

## **JAMES P. BRODY**

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### **Education**

- 1994. PhD. Physics, Princeton University, Princeton NJ.
- 1991. MS. Physics, Princeton University, Princeton, NJ
- 1989. BS. Physics, Massachusetts Institute of Technology, Cambridge MA.
- 1985. High School, L'Anse Creuse High School, Mount Clemens, MI.

### **Professional Experience**

- 2000 –. Assistant Professor. Department of Biomedical Engineering, University of California, Irvine.
- 1998 – 2000. Senior Research Fellow, Departments of Applied Physics & Biology, California Institute of Technology.
- 1996 – 1999, Consultant, Micronics, Inc. Redmond, WA.
- 1994 – 1998. Senior Fellow, Department of Bioengineering, University of Washington.
- 1989 – 1994. Research Associate, Department of Physics, Princeton University.

### **Five Relevant Publications**

1. Limin Lin; Joseph W. Harris; H. Garrett R. Thompson; and James P. Brody, “Surface plasmon resonance based sensors to identify cis-regulatory elements” *Analytical Chemistry*, Nov 15;76(22):6555-9 2004.
2. James P. Brody and Paul Yager, “Low Reynolds Number Micro-fluidic Devices,” *Hilton Head 1996 Solid-State Sensor and Actuator Workshop*, p 105 – 108, June 1996
3. James P. Brody, Paul Yager, Raymond Goldstein, and Robert H. Austin, “Biotechnology at Low Reynolds Numbers,” *Biophysical Journal*, 71:6, p 3430 – 3441, December 1996.
4. James P. Brody and Paul Yager, “Diffusion based Extraction in a Microfabricated Structure.” *Sensors and Actuators A: Physical* **58**, p 13 – 16, March 1997
5. James P Brody, BA Williams, BJ Wold, and SR Quake, “Significance and statistical errors in the analysis of DNA microarray data.” *Proc. Natl. Acad. Sciences*, 99, 12975 – 12978, 2002.

## Five Other Publications

1. H. Garrett Thompson, Joseph W. Harris, Barbara J. Wold, Fritz Lin, and James P. Brody, "P62 over-expression in breast tumors and its regulation by Prostate-Derived Ets Factor (PDEF) in breast cancer cells in vitro," *Oncogene*, **22**, 2322–2333, 2003
2. H. Garrett R. Thompson; Joseph W. Harris; Limin Lin and James P. Brody, "Identification of the protein ZIBRA, its genomic organization, regulation and expression in breast cancer cells," *Experimental Cell Research*, **295**(2) 448-459. 2004.
3. PH Tran, DA Peiffer, Y Shin, LM Meek, JP Brody, and KW Cho, "Microarray optimizations: increasing spot accuracy and automated identification of true signals," *Nucleic Acids Research*, 30:e54, 2002.
4. HGR Thompson, JW Harris, BJ Wold, SR Quake and JP Brody, "Identification and confirmation of a module of co-expressed genes." *Genome Research*. 12, 1517 – 1522. Oct 2002.
5. Lifeng Zheng, Shengdong Li, James P. Brody and Peter J. Burke, "Manipulating Nanoparticles in Solution with Electrically Contacted Nanotubes Using Dielectrophoresis," *Langmuir* 20, 8612-8619, 2004.

## Collaborators and Other Affiliations

**Collaborators during the previous 48 months:** Barbara Wold (Caltech), Peter Burke (UCI), Ken Cho (UCI)

**Advisors:** Prof. Robert Austin (Princeton University), Prof. Sol Gruner (Cornell University), Prof Paul Yager (University of Washington), Prof. Steve Quake (Caltech/Stanford), Prof. Barbara Wold (Caltech).

**Advisees:** Garrett Thompson (Postdoc, UCI), Alan Lee (Graduate Student, UCI), Limin Lin (Graduate Student, UCI). Total: 1 Postdoc, 2 Graduate Students.