# Ronald L. Calabrese

Biology Department Emory University, Atlanta GA 30322

# EDUCATION:

Ph.D. in Neurobiology, Stanford University 1975 (thesis advisor D. Kennedy)

A.M. in Neurobiology, Stanford University, 1970

# PROFESSIONAL EXPERIENCE:

1978–1983 Assistant Professor, Dept. of Cellular and Developmental Biology, Harvard Univ. 1983–1985 Associate Professor, Dept. of Cellular and Developmental Biology, Harvard Univ.

1986–1990 Associate Professor, Dept. of Biology, Emory Univ. 1990–present Professor, Department of Biology, Emory Univ.

1995–1998 Chair of the Science Council and Trustee, Marine Bio. Labs., Woods Hole

# **ACADEMIC HONORS:**

Alfred P. Sloan Research Fellowship for Basic Research, 1979-1981; Javits Neuroscience Investigator, 1992-1999; Grass Traveling Scientist, 1994; Emory Williams Teaching Award in the Natural Sciences, 1997; Winship Research Professorship 1999-2002.

#### SCIENTIFIC ADVISORY COMMITTEES:

Associate Editor, Journal of Neuroscience 1994-2001; National Science Foundation study panel on Behavioral and Computational Neuroscience, regular member, 1992-1995; National Institute of Health Integrative, Functional and Cognitive Neuroscience Review Committee (IFCN-7), regular member, 1998-present, chair 1999-present.

# GRADUATE AND POSTDOCTORAL ADVISING (in past 5 years):

Graduate Students: M.A. Masino, 8 Ph.D. students in all

Postdocs: Ø.H. Olsen, J. Lu, A.A. Hill, A. Ivanov, G. Cymbalyuk, A. Wenning, L. Morris, A. Weaver, 19 postdoctoral fellows in all.

# OTHER COLLABORATORS (past eighteen months):

S. DeWeerth, W. Ditto, R. Butera

# **SELECTED PUBLICATIONS:**

- 1. "Activation of intrinsic and Synaptic currents in leech heart interneurons by realistic waveforms" (with . H. Olsen), J. Neuroscience 16, 4958-4970 (1996)
- 2. "Function role of Ca2+ currents in graded and spike-mediated synaptic transmission between leech heart interneurons" (with J. Lu, J. F. IV Dalton, and D. R. Stokes), *J. Neurophysiology* 77, 1779-1794 (1997)
- 3. "Modeling alternation to synchrony with inhibitory coupling: A VLSI approach" (with G. Cymbalyuk, G. Patel, S. DeWeerth, and A. Cohen), *Neural Computation* **12**, 2259-2278 (2000)
- 4. "Oscillatory behaviors in pharmacologically isolated heart interneuron", (with G. S. Cymbalyuk), *J. Neurocomputing* **32-33**, 97-104 (2000)
- 5. "Intracellular Ca2+ dynamics during spontaneous and evoked activity of leech heart interneurons: Low-threshold Ca Currents and graded synaptic transmission" (with A. I. Inavov) *J. Neurosci.* **20**, 4930-4943 (2000)
- 6. "A model of a segmental oscillator in the leech heartbeat neuronal network" (with A.A.V. Hill, J. Lu, M.A. Masino, and Ø.H. Olsen), *J. Comp. Neurosci.* **10**, 281-302 (2001)
- 7. "A model of slow plateau-like oscillations based upon the fast Na+ current in a window mode" (with G. S. Cymbalyuk) *Neurocomputing* **38-40**, 159-166 (2001)