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

Saturday, December 16, 2017	
7:30 a.m.	Registration & Breakfast
8:00 a.m.	Welcome and Introductions Matthew R. Callstrom, M.D., Ph.D., James F. Greenleaf, Ph.D.
8:15 a.m.	Shear Wave Elastrography of Exercise-Trained Hamstring Muscles Kristin D. Zhao, Ph.D.
8:30 a.m.	Ultrasound Practice in Maternal-Fetal Medicine Mari Charisse (Charisse) Trinidad, M.D.
8:45 a.m.	Microbubble Nanoparticle Dual System Conjugated through Click Chemistry for Ultrasound Guided Anti-Cancer Drug Delivery Xifeng Liu, Ph.D.
9:00 a.m.	CUR Bone Implant Interface Scott A. Mitchell, M.D.
9:15 a.m.	Sub-Hertz Analysis of ViscoElasticity (SAVE) for Differentiation of Breast Masses Mahdi Bayat, Ph.D.
9:30 a.m.	Using High-Frequency Ultrasound Imaging to Quantify Drug Responses in a Chick Embryo Patient-Derived Xenograft Model of Renal Cell Carcinoma Matthew Lowerison, Ph.D.
9:45 a.m.	Refreshment Break
10:00 a.m.	Intramammary and Systemic Imaging Findings of Silicone Deposition Katrina N. Glazebrook, M.B., Ch.B.
10:15 a.m.	A Preliminary Study of Using Machine Learning to Reduce Biopsies of Thyroid Nodules Based on Ultrasound Images Zeynettin Akkus, Ph.D.
10:30 a.m.	Robust Ultrasound Super-resolution Microvessel Imaging with Spatiotemporal Nonlocal Means Filtering and Bipartite Graph-Based Microbubble Tracking Pengfei Song, Ph.D.
10:45 a.m.	A Parameter-Free Approach to Probe Motion Artifacts Suppression for In Vivo Imaging with Probe Oscillation Shear Wave Elastography (PROSE) Daniel Mellema, Ph.D.

11:00 a.m.	Unambiguous Identification and Visualization of an Acoustically Active Catheter by Ultrasound Imaging in Real Time: Theory, Algorithm, Phantom and In-vivo Experiments Viksit Kumar, Ph.D.
11: 15 a.m.	Attenuation Measuring Ultrasound Shearwave Elastography (AMUSE) Ivan Z. Nenadic, Ph.D
11:30 a.m.	**Lunch & Poster Presentations**
1:00 p.m.	Evaluation of the Mechanical Properties or Anastomosis in Vascular Grafts and Arterial Models Miguel Bernal Restrepo, Ph.D.
1:15 p.m.	Measurement of Carotid Artery Viscoelasticity in Young and Older Individuals Using Acoustic Radiation Force-Induced Waves and Fourier Analysis Matthew W. Urban, Ph.D.
1:30 p.m.	2-Dimensional Speckle Tracking Echocardiography Predicts Severe Coronary Artery Disease in Women with Normal LV Function Maria C. Arciniegas Calle, M.D.
1:45 p.m.	Shear Wave Elastography on the GE LOGIQ E9 with Comb-push Ultrasound Shear Elastography (CUSE) and Time Aligned Sequential Tracking (TAST) Pengfei Song, Ph.D.
2:00 p.m.	Cardiovascular Elastography Ivan Z. Nenadic, Ph.D., Pengfei Song, Ph.D.
2:15 p.m.	Valvular Involvement in Brucellosis Abolfazl Dohaei
2:30 p.m.	Discussion and Closing Remarks Matthew R. Callstrom, M.D., Ph.D., James F. Greenleaf, Ph.D.
2:45 p.m.	Course Adjourns