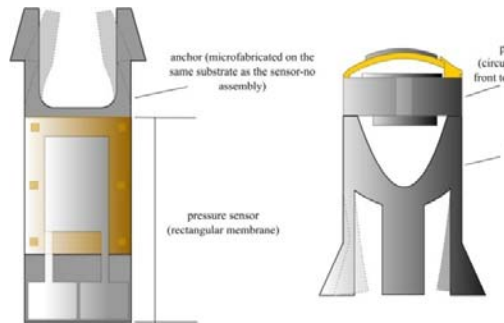


# MEMS Sensors

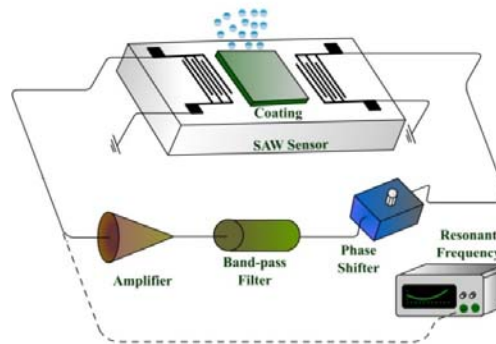
Rajesh Rajamani (PI), Peng Peng, Kalpesh Singal, Shyam Sivaramakrishnan

Department of Mechanical Engineering, University of Minnesota

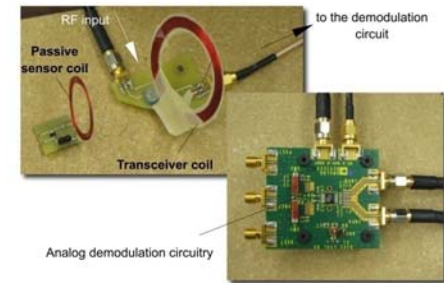
## Muscle Force Sensor for Neuromuscular Diseases



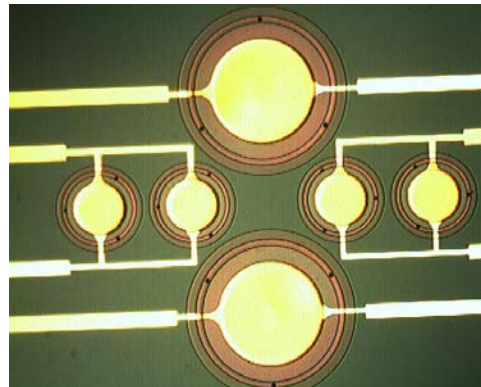
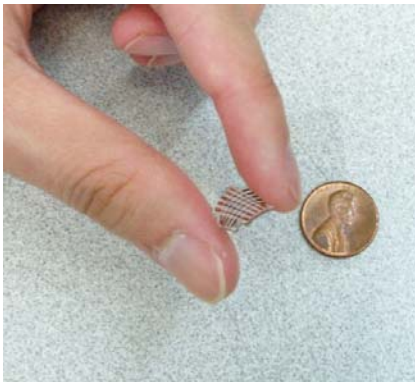
## Wireless Carbon Nanotube Sensors for Breath Analysis in Humans



## Battery-less Wireless MEMS Sensors



## MEMS Tactile Sensors for Minimally Invasive Applications



### Publications

- 1) P. Peng, R. Rajamani and A.G. Erdman "Flexible Tactile Sensor for Tissue Elasticity Measurements," Vol. 18, No. 6, pp. 1226-1233, IEEE/ASME Journal of Microelectromechanical Systems, December 2009.
- 2) P. Peng, A.S. Sezen, R. Rajamani and A.G. Erdman "Novel MEMS Stiffness Sensor for Force and Elasticity Measurements," *Sensors and Actuators A: Physical*, Vol. A158, No. 1, pp. 10-17, March 2010.
- 3) S. Sivaramakrishnan, R. Rajamani and T.M. Pappenfus "Electrically Stretched Capacitive Membranes for Stiffness Sensing and Analyte Concentration Measurement," *Sensors and Actuators, Part B: Chemical*, Vol. 135, No. 1, pp. 262-267, December 10, 2008.