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, AΩA's longtime administrator, who died in January 2004.

Evaluations of the fellowship proposals were made by the following reviewers: C. Bruce Alexander, MD; Thomas T. Andersen, PhD; Carol A. Aschenbrener, MD; Robert G. Atnip, MD; Jeremiah Barondess, MD; Syamal K. Bhattacharya, PhD, CLD; Paul A. Bunn, MD; Tim Byers, MD, MPH; Ken Byrd, MD; Julio A. Chalela, MD; Stephen Y. Chan, MD; Lynn M. Cleary, MD; Benjamin Clyburn, MD; Graciela De Jesus, MD; Daniel Foster, MD; Bruce M. Frankel, MD; Doug Fredrick, MD; Gillian Galbraith, MD; Boyd Gillespie, MD; Richard F. Gillum, MD, MS; Richard B. Gunderman, MD, PhD; Diane Harper, MD, MPH, MS; Joseph A. Hill, MD, PhD; Pascal Imperato, MD, MPH&TM; Marc G. Jeschke, MD, PhD, FACS; J. Michael Kilby, MD; Paul R. Lambert, MD; Patricia G. McBurney, MD, MSCR; Mark J. Mendelsohn, MD; Lesley Motheral, MD; Gokhan M. Mutlu, MD; Douglas S. Paauw, MD; Ronald G. Pearl, MD, PhD; Thoru Pederson, PhD; Suzann Pershing, MD; Sheryl Pfeil, MD; Noah S. Philip, MD; Paul B. Pritchard, MD; Steven P. Ringel, MD; Alan G. Robinson, MD; William M. Rogoway, MD; Shashikumar Salgar, PhD; Wiley Souba, MD, ScD, MBA; Joseph W. Stubbs, MD, MACP; Bruce H. Thiers, MD; John Tooker, MD, MBA, MACP; Kenneth L. Tyler, MD; Gabriel T. Virella, MD, PhD; Alan G. Wasserman, MD; Gerald Weissmann, MD; John A. Zic, MD.

The recipients of the 2014 fellowships are:

Eric Anderson
Class of 2016, Stanford University School of Medicine
Pilot trial to evaluate the effect of vitamin D on melanocyte biomarkers
Mentor Jean Tang, MD, PhD
Association Chair Charles G. Prober, MD

Joshua Bakhsheshian
Class of 2015, Chicago Medical School at Rosalind Franklin University of Medicine & Science
Using wireless technology to assess objective measures of functional recovery in patients undergoing major elective spine surgery
Mentor Zachary A. Smith, MD
Councilor Michael J. Zdon, MD

Devang Bhoiwala
Class of 2016, Albany Medical College
The influence of systemic iron overload on retinal iron overload and retinal degeneration
Mentor Joshua Dunaief, MD, PhD
Councilor Neil Lempert, MD

The recipients of the 2014 fellowships are:

Mizanur Ahmed
Class of 2017, State University of New York Downstate Medical Center College of Medicine
VpreB Expression in Mature B Cells Alters B Cell Development Leading to Autoantibody Production
Mentor Christopher Roman, PhD
Councilor Douglas R. Lazzaro, MD

Bianca Bromberger
Class of 2015, Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania
Living Donor Utilization Among Kidney Transplant Recipients Sensitized by Pregnancy
Mentor Paige M. Porrett, MD
Councilor Jon B. Morris, MD

Patricia Carr Reese
Class of 2017, George Washington University School of Medicine and Health Sciences
Schistosoma haematobium and urinary tract infections among women in rural Malawi
Mentor Abigail Norris Turner, PhD
Councilor Alan G. Wasserman, MD
Gaurav Chattree  
Class of 2017, University of Texas Southwestern Medical Center at Dallas Southwestern Medical School  
Dissecting synaptic changes that underlie the temporal control of vocal behavior  
Mentor Todd Roberts, PhD  
Counselor Kevin Klein, MD  
Megan Chock  
Class of 2015, Mayo Medical School  
Health care use by suicide decedents compared with members of the general population  
Mentor J. Michael Bostwick, MD  
Councilor Kevin Klein, MD  
Abigail Cline  
Class of 2017, Medical College of Georgia at Georgia Regents University  
DNA Damage and Apoptosis in Epidermal-Specific Protein Kinase D1 Knockout Mouse Skin upon Ultraviolet B Irradiation  
Mentor Wendy Bollag, PhD  
Councilor Clarence Joe, DMD, MD, FACR  
Sahitya Denduluri  
Class of 2016, University of Chicago Division of the Biological Sciences The Pritzker School of Medicine  
Modulating insulin-like growth factor 1 receptor (IGF-1R) signaling as a potential treatment for osteosarcoma  
Mentor Hue Luu, MD  
Councilor Adam Cifu, MD  
Sahitiya Denduluri  
Class of 2016, University of Chicago Division of the Biological Sciences The Pritzker School of Medicine  
Modulating insulin-like growth factor 1 receptor (IGF-1R) signaling as a potential treatment for osteosarcoma  
Mentor Hue Luu, MD  
Councilor Adam Cifu, MD  
Rami Diab  
Class of 2015, American University of Beirut School of Medicine  
Role of hsa-miR-4747-5p and hsa-miR-4313 in the regulation of CYP2B1 and CYP4F4 activity in diabetic nephropathy-induced kidney injury: An in-vivo and in-vitro model of Type I Diabetes  
Mentors Assad E. Eid, PhD, and Hanna Abboud, MD  
Councilor Ibrahim S. Salti, MD  
Peter Dorschner  
Class of 2016, Northwestern University The Feinberg School of Medicine  
A Retrospective Study of Early Post-Transplant Nosocomial Infections  
Mentor Michael J. Ison, MD  
Councilor John P. Flaherty, MD  
Benjamin Farnia  
Class of 2015, Baylor College of Medicine  
Assessing predictive factors of intratumoral hemorrhage following stereotactic radiosurgery for metastatic intracerebral tumors  
Mentor Paul Brown, MD  
Councilor Kristin Angeli Kassaw, MD  
Jesse Fitzpatrick  
Class of 2015, Duke University School of Medicine  
Can MRI inform return-to-play-guidelines in brain injury: An empiric study to identify predictive MRI markers in a mouse model of repeated traumatic brain injury  
Mentor Christopher Lascola, MD  
Councilor Edward Buckley, MD  
Justin Gibson  
Class of 2017, University of Cincinnati College of Medicine  
Role of adenosine signaling in protection against secondary brain injury  
Mentor Jed Hartings, PhD  
Councilor Robert W. Neel, MD  
Surbhi Gupta  
Class of 2017 Michigan State University College of Human Medicine  
Hemocompatibility comparison of medical grade polymers incorporated with nitric oxide donors  
Mentor Hitesh Handa, PhD  
Councilor Gary Ferenich, MD, MS  
Austin Ha  
Class of 2016, The Warren Alpert Medical School of Brown University  
Nr2f2 and Other Gene Expression Profiles of Responders vs. Non-responders to Hyperbaric Oxygen Therapy  
Mentor Paul Y. Liu, MD  
Councilor Charlotte M. Boney, MD  
Byounglun Han  
Class of 2015, New York University School of Medicine  
Use of an automated eye tracking system for early detection of hydrocephalus  
Mentor Uzma Samadani, MD, PhD  
Councilor Linda Tewksbury, MD  
Lydia Hartsell  
Class of 2015, University of Minnesota Medical School  
Pilot study assessing the prevalence of Schistosomiasis haematobium among Tanzanian obstetric fistula patients and potential impact of infection on fistula characteristics and surgical outcome  
Mentor Kristin Chrouser, MD, MPH  
Councilor Charles Billington, MD  
Jason Huang  
Class of 2017, University of Illinois College of Medicine  
Regulation of PAI-1 by miRNA-17–92 and Its Role in Pulmonary Arterial Hypertension  
Mentors J. Usha Raj, MD, and Guofei Zhou, PhD  
Councilors Melvin Lopata, MD, and Jessica Ryan Hanks, MD  
Anna Huguenard  
Class of 2016, Emory University School of Medicine  
Deep brain stimulation as a novel treatment following traumatic brain injury: An immunohistochemical analysis for promotion of neurogenesis and neuroplasticity  
Mentor Emad Eskandar, MD  
Councilor Thomas C. Pearson, MD, DPhil  
Peter Ireland  
Class of 2017, Saint Louis University School of Medicine  
Cell-based Screening of Beta-Thujaplicinol Derivatives as Potential Therapies for Herpes simplex Viruses  
Mentor Lynda Morrison, PhD  
Councilor Dennis O’Connor, MD  
Kathleen Jee  
Class of 2015, Johns Hopkins University School of Medicine  
Examination of Angiopoietin-like 4 in Patients with Diabetic Eye Disease  
Mentor Akrit Sodhi, MD, PhD  
Councilor Charles W. Flexner, MD  
Peter Kadlec  
Class of 2017, Medical College of Wisconsin  
Effect of Novel Otoferlin Mutations on Temperature-Sensitive Auditory Neuropathy Spectrum Disorder  
Mentor Christina L. Runge, PhD  
Councilor James L. Sebastian, MD
Roger Khouri
Class of 2017, University of Michigan Medical School
Growth Hormone Therapy to Improve Recovery from Chronic Muscle Tears
Mentors Christopher Mendias, PhD, ATC, and Asheesh Bedi, MD
Councilor Cyril M. Grum, MD

Khameer Kidia
Class of 2017, Icahn School of Medicine at Mount Sinai
System-Level Analysis of Mental Health Services in Zimbabwe
Mentor Craig Katz, MD
Councilor Carrie Ernst, MD

Sushma Kola
Class of 2017, University of Pittsburgh School of Medicine
Regenerating Trabecular Meshwork by Mobilizing Adjacent Stem Cells in ex-vivo Human Eyes
Mentor Nils Loewen, MD, PhD
Councilor Carl R. Fuhrman, MD

Arooshi Kumar
Class of 2017, University of Louisville School of Medicine
Genetic Heritability Estimates of Ischemic Stroke Severity and Post-stroke Outcome
Mentor Natalia Rost, MD, MPH
Councilor Daniel Danzl, MD

Daniel Mascarenhas
Class of 2017, University of Maryland School of Medicine
“Is CT enough?” The Subaxial Cervical Spine Injury Classification (SLIC) System: Can CT alone predict the need for surgical intervention
Mentor David Dreizin, MD
Councilors Donna Parker, MD, and Yvette Rooks, MD

Ari Morgenthau
Class of 2017, New York Medical College
The role of lactoferrin binding protein B during infections with pathogenic Neisseriaceae
Mentors Anthony B. Schryvers, PhD, MD, and Scott Gray-Owen, PhD
Councilor William H. Frishman, MD

Justin Morse
Class of 2015, University of North Carolina at Chapel Hill School of Medicine
Optimizing Decellularized Bone as a Scaffold for Novel Stem Cell Therapies
Mentor John A. van Aalst, MD, MA
Councilor Amanda Drake, MD

Sahar Naseer
Class of 2015, University at Buffalo State University of New York
Next-Generational Sequencing in Pemphigus Vulgaris
Mentor Animesh A. Sinha, PhD
Councilor Frank Schimpfhauser, PhD

Matthew Recker
Class of 2017, Drexel University College of Medicine
The role of mTOR in exercise dependent axon regeneration through a peripheral nerve graft following spinal cord injury
Mentor John D. Houle, PhD
Councilor Kathleen Ryan, MD

Russell Reeves
Class of 2017, Geisel School of Medicine at Dartmouth
Determining Nanoparticle Distribution for Treatment Planning Using SWIFT
Mentor P. Jack Hoopes, DVM, PhD
Councilor Susan Harper, MD

Jessica Regan
Class of 2017, Virginia Commonwealth University School of Medicine
The impact of Interleukin-18 (IL-18) blockade on inflammation in a model of heart failure with preserved ejection fraction (HFpEF)
Mentor Antonio Abbate, MD, PhD
Councilor Susan DiGiovanni, MD

Timothy Richmond
Class of 2015, Ohio State University College of Medicine
Role of nucleolin in the development of chemo- and radio-resistance in cancer cells
Mentor Carlo Croce, MD
Councilor Sheryl Pfeil, MD

Sharmistha Rudra
Class of 2015, The University of Texas School of Medicine at San Antonio
Role for the Alternatively Spliced BAFF Isoform in Patients Without Chronic Graft Versus Host Disease (cGVHD)
Mentor Stefanie Sarantopoulos, MD, PhD
Councilor Erin Nelson, MD

Cristian Serna-Tamayo
Class of 2015, Rutgers New Jersey Medical School
Poxviruses as Oncolytic and Immunotherapy for Melanoma
Mentors Clark Lambert MD, FAAP, and Robert A. Schwartz MD, MPH

Sasha Targ
Class of 2017, University of California, San Francisco, School of Medicine
Molecular Mechanism of IL-21 Mediated Regulation of IgE Antibody Responses
Mentor Christopher Allen, PhD
Councilor Lee Atkinson-McEvoy, MD

Siobhan Thomas-Smith
Class of 2015, University of Washington School of Medicine
Electronic Health Assessment for Adolescents Study
Mentor Laura Richardson, MD, MPH
Councilor Douglas S. Pauw, MD

Anthony Trenga
Class of 2017, University of Virginia School of Medicine
Radiographic patterns of congenital bony spinal deformities and their association with neural axis abnormalities on MRI
Mentor Mark Abel, MD
Councilor Mark J. Mendelsohn, MD

Justin Tse
Class of 2015, University of California, Los Angeles David Geffen School of Medicine
Tissue Engineering the Vocal Fold: A Multidisciplinary Approach
Mentor Jennifer Long, MD, PhD
Councilor Jason Shiffermiller, MD

Grant Turner
Class of 2015, University of Nebraska College of Medicine
The role of IFT88 on ciliogenesis of motile respiratory epithelium and the regulation of ciliary motility
Mentor Joseph Sisson, MD
Councilor Jason Shiffermiller, MD

Michal Ursiny
Class of 2015, University of Vermont College of Medicine
Minimizing Cost and Antibiotic Resistance When Treating Uncomplicated E. coli Cystitis
Mentors Turner Ostler, MD, and Brian Eisner, MD
Councilor Gilman Allen, MD
Nikki Vyas  
Class of 2015, USF Health Morsani College of Medicine  
Comparing Whole Slide Digital Images versus Traditional Glass Slides in the Detection of Common Microscopic Features Seen in Dermatitis  
Mentor Drazen M. Jukic, MD, PhD  
Councilor Patricia J. Emmanuel, MD

Andrew Walls  
Class of 2016, Georgetown University School of Medicine  
Metabolic Pathway Analysis in Pediatric Patients Diagnosed with PANDAS  
Mentor Earl Harley, MD  
Councilor Michael Adams, MD

Timothy Wen  
Class of 2016, Keck School of Medicine of the University of Southern California  
“Never Events”: Evaluating the quality and safety of pediatric hydrocephalus shunt procedures on a national level  
Mentors William Mack, MD, and Steven Y. Cen, MD  
Councilors Paul Holtom, MD

Caroline West  
Class of 2016, Medical University of South Carolina College of Medicine  
Developing a model of screening for diabetes in the resource poor setting of rural Tanzania  
Mentor Michael Sweat, PhD  
Councilor Christopher G. Pelic, MD

Sherry Yan  
Class of 2015, Columbia University College of Physicians and Surgeons  
Changes in EGFR genomic mutational profile in response to concurrent chemoradiation for treatment of locally advanced NSCLC  
Mentor Simon Cheng, MD, PhD  
Councilor John C.M. Brust, MD

Yang Yu  
Class of 2015, University of California, Irvine, School of Medicine  
Variable Pathogenicity of Different Propionibacterium acnes Strains  
Mentor Jenny Kim, MD, PhD  
Councilors Michael L. Berman, MD, and Ranjan Gupta, MD

Changes to the Pharos editorial board

Ralph Crawshaw, MD, 1921–2014

On May 24, 2014, Ralph Crawshaw of Portland, Oregon died of natural causes. Medical pioneer and tireless social activist, author, and passionate idealist driven to solve problems through practical innovation, Ralph left a legacy of achievements and organizations. His focus was the health of the community. In a few of many examples, he gathered leaders from many professions and industry to work to improve access to health care of Oregonians as well as those globally, to protect the forested watershed of Portland’s water supply from environmental degradation, and to educate physicians about managing pain.

Born in Brooklyn, he found at age eleven his calling in medicine in the movie Arrowsmith. Crawshaw’s career highlights his broad interests and recognition. Service as a volunteer ski trooper and later as a Navy physician to marines in World War II bracketed graduation from NYU and a Menninger residency. Scholarly pieces on evolving medical oaths, election to the Institute of Medicine in 1978, presidency of his county medical society, and Senior Scholar at OHSU’s Ethics Center identify a renaissance character. Crawshaw conceived several non-profits. To address the lack of mental health services for children, in 1961 he and an engineer-magnate established what became Lifeworks Northwest. Today this agency annually serves over 17,000 children, adolescents, and adults with abuse prevention, mental health, and addiction recovery services. Decades ago he foresaw mental health as part of community health. In 1982 he formed Oregon Health Decisions and moderated scores of its town halls statewide to engage public dialogue in shaping health policy. Their medical priorities undergirded State Senator John Kitzhaber’s 1993 legislation that provided medical services to 300,000 working poor through the seminal Oregon Health Plan, a kinder, community-shared form of rationing limited resources. Following a rash of suicides of physicians challenged for their drug prescribing, Crawshaw pushed the 1984 creation of The Foundation for Medical Excellence, an educational approach parallel to the
changes to the Pharos editorial board

Concerns of the supportive state licensing board. TFME would more generally address the doctor-patient relationship and physician professionalism and well-being. The Foundation continues to sponsor regional courses on pain management, several annual lectures by national authorities on health policy and education, monthly colloquia on social and historical topics, and publications on health care reform. In 1986 in JAMA Ralph urged fellow practitioners to aid colleagues in developing countries. Healthcare Volunteers Overseas resulted, as of today having sent over 4500 volunteers on over 8000 missions worldwide.

Ralph was a cheerful, generous, and compassionate—while relentless—persuader, who stimulated the intellect and effectiveness of colleagues, community leaders, and newspaper editors alike. He deplored inaction when logic demanded action. Friendly debates, never arguments, over such topics as the soul versus the spirit of medicine were lively, but seldom resolved. Eclectic, energetic, apolitical in the party sense, lively, but seldom resolved. Eclectic, energetic, apolitical in the party sense, naturally perceptive about human behavior, he persuaded others by "inviting their higher angels." In every way Ralph Crawshaw epitomized the worthy physician-citizen.

John A. Benson, Jr, MD
(ΑΩΑ, Oregon Health & Science University, 1968)
Portland, Oregon

Ralph Crawshaw launched “The Physician at the Movies” column in 1971. A psychiatrist, he probed the psychological aspects of films in his reviews, many of which remain classics. I got to know him when I invited him to be an ΑΩΑ visiting professor at Johns Hopkins in the early 1980s for a two-day film series tracing the trajectory of Hollywood’s portrayal of physicians. We started with the 1946 film Miss Susie Slagle’s about the early days of the twentieth century when Johns Hopkins medical school acted in loco parentis, through Hospital, which showed the dark side of medicine and patient care in an inner city New York hospital, and finally to The House of God, a cult book about hardened and profane residents at a Boston hospital that was turned into a movie but never distributed.

In 1990 Ralph decided to give up writing the column, and he recommended me to Editor Robert Glaser. That led to at least quarterly phone calls or letters of support for my efforts. In his review of my book about doctors in the movies, in his typical enthusiastic way, he suggested to Steve Schroeder, then the president of the Robert Wood Johnson Foundation, that a copy be sent to every medical student. Steve, being more prudent, graciously agreed to send a copy to every medical school library.

Our conversations, which lasted right up to last year, would end up with his soliciting my thoughts about, and involvement in, his latest efforts to improve the profession and assure compassionate patient care. Like Don Quixote, he was always tilting at windmills, trying to make the seemingly impossible possible—and he often succeeded. He compiled many of his ideas and efforts in his 2002 book Compassion’s Way: A Doctor’s Quest into the Soul of Medicine (Medi-Ed Press, 2002). He didn’t look like a revolutionary. He wasn’t starry-eyed or wild-eyed, but being Brooklyn-born, he was realistic. He knew that revolutionaries often die on the barricades and to the extent that they succeed it is others who often get the credit. This didn’t bother him as long as some good was accomplished. One of the last things that we kicked around was starting a society named after Antoine Lavoisier. A tax collector, lawyer, and banker, Lavoisier’s main claim to fame was his revolutionizing the science of chemistry and proving that it was oxygen and not phlogiston that was responsible for combustion. The society’s motto was to be: “No good deed goes unpunished.” No one illustrated that motto better than Lavoisier whose tax collecting gig caught up with him—he finally rode the tumbrel to a rendezvous with Dr. Guilliton’s so-called "humane" dispatcher to the next world, an event that led the eighteenth-century French mathematician Joseph Louis Lagrange to say, "Only a moment to cut off that head and a hundred years may not give us another like it.” The same might be said about Ralph. Medicine has lost a great advocate for professionalism and compassion and many of us have lost a dear friend.

Peter E. Dans, MD
(ΑΩΑ, Columbia University, 1960)
Cockeysville, Maryland

Retirement

Editorial board member Eric Pfeiffer, MD, published poet, founding director of the Eric Pfeiffer Suncoast Alzheimer’s Center, and emeritus professor of Psychiatry at the University of South Florida College of Medicine, is retiring from the Pharos Editorial Board.

Dr. Pfeiffer served as Interim Editor of The Pharos in 2011 after the death of Executive Director Edward D. Harris, Jr., and before the appointment of Dr. Richard L. Bynum. We thank him for the inestimable help and support he gave us during that difficult time.
New editorial board members

We are pleased to announce the addition of three new members to the *Pharos* editorial board: Henry Langhorne, MD; Jenna Le, MD; and Janice Townley Moore.

Henry Langhorne graduated from Tulane Medical School 1957 and trained in cardiology at Tulane and Charity Hospital New Orleans. He has practiced cardiology in Pensacola, Florida since 1963 as a senior member of Cardiology Consultants. Dr. Langhorne has eight collections of poetry published by the West Florida Literary Federation and Pelican Press. He is the former Poet Laureate of Northwest Florida (1999–2009), selected by the West Florida Literary Federation. Over the past twenty years, he has published poetry in a number of periodicals including *Plainsongs*, *The Cape Rock*, *Poem*, *The Chattahoochee Review*, *Negative Capability, Hurricane Review*, *The Panhandler, JAMA*, and *The Pharos*.

Jenna Le received a BA in Mathematics from Harvard University and an MD from Columbia University. She is a radiology resident at Montefiore Medical Center/The Albert Einstein College of Medicine of Yeshiva University in Bronx, New York. In 2015/16, she will be a Musculoskeletal Radiology fellow at Montefiore Medical Center. Dr. Le is the author of *Six Rivers*, a book of poetry that was published by New York Quarterly Books in 2011 and was a Small Press Poetry Bestseller. Her poetry, fiction, essays, book criticism, and translations of French poetry have appeared or are forthcoming in many respected literary journals including *AGNI Online*, *Barrow Street*, *Bellevue Literary Review*, *The Southampton Review*, and *32 Poems*. Her past national honors include being a two-time winner of the *Pharos* Poetry Competition, a William Carlos Williams Poetry Competition finalist, a Michael E. DeBakey Medical Student Poetry Award finalist, a Pushcart Prize nominee, and a PEN Emerging Writers Award nominee.

Janice Townley Moore, a native of Atlanta, is Professor Emeritus at Young Harris College in the mountains of north Georgia, where she has had a long career of teaching English and creative writing. For a dozen years she served as poetry editor of *Georgia Journal*. Her poems have been published in such journals as *Prairie Schooner, Georgia Review, JAMA, Connecticut Review, The Pharos*, and in many anthologies including *The Bedford Introduction to Literature* and *The Southern Poetry Anthology* (Texas Review Press).