Dr. Paul B. Beeson, a renowned physician, researcher, and teacher, was the inspiration behind the creation of the Paul B. Beeson Emerging Leaders Career Development Awards in Aging Program. It was his vision to increase the number of physicians with combined clinical, academic, and scientific expertise to care for a growing older population.

At the time of his death, Dr. Beeson was professor emeritus of medicine at the University of Washington. Although "retired," he remained active in the field of aging research, attending meetings and advising many Beeson Scholars. In his long and distinguished career, he profoundly influenced the career paths of many physician-scientists and was stalwart in his concern for the care and dignity of patients.

To date, 249 Scholars supported by the Beeson Program have become leaders in geriatric medicine and aging research throughout the United States and the Island of Ireland. The careers of these remarkable Scholars serve as a lasting testament to Dr. Beeson’s enduring legacy as they seek to provide the best possible care for older adults and train the next generation of leaders in aging research and geriatrics.

Arti Hurria, MD, a leader in geriatric cancer care and a former Beeson scholar, died from injuries sustained in a traffic accident on November 7, 2018. She was Director of the Center for Cancer and Aging at City of Hope in Duarte, California, where she served in many additional roles as well.

Dr. Hurria earned her MD at Northwestern University, and was inspired by her mother, a radiation oncologist, to pursue a career in oncology. It was during her internship at Beth Israel Medical Center in 1995 when she became interested in the needs of older adults undergoing chemotherapy. She completed a geriatrics fellowship at Harvard and an oncology fellowship at Memorial Sloan Kettering Cancer Center, and was a pioneer in integrating geriatric medicine and cancer care.

Among numerous awards and honors, Dr. Hurria received a Paul B. Beeson Emerging Leaders Career Development Award in Aging in 2005. She was well-regarded for her collaborative and innovative research in geriatric oncology, including recently published work on functional decline in older, female chemotherapy patients. She was passionate about performing high quality patient-oriented research in geriatric oncology to improve the care of older adults with cancer, and training the next generation of geriatric oncology researchers. She also was one of the founding members of the Cancer and Aging Research Group. In Dr. Hurria’s honor, the American Geriatrics Society Health in Aging Foundation has established the Arti Hurria Memorial Award for Emerging Investigators in Internal Medicine. And Conquer Cancer, the ASCO Foundation, has established a Young Investigator Award (YIA) in Geriatric Oncology in honor of Dr. Arti Hurria.

AFAR was proud to call Dr. Hurria one of its own. Dr. Hurria’s early achievements were noted in the AFAR 2010 Annual Report highlighting women in science. Here, Dr. Hurria noted: “My mother, a physician, paved a path for me, my mentors taught me the skills, and my patients inspire my passion for research.”

“Arti exemplified the spirit of giving back and paying forward,” says Stephanie Lederman, AFAR Executive Director. “The collaboration and comradery she brought to the field were extraordinary and will continue to inspire AFAR’s commitment to supporting young researchers.”
Creating a cadre of clinician-scientists to take leadership roles in aging research has been the aim of the Beeson Program for more than 20 years. With the 2017 class of Beeson Scholars, we can see how our field has grown. Unlike most years, there are no geriatricians in this class, and remarkably there are two geriatric anesthesiologists, as well as a critical care physician, a neurologist, and a geropsychiatric nurse. The interest of these subspecialists in aging research reflects maturation of our field.

The 2017 Scholars also represent diverse types of research, including translational, epidemiologic, palliative care, and clinical trials. Yet there is a theme across their research programs: cognition is prominent focus. This aligns nicely with the heavy investment of the National Institute on Aging (NIA) in Alzheimer’s disease and related dementias. These Beeson Scholars will be well positioned to take advantage of the extra resources to support their research going forward as it relates to the aging brain.

Another notable feature of this small, but select, class is that three out of five received NIA GEMSSTAR awards prior to their Beeson awards. The connection between the GEMSSTAR and Beeson awards has been strengthened over the years, and it has become an outstanding pipeline for Beeson Scholar candidates. Another path for new applicants has been opened by a recent initiative—travel awards that allow non-Beeson early stage investigators to learn more about the field of aging by attending the Beeson Annual Meeting.

Leadership potential is a criterion of the Beeson Award, and the 2017 Scholars already are having an impact through a variety of leadership roles at the national level. For fields that are not heavily populated yet with investigators focused on aging, there are perhaps even more opportunities for leadership than in more mature fields.

We are delighted to introduce here the 2017 Beeson Scholars. With their stellar accomplishments they are leading the way in bringing an aging focus to a range of medical fields.

Before closing, we would like to take this opportunity to express our sincere gratitude to Dr. Robin Barr, who will be retiring in early 2020 after 32 years at the National Institute on Aging. As highlighted elsewhere in this report, Dr. Barr was instrumental in transitioning the Beeson Program from private sponsorship to its unique public-private partnership. With each new class of Beeson Scholars, his legacy will grow over time.
Beeson Ireland Scholars and CARDI Fellows Collaborate with Innovation Fund Support

As part of an ongoing partnership between AFAR and the Centre for Ageing Research and Development in Ireland (CARDI), and support from The Atlantic Philanthropies, an Innovation Fund was created to foster and stimulate collaborative, interdisciplinary research by Beeson Scholars and CARDI Fellows. By supporting projects that cross disciplines and/or institutions, this Fund builds on the strengths of the Beeson Scholars and CARDI Fellows and provides opportunities to develop new research directions.

“The partnership maintains and enhances the enthusiasm for aging research within Ireland by taking advantage of earlier investments through the Beeson Ireland scholars with the CARDI fellows,” says Thomas M. Gill, MD, chair of the Beeson Program Advisory Committee.

2015 Beeson scholar Claire McEvoy, PhD, adds, “The Beeson-CARDI collaboration is special because it increases research capacity in aging research in Ireland to tackle important issues such as health and inequalities in our population. Only by working together can we create opportunities for transformational policy change across the island of Ireland and help people grow older in a healthy and fairer society.”

Winning teams were chosen based on persuasiveness, innovation, scientific merit, and feasibility.

**Team:** Claire McEvoy, PhD, MPhil, RD (Beeson 2015); Joanne Feeney, PhD, and Joanna McHugh Power, PhD, CARDI Fellows

Alcohol Consumption and Brain Health in Older Adults Across the Island of Ireland

Alcohol consumption accounts for a growing burden of death and disability in Ireland. But the impact of alcohol on brain health is poorly understood. The amount of alcohol consumed, from abstinence to heavy use, plays a role as do factors such as loneliness, socioeconomic status, and emotional stress.

For this study, the researchers are harnessing data from two long-term studies, The Irish Longitudinal Study on Ageing (TILDA) and the Northern Ireland Cohort for the Longitudinal Study of Ageing (NICO-LA). Using these data they will characterize and compare alcohol consumption patterns in older adults in Ireland; determine associations between alcohol patterns and cognitive function; and identify psychosocial mechanisms underpinning relations between alcohol and cognitive function.

Ultimately, a better understanding of the role of alcohol in cognitive health can inform policy about alcohol recommendations for older adults. The results of this project also could lead to a wider program of research on the health impact of alcohol during aging, and provide a basis for interventions aimed at reducing alcohol-related harm.

**Team:** Charlotte Neville, PhD, CARDI Fellow, and Claire McEvoy, PhD, MPhil, RD (Beeson 2015)

Food Biomarkers in Older Adults: A Metabolomics Study

Adherence to a Mediterranean diet, rich in fruits, vegetables, whole grains, nuts, olive oil, and fish, has been shown to reduce mortality and the occurrence of major chronic diseases of aging. However, understanding how diet impacts healthy aging is hampered by imprecise, self-reported measures of diet. The novel technology of metabolomics is emerging as a less biased tool than self-report for measuring diet. It provides a chemical ‘fingerprint’ of food intake and specific dietary profiles that can then be studied in relation to disease risk.

For this study, metabolomics are used to analyze existing blood, saliva, and urine samples from older Northern Irish adults to identify patterns associated with a Mediterranean style diet. This work addresses the challenge of measuring diet in an aging population. It will improve how we characterize individual nutritional status, and more accurately quantify exposure to specific dietary metabolites. Ultimately, identifying biomarker patterns for diets associated with healthy aging may pave the way for greater adoption of ‘omics’ technology in dietary intervention studies and for determining relationships between diet and health outcomes in longitudinal cohorts.
“My interest in geriatrics got piqued when I was an anesthesiology resident,” says Miles Berger, MD, PhD. “I realized that we were taking care of more and more older patients, and many of them weren’t back to their cognitive baseline within hours or days after surgery. Nobody really had a great answer for why.”

In fact, of the 16 million older Americans who undergo anesthesia and surgery each year, up to 40 percent develop delirium or postoperative cognitive dysfunction that does not resolve within a year. These changes in cognition include problems with memory, attention, and executive function.

“Cognitive problems can sometimes limit their ability to reap the benefits of the surgery,” says Dr. Berger, who is a geriatric neuro-anesthesiologist. “Somebody may get a hip repair or a hip replacement, so they can walk better. But they don’t necessarily anticipate that they’re going to have fuzzy thinking afterward.”

Dr. Berger’s research leading up to his Beeson award, as well as other studies, has shown that inflammation in the brain is common after surgery. “What’s really unknown is whether those two things are related,” he says. “Does the inflammatory response in the brain or in the central nervous system drive cognitive or memory deficits in our patients? That’s the question we’re trying to answer in the Beeson work.”

Evidence for this connection is mounting. Research in animal models supports the theory that brain inflammation after surgery causes memory problems. In a preliminary study in patients, Dr. Berger and colleagues found an increase in white blood cells in the spinal fluid after surgery, consistent with a neuroinflammatory process. The spinal fluid bathes the brain, and is simple to collect with a lumbar puncture. Testing it can help diagnose brain disorders.

For his Beeson research, Dr. Berger is leading the Investigating Neuroinflammation Underlying Postoperative Cognitive Dysfunction (INTUIT) study, which measures markers of inflammation in the cerebrospinal fluid of 200 surgical patients over age 65. He and colleagues will determine whether these markers are associated with postoperative cognitive function and/or with delirium, an acute fluctuating disturbance in attention and the level of consciousness that typically occurs within days after surgery.

Participants undergo cognitive testing before, six months after, and one year after surgery. Half the patients also undergo pre- and postoperative functional magnetic resonance imaging (fMRI) scans. The scans assess changes in brain connectivity that may be associated with inflammation.

Neuroinflammation is thought to play a role in Alzheimer’s, and the study may also shed light on this disease. Dr. Berger and colleagues have shown that there are changes in brain connectivity before and after surgery that correlate with cognitive changes, similar to brain connectivity changes seen in Alzheimer’s patients. It is also known that the brain changes underlying Alzheimer’s begin to develop years before any symptoms. It could be that people who have these early changes are at increased risk of cognitive dysfunction after surgery, and/or that delirium or other cognitive dysfunction after surgery themselves portend an increased long-term risk for developing dementia.

“Ultimately, we need strategies to prevent post-operative delirium and cognitive dysfunction, but first we need to understand what causes them,” says Dr. Berger.

Beyond supporting his research, Dr. Berger notes the value of the leadership component of the Beeson award. “There’s an increasing awareness that leadership and management skills are really key for leading a research team, yet they’re often not taught in medical school or graduate school,” he says.

The annual meeting is “one of the great things about the Beeson program,” he adds. “It brings together clinical researchers, basic scientists, and even translational researchers like me, to share their perspectives on how to take better care of older patients, age-related disease processes, and so on, all the way from the molecular level up to the social and behavioral level. And that’s a special thing about the Beeson meeting, to hear about people working at all those different levels.”
Delirium is a common complication of surgery for older adults, in particular after heart surgery and surgery for hip fracture. This short-term episode of extreme confusion is associated with later difficulties as well, including an increased risk of cognitive and functional decline.

"During my cardiac anesthesia training, both in residency and fellowship, I saw a lot of older adults undergoing surgery, and the unique needs that were part of that," says Charles H. Brown, IV, MD, MHS. "I had some patients with delirium afterwards, and got interested in why it was happening and what we were doing about it." His Beeson project is examining how swings in blood pressure during hip fracture surgery may contribute to delirium, and how maintaining a targeted blood pressure may prevent it.

The brain needs a constant supply of oxygenated blood. In a process called autoregulation, a constant flow of blood to the brain is maintained over a wide range of blood pressure in the body. Without autoregulation, blood flow would go down or up along with changes in blood pressure. If blood flow, and oxygen levels, dropped regularly, brain injury could occur.

But during surgery, not only does blood pressure vary widely, it also can dip below, or rise above, the range that the brain can correct to "just right." That puts older adults at risk of delirium.

“It turns out we don’t really have a gold standard for defining adequate blood pressure during surgery,” says Dr. Brown, who is a geriatric anesthesiologist. In research leading up to his Beeson award, he and colleagues developed methods to define optimal blood pressure during heart surgery. In one study they investigated the lower limit of autoregulation—the lowest blood pressure allowing adequate blood flow to the brain.

They found that this lower limit varies considerably from person to person. Also, the farther and longer blood pressure fell below it, the more likely patients were to have kidney injury, delirium, and other complications. The next step was a randomized clinical trial in which, for some heart surgery patients, the lower limit of cerebral autoregulation was identified during surgery before they were put on the heart-lung machine. While these patients were on cardiopulmonary bypass, their mean arterial pressure was targeted to be greater than their individual lower limit of autoregulation.

The results of the study, published this year in JAMA Surgery suggested that optimizing mean arterial pressure to be greater than the individual patient’s lower limit of cerebral autoregulation during bypass may reduce the incidence of delirium after cardiac surgery.

With his Beeson award, Dr. Brown is extending this work to patients undergoing surgery for hip fracture. Whereas heart surgery patients tend to have hypertension, stroke, and diabetes, those having surgery for hip fracture “are often older, have a high prevalence of dementia, and are frail. It’s a very distinct population,” he says.

“We’re asking similar questions as for the heart patients. How much does the lower limit vary in a population? And how is the amount of blood pressure below that limit associated with delirium?” A pilot study will test whether setting a blood pressure target during hip fracture surgery results in less delirium and other complications.

As a Beeson scholar Dr. Brown has taken on new leadership roles, as president-elect of the Society for the Advancement of Geriatric Anesthesia, and as deputy vice-chair of research in his department. Beyond research support, Dr. Brown says that “the mentors and meetings that go along with the Beeson award are critical for developing that larger national and international community. I have a great team of mentors. And the annual meetings have been a good time to get a different set of eyes on both research problems and career decisions.”
As a pulmonary and critical care physician, Lauren Ferrante, MD, MHS, is working to incorporate geriatric medicine into the hospital intensive care unit (ICU). “I was drawn to this area after caring for critically ill older adults in the ICU, and recognizing that functional recovery after discharge would be an uphill battle,” she says.

Adults over 65 account for one in four ICU admissions in the United States. They bring with them complex health histories which are very different from younger patients. Beyond their critical illness, risk factors like frailty and chronic diseases affect their ability to recover. Each year 1.4 million of them survive the ICU experience—but at a price. Most leave the hospital with new or worsened disabilities.

What separates those who recover fully from those who do not regain their previous independence? For her Beeson research, Dr. Ferrante is developing a tool to identify people at risk of persistent functional decline after the ICU. Knowing which patients are at risk, physicians can then provide interventions and support in the months after the ICU period, with the goal of preventing long-term disability.

To do so, Dr. Ferrante’s research takes advantage of data collected through Yale’s Precipitating Events Project (PEP), a large cohort of older adults living in the New Haven, Connecticut area whose health has been monitored regularly since 1998. Previous studies of disability after ICU admission have enrolled patients when they arrived at the hospital. Looking at data from participants in the Yale cohort who have been admitted to the ICU allows her to get both a “before” and an “after” picture of their health.

“The longitudinal follow-up in PEP has given us a lot of insight into what preexisting risk factors will impact the post-ICU functional outcomes of older adults,” says Dr. Ferrante. Such risk factors include frailty, cognitive impairment, and hearing and vision impairment. “We have also learned from our work that the pre-ICU functional trajectory is extremely important.”

“For the Beeson award, we wanted to bring all of this together and develop a prediction tool that would identify older patients at greatest risk of persistent disability after a critical illness,” says Dr. Ferrante. “We evaluated more than 20 factors when developing the risk prediction model.”

Dr. Ferrante and colleagues externally validated the risk prediction model in a cohort of ICU survivors from the National Health and Aging Trends Study, a nationally representative sample of Medicare beneficiaries ages 65 and older. This winter, Dr. Ferrante will pilot test the risk-prediction tool in the ICU to find out how feasible it is to administer it to patients before hospital discharge and how acceptable patients find it. The pilot testing will inform Dr. Ferrante’s application for a research grant to evaluate and refine the tool with a much larger cohort.

Dr. Ferrante says the support of the Beeson award has given her protected time to focus on research. Being a Beeson scholar also has supported her success in leading and developing a new field of geriatric critical care medicine. With another Beeson Scholar, Nathan Brummel (2016), she is co-chair of the American Thoracic Society’s Aging in Critical Care Interest Group, as well as a new aging-focused group in the Society of Critical Care Medicine that is being launched this year. Dr. Ferrante also co-chairs the American Geriatrics Society’s Medical Subspecialties Section.

“I am a strong advocate of integrating geriatrics principles into the subspecialties and increasing collaboration between the subspecialties and geriatrics. The Beeson program, GEMSSTAR program, and aging-focused subspecialty groups unite those of us who share a vision,” says Dr. Ferrante, “and the success of these programs helps inspire other people to pursue this path.”
Bleeding in the brain becomes more common with aging. In fact, about 20 percent of people over age 60, with normal cognition, have at least one of the small hemorrhages known as cerebral microbleeds. This frequency rises to 40 percent at age 80. “Cerebral microbleeds are asymptomatic. But they’re important to assess, because they are an established risk factor for a future symptomatic bleed in the brain—a hemorrhagic stroke—later in life,” says Jonathan Graff-Radford, MD.

Yet doctors currently cannot predict whether a patient with microbleeds will go on to have a hemorrhagic stroke. And at the same time, older adults often have conditions like atrial fibrillation or heart disease that are typically treated with medications that reduce blood clotting, and thereby promote bleeding.

“What do you do for patients who have these competing risks?” asks Dr. Graff-Radford. As a neurologist with subspecialties in behavioral neurology and stroke, he routinely sees such patients, and “right now there’s not enough evidence to guide clinicians,” he says.

Dr. Graff-Radford’s Beeson research aims to help resolve this clinical dilemma, provide guidance on treating cerebral microbleeds and assessing stroke risk, and better understand the underlying mechanisms that lead to these bleeds. His project harnesses data gathered through the Mayo Clinic Study of Aging, which launched in 2004. In this population-based study, thousands of individuals over the age of 50 come in for routine cognitive testing and neurologic examinations. They also undergo MRI and PET scans of the brain, which can identify microbleeds and also provide insight into their cause.

Most earlier studies followed patients who already had stroke or dementia. The long-term population data is helping Dr. Graff-Radford lay the foundation for understanding how common microbleeds are in people who have no symptoms, what factors predict developing a cerebral microbleed, and how many of these people go on to develop a more serious hemorrhage.

One factor known to cause microbleeds is deposition of amyloid protein in the brain’s blood vessels, a condition called cerebral amyloid angiopathy. Such microbleeds are more common in people who have Alzheimer’s disease, and in those patients, are associated with a worse prognosis. In the Mayo Clinic study, participants’ PET scans measure amyloid in the brain. “We can see how many of these people with microbleeds likely have significant amyloid in their brain, and what happens to them,” says Dr. Graff-Radford.

Finally, some study participants have agreed to donate their brains after death, and Dr. Graff-Radford is examining this tissue to better understand the mechanisms that cause cerebral microbleeds.

Ultimately the results will help clinicians assess a patient’s risk of a bleed, and guide therapy. “Who is it with atrial fibrillation who’s going to have a large bleed? If you have one microbleed, does that have clinical significance? People who have microbleeds but also have amyloid in the brain — are those the ones that have particularly high risk? We hope the population-based study can answer some of those questions,” says Dr. Graff-Radford.

The Beeson award also has given Dr. Graff-Radford time to develop as a researcher, for example by working in the neuroimaging laboratory of his mentors. “They’ve trained me how to do quantification of these imaging variables, and then how to be able to analyze them for my project,” he says. He has also worked with neuropathologists to learn how to grade vascular changes in the brain. And courses in epidemiology and statistical analysis have helped him complete more complex parts of the project.

“Going to the annual meeting has been a great chance to network with other Beeson awardees, but also I’ve had really good input into my career trajectory and tips on future grant writing,” he says. “I can’t speak highly enough about those meetings.”
People with serious illness who live in nursing homes often make repeated trips to the hospital. Having been a young caregiver to both her parents, and as a geropsychiatric consultant in more than 100 nursing homes in three states, Caroline Stephens, PhD, RN, GNP, FAAN has witnessed first-hand the stress and increased disability that result from this cycle of hospital visits. That's what drives her to work for improved access to palliative care in nursing homes.

In a study aimed at finding ways to reduce hospital readmissions, Dr. Stephens found that in three northern California nursing homes, 70 percent of residents were eligible for palliative care—and none were receiving it. “The underlying theme of all of the people who were stuck in the revolving door of the emergency room of the hospital was that they had unmet palliative care needs,” she says. “Ultimately what we do in the nursing home is really focused on managing symptoms and improving function and quality of life, which are the core tenets of palliative care.” So why weren’t these needs being met?

Further research revealed the complexity of the issue. Dr. Stephens found that nursing home staff tended to equate palliative care with hospice, thinking it was only meant for people who were dying. When questions about care arose, far-away family members chose to send their loved ones to the hospital, and tended to not trust the assessments by nursing home staff. And even though nearly 100 percent of nursing home residents had completed physician’s orders for life-sustaining treatment, very few remembered doing so. The conversations about goals and values for end-of-life care had been lost.

“So I started to think about how we can bring the appropriate palliative care expertise to the nursing home setting when we don’t have sufficient work force to meet that need,” says Dr. Stephens.

With her Beeson award, she is pilot testing tele-heath for palliative care consultations. The technology includes a secure platform that can bring together the nursing home resident and palliative care specialist, and also tie in family members, nursing home staff, and others for video, audio, and text meetings to coordinate care, manage symptoms, facilitate goals-of-care discussions, and educate staff.

Dr. Stephens relates a striking success story from her pilot study. After much effort to schedule a video visit that included a nursing home resident, family that was off-site, and the palliative care provider, “we got to the facility and the resident had been taken to dialysis early,” she says. Usually an in-person visit would have been canceled or simply conducted without the family. “But the technology can follow the person,” says Dr. Stephens. “We went to dialysis, with his permission, and the family’s permission, and we did the video visit there. It was so powerful for the family to actually see their loved one go through dialysis, because they never knew what that was like. They also saw the toll that it took. It was a powerful opportunity for the palliative care provider to have a conversation with both the family and the resident, clarifying the symptoms and the goals.”

When the pilot study concludes this year, the research will provide proof of concept data necessary for funding a larger trial. Already, she and colleagues have secured a grant to expand the project to assess the palliative care needs of residents in assisted living facilities.

“Being a part of the Beeson community has been a phenomenal opportunity,” says Dr. Stephens, who was inducted as a fellow in the American Academy of Nursing in 2018 and recently accepted a faculty position at the University of Utah College of Nursing as the Helen Lowe Bamberger Colby Presidential Endowed Chair in Gerontological Nursing. “I have been able to have a much greater impact earlier in my career than I would have had otherwise. The Beeson award has played a big role in that.”
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Beeson Scholars

2019

Elizabeth Goldberg, MD
The Alpert Medical School of Brown University

Meredith Greene, MD
University of California San Francisco

Lisa Kilpela, PhD
University of Texas Health Science Center San Antonio

Allison Magnuson, DO
University of Rochester

Zachary Marcum, PharmD, PhD
University of Washington

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Weill Cornell Medicine

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Massachusetts General Hospital

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Vanderbilt University School of Medicine

Victoria Lai-Yen Tang, MD
University of California, San Francisco

Melisa Wong, MD, MAS
University of California, San Francisco

Heidi Zapata, MD, PhD
Yale School of Medicine

2018

Rebecca T. Brown, MD, MPH
University of Pennsylvania

Kathryn Callahan, MD
Wake Forest School of Medicine

Andrew Cohen, MD, DPhil
Yale University

Guido Falcone, MD, ScD, MPH
Yale School of Medicine

Dr. Robin Barr retires from the National Institute on Aging

Dr. Barr joined the National Institute on Aging in 1987. From 1994–2006, he served as Deputy Director of the Division of Extramural Activities and the NIA Training Officer. In 2006, he was appointed Director of the Division. During his tenure at NIA, Dr. Barr has worked at the NIH level to help shape policies toward new and early stage investigators. In particular, he was instrumental in establishing the Beeson public-private partnership in 2003, and he has ensured its continuation during the past 16 years. Dr. Barr is planning to retire from the NIA in early 2020.

He’s been an invaluable asset to the Beeson Program, and the Beeson community will truly miss his leadership.
Indranil Sinha, MD
Harvard Medical School/Brigham and Women's Hospital

2017

Miles Berger, MD, PhD
Duke University Medical Center

Jonathan Graff-Radford, MD
Mayo Clinic

Charles Brown, MD
Johns Hopkins University

Lauren Ferrante, MD
Yale University

Caroline Stephens, RN, PhD, GNP, AAN
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Nathan Brummel, MD, MSCI
Vanderbilt University School of Medicine

Zara Cooper, MD, MSc, FACS
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Weill Cornell Medicine

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Jennifer Lai, MD, MBA
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John Newman, MD, PhD
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Kelly Trevino, MD
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Kathleen Unroe, MD
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2013

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Daniel B. Kramer, MD
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Ozioma Okonkwo, PhD
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Janey Peterson, EdD, MS, RN
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Vivek Prabhakaran, MD, PhD
University of Wisconsin School of Medicine and Public Health

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Thomas Robinson, MD
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