2019

A YEAR IN REVIEW

The Academy for Radiology & Biomedical Imaging Research

Advancing Innovation in Imaging Science

The Academy is independently audited annually.
A Note from Our Academy President

For more than two decades, I have served on the Academy board, representing the Society for the Advancement of Women in Imaging, the RSNA, and the RSNA R&E Foundation, and finally as president. I recall traveling to Washington, D.C. with my husband, Alex Margulis, M.D. (a founder of the Academy) as the founders of this organization were establishing it with the narrow mission of creating the National Institutes for Biomedical Imaging and Bioengineering (NIBIB). Looking back on how the Academy has expanded in scope, membership diversity and impact, all while staying true to our mission, I am in awe at what we have been able to achieve. The support of your society or department made this work possible. Your continued support of the Academy is essential to the future strength of our profession. As our 2019 year closes, I am honored to share three key highlights of our work.

1. **The Academy is the only organization that brings together academia, patient advocates, and industry to collectively advocate on behalf of our community.** The founders of the Academy understood well that we needed an organization that could collectively represent our interests on Capitol Hill. I wish to ensure that future leadership within this community continues to value and support federal advocacy for research funding. We must cultivate the next generation of advocates. The Academy’s Council of Early Career Investigators in Imaging (CECI²) is that next generation: brilliant young investigators who understand how our advocacy efforts impact funding and policy. CECI² is expanding as the Academy creates additional opportunities for engagement and career development. I ask that you, as leaders, support this council from within your society or department.

2. **When we engage in our community of experienced imaging scientists, experts in novel technologies, patients, and their advocates, we promote shared learning and communication regarding current research and future initiatives.** Our Diagnostic Cockpit of the Future (DxCP) Task Force continues to strategize around projects that help create valuable tools and fuel conversation across the imaging community, the broader medical community, federal agencies and Congressional offices. The DxCP fosters unique collaborations beyond traditional imaging, and it is a foundation point for the development of new initiatives that may garner additional funding.

3. **The Academy informs the public and policymakers about how imaging and image-guided therapies translate into disease prevention, earlier and more accurate diagnoses, and improved quality of health care.** Academy efforts in support of increases to the National Institutes of Health budget remain a key priority. Our staff, leadership and CECI² met with more than 100 congressional offices this fiscal year. We hosted our 10th Annual Medical Imaging Technology Showcase (Med-Tech) in the U.S. Senate this spring. Please save the date for our 2020 MedTech in Washington, D.C., May 3-5. We continue to keep the conversation open between the imaging research community, patient advocacy groups, and lawmakers, all of which directly contribute to academic research departments’ federal funding bottom line.

As my two-year term as president closes in early December, please know that it was an honor to serve in this position. Working closely with our Executive Director, Renee Cruea, and her staff, the board of directors, council, committee and task force members have made me appreciate more than ever what a difference this organization makes for our community.

Hedvig Hricak, M.D., Ph.D., Dr.(hc)
Academy President
The Academy for Radiology & Biomedical Imaging Research

Hedvig Hricak, M.D., Ph.D.
President
The Academy for Radiology & Biomedical Imaging Research
The Academy’s DxCP initiative has maintained momentum and gained notable traction from both within and beyond the imaging community. Representatives from multiple government agencies, industry and academia comprise the task force. They have been working to identify meaningful inroads into strategies, projects and initiatives that will continue to facilitate multi-society, multi-specialty and cross-governmental agency collaboration. The Academy’s role beyond developing this initiative, is to facilitate vital connections. Engagement of our member societies will be critical for the imaging research community to truly take the lead on these important topics. Advocacy by Academy staff, beyond the scope of the task force, will focus on new and increased federal funding for the medical imaging research community. The Academy Annual Research Roundtable held in April with more than 60 representatives from federal agencies, academic departments, and companies led to the following task force initiatives:

**Audit of Current Efforts and Initiatives**
The Academy is currently collecting and collating feedback from our member societies and academic departments that identifies current efforts and initiatives that could be relevant to DxCP. This information will be available to our members and government agencies engaged in the DxCP or any other initiative to avoid duplication of current efforts and encourage communication.

**Cultivating New Congressional Champions**
Several Congressional offices are engaged in and actively supporting the DxCP initiative. Congressional offices have engaged with NIBIB leadership, and the Academy is working to maintain that momentum.

**The Bioeconomy and Artificial Intelligence**
Submitted an Academy Coalition for Imaging & Biomedical Research (CIBR) response to the request for information on the U.S. Bioeconomy published by the Office of Science Technology and Policy (OSTP) for the Executive Office of the President connecting how the DxCP could be a vital component in the future of the bioeconomy. Published an Academy CIBR support statement on the article written by our member societies (ACR, RSNA, SIIM, AAPM, ESR and EuSoMII) “Ethics of Artificial Intelligence in Radiology,” showing alignment among our diverse membership on this important issue.

**NIBIB RFP Development Essential Collaboration**
The task force is collaborating with NIBIB to develop an RFP for a test pilot.

**Expanding Engagement Beyond Imaging**
Multiple federal agencies remain actively engaged in this initiative. Academy leadership presented the DxCP initiative at the Association of Pathology Chairs Annual Meeting.

**Machine Intelligence**
The Academy co-sponsored an NIBIB workshop, “Accelerating Clinical Adoption of Machine Intelligence Applications in Medical Imaging” which aligned with and stemmed from previous DxCP meetings. This workshop was effective and collaborative, engaging vital imaging societies such as representatives from the AAPM, ACR, RSNA, SIIM, SIR, QIIB and SPIE.

**Vision for The Academy’s “Diagnostic Cockpit Initiative” (DxCP)**
“The DxCP will empower precision medicine by bringing together the latest diagnostic sensor technology with advanced artificial intelligence-based computing to better match patients to the best treatments. The Academy is proud to be able to convene stakeholders and experts to outline the pathway of research needed to make the DxCP a reality.”
– Mitch Schnall, M.D., Task Force Chair
Advocating for continued increases to the National Institutes of Health (NIH) is a priority for the Academy. Efforts focus on ensuring that policymakers understand the value of federal funding and the impact that investments in medical imaging technology has on patient care. Academy staff continuously meet with congressional offices to illustrate medical imaging research currently taking place in their district. Our congressional events provide a platform for patients to share how medical imaging technology has impacted their care. Sharing these stories is an impactful way to educate any audience about how research leads to the development of technology that significantly impacts patient care and outcomes.

Here is a snapshot of some of our 2019 advocacy work:

- The Academy is a member of the Coalition for Health Funding, the AAMC Ad Hoc Group for Medical Research (Ad Hoc) and Research!America. These coalitions are an important part of the Academy’s advocacy, providing us the opportunity to collectively expand and diversify our advocacy efforts with a stronger voice. For example, the Academy, a member of the steering committee for Ad Hoc, meets with the leadership of each NIH Institute enabling additional outreach and connections. These coalitions enable the imaging community to be more visible, such as in the annual Senate and House NIH support letter with more than 310 signatories. This year 30 signatures were imaging societies and another 34 are Academy CIBR members including member patient advocacy groups and industry partners.

- Academy leadership, staff and members advocated for continued increases in federal funding to more than 100 congressional offices. This year, 34 early-career investigators met with more than 70 congressional offices to highlight their research, establishing important connections that they can maintain throughout their academic careers.

- The Academy continues to advocate for a $2.5 billion increase in funding for NIH FY20. These numbers are decided upon as a collective with all other advocacy groups who are part of Ad Hoc so that our messaging is consistent and more effective. The Academy submitted written testimony to the House and Senate Appropriations Committees in support of NIH, and more specifically NIBIB, budget increases.

The total amount of NIH dollars going to Contact PIs having primary appointments in diagnostic radiology departments increased 19.5% in FY18 compared to FY17 ($598M vs $500M).
Our Council of Early Career Investigators in Imaging (CECI) was created in 2014 to recognize the achievements of researchers who are in the early phases of their careers and engage them in our advocacy. Academic departments and societies who are members of the Academy are invited to nominate or support an individual. The Academy provides advocacy training, schedules one-on-one meetings with leadership and program staff at the NIH institutes of their choice, arranges meetings with Member(s) of Congress, hosts opportunities to network with patient advocacy groups and academic leaders. Most importantly, they participate as the key presenters of their research at the annual Medical Imaging Technology Showcase in the Senate.

This year, the Academy inducted 30 new members into our CECI, representing 21 academic radiology departments and six societies. For the first time, the Academy encouraged member imaging societies to sponsor an early career investigator. This new opportunity enabled us to expand our advocacy efforts and engage members of the following societies: the American Association of Physicists in Medicine (AAPM), International Society of Magnetic Resonance in Medicine (ISMRM), Radiological Society of North America (RSNA), Society for Advanced Body Imaging (SABI), Society of Nuclear Medicine and Molecular Imaging (SNMMI) and Society for Pediatric Radiology (SPR).

Advocacy is only as effective as those who are telling the stories. Our Council of Early Career Investigators in Imaging is the future of radiology research and advocacy.

“The Academy has great value in advocating for more research funding and representing the community to decision makers. We were only one of many organizations advocating on Capitol Hill that day. Without an organization such as the Academy, we would not be represented.”
Steven H. Baete, Ph.D.
NYU/Langone Health

“My experience with the Academy has been a groundbreaking opportunity to exchange ideas with a national network of researchers and leaders, collectively advocating for increased research funding and the future of radiology.”
Mai-Lan Ho, M.D.
Nationwide Children’s/Ohio State University
Sponsored by The Society for Pediatric Radiology

“The Academy offers an event with a breadth that I’ve not seen matched elsewhere. The event focuses on professional development and global service to the greater scientific community. From the extended time spent at the NIH learning how to individually hone and optimize our grant writing skills, to the afternoon on Capitol Hill pitching for budgetary increases to the NIH and NIBIB, each investigator had an opportunity to contribute positively to the future of our medical imaging practice.”
Dr. Emily L. Marshall, Ph.D.
University of Chicago
Sponsored by the American Association of Physicists in Medicine

“The Academy provides a unique opportunity for the development of partnerships with legislators, academic leaders in radiology, and members of imaging technology industry which can pave the way for promoting bioimaging research, effective implementation of our research results and opens new doors for future technological and scientific collaborations.”
Dr. Sam Payabvash, M.D.
Yale University
The work of the Academy goes well beyond congressional advocacy. The Academy continues to strengthen our relationships with federal agencies, including the National Library of Medicine (NLM), the National Institute of Standards and Technology (NIST), the Office of Science and Technology Policy (OSTP), Food and Drug Administration (FDA) and the Centers for Medicare and Medicaid Services (CMS).

The Academy, in partnership with Representative Anna Eshoo (D-CA), a longtime Academy supporter and an original co-sponsor of the NIBIB, hosted a congressional welcome reception to introduce the new director of the National Institute of Biomedical Imaging and Bioengineering (NIBIB), Dr. Bruce Tromberg, to Members of Congress, their staff and other federal employees.

This past year, Academy staff has continued to nurture relationships with the National Cancer Institute (NCI), National Institute of Biomedical Imaging and Bioengineering (NIBIB), National Institute of Arthritis and Musculoskeletal Skin Diseases (NIAMS), National Institute of Neurological Disorder and Stroke (NINDS), National Institute on Aging (NIA), National Institute of Diabetes and Digestive Kidney Diseases (NIDDK), National Institutes of Mental Health (NIMH) and National Heart, Lung and Blood Institute (NHLBI) at the NIH.

Patient advocacy engagement is an essential component of the Academy's work. Patient stories stick. They personally illustrate the impact of federally-funded imaging research to legislators and other federal employees. To ensure proper representation and engagement of our more than 100 patient advocacy groups this year, the Academy welcomed Christine Buckley, Executive Director of the Brain Aneurysm Foundation, to our Board of Directors. Healthy Women and the Obesity Action Coalition are our newest patient advocacy members adding to the diversity of our membership. To further highlight our patient advocates, the Academy collaborated with patient advocates to create a video showcasing their view of medical imaging technology.

• Receive Academy emails on NIH weekly funding opportunities, legislative updates and opportunities for grassroots engagement.

• Nominate someone for the Academy Council of Early Career Investigators in Imaging (CECI®). Since 2014, the Academy CECI has grown to 84 members and this year the Academy added 30 members. Each year the nominations significantly increase, and we hope to continue to support the growing interest in this program.

• Nominate members from academic departments for the Council of Distinguished Investigators Award (DI). This year, the Academy inducted 37 new members and the Council now has 334 members. The DI and Gold Medal ceremony is always held on Tuesday afternoon during the RSNA meeting.

• Nominate someone to present at the Academy Imaging Shark Tank session at the RSNA Annual Meeting. An expert panel chooses three individuals to pitch an idea, they are allotted five minutes and five slides. Post pitch, the panel of VC, industry, an intellectual property attorney and academic provide valuable feedback with audience participation. This session provides participants and attendees the opportunity to learn from experts, how to communicate their ideas in a way that resonates and sets them up for success throughout their career. This event is fun, interactive and offers CME credit.
A Note from Academy Executive Director, Renee Cruea, M.P.A.

The Academy is a unique organization as the only advocacy organization representing all stakeholders from within the medical imaging research community by collectively advocating for steady and consistent federal research investments. Our 2017-2020 Strategic Roadmap is Advocate — Communicate — Train (ACT) and guides our efforts and initiatives each year. The Strategic Planning Committee developed three main goals that align with our ACT Roadmap:

1. Prioritize advocacy efforts.
2. Strengthen branding and communications
3. Expand support for early-career investigators.

We maintain our focus on those three goals. Meaningful conversations with policymakers illustrating the impact of medical imaging technology, educate and inform while strengthening connections with those offices as we create and maintain valuable congressional champions. Providing opportunities for our investigators to engage in advocacy efforts and learn about funding opportunities adds strength to both our advocacy efforts and to their personal career development — a win for everyone. Continuously identifying ways to communicate with our members and raise awareness outside of our community about our initiatives together strengthen the Academy and empower our members.

Thank you again for your support. I look forward to all we will accomplish for the medical imaging research community in 2020 and beyond.

“I can’t tell you how impressed Representative Eshoo and I are 20 years later, to see the progress that’s been made with the [NIBIB], the Academy and with the researchers that are in this room.”
– Senator Richard Burr

Representative Anna Eshoo (D-CA) and Senator Richard Burr (R-NC), original co-sponsors of the NIBIB, provided opening remarks at the Showcase.
Academy Leadership

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