

## 2005 Alpha Omega Alpha Carolyn L. Kuckein Student Research Fellowships

In 1982, the board of directors of Alpha Omega Alpha established five student research fellowship awards to encourage and support student research. Since then, the awards have grown in number and dollar amount, and the board now allocates up to \$175,000 annually for this project. As many as 50 \$3000 awards are made, and \$500 is available for each recipient's faculty mentor to help meet expenses incurred in support of the project. In 2004, the name of the fellowship program was changed to the Alpha Omega Alpha Carolyn L. Kuckein Student Research Fellowship awards in honor of Carolyn L. Kuckein, AΩA's longtime administrator, who died in January 2004.

Evaluations of the fellowship proposals were made by: Ruth-Marie Fincher, M.D., and Donald E. Wilson, M.D., committee co-chairmen; C. Bruce Alexander, M.D. Michael V. Drake, M.D.; N. Joseph Espat, M.D.; William Frishman, M.D.; Rae-Ellen W. Kavey, M.D.; Douglas S. Paauw, M.D.; Don W. Powell, M.D.; Donald B. Russell, M.D.; Troy L. Thompson II, M.D.; Donald E. Wilson, M.D.

In 2004, Andrew D. Martin of Tulane University School of Medicine was awarded an AΩA Student Research Fellowship. Because of treatment for an ongoing illness, Andrew was unable to begin his research, and he died on November 19, 2004. In his honor, AΩA is funding a second research fellowship at Tulane in Andrew's name, which was awarded to Mr. Landon Trost of the Class of 2007 for his project, "Efficacy of povidone-iodine on intravitreally injected Propionibacterium acnes in the rabbit model."

We extend our sincere sympathy to Andrew's parents on his loss.

### **Arun Aneja, Class of 2007**

University of North Carolina at Chapel Hill School of Medicine  
"Surgical infection prophylaxis with slow release antibiotics"  
Laurence E. Dahners, M.D., mentor  
Amelia F. Drake, M.D., councilor

### **Ali Baher, Class of 2008**

University of California, Los Angeles, David Geffen School of Medicine at UCLA  
"Intracellular calcium dynamics plays a crucial role in genesis of ventricular fibrillation"  
Alan Garfinkel, Ph.D., mentor  
Neil H. Parker, M.D., councilor

### **Heather Bartsch, Class of 2007**

Baylor College of Medicine  
"The effect of matrix metalloproteinase-9 on vascular smooth muscle cell apoptosis"  
Xing Li Wang, M.D., Ph.D., mentor  
Kristin Angelie Kassaw, M.D., councilor

### **Edward W. Baumgartner, Jr., Class of 2007**

University of Texas Medical School at Houston  
"Glucolipototoxicity and cardiac dysfunction in the clinically severe obese"  
Heinrich Taegtmeier, M.D., D.Phil., mentor  
Eugene Boisabuin, M.D., councilor

### **Keith M. Blechman, Class of 2006**

New York University School of Medicine  
"Hypoxia-specific regulation of multipotent adult progenitor cell proliferation, differentiation, and migration"  
Geoffrey C. Gurtner, M.D., mentor  
Steven Abramson, M.D., councilor

### **Megan M. Boysen, Class of 2007**

University of California, Irvine, College of Medicine  
"Sensitivity of FAST scan to detect clinically significant injuries in pediatric blunt abdominal trauma"  
J. Christian Fox, M.D., mentor  
Michael Berman, M.D., and Ranjan Gupta, M.D., councilors

### **Mohamad Raafat Chaaban, Class of 2006**

American University of Beirut  
"The effects of angiotensin II receptor subtype I antagonist and insulin on the uriniferous tubules in diabetic Sprague-Dawley rats"  
Anwar B. Bikhazi, Ph.D., mentor  
Ibrahim Salti, M.D., councilor

### **Patrick Eckert, Class of 2006**

Temple University School of Medicine  
"Airway measurement by high resolution CT and outcomes of lung volume reduction surgery"  
Gerard J. Criner, M.D., mentor  
Amy J. Goldberg, M.D., councilor

### **Robert A. Ellis, Class of 2008**

University of Chicago, Division of the Biological Sciences  
Pritzker School of Medicine  
"Litigation and quality of care in nursing homes: Does medical malpractice deterrence work?"  
Elmer D. Abbo, M.D., J.D., mentor  
Holly H. Humphrey, M.D., councilor

### **Jeremy Etzkorn, Class of 2008**

Washington University School of Medicine  
"Acute effects of HIV protease inhibitors on amino acid transport"  
Paul Hruz, M.D., Ph.D., mentor  
Morton E. Smith, M.D., councilor

### **Clifton David Fuller, Class of 2006**

University of Texas Medical School at San Antonio  
"Clinical and dosimetric analysis of image-guided intensity modulated radiotherapy (IG-IMRT) for biliary tract tumors"  
Charles R. Thomas, Jr., M.D., mentor  
Robert J. Nolan, Jr., M.D., councilor

### **Alexander H. Gelbard, Class of 2006**

Tulane University School of Medicine  
"The role of tumor microenvironmental B7-H1 in tumor regulatory T-cell differentiation"  
Tyler Curiel, M.D., M.P.H., mentor  
Elma I. LeDoux, M.D., councilor

### **Stephen G. George, Class of 2008**

University of Rochester School of Medicine and Dentistry  
"I've fallen, but I can get up: Inhibition of bone morphogenetic protein (BMP) signaling as a potential therapy for osteoarthritis (OA)"  
Randy N. Rosier, M.D., Ph.D., mentor  
Elethea Caldwell, M.D., councilor

### **Sailaja Ghanta, Class of 2008**

Albany Medical College  
"Involvement of BCL11B in repression of IL-2 expression"  
Dorina Avram, Ph.D., mentor  
Neil Lempert, M.D., councilor

### **Ravindra Alok Gupta, Class of 2008**

Ohio State University College of Medicine and Public Health  
"The coordination of services for families with co-occurring child and domestic violence"  
Kelly J. Kelleher, M.D., M.P.H., mentor  
Sheryl Pfeil, M.D., councilor

### **Nieka K. Harris, Class of 2006**

Temple University School of Medicine  
"Exploring racial differences in rheumatoid arthritis: Taking steps now to avoid future disparities in targeted therapy"  
Raul A. DeLa Cadena, M.D., mentor  
Amy J. Goldberg, M.D., councilor

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### **Antje M. Herlyn, Class of 2007**

University of California, San Francisco, School of Medicine  
“Effects of potential anti-migraine drugs in an animal model of trigeminal neuropathic pain”  
Michel Hamon, Ph.D., and Allan Basbaum, Ph.D., mentors  
Steven Z. Pantilat, M.D., councilor

### **Sarah Grim Hostetler, Class of 2008**

Ohio State University College of Medicine and Public Health  
“Eye injury-associated hospitalizations in the United States, 2000–2002”  
Huiyun Xiang, M.D., M.P.H., Ph.D., mentor  
Sheryl Pfeil, M.D., councilor

### **Michael Steven Hughes, Class of 2006**

University of Missouri-Columbia School of Medicine  
“Wear characteristics of ceramic femoral head implants sustaining varying degrees of surface damage in comparison to undamaged controls”  
B. Sonny Bal, M.D., M.B.A., mentor  
Thomas J. Selva, M.D., councilor

### **Jeffrey T. Jacob, Class of 2007**

Mayo Medical School AQA Association  
“B7-H1, an inducer of T-cell apoptosis, is expressed more abundantly in high grade gliomas compared to lower grade tumors”  
Joon H. Uhm, M.D., mentor  
Judith Salmon Kaur, M.D., councilor

### **Sarah Kemble, Class of 2006**

University of California, San Francisco, School of Medicine  
“Antimalarial treatment practices for management of fever in children in urban Kampala”  
Sarah Staedke, M.D., mentor  
Steven Z. Pantilat, M.D., councilor

### **Arman Kilic, Class of 2008**

University of Pittsburgh School of Medicine  
“Characterization of the inflammatory and neurodegenerative basis of achalasia”  
James D. Luketich, M.D., mentor  
Carl R. Fuhrman, M.D., councilor

### **Katherine Kintner, Class of 2008**

University of Texas Medical School at Galveston  
“Characterization of a bladder detrusor function, external urethral function and fecal continence in a rat model of dorsal root ganglia injury”  
Claire E. Hulsebosch, Ph.D., mentor  
Don W. Powell, M.D., councilor

### **Clayton David Knox, Class of 2007**

Vanderbilt University School of Medicine  
“Therapeutic effects of IP<sub>3</sub>-receptor inhibitors in liver ischemia reperfusion injury”  
Ravi S. Chari, M.D., mentor  
John A. Zic, M.D., councilor

### **Paul B. Lewis, Class of 2007**

Rush Medical College of Rush University  
“Quantitative analysis of neuronal plasticity correlated with clinical pathology of the long head of the biceps brachii tendon”  
Brian J. Cole, M.D., mentor  
Richard I. Abrams, M.D., councilor

### **Nikki A. Liburd, Class of 2008**

University of Texas Medical Branch at Galveston  
“Development of high affinity miniproteins against HIV-1gp120 variable loop V<sub>3</sub>”  
William A. O’Brien, M.D., M.S., and Monique R. Ferguson, Ph.D., mentors  
Don W. Powell, M.D., councilor

### **Conrad Maciejewski, Class of 2007**

University of Alberta Faculty of Medicine and Dentistry  
“An investigation of the thermal properties of bone using Nd-YAG lasers”  
Ronald B. Moore, M.D., Ph.D., mentor  
Adrian B. Jones, M.D., councilor

### **Warren Manyara, Class of 2008**

University of Minnesota Medical School—Twin Cities  
“Investigation of genetic basis for predisposition to strokes in SCD patients by analyzing EGR-1 and NFκB expression in normal versus SCD endothelial cells:”  
Robert P. Hebbel, M.D., mentor  
James H. House, M.D., councilor

### **Owen Mogabgab, Class of 2006**

University of Texas Medical School at Houston  
“The therapeutic potential of phosphodiesterase 4a isoform inhibition in the prevention of neuropathic pain in spinal cord contusion injured rats”  
Raymond J. Grill, Ph.D., mentor  
Eugene V. Boisubain, M.D., councilor

### **Christina S. Moon, Class of 2008**

Dartmouth Medical School  
“Noninvasive identification of limbal epithelial stem cells in keratinocyte medium measured by autofluorescence spectroscopy”  
Roy S. Chuck, M.D., Ph.D., mentor  
David W. Nierenberg, M.D., councilor

### **Sara E. Morgan, Class of 2008**

Mercer University School of Medicine  
“Early identification and intervention in persons at high risk for diabetes mellitus using a church based model”  
John M. Boltri, M.D., mentor  
Richard J. Ackermann, M.D., councilor

### **Sarah Nakib, Class of 2007**

University of Minnesota Medical School—Twin Cities  
“Quantitation of perifollicular and epidermal nerve fibers in immunostained C<sub>57</sub>BL/6J mouse dorsal skin biopsy specimens following anagen hair induction by neuroimmunophilin ligands FK506, GPI 1046, and GPI 1511”  
Maria Hordinsky, M.D., and Marna E. Ericson, Ph.D., mentors  
James H. House, M.D., councilor

### **Andrew J. Paris, Class of 2008**

Mount Sinai School of Medicine of New York University  
“Secretion of alternative splice forms of Krüppel-like Factor 6 (KLF6) tumor suppressor”  
Scott L. Friedman, M.D., mentor  
Lisa Bensinger, M.D., and Suzanne Rose, M.D., M.S.Ed., councilors

### **Nishant Patel, Class of 2008**

Johns Hopkins University School of Medicine  
“Results of aortic valve-sparing root replacement: Experience with reimplantation using the DePaulis Valsalva graft”  
William A. Baumgartner, M.D., mentor  
Karen M. Horton, M.D., councilor

### **Ramin Ram, Class of 2006**

Keck School of Medicine of the University of Southern California  
“Application of protein-based therapy for dystrophic epidermolysis bullosa (DEB): Intradermal injection of recombinant human type VII collagen and demonstration of reversion of the DEB phenotype in DEB animal models”  
Mei Chen, Ph.D., mentor  
Darin D. Signorelli, M.D., councilor

### **Ranjith Ramasamy, Class of 2007**

UMDNJ-Robert Wood Johnson Medical School  
“To determine if breast feeding during infancy protects against bedwetting during childhood”  
Joseph G. Barone, M.D., mentor  
Siobhan Corbett, M.D., councilor

### **Brett David Reichwage, Class of 2006**

Indiana University School of Medicine  
“Quantification of bleomycin induced pulmonary fibrosis in the treatment of nonseminomatous germ cell cancers using computer mediated imaging analysis”  
Kenneth A. Kesler, M.D., mentor  
Aslam R. Siddiqui, M.D., councilor

### **Ami E. Rice, Class of 2008**

Indiana University School of Medicine  
“Signal transduction of oxidized low density lipoprotein (OX-LDL) induced arterial muscle contraction”  
C. Subah Packer, Ph.D., mentor  
Aslam R. Siddiqui, M.D., councilor

### **Pauline Sacks, Class of 2007**

Louisiana State University School of Medicine in New Orleans  
“Stress disorders in sexual assault victims evaluated in the emergency department: Prevalence, risk factors, and multidisciplinary intervention strategies”  
Trevor J. Mills, M.D., M.P.H., mentor  
Peter M.C. DeBlieux, M.D., councilor

### **Caren P. Schaecher, Class of 2006**

Southern Illinois University School of Medicine  
“Altered expression of HuR, an mRNA stabilizing protein, mediates aberrant placenta growth factor (PlGF) expression in preeclampsia?”  
Donald S. Torry, Ph.D., mentor  
Andrew J. Varney, M.D., councilor

### **Falak Shah, Class of 2008**

Rush Medical College of Rush University  
“Ultrasound contrast-enhanced imaging of the atherosclerotic carotid plaque neovascularization: A preliminary surgical validation for a programmatic developmental plan”  
Steven Feinstein, M.D., mentor  
Richard I. Abrams, M.D., councilor

### **Veronica Sikka, M.H.A., M.P.H., Class of 2009**

Virginia Commonwealth University School of Medicine  
“Automatic external cardioverter-defibrillators (AED): Effectiveness in treating emergency room patients in cardiac arrest”  
Joseph P. Ornato, M.D., mentor  
Michael P. Edmond, M.D., M.P.H., M.P.A., councilor

### **Raja Sivamani, Class of 2008**

University of California, Davis, School of Medicine  
“Do β-adrenergic agonists/antagonists alter the rate of burn wound healing”  
David G. Greenhalgh, M.D., mentor  
Rivkah Isseroff, M.D., mentor  
Faith T. Fitzgerald, M.D., councilor

### **Matthew S. Smith, Class of 2007**

West Virginia University School of Medicine  
“The educational effectiveness of bone density measurements in osteoporosis education”  
Gregory A. Doyle, M.D., mentor  
Melanie A. Fisher, M.D., M.Sc., councilor

### **Alexandra Snyder, Class of 2008**

Mount Sinai School of Medicine of New York University  
“A potential role for Vpr in podocyte differentiation in HIV-associated nephropathy”  
Mary E. Klotman, M.D., mentor  
Lisa Bensinger, M.D., and Suzanne Rose, M.D., M.S.Ed., councilors

### **Nancy Sorokac, Class of 2007**

Miller School of Medicine at the University of Miami  
“Isolating dysfunctional from dead retinal ganglion cells in glaucomatous neuropathy”  
Vittorio Porciatti, D.Sc., mentor  
Alex J. Mechaber, M.D., councilor

### **Tiffany Sun, Class of 2008**

University of Texas Southwestern Medical Center at Dallas Southwestern Medical School  
“A prospective, randomized, double-blinded, placebo-controlled trial to evaluate the analgesic benefits of COX-2 inhibitors in obese patients undergoing major laparoscopic surgical procedures”  
Paul F. White, Ph.D., M.D., mentor  
Kevin W. Klein, M.D., councilor

### **Christopher Henry Swan, Class of 2007**

University of Pittsburgh School of Medicine  
“SERCA2a gene therapy for heart failure: A novel approach to a challenging problem”  
Barry London, M.D., Ph.D., mentor  
Carl Fuhrman, M.D., councilor

### **Landon Trost, Class of 2007**

Tulane University School of Medicine  
“Efficacy of povidone-iodine on intravitreally injected propionibacterium acnes in the rabbit model”  
Gholam A. Peyman, M.D., mentor  
Elma I. LeDoux, M.D., councilor

### **Jonathan Wanderer, Class of 2008**

University of Pennsylvania School of Medicine  
“Determining the ultrastructure and composition of inclusions in the R6/2 model of Huntington’s disease”  
Jenny Morton, M.D., mentor  
Jon B. Morris, M.D., councilor

### **Stefanie Woolridge, Class of 2009**

Case Western Reserve University School of Medicine  
“Quality Assessment of tuberculosis microscopy laboratories in the Kampala zone”  
Christopher Whalen, M.D., M.S., mentor  
Jerome Liebman, M.D., councilor

### **Judy Wu, Class of 2008**

Drexel University College of Medicine  
“To identify targets and/or regulators of BRCA1 E3 ligase activity by subtractive proteomic analysis using 2D gel analysis and tandem affinity purification”  
Yong Wan, Ph.D., mentor  
Allan R. Tunkel, M.D., Ph.D., councilor