## 2006–2007 ACS Division of Organic Chemistry Graduate Fellowship Awards

ORGANIC

The Division of Organic Chemistry annually awards fellowships to outstanding third and fourth year graduate students in organic chemistry. The program, now in its 26th year, has awarded over 300 fellowships. The complete list of Fellows is available on the Division of Organic Chemistry web site at http://organicdivision.org/ fellowships\_previous.html.

The fellowship stipend this year is \$24,000, and the Fellows will travel to the 2007 National Organic Symposium to present a poster on their work. Each of the fellowships is sponsored by a prominent company, organization, or individual endowment. Awardees are selected by an independent committee, and evidence of research accomplishments is an important factor in the selection process. The applicants for the fellowship submit a short original essay as part of the competition, and the essays of the award winners are available on the Division of Organic Chemistry web site.

I want to take this opportunity to thank all the companies and individuals who have sponsored fellowships. I would like to extend a special thanks to the Genentech Foundation for sponsoring the first Genentech Foundation Fellow this year. If your company is not currently sponsoring a fellowship, please consider supporting this worthwhile program. I welcome contacts from companies, individuals, and organizations interested in sponsoring annual fellowships or wishing to endow a fellowship. There are always many more deserving applicants than there are fellowships! The Division of Organic Chemistry congratulates the following 14 award winners, gratefully acknowledges the sponsors, and thanks *Organic Letters* for the opportunity to publish these biographical sketches.

Scott Rychnovsky Chair, Division of Organic Chemistry Graduate Fellowship Program University of California, Irvine, October 27, 2006.



Emily P. Balskus Sponsor: Schering-Plough Research Institute Harvard University Advisor: Eric Jacobsen

**Essay - Chiral Diene–Metal Complexes in Asymmetric Catalysis.** Emily Balskus graduated with a B.A. degree from Williams College in Williamstown, MA, in 2002. She spent a year as a Winston Churchill Scholar working with Prof. Steven Ley in Cambridge, UK. She is currently a fourth year graduate student at Harvard working in Prof. Eric Jacobsen's laboratory. She has completed a synthesis of lactacystin and is currently working in collaboration with Prof. Alfred Goldberg of the Harvard Medical School to design and synthesize novel proteasome inhibitors.



Megan L. Bolla Sponsor: Proctor and Gamble Company University of California, Irvine Advisor: Scott Rychnovsky

**Essay - Recent Advances in Asymmetric Organocatalytic Michael Additions to Nitroalkenes.** Megan Bolla graduated with a B.S. in Microbiology from San Diego State University in 2003, where she worked in the laboratory of Prof. Shelli McAlpine investigating the synthesis of combinatorial libraries based on synergimycins. She spent the summer of 2003 doing protein expression in the laboratory of Prof. Bridget Mabbutt at Macquarie University in Sydney, Australia. She is currently working with Prof. Scott Rychnovsky studying Mukaiyama–Michael cascade cyclizations.



Matthew B. Boxer Sponsor: Novartis Pharmaceuticals *University of Chicago* Advisor: Hisashi Yamamoto

**Essay - Stereoselective Multicomponent Reactions: Domino and Sequential Reactions.** Matthew Boxer graduated with a B. S. degree in Chemistry from the University of Vermont. There he worked in the laboratory of Prof. A. P. Krapcho on the synthesis of telomerase inhibitors. In the summer of 2002 he worked at the University of Connecticut on assay techniques to study the activation and reactivity of myoglobin in organic solvents. Matthew is currently working in the laboratory of Prof. H. Yamamoto on aldehyde derived tris(trimethylsilyl)silyl enol ethers for diastereoselective reactions.



Anthony A. Estrada Sponsor: Boehringer Ingelheim University of California, San Diego and Scripps Research Institute Advisor: K. C. Nicolaou

**Essay - N-Hydroxyindoles: A Class of Heterocycles on the Rise.** Anthony Estrada graduated with a B.S. degree from the University of La Verne in La Verne, CA, in 2003, where he worked in the laboratory of Prof. I. Parchamazad. During the summer of 2002, he worked as a research assistant in the laboratory of Prof. F. J. DiSalvo at Cornell University in Ithaca, NY. Anthony is currently working in the laboratory of Prof. K. C. Nicolaou, where he has contributed to the total synthesis of thiostrepton and is currently working on the synthesis of the antibiotic nocathiacin I.



David J. Gorin Sponsor: Merck Research Laboratories University of California, Berkeley Advisor: Dean Toste

**Essay - Intermediacy of Pd(IV) Species in Organic Synthesis: Claims and Investigations.** David Gorin received his A.B. in Chemistry from Harvard in 2003. He has done summer internships in medicinal chemistry at Merck and Co., in thin film metal and dielectrics at Lucent Technologies, and in the department of Genetics and Development at Columbia Medical school. He is currently working in the laboratory of Prof. D. Toste studying goldcatalyzed reactions.



Kami L. Hull Sponsor: Eli Lilly and Company University of Michigan Advisor: Melanie Sanford

**Essay - Regioselective Carbon–Carbon Bond Formation via Pd-Catalyzed Oxidative Coupling Reactions.** Kami Hull received her B.A. in Chemistry, cum laude, from Macalester College in St. Paul, MN, where she worked in the laboratory of Prof. R. Brisbois developing methodology for the preparation of unsymmetrical bisarylethynes. In the summer of 2001, she worked with Prof. P. Grieco on Pdand Pt-mediated supramolecular self-assembly. She is currently working in the laboratory of Prof. M. Sanford on the development and discovery of CH activation processes for C–O, C–F, and C–C bond formations.



Luke D. Lavis Sponsor: Genentech Foundation Fellow University of Wisconsin, Madison Advisor: Ronald T. Raines

**Essay - The Chemistry of Abelson Tyrosine Kinase Inhibitors.** Luke Lavis obtained his B.S. degree summa cum laude from Oregon State University in 2000, where he worked on the synthesis of natural products under the tutelage of Prof. J. D. White. From 2000 to 2003, he spent time in industry, working first at Molecular Probes in Eugene, OR, on fluorescent dye synthesis. He later moved to Molecular Devices in Sunnyvale, CA, where he worked on fluorescent pH indicators for cell-based assays. Luke is currently working in the laboratory of Prof. R. T. Raines on the development of novel fluorescent and fluorogenic molecules.



Jean-Philip G. Lumb Sponsor: Pfizer, Inc. University of California, Berkeley Advisor: Dirk Trauner

**Essay - Recent Advancements in Anodic Oxidation: Applications in Total Synthesis.** Jean-Philip Lumb received his B.S. degree magna cum laude from Cornell University in Ithaca, NY, where he worked in the laboratory of Prof. B. Ganem on polyhydroxylated aziridinylcyclopentanes as glycomimetics and on the synthesis of mololipids. He is currently working under the tutelage of Prof. Dirk Trauner at the University of California, Berkeley, where he has carried out the synthesis of mollugin, microphyllaquinone, and rubicordifolin. He is currently working on biomimetic routes to other naphthoquinones.



Matthew Myers Sponsor: Organic Reactions, Inc. Columbia University Advisor: Colin Nuckolls

**Essay - Conjugated Molecular Belts.** Matthew Myers obtained his B.S. degree in 2003 in Chemical Engineering from the California Institute of Technology, where he worked in the laboratories of Prof. R. Grubbs and Prof. K. Giapis. He has done internships at the IBM Almaden Research Labs in San Jose with Jim Hedrick developing a new class of ring-opening polymerization catalysts for cyclic esters and at Columbia University with Prof. L. Brus where he studied the properties of iron oxide nanoparticles. Currently at Columbia University, he is working on the synthesis and application of curved polyaromatic hydrocarbons under the mentorship of Prof. C. Nuckolls.



Jason M. Nichols Sponsor: Bristol-Myers Squibb University of Maryland, College Park Advisor: Michael Doyle

Essay - Recent Advances in Enzyme Mimicry: Using Non-covalent Interactions to Define Reaction Geometries and Outcomes. Jason Nichols received his B.S. degree from Ithaca College in Ithaca, NY, in 2000. There he worked in the laboratory of Prof. H. Koch on the mechanism of proton transfer reactions from highly halogenated hydrocarbons and on a related computational project with Prof. V. Deturi. He also completed a computational internship in The Netherlands at the University of Wageningen under the tutelage of Prof. H. Zuilhof. From there, Jason worked in industry at Advancis Pharmaceuticals in Gaithersburg, MD, as an analytical chemist and at Merck Pharmaceuticals in West Point, PA, as a medicinal chemist. Currently at the University of Maryland, he is working in the laboratory of Prof. M. Doyle to develop methodologies for redox-active dirhodium complexes and a mechanistic model for their catalysis.



Joshua G. Pierce Sponsor: Wyeth Research University of Pittsburgh Advisor: Peter Wipf

**Essay - Recent Approaches to the Synthesis of Strained Macrocyclic Natural Products.** Joshua Pierce obtained his B.S. degree in Chemistry with a Bioscience option at the University of Pittsburgh studying the synthesis and application of chiral ligands for diethylzinc additions to aldehydes. Currently he is working in the laboratory of Prof. P. Wipf at the University of Pittsburgh on the application of allyl and alkenylzirconocenes in organic synthesis.



Christopher C. Scarborough Sponsor: Nelson J. Leonard Fellowship, Sponsored by Organic Syntheses, Inc. University of Wisconsin, Madison Advisor: Shannon S. Stahl

**Essay - Arene C-H Functionalization via Gold(III) Catalysis.** Chris Scarborough obtained an A.A. degree in Biology in 2001 from Fullerton College, CA, and a B.S. degree from the University of California at Irvine working in the laboratory of Prof. G. A. Weiss on a project with the long-term goal of blocking the interaction between HIV-1 Nef and human CD4 to treat HIV infections. Currently at the University of Wisconsin in Madison, Chris is working with Prof. S. Stahl on the synthesis of axially chiral NHC ligands for use in oxidative asymmetric catalysis.



Joshua D. Sieber Sponsor: Organic Syntheses, Inc. *Boston College* Advisor: J. P. Morken

**Essay - Successes in the Total Synthesis of Garsubellin A.** Joshua Sieber obtained his B.S. degree in Chemistry with high distinction and honors in chemistry at the Pennsylvania State University in 2003. His undergraduate work with Prof. A. Sen was directed towards polymerizations in ionic liquids and the surface modification of novel ionic liquids. Currently at Boston College, Joshua is working in the laboratory of Prof. J. P. Morken on the catalytic enantioselective diboration of allenes and its applications and on metal-catalyzed additions of organoboron reagents to activated enones.



Andrew H. Weiss Sponsor: GlaxoSmithKline *Stanford University* Advisor: Barry M. Trost

**Essay - Chiral Propargylic Alcohols: Accessibility and Applications.** Andrew Weiss received B.S. degrees in both Chemistry and Biochemistry from the University of Michigan where he worked in the laboratory of Prof. E. Vedejs. There he designed and developed methods for oxazole functionalization and coupling, and optimized new methods for the mild deprotection and methylation of aziridines. Currently at Stanford University, working in the laboratory of Prof. B. M. Trost, Andrew is studying asymmetric alkyne additions to carbonyl compounds and plans to utilize the methodology in the synthesis of the natural products adociacetylene B and spirolaxine methyl ether.

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