

ALBERT J. WONG

CONTACT

Department of Psychology
University of Tennessee
Knoxville, TN 37996-0900
Email: awong5@utk.edu

EDUCATION

PRINCETON UNIVERSITY, A.B., Physics, 1991 (*magna cum laude*, Sigma Xi, Phi Beta Kappa)
OXFORD UNIVERSITY, B.A., PPE, 1993 (First Class Honors Degree, Marshall Scholar)
UNIVERSITY OF MICHIGAN, M.A., Philosophy, 1995 (Rackham Merit Fellow)
ESALEN INSTITUTE, STAFF, 1995-2000 (Gestalt, Group Process, and Somatic Psychology)
UNIVERSITY OF TENNESSEE, Ph.D., 2009-*present* (Clinical Psychology doctoral candidate)

HONORS AND AWARDS

Marshall Scholar
Goldwater Scholarship
Yale Psychoanalytic Research Training Fellow
Westinghouse Scholar, 3rd place nationally
Navy National Science Competition, 4th place nationally
US Air Force Award, International Science and Engineering Fair, 1st place internationally
General Motors Award, International Science and Engineering Fair, 2nd place internationally
National Junior Science and Humanities Symposium, National Runner-Up
TIME Magazine College Achievement Award Winner
National Merit Scholar
Martin Marietta Scholar
Golden Plate Award
Henry DeWolf Smyth Princeton Scholar
Kusaka Prize
SARIF Summer Research Grant

PUBLICATIONS

- Wong, A.J.** (1991). Theme and Variations: Spin-glasses, neural networks, and evolution. In L. Nadel and D. Stein (Eds.) *The 1990 Summer Proceedings of the Santa Fe Institute* (pp. 547-554). New York: Addison-Wesley.
- Chen, R.F., **Wong, A.**, Porter, D., & Knutson, J. (1991). Nonfluorescent conformers of proteins and tryptophan as revealed by lifetime and quantum yield measurements. *Biophysical Journal*, 1991. 59: 354a.
- Wong, A.J.** (1990). Development of a Spin-Glass Model of Prebiotic Evolution: Environmental Effects on Ensembles of Genetic Polymers. *Journal of Theoretical Biology*. 146(4): 523-544.
- Wong, A.J.** (1988). Recognition of General Patterns Using Neural Networks. *Biological Cybernetics*, 58, 361-372.

In progress

- Wong, A. J.**, Nash, M.R., Lounsbury, J. (2010). Therapist mindfulness: The development of a new psychometric concept. Working manuscript, University of Tennessee -- Knoxville, TN.
- Wong, A. J.**, Swan, S. A., & Nash, M. R. (2010). Landscapes of the self: A dimensional extension of Galatzer-Levy's coupled oscillation model of psychoanalytic process. Working manuscript, University of Tennessee -- Knoxville, TN.

PRESENTATIONS

- Wong, A. J.**, Swan, S. A., & Nash, M. R. (2010). Landscapes of the Self: A dimensional extension of Galatzer-Levy's coupled oscillation model of psychoanalytic process. Poster presented at the Spring Meeting of the APA Division of Psychoanalysis, Chicago, IL.
- Wong, A. J.**, Lounsbury, J. W. & Nash, M. R. (2010). The impact of therapist mindfulness on therapeutic change within a patient across time: An ideographic time series study of patient therapist covariation. Paper presented at Yale Psychoanalytic Research Training Program, New Haven, CT.
- Swan, S. A., Gray, E., **Wong, A. J.**, Lounsbury, J. W. & Nash, M. R. (2010). Openness to the Unconscious: Reliability and validity. Poster presented at the Spring Meeting of the APA Division of Psychoanalysis, Chicago, IL.
- Wong, A.J.** (1990). Theme and Variations: Spin-glasses, neural networks, and evolution. Paper presented at the Santa Fe Institute, Complex Systems Summer School, Santa Fe, NM.
- Wong, A.J.** (1987). Recognition of General Patterns Using Neural Networks. Poster presented at the Westinghouse Science Talent Search, Washington, DC and International Science and Engineering Fair, San Juan, Puerto Rico. Paper presented at National Junior Science and Humanities Symposium, West Point, NY.

SCIENTIFIC SYMPOSIA

- Selected internationally to attend the Complex Systems School at the Santa Fe Institute, Santa Fe, New Mexico. Research paper was one of six student papers to be published in the Institute Proceedings.
- Selected nationally to be one of eight Americans invited to attend the International Summer Science Institute at the Weizman Institute of Science, Rehovot, Israel.
- Intramural Research Fellow at the National Heart, Lung and Blood Institute, Bethesda, Maryland.

CLINICAL EXPERIENCE

Co-leader (with Seymour Carter), Los Angeles Gestalt Master Class Series, 2009

- Trained practicing therapists, clinical psychologists, interns, and health care workers in gestalt methodology

Independent Practice, Gestalt Process Work, 2008-2009

Core Member, Los Angeles Gestalt Study Group, 2000-2009

Staff Member, Gestalt Trainee, and Group Process Leader, Esalen Institute, 1995-2000

ACADEMIC APPOINTMENTS

Associate Adjunct Professor, Santa Monica College, Theater Arts, 2005-2009

Adjunct Professor, Ryokan College, Psychodrama and Gestalt, 2008

Adjunct Professor, Santa Monica College, Theater Arts, 2001-2005

Instructor, Duke University, Physics, 1991-92

RESEARCH EXPERIENCE

Oak Ridge National Laboratory

Advisor: Al Geist, Computer Science Research Group Leader

Extended John Hopfield's pre-existing model of neural network associative pattern recognition. [This model could only faithfully recognize pseudo-orthogonal patterns (where the concept of orthogonality is defined by a binary vector dot product).]

Generalized the Hopfield system so that even non-orthogonal patterns could be recognized by the neural network system. This new class of neural network actually incorporated the Hopfield network as well as the Personnaz network as special cases.

This paper was recognized in various science competitions including the International Science and Engineering Fair, the Westinghouse Science Talent Search, and the National Junior Science and Humanities Symposium, among others. After refereed review, the paper was published in *Biological Cybernetics*.

Princeton University

Advisor: Phil Anderson, Nobel Laureate

Conducted research investigating parallels between neural network systems and prebiotic evolution (origins of life). Created an interaction term which allowed different species to be symbiotically or antagonistically related within the evolutionary landscape. The result was the formation of entire ecosystems of interactive RNA, exhibiting many of the typical characteristics of predator-prey relationships. Additionally, this catalytic model could account for the origin of hypercycles that tend to maintain the biological order.

The work was published in the *Journal of Theoretical Biology*. Additionally, research resulted in scholarship to attend the Santa Fe Institute's Summer Science Institute to further refine work.

National Institutes of Health

Intramural Research Fellow at the National Heart, Lung and Blood Institute, Bethesda, Maryland. Assisted Raymond Chen in researching tryptophan fluorescence properties.

This work was published in *Biophysical Journal*.