

# CURRICULUM VITAE

STEPHEN E. TENNENBAUM

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## EDUCATION

- 2005 Cornell University, Ph.D. Ecology & Evolutionary Biology  
Advisor: Carlos Castillo-Chavez
- 1988 University of Florida, M.S. Environmental Engineering Science.  
Advisor: Howard T. Odum
- 1980 Rutgers University, Camden. B.A. General Science.

## EMPLOYMENT

- 6/08 – Current ASSISTANT RESEARCH PROFESSOR and ASSOCIATE DIRECTOR; Mathematical, Computational & Modeling Sciences Center, Arizona State University. (Administrative position includes grant preparation & reporting, directing non-academic operations and organization of academics for MTBI summer research program, oversee center initiatives, etc.)
- 4/07 – 6/08 ASSOCIATE PROGRAM DIRECTOR; Arizona State University - Mathematical & Theoretical Biology Institute/ Institute for Strengthening the Understanding of Mathematics and Science.
- 1/06 – 4/07 RESEARCH SCIENTIST; Innovative Emergency Management (Bioterrorism Preparedness and Response Group).
- 9/05 – 12/05 MATHEMATICS INSTRUCTOR; Arizona State University.
- 9/97 – 3/03 PROGRAM MANAGER; Cornell - Mathematical & Theoretical Biology Institute.
- 1/98 – 6/98 BIOLOGY INSTRUCTOR; Tompkins-Cortland Community College.
- 9/91 – 5/95 GRADUATE TEACHING ASSISTANT; Cornell University, Ithaca N.Y. Lab instructor for Introductory Oceanography, Biology, Intro. Biometry and Recitation instructor for Ecology, Evolution, and Evolutionary Biology.
- Summer 1996 & 1997 TEACHING ASSISTANT; Cornell-MTBI Summer Science Institute.
- 1/89 – 8/91 RESEARCH ASSISTANT; University of Maryland, Chesapeake Biological Lab. Marine and Estuarine Environmental Studies, Solomons Is., MD.
- 6/86 – 8/86 SUMMER INTERN; Texas Department of Agriculture, Office of Natural Resources, Austin Texas. Research and some editing of publications produced by the Office of Natural Resources
- 5/85 – 12/88 GRADUATE RESEARCH ASSISTANT; University of Florida, Environmental Engineering Program, Gainesville FL.
- 2/81 – 5/85 RESEARCH ASSISTANT; Thomas Jefferson University Hospital, Neurology & Psychiatry Depts., Philadelphia PA.

## HONORS and AWARDS

- 2001 Letter of commendation from the office of Dean of Academics of Cornell, J. Robert Cooke for excellent service in operation of the Mathematical and Theoretical Biology Institute.
- 2000 *David Blackwell & Richard Tapia Distinguished Lecture Series in the Mathematical and Statistical Sciences*: Award for outstanding contributions in support of underrepresented minorities in the mathematical, statistical, and biological sciences.
- 1995-1997 NSF-Training Grant Fellowship in Theoretical and Computational Biology.
- 1979 Athenaeum Honor Society – Rutgers University

## SPECIAL ACTIVITIES

- 1996 to present Working with and advising undergraduates in the MTBI Summer program on research projects.

- Spring 2005 SAMSI/CRSC Graduate Associate. *2004-05 Program on Genomes to Global Health: Computational Biology of Infectious Diseases*. Courses were: Mathematical Modeling of Infectious Diseases – Alun Lloyd; Inverse problems – Tom Banks; and Biophysics of Cell Signaling – Byron Goldstein.
- March 2002 Participant of the DIMACS Working Group Meeting on Mathematical Sciences Methods for the Study of Deliberate Releases of Biological Agents and their Consequences. Rutgers University *Agro-Terrorism working group*
- Spring 1998 – 2000 Cornell – Ithaca Math Enrichment Program (CIMEP). Organized an after school applied math program at the Ithaca High School.

#### **PUBLICATION LIST**

- Tennenbaum, S., “Extinction times in a simple discrete death process”. In preparation.
- Tennenbaum, S., “An hypothesis on the origin of separate sexes”. In preparation.
- Tennenbaum, S. “The chain of infection, contacts, and model parametrization.”. in *Mathematical and Statistical Estimation Approaches in Epidemiology*. G. Chowell Editor-in-Chief, M. Hyman, L. Bettencourt, & C. Castillo-Chavez, Editors, Springer In press.
- Tennenbaum, S., “Simple criteria for finding (nearly) optimal vaccination strategies”, *J Theor Biol.* 2008 Feb 21;250(4):673-83
- Tennenbaum, S. E., 2006. *A Two-Sex Age-Structured Population Model in Discrete-Time*. Ph.D. Dissertation. Cornell University, Ithaca, NY.
- Tennenbaum, S, T.G. Kassem, S. Roudenko, and C. Castillo-Chavez. "The Role of Transactional Sex in Spreading HIV in Nigeria. pgs 367-389 in *Contemporary Mathematics (Series) #410 - Mathematical Studies on Human Disease Dynamics: Emerging Paradigms and Challenges* - Abba Gumel, Editor-in-Chief, Carlos Castillo-Chavez, Ronald E. Mickens, and Dominic P. Clemence, Editors - AMS, 2006, 389 pp
- Rivas, A. L., S. E. Tennenbaum, J. P. Aparicio, A. L. Hoogesteyn, H. O. Mohammed, C. Castillo-Chávez, S. J. Schwager. Oct. 2003. “Critical Response Time (Time Available To Implement Effective Measures for Epidemic Control): Model Building & Evaluation”. *Canadian J. of Veterinary Research*. Vol. 67(4)
- Tennenbaum, S., “Research and Education Activities of the Mathematical and Theoretical Biology Institute at Cornell”, pgs. 41-50 in *Proceedings of the Conference on Summer Undergraduate Mathematics Research Programs*. Joseph A. Gallian, Editor. 2000. Providence, R.I.: American Mathematical Society. 372 pp.
- Tennenbaum, S. and R. Costanza. 1991. “The Plight of the Chesapeake.” Chapter 8 in: *Elephants in the Volkswagen: Facing the Tough Questions About Our Overcrowded Country*. Lindsey Grant editor. W. H. Freeman and Co. New York, N.Y. 272 pp.
- Brown M. T., H. T. Odum, R. C. Murphy, R. A. Christianson, S. J. Doherty, T. R. McClanahan, and S. E. Tennenbaum. 1995. Rediscovery of the World: Developing an Interface of Ecology and Economics. In C.A.S Hall (ed) *Maximum Power*. University Press of Colorado, Niwot, CO, pp.216 - 250
- Brown, M. T., S. Tennenbaum, and H. T. Odum. 1988. *Emergy Analysis and Policy Perspectives for the Sea of Cortez, Mexico*. Report to the Cousteau Society. Gainesville, FL: Center for Wetlands, University of Florida. 58 pp. (CFW-88-04)
- Tennenbaum, S. E. 1988. *Network Energy Expenditures for Subsystem Production*. M.S. Thesis. University of Florida, 131 pp. (CFW-88-08)
- Davis, M. M., S. E. Tennenbaum, and G. R. Best. 1988 “Effects of eighteen years of water impoundment on the swamp forest of Lake Ocklawaha, Florida.” Center for Wetlands Tech. Report. Center for Wetlands and Water Resources, University of Florida.

#### **Editorial**

- Castillo-Chavez, C. and S. Tennenbaum, Eds. 1997-2002. *Studies in Theoretical Biology: A Collection of Undergraduate Research*. Biometrics Dept. Tech. Reports BU-1419-M, BU-815, BU-831. Cornell University. (There are over 70 papers included in these technical reports.)