBioMedicine. 2019 Aug;46:356-367.

196. Peng B, Luo S, Xu Z, Jiang J. Accelerating 3-D GPU-based Motion Tracking for Ultrasound Strain Elastography Using Sum-Tables: Analysis and Initial Results. Appl Sci (Basel). 2019 May 2;9(10):1991.

197. Karakatsani ME, Blesa J, Konofagou EE. Blood-brain barrier opening with focused ultrasound in experimental models of Parkinson's disease. Mov Disord. 2019 Sep;34(9):1252-1261.

198. Tiennot T, Kamimura HAS, Lee SA, Aurup C, Konofagou EE. Numerical modeling of ultrasound heating for the correction of viscous heating artifacts in soft tissue temperature measurements. Appl Phys Lett. 2019 May 20;114(20):203702.

199. Melki L, Grubb CS, Weber R, Nauleau P, Garan H, Wan E, Silver ES, Liberman L, Konofagou EE. Localization of Accessory Pathways in Pediatric Patients With Wolff-Parkinson-White Syndrome Using 3D-Rendered Electromechanical Wave Imaging. JACC Clin Electrophysiol. 2019 Apr;5(4):427-437.

200. Karakatsani ME, Wang S, Samiotaki G, Kugelman T, Olumolade OO, Acosta C, Sun T, Han Y, Kamimura HAS, Jackson-Lewis V, Przedborski S, **Konofagou E.** Amelioration of the nigrostriatal pathway facilitated by ultrasound-mediated neurotrophic delivery in early Parkinson's disease. J Control Release. 2019 Jun 10;303:289-301. doi: 10.1016/j.jconrel.2019.03.030. Epub 2019 Apr 4. PMID: 30953664; PMCID: PMC6618306. [COVER]

201. Payen T, Oberstein PE, Saharkhiz N, Palermo CF, Sastra SA, Han Y, Nabavizadeh A, Sagalovskiy IR, Orelli B, Rosario V, Desrouilleres D, Remotti H, Kluger, Schrope BA, Chabot JA, Iuga AC, Konofagou E, Olive KP. Harmonic Motion Imaging of pancreatic tumor stiffness indicates disease state and treatment response. Clin Cancer Res. 2019 Dec 12. pii: clincanres.3669.2018.

202. Kamimura HAS, Aurup C, Bendau EV, Saharkhiz N, Kim MG, Konofagou EE Iterative Curve Fitting of the Bioheat Transfer Equation for Thermocouple-Based Temperature Estimation In Vitro and In Vivo. IEEE Trans Ultrason Ferroelectr Freq Control. 2020 Jan;67(1):70-80.

203. Sayseng V, Grondin J, Weber RA, **Konofagou E.** A comparison between unfocused and focused transmit strategies in cardiac strain imaging. Phys Med Biol. 2020 Jan 24;65(3):03NT01. Central PMCID: PMC6982561.

204. Washington PM, Lee C, Dwyer MKR, Konofagou EE, Kernie SG, Morrison B 3rd. Hyaluronidase reduced edema after experimental traumatic brain injury. J Cereb

Blood Flow Metab. 2019 Oct 24:271678X19882780.

205. Ji R, Smith M, Niimi Y, Karakatsani ME, Murillo MF, Jackson-Lewis V, Przedborski S, Konofagou EE. Focused ultrasound enhanced intranasal delivery of brain derived neurotrophic factor produces neurorestorative effects in a Parkinson's disease mouse model. Sci Rep. 2019 Dec 18;9(1):19402.

206. Pouliopoulos AN, Wu SY, Burgess MT, Karakatsani ME, Kamimura HAS, Konofagou EE. A Clinical System for Non-invasive Blood-Brain Barrier Opening Using a Neuronavigation-Guided Single-Element Focused Ultrasound Transducer. Ultrasound Med Biol. 2020 Jan;46(1):73-89.

207. Apostolakis IZ, Karageorgos GM, Nauleau P, Nandlall SD, Konofagou EE. Adaptive Pulse Wave Imaging: Automated Spatial Vessel Wall Inhomogeneity Detection in Phantoms and in-Vivo. IEEE Trans Med Imaging. 2020 Jan;39(1):259-269.

208. Karageorgos GM, Apostolakis IZ, Nauleau P, Gatti V, Weber R, Connolly ES, Miller EC, Konofagou EE. Arterial wall mechanical inhomogeneity detection and atherosclerotic plaque characterization using high frame rate pulse wave imaging in carotid artery disease patients in vivo. Phys Med Biol. 2020 Jan 17;65(2):025010.

209. Wang S, Wu CC, Zhang H, Karakatsani ME, Wang YF, Han Y, Chaudhary KR, Wuu CS, Konofagou E, Cheng SK. Focused ultrasound induced-blood-brain barrier opening in mouse brain receiving radiosurgery dose of radiation enhances local delivery of systemic therapy. Br J Radiol. 2020 May 1;93(1109):20190214

210. Grubb CS and Melki L Wang DY, Peacock J, Dizon J, Iyer V, Sorbera C, Biviano A, Rubin DA, Morrow JP, Saluja D, Tieu A, Nauleau P, Weber R, Chaudhary S, Khurram I, Waase M, Garan H, Konofagou EE* and Elaine Y*. Wan, Noninvasive localization of cardiac arrhythmias using electromechanical wave imaging, Science Translational Medicine, Sci Transl Med. 2020 Mar 25;12(536).. [*co-corresponding authors]

211. Kim MG, Kamimura HAS, Lee SA, Aurup C, Kwon N, Konofagou EE. Image-guided focused ultrasound modulates electrically evoked motor neuronal activity in the mouse peripheral nervous system in vivo. J Neural Eng. Apr 8;17(2):026026, 2020

212. Nabavizadeh A, Payen T, Iuga AC, Sagalovskiy IR, Desrouilleres D, Saharkhiz N, Palermo CF, Sastra SA, Oberstein PE, Rosario V, Kluger MD, Schrope BA, Chabot JA, Olive KP, **Konofagou E.** Noninvasive Young's modulus visualization of fibrosis progression and delineation of pancreatic ductal adenocarcinoma (PDAC) tumors using Harmonic Motion Elastography (HME) in vivo. Theranostics. 2020 Mar 15;10(10):4614-4626.

213. Sayseng V, Grondin J, Salgaonkar V, Grubb CS, Basij M, Mehrmohammadi M, Iyer V, Wang D, Garan H, Wan EY, **Konofagou E.** Catheter ablation lesion visualization with intracardiac strain imaging in canines and humans. IEEE Trans Ultrason Ferroelectr Freq Control. 2020 Apr 15.

214. Pouliopoulos AN, Jimenez DA, Frank A, Robertson A, Zhang L, Kline-Schoder AR, Bhaskar V, Harpale M, Caso E, Papapanou N, Anderson R, Li R, Konofagou EE. Temporal stability of lipid-shelled microbubbles during acoustically-mediated blood-brain barrier opening. Front Phys. 2020 May;8:137. doi: 10.3389/fphy.2020.00137.

215. Lee SA, Kamimura HAS, Burgess MT, Konofagou EE. Displacement imaging for focused ultrasound peripheral nerve neuromodulation. IEEE Trans Med Imaging. 2020 May 14. doi: 10.1109/TMI.2020.2992498.

216. Kamimura HAS, Conti A, Toschi N, Konofagou EE. Ultrasound neuromodulation: mechanisms and the potential of multimodal stimulation for neuronal function assessment. Front Phys. 2020 May;8:150

217. Galan-Acosta L, Sierra C, Leppert A, Pouliopoulos AN, Kwon N, Noel RL,

Tambaro S, Presto J, Nilsson P, Konofagou EE, Johansson J.Recombinant BRICHOS chaperone domains delivered to mouse brain parenchyma by focused ultrasound and microbubbles are internalized by hippocampal and cortical neurons. Mol Cell Neurosci. 2020 Jun;105:103498.

218. Sayseng V, Ober RA, Grubb CS, Weber RA, **Konofagou E.**Monitoring Canine Myocardial Infarction Formation and Recovery via Transthoracic Cardiac Strain Imaging.Ultrasound Med Biol. 2020 Jul 27:S0301-5629(20)30262-3.

219. Kamimura HAS, Wu SY, Grondin J, Ji R, Aurup C, Zheng W, Heidmann M, Pouliopoulos AN, **Konofagou E.**, Real-time passive acoustic mapping using sparse matrix multiplication. IEEE Trans Ultrason Ferroelectr Freq Control. 2020 Jun 29.

220. Lee SA, Kamimura HAS, Konofagou EE Displacement imaging during focused ultrasound median nerve modulation: A preliminary study in human pain sensation mitigation. IEEE Trans Ultrason Ferroelectr Freq Control. 2020 Aug 3.

221. Saharkhiz N, Ha R, Taback B, Li XJ, Weber R, Nabavizadeh A, Lee SA, Hibshoosh H, Gatti V, Kamimura HAS, Konofagou EE. Harmonic motion imaging of human breast masses: an in vivo clinical feasibility. Sci Rep. 2020 Sep 17;10(1):15254.

222. Gatti V, Nauleau P, Karageorgos GM, Shim JJ, Ateshian GA, Konofagou EE. Modelling Pulse Wave Propagation Through a Stenotic Artery with Fluid Structure Interaction: A Validation Study Using Ultrasound Pulse Wave Imaging. J Biomech Eng. 2020 Oct 8. doi: 10.1115/1.4048708.

223. Fung CW, Guo J, Fu H, Figueroa HY, Konofagou EE, Duff KE. Atrophy associated with tau pathology precedes overt cell death in a mouse model of progressive tauopathy. Sci Adv. 2020 Oct 16;6(42):eabc8098.

224. Wei HJ, Upadhyayula PS, Pouliopoulos AN, Englander ZK, Zhang X, Jan CI, Guo J, Mela A, Zhang Z, Wang TJC, Bruce JN, Canoll PD, Feldstein NA, Zacharoulis S, Konofagou EE, Wu CC. Focused Ultrasound-Mediated Blood-Brain Barrier Opening Increases Delivery and Efficacy of Etoposide for Glioblastoma Treatment. Int J Radiat Oncol Biol Phys. 2020 Dec 17:S0360-3016(20)34665-4. doi: 10.1016/j.ijrobp.2020.12.019. Epub ahead of print. PMID: 33346092.

225. Karakatsani ME, Pouliopoulos A, Liu M, Jambawalikar SR, Konofagou EE. Contrast-free detection of focused ultrasound-induced blood-brain barrier opening using diffusion tensor imaging. IEEE Trans Biomed Eng. 2020 Dec 25;PP. doi: 10.1109/TBME.2020.3047575. Epub ahead of print. PMID: 33360980.

226. Aurup C, Kamimura HAS, Konofagou EE. High-Resolution Focused Ultrasound Neuromodulation Induces Limb-Specific Motor Responses in Mice in Vivo. Ultrasound Med Biol. 2021 Jan 14:S0301-5629(20)30570-6. doi: 10.1016/j.ultrasmedbio.2020.12.013. Epub ahead of print. PMID: 33455808.

227. McGarry MDJ, Campo A, Payen T, Han Y, Konofagou EE. An analytical model of full-field displacement and strain induced by amplitude-modulated focused ultrasound in harmonic motion imaging. Phys Med Biol. 2021 Jan 20. doi: 10.1088/1361-6560/abddd1.

228. Hossain MM, Saharkhiz N, Konofagou EE. Feasibility of Harmonic Motion Imaging Using A Single Transducer: In Vivo Imaging of Breast Cancer in A Mouse Model and Human Subjects. IEEE Trans Med Imaging. 2021 Feb 1;PP. doi: 10.1109/TMI.2021.3055779.

229. Melki L, Wang DY, Grubb CS, Weber R, Biviano A, Wan EY, Garan H, Konofagou EE. Cardiac Resynchronization Therapy response assessment with electromechanical activation mapping within 24 hours of device implantation - a pilot study. J Am Soc Echocardiogr. 2021 Mar 4:S0894-7317(21)00079-1. doi: 10.1016/j.echo.2021.02.012.

230. Englander ZK, Wei HJ, Pouliopoulos AN, Bendau E, Upadhyayula P, Jan CI, Spinazzi EF, Yoh N, Tazhibi M, McQuillan NM, Wang TJC, Bruce JN, Canoll P,

Feldstein NA, Zacharoulis S, Konofagou EE, Wu CC. Focused ultrasound mediated blood-brain barrier opening is safe and feasible in a murine pontine glioma model. Sci Rep. 2021 Mar 22;11(1):6521. doi: 10.1038/s41598-021-85180-y.

231. Klink PC, Aubry JF, Ferrera VP, Fox AS, Froudist-Walsh S, Jarraya B, Konofagou E, Krauzlis R, Messinger A, Mitchell AS, Ortiz-Rios M, Oya H, Roberts AC, Roe AW, Rushworth MFS, Sallet J, Schmid MC, Schroeder CE, Tasserie J, Tsao D, Uhrig L, Vanduffel W, Wilke M, Kagan I, Petkov CI. Combining Brain Perturbation and Neuroimaging in Non-human Primates. Neuroimage. 2021 Mar 29:118017. doi: 10.1016/j.neuroimage.2021.118017.

232. Molotkov A, Carberry P, Dolan MA, Joseph S, Idumonyi S, Oya S, Castrillon J, Konofagou EE, Doubrovin M, Lesser GJ, Zanderigo F, Mintz A. Real-Time Positron Emission Tomography Evaluation of Topotecan Brain Kinetics after Ultrasound-Mediated Blood-Brain Barrier Permeability. Pharmaceutics. 2021 Mar 18;13(3):405. doi: 10.3390/pharmaceutics13030405. PMID: 33803856.

233. Karageorgos GM, Apostolakis IZ, Nauleau P, Gatti V, Weber R, Kemper P, Konofagou EE. Pulse Wave Imaging Coupled With Vector Flow Mapping: A Phantom, Simulation, and In Vivo Study. IEEE Trans Ultrason Ferroelectr Freq Control. 2021 Jul;68(7):2516-2531. doi: 10.1109/TUFFC.2021.3074113. Epub 2021 Jun 29. PMID: 33950838.

234. Shi C, Andino-Pavlovsky V, Lee SA, Costa T, Elloian J, Konofagou EE, Shepard KL. Application of a sub-0.1-mm^3 implantable mote for in vivo real-time wireless temperature sensing. Sci Adv. 2021 May 7;7(19):eabf6312. doi: 10.1126/sciadv.abf6312. PMID: 33962948; PMCID: PMC8104878.

235. Kim MG, Kamimura HAS, Konofagou EE. Neurogenic Flare Response following Image-Guided Focused Ultrasound in the Mouse Peripheral Nervous System in Vivo. Ultrasound Med Biol. 2021 Jun 24:S0301-5629(21)00211-8. doi: 10.1016/j.ultrasmedbio.2021.04.030. Epub ahead of print. PMID: 34176702.

236. Pouliopoulos AN, Kwon N, Jensen G, Meaney A, Niimi Y, Burgess MT, Ji R, McLuckie AJ, Munoz FA, Kamimura HAS, Teich AF, Ferrera VP, Konofagou EE. Safety evaluation of a clinical focused ultrasound system for neuronavigation guided blood-brain barrier opening in non-human primates. Sci Rep. 2021 Jul 22;11(1):15043. doi: 10.1038/s41598-021-94188-3. PMID: 34294761; PMCID: PMC8298475.

237. Ji R, Karakatsani ME, Burgess M, Smith M, Murillo MF, Konofagou EE. Cavitation modulated inflammatory response following focused ultrasound blood-brain barrier opening. J Control Release. 2021 Jul 26:S0168-3659(21)00393-X. doi: 10.1016/j.jconrel.2021.07.042. Epub ahead of print. PMID: 34324895.

238. Melki L, Tourni M, Konofagou EE. Electromechanical Wave Imaging with machine learning for automated isochrone generation. IEEE Trans Med Imaging. 2021 Apr 21;PP. doi: 10.1109/TMI.2021.3074808. Epub ahead of print. PMID: 33881993.

239. Karageorgos GM, Apostolakis IZ, Nauleau P, Gatti V, Weber R, Kemper P, Konofagou EE. Pulse Wave Imaging Coupled With Vector Flow Mapping: A Phantom, Simulation, and In Vivo Study. IEEE Trans Ultrason Ferroelectr Freq Control. 2021 Jul;68(7):2516-2531. doi: 10.1109/TUFFC.2021.3074113. Epub 2021 Jun 29. PMID: 33950838.

240. Shi C, Andino-Pavlovsky V, Lee SA, Costa T, Elloian J, Konofagou EE, Shepard KL. Application of a sub-0.1-mm^3 implantable mote for in vivo real-time wireless temperature sensing. Sci Adv. 2021 May 7;7(19):eabf6312. doi: 10.1126/sciadv.abf6312. PMID: 33962948; PMCID: PMC8104878.

241. Kim MG, Kamimura HAS, Konofagou EE. Neurogenic Flare Response following Image-Guided Focused Ultrasound in the Mouse Peripheral Nervous System in Vivo. Ultrasound Med Biol. 2021 Jun 24:S0301-5629(21)00211-8. doi: 10.1016/j.ultrasmedbio.2021.04.030. Epub ahead of print. PMID: 34176702.

242. Pouliopoulos AN, Kwon N, Jensen G, Meaney A, Niimi Y, Burgess MT, Ji R, McLuckie AJ, Munoz FA, Kamimura HAS, Teich AF, Ferrera VP, Konofagou EE. Safety evaluation of a clinical focused ultrasound system for neuronavigation guided blood-brain barrier opening in non-human primates. Sci Rep. 2021 Jul 22;11(1):15043. doi: 10.1038/s41598-021-94188-3. PMID: 34294761; PMCID: PMC8298475.

243. Ji R, Karakatsani ME, Burgess M, Smith M, Murillo MF, Konofagou EE. Cavitation modulated inflammatory response following focused ultrasound blood-brain barrier opening. J Control Release. 2021 Jul 26:S0168-3659(21)00393-X. doi: 10.1016/j.jconrel.2021.07.042. Epub ahead of print. PMID: 34324895.

244. Kemper PPN, Mahmoudi S, Apostolakis IZ, Konofagou EE. Feasibility of Bilinear Mechanical Characterization of the Abdominal Aorta in a Hypertensive Mouse Model. Ultrasound Med Biol. 2021 Dec;47(12):3480-3490. doi: 10.1016/j.ultrasmedbio.2021.08.001. Epub 2021 Sep 7. PMID: 34507874; PMCID: PMC8693438.

245. Kemper P, Nauleau P, Karageorgos G, Weber R, Kwon N, Szabolcs M, Konofagou E. Feasibility of longitudinal monitoring of atherosclerosis with pulse wave imaging in a swine model. Physiol Meas. 2021 Dec 28;42(10):10.1088/1361-6579/ac290f. doi: 10.1088/1361-6579/ac290f. PMID: 34551396; PMCID: PMC8733748.

246. Jimenez-Gambin S, Jimenez N, Pouliopoulos A, Benlloch JM, Konofagou E, Camarena F. Acoustic Holograms for Bilateral Blood-Brain Barrier Opening in a Mouse Model. IEEE Trans Biomed Eng. 2022 Apr;69(4):1359-1368. doi: 10.1109/TBME.2021.3115553. Epub 2022 Mar 18. PMID: 34570701.

247. Batts A, Ji R, Kline-Schoder A, Noel R, Konofagou E. Transcranial Theranostic Ultrasound for Pre-Planning and Blood-Brain Barrier Opening: A Feasibility Study Using an Imaging Phased Array In Vitro and In Vivo. IEEE Trans Biomed Eng. 2022 Apr;69(4):1481-1490. doi: 10.1109/TBME.2021.3120919. Epub 2022 Mar 18. PMID: 34665716; PMCID: PMC8945253.

248. Kamimura HAS, Saharkhiz N, Lee SA, Konofagou EE. Synchronous temperature variation monitoring during ultrasound imaging and/or treatment pulse application: a phantom study. IEEE Open J Ultrason Ferroelectr Freq Control. 2021;1:1-10. doi: 10.1109/ojuffc.2021.3085539. Epub 2021 Jun 3. PMID: 34713274; PMCID: PMC8547607.

249. Lee SA, Konofagou EE. FUS-Net: U-Net-Based FUS Interference Filtering. IEEE Trans Med Imaging. 2022 Apr;41(4):915-924. doi: 10.1109/TMI.2021.3128641. Epub 2022 Apr 1. PMID: 34784273; PMCID: PMC8976793.

250. Nguyen DT, Berisha DE, Konofagou EE, Dmochowski JP. Neuronal responses to focused ultrasound are gated by pre-stimulation brain rhythms. Brain Stimul. 2022 Jan-Feb;15(1):233-243. doi: 10.1016/j.brs.2022.01.002. Epub 2022 Jan 3. PMID: 34990877.

251. Grondin J, Lee C, Weber R, Konofagou EE. Myocardial Strain Imaging With Electrocardiogram-Gated and Coherent Compounding for Early Diagnosis of Coronary Artery Disease. Ultrasound Med Biol. 2022 Apr;48(4):626-637. doi: 10.1016/j.ultrasmedbio.2021.12.001. Epub 2022 Jan 19. PMID: 35063291; PMCID: PMC8866224.

252. Munoz F, Meaney A, Gross A, Liu K, Pouliopoulos AN, Liu D, Konofagou EE, Ferrera VP. Long term study of motivational and cognitive effects of low-intensity focused ultrasound neuromodulation in the dorsal striatum of nonhuman primates. Brain Stimul. 2022 Mar-Apr;15(2):360-372. doi: 10.1016/j.brs.2022.01.014. Epub 2022 Jan 29. PMID: 35092823.

253. Hoffman B, Yoshi Y., Lee S, Konofagou EE* and Lumpkin E*, Focused Ultrasound excites action potentials in mammalian peripheral neurons in part through the mechanically gated ion channel Piezo2 [*co-corresponding authors], Proc Natl Acad Sci U S A. 2022 May 24;119(21):e2115821119. doi:

10.1073/pnas.2115821119. Epub 2022 May 17. PMID: 35580186; PMCID: PMC9173751.

254. Karageorgos GM, Kemper P, Lee C, Weber R, Kwon N, Meshram N, Mobadersany N, Grondin J, Marshall RS, Miller EC, Konofagou EE. Adaptive Wall Shear Stress Imaging in Phantoms, Simulations and in Vivo. IEEE Trans Biomed Eng. 2022 Jul 1;PP. doi: 10.1109/TBME.2022.3186854. Epub ahead of print. PMID: 35776824.

255. Hossain MM, Konofagou EE. Imaging of Single Transducer-Harmonic Motion Imaging-Derived Displacements at Several Oscillation Frequencies Simultaneously. IEEE Trans Med Imaging. 2022 Nov;41(11):3099-3115. doi: 10.1109/TMI.2022.3178897. Epub 2022 Oct 27. PMID: 35635828.

256. Melki L, Tourni M, Wang DY, Weber R, Wan EY, Konofagou EE. A new Electromechanical Wave Imaging dispersion metric for the characterization of ventricular activation in different Cardiac Resynchronization Therapy pacing schemes. IEEE Trans Biomed Eng. 2022 Sep 1;PP. doi: 10.1109/TBME.2022.3203653. Epub ahead of print. PMID: 36049009.

257. Saharkhiz N, Kamimura HAS, Konofagou EE. An efficient and multi-focal focused ultrasound technique for harmonic motion imaging. IEEE Trans Biomed Eng. 2022 Oct 3;PP. doi: 10.1109/TBME.2022.3211465. Epub ahead of print. PMID: 36191094.

258. El Harake J, Sayseng V, Grondin J, Weber R, Einstein AJ, Konofagou E. Preliminary Feasibility of Stress Myocardial Elastography for the Detection of Coronary Artery Disease. Ultrasound Med Biol. 2022 Nov 23:S0301-5629(22)00602-0. doi: 10.1016/j.ultrasmedbio.2022.10.007. Epub ahead of print. PMID: 36435662.

259. Aurup C, Pouliopoulos AN, Kwon N, Murillo MF, Konofagou EE. Evaluation of Non-invasive Optogenetic Stimulation with Transcranial Functional Ultrasound Imaging. Ultrasound Med Biol. 2022 Nov 29:S0301-5629(22)00631-7. doi: 10.1016/j.ultrasmedbio.2022.11.002. Epub ahead of print. PMID: 36460567.

260. Leong K, Lao YH, Ji R, Zhou J, Snow K, Kwon N, Saville E, He S, Chauhan S, Chi CW, Datta M, Zhang H, Quek CH, Cai S, Li M, Gaitan Y, Bechtel L, Wu SY, Lutz C, Tomer R, Murray S, Chavez A, Konofagou E. Focused ultrasound-mediated brain genome editing. Res Sq [Preprint]. 2023 Jan 20:rs.3.rs-2365576. doi: 10.21203/rs.3.rs-2365576/v1. Update in: Proc Natl Acad Sci U S A. 2023 Aug 22;120(34):e2302910120. PMID: 36712096; PMCID: PMC9882596.

261. Lee P, Wei H, Pouliopoulos AN, Forsyth BT, Yang Y, Zhang C, Laine AF, Konofagou EE, Wu C, Guo J. Deep Learning Enables Reduced Gadolinium Dose for Contrast-Enhanced Blood-Brain Barrier Opening. ArXiv [Preprint]. 2023 Jan 18:arXiv:2301.07248v1. PMID: 36713234; PMCID: PMC9882566.

262. Roh DJ, Boehme A, Mamoon R, Hooper D, Cottarelli A, Ji R, Mao E, Kumar A, Carvalho Poyraz F, Demel SL, Spektor V, Carmona J, Hod EA, Ironside N, Gutierrez J, Guo J, Konofagou E, Elkind MSV, Woo D. Relationships of Hemoglobin Concentration, Ischemic Lesions, and Clinical Outcomes in Patients With Intracerebral Hemorrhage. Stroke. 2023 Apr;54(4):1021-1029. doi: 10.1161/STROKEAHA.122.041410. Epub 2023 Feb 13. PMID: 36779340; PMCID: PMC10050127.

263. Batts AJ, Ji R, Noel RL, Kline-Schoder AR, Bae S, Kwon N, Konofagou EE. Using a novel rapid alternating steering angles pulse sequence to evaluate the impact of theranostic ultrasound-mediated ultra-short pulse length on blood-brain barrier opening volume and closure, cavitation mapping, drug delivery feasibility, and safety. Theranostics. 2023 Feb 5;13(3):1180-1197. doi: 10.7150/thno.76199. PMID: 36793858; PMCID: PMC9925313.

264. Liu D, Munoz F, Sanatkhani S, Pouliopoulos AN, Konofagou E, Grinband J, Vp F. Alteration of functional connectivity in the cortex and major brain networks of non-human primates following focused ultrasound exposure. bioRxiv [Preprint]. 2023

Feb 16:2023.02.16.528741. doi: 10.1101/2023.02.16.528741. Update in: Brain Stimul. 2023 Aug 7;16(4):1196-1204. PMID: 36824864; PMCID: PMC9949083.

265. Mobadersany N, Meshram NH, Kemper P, Sise CV, Karageorgos GM, Liang P, Ateshian GA, Konofagou EE. Pulse wave imaging of a stenotic artery model with plaque constituents of different stiffnesses: Experimental demonstration in phantoms and fluid-structure interaction simulation. J Biomech. 2023 Mar;149:111502. doi: 10.1016/j.jbiomech.2023.111502. Epub 2023 Feb 17. PMID: 36842406; PMCID: PMC10392770.

266. Kemper P, Karageorgos GM, Fodera D, Lee N, Meshram N, Weber RA, Nauleau P, Mobadersany N, Kwon N, Myers K, Konofagou EE. Pulse wave and vector flow Imaging for atherosclerotic disease progression in hypercholesterolemic swine. Sci Rep. 2023 Apr 18;13(1):6305. doi: 10.1038/s41598-023-32358-1. PMID: 37072435; PMCID: PMC10113229.

267. Bae S, Liu K, Pouliopoulos AN, Ji R, Konofagou EE. Real-Time Passive Acoustic Mapping With Enhanced Spatial Resolution in Neuronavigation-Guided Focused Ultrasound for Blood-Brain Barrier Opening. IEEE Trans Biomed Eng. 2023 May 9;PP. doi: 10.1109/TBME.2023.3266952. Epub ahead of print. PMID: 37159313.

268. Noel RL, Batts AJ, Ji R, Pouliopoulos AN, Bae S, Kline-Schoder AR, Konofagou EE. Natural aging and Alzheimer's disease pathology increase susceptibility to focused ultrasound-induced blood-brain barrier opening. Sci Rep. 2023 Apr 25;13(1):6757. doi: 10.1038/s41598-023-30466-6. PMID: 37185578; PMCID: PMC10130033.

269. Saharkhiz N, Kamimura HAS, Konofagou EE. The impact of amplitude modulation frequency in harmonic motion imaging on inclusion characterization. Ultrasound Med Biol. 2023 Aug;49(8):1768-1779. doi: 10.1016/j.ultrasmedbio.2023.03.025. Epub 2023 May 16. PMID: 37202245; PMCID: PMC10392769.

270. McCune EP, Lee SA, Konofagou EE. Interdependence of Tissue Temperature, Cavitation, and Displacement Imaging During Focused Ultrasound Nerve Sonication. IEEE Trans Ultrason Ferroelectr Freq Control. 2023 Jul;70(7):600-612. doi: 10.1109/TUFFC.2023.3280455. Epub 2023 Jun 29. PMID: 37256815; PMCID: PMC10332467.

271. Tourni M, Han SJ, Weber R, Kucinski M, Wan EY, Biviano AB, Konofagou EE. Electromechanical Cycle Length Mapping for atrial arrhythmia detection and cardioversion success assessment. Comput Biol Med. 2023 Sep;163:107084. doi: 10.1016/j.compbiomed.2023.107084. Epub 2023 May 30. PMID: 37302374.

272. Singh A, Jiménez-Gambín S, Konofagou EE. An all-ultrasound cranial imaging method to establish the relationship between cranial FUS incidence angle and transcranial attenuation in non-human primates in 3D. Res Sq [Preprint]. 2023 Jun 13:rs.3.rs-3017935. doi: 10.21203/rs.3.rs-3017935/v1. PMID: 37397998; PMCID: PMC10312917.

273. Karakatsani ME, Ji R, Murillo MF, Kugelman T, Kwon N, Lao YH, Liu K, Pouliopoulos AN, Honig LS, Duff KE, Konofagou EE. Focused ultrasound mitigates pathology and improves spatial memory in Alzheimer's mice and patients. Theranostics. 2023 Jul 14;13(12):4102-4120. doi: 10.7150/thno.79898. PMID: 37554284; PMCID: PMC10405840.

274. Liu D, Munoz F, Sanatkhani S, Pouliopoulos AN, Konofagou EE, Grinband J, Ferrera VP. Alteration of functional connectivity in the cortex and major brain networks of non-human primates following focused ultrasound exposure in the dorsal striatum. Brain Stimul. 2023 Jul-Aug;16(4):1196-1204. doi: 10.1016/j.brs.2023.08.003. Epub 2023 Aug 7. PMID: 37558125.

275. Noel RL, Gorman SL, Batts AJ, Konofagou EE. Getting ahead of Alzheimer's disease: early intervention with focused ultrasound. Front Neurosci. 2023 Jul 27;17:1229683. doi: 10.3389/fnins.2023.1229683. PMID: 37575309; PMCID: PMC10412991.

276. Lao YH, Ji R, Zhou JK, Snow KJ, Kwon N, Saville E, He S, Chauhan S, Chi CW, Datta MS, Zhang H, Quek CH, Cai SS, Li M, Gaitan Y, Bechtel L, Wu SY, Lutz CM, Tomer R, Murray SA, Chavez A, Konofagou EE, Leong KW. Focused ultrasound-mediated brain genome editing. Proc Natl Acad Sci U S A. 2023 Aug 22;120(34):e2302910120. doi: 10.1073/pnas.2302910120. Epub 2023 Aug 14. PMID: 37579143; PMCID: PMC10450663.

277. Kline-Schoder AR, Chintamen S, Willner MJ, DiBenedetto MR, Noel RL, Batts AJ, Kwon N, Zacharoulis S, Wu CC, Menon V, Kernie SG, Konofagou EE. Characterization of the responses of brain macrophages to focused ultrasound-mediated blood-brain barrier opening. Nat Biomed Eng. 2023 Oct 19.

278. Li XJ, Hossain MM, Lee SA, Saharkhiz N, Konofagou E. Harmonic Motion Imaging-Guided Focused Ultrasound Ablation: Comparison of Three Focused Ultrasound Interference Filtering Methods. Ultrasound Med Biol. 2024 Jan;50(1):119-127. doi: 10.1016/j.ultrasmedbio.2023.09.012. Epub 2023 Oct 21.

279. Liu Y, Saharkhiz N, Hossain MM, Konofagou EE. Optimization of the Tracking Beam Sequence in Harmonic Motion Imaging. IEEE Trans Ultrason Ferroelectr Freq Control. 2024 Jan;71(1):102-116.

280. Bendau EV, McCune EP, Blackman SG, Kamimura HAS, Aurup C, Konofagou EE. Modulation of cardio-respiratory activity in mice via transcranial focused ultrasound. Ultrasound Med Biol. 2024 Mar;50(3):332-340. doi: 10.1016/j.ultrasmedbio.2023.11.003

281. Roh DJ, Murguia-Fuentes R, Gurel K, Khasiyev F, Rahman S, Bueno PP, Kozii K, Spagnolo-Allende AJ, Cottarelli A, Simonetto M, Ji R, Guo J, Spektor V, Hod EA, Burke DJ, Konofagou E, Rundek T, Wright CB, Marshall RS, Elkind MSV, Gutierrez J. Relationships of Hematocrit With Chronic Covert and Acute Symptomatic Lacunar Ischemic Lesions. Neurology. 2024 Jan 23;102(2):e207961.

282. Bae S, Liu K, Pouliopoulos AN, Ji R, Jiménez-Gambín S, Yousefian O, Kline-Schoder AR, Batts AJ, Kokossis D, Mintz A, Honig LS, Konofagou EE. Transcranial Blood-Brain Barrier Opening in Alzheimer's Disease Patients Using A Portable Focused Ultrasound System with Real-Time 2-D Cavitation Mapping. medRxiv [Preprint]. 2024 Jan 18:2023.12.21.23300222. doi: 10.1101/2023.12.21.23300222. PMID: 38196636; PMCID: PMC10775403.

283. Mobadersany N, Liang P, Kemper P, Konofagou EE. Polyvinyl Alcohol Phantoms With Heterogeneous Plaques: Estimation of Pulse Wave Velocity at the Stenotic Region Using Pulse Wave Imaging. Ultrasound Med Biol. 2024 Jan;50(1):91-98. doi: 10.1016/j.ultrasmedbio.2023.09.005.

284. Lee SA, Kamimura HAS, Smith M, Konofagou EE. Functional Cerebral Neurovascular Mapping During Focused Ultrasound Peripheral Neuromodulation of Neuropathic Pain. IEEE Trans Biomed Eng. 2024 Jan 10;PP. doi: 10.1109/TBME.2024.3352025.

285. Singh A, Jiménez-Gambín S, Konofagou EE. An all-ultrasound cranial imaging method to establish the relationship between cranial FUS incidence angle and transcranial attenuation in non-human primates in 3D. Sci Rep. 2024 Jan 17;14(1):1488.

286. Hossain MM, Konofagou EE. Feasibility of Phase Velocity Imaging Using Multi Frequency Oscillation-Shear Wave Elastography. IEEE Trans Biomed Eng. 2024 Feb;71(2):607-620.

287. Singh A, Jiménez-Gambín S, Konofagou EE. An all-ultrasound cranial imaging method to establish the relationship between cranial FUS incidence angle and transcranial attenuation in non-human primates in 3D. Sci Rep. 2024 Jan 17;14(1):1488. doi: 10.1038/s41598-024-51623-5. PMID: 38233480; PMCID: PMC10794232.

Conference Publications

Conference Proceedings Publications:

Peer-reviewed Conference Proceedings:

1. **Konofagou E.E.**, Sokka S., Thierman J. and Hynynen K., Mapping of Temperature Rise Using Focused Ultrasound Phased Arrays, 2nd joint EMBS-BMES IEEE Conference in Biomedical Engineering, Houston, TX, Oct. 23-26, 2002.
2. **Konofagou E.E.**, Harrigan T. and Solomon, S., Cardiac Elastography: Detecting Pathological Changes in the Myocardium, SPIE Medical Imaging, San Diego, CA, Feb. 20-23, 242-250, 2003.
3. **Konofagou E.E.**, and Hynynen K., Harmonic Motion Imaging: A new method for the estimation of localized oscillatory response and modulus, SPIE Medical Imaging, San Diego, CA, Feb. 20-23, 201-210, 2003.
4. Morda L.S. and **Konofagou E.E.**, Left-Ventricular Segmentation Using Autocovariance Techniques, International Optical Society (SPIE) meeting, San Diego, CA, February 12-17, 378-387, 2005.
5. **Konofagou E.E.**, Spalazzi J.P., Fung-kee-Fung, S. and Lu H.H., Elastographic Imaging Of ACL-Bone Insertions In Vitro, 27th Annual Conference of the IEEE Engineering in Medicine and Biology Society, Sept. 1-4, 2005 [Invited].
6. **Konofagou E.E.**, Lee W-N. and Ingrassia C.P., A Theoretical Model For Myocardial Elastography And Its In Vivo Validation, 27th Annual Conference of the IEEE Engineering in Medicine and Biology Society, Sept. 1-4, 2005 [Invited].
7. **Konofagou E.E.**, Fung-kee-Fung S.D., Luo J. and Pernot M., Imaging the mechanics and electromechanics of the heart, IEEE Proceedings of the Engineering in Medicine and Biology Society (EMBS), New York, NY, Aug 30-Sep 2, 6648-6651, 2006.
8. Luo J., Fujikura K., and **Konofagou E.E.**, Detection Of Murine Infarcts Using Myocardial Elastography At Both High Temporal And Spatial Resolution, IEEE EMBS Symposium in Biomedical Engineering, New York, NY, Aug 30-Sep 2, 2006.
9. Maleke C. and **Konofagou E.E.**, An All-Ultrasound System for Sonication and Real- Time Monitoring of Temperature and Ablation, IEEE EMBS Symposium in Biomedical Engineering, New York, NY, Aug 30-Sep 2, 2006.
10. Ginat D. T., Hung G., Gardner T. R. and **Konofagou E.E.**, High-Resolution Ultrasound Elastography of Articular Cartilage in Vitro, Proceedings of the 28th IEEE EMBS Annual International Conference, New York City, USA, Aug 30-Sept 3, pp.6644-6647, 2006.
11. Katouzian A., Prakash A. and **Konofagou E.E.**, A New Automated Technique For Left- And Right-Ventricular Segmentation In Magnetic Resonance Imaging, IEEE EMBS Symposium in Biomedical Engineering, New York, NY, Aug 30-Sep 2, 2006.
12. **Konofagou E.E.**, Lee W-N. and Fung-kee-Fung S.D., Angle-Independent Myocardial Elastography – Theoretical Analysis and Clinical Validation, International Optical Society (SPIE) meeting, San Diego, CA, pp. 65130G-1-11, February 17-22, 2007.
13. Luo J. and **Konofagou E.E.**, High Frame-Rate, Full-View Myocardial Elastography With Automated Contour Tracking In Vivo, IEEE International Society of Biomedical Imaging (ISBI), Washington, DC, April 12-15, 2007.
14. Lee W.-N., Qian Z., Tosti C.L., Brown T.R., Metaxas D.N. and **Konofagou E.E.**, Validation Of Ultrasound Myocardial Elastography Using MR Tagging In Normal Human Hearts In Vivo, IEEE International Society of Biomedical Imaging (ISBI), Washington, DC, April 12-15, 384-387, 2007.
15. Qian, Z. Lee W-N., Metaxas D., and **Konofagou E. E.**, "Ultrasound Myocardial Elastography And Registered 3D Tagged MRI: Quantitative Strain Comparison." Proc. of the 10th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Melbourne,

Australia, Sept. 27-30, 800- 808, 2007.

16. Maleke, C., Luo J., Pelegri M. and **Konofagou E.E.**, Mapping Of Regional Cancerous Tissue Mechanical Property Changes Using Harmonic Motion Imaging, Proceedings of 2007 ASME International Mechanical Engineering Congress and Exposition, Seattle, Washington, November 11-15, 2007.

17. Katouzian A., Baseri B., **Konofagou E.E.**, Laine A.F., Texture-Driven Coronary Artery Plaque Characterization By Wavelet Packet Signatures, International Optical Society (SPIE) meeting, San Diego, CA, February 2008.

18. Katouzian A., Baseri B., **Konofagou E.E.**, Carlier S.G., Laine A.F., Texture-Driven Coronary Artery Plaque Characterization By Wavelet Packet Signatures, International Symposium Biomedical Imaging (ISBI), Paris, France, May 2008.

19. Vappou J., Zervantonakis I., Luo J., and **Konofagou E.E.**, Finite Element Modeling of the Pulse Wave propagation in the aorta for simulation of the Pulse Wave Imaging (PWI) method, 11th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), Sept. 6-10, 2008.

20. Konofagou E.E., Choi J., Wang S., Morrison B. III and Borden M., Characterization and Optimization of Trans-Blood-Brain Barrier Diffusion In Vivo, International Society on Therapeutic Ultrasound (ISTU), Minneapolis, Minnesota, 418-22, 2008.

21. Maleke C. and **Konofagou E.E.**, Real-time HIFU Monitoring Using Harmonic Motion Imaging (HMI), International Society on Therapeutic Ultrasound (ISTU), Minneapolis, Minnesota, Sept. 10-14, 2008.

22. Wang S., Choi J., Tung Y-S., Morrison B. III and **Konofagou E.E.**, Qualitative and quantitative analysis of the molecular delivery through the ultrasound-induced blood- brain barrier opening in the murine brain, International Society on Therapeutic Ultrasound (ISTU), Minneapolis, Minnesota, Sept. 10-14,2008.

23. Choi J., Wang S., Feshitan J., Tung Y-S., Borden M. and **Konofagou E.E.**, The dependence of the ultrasound-induced blood-brain barrier opening characteristics in vivo on microbubble size, International Society on Therapeutic Ultrasound (ISTU), Minneapolis, Minnesota, Sept. 10-14, 2008.

24. Luo J. and **Konofagou E.E.**, Fundamental Analysis of 2D Estimation Quality In Ultrasound Elastography, IEEE International Society of Biomedical Imaging (ISBI), Boston, MA, June 28-July 1, 2009.

25. Konofagou E.E., Choi J.J., Lee A., Baseri B., Molecular Imaging Through The Blood-Brain Barrier: Safety Assessment And Parameter Dependence, IEEE International Society of Biomedical Imaging (ISBI), Boston, MA, June 28-July 1, 2009.

26. Luo J. and **Konofagou E.E.**, Key Parameters For Precise Lateral Displacement Estimation In Ultrasound Elastography, IEEE EMBS Symposium in Biomedical Engineering, Minneapolis, MN, 4407-10, 2009. [Invited].

27. Gamarnik V., Pan S., Malke J., Chiu C., Koo B., Montes J., Yeager K., Marra J., Dunaway S., Montgomery M., Strauss N., De Vivo D. C., Kaufmann P., Morrison B., **Konofagou E.E.**, An Integrated Motion Capture System for Evaluation of Spinal Muscular Atrophy Patients, IEEE EMBS Symposium in Biomedical Engineering, Minneapolis, MN, 218-21, 2009.

28. Koo B., Montes J., Gamarnik V., Yeager K., Marra J., Dunaway S., Montgomery M., Strauss N., De Vivo D. C., **Konofagou E.E.**, Kaufmann P., Morrison B., Design, Testing and Evaluation of Gravity Neutral Orthosis in Patients with Neuromuscular Diseases, IEEE EMBS Symposium in Biomedical Engineering, Minneapolis, MN, 1573-6., 2009.

29. Danpinid A., Luo J., Vappou J., Terdtoon P. and **Konofagou E.E.**, Characterization of the Stress-Strain Relationship of the Abdominal Aortic Wall In Vivo, IEEE EMBS Symposium in Biomedical Engineering, Minneapolis, MN,

1960-3, 2009.

30. Tung Y-S., Choi J.J. and **Konofagou E.E.**, Identifying the Inertial Cavitation Threshold of Monodispersed Microbubbles and Skull Effects in a Vessel Phantom Using FUS, International Society on Therapeutic Ultrasound (ISTU), Aix-en- Provence, France, 186 – 189, 2009.

31. Konofagou E.E., Choi J.J., Baseri B. and Tung Y-S., Mechanism and safety of FUS- induced BBB opening, International Society on Therapeutic Ultrasound (ISTU), Aix- en-Provence, France, 172-175, 2009.

32. Maleke C., Ludwig T. and **Konofagou E.E.**, Harmonic Motion Imaging (HMI) for Focused Ultrasound (HMIFU): Initial in vivo results, International Society on Therapeutic Ultrasound (ISTU), Aix-en-Provence, France, 2009.

33. Lee W-N., Provost, J., Fujikura K., Wang J. and **Konofagou E.E.** Strain Imaging in the Myocardium under Graded Ischemia, Rotterdam, Netherlands, April 14-17, 2010.

34. Hou Y., Marquet F., Wang S., **Konofagou E.**E. Monitoring During Slow Denaturation And Boiling Using Harmonic Motion Imaging Forfocused Ultrasound (HMIFU) Ex Vivo, Engineering in Medicine and Biology Conference (EMBC), Osaka, Japan, 2013.

35. Shahmirzadi D., Chen J., Hou Y., **Konofagou E.**E. A Viscoelastic Property Study in Canine Liver Before and After HIFU Ablation In Vitro, Engineering in Medicine and Biology Conference (EMBC), Osaka, Japan, 2013.

36. Ji, Robin (Columbia University), Burgess, Mark (Columbia University), Konofagou, Elisa (Columbia University), Transcranial Blood-Brain Barrier Opening and Power Cavitation Imaging Using a Diagnostic Imaging Array, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

37. Karageorgos, Grigorios (Columbia University), Apostolakis, Iason Zacharias (Philips Research North America), Nauleau, Pierre (Columbia University), Gatti, Vittorio (Columbia University), Weber, Rachel (Columbia University), Grondin, Julien (Columbia University), Konofagou, Elisa (Columbia University), Imaging of Pulse Wave Propagation Coupled with Vector Flow and Wall Shear Stress Mapping in Atherosclerotic Plaque Phantoms and Carotid Artery Disease Patients In-Vivo, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019.

Non-peer-reviewed Conference Proceedings Publications:

38. Ophir, J., Varghese, T., Kallel, F., Alam, S.K. and **Konofagou, E.E.**, Elastography: A Quantitative Description of Tradeoffs in the Imaging of Tissue Strain, Proceedings of the 17th Ultrasonics international conference, Her Aula Congresscentrum, Technical University of Delft, The Netherlands, July 2-4, 1997.

39. Varghese, T., **Konofagou, E.E.**, Bilgen, M. and Ophir, J., Improvement in Elastograms using Multiresolution Elastography, 1997 IEEE Symposium of Ultrasonics, Ferroelectrics and Frequency Control in Toronto, Canada, Oct. 5-8, 1527-1530, 1997.

40. **Konofagou, E.E.**, Alam, S.K. and Ophir, J., Methods for Dynamic Range Expansion and Enhancement of the Signal-to-noise ratio in Elastography, IEEE Proceedings of the Symposium of Ultrasonics, Ferroelectrics and Frequency Control in Toronto,

Canada, Oct. 5-8, 1157-1160, 1997.

41. **Konofagou E.E.** and Ophir J., Three-dimensional Motion estimation in Elastography, IEEE Proceedings of the Symposium of Ultrasonics, Ferroelectrics and Frequency Control in Sendai, Japan, 1745-1748,1998.

42. **Konofagou E.E.**, Harrigan T., Ophir J. and Krouskop T., Poroelastography: Estimation and Imaging of the Poroelastic Properties of Tissues, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency

Control, Lake Tahoe, NV, 1627-1630, 1999.

43. **Konofagou E.E.**, D'hooge J. and Ophir J., Cardiac Elastography – A feasibility study, IEEE Proceedings of Symposium in Ultrasonics, Ferroelectrics and Frequency Control, San Juan, Puerto Rico, 1273-1276, 2000.

44. **Konofagou E.E.**, Thierman J. and Hynynen K., Ultrasound Surgery Monitoring using Vibroacoustography, IEEE Proceedings of Symposium in Ultrasonics, Ferroelectrics and Frequency Control, San Juan, Puerto Rico, 1577-1580, 2000.

45. **Konofagou E.E.**, Thierman J. and Hynynen K., Experimental Temperature Monitoring and Coagulation Detection using Ultrasound-Stimulated Acoustic Emission, IEEE Proceedings of Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Atlanta, GA, 1299-1302, 2001.

46. **Konofagou E.E.**, Harrigan T. and Solomon S., Assessment of Regional Myocardial Strain using Cardiac Elastography: Distinguishing Infarcted from Non-Infarcted Myocardium, IEEE Proceedings of Symposium in Ultrasonics, Ferroelectrics and Frequency Control, 1589-1602, 2001.

47. **Konofagou E.E.**, Thierman J. and Hynynen K., An Acoustic Thermometer for Hyperthermia and Focused Surgery, 17th International Congress on Acoustics, Sept. 2-7, 2001.

48. Thierman J., **Konofagou E.E.** and Hynynen K., The Detection of Cavitation Using Ultrasound-Stimulated Acoustic Emission, 17th International Congress on Acoustics, Sept. 2-7, 2001.

49. **Konofagou E.E.**, Sokka S., Thierman J. and Hynynen K., Temporal and Spatial Monitoring of Temperature Changes Using Focused Ultrasound Phased Arrays, IEEE Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Munich, Germany, Oct. 7-10, 1330-1333, 2002.

50. **Konofagou E.E.** and Hynynen K., Localized Harmonic Motion Estimation Induced by Oscillatory Ultrasound Radiation Force, IEEE Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Munich, Germany, Oct. 7-10, 1848-1851, 2002.

51. **Konofagou E.E.**, Ophir J., Krouskop T. and Garra B.S., Elastography: From theory to clinical applications, ASME Summer Bioengineering Conference, Sonesta Beach Resort in Key Biscayne, Florida, June 25-29, 2003 [Invited].

52. **Konofagou E.E.** and Harrigan T.P., Palpation Tomography – A New Technique for Modulus Estimation in Elastography, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Honolulu, Hawaii, 652-655, 2003.

53. **Konofagou E.E.** Ottensmeyer M., Dawson S.L. and Hynynen K., Estimating localized oscillatory tissue motion for the detection of stiffer masses, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Honolulu, Hawaii, 558-561, 2003.

50. **Konofagou E.E.**, Manning W., Kissinger K. and Solomon S. D. Myocardial Elastography – Comparison to Results Using MR Cardiac Tagging, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Honolulu, Hawaii, 130-133, 2003.

51. **Konofagou E.E.**, Wu J. and Langevin H. M., Imaging The Effect Of Acupuncture Needling On Human Connective Tissue In Vivo, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Honolulu, Hawaii, 1288-1291, 2003.

52. Choi, J., Pernot, M. and **Konofagou E.E.**, Transcranial, localized drug-delivery in the brain of Alzheimer′s-model mice using focused ultrasound – a feasibility study, International Society of Therapeutic Ultrasound (ISTU), Boston, MA, USA, Oct. 27- 29, 2005.

53. Spalazzi J.P., **Konofagou E.E.** and Lu H.H., Elastographic Imaging Of Strain Distribution At The ACL-Bone Insertions, Fifth International Symposium for Ligaments and Tendons, Washington, D.C., February 19, 2005.

54. **Konofagou E.E.**, Spalazzi J.P., and Lu H.H., Elastographic Imaging Of Strain Distribution At The ACL-Bone Insertions, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Rotterdam, Netherlands, Sept. 17-20, 1755-1758, 2005.
55. Fung-kee-Fung, S., Lee W-N., Ingrassia C., Costa K.D. and **Konofagou E.E.** Full strain tensor characterization for angle-independent strain mapping in myocardial elastography, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Rotterdam, Netherlands, Sept. 17-20, 516-519, 2005.
56. Pernot, M. and **Konofagou E.E.**, Electromechanical imaging of the myocardium at normal and pathological states, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Rotterdam, Netherlands, Sept. 17-20, 2005.
57. Choi, J., Pernot, M. and **Konofagou E.E.**, Transcranial focused ultrasound in Alzheimer's mice, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Rotterdam, Netherlands, Sept. 17-20, 988-991,2005.
58. Maleke, C., Pernot, M. and **Konofagou E.E.**, A single transducer for simultaneous generation and monitoring of thermal treatment, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Rotterdam, Netherlands, 17-20, 2005.
59. Maleke, C., Pernot M. and **Konofagou E.E.**, Real-time monitoring of regional tissue elasticity during High-Intensity Focused Ultrasound therapy using Harmonic Motion Imaging, International Society of Therapeutic Ultrasound (ISTU), Boston, MA, USA, Oct. 27-29, 2005.
60. Lee W-N. And **Konofagou E.E.**, Analysis OF 3D Motion Effects In 2D Myocardial Elastography, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, Vancouver, Canada, Oct. 2-5, 1217-1220, 2006.
61. Choi J., Small S. and **Konofagou E.E.**, Optimization Of Ultrasound-Induced Transient Blood-Brain Barrier Opening In Mice, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Vancouver, Canada, Oct. 2-5, 2006.
62. Fujikura K., Luo J. and **Konofagou E.E.**, Pulse Wave Imaging In Murine Abdominal Aortas - A feasibility study, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Vancouver, Canada, Oct. 2-5, 2006.
63. Luo J., Fujikura K., and **Konofagou E.E.**, Myocardial elastography of murine infarcts at both high temporal and spatial resolution, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Vancouver, Canada, Oct. 2-5, 752-755, 2006.
64. **Konofagou E.E.**, Luo J., Fujikura K., Cervantes D. and Coromilas J., Imaging the electromechanical wave activation of the left ventricle in vivo, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Vancouver, Canada, Oct. 2-5, 985-988, 2006.
65. Maleke, C. and **Konofagou E.E.**, A Harmonic Motion Imaging System for Real-Time Monitoring of Temperature Changes and Tissue Ablation, IEEE Proceedings of the Symposium in Ultrasonics, Ferroelectrics and Frequency Control, Vancouver, Canada, Oct. 2-5, 24-27, 2006.
66. Fujikura K., Luo J., Tyrie, L., Tilson M.D. and **Konofagou E.E.**, A Novel Non- Invasive Technique For Pulse-Wave Imaging And Characterization Of Vascular Mechanical Properties In-Vivo, Journal of The American College Of Cardiology (JACC) 49 (9): 135A-135A, 2007.
67. Lee W.-N., Qian Z., Tosti C.L., Brown T.R., Metaxas D.N. and **Konofagou E.**

E., Validation Of Ultrasound Myocardial Elastography Using MR Tagging In Normal Human Hearts In Vivo, IEEE International Society of Biomedical Imaging (ISBI), Washington, DC, April 12-15, 2007.

68. Luo J. and **Konofagou E.E.**, High Frame-Rate, Full-View Myocardial Elastography With Automated Contour Tracking In Vivo, IEEE International Society of Biomedical Imaging (ISBI), Washington, DC, April 12-15, 2007.

69. Maleke, C., Joseph K.-A. and **Konofagou E.E.**,Tumor Detection and Treatment Guidance in Breast and Liver with Harmonic Motion Imaging, International Congress in Acoustics, Vienna, Austria, April 14-17, 2007 [Invited].

70. Lee W-N., Fung-Kee-Fung, S. and **Konofagou E.E.**, Angle-Independent Myocardial Elastography: From Theory to Clinical Validation, International Congress in Acoustics, Vienna, Austria, April 14-17, 200.

71. Choi J., Small S. and **Konofagou E.E.**, Optimization of Ultrasound-induced Transient Blood-Brain Barrier Opening in Mice, International Congress in Acoustics, Vienna, Austria, April 14-17, 2007.

72. Choi J., Small S. and **Konofagou E.E.**, Non-invasive opening of the blood-brain barrier using focused ultrasound in mice, International Society of MR in Medicine (ISMRM), Berlin, Germany, May 15, 2007.

73. Lee W.-N., Qian Z., Tosti C.L., Brown T.R., Metaxas D.N. and **Konofagou E. E.**, Validation Of Ultrasound Myocardial Elastography Using MR Tagging In Normal Human Hearts In Vivo, International Society of MR in Medicine (ISMRM), Berlin, Germany, May 15, 2007.

74. **Konofagou E.E.**, Luo J., Chopra D., Cervantes D., Fujikura K. and Coromilas J., Conduction velocity estimation in electromechanical wave imaging with varying pacing origins in vivo, IEEE Proceedings Of The Symposium In Ultrasonics, New York, NY, 969-972, 2007.

75. Luo J. and **Konofagou E.E.**, Automated Contour Tracking For High Frame-Rate, Full-View Myocardial Elastography In Vivo, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, New York, NY, 1929-1932, 2007.

76. Gamarnik V., Lee W-N. and **Konofagou E.E.**, Experimental assessment of angle- independent myocardial elastography performance using a left-ventricular phantom under physiologic motion, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, New York, NY, 741-744, 2007.

77. Lee W-N., Qian Z., Metaxas D.N. and **Konofagou E.E.** Clinical Validation of Angle- Independent Myocardial Elastography Using MRI Tagging, IEEE Trans. Ultras. Ferroel. Freq. Control., New York, NY,749-752, 2007.

78. Maleke, C., Luo J. and **Konofagou E.E.**, 2D Simulation of The Amplitude-Modulated Harmonic Motion Imaging (AM-HMI) with Experimental Validation, IEEE Trans. Ultras. Ferroel. Freq. Control., New York, NY,797-800, 2007.

79. Wang S., Luo J., Lee W.-N. and **Konofagou E.E.**, High frame-rate clinical ultrasound system for myocardial elastography and electromechanical imaging using retrospective ECG gating, IEEE Proceedings Of The Symposium In Ultrasonics,Ferroelectrics And Frequency Control, New York, NY, 880-883, 2007.

80. Luo J., Lee W.-N. and **Konofagou E.E.**, An In-Vivo Study Of Frame Rate Optimization For Myocardial Elastography, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, New York, NY, 1933-1936, 2007.

81. Choi J., Wang S., Morrison B. and **Konofagou E. E.**, Molecular Delivery and Microbubble Dependence Study of the FUS-induced Blood-Brain Barrier Opening In Vivo, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, New York, NY, Oct. 28-31, 1192-1195, 2007.

82. Luo J., Fujikura K., Tyrie, L., Tilson M.D. and **Konofagou E.E.**, Pulse Wave Imaging Of Abdominal Aortic Aneurysm Using High-Resolution Ultrasound:

Comparison Between Control And Angiotensin II-Treated Mice In Vivo, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, New York, NY, 985-988, 2007.

83. **Konofagou E.E.**, Choi J., Wang S., Morrison B. III and Borden M., Characterization and Optimization of Trans-Blood-Brain Barrier Diffusion In Vivo, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, Beijing, China, Nov. 3-7, 1706-1709, 2008.

84. Wang S, Choi J.J., Tung Y-S, Morrison B. III, **Konofagou E.E.** Qualitative and quantitative analysis of the molecular delivery through the ultrasound-enhanced blood-brain barrier opening in the murine brain, IEEE Proceedings Of The Symposium In Ultrasonics, Ferroelectrics And Frequency Control, Beijing, China, Nov. 3-7, 1702-1705, 2008.

85. Luo J, Lee W-N and **Konofagou E.E.** Fundamental Performance Assessment of 2- D Myocardial Elastography in a Phased Array Configuration, 2008 IEEE International Ultrasonics Symposium, Beijing, China, 962-965, 2008.

86. Luo J, Lee W-N, Wang S and **Konofagou E.E.** Pulse Wave Imaging of Human Abdominal Aortas In Vivo, 2008 IEEE International Ultrasonics Symposium, Beijing, China, Nov 2-5, 859-862, 2008.

87. Lee W-N, Provost J, Wang S, Fujikura K, Wang J and **Konofagou E.E.** In Vivo Validation of Myocardial Elastography at Variable Levels of Ischemia, 2008 IEEE International Ultrasonics Symposium, Beijing, China, Nov 2-5, 2008.

88. Provost J , Gurev V , Trayanova N , **Konofagou EE,** Characterization of wave origins in electromechanical wave imaging, Proceedings of the IEEE International Ultrasonics Symposium , Beijing, China, Nov 2-5, 2008.

89. Choi J., Feshitan J., Baseri B., Wang S., Tung Y-S., Borden M., and **Konofagou E. E.**, Brain region and microbubble-size dependence of the focused ultrasound-induced blood-brain barrier opening in mice in vivo, 2009 IEEE International Ultrasonics Symposium, Rome, Italy, Sept. 18-21, 2009.

90. Lee W-N, Parker K., Luo J, Holmes J.W. and **Konofagou E.E.** Frame Rate Dependence of Myocardial Elastography Estimates Using a Physiologic 3D Biventricular Finite-Element Model of the Heart with Preliminary In Vivo Validation, 2009 IEEE International Ultrasonics Symposium, Rome, Italy, Sept. 18-21, 2009.

91. Provost J., Lee W-N, Fujikura K. and **Konofagou E.E.**, Electromechanical Wave Imaging: Non-invasive Localization and Quantification of Partial Ischemic Regions In Vivo, 2009 IEEE International Ultrasonics Symposium, Rome, Italy, Sept. 18-21, 2009.

92. Maleke, C., and **Konofagou E.E.**, Harmonic Motion Imaging (HMI) for Focused Ultrasound (HMIFU): Initial in vivo results, 2009 IEEE International Ultrasonics Symposium, Rome, Italy, Sept. 18-21, 2009.

93. Choi J., Selert K., and **Konofagou E.** Enhanced brain molecular delivery using focused ultrasound at short pulse lengths and low acoustic pressures. 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14,1518-1521, 2010.

94. Okrasinski S., Wan E. Lee W-N, and **Konofagou E.E.**, Early Detection of Coronary Stenosis with Myocardial Elastography: A Clinical Feasibility Study, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14, 2010.

95. Vappou J, Luo J and **Konofagou E.E.** Regional measurement of arterial stiffness using Pulse Wave Imaging: Phantom validation and preliminary clinical results, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14, 2010.

96. Tung Y-S., Vlachos F., Choi J., Deffieux T., Selert K., and **Konofagou E.** In

vivo Transcranial Cavitation Detection during Ultrasound-Induced Blood-Brain Barrier Opening, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11- 14, 2010.

97. Luo J and **Konofagou E.E.** A Fast, High-Performance Motion and Strain Imaging Method, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11- 14, 2010.

98. Vlachos F., Tung Y-S., and **Konofagou E.** In-vivo Quantitative Permeability Assessment of the Focused-Ultrasound induced Blood-Brain Barrier Opening using Dynamic Contrast-Enhanced MRI, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14, 2010.

99. Provost, J., Gurev V, Okrasinski S., Trayanova N., and **Konofagou E.E.**,Validation of Electromechanical Wave Imaging for Mapping of the Regional Cardiac Electrical Activity Noninvasively In Vivo, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14, 2010.

100. Hou G., Luo J., Maleke C., Vappou J., and **Konofagou E.E.**,A comprehensive framework for Harmonic Motion Imaging for Focused Ultrasound (HMIFU) with ex vivo validation, 2010 IEEE International Ultrasonics Symposium, San Diego, CA, Oct. 11-14, 2010.

101. González N, Jiménez N, Redondo J., Roig B, Picó R., Sánchez-Morcillo V., **Konofagou E.E**., Camarena F., Nonlinear Effects in the Radiation Force Generated by Amplitude-Modulated Focused Beams, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

102. Hou Y., Luo, J., Maleke C., Vappou J., **Konofagou E.E.** Fundamental Analysis and Ex Vivo Validation of Thermal Lesion Mapping Using Harmonic Motion Imaging for Focused Ultrasound (HMIFU) , International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

103. Tung Y-S, Vlachos F., Feshitan J., Borden M, **Konofagou E.E.** The Bubble-dependent Mechanism of FUS-induced Blood-Brain Barrier Opening in Mice in Vivo, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

104. Vlachos F., Tung Y-S, Feshitan J., Borden M, **Konofagou E.E.** Blood-Brain Barrier Permeability Dependence on Acoustic and Microbubble Parameters, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

105. Samiotaki, M, Vlachos F., Tung Y-S, Feshitan J., Borden M, **Konofagou E.E.** Pressure and Microbubble Size Dependence Study of Focused Ultrasound-Induced Blood-Brain Barrier's Opening Reversibility in Vivo, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

106. Marquet F, Tung Y-S, **Konofagou E.E.** Feasibility Study of a Single-Element Transcranial Focused Ultrasound System for Blood-Brain Barrier Opening,

International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

107. Jimenez N, Roig B, Redondo J., Picó R., Sánchez-Morcillo V., Marquet F., **Konofagou E.E**., Camarena F., Numerical Study of Nonlinear, Transcranial Focused Ultrasound Wave Propagation for Blood-Brain Barrier (BBB) Opening, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011 (in press).

108. Nover AB, O'Connell GD, Ateshian GA, Lima EG, **Konofagou EE**, Hung CT. Exploration of Focused Ultrasound with HMIFU Monitoring as a Tool for Affecting Local Tissue Properties in Articular Cartilage Engineering, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.

109. **Konofagou EE**, Optimization of Delivery across the Blood-Brain Barrier, 2011

IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011 [Invited].

110. Provost J., Gambhir A., Thiebaut S., Nguyen V. T-H., Vest J., Garan H., **Konofagou EE**, Non-invasive Electromechanical Imaging of Atrial, Supraventricular and Ventricular Cardiac Conduction Disorders in Canines and Humans, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

111. Samiotaki G., Vlachos F., Tung Y-S., **Konofagou EE**, Permeability and Reversibility Timeline Study of the Focused-Ultrasound Induced Blood-Brain Barrier Opening at Distinct Pressures and Microbubble Sizes in vivo, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

112. Hou G., Marquet F., Luo J., **Konofagou EE**, Multi-parametric analysis of monitoring High Intensity Focused Ultrasound (HIFU) treatment using Harmonic Motion Imaging for Focused Ultrasound (HMIFU), 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

113. Luo J., Li R., Balaram S., Chaudhry F., Lantis J., **Konofagou EE**, Pulse wave imaging of arteries of healthy subjects and patients with hypertension and abdominal aortic aneurysms, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

114. Tung Y-S., Marquet F., Teichert T., Ferrera V., **Konofagou EE**, Mechanism Monitoring of Noninvasive Cavitation-Guided Blood-Brain Barrier Opening Using Focused Ultrasound and Microbubbles in Non-Human Primates, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

115. Marquet F., Tung Y-S., Teichert T., Ferrera V., **Konofagou EE**, Initial In Vivo Feasibility of a Simple, Pre-Clinical Focused Ultrasound System Applied to Blood- Brain Barrier Opening, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

116. Vappou J., Luo J., Okajima K., Di Tullio M., **Konofagou EE,** Pulse Wave Ultrasound Manometry (PWUM): Measuring central blood pressure noninvasively, 2011 IEEE International Ultrasonics Symposium, Orlando, Florida, Oct. 19-21, 2011.

117. Cherry C. Chen, Shih-Ying Wu, John D. Finan, Barclay Morrison III, Elisa E. Konofagou, An experimental study on the stiffness of size-isolated microbubbles used for blood-brain barrier opening, Proceedings of the 12th International Symposium on Therapeutic Ultrasound (Heidelberg, Germany), June 10 to 13, 2012

118. Fabrice Marquet, Yao-Sheng Tung, Tobias Teichert, Vincent P. Ferrera, Elisa E. Konofagou,Microbubble-enhanced focused ultrasound blood-brain barrier opening in non-human primates: targeting accuracy and closing timeline, Proceedings of the 12th International Symposium on Therapeutic Ultrasound (Heidelberg, Germany), June 10 to 13, 2012.

119. Shih-Ying Wu, Yao-Sheng Tung, Fabrice Marquet, Elisa E. Konofagou, Non-human primate skull effects on the in vivo study of the mechanism of the FUS- induced blood-brain barrier opening, 12th International Symposium on Therapeutic Ultrasound (Heidelberg, Germany), June 10 to 13, 2012

120. Yao-Sheng Tung, Oluyemi O. Olumolade, Shutao Wang, Shih-Ying Wu, Elisa E. Konofagou, Physical mechanism of non-inertial cavitation induced blood-brain barrier opening using focused ultrasound and microbubbles, 12th International Symposium on Therapeutic Ultrasound (Heidelberg, Germany), June 10 to 13, 2012

121. Danial Shahmirzadi, Ronny X. Li, William W. Qaqish., **Konofagou EE,** Arterial wall stiffness variations along the canine aorta using pulse wave imaging with validation in vitro, Biomedical Engineering Society Annual Meeting (Atlanta, GA, USA), October 24 to 27, 2012.

122. Wu S-W, Marquet F., Tung Y-S., Teichert T., Ferrera V., Konofagou EE, Monitoring FUS-induced BBB opening in non-human primates using transcranial cavitation detection in vivo, International Society of Therapeutic Ultrasound (ISTU) Meeting, Shanghai, China, 2013.

123. Chen C, Sheeran P, Dayton P, Konofagou EE, Targeted drug delivery with focused ultrasound-induced blood-brain barrier opening using acoustically-activated nanodroplets, International Society of Therapeutic Ultrasound (ISTU) Meeting, Shanghai, China, 2013.

124. Wang S, Olumolade O, Osting S, Burger C, Konofagou EE, Focused ultrasound induced blood-brain barrier opening in macromolecule delivery, 13th International Symposium on Therapeutic Ultrasound, Shanghai, China, 2013.

125. Chen H, Sun T, Konofagou EE, Delivery of molecules of various sizes through blood brain barrier opening induced by long and short ultrasound pulses, International Society of Therapeutic Ultrasound (ISTU) Meeting, Shanghai, China, 2013.

126. Hou Y., Marquet F., Wang S., **Konofagou E.**E. Monitoring During Slow Denaturation And Boiling Using Harmonic Motion Imaging For focused Ultrasound (HMIFU) Ex Vivo, International Society of Therapeutic Ultrasound (ISTU) Meeting, Shanghai, China, 2013.

127. Chen C, Sheeran P, Wu S-Y, Olumolade Y.,Dayton P, Konofagou EE, Targeted drug delivery with focused ultrasound-induced blood-brain barrier opening using acoustically-activated nanodroplets, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013.

128. Wu S-Y, Tung Y-S, Marquet F, Konofagou EE, FUS-induced BBB opening in non- human primates using transcranial cavitation detection in vivo and the human skull effect, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013.

129. Samiotaki G, Olumolade Y., Wang S, Konofagou EE, Localized Delivery of the Neurturin (NTN) neurotrophic factor through Focused Ultrasound – mediated Blood- Brain Barrier Opening, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013.

130. Melki L, Grubb CS, Weber R, Nauleau P, Garan H, Wan E, Silver ES, Liberman L, Konofagou EE. 3D-rendered Electromechanical Wave Imaging for Localization of Accessory Pathways in Wolff-Parkinson-White Minors(). Conf Proc IEEE Eng Med Biol Soc. 2019 Jul;2019:6192-6195. doi: 10.1109/EMBC.2019.8857876.

131. Karageorgos GM, Apostolakis IZ, Nauleau P, Gatti V, Weber R, Konofagou EE. Atherosclerotic plaque mechanical characterization coupled with vector Doppler imaging in atherosclerotic carotid arteries in-vivo. Conf Proc IEEE Eng Med Biol Soc. 2019 Jul;2019:6200-6203. doi: 10.1109/EMBC.2019.8857609.

Conference Abstract Publications:

132. Konofagou E.E. and Kalfas, C.A., A Model of the Time-course of Human Left-ventricular Pressure During Isovolumic Contraction and Relaxation, 13th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb 13-14, 1995.

133. Konofagou, E.E., Dutta, P., Ophir, J. and Cespedes, I., Reduction of Stress Nonuniformities by Apodization of Compressor Displacement in Elastography, Ultrasonic Imaging and Tissue Characterization conference in Arlington, VA, June 3-5, 1995.

134. Konofagou E.E., Dutta, P., Ophir, J. and Cespedes, I., Reduction of Stress Nonuniformities by Apodization of Compressor Displacement in Elastography, 14th conference of the Houston Society of Engineering in Medicine and Biology in

Houston, Texas, Feb 8-9, 1996.

135. Konofagou E.E. and Ophir, J., Techniques for Expansion of the Dynamic Range in Elastography: Theory and Applications, Ultrasonic Imaging and Tissue Characterization conference in Arlington, VA, June 4-6, 1996.

136. Konofagou E.E., Ophir, J., Kallel, F. and Varghese, T., Methods for Combined Improvement of the Elastographic Signal-to-noise ratio and Dynamic range, 15th Houston Society of Engineering in Medicine and Biology meeting in Houston, Texas, Feb 13-14, 1997.

137. Ophir, J., **Konofagou, E.E.**, Varghese, T., Kallel, F., Alam, S.K., Cespedes, I., Elastography: A Quantitative Method for Imaging the Elasticity of Biological Tissues, Sigma Xi Poster Competition, UH Chapter, April 3rd, 1997.

138. Konofagou E.E., Ophir, J., Varghese, T. and Kallel, F., Methods for Improvement of Image Quality in Elastography: Theory and Applications, 22nd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1997.

139. Konofagou E.E., Ophir, J. and Varghese T., Dynamic Range Expansion in Elastography: Theory and Applications, World Federation for Ultrasound in Medicine and Biology (WFUMB '97), Buenos Aires, Argentina, September 1-5, 1997.

140. Konofagou E.E. and Ophir J., Imaging of Two-dimensional Motion with Elastography, 16th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, April 2-3, 1998.

141. Konofagou E.E. and Ophir J., An Iterative High Resolution Method for Improving Axial, Lateral and Poisson's Ratio Elastograms, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, May 27-29, 1998.

142. Kallel F., Chiou F., Garra B., Hazle J., **Konofagou E.E.**, Krouskop T., Ophir J., Price R.E., Righetti R. and Stafford J., Applications of Elastography, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

143. Varghese T., Ophir J., **Konofagou E.E.** and Kallel F., Fundamentals of Elastographic Imaging, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

144. Konofagou E.E. and Ophir J., Multi-Dimensional Motion Correction and Estimation in Elastography, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

145. Ophir J., Kallel F., **Konofagou E.E.**, Krouskop T., Garra B. and Varghese T., Fundamentals of Elastographic Imaging and Their Applications: A Tutorial, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

146. Ophir J., Kallel F., **Konofagou E.E.**, Krouskop T., Garra B. and Varghese T., Fundamentals of Elastographic Imaging and Their Applications: A Tutorial, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

147. Konofagou E.E. and Ophir J., Multi-Dimensional Motion Correction and Estimation in Elastography, 17th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 11-12, 1999. [Invited].

148. Konofagou E.E. and Ophir J., Axial, Lateral, Shear and Poisson's Ratio Elastography: Methods and Preliminary Results, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

149. Varghese T., **Konofagou E.E.**, Ophir J. and Alam S. K., Coherent vs. Incoherent Strain Estimation in Elastography, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

150. Kallel F., Price R., Righetti R., **Konofagou E.E.**, Krouskop T. and Ophir J., Elastographic Imaging of The Normal Prostate: An In-vitro Canine Model, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March

14-18, 1999.

151. Kallel F., Price R., Righetti R., **Konofagou E.E.**, Krouskop T. and Ophir J., Elastographic Imaging of The Normal Prostate: An In-vitro Canine Model, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

152. Varghese T., **Konofagou E.E.**, Ophir J. and Alam S. K., Coherent vs. Incoherent Strain Estimation in Elastography, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

153. Konofagou E.E. and Ophir J., Axial, Lateral, Shear and Poisson's Ratio Elastography: Methods and Preliminary Results, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

154. Konofagou E.E. and Ophir J., High Precision Iterative Axial and Lateral Corrections In Elastography: Experimental Results, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

155. Konofagou E.E., Tomy Varghese and Ophir J., Fundamental Limits on the Estimation and Imaging of Transverse Displacement, Transverse Strain and Poisson's Ratio in Elastography, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

156. Kallel F., **Konofagou E.E.**, Price R., Stafford J., Righetti R. and Ophir J., Elastographic Imaging of the Dog Prostate In-Vitro, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

157. Varghese T., **Konofagou E.E.**, Ophir J. and Alam S.K., Spectral Strain Estimation in Elastography, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

158. Varghese T., **Konofagou E.E.**, Ophir J. and Alam S.K., Spectral Strain Estimation in Elastography, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

159. Konofagou E.E. and Ophir J., High Precision Iterative Axial and Lateral Corrections In Elastography: Experimental Results, American Institute of Ultrasound in Medicine (AIUM) conference, San Antonio, Texas, March 14-18, 1999.

160. Kallel F., **Konofagou E.E.**, Price R., Stafford J., Righetti R. and Ophir J., Elastographic Imaging of the Dog Prostate In-Vitro, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

161. Konofagou E.E., Varghese T. and Ophir J., Fundamental Limits on the Estimation and Imaging of Transverse Displacement, Transverse Strain and Poisson's Ratio in Elastography, 23rd international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, June 2-4, 1999.

162. Konofagou E.E., and Ophir J., Estimation and Imaging of the Normal and Shear Principal Strain Components in Elastography, 1999 World Congress in Ultrasound, Lyngby, Denmark, June 29- July 2, 1999.

163. Konofagou E.E., Varghese T. and Ophir J., Spectral Estimators in Elastography, 1999 World Congress in Ultrasound, Lyngby, Denmark, June 29- July 2, 1999.

164. Kallel F., Price R., **Konofagou E.E.** and Ophir J., Elastographic Imaging of the Dog Prostate In-Vitro, 18th conference of the Houston Society of Engineering in Medicine and Biology in Houston, Texas, Feb. 10-11, 2000.

165. Konofagou E.E. and Ophir J., New Methods in Elastography, World Federation of Ultrasound in Medicine and Biology, Florence, Italy, May 8-11, 2000.

166. Ophir J., Garra B., Kallel F., **Konofagou E.E.**, Krouskop T., Righetti R., and Varghese T., Elastography: Progress and Prospects in the Ultrasonic Imaging of the Mechanical Attributes of Soft Tissues, World Federation of Ultrasound in Medicine and Biology, Florence, Italy, May 8-11, 2000.

167. D'hooge J., **Konofagou E.E.**, Bijnens B., Ophir J., Thoen J., Sutherland G., Suetens P., Cardiac Elastography – A Feasibility Study, EuroEcho VI, Lisbon, Portugal, Dec 6-10, 2000.

168. Thierman J., McDannold N., **Konofagou E.E.** and Hynynen K., Non-Invasive Techniques for Therapy Monitoring and Assessment, 48th Annual Meeting of the Radiation Research Society and 19th Annual Meeting of the North American Hyperthermia Society, San Juan, Puerto Rico, April 21-25, 2001 [Invited].

169. Varghese T., Ophir J., **Konofagou E.**, Kallel F. and Righetti R., Factors and Tradeoffs Affecting Image Quality in Elastography, 25th international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, May 30 - June 1, 2001.

170. Thierman J., **Konofagou E.E.** and Hynynen K., The Detection of Cavitation Using Ultrasound-Stimulated Acoustic Emission, 17th International Congress on Acoustics, Sept. 2-7, 2001.

171. Konofagou E.E., Thierman J. and Hynynen K., An Acoustic Thermometer for Hyperthermia and Focused Surgery, 17th International Congress on Acoustics, Sept. 2-7, 2001.

172. Konofagou E.E., Thierman J. and Hynynen K., A USAE Frequency Shift Method for Monitoring Stiffness Variations in Tissues, 142nd Meeting of the Acoustical Society of America, Pittsburgh, PA, June 3-7, 2002.

173. Konofagou E.E., Sokka S., Thierman J. and Hynynen K., Temporal and Spatial Monitoring of Temperature Changes Using Focused Ultrasound Phased Arrays, 1st International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Oct. 20-23, 2002.

174. Konofagou E.E. and Harrigan T., Reconstruction of the Myocardial Modulus in Cardiac Elastography, 1st International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Oct. 20-23, 2002.

175. Konofagou E.E., Thierman J. and Hynynen K., A USAE Frequency Shift Method for Monitoring Stiffness Variations in Tissues, 1st International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Oct. 20-23, 2002.

176. Konofagou E.E., and Hynynen K., Harmonic Motion Imaging: A new method for the estimation of localized oscillatory response and modulus, 1st International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Oct. 20-23, 2002.

177. Langevin H.M., Wu J., **Konofagou E.**, Garra B.S. and Ophir J., Effect of acupuncture on connective tissue in vitro and in vivo, 27th international Symposium on Ultrasonic Imaging and Tissue Characterization, Arlington, VA, May 27-29, 2003.

178. Konofagou E.E. and Hynynen K., Harmonic Motion Imaging: A New Method for Localized Estimation of Tissue Mechanical Properties, American Institute of Ultrasound in Medicine, Montreal, Canada, June 6-9, 2003.

179. Konofagou E.E., Ophir J., Krouskop T. and Garra B.S., Elastography: From theory to clinical applications, ASME Summer Bioengineering Conference, Sonesta Beach Resort in Key Biscayne, Florida, June 25-29, 2003 [Invited].

180. Konofagou E.E., Wu J., Garra B. S., Ophir J. and Langevin H. M., Imaging Of The Effect Of Acupuncture Needling On Human Connective Tissue In Vivo, World Congress on Medical Physics and Biomedical Engineering, Aug. 24-29, Sydney, Australia, 2003 [Invited].

181. Langevin H.M., **Konofagou E.E.** and Garra B. S. Monitoring The Effect Of Acupuncture Needling On Human Connective Tissue In Vivo, 2nd International Conference on the Ultrasonic Measurement and Imaging of Tissue Elasticity, Oct. 12-15, 2003.

182. Konofagou E.E., Imaging Mechanical Responses in Tissues, Inverse Problems Mini-Symposium, Rensselaer Polytechnic Institute, April 5-7, 2004[Invited].

183. Konofagou E.E., Measuring Elastic Responses for Tissue Imaging, Society for Industrial and Applied Mathematics (SIAM) meeting, July 12-16, Portland, Oregon, 2004 [Invited].

184. Konofagou E.E., Fox J.R., Langevin H.M., Tissue Displacement And Strain

Patterns During Acupuncture Follow Connective Tissue Planes, Tissue Elasticity Imaging Conference 2004, Lake Windermere, England, UK, Oct. 17-20, 2004.

185. **Konofagou E.E.** and Harrigan T.P., Imaging Localized Viscoelastic Properties Using Harmonic Motion Imaging, Tissue Elasticity Imaging Conference 2004, Lake Windermere, England, UK, Oct. 17-20, 2004.
186. **Konofagou E.E.**, Pulerwitz T.C., Tissue Displacement And Strain Patterns During Acupuncture Follow Connective Tissue Planes, Tissue Elasticity Imaging Conference 2004, Lake Windermere, England, UK, Oct. 17-20, 2004.
187. Spalazzi J.P., **Konofagou E.E.** and Lu H.H., Elastographic Imaging Of Strain Distribution At The ACL-Bone Insertions, Fifth International Symposium for Ligaments and Tendons, Washington, DC, February 19, 2005.
188. **Konofagou E.E.** and Lee W-N., Full Strain Representation In Myocardial Elastography, Society of Industrial and Applied Mathematics (SIAM) Annual Conference, July 11-15, 2005 [Invited].
189. Lee W-N., Ingrassia C.P. and **Konofagou E.E.**, A 3D Simulation Model For Performance Assessment Of 2D Myocardial Elastography, Tissue Elasticity Imaging Conference 2005, Austin, TX, Oct. 17-20, 2005.
190. Maleke, C., Pernot, M. and **Konofagou E.E.**, In-Vitro Demonstration Of Real Time Monitoring Of Regional Tissue Elasticity During Focused Ultrasound Therapy Using Harmonic Motion Imaging, Tissue Elasticity Imaging Conference 2005, Austin, TX, Oct. 17-20, 2005.
191. Langevin H.M., **Konofagou E.E.**, Wu J., Fox J. R. and Iatridis J. C., Soft Tissue Biomechancial Behavior During Robotic Acupuncture In Low Back Pain Using Ultrasound Elasticity Imaging, Tissue Elasticity Imaging Conference 2005, Austin, TX, Oct. 17-20, 2005.
192. Spalazzi J.P., Lu H.H. and **Konofagou E.E.**, In Vitro Measurement and Imaging of the Strain at the Bovine ACL-Bone Insertion, Tissue Elasticity Imaging Conference 2005, Austin, TX, Oct. 17-20, pp. 1755-1758, 2005.
193. Fung-kee-Fung S.D. and **Konofagou E.E.**, Angle-Independent Strain Estimation In Myocardial Elastography, Tissue Elasticity Imaging Conference 2005, Austin, TX, Oct. 17-20, 2005.
194. Maleke, C., Pernot, M. and **Konofagou E.E.**, A single transducer for simultaneous generation and monitoring of thermal treatment, International Society of Therapeutic Ultrasound (ISTU), Oct. 27-29, 2005.
195. Pernot M. and **Konofagou, E.** Imaging the mechanics and electromechanics of the leftventricle in vivo, American Institute of Ultrasound in Medicine (AIUM), Washington D.C., Mar. 23-26, 2006.
196. **Konofagou E.**, Mechanical and Electromechanical Imaging of Tissues, Symposium on Bio- and Nano- Electronics 2006, Sendai, Japan, Mar. 2-3, 2006. [Invited].
197. Choi, J., Pernot, M., Small, S. and **Konofagou, E.** Feasibility of treatment of neurodegenerative diseases through ultrasound-induced blood-brain barrier opening in vivo, American Institute of Ultrasound in Medicine (AIUM), Washington D.C., Mar. 23-26, 2006. [AIUM New Investigator award].
198. **Konofagou E.E.,** Ultrasonic elastography of the mouse aorta: Possible usefulness in non-invasive analysis of aortic dilation in mice and risk of rupture in humans, 10th Anniversary Symposium on The Abdominal Aortic Aneurysm: Genetics, Pathophysiology, and Molecular Biology, New York, NY, USA, Apr. 3-5, 2006 [Invited].
199. **Konofagou, E.E.**, Luo, J., Fujikura K. and Pernot M., Physiologic wave propagation and characterization in the murine heart and aorta, Ultrasonic Imaging and Tissue Characterization conference in Arlington, VA, May 24-25, 2006.
200. Maleke C. and **Konofagou E.,** An amplitude-modulated harmonic motion imaging method for mapping tissue ablation, 151st Acoustical Society of America Meeting, Providence, RI, June 5-9, 2006.

201. Choi J. and **Konofagou E.**, Focused ultrasound-induced opening of the blood-brain barrier in mice, 151st Acoustical Society of America Meeting, Providence, RI, June 5-9, 2006.

202. Konofagou E.E., Fung-kee-Fung S. and Lee W-N., Principal Strain Imaging for the Detection of Infarcts, Society of Industrial and Applied Mathematics (SIAM) Annual Conference, Boston, MA, July 7-10, 2006 [Invited]

203. Konofagou E.E., Luo J., Fujikura K., and Pernot M., Elastographic imaging of the murine heart and aorta for the detection of disease at high temporal and spatial resolutions, 5th International Conference on Ultrasonic Biomedical Microscanning, Corsica, France, Sept 10-15, 2006. [Invited]

204. Triano J, Langevin H. M., Fox J.R., **Konofagou E. E.**, Feasibility of muscle strain estimates by hand-held elastography during therapeutic body movements, Tissue Elasticity Imaging Conference 2006, Snowbird, UT, Oct. 7-10, 2006.

205. Luo J., Fujikura K., Homma S. and **Konofagou E.E.**, High-resolution, high frame-rate strain imaging for early myocardial infarction detection, American Heart Association Meeting, Chicago, IL, Nov. 12-15, 2006. [Circulation, 114: 18, S665-S665, 2006].

206. Fujikura K., Luo J., Gamarnik V., Pernot M., Fukumoto R., Homma S., Tilson III M.D. and **Konofagou E.E.**, A Non-Invasive Imaging Technique for Characterization of Vascular Mechanical Properties In-Vivo and Detection of Disease, American Institute of Ultrasound in Medicine (AIUM), New York, NY, Mar. 15-18, 2007.

207. Fujikura K., Luo J., Gamarnik V., Pernot M., Fukumoto R., Homma S., Tilson III M.D. and **Konofagou E.E.**, Non-invasive imaging of the aortic pulse-wave propagation for the detection of abdominal aortic aneurysms in vivo, J. Amer. Coll. Card. 49: 9, S135A-135A, 2007.

208. Tyrie L, **Konofagou E E**, Fujikura K, Toset A, Ro C Y, Marboe C, Gaetz H P, Collin P, and Tilson M D, Ultrasound and Histological Characteristics of Suprarenal Aortic Aneurysms Induced by Angiotensin II in the Genetically Intact C57BL6 Mouse: An Approach to Studying Aneurysmal Disease Without the Influence of Atherosclerosis, Vascular Annual Meeting - 2007 Research Initiatives Conference, Washington, DC, March 29-30, 2007.

209. Choi J., Small S. and **Konofagou E.E.**, Optimization of Ultrasound-induced Transient Blood-Brain Barrier Opening in Mice, International Congress in Acoustics, Vienna, Austria, April 14-17, 2007.

210. Luo J. and **Konofagou E.E.**, High Frame-Rate, Full-View Myocardial Elastography With Automated Contour Tracking In Vivo, IEEE International Society of Biomedical Imaging (ISBI), Washington, DC, April 12-15, 2007.

211. Maleke, C., Joseph K.-A. and **Konofagou E.E.**,Tumor Detection and Treatment Guidance in Breast and Liver with Harmonic Motion Imaging, International Congress in Acoustics, Vienna, Austria, April 14-17, 2007 [Invited]

212. Lee W-N., Fung-Kee-Fung, S. and **Konofagou E.E.**, Angle-Independent Myocardial Elastography: From Theory to Clinical Validation, International Congress in Acoustics, Vienna, Austria, April 14-17, 2007.

213. Konofagou E.E. and Choi J., Noninvasive and reversible opening of the blood-brain barrier using focused ultrasound, Leading Edge Symposium, Atlantic City, NJ, May 3, 2007. [Invited]

214. Konofagou E., Luo J., Lee W-N, Zervantonakis I., Fujikura K., Wang S., Homma S. and Coromilas J., Mechanical and electromechanical imaging of the cardiovascular system, Ultrasonic Imaging and Tissue Characterization conference in Arlington, VA, May 18-20, 2007. [Invited].

215. Tyrie L, **Konofagou E E,** Fujikura K, Toset A, Ro C Y, Marboe C, Gaetz H P, Collin P, and Tilson M D, AneuMastat(R) Reduces Aneurysm Incidence in the Angiotensin II (AngII)-Induced Model of Abdominal Aortic Aneurysm (AAA) in the Wildtype C57BL6 Mouse, American College of Surgeons 93rd Annual Clinical

Congress, October 7-11, 2007, in New Orleans, LA.

216. Maleke, C., Luo J. and **Konofagou E.E.**, 2D Theoretical Assessment of the Amplitude-Modulated Harmonic Motion Imaging (AM-HMI) and Experimental Validation, Tissue Elasticity Imaging Conference 2007, Santa Fe, NM, Nov. 2-5, 2007.

217. Luo J., Fujikura K. and **Konofagou E.E.**, Pulse Wave Imaging of Normal and Aneurysmal Abdominal Aortas in vivo, Tissue Elasticity Imaging Conference 2007, Santa Fe, NM, Nov. 2-5, 2007.

218. Luo J., Lee W-N and **Konofagou E.E.**, The Effect of Frame Rate on Image Quality of Myocardial Elastography in vivo, Tissue Elasticity Imaging Conference 2007, Santa Fe, NM, Nov. 2-5, 2007.

219. Lee W-N, Qian Z, Metaxas DN and **Konofagou EE.** Clinical Validation Of Principal Strain Estimation In Myocardial Elastography Against MRI Tagging, Tissue Elasticity Imaging Conference 2007, Santa Fe, NM, Nov. 2-5, 2007.

220. Zervantonakis I., Luo J. and **Konofagou E.E.**, A Computational Study Of Regional Arterial Wall - Blood Flow Interaction With Experimental Validation Using In Vivo Pulse Wave Imaging, Tissue Elasticity Imaging Conference 2007, Santa Fe, NM, Nov. 2-5, 2007.

221. Fujikura K., Luo J., Tyrie, L., Tilson M.D. and **Konofagou E.E.**, Non-Invasive Imaging of the Aortic Pulse-Wave Propagation for the Detection of Abdominal Aortic Aneurysms In Vivo, American Heart Association Meeting, Orlando, FL, Nov. 3-6, 2007. [Circulation, 116: 16, S598-S598, 2007].

222. **Konofagou E. E.**, Luo J., Saluja D., Cervantes D., Fujikura K. and Coromilas J., Imaging of the Propagation of the Contraction Wave Using RF-Based Speckle Tracking In Vivo, American Heart Association Meeting, Orlando, FL, Nov. 3-6, 2007. [Circulation, 116: 16, S627-S628, 2007].

223. Katouzian A., Baseri B., **Konofagou E.E.**, Laine A.F., Texture-Driven Coronary Artery Plaque Characterization By Wavelet Packet Signatures, International Optical Society (SPIE) meeting, San Diego, CA, Feb. 18-21, 2008.

224. **Konofagou E.E.**, Luo J., Lee W-N and Wang S. Imaging the mechanics and electromechanics in animal and human hearts in vivo, 11th International Symposium on Advanced Biomedical Ultrasound, Sendai, Japan, Mar. 7-8, 2008. [Invited]

225. **Konofagou E.E.**, Choi J.J., Wang S., Morrison B. and Borden M. Characterization and Optimization of Ultrasound-induced Molecular Delivery In Vivo, Joint Acoustical Society of America and Euroacoustics meeting, June 29-July 4, 2008. [Invited].

226. Choi J.J., Wang S., Tung Y-S, Morrison B. and **Konofagou E.E.** The delivery of compounds at pharmacologically relevant molecular weights in the hippocampus of mice using Focused Ultrasound, Joint Acoustical Society of America and Euroacoustics meeting, June 29-July 4, 2008.

227. Maleke, C., Luo J., Gamarnik V. and **Konofagou E.E.**, Experimental Validation of the amplitude-modulated harmonic motion imaging (AM-HMI) for tissues stiffness estimation, Joint Acoustical Society of America and Euroacoustics meeting, June 29-July 4, 2008.

228. Provost J., Luo J. and **Konofagou E.E.**, Mechanical and electromechanical imaging of the cardiovascular system, SIAM Life Sciences meeting, Montreal, Canada, August 3-6, 2008. [Invited].

229. Khanarian N., Maleke C., Lee W-N, **Konofagou E.E.**, Lu H.H. Ultrasound Elastography Analysis of Chondrocyte-Seeded Hydrogel Scaffolds, Biomedical Engineering Society (BMES) Fall Meeting, St. Louis, MI, Oct. 2-4, 2008.

230. **Konofagou E.E.**, Khanarian N., Maleke C., Lee W-N, Ginat D., Hung G., Lu H.H. and Mow V.C., High Resolution Elastography of Native Cartilage and Tissue-Engineered Scaffolds, Ultrasound Biomicroscopy Scanning, Malibu, CA, Sept. 25-29, 2008. [Invited].

231. Provost J., Lee W-N., Fujikura K. and **Konofagou E.E.**, Electromechanical Wave

Propagation In The Normal And Ischemic Canine Myocardium In Vivo, Tissue Elasticity Imaging Conference 2008, Austin, TX, Oct. 26-29, 2008.

232. Vappou J., Luo J. and **Konofagou E.E.**, Pulse Wave Imaging (PWI) As A Tool For The Quantitative Assessment Of Vascular Elasticity: Evaluation Of A Quantitative Finite-Element Model And In-Vivo Results In Human Subjects, Tissue Elasticity Imaging Conference 2008, Austin, TX, Oct. 26-29, 2008.

233. Vappou J.,Maleke C. and **Konofagou E.E.**, Viscoelastic Property Estimation using Harmonic Motion Imaging, Tissue Elasticity Imaging Conference 2008, Austin, TX, Oct. 26-29, 2008.

234. Provost J., Gurev V., Luo J., Trayanova N. and **Konofagou E.E.**, Characterization of Wave Origins in Electromechanical Wave Imaging, 2008 IEEE International Ultrasonics Symposium, Beijing, China, Nov 2-5, 2008.

235. Maleke C., Vappou J., and **Konofagou E.E.**, A Harmonic Motion Imaging- based technique for non-contact mapping and estimating regional viscoelastic properties, 2008 IEEE International Ultrasonics Symposium, Beijing, China, Nov 2-5, 2008.

236. Tung Y-S. Choi J., Wang S., Feshitan J., Borden M. and **Konofagou E.E.**, Identifying the Inertial Cavitation Threshold In a Vessel Phantom Using FUS and Microbubbles, J Acoust Soc Am., Nov. 5-12, 2008.

237. Choi J.J., Wang S., Brown T. R., Small S.A., Duff K.E.K., **Konofagou E.E.**, Noninvasive and transient blood-brain barrier opening in the hippocampus of Alzheimer's APP/PS1 mice using Focused Ultrasound, Society of Neuroscience Meeting, Washington DC, Nov. 15-19, 2008.

238. **Konofagou E.E.**, Choi J.J., Wang S. and Morrison B. III, Microbubble dependence and permeability assessment of the ultrasound-induced blood-brain barrier opening in vivo, Society of Neuroscience Meeting, Washington DC, Nov. 15-19, 2008.

239. **Konofagou E.E.**, and Maleke C., Preliminary Evaluation of the HMIFU system In Vivo, American Institute of Ultrasound in Medicine (AIUM), New York, NY, Apr. 2-5, 2009.

240. **Konofagou E.E.**, Lee W-N., Luo J, Cardiovascular Elasticity Imaging, International Congress in Acoustics, Santiago, Chile, January 11-15, 2009 [Invited].

241. Lee W-N, Provost J , Wang S, Fujikura K, Wang J and **Konofagou E.E.**, In Vivo Validation of Left-Ventricular Strains at Variable Levels of Myocardial Ischemia, American Institute of Ultrasound in Medicine (AIUM), New York, NY, Apr. 2-5, 2009.

242. **Konofagou E.E.**, Choi J., Wang S., and Baseri B., Brain Molecular Imaging and Nanoparticle Delivery Through the Blood-Brain Barrier, American Institute of Ultrasound in Medicine (AIUM), New York, NY, Apr. 2-5, 2009.

243. Luo J., Lee W-N, Wang S, and **Konofagou E.E.**, Noninvasive Imaging of Pulse Wave Propagation and Assessment of Wall Properties in Human Abdominal Aortas In Vivo, American Institute of Ultrasound in Medicine (AIUM), New York, NY, Apr. 2-5, 2009.

244. Gurev V., Provost J., **Konofagou E.E.** and Trayanova N., In Silico Characterization Of Ventricular Activation Pattern By Electromechanical Wave Imaging, Heart Rhythm, Boston, MA, May 13-16, 2009.

245. Lee W-N, Provost J , Fujikura K, Wang J and **Konofagou E.E.**, In vivo validation of myocardial elastography to quantify variable levels of myocardial ischemia, Ultrasonic Imaging and Tissue Characterization Meeting, Arlington, VA, June 10-12, 2009. [Invited].

246. Vappou J., Luo J. and **Konofagou E.E**., Validation Of Pulse Wave Imaging (Pwi) As A Quantitative Method For Mapping Arterial Elasticity, Tissue Elasticity Imaging Conference 2009, Rotterdam, Netherlands, Sept. 17-19, 2009.

247. Vappou J., Maleke C. and **Konofagou E.E**., Dynamic Viscoelastic Properties Of Soft Tissues Measured By Harmonic Motion Imaging (HMI): Preliminary Results Obtained On Normal And Cancerous Breast Tissues, Tissue Elasticity Imaging Conference 2009, Rotterdam, Netherlands, Sept. 17-19, 2009.

248. Choi J.J., Wang S., Tung Y-S., Baseri B., Morrison B., **Konofagou E.E.**, Delivery of pharmacologically-relevant sized molecules through the ultrasound-induced blood-brain barrier opening in vivo, Society of Neuroscience Meeting, Chicago IL, Oct. 17-21, 2009.

249. Deffieux T. and **Konofagou E.E.**, Transcranial Focused Ultrasound For Blood Brain Barrier Opening - Numerical Simulations With In Vitro Validation In Human, Monkey And Mouse Skulls, American Institute of Ultrasound in Medicine (AIUM) meeting, San Diego, CA, March 26-28, 2010.

250. Luo J. and **Konofagou E.E.**, A Real-Time and High-Quality RF-Based Speckle Tracking Method, American Institute of Ultrasound in Medicine (AIUM) meeting, San Diego, CA, March 26-28, 2010.

251. Hou, G.Y., Luo J., Maleke C. and **Konofagou E.E.**, Harmonic motion imaging (HMI) for reliable HMIFU (Harmonic motion imaging for focused ultrasound)-lesion localization and quantification: A simulation study with in vitro validation, American Institute of Ultrasound in Medicine (AIUM) meeting, San Diego, CA, March 26-28, 2010.

252. Konofagou E.E., Maleke C., Hou Y., The Harmonic Motion Imaging for Focused Ultrasound (HMIFU) system for tumor detection and treatment: Simulation, in vitro and in vivo results, Acoustical Society of America (ASA) meeting, Baltimore, MD, April 19-23, 2010. [Invited].

253. Konofagou E.E., Vappou J., Maleke C., Harmonic Motion Imaging For The Localized Measurement And Imaging Of Viscoelastic Properties, International Symposium on Biomedical Simulation (ISBMS), Phoenix, AZ, Jan. 22-24, 2010. [Invited].

254. Konofagou E.E., Provost J., Luo J., Myocardial Elastography In The Detection And Localization Of Early Onset Of Ischemia, Society of Applied and Industrial Mathematics (SIAM), Pittsburgh, PA, July 11-14, 2010. [Invited].

255. Durney, KM; Sirsi, SR; Nover, A; Ateshian, GA; **Konofagou, EE**; Maleke, C; Borden, MA; Lima, EG; Hung, CT, Using Microbubbles to Modulate Hydrogel Scaffold Properties for Cartilage Tissue Engineering, Orthopaedic Research Society meeting, 2010.

256. Konofagou E.E., Vappou J., Luo J. and Danpinid, A, Imaging of Mechanical Properties in Normal and Pathological Abdominal Aortas In Vivo, Society of Industrial and Applied Mathematics (SIAM) Annual Conference, Pittsburgh, PA, July 7-10, 2010 [Invited].

257. Provost J., Lee W-N, Fujikura K, and **Konofagou E.E.**, A Noninvasive Alternative to Cardiac Mapping: Electromechanical Wave Imaging, Heart Rhythm Society Meeting, Denver, CO, May 15-17, 2010.

258. Vlachos F., Tung Y-S. and **Konofagou E.E.**Pharmacokinetic modeling with MRI-detected Focused Ultrasound-induced Blood-Brain Barrier Opening, 2010 BMES meeting, Austin, TX, Oct. 5-9, 2010.

259. Okrasinski S., Wan E. Lee W-N, and **Konofagou E.E.**, Early Detection Of Coronary Stenosis With Myocardial Elastography: A Clinical Feasibility Study, Int. Tissue Elas. Conference, October 16-19, 2010.

260. Provost J., Lee W-N. Fujikura K, and **Konofagou E.E.**, Mapping The Electrical Activation Sequence Of The Heart Using Electromechanical Wave Imaging: A Validation Study In Canines, Int. Tissue Elas. Conference, October 16-19, 2010.

261. Luo J., and **Konofagou E.E.**, Imaging Of Cardiovascular Wall–Flow Coupling In Vivo, Int. Tissue Elas. Conference, October 16-19, 2010.

262. Vappou J., and **Konofagou E.E.**, Internal Indentation For Direct Modulus Estimation, Int. Tissue Elas. Conference, October 16-19, 2010.

263. Konofagou E.E. and Maleke C., , Ex Vivo Feasibility Of Harmonic Motion Imaging Of Human Breast Tumors, Int. Tissue Elas. Conference, October 16-19, 2010.

264. Hou G., Luo J., Maleke C., Vappou J., and **Konofagou E.E.**,A Simulation

Framework For Harmonic Motion Imaging For Focused Ultrasound (HMIFU) With Ex Vivo Validation, Int. Tissue Elas. Conference, October 16-19, 2010.

265. Provost J., Lee W-N, Fujikura K, and **Konofagou E.E.**, Electromechanical Wave Imaging for Noninvasive Mapping the 3D Electrical Activation Sequence In Vivo, Amer. Heart. Assoc, Chicago, IL,Nov. 11-14, 2010.

266. Nover AB, O'Connell GD, Ateshian GA, Lima EG, **Konofagou EE**, Hung CT. A Focused Ultrasound Technique for Modulating Local Tissue Properties for Articular Cartilage Tissue Engineering. Trans Orthop Res Soc 36, 2011 (in press).

267. Durney KM, Sirsi SR, Nover AB, Ateshian GA, **Konofagou EE**, Maleke C, Borden MA, Hung CT, Lima EG. Microbubbles Improve Depth-Dependent Mechanical Properties of Cartilage Tissue Engineered Constructs Trans Orthop Res Soc 36, 2011 (in press).

268. Konofagou E.E., High-Frequency Preclinical Ultrasound: Cardiac Applications, American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011. [Invited]

269. Luo J. and **Konofagou E.E.,** Simultaneous Imaging of Cardiovascular Wall Motion and Flow Velocity in the Heart and Vessels of Mice In Vivo American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011.

270. Tung Y-S, Vlachos F., Selert K. and **Konofagou E.E.** In Vivo Identification of the Mechanism Behind Ultrasound-Induced Blood-Brain Barrier Opening, American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011.

271. Hou Y., Luo J., Marquet F., Vappou J. and **Konofagou E.E**., In Silico and Ex Vivo Feasibility Study on Thermal Lesion Mapping With Harmonic Motion Imaging for Focused Ultrasound, American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011.

272. Marquet F., Tung Y-S. and **Konofagou E.E**., Feasibility Study of a Simple Transcranial Focused Ultrasound System Applied to Blood-Brain Barrier Opening, American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011.

273. Okrasinski, S., Wan, E., Oe, Y. and **Konofagou E.E**. Early Detection of Coronary Stenosis With Myocardial Elastography: A Clinical Feasibility Study, American Institute of Ultrasound in Medicine (AIUM) Meeting, New York, NY, April 2011.

274. Konofagou E.E., Vappou J and Hou Y., Harmonic Motion Imaging for the Detection and Monitoring of Ablation, Acoustical Society of America Meeting, Seattle, WA, May 2011 (Invited).

275. Konofagou E.E., Measuring Mechanical Properties in Cartilage and ACL, Aegean Conference in Tissue Engineering, June 2011 [Invited].

276. Li R., Luo J., Balaram S., Chaudhry F., Lantis J., and **Konofagou E.E**.,Pulse Wave Imaging For Arterial Stiffness Measurement In Normal And Pathological Human Arteries In Vivo), EMBS Conference, Aug. 30-Sept. 2, 2011.

277. Konofagou E.E., Lee W-N,Okrasinski S., Provost J. Myocardial Elastography And Electromechanical Wave Imaging – From Theory To Clinical Applications, Int. Tissue Elas. Conference, October 12-15, 2011 [Invited].

278. Okrasinski S., and **Konofagou E.E.**, Assessment Of Myocardial Elastography Performance In Normal And Ischemic Phantoms Under Physiologic Motion Configurations With Preliminary In Vivo Validation, Int. Tissue Elas. Conference, October 12-15, 2011.

279. Provost J.,Thiebaut S. Luo J, and **Konofagou E.E**, Single–Heartbeat Electromechanical Wave Imaging With Optimal Strain Estimation Using Temporally–Unequispaced Acquisition Sequences, Int. Tissue Elas. Conference, October 12-15, 2011.

280. Triano J.,Langevin H., and **Konofagou E.E**, Differential Tissue Strain Estimation Across Strata Of Lumbar Tissues Under Intrinsic Motion, Int. Tissue Elas. Conference, October 12-15, 2011.

281. Shahmirzadi D.,Li R., Luo J. and **Konofagou E.E**, Simulated Pulse Wave Imaging For Local Stiffness Estimation In Patient–Specific Aortas With Phantom Validation, Int. Tissue Elas. Conference, October 12-15, 2011.

282. Hou Y., Marquet F., Luo J., and **Konofagou E.E**., Multi–Parametric Monitoring Of Thermal Lesions Using Harmonic Motion Imaging For Focused Ultrasound (HMIFU), Int. Tissue Elas. Conference, October 12-15, 2011.

283. Li R., Luo J., Balaram S., Chaudhry F., Lantis J., and **Konofagou E.E**. Pulse Wave Imaging For Arterial Stiffness Measurement In Normal And Pathological Human Arteries In Vivo), Int. Tissue Elas. Conference, October 12-15, 2011.

284. **Konofagou E.E**.,Cardiovascular Elasticity Imaging, Symposium on Signal Processing in Medicine and Biology, New York, NY Dec. 10, 2011 [Invited].

285. Provost J.,Thiebaut S. Luo J, and **Konofagou E.E**, Single–Heartbeat Electromechanical Wave Imaging With Optimal Strain Estimation Using Temporally–Unequispaced Acquisition Sequences, Symposium on Signal Processing in Medicine and Biology, New York, NY Dec. 10, 2011 [Invited].

284. R. X. Li, J. Luo, L. A. Walker, S. Laifer-Narin, E. Hecht, F. A. Chaudhry, and E. E. Konofagou, In-vivo Pulse Wave Imaging (PWI) in the Abdominal Aortas of Hypertensive and Aneurysmal Human Subjects: A Feasibility Study, American Institute of Ultrasound in Medicine (AIUM) meeting, Phoenix, AZ, March 31-Apr.2, 2012.

285. Costet A., Provost J., Gambhir A., Bobkov Y., Sosunov E., Cohen I., Kryukova E., Robinson R., Boink G., Danilo P., Rosen M., **Konofagou E.** Transthoracic Electromechanical Wave Imaging of Stem Cell and Viral Pacing of the Canine Heart In Vivo, Heart Rhythm Society Meeting, Boston, MA, May 8-11, 2012.

286. Cherry C. Chen, Shih-Ying Wu, John D. Finan, Barclay Morrison III, **Konofagou E.**E., An experimental study on the stiffness of size-isolated microbubbles with relevance to blood-brain barrier opening applications, Gordon Research Conference: Barriers of the Central Nervous System (New London, NH, USA), June 17 to 22, 2012

287. Provost J.,Thiebaut S., Luo J, and **Konofagou E.**E, Single–Heartbeat Electromechanical Wave Imaging With Optimal Strain Estimation Using Temporally–Unequispaced Acquisition Sequences, Ultrasound Imaging and Tissue Characterization Meeting, Washington, DC, 2012 [Invited].

288. Ronny X. Li, Danial Shahmirzadi, William W. Qaqish, **Konofagou E.**E., Performance assessment and optimization of Pulse Wave Imaging (PWI) and its applications for pulse wave analysis in ex vivo canine aortas and in vivo normal human arteries, 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (San Diego, CA, USA), August 28 to September 1, 2012

289. Jiangang Chen, Yi Hou, Fabrice Marquet, **Konofagou E.**E., Radiation-force-based estimation of acoustic attenuation using harmonic motion imaging, 164th Meeting of the Acoustical Society of America (Kansas City, MO, USA), October 22 to 26, 2012.

290. Jean Provost, Alok Gambhir, Hasan Garan, **Konofagou E.E.**, Single-heartbeat electromechanical wave imaging in humans during arrhythmia, IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012.

291. Stanley J. Okrasinski, Jean Provost, Diégo Legrand, **Konofagou E.E.**, Single-heartbeat 2-D myocardial elastography using an unfocused transmit sequence: an in vivo feasibility study, Stanley J. Okrasinski, Jean Provost, Diégo Legrand, **Konofagou E.E.**, IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012.

292. Yao-Sheng Tung, Shih-Ying Wu, Fabrice Marquet, **Konofagou E.E.**, Quantification of stable cavitation dose during FUS-induced blood-brain barrier opening in mice and in non-human primates IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

293. Danial Shahmirzadi, Yi Hou, **Konofagou E.E.**, Viscoelastic mechanical properties of the canine liver before and after focused ultrasound-induced thermal ablation in vitro,Biomedical Engineering Society Annual Meeting (Atlanta, GA, USA), October 24 to 27, 2012.

294. Ronny X. Li, Cesare Russo, William W. Qaqish, Marco di Tullio, **Konofagou E.E.**, Pulse Wave Ultrasound Manometry (PWUM) for noninvasive central blood pressure measurement in hypertensive human subjects in vivo , IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

295. Shih-Ying Wu, Yao-Sheng Tung, Fabrice Marquet, Cherry C. Chen, **Konofagou E.E.**, Non-human primate skull effects on the FUS-induced blood-brain barrier opening, IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

296. Yi Hou, Danial Shahmirzadi, Fabrice Marquet, **Konofagou E.E.**, Multi-parametric monitoring of viscoelastic property changes during HIFU ablation of canine liver ex vivo using HMIFU with preliminary validation, IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

297. Alexandre Costet, Jean Provost, Alok Gambhir, Gerard J. J. Boink, Peter Danilo Jr., Michael R. Rosen, **Konofagou E.E.**, Electromechanical wave imaging of stem cell and viral cardiac pacing in conscious dogs in vivo, IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

298. Cherry C. Chen, Shih-Ying Wu, John D. Finan, Barclay Morrison III, **Konofagou E.E.**, An experimental study on the apparent stiffness of size-isolated microbubbles used for blood-brain barrier opening applications, Proceedings of the IEEE International Ultrasonics Symposium (Dresden, Germany), October 7 to 10, 2012

299. Danial Shahmirzadi, Yi Hou, **Konofagou E.E.**, Viscoelasticity parameters of HIFU ablated canine liver tissues ex vivo, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

300. Stanley J. Okrasinski, Jean Provost, Diégo Legrand, **Konofagou E.E.** Single-heartbeat 2-D myocardial elastography using an unfocused transmit sequence: an in vivo feasibility study, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

301. Ronny X. Li, William W. Qaqish, Danial Shahmirzadi, **Konofagou E.E.**, Performance assessment and optimization of pulse wave imaging for pulse wave analysis in ex vivo canine aortas and in vivo normal human aortas, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

302. Yi Hou, Danial Shahmirzadi, Fabrice Marquet, **Konofagou E.E.**, Multi-parametric monitoring of viscoelastic property changes during HIFU treatment using HMIFU ex vivo, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

303. Alexandre Costet, Jean Provost, Alok Gambhir, Yevgeniy Bobkov, Gerard J. J. Boink, Peter Danilo Jr., Michael R. Rosen, **Konofagou E.E.**, Electromechanical wave imaging of stem cell and viral cardiac pacing in conscious dogs in vivo, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

304. Jean Provost, Alok Gambhir, Alexandre Costet, Julien L. Grondin, Stanley J. Okrasinski, **Konofagou E.E.**,Electromechanical wave imaging of canine and human pathological hearts in vivo, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012

305. Danial Shahmirzadi, **Konofagou E.E.**, Effects of the wall inclusion size and modulus contrast on the regional pulse wave propagation along the arterial wall in silico, 11th International Tissue Elasticity Conference (Deauville, France), October 2 to 5, 2012.

306. Yao-Sheng Tung, Cherry C. Chen, Oluyemi O. Olumolade, Shih-Ying Wu, Shutao Wang, **Konofagou E.E.**, The cavitation-dependent zonula-occludens-1 integrity after ultrasound-induced blood-brain barrier opening ,Cold Spring Harbor Laboratory

Meeting: The Blood-Brain Barrier (Cold Spring Harbor, NY, USA), December 5 to 8, 2012.

307. Baseri B., Choi J.J., Deffieux T., Samiotaki G., Tung Y-S.,Olumolade O., Small, S.A., Morrison B. III, **Konofagou E.E.**, Activation of signaling pathways following localized delivery of systemically administered neurotrophic factors across the blood–brain barrier using focused ultrasound and microbubbles,Cold Spring Harbor Laboratory Meeting: The Blood-Brain Barrier (Cold Spring Harbor, NY, USA), December 5 to 8, 2012.

308. Danial Shahmirzadi, Yi Hou, **Konofagou E.**E., Potential strong-HIFU-ablation-induced tissue damage as measured by viscoelastic characterization of canine liver tissue post-ablation, American Institute of Ultrasound in Medicine Annual Convention (New York, NY, USA), April 6 to 10, 2013.

309. Sacha D. Nandlall, Monica P. Goldklang, Jeanine M. d'Armiento, **Konofagou E.**E. Monitoring the formation of aneurysms in murine aortas using Pulse Wave Imaging (PWI), American Institute of Ultrasound in Medicine Annual Convention (New York, NY, USA), April 6 to 10, 2013.

310. **Konofagou E.**E. Cardiovascular Functional Imaging in Mice in Vivo, American Institute of Ultrasound in Medicine Annual Convention (New York, NY, USA), April 6 to 10, 2013.

311. Chen Cherry C., Paul S. Sheeran, Shih-Ying Wu, Oluyemi O. Olumolade, Paul S. Dayton, Elisa E. **Konofagou**, Targeted Drug Delivery with Focused Ultrasound-Induced Blood-Brain Barrier Opening Using Acoustically-Activated Nanodroplets, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

312. Gesthimani Samiotaki, Shutao Wang, Oluyemi Olumolade, Elisa E. **Konofagou**, Neurturin Delivery using FUS through the Blood-Brain Barrier, 14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014

313. Hou Yi, Jean Provost, Julien L. Grondin, Shutao Wang, Fabrice Marquet, Elisa E. **Konofagou**, Real-time 2-D elasticity imaging and monitoring of HIFU treatment using Harmonic Motion Imaging for focused Ultrasound (HMIFU), IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

314. Bunting Ethan A., Jean Provost, Elisa E. **Konofagou**, Performance Analysis of Two-Dimensional Cardiac Strain Estimation Using Different Beamforming and Temporal Resolution in Vivo, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

315. Li Ronny X., Isaac Jourard, Joyce Salomon, Prathyush Narayanan, Lancelot A. Walker, Cesare Russo, Marco di Tullio, Elisa E. **Konofagou**, Noninvasive arterial pulse pressure mapping using Pulse Wave Ultrasound Manometry (PWUM) in hypertensive aortas and stenotic carotid arteries in vivo, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013.

316. Nandlall Sacha D., Monica P. Goldklang, Jeanine M. d'Armiento, Elisa E. **Konofagou**, Monitoring the formation of aneurysms and ruptures in murine aortas using Pulse Wave Imaging (PWI), IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013.

317. Wu Shih-Ying, Fabrice Marquet, Yao-Sheng Tung, Tobias Teichert, Matthew E. Downs, Cherry C. Chen, Vincent P. Ferrera, Elisa E. **Konofagou**, Monitoring of FUS-induced BBB opening in non-human primates using transcranial cavitation

detection in vivo and the human skull effect, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

318. Grondin Julien L., Elaine Y. Wan, Alok Gambhir, Hasan Garan, Elisa E. **Konofagou**, Intracardiac Myocardial Elastography at high temporal resolution in canines and humans in vivo, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

319. Costet Alexandre, Jonathan T. Lu, Elisa E. **Konofagou**, Electromechanical Wave Imaging of atrial fibrillation in humans: a feasibility study, IEEE International Ultrasonics Symposium (Prague, Czech Republic), July 21 to 25, 2013

320. Downs M, Wu S-Y, Marquet F, Tung Y-S, Teichert T, Chen C, Ferrera V, **Konofagou** EE, Safety of Blood-Brain Barrier Opening in Non-Human Primates In Vivo, Society of Neuroscience Meeting, Nov. 9-13, 2013.

321. Olumolade O., Samiotaki G, Wang S, **Konofagou** EE, Localized Delivery of the Neurturin (NTN) neurotrophic factor through Focused Ultrasound – mediated Blood-Brain Barrier Opening, Society of Neuroscience Meeting, Nov. 9-13, 2013.

322. Sun T, Samiotaki S, **Konofagou E.**E., Real-time prediction of the reversibility of the ultrasound-induced blood-brain barrier opening using passive cavitation detection with MRI validation, Society of Neuroscience Meeting, Nov. 9-13, 2013.

323. **Konofagou** EE, Imaging and Therapeutics through the Blood-Brain Barrier, Acoustical Society of America Meeting, Dec. 2-7, 2013 [Invited].

324. **Konofagou** EE, The Role of Microbubbles in the Blood-Brain Barrier Opening with Ultrasound, Beneficial Bubbles: the Role of Ultrasound Contrast Agents in Therapy, American Institute of Ultrasound In Medicine, Las Vegas, NV, March 29 - April 2, 2014. [Invited].

325. Shutao Wang, Oluyemi O. Olumolade, Tao Sun, Gesthimani Samiotaki, Elisa E. **Konofagou**, Non-Invasive, Neuron-Specific Gene Therapy can be achieved by Focused Ultrasound and Recombinant Adeno-Associate Virus,14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014

326. Hong Chen, Yi Hou, Yang Han, Elisa E. **Konofagou**, Initial Feasibility of Harmonic Motion Imaging for High-Intensity Focused Ultrasound Ablation of Mouse Pancreatic Tumors, 14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014.

327. Shih-Ying Wu, Carlos J. Sierra Sánchez, Matthew E. Downs, Amanda M. Buch, Gesthimani Samiotaki, Vincent P. Ferrera, Elisa E. **Konofagou**, Focused Ultrasound-Induced Blood-Brain Barrier Opening in Non-Human Primates with Transcranial Cavitation Detection In Vivo,14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014.

328. Yang Han, Shutao Wang, Elisa E. **Konofagou**, Detection and Treatment Monitoring of Ex Vivo Human Breast Tumors Using Harmonic Motion Imaging,14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014.

329. Matthew E. Downs, Amanda M. Buch, Carlos J. Sierra Sánchez, Marilena E. Karakatsani, Shangshang Chen, Elisa E. **Konofagou**, Vincent P. Ferrera, Behavioral Effects of Targeted Drug Delivery via Non-Invasive Focused Ultrasound Blood Brain Barrier Opening in Non-Human Primates,14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5.

330. Tao Sun, Gesthimani Samiotaki, Shutao Wang, Cherry C. Chen, Camilo J. Acosta,

Elisa E. **Konofagou**, 2014Acoustic Cavitation Assessment of the Reversibility and Permeability of the Ultrasound-Induced Blood-Brain Barrier Opening, 14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014

331. Gesthimani Samiotaki, Shutao Wang, Oluyemi Olumolade, Elisa E. **Konofagou**, Neurturin Delivery using FUS through the Blood-Brain Barrier, 14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014

332. Hou Yi, Jean Provost, Julien L. Grondin, Shutao Wang, Fabrice Marquet, Elisa E. **Konofagou**, Real-time 2-D elasticity imaging and monitoring of HIFU treatment using Harmonic Motion Imaging for focused Ultrasound (HMIFU), 14th International Symposium on Therapeutic Ultrasound (Las Vegas, NV, USA), April 2 to 5, 2014

333. **Konofagou** EE, Drug Delivery through the Opened Blood-Brain Barrier, 2014 Barriers of the CNS Gordon Research Conference, June 14-15, 2014. [Invited].

334. Matthew E. Downs, Amanda M. Buch, Marilena E. Karakatsani, Vincent P. Ferrera, Elisa E. **Konofagou**,Non-invasive focused ultrasound blood-brain barrier opening in awake non-human primates, Cold Spring Harbor Laboratory Meeting: The Blood-Brain Barrier (Cold Spring Harbor, NY, USA), December 10 to 13, 2014

335. Shutao Wang, Oluyemi O. Olumolade, Vernice R Jackson-Lewis, Javier F Blesa De Los Mozos, Tao Sun, Gesthimani Samiotaki, Serge Przedborski, Elisa E. **Konofagou** Neuroprotective effects induced by focused ultrasound-facilitated AAV-GDNF delivery in a Parkinson's-disease mouse model, Neuroscience (Washington, DC, USA), November 15 to 19, 2014

336. Hong Chen, Cherry C. Chen, Camilo J. Acosta, Shih-Ying Wu, Tao Sun, Elisa E. **Konofagou**, A new brain drug delivery strategy: Focused ultrasound-enhanced intranasal drug delivery, Neuroscience (Washington, DC, USA), November 15 to 19, 2014

337. Hong Chen, Thomas Payen De La Garanderie, Yang Han, Carmine F. Palermo, Kenneth P. Olive, Elisa E. **Konofagou**, Harmonic motion imaging for pancreatic tumor detection and high-intensity focused ultrasound ablation monitoring, 4th International Symposium on Focused Ultrasound (Washington, DC, USA), October 12 to 16, 2014

338. Shutao Wang, Oluyemi O. Olumolade, Vernice R Jackson-Lewis, Javier F Blesa De Los Mozos, Tao Sun, Gesthimani Samiotaki, Serge Przedborski, Elisa E. **Konofagou**, Focused ultrasound-facilitated AAV-GDNF delivery triggers neuroprotective effects in a Parkinson's-disease mouse model, 4th International Symposium on Focused Ultrasound (Washington, DC, USA), October 12 to 16, 2014

339. Matthew E. Downs, Amanda M. Buch, Marilena E. Karakatsani, Carlos J. Sierra Sánchez, Shangshang Chen, Vincent P. Ferrera, Elisa E. **Konofagou**, Behavioral effects of targeted drug delivery via non-invasive microbubble enhanced focused ultrasound blood brain barrier opening in non-human primates, 4th International Symposium on Focused Ultrasound (Washington, DC, USA), October 12 to 16, 2014

340. Sacha D. Nandlall, Danial Shahmirzadi, Iason-Zacharias Apostolakis, John D. Finan, Natalie A. Delpratt, Barclay Morrison III, Elisa E. **Konofagou**, Mapping the local stiffness of murine aortas using pulse wave imaging and validation with atomic force microscopy, 9th International Conference in Ultrasonic Biomedical

Microscanning (Eddleston, Scotland, United Kingdom), September 28 to October 1, 2014

341. Iason-Zacharias Apostolakis, Sacha D. Nandlall, Elisa E. **Konofagou**, Adaptive stiffness mapping in murine atherosclerotic and aneurysmal aortas using Pulse Wave Imaging (PWI) in vivo, 9th International Conference in Ultrasonic Biomedical Microscanning (Eddleston, Scotland, United Kingdom), September 28 to October 1, 2014

342. Ronny X. Li, Iason-Zacharias Apostolakis, James F. McKinsey, Edward S. Connolly, Elisa E. **Konofagou**,Modulus mapping of normal and stenotic carotid arteries using Pulse Wave Imaging,13th International Tissue Elasticity Conference (Snowbird, UT, USA), September 7 to 10, 2014

343. Iason-Zacharias Apostolakis, Sacha D. Nandlall, Elisa E. **Konofagou**,Stiffness mapping in murine atherosclerotic and aneurysmal aortas using Pulse Wave Imaging (PWI) in vivo, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

344. Julien L. Grondin, Alok Gambhir, Stanley J. Okrasinski, Ethan A. Bunting, Elisa E. **Konofagou**, Single-Heartbeat Myocardial Elastography in human subjects with Coronary Artery Disease, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

345. Gesthimani Samiotaki, Marilena E. Karakatsani, Shih-Ying Wu, Amanda M. Buch, Matthew E. Downs, Vincent P. Ferrera, Sachin R. Jambawalikar, Elisa E. **Konofagou**,Pharmacodynamic analysis for efficient drug delivery through the FUS-induced BBB opening in Non-Human Primates in vivo, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

346. Hong Chen, Yang Han, Carmine F. Palermo, Kenneth P. Olive, Elisa E. **Konofagou**, In vivo pancreatic tumor detection and high-intensity focused ultrasound ablation monitoring using harmonic motion imaging technique, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

347. Ronny X. Li, Iason-Zacharias Apostolakis, James F. McKinsey, Edward S. Connolly, Elisa E. **Konofagou**, In vivo characterization of atherosclerotic plaques using Pulse Wave Imaging-based stiffness maps, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

348. Ethan A. Bunting, Litsa K. Lambrakos, Elisa E. **Konofagou**, Identification and optimization of response to Cardiac Resynchronization Therapy using Electromechanical Wave Imaging, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

349. Julien L. Grondin, Shutao Wang, Elisa E. **Konofagou**, Harmonic Motion Imaging (HMI) and monitoring of HIFU treatment in real-time using diverging and plane wave

350. IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

351. Shih-Ying Wu, Carlos J. Sierra Sánchez, Matthew E. Downs, Amanda M. Buch, Gesthimani Samiotaki, Vincent P. Ferrera, Elisa E. **Konofagou**, Focused Ultrasound-Induced Blood-Brain Barrier Opening in Non-Human Primates with Transcranial Cavitation Detection In Vivo, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

352. Alexandre Costet, Ethan A. Bunting, Julien L. Grondin, Stanley J. Okrasinski, Alok

Gambhir, Elisa E. **Konofagou**, Electromechanical Wave Imaging of Atrial Arrhythmias using Frequency Analysis Processing Techniques: Validation in vivo. IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

353. Shutao Wang, Tao Sun, Oluyemi O. Olumolade, Gesthimani Samiotaki, Elisa E. **Konofagou**,Direct Infusion to the Brain Can Be Enhanced by Pre-treatment of Focused Ultrasound and Microbubblesm, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

354. Wang Shutao, Oluyemi O. Olumolade, Vernice R Jackson-Lewis, Javier F Blesa De Los Mozos, Tao Sun, Gesthimani Samiotaki, Serge Przedborski, Elisa E. **Konofagou**,Focused ultrasound-facilitated AAV-GDNF delivery triggers neuroprotective effects in a Parkinson's-disease mouse model, 4th International Symposium on Focused Ultrasound (Washington, DC, USA), October 12 to 16, 2014

355. Downs Matthew E., Amanda M. Buch, Marilena E. Karakatsani, Carlos J. Sierra Sánchez, Shangshang Chen, Vincent P. Ferrera, Elisa E. **Konofagou**,Behavioral effects of targeted drug delivery via non-invasive microbubble enhanced focused ultrasound blood brain barrier opening in non-human primates, 4th International Symposium on Focused Ultrasound (Washington, DC, USA), October 12 to 16, 2014

356. Wang Shutao, Oluyemi O. Olumolade, Vernice R Jackson-Lewis, Javier F Blesa De Los Mozos, Tao Sun, Gesthimani Samiotaki, Serge Przedborski, Elisa E. **Konofagou** Neuroprotective effects induced by focused ultrasound-facilitated AAV-GDNF delivery in a Parkinson's-disease mouse model, Cold Spring Harbor Laboratory Meeting: The Blood-Brain Barrier (Cold Spring Harbor, NY, USA), December 10 to 13, 2014

357. Chen Hong, Cherry C. Chen, Camilo J. Acosta, Shih-Ying Wu, Tao Sun, Elisa E. **Konofagou**, A new brain drug delivery strategy: Focused ultrasound-enhanced intranasal drug delivery, Society for Neuroscience Meeting (Washington, DC, USA), November 15 to 19, 2014

358. Downs Matthew E., Amanda M. Buch, Marilena E. Karakatsani, Vincent P. Ferrera, Elisa E. **Konofagou**,Non-invasive focused ultrasound blood-brain barrier opening in awake non-human primates, Cold Spring Harbor Laboratory Meeting: The Blood-Brain Barrier (Cold Spring Harbor, NY, USA), December 10 to 13, 2014

359. Wang Shutao, Oluyemi O. Olumolade, Vernice R Jackson-Lewis, Gesthimani Samiotaki, Serge Przedborski, Elisa E. **Konofagou**,Transcranial focused ultrasound-facilitated AAV-hGDNF delivery induced neuroprotection in a Parkinson's-disease mouse model,15th International Symposium on Therapeutic Ultrasound (Utrecht, Netherlands), April 15 to 18, 2015.

360. Wu Shih-Ying, Cherry C. Chen, Yao-Sheng Tung, Oluyemi O. Olumolade, Elisa E. **Konofagou**,The Effect of Microbubble Shell Physicochemical Properties on Focused Ultrasound-Induced Blood-Brain Barrier Opening,15th International Symposium on Therapeutic Ultrasound (Utrecht, Netherlands), April 15 to 18, 2015.

361. Karakatsani Marilena E., Gesthimani Samiotaki, Matthew E. Downs, Vincent P. Ferrera, Elisa E. **Konofagou**,Targeting Effects on the Volume and Gray-To-White-Matter Ratio of the Focused-Ultrasound Induced Blood-Brain Barrier Opening in

Non-Human Primates In Vivo, 15th International Symposium on Therapeutic Ultrasound (Utrecht, Netherlands), April 15 to 18, 2015

362. Downs Matthew E., Amanda M. Buch, Marilena E. Karakatsani, Elisa E. **Konofagou**, Vincent P. Ferrera, Non-Invasive Focused Ultrasound Mediated Blood-Brain Barrier Opening in Awake Non-Human Primates, 15th International Symposium on Therapeutic Ultrasound (Utrecht, Netherlands), April 15 to 18, 2015.

363. Chen Hong, Camilo J. Acosta, Carlos J. Sierra Sánchez, Marilena E. Karakatsani, Elisa E. **Konofagou**, Focused ultrasound-enhanced intranasal drug delivery, 15th International Symposium on Therapeutic Ultrasound (Utrecht, Netherlands), April 15 to 18, 2015.

364. Bunting E., Lambrakos L., Gambhir A., Garan H., **Konofagou E.**E. Electromechanical Wave Imaging Identifies Heart Failure and Treatment Response to Cardiac Resynchronization Therapy, IEEE International Symposium on Biomedical Imaging, Brooklyn NY, April 16-19, 2015.

365. Grondin J., Wan E.Y., Gambhir A., Garan H., **Konofagou E.**E. Intracardiac Myocardial Elastography for Assessment of Right and Left Atrial Radiofrequency Ablation Lesions in Humans, IEEE International Symposium on Biomedical Imaging, Brooklyn NY, April 16-19, 2015.

366. Kamimura Hermes A. S., Antonio A Carneiro, Shutao Wang, Hong Chen, Qi Wang, Christian Aurup, Kathleen G. Fan, Elisa E. **Konofagou**, Noninvasive Ultrasound Neurostimulation, XXXVIII Brazilian Physical Society National Meeting on Condensed Matter Physics (Foz do Igaçu, Brazil), May 24 to 28, 2015

367. Lambrakos L., Bunting E., Garan H., **Konofagou E.**E. Electromechanical Characterization of Left Ventricular Pacing Vectors in CRT, EHRA Europace - Cardiostim, Milan, Italy, June 21-24, 2015.

368. **Konofagou** EE, Ablation Monitoring using Harmonic Motion Imaging, 2015 American Association of Physicists in Medicine, Orange County, CA, July 12-17, 2015.

369. Sacha D. Nandlall, Monica P. Goldklang, Aubrey Kalashian, Nida A. Dangra, Jeanine M. d'Armiento, Elisa E. **Konofagou**, Determining the stability of murine abdominal aortic aneurysms with pulse wave imaging, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

370. Yang Han, Shutao Wang, Elisa E. **Konofagou**,Detection and treatment monitoring of ex vivo human breast tumors using harmonic motion imaging, IEEE International Ultrasonics Symposium (Chicago, IL, USA), September 3 to 6, 2014

371. Sun Tao, Shutao Wang, Camilo J. Acosta, Elisa E. **Konofagou**, Cavitation characterization in the safety assessment of FUS-enhanced blood-brain barrier opening, IEEE International Ultrasonics Symposium (Chicago, IL,USA), September 3 to 6, 2014.

372. Han Yang, Thomas Payen De La Garanderie, Shutao Wang, Elisa E. **Konofagou**, Real-time steering for inducing and monitoring HIFU ablation using Harmonic Motion Imaging, 14th International Tissue Elasticity Conference (Verona, Italy), September 21 to 24, 2015

373. Thomas Payen De La Garanderie, Carmine F. Palermo, Stephen A Sastra, Hong Chen, Han Yang, Kenneth P. Olive, Elisa E. **Konofagou** Harmonic Motion Imaging for elasticity mapping of abdominal organs in vivo, 14th International Tissue Elasticity Conference (Verona, Italy), September 21 to 24, 2015

374. Karakatsani Maria Eleni (Marilena), Gesthimani Samiotaki, Matthew Downs, Vincent Ferrera, Elisa **Konofagou**, Linearity of the Targeting Parameters and Gray-to-White-Matter Ratio Dependence on the Focused-Ultrasound Induced Blood-Brain Barrier Opening Volume across Non-Human Primates, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

375. Chen Hong, Camilo Acosta, Carlos Sierra Sánchez, Marilena Karakatsani, Elisa **Konofagou** Enhanced intranasal brain drug delivery by focused ultrasound-activated microbubbles, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

376. Samiotaki Gesthimani, Camilo Acosta, Maria Eleni Karakatsani, Shutao Wang, Elisa **Konofagou**, Dopaminergic neuron regeneration after Neurturin delivery through the FUS-induced BBB opening in a Parkinsonian model, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

377. Kamimura Hermes, Shutao Wang, Shih-Ying Wu, Marilena Karakatsani, Camilo Acosta, Antonio Carneiro, Elisa **Konofagou**, Improving targeting of ultrasound-mediated blood-brain barrier opening using chirp and random-based modulation, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

378. Wu Shih-Ying, Cherry Chen, Yao-Sheng Tung, Oluyemi Olumolade, Elisa **Konofagou** Effects of the Microbubble Shell Physicochemical Properties on Ultrasound-Mediated Drug Delivery to the Brain, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015

379. Wang Shutao, Amanda Buch , Camilo Acosta , Oluyemi Olumolade , Elisa **Konofagou**, Focused ultrasound facilitated adenoviral delivery for optogenetic stimulation, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

380. Grondin Julien L., Alexandre Costet, Ethan A. Bunting, Alok Gambhir, Elaine Y. Wan, Elisa E. **Konofagou**, Validation of Electromechanical Wave Imaging in canine left ventricles against electrography, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015

381. Bunting Ethan A., Julien L. Grondin, Clement Papadacci, Elisa E. **Konofagou**, SNRe increase of two-dimensional cardiac strain estimation using coherent compounding in silico and in vivo, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

382. Li Ronny X., Iason-Zacharias Apostolakis, Edward S. Connolly, Elisa E. **Konofagou**, Intra-plaque stiffness mapping in carotid stenosis patients in vivo using high-frame rate Pulse Wave Imaging, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015

383. Costet Alexandre, Ethan A. Bunting, Elaine Y. Wan, Elisa E. **Konofagou**, Electromechanical Wave Imaging of Atrial Tachycardia and Myocardial Infarct In Vivo: a Feasibility Study, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015

384. Grondin Julien L., Marc Waase, Vincent Sayseng, Elisa E. **Konofagou**, Detection of Coronary Artery Disease with Myocardial Elastography with validation against myocardial perfusion imaging and coronary angiography, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015

385. Matthew McGarry, Ronny X. Li, Iason-Zacharias Apostolakis, Elisa E. **Konofagou**, A 1D model-based inverse problem for recovery of spatially varying vessel stiffness for Pulse Wave Imaging, IEEE International Ultrasonics Symposium (Taipei, Taiwan), October 21 to 24, 2015.

386. Wu Shih-Ying, Julien L. Grondin, Wenlan Zheng, Marc Heidmann, Marilena E. Karakatsani, Carlos J. Sierra Sanchez, Vincent P. Ferrera, Elisa E. **Konofagou** Real-time, transcranial passive cavitation mapping for monitoring of

the focused ultrasound-induced blood-brain barrier opening in primates, 16th International Symposium on Therapeutic Ultrasound (Tel Aviv, Israel), March 14 to 16, 2016.

387. Han Yang, Shutao Wang, Elisa E. **Konofagou**, Real-time monitoring of high-intensity focused ultrasound treatment using Harmonic Motion Imaging for focused ultrasound,16th International Symposium on Therapeutic Ultrasound (Tel Aviv, Israel), March 14 to 16, 2016.

388. Aurup Christian, Hermes A. S. Kamimura, Shutao Wang, Hong Chen, Camilo J. Acosta, Antonio A Carneiro, Elisa E. **Konofagou**, Motor response elicitation and pupil dilation using megahertz-range focused ultrasound neuromodulation, 16th International Symposium on Therapeutic Ultrasound (Tel Aviv, Israel), March 14 to 16, 2016.

389. Payen De La Garanderie Thomas, Carmine F. Palermo, Stephen A Sastra, Hong Chen, Yang Han, Kenneth P. Olive, Elisa E. **Konofagou**, Harmonic Motion Imaging for Focused Ultrasound (HMIFU) for pancreatic tumor monitoring and treatment in a transgenic mouse model, 16th International Symposium on Therapeutic Ultrasound (Tel Aviv, Israel), March 14 to 16, 2016.

390. Karakatsani Marilena E., Gesthimani Samiotaki, Shutao Wang, Camilo J. Acosta, Eliza R. Feinberg, Elisa E. **Konofagou**, Enhanced neurorestoration through triple treatment with Focused-Ultrasound facilitated delivery of the neurotrophic factor Neurturin, 16th International Symposium on Therapeutic Ultrasound (Tel Aviv, Israel), March 14 to 16, 2016.

391. Costet A., Wan E.Y., Bunting E., Grondin J., Garan H., **Konofagou E.**E. Source Visualization of Focal Atrial Arrhythmia using Electromechanical Wave Imaging, 37th Heart Rhythm Society Annual Scientific Sessions, San Francisco, CA, May 4- 7, 2016.

392. Costet A., Wan E.Y., Bunting E., Grondin J., Garan H., **Konofagou E.**E. Electromechanical Wave Imaging of VT for the non-invasive detection and differentiation of endocardial from epicardial sources in a paced animal model, 37th Heart Rhythm Society Annual Scientific Sessions, San Francisco, CA, May 4-7, 2016.

393. Aurup Christian, Hermes A. S. Kamimura, Shutao Wang, Hong Chen, Camilo J. Acosta, Antonio A Carneiro, Elisa E. **Konofagou**, Ultrasound-mediated modulation of motor and ocular responses in anesthetized mice in vivo, 5th International Symposium on Focused Ultrasound (Bethesda, MD, USA), August 28 to September 1, 2016.

394. Downs Matthew E., Georgiana Yang, Qi Wang, Elisa E. **Konofagou**, Noninvasive peripheral nerve stimulation via focused ultrasound in vivo, 5th International Symposium on Focused Ultrasound (Bethesda, MD, USA), August 28 to September 1, 2016.

395. Han Yang, Shutao Wang, Elisa E. **Konofagou** Harmonic motion imaging for characterization and focused ultrasound ablation monitoring of post-surgical human breast tumors, 5th International Symposium on Focused Ultrasound (Bethesda, MD, USA), August 28 to September 1, 2016.

396. Wan E., Costet A., Bunting E., Grondin J., **Konofagou E.**, Garan H. Electomechanical wave imaging: a novel non-invasive tool for atrial arrhythmia mapping, Cardiostim 2016 EHRA EuroPace, Nice, France, June 8-11, 2016.

397. Bunting E., Papadacci C., Wan E.Y., Grondin J., **Konofagou E.**E. Intracardiac myocardial elastrography for lesion quantification in cardiac radiofrequency ablation, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016. (Nominated for Best Student Paper Award)

398. Costet A., Wan E.Y., Melki L., Bunting E., Grondin J., Garan H., **Konofagou E.**E. Electromechanical Wave Imaging of Focal Ventricular Tachycardia for non-

invasive detection and differentiation of endocardial from epicardial sources in a paced large animal model, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

399. Grondin J., **Konofagou E.**E. 2D and 3D imaging of axial and lateral cardiac strain with coherent compounding of diverging waves in silico, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

400. Papadacci C., Bunting E., Wan E.Y., Nauleau P., **Konofagou E.**E. 3D strain elastography in vivo at high volume rates, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

401. Sayseng V., Grondin J., Papadacci C., **Konofagou E.**E. Optimization of two-dimensional cardiac strain estimation with parallel beamforming and coherent compounding in silico and in vivo, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

402. Han Yang, Shutao Wang, Thomas Payen De La Garanderie, Elisa E. **Konofagou**, Real-time ablation monitoring of high-intensity focused ultrasound treatment using harmonic motion imaging guided Focused Ultrasound (HMIgFUS)IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

403. Nauleau Pierre, Clement Papadacci, Iason-Zacharias Apostolakis, Matthew McGarry, Elisa E. **Konofagou**,Feasibility of 4D Pulse Wave Imaging of human carotid in vivo, IEEE International Ultrasonics Symposium, Tours, France, September 18-21, 2016.

404. Sayseng V., Grondin J., Papadacci C., **Konofagou E.**E. Optimization Of Transmit Parameters For Two-Dimensional Cardiac Strain Estimation With Coherent Compounding In Silico, In Vitro, And In Vivo, Int. Tissue Elas. Conf. Vermont, October 17-20, 2016. [Student Award]

405. Melki L and **Konofagou E.**E. Reproducibility And Angle Independence Of Electromechanical Wave Imaging For The Measurement Of Electromechanical Activation During Sinus Rhythm In Healthy Humans, Int. Tissue Elas. Conf, Fairlee, Vermont, October 17-20, 2016. [Student Award]

406. McGarry Matthew, Iason-Zacharias Apostolakis, Pierre Nauleau, Elisa E. **Konofagou** Spatially varying compliance estimated through the pulse wave inverse problem: repeatability in healthy carotid arteries, 15th International Tissue Elasticity Conference (Lake Morey, VT, USA), October 16 to 19, 2016.

407. Nauleau Pierre, Iason-Zacharias Apostolakis, Matthew McGarry, Elisa E. **Konofagou**, Estimation of Pulse Wave Velocity in arteries: a new method based on cross-correlation, 15th International Tissue Elasticity Conference (Lake Morey, VT, USA), October 16 to 19, 2016.

408. Thomas Payen De La Garanderie, Kenneth P. Olive, Elisa E. **Konofagou**, Pancreatic cancer detection in human resected specimen using Harmonic Motion Imaging (HMI), 15th International Tissue Elasticity Conference (Lake Morey, VT, USA), October 16 to 19, 2016.

409. Apostolakis Iason-Zacharias, Nauleau Pierre,, Matthew McGarry, Elisa E. **Konofagou**, Compliance estimation using Pulse Wave Imaging, 15th International Tissue Elasticity Conference (Lake Morey, VT, USA), October 16 to 19, 2016. [Nominated for a student award]

410. Downs Matthew E., Stephen A Lee, Georgiana Yang, Qi Wang, Elisa E. **Konofagou**, Peripheral nerve stimulation in mice via non-invasive focused ultrasound, Neuroscience (San Diego, California, USA), November 12 to 16, 2016.

411. Karakatsani Marilena E., Gesthimani Samiotaki, Shutao Wang, Camilo J. Acosta, Eliza R. Feinberg, Elisa E. **Konofagou**, Enhanced neurorestoration through triple treatment with Focused-Ultrasound facilitated delivery of the neurotrophic factor Neurturin, Neuroscience (San Diego, California, USA), November 12 to 16, 2016.

412. Karakatsani Marilena E., Gesthimani Samiotaki, Shutao Wang, Camilo J.

Acosta, Eliza R. Feinberg, Elisa E. **Konofagou**, Enhanced neurorestoration through triple treatment with Focused-Ultrasound facilitated delivery of the neurotrophic factor Neurturin, Blood-Brain Barrier Conference, Cold Spring Harbor, NY, Dec. 7-10, 2016.

413. Kugelman, T, Acosta, C, Karakatsani M, Wang S, Agalliu, D, **Konofagou** EE. Analysis of focused ultrasound with microbubbles induced blood brain barrier disruption on tight junction morphology Blood-Brain Barrier Conference, Cold Spring Harbor, NY, Dec. 7-10, 2016.

414. Konofagou EE, Opening the blood-brain barrier with ultrasound and microbubbles, Contrast Symposium, Rotterdam, Netherlands, Jan. 20-21, 2017.

415. Bunting Ethan A., Wan E., **Konofagou E.**E., Lesion Gap Visualization and Assessment of Lesion Transmurality using Intracardiac Myocardial Elastography, 38th Heart Rhythm Society Annual Scientific Sessions (Chicago IL), May 10 to 14, 2017.

416. Han Yang, Wang Shutao, Payen De La Garanderie Thomas, Konofagou Elisa E., Tumor characterization of human breast mastectomy specimens using Harmonic Motion Imaging (HMI), 17th International Symposium for Therapeutic Ultrasound (Nanjing, China), May 31 to June 2, 2017.

417. Karakatsani Marilena E., Tara Kugelman, Shutao Wang, Elisa E. Konofagou, Unilateral focused ultrasound-induced blood-brain barrier opening reduces phosphorylated tau in an Alzheimers mouse model, 2017 Alzheimer's Association International Conference (Toronto, Canada), July 22 to 26, 2017

418. Burgess Mark, Iason-Zacharias Apostolakis, Elisa E. Konofagou, Passive microbubble imaging with short pulses of focused ultrasound and absolute time-of- flight information, Joint Meeting of the Acoustical Society of America and the European Acoustics Association (Boston, MA, USA), June 25 to 29, 2017

419. Karakatsani Marilena E., Tara Kugelman, Shutao Wang, Elisa E. Konofagou, Unilateral focused ultrasound-induced blood-brain barrier opening reduces phosphorylated tau in an Alzheimers mouse model, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

420. Burgess Mark, Iason-Zacharias Apostolakis, Elisa E. Konofagou, Synchronized passive microbubble imaging for guidance and monitoring of focused ultrasound therapies, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

421. Christian Aurup, Elisa E. Konofagou, Physiological response latencies to FUS-mediated neuromodulation are location dependent, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

422. Nauleau Pierre, Lea Melki, Elisa E. Konofagou, Multi-2D reconstruction of electromechanical activation maps of a beating heart, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

423. Payen De La Garanderie Thomas, Niloufar Saharkhiz, Carmine F. Palermo, Stephen A Sastra, Kenneth P. Olive, Elisa E. Konofagou, Mechanical Effects of Cisplatin on Pancreatic Ductal Adenocarcinoma in a Transgenic Mouse Model Using Harmonic Motion Imaging, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

424. Lee Stephen A., Matthew E. Downs, Yang Han, Niloufar Saharkhiz, Diana Kim, Elisa E. Konofagou, Imaging of Tissue Displacement During Focused Ultrasound Peripheral Neuromodulation, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

425. Han Yang, Shutao Wang, Thomas Payen De La Garanderie, Elisa E. Konofagou, Human Breast Tumor Characterization on Post-Surgical Mastectomy Specimens Using Harmonic Motion Imaging (HMI), IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017

426. Wu Shih-Ying, Elisa E. Konofagou, Focused Ultrasound-Facilitated Brain Drug

Delivery Using Optimized Nanodroplets, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

427. Sayseng Vincent, Julien L. Grondin, Elisa E. Konofagou, Comparison Between Fully and Partially Focused Transmit Strategies in Transthoracic Cardiac Strain Estimation, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017.

428. Kugelman Tara, Marilena E. Karakatsani, Shutao Wang, Camilo J. Acosta, Elisa E. Konofagou, Analysis of Focused Ultrasound with Microbubbles Induced BBB Disruption on Tight Junction Morphology, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017

429. Melki Lea, Pierre Nauleau, Ethan A. Bunting, Elisa E. Konofagou, 3D rendering of Electromechanical Wave Imaging for the characterization and optimization of biventricular pacing conditions in Heart Failure patients undergoing Cardiac Resynchronization Therapy, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017

430. Ji Robin, Elisa E. Konofagou, Characterization of Stable Cavitation Effects for Focused Ultrasound Enhanced Intranasal Drug Delivery, IEEE International Ultrasonics Symposium (Washington, DC, USA), September 6 to 9, 2017

431. Grondin Julien L., Elisa E. Konofagou, 3-D Electromechanical activation mapping of the heart in canines and humans in vivo, 2017 International Congress on Ultrasonics (Honolulu, HI, USA), December 18 to 20, 2017

432. Pouliopoulos Antonios, Mark Burgess, Elisa E. Konofagou, Pulse inversion therapy for improved monitoring of blood-brain barrier opening, 2017 Acoustical Society of America, 174th meeting (New Orleans, LA, USA), December 4 to 8, 2017.

433. Lee Stephen A., Matthew E. Downs, Yang Han, Niloufar Saharkhiz, Diana Kim, Elisa E. Konofagou, Imaging of tissue displacement induced during focused ultrasound neuromodulation in vivo, 2017 Acoustical Society of America, 174th meeting (New Orleans, LA, USA), December 4 to 8, 2017.

434. Zhang Hairong, Carlos J. Sierra Sanchez, Nancy Kwon, Elisa E. Konofagou, Focused-ultrasound mediated anti-alpha-synuclein antibody delivery for the treatment of Parkinson's disease, 174th meeting 2017 Acoustical Society of America, (New Orleans, LA, USA), December 4 to 8, 2017.

435. Aurup Christian, Elisa E. Konofagou, Electromyography characteristics in response to focused ultrasound-mediated neuromodulation in mouse brains in vivo are spatially specific, 2017 Acoustical Society of America, 174th meeting (New Orleans, LA, USA), December 4 to 8, 2017

436. Lee Stephen A., Matthew E. Downs, Diana S. Kim, Min G. Kim, Elisa E. Konofagou, Noninvasive Peripheral Neuromodulation Using Focused Ultrasound In Vivo, 2018 North American Neuromodulation Society Annual Meeting (Las Vegas, NV, USA), January 11 to 14, 2018.

437. Florez-Paz Danny M., Chi-Kun Tong, Benjamin U. Hoffman, Stephen A. Lee, Elisa E. Konofagou, Ellen A. Lumpkin, Focused ultrasound evoked responses in dorsal root ganglion neurons (DRG) and HEK293 cells, Biophysical Society 62nd Annual Meeting (San Francisco, CA, USA), February 17 to 21, 2018

438. Kemper Paul, Iason Apostolakis, Matthew McGarry, Elisa E. Konofagou , Pulse Wave Imaging to map the progression of Ang-II induced hypertension in mice, 2018 American Institute of Ultrasound in Medicine Annual Convention (New York, New York, USA), March 24 to 28, 2018

439. Han Yang, Niloufar Saharkhiz, Elisa E. Konofagou, High Intensity Focused Ultrasound (HIFU)-Treated Cartilage Explants Maintain Viability and Enhanced Tissue Integration with Extended Culture Time, Orthapaedic Research Society (New Orleans, LA), March 10 to 13, 2018

440. Christopher S. Grubb, Lea Melki (co-first), Leonardo Liberman, Eric Silver, Carmine A. Sorbera, Daniel Y. Wang, Vivek Iyer, Marc Waase, Rina R. Shah, Hasan

Garan, Elisa E. Konofagou (co-senior), Elaine Wan, Novel 3D Noninvasive Ultrasound Imaging Localizes Accessory Pathways in Adults and Adolescents with Wolff-Parkinson-White Syndrome, American College of Cardiology 67th Annual Scientific Session (Orlando, FL, USA), March 10 to 12, 2018

441. Grubb Christopher S., Lea Melki (co-first), Daniel Y. Wang, James Peacock, Jose M. Dizon, Hasan Garan, Elisa E. Konofagou (co-senior), Elaine Wan, Cardiac Resynchronization Therapy in 3D Using Electromechanical Wave Imaging: A Novel Non Invasive Ultrasound-based Imaging Technique, American College of Cardiology 67th Annual Scientific Session (Orlando, FL, USA), March 10 to 12, 2018

442. Karakatsani Maria Eleni, Tara Kugelman, Karen Duff, Elisa E. Konofagou, Unilateral focused ultrasound-induced blood-brain barrier opening alters the pathological profile of the 3xTg Alzheimer's Mouse Model, 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA), May 14 to 17, 2018

443. Burgess Mark T., Maria E. Karakatsani, Iason Z. Apostolakis, Elisa E. Konofagou, Spatiotemporal Clutter Filtering Increases the Detectability of Acoustic Cavitation During Power Cavitation Imaging in Non-Human Primates, 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA), May 14 to 17, 2018

444. Ji Robin, Mark Burgess, Morgan Smith, Maria Karakatsani, Elisa E. Konofagou, Real-time cavitation-based monitoring to control the degree of inflammation after acoustic cavitation-mediated blood-brain barrier opening 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA), May 14 to 17, 2018

445. Pouliopoulos Antonios N., Nancy S. Kwon, Abid Hussaini, Elisa E. Konofagou, Focused-Ultrasound-Mediated Delivery of Virus-Encoded Red-Shifted ChannerIrhodopsin For Fully Non-Invasive and Remote Neuronal Activation In Vivo, 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA), May 14 to 17, 2018.

446. Kim Min G., Stephen A. Lee, Elisa E. Konofagou, Controlling motor neuron activity in mouse peripheral nerve using focused ultrasound in vivo, 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA), May 14 to 17, 2018

447. Melki Lea, Christopher S. Grubb (co-first), Elaine Wan, Hasan Garan, Eric Silver, Leonardo Liberman (co-senior), Elisa E. Konofagou, Localization Of Accessory Pathways In Pediatric Patients With Wolff-Parkinson-White Syndrome Using 3D Rendered Electromechanical Wave Imaging, 39th Heart Rhythm Society Annual Scientific Sessions (Boston, MA, USA), May 9 to 12, 2018

448. Grubb Christopher S., Lea Melki (co-first), Daniel Y. Wang, James Peacock, Jose M. Dizon, Vivek Iyer, Carmine A. Sorbera, Angelo B. Biviano, Hasan Garan, Elisa E. Konofagou (co-senior), Elaine Wan, Electromechanical Wave Imaging: An Echocardiography Based Technique For 3D Cardiac Resynchronization Therapy Quantification, 39th Heart Rhythm Society Annual Scientific Sessions (Boston, MA, USA), May 9 to 12, 2018

449. Grubb Christopher S., Lea Melki (co-first), Daniel Y. Wang, James Peacock, Jose M. Dizon, Vivek Iyer, Carmine A. Sorbera, Angelo B. Biviano, Marc Waase, Rina R. Shah, Hasan Garan, Elisa E. Konofagou (co-senior), Elaine Wan, 3D Rendered Electromechanical Wave Imaging: A Novel Technique For Localization Of Arrhythmias Prior to Catheter Ablation, 39th Heart Rhythm Society Annual Scientific Sessions (Boston, MA, USA), May 9 to 12, 2018

450. Kugelman Tara, Maria E. Karakatsani, Claire S. Choi, Shutao Wang, Camila Acosta, Dritan Agalliu, Elisa E. Konofagou, Assessment of Focused Ultrasound with Microbubbles Induced BBB Disruption on Tight Junction Morphology, 18th International Symposium for Therapeutic Ultrasound (Nashville, Tennessee, USA),

May 14 to 17, 2018

451. Apostolakis Iason, Pierre Nauleau, Paul Kemper, Edward S. Connolly, Elisa E. Konofagou, Pulse wave velocity (PWV) and compliance estimation and mapping using pulse wave imaging (PWI) in healthy, stenotic and post-endarterectomy carotid arteries in vivo, 8th World Congress of Biomechanics (Dublin, Ireland), July 8 to 12, 2018

452. Kemper Paul, Matthew McGarry, Iason Apostolakis, Elisa E. Konofagou, Pulse Wave Imaging for monitoring of hypertension induced stiffening in an Ang-II mice model, 8th World Congress of Biomechanics (Dublin, Ireland), July 8 to 12, 2018.

453. Julien L. Grondin, Elisa E. Konofagou, Ventricular tachycardia re-entry mapping with 3D electromechanical wave imaging, IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

454. Antonios Pouliopoulos, Mark Burgess, Elisa E. Konofagou, Passive cavitation mapping during blood-brain barrier opening is facilitated through treatment with ultrasonic pulses of inverse polarity ,IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

455. Vincent Sayseng, Rachel Weber, Elisa E. Konofagou, Monitoring Canine Myocardial Infarction Formation and Healing with Transthoracic Cardiac Strain Imaging, IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

456. Min Gon Kim, Stephen A. Lee, Hermes A. S. Kamimura, Elisa E. Konofagou, Inhibitory effects of motor neuron activity in mouse peripheral nerve system using ultrasound-guided focused ultrasound in vivo, IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

457. Alireza Nabavizadeh rafsanjani, Thomas Payen De La Garanderie, Niloufar Saharkhiz, Kenneth P. Olive, Elisa E. Konofagou, Feasibility of Young's modulus mapping in Pancreatic Ductal Adenocarcinoma (PDA) tumors,IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

458. Niloufar Saharkhiz, Yang Han, Alireza Nabavizadeh rafsanjani, Elisa E. Konofagou, A Harmonic Motion Imaging (HMI) clinical system for detection and characterization of in-vivo human breast tumors - Initial feasibility, IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

459. Niloufar Saharkhiz, Yang Han, Alireza Nabavizadeh rafsanjani, Elisa E. Konofagou, A feasibility study of in-vivo human breast tumor detection and differentiation using Harmonic Motion Imaging (HMI), 6th International Symposium on Focused Ultrasound (Reston, VA, USA), October 21 to 25, 2018

460. Lea Melki, Pierre Nauleau, Rachel Weber, Elisa E. Konofagou, 3D direct visualization and non-invasive localization of atrial and ventricular arrhythmias using Electromechanical Wave Imaging in patients, IEEE International Ultrasonics Symposium (Kobe, Japan), October 22 to 25, 2018

461. Vincent Sayseng, Hasan Garan, Elaine Y. Wan, Elisa E. Konofagou,Monitoring Atrial Flutter Ablation with Intracardiac Strain Imaging in the Clinic, 16th International Tissue Elasticity Conference (Avignon, France), September 9 to 12, 2018

462. Alireza Nabavizadeh rafsanjani, Thomas Payen De La Garanderie, Kenneth P. Olive, Elisa E. Konofagou,Harmonic Motion Elastography for the differentiation between pancreatic ductal adenocarcinoma and normal pancreas in post-surgical specimens,16th International Tissue Elasticity Conference (Avignon, France), September 9 to 12, 2018

463. Lea Melki, Christopher S. Grubb, Rachel Weber, Andrew B. Tieu, Jose M. Dizon, John P. Morrow, Deepak Saluja, Salma Baksh, Irfan Khurram, Marc Waase, Hasan Garan, Elaine Wan, Elisa E. Konofagou, Cardiac Resynchronization Therapy quantification and direct assessment of patient response with 3D-rendered Electromechanical Wave Imaging, 16th International Tissue Elasticity Conference (Avignon, France), September 9 to 12, 2018

464. Lea Melki, Christopher S. Grubb, Rachel Weber, Andrew B. Tieu, Jose M. Dizon, John P. Morrow, Deepak Saluja, Salma Baksh, Irfan Khurram, Marc Waase, Hasan Garan, Elaine Wan, Elisa E. Konofagou, Characterizing Macroreentrant Atrial Flutter With Electromechanical Wave Imaging, 40th Heart Rhythm Society Annual Scientific Sessions (San Francisco, CA), May 8 to 11, 2019.

465. Konofagou, Elisa, Beyond Conventional Clinical Ultrasound: Advancing Elasticity Imaging and Therapeutics, International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

466. Pouliopoulos, Antonios , Kwon, Nancy , Jensen, Greg , Meaney, Anna , Burgess, Mark , Munoz, Fabian , Ji, Robin , Ferrera, Vincent , Konofagou, Elisa , Inflammatory Response and Cognitive Function Following Focused Ultrasound-Mediated Blood-Brain Barrier Opening in Non-Human Primates, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

467. El-Harake, Jad , Sayseng, Vincent (Columbia University in the City of New York), Grondin, Julien , Weber, Rachel , Flaherty, Kathleen R , Bokhari, Sabahat , Konofagou, Elisa , Stress Myocardial Elastography for Improved Ischemia Detection, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

468. Karakatsani, Maria Eleni , Murillo, Maria , Ji, Robin , Kugelman, Tara , Konofagou, Elisa , Bilateral Focused Ultrasound-Induced Blood-Brain Barrier Opening Improves Spatial Memory in the 3xTg Alzheimer's Mouse Model, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

469. Lee, Stephen , Kamimura, Hermes Arytto Salles, Konofagou, Elisa , Simultaneous Nerve Displacement Mapping for Human Peripheral Neuromodulation, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

470. Kamimura, Hermes , Lee, Stephen , Niimi, Yusuke , Aurup, Christian , Gon Kim, Min , Konofagou, Elisa , Focused Ultrasound Stimulation of Median Nerve Modulates Somatosensory Evoked Responses, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

471. Saharkhiz, Niloufar , Kamimura, Hermes , Weber, Rachel , Gatti, Vittorio , Taback, Bret (Department of Surgery, New York-Presbyterian Hospital), Konofagou, Elisa , Ex Vivo and in Vivo Human Breast Tumor Comparison Study Using Harmonic Motion Imaging, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

472. Grondin, Julien , Konofagou, Elisa , 3D Myocardial Elastography with Coherent Compounding of Diverging Waves, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

473. Melki, Lea , Konofagou, Elisa , Automated Isochrone Generation Approaches for Localization of Accessory Pathways in Wolff-Parkinson-White Patients with Electromechanical Wave Imaging Using Machine Learning, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

474. Nabavizadeh, Alireza (Columbia University, USA), Payen, Thomas (Columbia University, USA), C Iuga, Alina (Department of Pathology & Cell Biology, Columbia University Medi), Sagalovskiy, Irina (Herbert Irving Comprehensive Cancer Center, Columbia University), Saharkhiz, Niloufar , P. Olive, Kenneth, Konofagou, Elisa , Perilesional Region Detection in Pancreatic Adenocarcinoa (PDA) Tumors Using Harmonic Motion Elastography (HME), IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

475. Nauleau, Pierre , Karageorgos, Grigorios , Weber, Rachel , Konofagou, Elisa, Feasibility of Longitudinal Monitoring of Atherosclerosis with Pulse Wave Imaging in a Swine Model, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

476. Li, Xiaoyue , Saharkhiz, Niloufar , Singh, Saurabh (Albert Einstein College of Medicine), Basu, Indranil (Albert Einstein College of Medicine at Montefiore),

Guha, Chandan (Albert Einstein Cancer Center), Konofagou, Elisa , Mechanical Properties of the Metastatic Liver in a Breast Cancer Mouse Model Using Harmonic Motion Imaging, IEEE International Ultrasonics Symposium (Glasgow, Scotland), October 6 to 9, 2019

477. Md Murad Hossain, Niloufar Saharkhiz, Elisa Konofagou , In Vivo Demonstration of Single Transducer Harmonic Motion Imaging (ST-HMI) in a Breast Cancer Mouse Model and Breast Cancer Patients, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

478. Nirvedh Meshram, Julien Grondin, Grigorios Karageorgos, Rachel Weber, Elisa Konofagou, 4D Pulse Wave Imaging with Sub Aperture Compounding in the Carotid Artery in simulations, Phantoms and Human Subjects, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

479. Paul Kemper, Pierre Nauleau, Grigorios Karageorgos, Rachel Weber, Elisa Konofagou ,, Monitoring Progression of Atherosclerotic Plaque Initiation and Development in WMS-FH Pigs, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

480. Niloufar Saharkhiz, Hermes A. S. Kamimura, Md Murad Hossain, Elisa E. Konofagou, Frequency Dependence of Inclusion Characterization in Harmonic Motion Imaging, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

481. Melina Tourni, Lea Melki, Rachel Weber, Elisa Konofagou, Electromechanical Cycle Length Mapping for Atrial Arrhythmia Characterization and Cardioversion Success Assessment, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

482. Jad El Harake, Changhee Lee, Paul Kemper Vincent Sayseng, Julien Grondin, Elisa Konofagou, Myocardial Elastography Is Improved with Minimum Variance Beamforming in silico and in Vivo ,IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

483. Sergio Jiménez-Gambín, Antonios N. Pouliopoulos{, Noé Jiménez, José M. Benlloch, Elisa E. Konofagou, Francisco Camarena, First in Vivo Demonstration of Bilateral blood-Brain Barrier Opening Using Acoustic Holograms in Mice IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

484. Rebecca Noel, Maria Eleni Karakatsani, Maria Murillo, Alina Kline-Schoder, Robin Ji, Alec Batts, Antonios Pouliopoulos, Elisa Konofagou,, Targeted Blood Brain Barrier Opening by Focused Ultrasound with Polydispersed Microbubbles Improves Spatial Memory in Wild Type Mice at Long and Short-Term Time Points IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

485. Antonios Pouliopoulos, Daniella Jimenez, Alexander Frank, Alexander Robertson, Lin Zhang, Alina Kline Schoder, Vividha Bhaskar, Mitra Harpale, Elizabeth Caso, Elisa Konofagou , Temporal Stability of Therapeutic microbubbles, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

486. Robin Ji, Mark Burgess, Elisa Konofagou , Combined Transcranial Blood-Brain Barrier Opening, Targeting and Monitoring in Both Small and Large Animals in Vivo Using an Imaging Array, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

487. Alec Batts, Elisa Konofagou, Accuracy Assessment of Transcranial Power Cavitation Imaging for BBB Opening, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

488. Stephen Lee, Hermes Kamimura, Elisa Konofagou , FUS-Induced Median Nerve Stimulation Alters Thermal Pain Sensation in Humans, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

489. Lea Melki, Daniel Wang, Christopher Grubb, Rachel Weber, Angelo Biviano, Elaine Wan, Hasan Garan, Elisa Konofagou , 3D-Rendered Electromechanical Wave

Imaging to Quantify and Inform Cardiac Resynchronization Therapy Response Within 24 Hours of Device Implantation, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

490. Karageorgos Grigorios M., Nirvedh Meshram, Pierre Nauleau, Changhee Lee, Rachel Weber, Salah Mahmoudi, Paul Kemper, Konofagou EE, Adaptive wall shear stress imaging coupled with Pulse Wave Imaging: A feasibility study in phantoms, FSI simulations and atherosclerotic swine in vivo. IEEE International Ultrasonics Symposium, September 6-11, 2020. [Virtual]

491. Kemper Paul, Pierre Nauleau, Grigorios Karageorgos, Konofagou EE, Monitoring Progression of Atherosclerotic Plaque Initiation and Development in WMS-FH Pigs. IEEE International Ultrasonics Symposium, September 6-11, 2020. [Virtual]

492. Meshram, Nirvedh H., Julien Grondin, Grigorios Marios Karageorgos, Rachel Weber, and Konofagou EE. "4D Pulse Wave Imaging with sub aperture compounding in the carotid artery in simulations, phantoms and human subjects." In 2020 IEEE International Ultrasonics Symposium (IUS) IEEE, 2020. [Virtual]

493. Christian Aurup, Antonios Pouliopoulos, Stephen Lee, Elisa Konofagou, Non-Invasive optogenetic Activation with Functional Ultrasound, IEEE International Ultrasonics Symposium (Las Vegas, US), September 6 to 9, 2020.

494. Pouliopoulos Antonios N., Daniella A. JimenezAlexander, Frank Alexander Robertson, Lin Zhang, Alina R. Kline-Schoder, Vividha Bhaskar, Mitra Harpale, Elizabeth Caso, Nicholas Papapanou, Rachel Anderson, Rachel Li, Elisa E. Konofagou, Stability of micron-sized cavitation nuclei within a therapeutic ultrasound field, 17th International Conference on Nanosciences & Nanotechnologies (NN20). July 2020.

495. Konofagou EE, Brain Modulation and Drug Delivery with FUS, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020. [Invited]

496. Konofagou EE, Neurorestoration throught the Blood-Brain Barrier in Parkinson's disease, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020. [Invited].

497. Karakatsani Maria Eleni, Pouliopoulos A, Liu M, Jambawalikar SR, Konofagou EE. Contrast-free detection of focused ultrasound-induced blood-brain barrier opening using diffusion tensor imaging, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020

498. Antonis Pouliopoulos, Ji R, Wu SY, Burgess MT, Karakatsani ME, Kamimura HAS, Konofagou EE. A neuronavigation-guided clinical ultrasound system for blood-brain barrier opening at the bedside with real-time cavitation monitoring – pre-clinical evaluation in non-human primates with behavioral amelioration and immunogenicity, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020.

499. Ji R, Karakatsani ME, Murillo M, Konofagou EE. Acoustic cavitation dependent immune response to FUS-induced blood-brain barrier opening, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020.

500. Alina Kline-Schoder, Rebecca Noel, Sana Chintamen, Elisa Konofagou, Phagocytic Response to Focused Ultrasound-Mediated Blood-Brain Barrier Opening, 7th International Symposium on Focused Ultrasound (virtual), Nov. 2020.

501. Md Murad Hossain, Niloufar Saharkhiz, Elisa Konofagou , In Vivo Demonstration of Single Transducer Harmonic Motion Imaging (ST-HMI) in a Breast Cancer Mouse Model and Breast Cancer Patients, Acoustical Society of America Meeting (virtual), December 2020.

502. Yousefian Omid, Grondin Julien, Elisa Konofagou, Using singular value distribution of backscattered ultrasound waves for tracking the pulmonary edema caused by COVID-19 in lung: A phantom-based study, Acoustical Society of America Meeting (virtual), December 2020.

503. Meshram Nirvedh, Karageorgos Grigorios, Lee Changhee, Grondin Julien, Rachel

Weber and and Konofagou EE, 4-D Pulse Wave Imaging validated on stenotic PVA phantoms and carotid arteries of atherosclerotic human subjects, 2021 IEEE International Ultrasonics Symposium (IUS), IEEE, 2021. [Virtual]

504. Kemper Paul, Karageorgos Grigorios, Meshram Nirvedh, Weber R and Konofagou EE, Multi-parametric monitoring of atherosclerotic plaque development in WMS-FH-swine, 2021 IEEE International Ultrasonics Symposium (IUS), IEEE, 2021. [Virtual]

505. Karageorgos Grigorios M., Changhee Lee, Rachel Weber, Marshall R, Miller E and Konofagou EE, Correlation of symptomatology of stroke with simultaneous measurements of pulse wave velocity, vector flow field and wall shear stress in carotid artery disease patients in vivo, 2021 IEEE International Ultrasonics Symposium (IUS), IEEE, 2021. [Virtual]

506. El Harake J., Sayseng V., Grondin J., Weber R., Lee C., Einstein A., Konofagou E.E., A Validation Study of Myocardial Elastography against Coronary Computed Tomography Angiography in Patients with Coronary Artery Disease, American Heart Association Scientific Sessions, Boston, November 13-15 2021.

507. Grondin J., Weber R., Konofagou E.E., Full 3D Single Heartbeat Electromechanical Wave Imaging Of The Heart In Vivo With Coherent Compounding Of Diverging Waves, American Heart Association Scientific Sessions, Boston, November 13-15 2021.

508. El Harake J., Sayseng V., Konofagou E.E., Transthoracic cardiac strain imaging with electromagnetic Six Degrees-of-Freedom tracking for 3D coregistration, IEEE International Ultrasonics Symposium, Virtual Conference, September 12-16 2021.

509. Grondin J., Sayseng V., Lee C., Weber R., Bokhari S., Konofagou E.E., Myocardial Elastography with ECG-Gating and Coherent Compounding for Early Diagnosis of Coronary Artery Disease, IEEE International Ultrasonics Symposium, Virtual Conference, September 12-16 2021.

510. Tourni M., Melki L., Weber R., Konofagou E.E., Automated Electromechanical Wave Imaging at Reduced Frame Rates during Sinus Rhythm using Machine Learning, IEEE International Ultrasonics Symposium, Virtual Conference, September 12-16 2021.

511. Tourni M., Melki L., Weber R., Konofagou E.E., Electromechanical Cycle Length Mapping: A Novel Technique For 3D Atrial Arrhythmia Characterization And Cardioversion Success Assessment, Heart Rhythm, Boston, July 28-31, 2021.

512. Alina Kline-Schoder, Sana Chintamen, Rebecca Noel, Vilas Menon, Steve Kernie, Elisa Konofagou, Focused ultrasound blood-brain barrier opening promotes microglia proliferation, CSHL 2021. January 2021

513. A.N. Pouliopoulos, R. Ji, Maria M. Murillo, Rebecca L. Noel, Rachel Weber, Lawrence S. Honig, Elisa E. Konofagou, Neuronavigation-guided focused ultrasound for non-invasive blood-brain barrier opening in the prefrontal cortex of Alzheimer's disease patients with real-time cavitation monitoring, 20th Annual International Symposium for Therapeutic Ultrasound (ISTU), June 6-9, 2021

514. Alec Batts, Robin Ji, Alina Kline-Schoder, Rebecca Noel, Elisa E Konofagou, Transcranial Theranostic Ultrasound Pre-Planning and Blood-Brain Barrier Opening Using a Phased Array In Vitro and In Vivo, 20th Annual International Symposium for Therapeutic Ultrasound (ISTU), June 6-9, 2021

515. Noel Rebecca, Robin Ji, Alec J. Batts, Alina Kline-Schoder, Elisa Konofagou, IUS 2021. September 2021, Natural aging and Alzheimer's disease pathology increase blood-brain barrier opening volume and prolong BBB closing timeline without affecting closing rate, IEEE International Ultrasonics Symposium, September 12-16, 2021.

516. Alina Kline-Schoder, Sana Chintamen, Rebecca Noel, Vilas Menon, Steve Kernie and Elisa Konofagou, Focused-ultrasound blood-brain barrier opening induces microglia proliferation, IEEE International Ultrasonics Symposium, September 12-

16, 2021.

517. S. Bae, K. Liu, A. Pouliopoulos, E. Konofagou, Coherence-Factor-Based Passive Acoustic Mapping for Real-Time Transcranial Cavitation Monitoring with Improved Axial Resolution, IEEE International Ultrasonics Symposium, September 12-16, 2021.

518. Alec J. Batts, Robin Ji, Rebecca L. Noel, Elisa E. Konofagou, The Effect of Pulse Length on Opening Volume and Reversibility of Theranostic Ultrasound-Mediated Blood-Brain Barrier Opening in Vivo, IEEE International Ultrasonics Symposium, September 12-16, 2021.

519. Antonios N. Pouliopoulos, Maria M. Murillo, Rebecca L. Noel, Alec J. Batts, Robin Ji, Elisa E. Konofagou, Long-term fear modulation following non-invasive blood-brain barrier opening and optogenetic stimulation in mice, IEEE International Ultrasonics Symposium, September 12-16, 2021.

520. Pouliopoulos, Antonios & Yousefian, Omid & Bae, Sua & Kamimura, Hermes & Ji, Robin & Murillo, Maria & Weber, Rachel & Batts, Alec & Konofagou, Elisa. (2021). Considerations for neuronavigation-guided blood–brain barrier opening in humans. The Journal of the Acoustical Society of America. 149. A18-A18. 10.1121/10.0004389.

521. S. Bae, O. Yousefian, R. Ji, A. Pouliopoulos, K. Liu, S. Zacharoulis, C. Wu, & E. Konofagou, A pilot study for real-time transcranial cavitation monitoring in a pediatric tumor patient for blood-brain barrier opening, 21st Annual International Symposium for Therapeutic Ultrasound (ISTU), Toronto, CA, June 7-10, 2022

522. A. Batts, R. Ji, R. Noel, A. Kline-Schoder, N. Kwon, & E. Konofagou, Theranostic ultrasound-mediated blood-brain barrier opening and viral delivery with a novel pulse sequence, 21st Annual International Symposium for Therapeutic Ultrasound (ISTU), Toronto, CA, June 7-10, 2022

523. S. Jimenez-Gambin, A. Pouliopoulos, N. Jimenez, J. Benlloch, E. Konofagou, & F. Camarena, Acoustic holograms for bilateral blood-brain barrier opening in mice, 21st Annual International Symposium for Therapeutic Ultrasound (ISTU), Toronto, CA, June 7-10, 2022

524. O. Yousefian, S. Bae, A. Pouliopoulos, R. Ji, H. Kamimura & E. Konofagou, Pressure attenuation and focal shift estimation for therapeutic ultrasound applications at low frequencies, 21st Annual International Symposium for Therapeutic Ultrasound (ISTU), Toronto, CA, June 7-10, 2022.

525. Tourni Melina, Alexandra ChanningSeungyeon Julia HanMary KucinskiJohanna Tonko, Elisa E. Konofagou, Electromechanical Wave Imaging activation and repolarization mapping for mitral valve disease characterization in the clinic, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

526. Sua Bae, Antonios Pouliopoulos, Robin Ji, Keyu Liu, Sergio Jiménez-Gambín, Omid Yousefian, Maria Murillo, Danae Kokossis, E. Konofagou, Evaluating the Accuracy and Precision of Blood-Brain Barrier Opening by Using Neuronavigation-Guided FUS in Alzheimer's Disease Patients, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

527. Batts, Alec, Fotios Tsitsos, Rebecca Noel, Robin Ji, Elisa E. Konofagou, IEEE International Ultrasonics Symposium. Combination of Lateral Beam Steering and Axial Focusing Significantly Increases theranostic Ultrasound Mediated blood-Brain Barrier Opening Volume and Viral Gene Delivery in Vivo, The 61st IEEE International Ultrasonics Symposium. September 2023

528. Robin Ji, Sua Bae, Sergio Jiménez-Gambín, Alec Batts, Elisa E. Konofagou, A Single Linear Array for Simultaneous blood-Brain Barrier Opening and Cavitation Mapping in non-Human Primates, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

529. McCune, EP, Sachs T, Stephen A. Lee, Seongyeon Kim, Elisa E. Konofagou

Displacement and Cavitation Monitoring During Focused Ultrasound Neuromodulation of the Sciatic Nerve in Vivo, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

530. Liu Yangpei, Md Murad Hossain, Xiaoyue Judy Li, Daniella A. Jimenez, Elisa E. Konofagou, Optimization of the excitation beam sequences in Harmonic Motion Imaging for clinical breast tumor characterization, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

531. Gami Parth, Alex Ying, Grigorios Karageorgos, Mary Kucinski, Rachel Weber, Elisa E. Konofagou, Association of stroke occurrence with biomarkers derived from Pulse Wave Imaging and Vector Flow Imaging: A Preliminary Study in Carotid Atherosclerosis Patients In Vivo, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023

532. Pengcheng, Paul Kemper, Elisa E. KonofagouA Physics-Informed Neural Network Approach to the Pulse Wave Inverse Problem for Noninvasive Intravascular Pressure Estimate, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023.

533. Kline-Schoder Alina R., Sana Chintamen, Moshe J. Willner, Melody R. DiBenedetto, Rebecca L. Noel, Alec J. Batts, Nancy Kwon, Stergios Zacharoulis, Cheng-Chia Wu, Vilas Menon, Steven G. Kernie, Elisa E. Konofagou, Characterization of the responses of brain macrophages to focused ultrasound-mediated blood–brain barrier opening, IEEE International Ultrasonics Symposium. The 61st IEEE International Ultrasonics Symposium. September 2023.

534. Tourni Melina, Seungyeon Julia Han, Mary Kucinski, Angelo Biviano, Elisa Konofagou, Long-term Response Classification and Prediction of Atrial Fibrillation Ablation using Non-invasive 3D-rendered Electromechanical Cycle Length Mapping, IEEE International Society of Biomedical Imaging, Athens, Greece, May 2024.

PhD dissertations:

1. Lee WN, Myocardial Elastography: A Strain Imaging Technique for the Reliable Detection and Localization of Myocardial Ischemia in Vivo, PhD dissertation, Columbia University, 2009.

2. Choi JJ, Opening of the blood-brain barrier using focused ultrasound, PhD dissertation, Columbia University, 2010.

3. Maleke, C, In Vivo Detection and Thermal Treatment Monitoring of Breast Tumors Using Harmonic Motion Imaging (HMI), PhD dissertation, Columbia University, 2010.

4. Tung YS, The Physical Mechanism of Blood-Brain Barrier Opening using Focused Ultrasound and Microbubbles, PhD dissertation, Columbia University, 2012.

5. Provost J, Electromechanical Wave Imaging, Ph.D. dissertation, Columbia University, 2012.

6. Samiotaki G, Quantitative and dynamic analysis of the focused-ultrasound induced blood-brain barrier opening in vivo for drug delivery, PhD dissertation, Columbia University, March 2015.

7. Downs M., Safety and drug delivery through the focused-ultrasound induced blood-brain barrier opening in non-human primates in vivo, PhD dissertation, Columbia University, July 2015.

8. Costet A. Electromechanical Wave Imaging for in vivo characterization of atrial and ventricular arrhythmias, PhD dissertation, Columbia University, 2016.

9. Wu, S-Y, Neuronavigation-Guided Transcranial Focused Ultrasound: Development towards a Clinical System & Protocol for Blood-Brain Barrier Opening, PhD dissertation, Columbia University, 2016.

10. Bunting, E., Performance Analysis and Optimization of 2D Cardiac Strain Imaging for Clinical Applications, PhD dissertation, Columbia University, 2017.

11. Apostolakis, I., 2-D and 3-D high frame-rate Pulse Wave Imaging for the

characterization of focal vascular disease, PhD dissertation, Columbia University, 2018.

12. Han Y., Development of a Harmonic Motion Imaging guided Focused Ultrasound system for breast tumor characterization and treatment monitoring, Columbia University, 2019.

13. Karakatsani M, Optimization of blood-brain barrier opening for the treatment of neurodegenerative disease, PhD dissertation, Columbia University, 2020.

14. Sayseng, V, Toward clinical realization of Myocardial Elastography: Cardiac strain imaging for better diagnosis and treatment of heart disease, PhD dissertation, Columbia University, 2020.

15. Melki L, Electromechanical Wave Imaging in the clinic: localization of atrial and ventricular arrhythmias and quantification of cardiac resynchronization therapy response, PhD dissertation, Columbia University, 2020.

16. Ji R, Optimization of Focused Ultrasound Mediated Blood-Brain Barrier Opening, PhD dissertation, Columbia University, Dec. 2021.

17. Lee, S. Focused Ultrasound Neuromodulation of the Peripheral Nervous System, Columbia University, 2022.

18. Aurup C., A System for Monitoring Focused Ultrasound-Mediated Neuromodulation in the Central Nervous System, Columbia University, 2022.

19. Saharkhiz N, Harmonic Motion Imaging in Breast Cancer, Columbia University, 2022.

20. Karageorgos G, Pulse Wave Imaging for the detection of Atherosclerosis, Columbia University, 2022.

21. Kemper P.,Pulse Wave and Flow Imaging of Atherosclerosis, Columbia University, 2023.

22. Kline-Schoder, A., Brain macrophage and extracellular vesicle response to focused ultrasound neuroimmunotherapy, Columbia University, 2023.

23. El Harake, J, Myocardial Elastography for the Diagnosis of Coronary Artery Disease and Coronary Microvascular Disease, Columbia University, 2024.

Book Chapters And Invited Clinical Articles

1. **Konofagou E.E.**, Chapter of **'Ultrasonic Imaging'** in The "Handbook of Biomedical Technology and Devices", Editors: James E. Moore and George Zouridakis, CRC press, 9-1 – 9-30, 2004. [Invited]
2. **Konofagou E.E.**, Chapter on 'Ultrasound Imaging' in the Encyclopedic Reference of Imaging, Springer Verlag, 2006. [Invited].
3. **Konofagou E.E.**, Article on 'Recent and future developments in diagnostic ultrasound', International Hospital Equipment & Solutions (IHE), September 2006. [Invited].
4. **Konofagou E.E.**, Principles of Ultrasound Imaging, Principles and Recent Advances in Medical Imaging and Image Analysis, World Scientific Publishing Company, Oct. 2007. [Invited].
5. **Konofagou E.E.**, Lee W-N. and Luo J., Cardiovascular elasticity imaging, Vibrations and Acoustics and in Biomedical Applications: Imaging and Diagnostics, Al-Jumaily A., Fatemi, M., Eds.; ASME Press, New York, NY, Chapter 6, pp. 115-135, 2008 [Invited].
6. **Konofagou E.E.**, and Maleke C., Harmonic Motion Imaging in HIFU monitoring, Vibrations and Acoustics and in Biomedical Applications: Therapy and Sports, Eds: A.Al-Jumaily and M. Fatemi, ASME Press, New York, NY, Chapter 7, pp. 115-135, 2008 [Invited].
7. **Konofagou E.E.** and Choi J., Ultrasound-induced treatment of neurodegenerative diseases across the blood-brain barrier, Biomedical Applications of vibration and Acoustics in therapy, Bioeffects and modelling, Eds: A.Al-Jumaily and M. Fatemi, ASME Press, New York, NY, Chapter 3, pp. 63-80, 2008 [Invited].
8. **Konofagou E.E.**, Principles of Ultrasound Imaging Modalities in Principles and

Advances in Medical Imaging and Image Analysis, Editors: A. Dhawan and H.K. Huang, 2009 [Invited].

9. **Konofagou E.E.**, Ultrasound Imaging, Image-Guided Therapy Systems, Engineering in Medicine & Biology, Editors: S. Vaezy and V. Zderic, Artech House, 2009 [Invited].
10. Qian Z, Lee W, **Konofagou EE**, Metaxas DN, Axel L, Registered 3D tagged MRI and ultrasound myocardial elastography: quantitative strain comparison, Multi-Modality Medical Image Segmentation and Registration Techniques Book, 2010 .
11. **Konofagou EE**, Maleke, C., and Vappou J., Harmonic Motion Imaging (HMI) for Tumor Imaging and Treatment Monitoring, Soft Tissue Biomechanical Modeling for Computer Assisted Surgery Series: Studies in Mechanobiology, Tissue Engineering and Biomaterials, Vol. 11, Payan, Yohan (Ed.), Springer Verlag, 257-280, 2012.
12. **Konofagou EE**, Chapter 22: Ultrasound Induced Blood-Brain Barrier Opening, Drug Delivery to the Brain. Editor: Robert Thorne, Springer, 2014.
13. **Konofagou E.**E. and Provost J., Evolving concepts in measuring ventricular strain in the human heart: non-invasive imaging, Cardiac Mechano-Electric Coupling and Arrhythmias, 2nd Edition, Ed: P. Kohl. 2014. [Invited]
14. **Konofagou E.**E., Intrinsic Cardiovascular Wave and Strain Imaging, Ultrasound Elastography for Biomedical Applications and Medicine", Ed: M. Urban, Elsevier and Wiley Publishing, 2018. [Invited]
15. **Konofagou E.**E., Cardiac Elasticity Imaging and Quantification, Elastography, Ed: K. Alam and B. Garra, Elsevier, 2018. [Invited]
16. **Konofagou E.**E., Harmonic Motion Imaging, Ultrasound Elastography for Biomedical Applications and Medicine, Ed: M. Urban, Elsevier and Wiley Publishing, 2018.
17. **Konofagou E.**E., Vascular Compliance Imaging, Biomechanics of Coronary Atheromatous Plaque: From Model to Patient, Ed: Ohayon J. & Pettigrew R., Elsevier, 2020.

E.2. Patents

1. Patent No. U.S. Patent 6,270,459, "Method for Estimation and Imaging of Transverse Displacements, Transverse Strains and Poisson's Ratio", 8/11/99 [Licensed]
2. Patent No. U.S. patent 6,494,834, "Power-spectral Methods for Direct Strain Estimation",11/8/00 [Licensed]
3. Patent No. U.S. Patent 6,984,209. "Harmonic Motion Imaging: A new technique for the estimation of mechanical properties in tissues", 12/7/04
4. Patent No. US 8,150,128, " Systems And Methods For Composite Elastography And Wave Imaging, " 4/3/2012
5. Patent No. US 8,428,687, " Systems And Methods For Matching And Imaging Tissue Characteristics," 04/23/13.
6. Patent No. US 8,858,441, " System and method for electromechanical wave imaging of body structures ", 10/14/2014
7. Patent No. US 9,585,631, "Devices, methods, and systems for measuring elastic properties of biological tissues using acoustic force", 3/7/17
8. Patent No. US 9,358,023, "Systems and methods for opening of a tissue barrier", 6/7/16
9. Patent No. US 9,302,124, "Systems and methods for opening a tissue",4/5/16
10. Patent No. US 9,265,483. "Medical imaging contrast devices, methods, and systems", 2/23/16
11. Patent No. 9,320,491 Ultrasound devices methods and systems
12. Patent No. 9,302,124 Systems and methods for opening a tissue
13. Patent No. 9,265,483 Medical imaging contrast devices, methods, and systems
14. Patent No. 9,247,921 Systems and methods of high frame rate streaming for treatment monitoring

15. Patent No. 8,858,441 System and method for electromechanical wave imaging of body structures
16. Patent No. 8,428,687 Systems and methods for matching and imaging tissue characteristics
17. Patent No. 10,687,785 System and method for electromechanical activation of arrhythmias
18. Patent No. 10,517,564 Systems and methods for mechanical mapping of cardiac rhythm
19. Patent No. 10,441,820 Systems and methods for opening of a tissue barrier in primates
20. Patent No. 10,322,178 Systems and methods for targeted drug delivery
21. Patent No. 10,166,379 Systems and methods for opening of a tissue barrier
22. Patent No. 10,098,539 Systems and methods for non-invasive brain stimulation with ultrasound
23. Patent No. 10,028,723 Systems and methods for real-time, transcranial monitoring of blood-brain barrier opening
24. Burgess and Konofagou, Power Cavitation Mapping, 2019 (PCT pending).
25. Lee and Konofagou, Peripheral neuromodulation with ultrasound, 2019 (PCT pending).
26. Houssain and Konofagou, Single-transducer Harmonic Motion Imaging, 2020 (PCT pending).
27. Kline-Schoder, Batts and Konofagou, Blood testing for Alzheimer's detection, 2020 (provisional).

F. GRANTS AWARDED

F.1.Government grants

ACTIVE

1. **National Institutes of Health**: NIH 1R56 AG038961 (P.I.: **Konofagou**): Assessment of ultrasound-facilitated neurotherapeutics in Alzheimer's disease ($1,057,340; 09/01/2023-08/31/2025).
2. **National Institutes of Health**: NIH 1R01 HL 114358 (P.I.: **Konofagou**): Noninvasive qualitative and quantitative assessment of vascular disease in vivo ($1,556,398; 04/01/2023-03/31/2027).
3. **National Institutes of Health**: NIH 1R01 HL 114358 (P.I.: **Konofagou**): Noninvasive arrhythmia mapping using Electromechanical Wave Imaging ($4,927,646; 04/01/23-01/31/28).
4. **National Institutes of Health**: NIH R01 EB029338 (P.I.: **Konofagou**): A theranostic system for ultrasound-facilitated blood-brain barrier opening ($2,365,079; 02/1/20-01/31/25).
5. **National Institutes of Health**: NIH R01 MH99876 (P.I.: Ferrera/**Konofagou**): Focused ultrasound for noninvasive brain stimulation ($2,000,000; 07/01/18-06/30/26).
6. **DARPA:** MOANA: Magnetic, Optical, and Acoustic Neural Access device, for High-bandwidth, non-surgical brain computer interfaces (PI: **Robinson**; Subcontract PI: **Konofagou**) ($1,200,000; 08/01/20-07/31/24).

COMPLETED

1. **National Institutes of Health**: NIH R01 HL135734 (P.I.: **Konofagou**): Noninvasive

qualitative and quantitative assessment of vascular disease in vivo ($1,556,398; 04/01/2017-03/31/2022).

2. **National Institutes of Health**: NIH 1R01 HL 114358 (P.I.: **Konofagou**): Noninvasive arrhythmia mapping using Electromechanical Wave Imaging ($4,927,646; 08/01/11-01/31/22).
3. **National Institutes of Health**: NIH 1R01EB014496 (P.I.: **Konofagou**): Ultrasound-based tumor targeting and thermal ablation monitoring system ($1,945,475; 07/01/2018 – 04/30/2022).
4. **National Institutes of Health**: NIH 1R01 AG038961 (P.I.: **Konofagou**): Assessment of ultrasound-facilitated neurotherapeutics in Alzheimer's disease ($6,257,450; 09/01/2011-08/31/2021).
5. **National Institutes of Health**: 1UG3NS115598 (PI: **Leong**): Focused Ultrasound-mediated Delivery of Gene-editing Elements to the Brain for Neurodegenerative Disorders (09/01/2019-07/31/2022).
6. **National Institutes of Health**: NIH 1R01 HL 114358 (P.I.: **Konofagou**): Mechanistic Monitoring of Ultrasound Neuromodulation ($2,559,322; 09/01/2018 - 08/31/2023).
7. **National Institutes of Health**: NIH R01CA228275 (P.I.: **Konofagou**): An integrated theranostic system for breast cancer ($2,699,437; 06/11/2018- 05/31/2023).
8. **National Institutes of Health**: NIH R01 EB009041 (P.I.: **Konofagou**): Optimization of Ultrasound-Induced Blood-Brain Barrier Opening ($4,346,808; 09/30/08-03/31/21-no cost extension).
9. **DARPA**: BAA-15-06 ElectRx (PI: **Konofagou**): PULSE: Phased-array ULtraSound for Electroceuticals ($3,329,740, 10/01/2015-08/31/2020).
10. **National Institutes of Health**: NIH R01 EB006042 (P.I.: **Konofagou**): Early Detection and Mapping of Ischemia using Myocardial Elastography ($4,406,271; 09/01/06-08/31/20).
11. **National Institutes of Health** (PI: **Konofagou**): NIH R21 EB021103: Intranasal delivery through the blood-brain barrier using focused ultrasound ($412,250; 12/01/15-11/30/17).
12. **National Science Foundation**: NSF CAREER 0644713 (PI: **Konofagou**): CAREER: Ultrasound-Induced Drug Delivery Through The Blood-Brain Barrier ($408,000; 07/01/07-06/30/12).
13. **National Institutes of Health**: NIH R21 EY018505 (PI: **Konofagou**): Ultrasound-induced Drug Delivery Through The Blood-Brain Barrier ($412,250; 09/01/07-08/31/10).
14. **National Institutes of Health**: NIH R21 EB008521 (PI: **Konofagou**): A Novel System For Simultaneous Generation And Monitoring Of Tumor Ablation ($419,037; 04/01/08-03/31/10).
15. **National Institutes of Health**: NIH R21 HL096094 (PI: **Konofagou**): Noninvasive Conduction Mapping using Electromechanical Wave Imaging ($572,058; 07/01/09-06/30/12).
16. **National Institutes of Health**: NIH 1KL2 RR024157-02 (PI: Ginsberg): Translational Center for Biomedical Education and Research ($80,000; 10/01/06-12/31/10) [Irving fellow].
17. **National Institutes of Health**: NIH 5R01 AT003479-04 (PI: Langevin): Soft Tissue Biomechanical Behavior During Acupuncture in Low Back Pain ($1,884,400; 4/1/07-03/31/12) [Consultant].

18. **National Institutes of Health**: NIH 5R21 AT004059-02 (P.I.: Triano): Imaging The Muscle Mechanics Before And After Physical Therapy ($418,000; 04/01/08-03/31/10).
19. **National Institutes of Health**: NIH R21 (NICAM) grant (P.I. Langevin): Biomechanical Effect Of Acupuncture Needling ($414,000; 07/01/99-06/30/04).
20. **National Institutes of Health**: NIH 1R21 HL089913 (NIHLB) (P.I: Vunjak-Novakovic): Controlled gene delivery for in vivo vascularization of an engineered cardiac patch ($423,000; 03/01/08-02/28/10).
21. **New York State's Stem Cell Board** (PI: Vunjak-Novakovic), Institutional Development of Stem Cell Research Capabilities ($1,000,000; 04/08-03/09).
22. **National Institutes of Health**: NIH 1U01 HL089913 (NIHLB) (P.I: Vunjak-Novakovic), National Tissue Engineering Resource Center ($2.8M; 08/01/09-07/31/14).
23. **National Institutes of Health:** NIHU01 (NEI) (PI: Goldberg) Core Grant for Vision Research ($2.5M; 7/1/2010-6/30/2015).
24. **National Institutes of Health:** NIHR21 (NCI) (PI: Shawber) Concurrent ultrasound & molecular evaluation of a lymphatic malformation model ($445,000; 4/1/13-3/31/15).

F.2.Foundation grants

ACTIVE

23. **Focused Ultrasound Surgery Foundation** Seed Grant (PI: **Konofagou**): Clinical study for the treatment of Alzheimer's disease ($100,000; 2/01/20-1/31/25).
24. **Focused Ultrasound Surgery Foundation** Seed Grant (PI: **Konofagou**): Peripheral neuromodulation for pain suppression ($100,000; 09/01/20-8/31/24).

COMPLETED

23. **Google X Seed grant** (PI: Konofagou): Clinical peripheral modulation ($150,000, 8/1/19-9/1/22).
24. **American Society of Echocardiography** research grant (P.I.: **Konofagou**): Assessment of Myocardial Contractility using Elastography ($25,000; 07/01/02-06/30/03).
25. **Radiological Society of North America** seed grant (P.I.: **Konofagou**): Harmonic Motion Imaging: A novel method for the assessment of mechanical properties of tissues for the detection of stiff nodules ($30,000; 07/01/03-06/30/04).
26. **American Heart Association** scientist development grant (P.I.: **Konofagou**): Noninvasive Assessment of Myocardial Contractility ($198,000; 07/01/04-06/30/07).
27. **Wallace H. Coulter Foundation** Early Career Development Award – Phase I (P.I.: **Konofagou**): An Elastocardiography Prototype Module for Echocardiography in the detection of heart disease ($240,000; 08/01/05-7/31/07).
28. **Wallace H. Coulter Foundation** Early Career Development Award – Phase II (P.I.: **Konofagou**): An Elastocardiography Prototype Module for Echocardiography in the detection of heart disease ($260,000; 08/01/07-7/31/10).
29. **Kinetics Foundation** Pilot Grant (PI: **Konofagou**): Ultrasound-induced molecular delivery in Parkinson's disease ($1.5M; 01/01/08-12/31/14).
30. **Kavli Foundation** Pilot Grant (PI: Ferrera; **Konofagou**): Ultrasound-induced molecular delivery in the visual cortex and hippocampus ($50,000; 12/01/10-11/30/12).

31. **Wallace H. Coulter Foundation** Pilot Grant (PI: **Konofagou**; Small): A noninvasive drug delivery system for focal treatment of brain diseases ($100,000; 8/01/12-7/31/13).
32. **Focused Ultrasound Surgery Foundation** Seed Grant (PI: **Konofagou**): FUS-mediated treatment for neurological and neurodegenerative diseases ($100,000; 8/01/12-7/31/13).
33. **Lustgarten Foundation Concept Grant** (PI: Olive)**:** Focused Ultrasound Technologies for Diagnosis, Monitoring, and Treatment of Pancreatic Cancer ($1,400,000;1/1/13-12/31/15).
34. **Focused Ultrasound Surgery Foundation** Seed Grant (PI: **Konofagou**): Neuronavigation-guided and ultrasound-monitored human BBB opening Focused ultrasound prototype system. ($150,000; 8/01/15-12/31/16).
35. **Wallace H. Coulter Foundation**, C4PT-0035 (Konofagou, Sheth): Noninvasive deep brain stimulation using focused ultrasound ($126,581; 7/1/15-6/30/16).
36. **Wallace H. Coulter Foundation** Pilot Grant (PI: **Konofagou**; Wanl): Visiblate: A New Technique for Visualization of RF ablation lesions in the heart ($100,000; 8/01/16- 7/31/17).
37. **Focused Ultrasound Surgery Foundation** Seed Grant (PI: **Konofagou**): Antibody delivery through the opened blood-brain barrier in a Parkinsonian mouse model ($100,000; 10/01/16-9/30/17).
38. **Grey Sky** Seed Grant (PI: **Konofagou**): Clinical peripheral modulation ($250,000; 4/01/17-9/30/19).

F.3.Intramural grants

COMPLETED

37. **Brigham Research and Education** Fund seed grant (P.I.: **Konofagou**), Novel Technique for the Detection of Cardiac Ischemia ($25,000; 11/01/02-10/30/03).
38. **Collaborative and Multidisciplinary Pilot Research** (CaMPR) Award for Collaborative Clinical and Translational Research Irving Center for Clinical Research of Columbia University (PI: Kauffman**/Konofagou**): Gravity Neutral Orthotic (GNO) – Design and Evaluation of a device to improve the lives of severely disabled children with Spinal Muscular Atrophy (SMA) –Phase I ($25,000; 09/01/07-03/31/08).
39. **Collaborative and Multidisciplinary Pilot Research** (CaMPR) Award for Collaborative Clinical and Translational Research Irving Center for Clinical Research of Columbia University (PI: Kauffman/**Konofagou**): Gravity Neutral Orthotic (GNO) – Design and Evaluation of a device to improve the lives of severely disabled children with Spinal Muscular Atrophy (SMA) –Phase II ($125,000; 07/01/08-06/30/09).
40. **Diversity Initiative Fund** (Columbia), Molecular Delivery Facilitated by Ultrasound Through the Blood Brain Barrier (P.I.: **Konofagou**) ($25,000; Indefinite).
41. **Collaborative and Multidisciplinary Pilot Research** (CaMPR) Award for Collaborative Clinical and Translational Research Irving Center for Clinical Research of Columbia University (PI: Borden/Klose/**Konofagou**/Pile-Spellman): Design and evaluation of a novel dual-modality ultrasound-fluorescence tomography system for vascular molecular imaging ($25,000; 01/01/10-09/01/10).
42. **SEAS Interdisciplinary Research Seed (SIRS) Funding** Award for Collaborative Clinical and Translational Research Irving Center for Clinical Research of Columbia University (PI: **Konofagou**/Kougioumtzoglou): Real-time Elasticity Imaging ($70,000; 01/01/17-12/31/17).

43. **SEAS RISE (Research Initiatives in Science & Engineering)** (PI: **Konofagou**/Razlighi/Shepard): Quantification of blood flow into the brain in Alzheimer's ($80,000; 10/01/17-09/30/19).

G.SERVICE TO DEPARTMENT, COLLEGE AND UNIVERSITY

2003-present	Academic advisor, BME undergraduate and graduate students
2003	Organizer, BME Holiday party
2004	Organizer, CU250 Biomedical Engineering Symposium Planning committee
2005	Days on Campus Luncheon and Laboratory Tours
2004-2005	Member, BME Faculty Search committee (Imaging track)
2004-present	Summer Undergraduate Research Fellowship (SURF) sponsor
2005-2008	Chair, International exchange committee
2006-2008	Chair, BME brochure committee
2006-present	Member, Undergraduate Education committee
2006-present	Departmental contact, Peterson's guide of academic programs
2007	Committee member for preparations on the visit of HRH Princess Srindihorn of Thailand, May 2007.
2007-present	Chair, BME Communications committee
2007-present	Department representative, New Student Orientation Program Academic Resource Fair
2004-present	Faculty recruitment committee in three departments (Biomedical, Mechanical and Chemical Engineering) of the School of Engineering and Applied Science (SEAS) of Columbia University
2007	Plenary Lecturer at the Alumni Reunion of the School of Engineering and Applied Science (SEAS) of Columbia University.
2008	Plenary Lecturer at the Alumni Reunion of the School of Engineering and Applied Science (SEAS) of Columbia University.
2008	Departmental representative in the 4th Bioengineering summit in Chicago, IL for the enhancement of undergraduate education in biomedical engineering.
2008-2009	Department representation in the Annual Career Fair, SEAS, Columbia University, October 2008 and October 2009.
2008	Department representation at the Society of Engineers for a Better Society (SEBS) undergraduate Fair, Columbia University, Nov. 2008.
2008	Department representation at the Department of Radiology retreat, CUMC, Nov. 2008.
2008	Faculty participant at the Society of Women in Engineering Community Outreach, Columbia University, Nov. 2008.
2008-present	Chair, Design and publication of the semi-annual departmental newsletter (together with Hayden Huang).
2008-present	Member, International exchange committee
2008-present	Reviewer, MD/PhD program admissions, Columbia University
2009	Lecturer and participant, Columbia University Women's Forum, Feb. 2009.
2009	Led the Town Hall Meeting to address concerns by all juniors of the department regarding the curriculum, Feb 2009.
2009-present	Organizer of Biomedical Engineering Research seminars at CUMC sponsored by the NIH-CTSA award, Spring 2009-2011.
2009	Panel member, New Faculty Orientation, SEAS, Columbia

University, Aug 2009.

2009 Academic Advisor, Society of Women Engineers (SWE), Sept. 2009.

2009 Speaker, *Inside the Academic Search Committee*, Columbia College graduate students and postdocs, Dec. 2009.

2010 Host faculty, Society of Women Engineers (SWE) department luncheon, Jan. 2010.

2010 *Member,* Irving Institute External Advisory Board, NIH-CTSA award committee, Columbia University Medical Center, Jan. 2010.

2010 *Host and organizer,* Tohoku University delegation visit from Japan, Columbia University, March 2010.

2010 *Faculty presenter,* Family Weekend, Columbia College and The Fu Foundation School of Engineering and Applied Science, October 2010.

2011 *Moderator* SEAS Affinity Group panel, Columbia University, Nov. 2011.

2012-2018 *Chair,* Biomedical Imaging Seed Grant Program, NIH-CTSA award committee, Columbia University Medical Center.

2012-2015 *Member,* Institutional Animal Care University Committee (IACUC), Columbia University Medical Center.

2012 *Panel Member,* Society of Women Engineers (SWE) conference, Columbia University.

2012-2015 Chair, Space Committee, Biomedical Engineering department, Columbia University.

2014-2016 Co-chair, MRI faculty position search, Biomedical Engineering department, Columbia University.

2015-present *Chair,* Graduate Studies, Biomedical Engineering department, Columbia University.

2019-present *Provost Leadership fellow*, Provost office, Columbia University.

2020-2021 *Faculty presenter,* Family Weekend, Columbia College and The Fu Foundation School of Engineering and Applied Science, October 2020 and October 2021.

2021-2023 Chair, Biomedical imaging open faculty search, Department of Biomedical Engineering, Columbia University.

2020-present Elected Senator, Columbia University Senate.

2020-present Chair, Diversity, Equity and Inclusion Committee, Department of Biomedical Engineering, Columbia University.

H.SERVICE TO PROFESSION

H.1. Membership to Grant Review Panels

1. Ad hoc reviewer, Basic Science Ultrasound Research Funding, American Institute of Ultrasound in Medicine, January 2005.
2. Ad hoc reviewer, Basic Science Ultrasound Research Funding, American Institute of Ultrasound in Medicine, January 2006.
3. Ad hoc reviewer, National Institutes of Health, Exploratory Ultrasound Panel, May 2006.
4. Ad hoc reviewer, Canadian Institutes of Health, Canada, Sept. 2006.
5. Ad hoc reviewer, Dutch NWO technology review, Netherlands, Nov. 2006.
6. Ad hoc reviewer, FONDECYT research committee, Chile, April 2007.
7. Ad hoc reviewer, National Institutes of Health, BMIT-Biomedical Imaging Technology panel, February 2007.
8. Ad hoc reviewer, National Science Foundation, CBET-Bioengineering panel, May

2007.

9. Ad hoc reviewer, National Institutes of Health, Electromagnetics panel, October 2007.
10. Ad hoc reviewer, NASA/National Space Biomedical Research Institute (NSBRI), February 2008.
11. Ad hoc reviewer, Radiological Society of North America (RSNA) Seed Grant committee, April 2008.
12. Ad hoc reviewer, NIH/CTSA Intramural T32 grant review panel, May 2008.
13. Ad hoc reviewer, National Institutes of Health, National Institute of Deafness and Other Communication Disorders (NIDCD) panel, June 2008.
14. Ad hoc reviewer, National Institutes of Health, NCRR Biotechnology Review Panel, October 2008.
15. Ad hoc reviewer, National Institutes of Health, ZGM1 Scope of Competitive Research Award Panel, January 2009.
16. Ad hoc reviewer, Radiological Society of North America (RSNA) Seed Grant committee, March 2009.
17. Ad hoc reviewer, F.I.R.S.T. (Bikura) Grant, Israel Science Foundation (ISF), May 2009.
18. Ad hoc reviewer, National Institutes of Health, Bioengineering Research Partnership Review Panel, 2009/10 ZRG1 SBIB-V (50) R Bioengineering Research Partnerships and Imaging June 2009.
19. Ad hoc reviewer, National Institutes of Health, Challenge Grants, RFA OD-09-003 Challenge 2009/10 ZRG1 SBIB-V (58) R, July 2009.
20. Ad hoc reviewer, National Institutes of Health, Fellowship Review Panel, 2009/10 ZRG1 f15-l (20) l Fellowships: biomedical imaging and bioengineering, July 2009.
21. Ad hoc reviewer, NSERC's Strategic Project Grants (SPG) program, Canada, July 2009.
22. Ad hoc reviewer, Czech Science Foundation (GA CR), August 2009.
23. Ad hoc reviewer, National Institutes of Health, Ultrasound Exploratory Panel, ZRG1, Oct. 2009.
24. Ad hoc reviewer, National Institutes of Health, Fellowship Panel, ZRG1 2010/05 ZRG1 F15-D (20) L meeting, Feb. 2010.
25. Ad hoc reviewer, F.I.R.S.T. (Bikura) Grant, Israel Science Foundation (ISF), March 2010 and March 2011.
26. Ad hoc reviewer, National Institutes of Health, Medical Imaging panel, 2010/05 ZRG1 MEDI-S (09), March 2010.
27. Ad hoc reviewer, American Heart Association, Bioengineering Panel, Apr. 2010.
28. Ad hoc reviewer, Research Promotion Foundation (RPF) of Cyprus, April 2010.
29. Chartered reviewer, National Institutes of Health, BMIT Study Section, Oct. 2010-Oct 2014.
30. Ad hoc reviewer, Wellcome Trust, United Kingdom, March 2011.
31. Ad hoc reviewer, Thalis, Ministry of Education, Lifelong Learning and Religious Affaris, Greece, March 2011.
32. Ad hoc reviewer, Ontario Mental Health Foundation, November 2011.
33. Ad hoc reviewer, National Institutes of Health, Member Conflict: Neurotechnology and Neurogenetics study section, Nov. 2011.
34. Ad hoc reviewer, Centre of Medical Image guided Therapy, Nov. 2011.
35. Ad hoc reviewer, National Institutes of Health, Outstanding new investigator, April 2012.
36. Ad hoc reviewer, National Institutes of Health, Bioengineering Research Partnership grant, March 2013.
37. Ad hoc reviewer, Fellowship Panel, ZRG1 2010/05 ZRG1 F15-D (20) L meeting, Feb. 2010,
38. Ad hoc reviewer, BTSS study section Reviews, Feb. 2016,

39. Ad hoc reviewer, Quantum study section reviews, June 2016.
40. Chartered reviewer, National Institutes of Health, MEDI/CTIS Study Section, Sept. 2017- June 2021.
41. Ad hoc reviewer, Gene delivery through the Blood-Brain Barrier, ZRG1 study section, Jan. 2022.
42. Ad hoc Chair, Neuromodulation and Neuroimaging Brain Initiative panel, ZRG1 study section, November 2023.

H.2.Organizer and Chair of Scientific Meetings and Symposia

Conference organizer:

1. Organization committee member and Local Arrangements Chair for the IEEE- IUS (International Ultrasound Symposium) 2007 Conference, New York, NY, October 2007.
2. Tutorial Arrangements Chair, New York, Medical Imaging and Computational Assisted Imaging (MICCAI) conference, September 2008.
3. Organizer, 2011 International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, Sept. 2011.
4. Co-organizer, 2012 Euroson School, Athens, Greece, Jan. 2012
5. Co-Chair, IEEE International Ultrasonics Symposium, Montreal, Canada, Sept. 2023.

Workshop/session organizer:

6. Workshop Organizer, “Advances in ultrasound elasticity imaging and therapeutics”, International Society of Biomedical Imaging, Baltimore, MD, April 2007.
7. Chair and Organizer, Ultrasound Imaging Sessions I and II, IEEE-EMBS (Engineering in Medicine and Biology Society) conference (EMBC), Minneapolis, MN, Sept. 2009.
8. Organizer and Chair, Tissue Engineering Seminar Series, Columbia University Medical Center, Spring 2010.
8. Workshop Organizer, “Principles of Ultrasound Imaging”, International Society of Biomedical Imaging, Rotterdam, Netherlands, April 2010.
9. Invited speaker,Tedx Columbia Engineering, Nov.2011.
10. Biomedical Imaging session, Japan-US Frontiers of Engineering, June 2014.
11. Therapeutic ultrasound session, Acoustical Society of America, Dec. 2020.

Chair:

11. Chair, IEEE Ultrasonics, Ferroelectrics and Frequency Control (IEEE-UFFC), Atlanta, GA, Oct. 2001.
12. Chair, Acoustical Society of America meeting, Nashville, TN, May 2003.
13. Session organizer and moderator of the Elasticity Imaging session, Acoustical Society of America Meeting, New York, NY, May 2004.
14. Co-chair, Elasticity Imaging Conference, Lake Windermere, England, U.K., October 2004.
15. Co-chair, Elasticity Imaging Conference, Lake Austin, Texas, U.S.A., October 2005.
16. Chair, IEEE-EMBS conference, New York, NY, August 2006.
17. Co-chair, Tissue Elasticity Imaging Conference, Santa Fe, New Mexico, November 2007.
18. Organizer and Chair, Nanotechnology Seminar Series, Columbia University Medical Center, Spring 2009.
19. Chair, Therapeutic Ultrasound Community of Practice meeting, American Institute of Ultrasound in Medicine (AIUM), April 2009. [~2,000 attendees; 50% acceptance]
20. Chair, Basic Science- Image Processing Session, American Institute of Ultrasound in Medicine Meeting, New York, NY, April 2009.
21. Chair, Segmentation in Ultrasound, IEEE International Society of Biomedical Imaging

(ISBI), Boston, MA, June 2009. [~1,500 attendees; 50% acceptance]
22. Chair, Ultrasound Imaging Sessions I and II, IEEE-EMBS (Engineering in Medicine and Biology Society) conference, Minneapolis, MN, Sept. 2009.
23. Chair, Therapeutic In-Vivo Studies, IEEE-IUS (International Ultrasound Symposium), New York, NY, Sept. 2009.
24. Chair, Cardiovascular Elasticity, Tissue Elasticity Imaging Conference, Rotterdam, Netherlands, Sept. 2009.
25. Chair, Drug Delivery & Monitoring in the Brain, International Society of Therapeutic Ultrasound (ISTU) Meeting, Aix-en-Provence, France, Sept. 2009.
26. Chair, Basic Science- Instrumentation II Session, American Institute of Ultrasound in Medicine Meeting, San Diego, CA, March 2010.
27. Chair, Therapeutic Ultrasound Community of Practice meeting, American Institute of Ultrasound in Medicine (AIUM), April 2010.
28. Chair, Thermometry and Radiation Force Imaging Session, International Society of Therapeutic Ultrasound (ISTU) Meeting, Tokyo, Japan, June 2010.
29. Chair, Thermometry and Radiation Force Imaging Session, International Society of Therapeutic Ultrasound (ISTU) Meeting, New York, NY, April 2011.
30. Chair, Ultrasound Vascular Imaging Session, 2011 IEEE-EMBS Conference, Boston, MA, Aug. 2011.
31. Co-Chair, Cardiovascular Elasticity imaging Session, 2011 International Tissue Elasticity Imaging Conference, Arlington, TX, Oct. 2011.
32. Co-organizer, 2012 Euroson School, Athens, Greece, Jan. 2012.
33. Co-chair, Biomedical Imaging and Optics track, Biomedical Engineering Society (BMES) conference, May-Sept. 2013.
34. Co-Chair, International Society of Therapeutic Ultrasound (ISTU) Meeting, Las Vegas, NV, April 2014.
35. Co-Chair, 2014 International Tissue Elasticity Imaging Conference, Snowbird, UT, Oct. 2014.
36. Chair, Therapy session, IEEE International Ultrasonics Symposium, Chicago, IL, Sept. 2014.
37. Chair, Brain drug delivery session, International Society of Therapeutic Ultrasound (ISTU) Meeting, Utrecht, Netherlands, April 2015.
38. Chair, Brain drug delivery session, International Society of Therapeutic Ultrasound (ISTU) Meeting, Utrecht, Netherlands, April 2015.
39. Chair, Cardiovascular session, IEEE International Ultrasonics Symposium, Taipei, Taiwan, Oct. 2015.
40. Chair, Drug delivery session, IEEE International Ultrasonics Symposium, Tours, France, Sept. 2016.
41. Co-chair, Cardiovascular Elasticity session, International Tissue Elasticity Imaging Conference, Ferlee, VT, Oct. 2016.
42. Session Chair, IEEE International Ultrasonics Symposium, Washington, DC, Oct. 2017.
43. Session Chair, IEEE International Ultrasonics Symposium, Kobe, Japan, Oct. 2018.
44. Session Chair, IEEE International Ultrasonics Symposium, Glasgow, Scotland, Oct. 2019.
45. Session Chair, IEEE International Ultrasonics Symposium, [virtual], Sept. 2020.
46. Co-organizer, IEEE Women in Ultrasonics Luncheon and Lecture, Sept. 2020.
47. Session Chair, FUS foundation symposium, [virtual], Nov. 2020.
48. Session Chair, Acoustical Society meeting, virtual, Dec. 2020.

H.3. Reviewer/Editor of Journal Manuscripts and Conference Abstracts

Editor for Journals:

Associate Editor: Medical Physics (2010-present)

Associate Editor, IEEE Transactions of Ultrasonics, Ferroelectrics and Frequency

Control (2013-present)
Associate Editor: Ultrasonic Imaging (2014-present)
Editorial Board Member: Ultrasound in Medicine and Biology (2006-2012)
Guest Editor in Special Issue on Elasticity Imaging (2011): Ultrasonics.
Consultant: Ultrasonics

Reviewer for Journal Manuscripts:
Annals of Biomedical Engineering, Applied Mathematics Letters, Applied Physics Letters, Biomedical Engineering Online, Arthritis Research & Therapy, Canadian Acoustical Association Journal, Circulation, Circulation: Cardiovascular Imaging, Engineering in Medicine and Biology Society (EMBS) magazine, EURASIP Journal on Advances in Signal Processing, Gene Therapy, Journal of Biomechanics, Heart and Circulatory Physiology, Hypertension Research, IEEE Transactions in Biomedical Engineering, IEEE Transactions in Medical Imaging, IEEE Transactions in Ultrasonics, Ferroelectrics and Frequency Control, Interface Focus, Imaging in Medicine, iScience, Journal of Acoustical Society of America, Journal of American College of Cardiology (JACC), Journal of Biological Physics, Journal of Computational Physics, Journal of Magnetic Resonance imaging, Journal of Orthopaedic Research, Measurement Science and Technology, Medical Engineering and Physics, Medical Image Analysis, Medical Physics, Microvascular Research, Nature, Nature Communications, Nature Biomedical Engineering, Osteoarthritis and Cartilage, Pattern Recognition Letters, Physics in Medicine and Biology, Technology In Cancer Research And Treatment, Proceedings of the Ultrasound in Medicine and Biology, Science Translational Medicine, Ultrasonic Imaging, Ultrasonics, Ultrasound in Medicine and Biology, Ultrasound In Medicine.

Editor for Conference Abstracts/Proceedings
- Associate Editor of IEEE Transactions on UFFC, Medical Physics and Ultrasonic Imaging (2004-2006)
- Local Arrangements Chair on the 2007 IEEE IUS meeting in New York City
- Technical committee member of New investigator award, American Institute of Ultrasound in Medicine Meeting (2011-2014)
- Student Paper Competition Committee Member: IEEE Engineering in Medicine and Biology Conference (EMBC), 2009
- **Technical committee member:** International Society of Biomedical Imaging (ISBI), 2007
- **Technical committee and board member**: International Society of Therapeutic Ultrasound (ISTU), 2010-2018
- **Technical committee member**: Annual IEEE International Ultrasound Symposium (IUS) Meeting, 2011-present
- **Meeting Organizer and Proceedings Editor, 2011:** International Society of Therapeutic Ultrasound (ISTU)
- **Cardiovascular Flow and Elasticity Imaging in Clinical Applications Workshop Co-organizer**, IEEE Engineering in Medicine and Biology Conference (EMBC), 2019.
- **Cardiovascular Flow and Elasticity Imaging in Clinical Applications Workshop Co-organizer**, IEEE Engineering in Medicine and Biology Conference (EMBC), 2021.

Reviewer for Conference Abstracts/Proceedings
American Association of Physicists in Medicine (AAPM), Acoustical Society of America, American Institute of Ultrasound in Medicine (AIUM), ASME International Mechanical Engineering Congress & Exposition (IMECE), IEEE Engineering in Medicine and Biology Society (EMBS), International Society of Biomedical Imaging (ISBI), International Society of Therapeutic Ultrasound (ISTU), Medical Image

Computing and Computer Assisted Intervention (MICCAI), Northeastern Bioengineering Conference (NEBEC).

I. INDUSTRIAL LICENSING/COLLABORATIONS/CONSULTANT

Active:

Biosense Webster	Sponsored Agreement and Licensing, 2019-Present
X (Google)	Sponsored Agreement and Licensing, 2019-Present
Samsung (Medison)	Licensing of elastography patents, 2009- present.
Siemens(International)	Licensing of elastography patents, 2009- present.
Siemens (Acuson)	Sponsored Agreement, 2017-2019
Spark Therapeutics (Roche)	Sponsored Agreement and Licensing, 2021-Present
Fujifilm (Ultrasonix)	Licensing of elastography patents, 2009- present.
Harmonic Medical, Inc	Licensing of HMI patents, 2005- present.
TheraWave Bio	Licensing and Scientific Board member, 2018-
Medtronic	Licensing, 2021-
TDK	Sponsored Research Agreement, 2022-
Verasonics	Scientific advisory board member, 2019-present

Past:

Echosens, Paris, France	Licensing discussions of patents, 2009.
Merck Pharmaceuticals, NJ	Collaboration on vascular pulse wave imaging, 2007-2011.
Mindray Ultrasound, NJ	Collaboration discussions, 2011.
Oxford Analytica, OX, UK	Consultant for GE Healthcare, 2011
Philips, US	Licensing discussions of patents, 2012-2014
Pfizer Pharmaceuticals, CT	Licensing discussions of patents, 2010-2012
Terason (Teratech)	Licensing discussions of patents, 2009-2013.
Vesselon	Licensing and Scientific Board member, 2018-2021
Volcano, CA	Collaboration on Intravascular Ultrasound Characterization (with Andrew Laine, Ph.D.), 2007-2011.

J. PROFESSIONALLY RELATED COMMUNITY SERVICE

2005-2011	Host faculty, High-school internship from the Bergen Academy, Bergen County, Hackensack, NJ (1-2 students/year).
2007-present	Host faculty, High-school internship from the Englewood Academy, Englewood, NJ (1 student/year).
2005-present	Host faculty, Collegiate middle school day visit for 5th year elementary school students to get initiated into the basics of ultrasound imaging of the heart (approx. 50 students)
2006-07	Member, Introduction to Biomedical Engineering for Lang medical scholars (high-school students).
2012-present	Introducing Biomedical Engineering to High School Girls, Chapin School.

K.PRESS RELEASES

1. IEEE Transactions of Ultrasonics, Ferroelectrics and Frequency Control, Cover page illustration, May 2001.
2. Featured on *Engineering News* (Columbia University's School of Engineering and Applied Sciences (SEAS) newsletter) as member of the female faculty at SEAS, November 2003.

3. Featured on *Engineering News* (Columbia University's School of Engineering and Applied Sciences (SEAS) newsletter) as member of the group for advancing biomedical engineering in Thailand, January 2006.
4. Featured in American Institute of Ultrasound in Medicine (AIUM) newsletter regarding AIUM New Investigator Award, March 2008.
5. *Technology Review* (an MIT publication), MedicalPhysicsWeb and Nouvel Observateur (Sciences et Avenir; in french) magazine articles published on our work involving FUS-induced BBB opening, June-July 2006 (with James Choi).
6. Selected out of 1,000 abstracts at the 2006 Acoustical Society of America meeting to present at a press conference covered by media such as *Science News*, *American Scientist*, *Nature News Service*, and *BBC*, June 2006 (with James Choi).
7. Work and profile featured in the 2006 SEAS Annual Fund brochure upon invitation by Dean Zvi Galil, September 2006.
8. Work on breast cancer and heart elastography quoted in Associated Press wire, New York Times, Forbes and another 16,000 websites and publications, December 2006.
9. Featured on the *Columbia Spectator* newspaper article "SEAS gets $1 Million in Grants', March 26, 2007.
10. Featured on *Engineering News* (Columbia University's School of Engineering and Applied Science newsletter) as part of the engineering design team that received a prize in the National Competition, June 2007.
11. Featured on *Engineering News* (Columbia University's School of Engineering and Applied Sciences newsletter) for funding obtained from the Kinetics Foundation for drug delivery in Parkinson's disease research, November 2007.
12. Interviewed by Forbes Magazine for research sponsored by Andrew Grove's Kinetics foundation, November 2007.
13. National Institutes of Health R21 grant featured on the "CUMC celebrates" website and "In vivo" magazine of Physicians & Surgeons newsletter of the Columbia University Medical Center, (http://www.cumc.columbia.edu/celebrates/issue16/), March 2008.
14. Featured online article on SEAS website entitled "New Funding for Ultrasound Projects", April 2008.
15. Featured in P&S alumni magazine for an article featuring the project on "Gravity Neutral Orthotic (GNO) – Design and Evaluation of a device to improve the lives of severely disabled children with Spinal Muscular Atrophy (SMA)", Fall 2008.
16. Featured in full article in *Science News* Magazine on Blood-brain barrier opening and molecular delivery, October 2008. (www.sciencenews.org/view/feature/id/36345/title/Breaking_the_Barrier)
17. Press release for paper entitled "Identifying the inertial cavitation threshold in a vessel phantom using focused ultrasound and microbubbles", Acoustical Society of America meeting, November 2008.
18. Interviewed and filmed on site for the Columbia Spectator Newspaper and Columbia SEAS website regarding the cardiac project for mechanical and electrical assessment of the heart, May-Oct 2009.
19. NIH project entitled Early Detection And Mapping Of Ischemia Using Myocardial Elastography to be featured in International Invention Report, Research Media Ltd, United Kingdom, Sept. 2009.
20. Featured work in the Fall 2009 SEAS newsletter and website, Special issue on bioengineering applications, Fall 2009: (http://engineering.columbia.edu/web/newsletter/fall_2009/radiationfree_tumortreatment, http://tv.seas.columbia.edu/videos/534/60/72?autostart=true)
21. Featured along with Nancy Strauss, MD, Petra Kaufmann, MD and Jackie Montes, MD in the article on the gravity neutral orthosis device project in the Dept. of Rehabilitation and Regenerative Medicine newsletter of Columbia University,

October 2009.

22. Featured blood-brain barrier research in the Alzheimer Research Forum (AlzForum), November 2009 (http://www.alzforum.org/new/detail.asp?id=2286).
23. Harmonic Motion Imaging paper selected among 1000 abstracts to be posted on the Acoustical Society of America's "World Wide Press Room" (http://www.acoustics.org/press), read by reporters at news outlets such as the New York Times, NPR, New Scientist, Discover, and Nature News, April 2010.
24. Blood-brain barrier NSF-funded work to be featured in *Science Nation*, Interview and Video, April 2010.
25. Featured work on GNO assist device in the journal *Clinical Translational Medicine* on "Reaping the Benefits of Biomedical Research: Partnerships Required.", National Center for Research resources, NIH, May 2010.
26. Featured work on Spinal Muscular Atrophy suspension device, Reaping the Benefits of Biomedical Research: Partnerships Required | Science Translational Medicine (sciencemag.org), Science Translational Medicine Vol. 2, No. 35, 2010.
27. "Using Ultrasound to Slow Down Alzheimer's", Columbia Record, October, 2010.
28. Research featured in Danish TV, June 2011.
29. Work on blood-brain barrier opening featured in the November issue of the Discover magazine under "The Brain" column by Carl Zimmer, Nov. 2011: http://discovermagazine.com/2011/nov/10-the-brain-maybe-do-need-hole-head-let-medicine-in/article_view?b_start:int=1&-C=
30. Featured article on Electromechanical Wave Imaging for Arrhythmias published in Physics in Medicine and Biology and featured in Medicalphysicsweb (http://medicalphysicsweb.org/cws/article/research/47680) , Nov.2011
31. TEDx talk at Columbia, Nov. 2011
32. Blood-brain barrier research discussed in Scientific American, June 2013 ((http://www.scientificamerican.com/article.cfm?id=messing-with-blood-brain-barrier-key-treating-host-diseases#comments).
33. Blood-brain barrier research discussed in The Scientist, Sept 2013.
34. Noninvasive tumor ablation and therapeutics with ultrasound, Columbia Magazine article and front page, Spring 2015.
35. Neuromodulation work featured in the "Ethnos" Sunday Greek newspaper, Oct. 2015.
36. Simulation work featured in MedScape, Nov. 2015.
37. Research profile featured on Athens U.S. embassy website, Oct. 2016.
38. Bodossaki Award announcement featured in National Greek TV and "Kathimerini" newspaper, June 2017.
39. IEEE Brain podcast, Nov. 2018
40. Brain modulation coverage, TechTalks, Dec. 2019, https://bdtechtalks.com/2020/01/02/brain-modulation-mri-eeg/
41. Brain modulation coverage, the next web (TNW), Jan. 2020, https://thenextweb.com/syndication/2020/01/09/brain-sciences-problem-isnt-data-its-getting-it-non-invasively/
42. Blood-brain barrier opening and brain modulation work featured in Science magazine, Aiming ultrasound at the brain raises hope of new treatments | Science | AAAS (sciencemag.org) , June 24, 2020
43. BBB opening in Alzheimer's work, TV interviews, ERT (National Cable channel) and Antenna (private cable channel), Nov. 2020
44. Blood-brain barrier opening in Alzheimer's, FUS foundation website, Dec 2020, First Alzheimer's Disease Patient Enrolled in Clinical Trial at Columbia University - Focused Ultrasound Foundation (fusfoundation.org)
45. BBB opening in Alzheimer's work featured in the "Ta Nea" Sunday Greek newspaper, Jan. 2021.
46. NIH-NIBIB website featuring work on electromechanical cardiac imaging, March

2021.

47. AIMBE fellows feature story, https://aimbe.org/college-of-fellows/COF-1661/
48. National Geographics feature story, April 2022.
49. Columbia magazine feature, Winter 2023: https://www.vagelos.columbia.edu/about-us/columbia-medicine-magazine/winter-2023/featured-stories/state-care-brain
50. IEEE Pulse magazine feature, January 2024: https://www.embs.org/pulse/articles/treating-the-brain-with-focused-ultrasound/.