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EDUCATION:

Ph.D., Electrical and Computer Eng. (BioEng. Program), Rice Univ., Houston, TX 1996
M.S.E.E., Electrical and Computer Eng. (BioEng. Program), Rice Univ., Houston, TX 1994
B.E.E., highest-honors, Georgia Institute of Technology, Atlanta, GA 1991

PROFESSIONAL EXPERIENCE:

2000–Present Adjunct Asst. Prof. of Biomedical Eng., Georgia Tech
1999–Present Asst. Prof. of Electrical and Comp. Eng., Georgia Tech
1998–1999 Postdoctoral Fellow, Lab for Neural Control, NINDS/NIH, Bethesda, MD
1996–1998 Postdoctoral Fellow, Math. Research Branch, NIDDK/NIH, Bethesda, MD

ACADEMIC HONORS:

James S. McDonnell Foundation 21st Century Scientist Award (2001)

GRADUATE AND POSTDOCTORAL ADVISING (in past 5 years):

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CURRENT RESEARCH SUPPORT:

National Science Foundation (DBI-9987074, IBN-0131612), National Institutes of Health (R01-MH62057), James S. McDonnell Foundation

OTHER COLLABORATORS (in past 48 months):

D. Terman, J. Rubin, J. Rinzel, D. Baxter, J. Byrne, C. Canavier, J. Clark, C. DelNegro, J. Smith, C. Wilson, H. Rigatto

SELECTED PUBLICATIONS:

1. “Periodicity, mixed-mode oscillations, and quasiperiodicity in a rhythm-generating neural network”, (with C. DelNegro, C. G. Wilson, H. Rigatto and J. C. Smith) *Biophysical Journal* **82**, 206-214 (2002).
2. “A methodology for achieving high-speed rates for artificial conductance injection in electrically excitable biological cells”, (with C. G. Wilson, C. A. DelNegro and J. C. Smith) *IEEE Transactions on Biomedical Engineering* **48**, 1460-1470 (2001).
3. “Models of respiratory rhythm generation in the pre-Botzinger complex: III. Model predictions and experimental observations”, (with C. DelNegro, S. M. Johnson and J. C. Smith) *J. Neurophysiology* **86**, 59-74 (2001).
4. “Multirhythmic bursting”, *Chaos* **8**, 274–284 (1998).
5. “Dissection and Reduction of a Modeled Bursting Neuron.” (with J. W. Clark, and J. H. Byrne) *Journal of Computational Neuroscience* **3**, 199-223 (1996).