Dieter Klatt, Asst Prof, The Richard and Loan Hill Dept. of Bioengineering, UIC.
Ph.D. in Physics, Humboldt University of Berlin, Germany, 2010.
German University Diploma, Ruhr-University Bochum, Germany, 2002.

Positions

Since 02/2013	Assistant Professor at the Richard and Loan Hill Department of Bioengineering, Adjunct Assistant Professor in the Department of Mechanical Engineering, The University of Illinois at Chicago, Chicago, Illinois
Since 09/2012	Adjunct Assistant Professor at the Department of Radiology, Northwestern University, Feinberg School of Medicine, Chicago, Illinois
09/2011-01/2013	Post-Doc at the Department of Bioengineering, The University of Illinois at Chicago, Chicago, Illinois
03/2010-06/2011	Post-Doc at the Department of Radiology, Charité - University Medicine Berlin, Germany
02/2004-02/2010	Research Assistant at the Department of Radiology, Charité - University Medicine Berlin, Germany
2003	Geophysicist for Deutsche Montan Technologie, Essen, Germany

Teaching

I have developed and taught the following courses:
BioE 594: Elastography: Review of theoretical foundations of Elastography and overview of elastographic techniques. The emphasis of this course is on Magnetic Resonance Elastography (MRE).
BioE 594: *Recent Advances in MR Elastography:* This course builds on the *Elastography* class and introduces new strategies in MR Elastography developed by the instructor and other researchers.
BioE 494; *BioE: 422 Imaging Laboratory*: This course is the lab component of *Biomedical Imaging* (*BioE 421*) and includes acquisition and processing procedures of MRI, CT, Ultrasound, Optical Imaging and Nuclear Medicine.

Peer-reviewed Publications

1. Yin, Z, Kearney SP, Magin RL, **Klatt D**. Concurrent 3D Acquisition of Diffusion Tensor Imaging and Magnetic Resonance Elastography Displacement Data (DTI-MRE): Theory and *In Vivo* Application. Magnetic Resonance in Medicine 2016 (in press); DOI: 10.1002/mrm.26121.
2. Liu Y, Royston TJ, **Klatt D**, Lewandowski ED. Cardiac MR Elastography of the Mouse: Initial Results. Magnetic Resonance in Medicine 2016 (in press); DOI: 10.1002/mrm.26030.
3. **Klatt D**, Johnson CL, Magin RL. Simultaneous, multidirectional acquisition of displacement fields in magnetic resonance elastography of the in vivo human brain. Journal of Magnetic Resonance Imaging 2015; 42(2): 297-304.
4. Yin, Z, Magin RL, **Klatt D**. Simultaneous MR Elastography and Diffusion Acquisitions: Diffusion-MRE (dMRE). Magnetic Resonance in Medicine 2014; 71(5): 1682-1688.
5. **Klatt D**, Yasar TK, Royston TJ, Magin RL. Sample Interval Modulation for the simultaneous acquisition of displacement vector data in Magnetic Resonance Elastography: Theory and Application. Phys Med Biol 2013; 58: 8663-8675.
6. Yasar TK, **Klatt D**, Magin RL, Royston TJ. Selective spectral displacement projection for multifrequency MRE. Phys Med Biol 2013; 58(16): 5771-5781.
7. Hirsch S, **Klatt D**, Freiman F, Scheel M, Braun J, Sack I. In vivo measurement of volumetric strain in the human brain induced by arterial pulsation and harmonic waves. Magnetic Resonance in Medicine 2013; 70(3): 671-683.
8. Kotecha M, **Klatt D**, Magin RL. Monitoring Cartilage Tissue Engineering Using Magnetic Resonance Spectroscopy, Imaging and Elastography. Tissue Engineering - Part B 2013; 19(6): DOI: 10.1089/ten.teb.2012.0755.

9. Kamphues C, **Klatt D**, Bova R, Yahyazadeh A, Bahra M, Braun J, Klauschen F, Neuhaus P, Sack I, Asbach P. Viscoelasticity-Based Magnetic Resonance Elastography for the Assessment of Liver Fibrosis in Hepatitis C Patients after Liver Transplantation. Röfo - Fortschritte auf dem Gebiet der Röntgenstrahlen und der Bildgebenden Verfahren 2012; 184: 1013-1019.
10. Elgeti T, Tzschätzsch H, Hirsch S, Krefting D, **Klatt D**, Niendorf T, Braun J, Sack I. Vibration-synchronized MRI for the detection of myocardial elasticity changes. Magnetic Resonance in Medicine 2012; 67: 919-924.
11. Freimann F, Streitberger K, **Klatt D**, Lin K, McLaughlin J, Braun J, Sprung C, Sack I. Alteration of brain viscoelasticity after shunt treatment in normal pressure hydrocephalus. Neuroradiology 2012; 54: 189-196.
12. Engelken FJ, Sack I, **Klatt D**, Fischer T, Fallenberg EM, Bick U, Diekmann F. Evaluation of tomosynthesis elastography in a breast-mimicking phantom. Eur J Radiol 2012; DOI:10.1016/j.ejrad.2011.06.033.
13. Riek K, **Klatt D**, Nuzha H, Mueller S, Neumann U, Sack I, Braun J. Wide-Range Dynamic Magnetic Resonance Elastography. Journal of Biomechanics 2011; 44(7): 1380-1386.
14. Streitberger K, Wiener E, Hoffmann J, Freimann F, **Klatt D**, Braun J, Ling K, McLaughling J, Sprunge C, Klingebiel R, Sack I. In vivo viscoelastic properties of the brain in normal pressure hydrocephalus. NMR in biomedicine 2011; 24: 385-392.
15. **Klatt D**, Papazoglou S, Braun J, Sack I. Viscoelasticity-based MR elastography of skeletal muscle. Phys Med Biol 2010; 55: 6445-6459.
16. **Klatt D**, Friedrich C, Korth Y, Vogt R, Braun J, Sack I. Viscoelastic properties of liver measured by oscillatory rheometry and multifrequency magnetic resonance elastography. Biorheology 2010; 47: 133-141.
17. Papazoglou S, **Klatt D**, Braun J, Sack I. Anderson localization of shear waves observed by magnetic resonance imaging. European Physics Letters 2010; 91: 17007.
18. Asbach P, **Klatt D**, Schlosser B, Biermer M, Muche M, Rieger A, Loddenkemper C, Somasundaram R, Berg T, Hamm B, Braun J, Sack I. Viscoelasticity-based Staging of Hepatic Fibrosis with Multifrequency MR Elastography. Radiology 2010; 257: 80-86.
19. Hamhaber U, **Klatt D**, Papazoglou S, Hollmann M, Stadler J, Sack I, Bernarding J, Braun J. In Vivo Magnetic Resonance Elastography of Human Brain at 7 T and 1.5 T. J Magn Reson Im 2010; 32: 577-583.
20. Würfel J, Paul F, Beierbach B, Hamhaber U, **Klatt D**, Papazoglou S, Zipp F, Martus P, Braun J, Sack I. MR-Elastography reveals degradation of tissue integrity in multiple sclerosis. NeuroImage 2010; 49: 2520-2525.
21. Sack I, Beierbach B, Würfel J, **Klatt D**, Hamhaber U, Papazoglou S, Martus P, Braun J. The impact of aging and gender on brain viscoelasticity. NeuroImage 2009; 46: 652-657.
22. Asbach P, **Klatt D**, Hamhaber U, Braun J, Somasundaram R, Hamm B, Sack I. Assessment of liver viscoelasticity using multifrequency MR elastography. Magn Reson Med 2008; 60: 373-379
23. Sack I, Beierbach B, Hamhaber U, **Klatt D**, Braun J. Non-invasive measurement of brain viscoelasticity using magnetic resonance elastography. NMR in biomedicine 2008; 21: 265-271.
24. **Klatt D**, Asbach P, Somasundaram R, Hamm B, Braun J, Sack I. Assessment of the Solid-Liquid Behavior of the Liver for the Diagnosis of Diffuse Disease Using Magnetic Resonance Elastography. Röfo - Fortschritte auf dem Gebiet der Röntgenstrahlen und der Bildgebenden Verfahren 2008; 180: 1104-1109 (in German).
25. **Klatt D**, Hamhaber U, Asbach P, Braun J, Sack I. Noninvasive assessment of the rheological behavior of human organs using multifrequency MR elastography: a study of brain and liver viscoelasticity. Phys Med Biol 2007; 52: 7281-7294.
26. Hamhaber U, Sack I, Papazoglou S, Rump J, **Klatt D**, Braun J. Three-dimensional analysis of shear wave propagation observed by in vivo magnetic resonance elastography of the brain. Acta Biomater 2007; 3: 127-137.
27. Rump J, **Klatt D**, Braun J, Warmuth C, Sack I. Fractional encoding of harmonic motions in MR elastography. Magn Reson Med 2007; 57: 388-395.
28. **Klatt D**, Asbach P, Rump J, Papazoglou S, Somasundaram R, Modrow J, Braun J, Sack I. In vivo determination of hepatic stiffness using steady-state free precession magnetic resonance elastography. Invest Radiol 2006; 41: 841-848.