

Name: **John G. Alford**  
Title: **Assistant Professor**  
Department: **Mathematics and Statistics**  
College: **Arts and Sciences**

### **Degrees Earned**

Ph.D., Mathematics, University of Houston, Houston, Texas  
M.S., Applied Mathematics, University of Houston  
B.S., Physics, University of California, Los Angeles, California

### **Peer-Review Publications**

- John G. Alford, Curtis Balusek, Kristen Bowers, and Casey Hartnett, *A Mathematical Model of Biocontrol of Invasive Aquatic Weeds*, *Involve*, submitted for review 2011.
- John G. Alford, *Reaction-Diffusion Models of Threshold and Waveblock in Heterogeneous Excitable Media*, *Applied Mathematics and Computation*, submitted for review 2011.
- John G. Alford and William I. Lutterschmidt, *Modeling Energetic and Theoretical Costs of Thermoregulatory Strategy*, *The Journal of Biological Dynamics*, accepted for publication in 2012.
- John G. Alford, *Synchrony and Spontaneous Order*, *Encyclopedia of Mathematics and Society* (a reference work on the role of mathematics in everyday life), Salem Press, 2011.
- John G. Alford, *Models of Unidirectional Propagation in Heterogeneous Excitable Media*, *Applied Mathematics and Computation*, Vol. 216, No. 4, 2010
- John G. Alford, *Bifurcation Structure of Rotating Wave Solutions of the FitzHugh-Nagumo Equations*, *Communications in Nonlinear Science and Numerical Simulations*, Vol. 14, No. 8, 2009
- John G. Alford, Giles Auchmuty, *Rotating Wave Solutions of the FitzHugh-Nagumo Equations*, *Journal of Math Biology*, Vol. 53, No. 5, Springer Berlin/Heidelberg 2006.

- John Alford, Nick Cogan, Charles Miller, Seth Patinkin, Bradford E. Peercy, Noah Rosenburg. *Boundary Element Analysis of Intracardiac Electrogram Sensing*, IMA Preprint Series #1589, August 1998.

### **Work or Professional Experiences**

- Assistant Professor of Mathematics, Sam Houston State University, 2006-present
- VIGRE (Vertical Integration of Research and Education) Postdoctoral Fellow}, Tulane University, 2003-2006
- Community College Mathematics Instructor, San Jacinto Community College, 1994-2003
- High School Mathematics Teacher, Alvin Senior High School, 1993-1994
- Teaching Fellow, University of Houston, 1992-1993
- Software Systems Engineer, CAE Link Flight Simulation, 1988-1990 and Eagle Technical Services, 1990-1991