Mr. Chairman and Members of the Subcommittee, my name is Dr. Carolyn Meltzer and I am privileged to serve as the President of the Academy for Radiology and Biomedical Imaging Research, formerly known as the Academy of Radiology Research. I am testifying today in strong support of an increase in funding for the National Institutes of Health of not less than $2.0 billion above the final level that is appropriated for FY17 when that process is completed, with a proportionate increase for the National Institute of Biomedical Imaging and Bioengineering (NIBIB). In addition, I am testifying in strong support of the Appropriations Committee taking the necessary steps to assure the release of the funding included for the NIH Innovation Fund created by the 21st Century Cures Act that was passed by overwhelming bipartisan margins in the last Congress.

In my “day job” I am the William P. Timmie Professor and Chair of Radiology and Imaging Sciences and Associate Dean for Research at the Emory University School of Medicine in Atlanta, Georgia, where I also established the Emory Center for Systems Imaging to broadly support the advance of imaging capabilities in basic and translational research.

As we present this testimony for the Subcommittee’s review, the final outcome on the FY17 process is unknown. What we do know, Mr. Chairman, is that you and the members of
this Subcommittee have been vigorous in your support for bringing this process to a conclusion in a manner that results in sustaining the commitment this Congress has made to funding biomedical research in a robust and predictable manner. For that we thank you, as we do for the increase that was included in the FY16 Omnibus legislation.

We also want to thank you for your hard work in negotiating with the authorizing committees to assure a funding mechanism that will enable some of the discrete, targeted efforts of the NIH – notably the Beau Biden Cancer Moonshot Initiative – to be funded. The Academy believes that such funding must be a supplement to the base NIH funding and not used to supplant it. More on that later.

As this subcommittee knows well, funding for NIH is spread throughout the country. Approximately 84 percent of the amount appropriated is used for peer-reviewed intramural grants to researchers at universities, hospitals, and institutes in all 50 states. Another nine percent funds very high-end research and patient care on the NIH campus. Only about seven percent of funding is used for administrative purposes, maximizing the return on the investment. Nowhere is the return on investment more significant than in the growing field of biomedical imaging.

Our requests of this Subcommittee are critically important to the physical and economic health of the nation and I would like to state them clearly here:

- Please increase NIH funding not less than $2.0 billion above the final funding level for FY17.

- Please increase NIBIB funding by not less than a proportionate amount.
• Please include a provision in your bill to release FY18 allocation to the NIH Innovation Fund created in the Cures Act and assure that it supplements base funding.

Mr. Chairman, there has been extensive research done on the impact of this Subcommittee’s investment in biomedical research and the numbers from NIBIB are quite impressive and quite startling. Using patents as a surrogate for economic activity, research funded by this small but critical institute dwarfs that of other institutes in economic impact. In a study by Battelle covering the 14-year period from 2000 to 2013, they found that NIBIB generated 25 patents for every $100,000,000 of research funding. Further the study noted that those patents generate more than $575 million in economic activity and growth, again for the same $100 million investment.

Truly, investment in NIBIB has paid off many times over.

But it is important to recognize that all of NIH has great economic impact. Imaging research is a significant component of the work of many different institutes, including the National Cancer Institute, National Institute of Diabetes, Digestive and Kidney Diseases, the National Institute of Neurological Disorders and Stroke, and more. There are few conditions that do not benefit from any of the wide-range of imaging modalities from x-rays to MRI, CT scan, PET scan, fluoroscopy, angiography, and ultrasound. And, as important as the economic activity is, we can never forget that for every patient – for every constituent – it is the health benefits of research that is the most important thing when they receive the cancer diagnosis, suffer a head injury, or any of thousands of other issues.
Delivering quality medical care in a time of need is essential to patients. In 2015, the Academy was privileged to work with the Office of Science Technology Policy (OSTP) in the White House to help develop the Interagency Working Group on Medical Imaging (IWGMI). The IWGMI was formed to coordinate the Federal investment in medical imaging research and develop a strategic plan for future development.

The working group will be publishing a roadmap in the near future that will focus on these six identified areas of interest:

- Standardize image acquisition and storage,
- Apply big-data and data-science concepts to medical imaging.
- Get to diagnosis more quickly and cost-effectively.
- Make imaging more accessible.
- Promulgate improved imaging practices.
- Improve translation of new imaging technologies.

All of these steps when implemented will create significant improvements in medical care for your constituents and they are made possible by a steady investment in biomedical research. The sooner we invest, the sooner your constituents benefit.

Mr. Chairman, innovation is what keeps America healthy – both physically and economically – and the NIH is a major contributor to our strength. Since its creation, NIBIB has proven itself to be a “patent machine.” And these activities have a significant impact on real people. On March 28, the Academy will sponsor its 8th Annual Medical Technology Showcase here on Capitol Hill in the Hart Building. At this event we will have some of our most promising Early Career Investigators displaying their work; patient advocates talking about how imaging
has impacted their lives positively; and industry showing off some amazing technologies. All of you have received an invitation and I encourage you and your staffs to come, talk to our young stars of the future and our stars of the present! It will be well worth your time.

Thank you again for the opportunity to present this testimony to you on behalf of the Academy at this important time in the process. The Academy welcomes the opportunity to work with the Congress in helping to assure that the American people benefit from their investment in research and have access to the best technology to address their imaging needs.