3rd Annual Mayo Clinic Ultrasound Research Center Symposium:
Convergence of Waves and Ideas

	Saturday, September 21, 2019
7:00 a.m.	Registration & Breakfast
7:50 a.m.	Welcome and Overview *Matthew R. Callstrom, M.D., Ph.D. and James F. Greenleaf, Ph.D.*
8:00 a.m.	Echo Research: Function, Flow, and Future *Patricia Pellikka, M.D.*
8:30 a.m.	Surface wave elastography in heart failure patients *Govind Pandompatam, M.D.*
8:45 a.m.	Innovations in Ultrasound Imaging *Shigao Chen, Ph.D.*
9:00 a.m.	Fast and Robust Super-Resolution Ultrasound Microvessel Imaging via Microbubble Separation *Chengwu Huang, Ph.D.*
9:15 a.m.	Ultrasound-guided Interventional Procedures: Can Machines Learn Human Pain? *Vamshi Mugu, M.D., M.S.*
9:30 a.m.	Investigation into the Role of Novel Anthropomorphic Breast Ultrasound Phantoms in Radiology Resident Education *Jacinta Browne, Ph.D., M.S.*
9:45 a.m.	Refreshment Break & Poster Presentations
10:15 a.m.	Ultrasound-guided Fetoscopic Regenerative In Utero Therapies at Mayo Clinic *Rodrigo Ruano, M.D, Ph.D.*
10:30 a.m.	Contrast-Free Ultrasound Microvasculature Morphometric Analysis for Cancer Detection *Azra Alizad, M.D.*
10:45 a.m.	The diagnostic performance of a multi-county cohort of prehospital providers using ultrasound to determine endotracheal tube position, before and after training *Ann Kaminski, M.D.*
11:00 a.m.	Kidney Stones to Axillary Lymph Node Tagging and Ultrasound Detection in Breast Cancer *Christine Lee, M.D., Ph.D.*

11:15 a.m.	Hemodynamics and Prognostic Impact of Concomitant Mitral Stenosis in Patients Undergoing Surgical or Transcatheter Aortic Valve Replacement for Aortic Stenosis *Nahoko Kato, M.D.*
11:30 a.m.	Lung Ultrasound Surface Wave Elastography *Xiaoming Zhang, Ph.D.*
11:45 a.m.	Classifying Early Stage Cardiac Amyloid from Echocardiogram Images Using Deep Learning *Qiao Huang, Ph.D.*
12:00 p.m.	Lunch Break & Poster Presentations
12:15 p.m.	Functional Ultrasound Imaging of the Brain *Mickael Tanter, Ph.D.*
1:00 p.m.	Intrinsic Cardiac Elastography: From Modeling to Clinical Testing *Cristina Pislaru, M.D.*
1:15 p.m.	Incremental prognostic value of intraplaque neovascularization detected by carotid Contrast-Enhanced Ultrasound (CEUS) in patients undergoing stress echocardiography *Runqing Huang, Ph.D.*
1:30 p.m.	Assessment and optimization of echocardiography in adult zebrafish using a high-frequency ultrasound system *Alex Zhang*
1:45 p.m.	Multi-parameter linear and nonlinear viscoelasticity approach in breast imaging *Mostafa Fatemi, Ph.D.*
2:00 p.m.	Combination of ultrasound shear wave elastography and contrast-enhanced ultrasound for evaluation of patients with atherosclerotic plaques *Matthew Urban, Ph.D.*
2:15 p.m.	Sparse Random Aperture for Multiangle High Frame Rate Volumetric Imaging *Miguel Bernal, Ph.D.*
2:30 p.m.	Functional Ultrasound Imaging for Visualization of Rat Brain Activation in Response to Pharmacologically Induced Tremor and its Suppression *Rohit Nayak, Ph.D.*
2:45 p.m.	Doppler Ultrasound as a Method of Detecting Kidney Stones by Using Twinkling Artifacts *Benjamin Wood*

3:00 p.m.	Left Ventricle to Right Atrial Fistula Complicating Infective Endocarditis *Yehia Ali, M.B.B.S.*
3:15 p.m.	Discussion and Closing Remarks *Matthew R. Callstrom, M.D., Ph.D. and James F. Greenleaf, Ph.D.*
3:30 p.m.	Adjourn for Discovery Square Tour *Matthew Urban, Ph.D. and Shigao Chen, Ph.D.*