

# Curriculum vitae

## Robert Stephen Phillips

### **Education:**

Georgia Institute of Technology, Chemistry Dept., B.S., 1974, Chemistry  
Georgia Institute of Technology, Chemistry Dept., Ph.D., 1979, Biochemistry  
Georgia Institute of Technology, Chemistry Dept., Postdoctoral, 1979-80, Enzyme Mechanisms  
National Institute of Mental Health, Postdoctoral, 1981-83, Enzyme Regulation  
NIADDKD, NIH, Postdoctoral, 1983-85, Bio-organic Chemistry

### **Employment:**

Assistant Professor of Chemistry and Biochemistry  
University of Georgia, 1985-1991  
Associate Professor of Chemistry and Biochemistry  
University of Georgia, 1991-1996  
Professor of Chemistry, Biochemistry and Molecular Biology  
University of Georgia, 1996 - present

### **Awards and Honors:**

Japan Society for the Promotion of Science Fellowship, 1992  
Northeast Georgia Section, American Chemical Society Chemist of the Year for Research, 1992  
Northeast Georgia Section, American Chemical Society Chemist of the Year for Service, 1995  
Creative Research Medal, University of Georgia Research Foundation, 1996  
Dozor Visiting Professor, Ben-Gurion University, Beersheeva, Israel, 1997  
Visiting Professor, University of Cergy-Pontoise, France, June 5-16, 2006  
CNRS Professor Rouge, University of Rouen, Mont St.-Aignan, France, October 10, 2006-July 31, 2007

### **Service on Review Panels:**

Ad Hoc member, Biochemistry Study Section, National Institutes of Health, February 22-23, 2001.  
Ad Hoc member, Biochemistry Study Section, National Institutes of Health, February 21-22, 2002.  
NSF Panel on Biosensors, June 4-5, 2004.  
EPA Scientific Advisory Panel on Enzyme Nomenclature, May 3-4, 2005.  
Ad Hoc member, MSFA Study Section, National Institutes of Health, February 5-6, 2007.  
Ad Hoc member, F04A Chemical and Bioanalytical Sciences Fellowship Study Section, National Institutes of Health, October 19, 2007.  
Ad Hoc member, MSFE Study Section, National Institutes of Health, January 31-February 1, 2008.

### **Membership in Scientific Societies:**

American Chemical Society, 1976-present  
American Society of Pharmacognosy, 1976-2005  
American Society of Biochemistry and Molecular Biology, 2002-present

### **Recent Publications list (Out of a total of 165):**

1. "Protein Expression in *Escherichia coli* S17-1 Biofilms: Impact of Indole", Collet, A., Vilian, S., Cosette, P., Jouenne, T., Junter, G.-A., Phillips, R. and Di Martino, P., *Antonie van Leeuwenhoek Int. J. General Molec. Microbiol.*, 91, 71-85 (2007).
2. "Asymmetric Reduction and Oxidation of Aromatic Ketones and Alcohols Using W110A Secondary Alcohol Dehydrogenase from *Thermoanaerobacter ethanolicus*", Musa, M. M., Ziegelmann-Fjeld, K. I., Vieille, C., Zeikus, J. G. and Phillips R. S., *J. Org. Chem.*, 72, 30-34 (2007).
3. "Crystal Structure of *Homo Sapiens* Kynureninase", Lima, S., Khristoforov, R., Momany, C. and Phillips, R. S., *Biochemistry*, 46, 2735-2744 (2007).
4. "Pressure and Temperature Jump Relaxation Kinetics of *Salmonella typhimurium* Tryptophan Synthase L-Serine Complex Reveal Large Transition State Compressibility and Heat Capacity Changes", Phillips, R. S., Miles, E. W., Marchal, S. and Lange R., *J. Am. Chem. Soc.*, 130, 13580-13588 (2008).
5. "Activity and Selectivity of W110A Secondary Alcohol Dehydrogenase from *Thermoanaerobacter ethanolicus* in Organic Solvents and Ionic Liquids: Mono- and Biphasic Media", Musa, M. M., Ziegelmann-Fjeld, K. I., Vieille, C., Zeikus, J. G., and Phillips, R. S., *Org. Biomol. Chem.*, 6, 887-92 (2008).
6. "Crystal Structure of *Homo sapiens* Kynureninase-3-Hydroxyhippuric acid Complex: The Molecular Basis of Kynureninase Substrate Specificity", Lima, S., Kumar, S., Gawandi, V., Momany, C. and Phillips, R. S., *J. Med. Chem.*, 52, 389-396 (2009).
7. "The Crystal Structure of the *Pseudomonas dacunhae* L-Aspartate Beta-Decarboxylase Reveals a Novel Oligomeric Ensemble for a Pyridoxal-5'-phosphate-dependent Enzyme", Lima, S., Bakthavatsalam, S., Khristoforov, R., Momany, C. and Phillips, R. S., *J. Mol. Biol.*, 388, 98-108 (2009). Featured on the cover of the April 24<sup>th</sup> issue.
8. "Path-dependent kinetic transition states of protein reactions revealed by bi-directional P- and T-jump experiments", Georges, C., Marchal, S., Torrent, J., Lange, R., Vilanova, M. and Phillips, R. S., *Accts. Chem. Res.*, 42, 778-787 (2009).
9. "A Single Point Mutation Reverses the Enantioference of *Thermoanaerobacter ethanolicus* Secondary Alcohol Dehydrogenase", Musa, M. M., Lott, N., Vieille, C., and Phillips, R. S., *Chem. Cat. Chem.*, 1, 89-93 (2009)..