International Conference on Multimodality Imaging

More than 150 scientists from China and neighboring countries attended the seventh Hangzhou International Molecular Imaging Conference, held September 24 and 25 in Hangzhou, China. Representatives of the Chinese national and state governments addressed the participants and underscored the importance of this annual scientific meeting as an international forum for scientific exchange. Speakers from China, Korea, Japan, Taiwan, and the United States covered basic research in molecular imaging, with topics ranging from radiolabeled targeted probes to nanoparticles, quantum dots, ultrasound bubbles, and microfluidics. Other lectures addressed molecular imaging approaches, including small animal PET and SPECT, optical imaging, MR, ultrasound, and Cerenkov luminescence imaging. Prominent among the faculty was Michael J. Welch, PhD, from Washington University in St. Louis (MO), who reported in several lectures his experience in probe development, testing, and examining the effectiveness of targeted probes for tumor characterization and therapy monitoring in oncologic patients. Heinrich R. Schelbert, MD, PhD, from the University of California at Los Angeles, provided a keynote lecture on “Current developments in molecular imaging,” from his perspective as the retiring editor of The Journal of Nuclear Medicine.

Scientific Journals and Impact Factors

On August 20, editors from 13 scientific journals concerned with medical imaging met in Cleveland, OH, for the Annual Editors Forum. Among the topics discussed was the use and misuse of journal impact factors. The attendees designated a small group of editors, led by William R. Hendee, PhD, editor of Medical Physics, to write an editorial on this topic. The resulting article, “Scientific journals and impact factor,” will appear in the January issue of Medical Physics and was made available to the Newsline editor for preview. The article, authored by Hendee with M.A. Bernstein and D. Levine, reviews the genesis of the impact factor, beginning in 1975 with the Institute for Scientific Information (now known as Thomson-Reuters or Thomson ISI) and its Journal Citation Reports (JCR).

The impact factor, one of the major data products of JCR, is a measure of the frequency with which an “average article” in a journal is cited during a specific period (usually 2 y for the well-known impact factor journal ranking). Hendee and his coauthors review the way in which impact factor rankings are calculated and describe some of the limitations to this approach, particularly when looked to as a standalone indicator of publishing or scholarly success and value. They note, “Certainly the impact factor should not be interpreted as the sole criterion of worthiness, because it can be influenced by factors other than those that reflect scientific progress.”

The authors also note the “disturbing practice” now gaining currency in Europe and at some U.S. sites of using the 2-y impact factor as an element in faculty promotions and tenure, awarding of research grants, and other decisions that affect the careers of researchers and the research enterprise in general. Hendee and colleagues write, “This practice penalizes investigators working in arcane but potentially important areas of research that are of less interest to widely cited journals. It also provides inadequate recognition of visionaries and entrepreneurs who are ahead of their time or working at the margins of mainstream research, especially since the 2-y citation window is often too short for wide recognition of cutting-edge research.” For consideration of professional advancement, the authors recommend instead the Hirsch index, which attempts to measure both productivity and the impact of a scholar’s work within a given field.

The authors’ findings will be discussed at future editors’ meetings and are being published by other medical imaging journals.

Medical Physics