

2013 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 to more than fifty each year.

The fellowship emphasizes a student-designed and -initiated project with an academic mentor. Recipients of the fellowship tell us that the awards have helped them to learn about the joys of scientific and scholarly discovery, and increase their critical understanding of scholarship and research in health care and science. Many recipients of the fellowship have followed up their work as student-researchers to become physician-scientists.

The student receives a \$5000 award, with \$1000 available for travel to a national meeting to present the research results. 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, AOA's longtime administrator, who died in January 2004.

Evaluations of the fellowship proposals were made by reviewers: C. Bruce Alexander, MD; Thomas T. Andersen, PhD; Robert G. Atnip, MD; James J. Barbee, MD; Jeremiah Barondess, MD; Syamal K. Bhattacharya, PhD, CLD; Sylvia Brice, MD; Paul A. Bunn, MD; Tim Byers, MD, MPH; R. William Caldwell, PhD; Stephen Y. Chan, MD; Lynn M. Cleary, MD; Philip Cohen, MD; N. Joseph Espat, MD; Ruth-Marie Fincher, MD; Daniel Foster, MD; James G. Gamble, MD; Richard F. Gillum, MD, MS; Hunter Groninger, MD; Richard B. Gunderman, MD, PhD; Diane Harper, MD, MPH, MS; Eve J. Higginbotham, SM, MD; Joseph A. Hill, MD, PhD; Pascal Imperato, MD, MPH&TM; Marc G. Jeschke, MD, PhD; William M. Lee, MD; Gerald Morris, MD, Lesley Motheral, MD; Douglas S. Paauw, MD; Thoru Pederson, PhD; Suzann Pershing, MD; Sheryl Pfeil, MD; Noah S. Philip, MD; Steven P. Ringel, MD; Alan G. Robinson, MD; Sarah M. Roddy, MD; William M. Rogoway, MD; Shashikumar K. Salgar, PhD; Joseph W. Stubbs, MD; John Tooker, MD, MBA; Kenneth L. Tyler, MD; Alan G. Wasserman, MD; Gerald Weissmann, MD; John A. Zic, MD.

The recipients of the 2013 fellowships are:

Adil Akthar

Class of 2013, University of Missouri—Kansas City School of Medicine

Assessing Accuracy in Staging in Stage I Non Small Cell Lung Carcinoma (NSCLC): Implications for the Stereotactic Body Radiotherapy Patient

Mentor Renuka Malik, MD

Councilor John Foxworth, PharmD

Ali Alam

Class of 2016, Texas A&M Health Science Center College of Medicine

The Role of Glioblastoma-derived Exosomes in Inducing the Tumor-Supportive M2 Macrophage

Mentor Amy Heimberger, MD

Councilor Mark L. Montgomery, MD

Christie Atchison

Class of 2016, USF Health Morsani College of Medicine

Risk factors for in-hospital venous thromboembolism in children

Mentor Neil Goldenberg, MD, PhD

Councilor Patricia J. Emmanuel, MD

David Ballard

Class of 2015, Louisiana State University School of Medicine in Shreveport

Drainage Catheter Design: From Whimsical to Research Proven

Mentor Horacio D'Agostino, MD

Councilor Jeffrey German, MD

Maureen Beederman

Class of 2014, University of Chicago Division of the Biological Sciences The Pritzker School of Medicine

Further Defining the Role of the RANK/RANKL/OPG Axis in Cranial Suture Biology and Craniostosis

Mentors Russell Reid, MD; T.-C. He, MD

Councilor Adam Cifu, MD

Thomas Bemenderfer

Class of 2014, Indiana University School of Medicine

Novel Osseous Repair with Second-Generation Thrombopoietic Agents

Mentor Melissa Kacena, PhD

Councilor Richard B. Gunderman, MD, PhD

Danielle Bitterman

Class of 2016, New York University School of Medicine

Epigenetic reprogramming to restore chemosensitivity in cells under-expressing TBLR1 protein: A potential therapeutic target for refractory childhood acute lymphoblastic leukemia

Mentor William L. Carroll, MD

Councilor Steven Abramson, MD

Hillary Braun

Class of 2016, University of California, San Francisco, School of Medicine

Perceptions of Female Surgeons within Academic Medicine

Mentors Nancy L. Ascher, MD, PhD; Patricia O'Sullivan, MS, EdD

Councilor Sue Carlisle, MD

Jorien Breur

Class of 2014, Albert Einstein College of Medicine of Yeshiva University

Evaluation of the feasibility of utilizing the Quantiferon-TB Gold test at an HIV comprehensive care clinic in La Romana, Dominican Republic

Mentors Philip LaRussa, MD; Magdalena Sobieszczyk, MD

Councilor Charles Nordin, MD

Margaret Brown

Class of 2016, Medical University of South Carolina College of Medicine
Activity of HIF-1 α and MMP-2 in Optic Nerve Head Astrocytes during Glaucoma-Related Hypoxic Injury
Mentor Shahid Husain, PhD
Councilor Christopher G. Pelic, MD

Virginia Bush

Class of 2014, University of Louisville School of Medicine
Study of cutaneous nerve density variation at key superficial anatomic landmarks
Mentor Bradon Wilhelmi, MD
Councilor Daniel Danzl, MD

Nicholas Caffes

Class of 2016, University of Maryland School of Medicine
Heme-induced chemokine expression and neutrophil recruitment in intracerebral hemorrhage
Mentor J. Marc Simard, MD, PhD
Councilors Yvette Rooks, MD; Donna Parker, MD; Gary D. Plotnick, MD

Janet Choi

Class of 2015, Johns Hopkins University School of Medicine
Long-term use of cochlear implant in older adults: Results from a large consecutive case series
Mentor Frank Lin, MD, PhD
Councilor Charles W. Flexner, MD

Joshua Cornman-Homonoff

Class of 2014, Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania
Chromatin occupancy of Sirtuin 7 in human adipose tissue aging
Mentor Ivona Percec, MD, PhD
Councilor Jon B. Morris, MD

Max Davis

Class of 2016, University of Michigan Medical School
Targeted inactivation of MMP-9 in connective tissue fibroblasts to improve the regeneration of rotator cuff tears
Mentor Christopher L. Mendias, PhD
Councilor Cyril M. Grum, MD

Jaden Evans

Class of 2014, Texas Tech University Health Sciences Center School of Medicine
Stereotactic Body Radiation Therapy Cardiac Isodose Distributions Associated with Focal ¹⁸F-Fluorodeoxyglucose Positron Emission Tomography Uptake
Mentor James Welsh, MD
Councilor Lesley Motheral, MD

Charlene Fares

Class of 2015, Keck School of Medicine of the University of Southern California
The Role of DNA Methylation in Tumor Maintenance
Mentor Peter Laird, PhD
Councilor Paul Holtom, MD

Ryan Gillihan

Class of 2016, University of Kansas School of Medicine
Exploring the Impact of Chronic Kidney Disease on Circulating Osteoblast Progenitor Cells
Mentor Jason Stubbs, MD
Councilor Steven Simpson, MD

Nancy Glober

Class of 2014, The University of Texas School of Medicine at San Antonio
Aquaporin 4 Expression in Astrocytes Subjected to an In Vitro Model for Ischemia
Mentor Murat Digicaylioglu, MD, PhD
Councilor Erin Nelson, MD

Shubhi Goyal

Class of 2016, University of Alabama School of Medicine
Characterizing Symptoms and Suffering at the End-of-Life in Children with Neurological Conditions
Mentor Christina K. Ullrich, MD, MPH
Councilor Stephanie D. Reilly, MD

Lisa Hisaw

Class of 2014, University of California, Irvine, School of Medicine
Interaction and Regulation of Ultraviolet B (UVB)-induced Cytokines in Human Keratinocytes
Mentor Jenny Kim, MD, PhD
Councilors Michael L. Berman, MD; Ranjan Gupta, MD

Yun Jenny Jiang

Class of 2016, University of Hawaii, John A. Burns School of Medicine
Predictors of intraparenchymal hematoma enlargement after moderate-to-severe TBI
Mentor Matthew Koenig, MD
Councilor Jill Omori, MD

Karen Kagma

Class of 2016, Medical College of Georgia at Georgia Regents University
The Regulation of Aquaporin 3 Expression
Mentor Wendy Bollag, PhD
Councilor Clarence Joe, DMD, MD, FACR

Daniel Katz

Class of 2016, Northwestern University The Feinberg School of Medicine
Phenomapping: Hierarchical Cluster Analysis of Phenotypic Data for the Categorization of Systemic Hypertension
Mentor Sanjiv J. Shah, MD
Councilor John P. Flaherty, MD

Kartik Kesavabhotla

Class of 2014, Weill Cornell Medical College
Intra-arterial chemotherapy with MR-guided ultrasound disruption of the blood-brain-barrier to target the glioma stem cell niche
Mentor John A. Boockvar, MD
Councilor O. Wayne Isom, MD

Fakhra Khalid

Class of 2016, University of California, Davis, School of Medicine
Wound Repair Optimization Using Stress Modulation of Mesenchymal Stem Cells
Mentor Rivkah Isseroff, MD
Councilor Regina Gandour-Edwards, MD

Young Lee

Class of 2015, Vanderbilt University School of Medicine
Preoperative Predictors of Complications, Hospital Length of Stay, and Total Cost of Care in Cerebrovascular Neurosurgery
Mentor Robert J. Singer, MD
Councilor John A. Zic, MD

Robert Lystrup

Class of 2015, Uniformed Services University of the Health Sciences
F. Edward Hébert School of Medicine
Student Fitness: Pedometry as Incentive?
Mentor Mark B. Stephens, MD
Councilor Robert E. Goldstein, MD

Lauren Mamer

Class of 2015, Ohio State University College of Medicine
Glutamate Vesicle Filling and Release Probability
Mentor Christian Rosenmund
Councilor Sheryl Pfeil, MD

Heather Melville

Class of 2015, Georgetown University School of Medicine
Identifying molecular mechanisms of resistance to anti-EGFR therapies through comprehensive phosphoprotein analysis
Mentor Michael Pishvaian, MD, PhD
Michael Adams MD, FACP

Devin Patel

Class of 2014, George Washington University School of Medicine and Health Sciences
Mapping Back and Lower Extremity Pain Relief with Percutaneous Spinal Cord Stimulation Placement
Mentor Mehul Desai, MD, MPH
Councilor Alan G. Wasserman, MD

Ronak Patel

Class of 2015, University of Texas Medical Branch School of Medicine
The Function of Argininosuccinate Lyase in Osteoarthritis
Mentor Brendan H. Lee, MD, PhD
Councilor Lisa R. Farmer, MD

Shailee Patel

Class of 2014, University of Miami Leonard M. Miller School of Medicine
Predictive Biomarkers for Healing Outcome of Diabetic Foot Ulcers
Mentor Marjana Tomic-Canic, PhD
Councilor Alex J. Mechaber, MD, FACP

Christopher Perrone

Class of 2014, University of Massachusetts Medical School
The role of multiple sclerosis as a risk factor for osteoporosis
Mentor Carolina Ionete, MD, PhD
Councilor David A. Drachman, MD

Marc Polacco

Class of 2014, University of Iowa Roy J. and Lucille A. Carver College of Medicine
The topological characteristics of micropatterned polymers determine ability to guide spiral ganglion neurite and Schwann cell growth
Mentor Marlan Hansen, MD
Councilor Christopher Cooper, MD

Elisa Quiroz

Class of 2016, Ponce School of Medicine and Health Sciences
Role of Alternative Lengthening of Telomeres in Lymphoma
Mentor Rodrigo T. Calado, MD, PhD
Councilor Gabriel A. Martinez, MD

Kelsey Ripp

Class of 2016, The Warren Alpert Medical School of Brown University
The effect of Praziquantel treatment of schistosoma-infected pregnant women on maternal anemia risk and infant iron endowment
Mentor Jennifer Friedman, MD, MPH, PhD
Councilor Charlotte M. Boney, MD

Lindsey Roeker

Class of 2014, Mayo Medical School
Reconsidering the Definition of Plasma Cell Leukemia
Mentor S. Vincent Rajkumar, MD
Association chairs Carola Arndt, MD; Judith Kaur, MD; Barbara Westmoreland, MD

Ashwin Shinde

Class of 2015, Drexel University College of Medicine
Amelioration of Ionizing Irradiation Damage to the Oral Cavity/Oropharynx of Radiosensitive Fanconi Anemia FancD2-/- Mice by GS-Nitroxide JP4-039
Mentor Joel Greenberger, MD Michael Epperly, PhD
Councilor Allan R. Tunkel, MD, PhD, MACP

Sarah Siu

Class of 2016, State University of New York Downstate Medical Center College of Medicine
Loss of Laminin $\gamma 3$ Chain Affects Rates of Corneal Epithelial Cell Proliferation, Differentiation and Apoptosis
Mentor William Brunken, PhD
Councilor Douglas R. Lazzaro, MD, FACS, FFAO

John Squiers

Class of 2016, University of Texas Southwestern Medical Center at Dallas Southwestern Medical School
Predicting Operative Mortality in Endocarditis
Mentor J. Michael DiMaio, MD
Councilor Kevin Klein, MD

Leland Stillman

Class of 2014, University of Virginia School of Medicine
Allergic Disease in Neighbors of Concentrated Animal Feeding Operations
Mentor Larry Borish, MD
Councilor Mark J. Mendelsohn, MD

Joshua Sumislawski

Class of 2015, University of Tennessee Health Science Center College of Medicine
Critical Administrative Thresholds: Redefining Massive Transfusion in Trauma
Mentors Stephanie A. Savage, MD; Bel L. Zarzaur, MD, MPH
Councilor Owen Phillips, MD

Sam Sun

Class of 2016, Washington University in St. Louis School of Medicine
Risk factors for the recurrence of atypical meningiomas
Mentor Albert Kim, MD, PhD
Councilor Morton E. Smith, MD

Daniel Talmasov

Class of 2015, Stony Brook University School of Medicine
Study of the radio-protective role of Kruppel-like Factor 4 following gamma-radiation induced gut injury
Mentors Vincent Yang, MD, PhD; Amr Ghaleb, PhD
Councilor Jack Fuhrer, MD

Corey Walker

Class of 2014, University of Rochester School of Medicine and Dentistry
Outcomes and Risk Factors of Pediatric Shunts at a Single Institution
Mentor Howard Silberstein, MD
Councilor Heidi B. Schwarz, MD

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Deva Wells

Class of 2015, University of Washington School of Medicine
The Impact of Socioeconomic Status on Survival from Out-of-Hospital Cardiac Arrest
Mentor Thomas Rea, MD, MPH
Councilor Douglas S. Paauw, MD

Jacob Wilson

Class of 2016, Medical College of Wisconsin
Effects of MK-2206, a novel AKT inhibitor, on cholangiocarcinoma cells
Mentor T. Clark Gamblin, MD, MS
Councilor James L. Sebastian, MD

Stephen Xue

Class of 2016, Louisiana State University School of Medicine in New Orleans
Reversal of nucleoside reverse transcriptase inhibitor-induced endothelial dysfunction by Coenzyme Q
Mentor Tammy Dugas, PhD
Councilor Peter M. C. DeBlieux, MD

Peter H. Yang

Class of 2016, Columbia University College of Physicians and Surgeons
Prediction of Arteriovenous Malformation (AVM) Recurrences in Pediatric Populations Using Characteristics of Vessel Compactness and Presence of Deep Venous Drainage
Mentor Richard C. E. Anderson, MD
Councilor John C.M. Brust, MD

Huayi Zhang

Class of 2014, University of Illinois College of Medicine
Role of T Lymphocytes in Atopic Dermatitis
Mentor Lawrence S. Chan, MD
Councilors Melvin Lopata, MD; Errol Baptist, MD

Rheanne Zimmerman

Class of 2016, University of Minnesota Medical School
Gene Network Analysis in Childhood Cancer
Mentor Logan Spector, PhD
Councilor Charles Billington, MD

Samantha Zwiebel

Class of 2015, Case Western Reserve University School of Medicine
Creation of a Biocompatible Scaffold Utilizing Growth Factors to Correct for Critical Size Defect in Rat Calvaria
Mentors Arun Gosain, MD; Davood Varghai, MD
Jeffrey L. Ponsky, MD

2013 Helen H. Glaser Student Essay Awards

The thirty-first annual Alpha Omega Alpha Helen H. Glaser Student Essay Awards were made in April. This year's winners are:

First prize: Catherine Spaulding of the Class of 2014 at Georgetown University School of Medicine for her essay, "Dennett's Echo."

Second prize: Christopher Salib of the Class of 2016 at Meharry Medical College for his essay, "Words Beyond Death: Literary Form and Its Intentions in Paul Zweig's Last Works."

Third prize, tie: Stanley Gutionov of the Class of 2015 at Northwestern University The Feinberg School of Medicine for his essay, "'Vital Amines,' Purple Smoke: A Select History of Vitamins and Minerals" and YunZu Wang of the Class of 2013 at Washington University in St. Louis School of Medicine for her essay, "Yes, I Can: Learning to Cope with Death."

Honorable mentions: Peter Daniel of the Class of 2014 at the Medical College of Georgia at Georgia Regents University for his essay, "Wet Dust"; Felipe Fernandez del Castillo of the University of Massachusetts Medical School for his essay, "Healing, Harming, and Hippocrates: Physician-Assisted Suicide in Roman Medicine"; and Matthew Molloy of the Class of 2014 at Johns Hopkins University School of Medicine for his essay, "Food Fight."

Winning essays will be published in future issues of *The Pharos*.

2013 *Pharos* Poetry Competition winners

The *Pharos* Poetry Competition awards were made in April. This year's winners are:

First prize: Corinna Iacopetti of the Class of 2014 at Case Western Reserve University School of Medicine for her poem, "Initiation."

Second prize: Kate Linetzky of the Class of 2015 at Georgetown University School of Medicine for her poem, "what i said."

Third prize: Anna Vollstedt of the Class of 2015 at the University of Iowa Roy J. and Lucille A. Carver College of Medicine for her poem, "Transcription."

Honorable mention: Alexander Fortenko of the Class of 2015 at the George Washington University School of Medicine and Health Sciences for his poem, "Negatives."

Winning poems will be published in issues of *The Pharos*.