Report to the Board of Directors RadioGraphics Annual Report

Jeffrey S. Klein, MD, Editor November 2016

RadioGraphics continues in its mission to identify, solicit, peer review, and publish educational materials to meet the needs of RSNA members and Journal subscribers, with a focus on self-assessment continuing medical education (SA-CME) content to meet ABR Maintenance of Certification (MOC) Part 2 requirements for Lifelong Learning and Self-Assessment. Its leadership role in producing high quality educational materials is a result of our continued focus on the Journal's mission and guidance from the RSNA Board of Directors. It represents the collective efforts of our expert authors, editorial board members, manuscript reviewers, annual meeting exhibit review panelists, and our skilled and dedicated RSNA publications and education staffs. In 2016 the Journal continued to improve its annual meeting, manuscript submission and peer review processes and expanded its social media efforts to better disseminate its content.

Journal metrics and statistics

In 2016, *RadioGraphics* will have published 137 educational manuscripts (including solicited exhibits, plenary sessions, and invited articles) and seven online PowerPoint™ presentations for members-in-training, for a total of 2101 printed pages. This compares to 122 papers in 2,219 pages for 2015. The 2015 impact factor for *RadioGraphics*, released in July 2016, is 2.523 (down from 2.609 for 2014). The Journal's five-year impact factor is 3.464. *RadioGraphics*' 2015 Article Influence Score, a measure of the average influence of a journal's articles over a 5-year period following publication, is 1.032.

Total Journal submissions for the period from January 1, 2016 to November 1, 2016 (excluding editorials, special reports, Practice Corner, and letters to the editor) totaled 178 manuscripts. Of these 178 submissions, 75% were from North American and 25% were from international (i.e., non-North American) authors, nearly identical percentages as compared to a similar period from 2015 (74% North American). Our overall acceptance rate for the 10-month period for papers that have received decisions as of this report was 70%, increased from the acceptance rate of 62% for both 2014 and 2015.

Acceptance rates by author nationality and by subspecialty designation are detailed in Appendix A.

The submission rate for 134 exhibits solicited from the 2014 RSNA annual meeting was 86%, compared to 84% and 82% from the 2015 and 2014 meetings respectively.

Currently through 2016 there are 16-17 SA-CME exercises available in each of the seven annual issues of *RadioGraphics* (all exercises are online or via mobile apps), each valid for a 3-year period from the date of publication. 90,205 category 1 SA-CME credits were awarded to readers for *RadioGraphics* CME activities in the 2015 calendar year. As of the end of the third quarter of 2015, the number of CME credit hours awarded from *RadioGraphics* content was 65,425, reflecting a slight increase from 64,210 at the same point in 2015 (see Appendix B).

To gauge online access to RadioGraphics articles, we have been tracking those papers that were accessed most frequently online. For 2015 & 2016, the number of full text accesses has steadily increased (see Appendix C1). A list of the five most read articles to date that were published in 2015 are attached (see Appendix C2).

Editorial Board

The Journal's editorial board saw minimal change in 2016. Dr. Michael Cohen, chair of the Breast Imaging section of the journal, retired and was succeeded by his assistant, Dr. Ermelinda Bonaccio from Roswell Park Cancer Institute in Buffalo, N.Y. Our new editorial board member for Breast Imaging is Dr. Catherine Geiss from Brigham and Women's Hospital in Boston, Mass. The editorial board will see significant change in 2017, as the 5-year term limits for editorial board members instituted with the change in Journal editorship in 2012 take effect. The RSNA Board has accepted the nominations of seven new editorial board chairs in abdominal, gastrointestinal, multisystem, neurologic/head and neck, pediatric, and trauma/emergency radiology, radiation oncology, and a new assistant chair of our imaging physics section. We are pleased to welcome our third international editorial board member, Dr. Antonio Luna, as the new assistant chair for Abdominal Imaging. In addition, the RSNA Board of Directors accepted the nomination of Drs. William Murphy (Historical material), Judy Yee (General), and David DiSantis (Education) as Consultants to the Editor. This group of individuals will serve at the discretion of the editor and assist the editor by providing guidance on issues related to editorial policy, annual meeting processes, ethical issues, initiatives on new journal content particularly online, social media, educational efforts including CME, and informatics. Each consultant will serve a 3-year term which may be renewed once.

Journal Functions

The 2016 RSNA Olmsted Editorial Fellow, Dr. Karen Buch, visited the Burlington *RadioGraphics* office on Wednesday and Thursday, October 26-27, 2016. Dr. Buch, a neuroradiology fellow and graduate assistant at the Massachusetts General Hospital, reviewed the journal's processes of reviewing education exhibits at the RSNA annual meeting, our submission and peer review systems, and print and online production. The 2016 Eyler Fellow is Dr. Meike Vernooij, a neuroradiologist and head and neck radiologist and Associate Professor of Radiology and Epidemiology at Erasmus MC University Medical Center in Rotterdam, the Netherlands. Dr. Vernooij is scheduled to visit the RadioGraphics offices for two days in mid-November and during her time with us will review the organizational structure of RSNA Publications, our process of identifying educational content for potential publication, the Journal's submission and peer-review processes, and our Journal content and future online initiatives.

RadioGraphics continues to support the International Society of Radiology's GoRAD (Global Outreach Radiology) initiative by identifying a paper from each issue of the online Journal for open access on the GoRAD site (http://www.isradiology.org/gorad). The RSNA and RadioGraphics also continue to have a contractual arrangement with Thieme Publishers to supply selected RadioGraphics papers, primarily those in neuroradiology, for German translation.

Annual Meeting Review and Solicitation Processes

As in past years, the *RadioGraphics* editorial board provided the Education Exhibits (EE) Committee a list of topics that they would like to see as exhibits at the 2016 annual meeting. As they review education exhibit abstracts, members of the EE Committee will consider topics that the Journal would like to see as submitted manuscripts. To further encourage the submission of desired topics for the Journal's consideration, we will publish a similar list of topics in my January 2017 editorial and in the *RadioGraphics* January 2017 call for abstracts for RSNA 2017, based upon our editorial board's suggestions and readers' requests collated from responses submitted with completed *RadioGraphics* CME exercises during 2016.

Again at RSNA 2016, we are using an electronic exhibit review system that has been updated and improved by RSNA IT Development staff. This facilitates the exhibit review process for our Journal panelists, as they will have links within the review system to all DPS exhibits and to pdfs of posterboard

exhibits being presented at the meeting. Our panel chairs are able to create and prioritize a list of recommended solicitations for the *RadioGraphics* editor and staff. The system will also provide direct feedback from panelists to our solicited exhibitors as they structure their materials for submission as manuscripts or as online presentations.

We continue to create lists of material previously published, accepted but not yet published, and in revision for our review panel chairs and panelists to avoid redundant submission and publication of material with overlapping content. This same list is provided to the faculty from the American Institute of Radiologic Pathology (AIRP), who continue to provide radiologic-pathologic correlative content for *RadioGraphics*.

At RSNA 2016 we will maintain the total number of solicitations from the annual meeting to 1) improve our time to publication, 2) reduce our backlog of accepted papers awaiting publication, 3) maintain a high quality of published material and 4) increase our acceptance rate of submitted papers. We will again use a staggered invitation process for RSNA 2016 whereby exhibits of high and moderate priority for publication (as determined by our editorial board) will initially be invited at the annual meeting. Following the responses received from these initial invitations, we will invite a second group of papers, with the total number of solicitations not to exceed 140.

In an effort to expedite the publication of important content identified at the RSNA meeting, we developed a "fast-track" mechanism for selected papers from the 2015 meeting. These submissions addressed topics that our editorial board identified as being the highest priority for publication, and were given early 2016 submission deadlines and an expedited processing, peer review, and production process in an effort to publish them in a more time-sensitive manner. For the 2015 meeting there were 16 Fast-Track papers solicited, of which 14 were submitted. Twelve of the 14 (86%) of the Fast-Track submissions were accepted, with seven of these 12 published in the November 2016 issue of the journal.

Of our 412 RSNA 2016 meeting *RadioGraphics* panelists, 379 are from North America. The 33 international panelists are from a variety of countries.

Peer Review

In 2016 we continued with our use of Manuscript Central/ScholarOne for manuscript submission and peer review. Beginning in 2015 we increased the requested number of reviewers for each manuscript

from two to three, in order to increase the likelihood of receiving high quality, detailed and timely reviews and to provide better and more detailed feedback to our authors.

In 2016 *RadioGraphics* continued with a peer review mentoring program for senior residents and junior faculty members. Three junior faculty have now completed this 18 month program, which utilizes senior reviewers and the *RadioGraphics* editor to mentor these junior colleagues by providing constructive feedback on manuscript review. We have actively advertised this opportunity with the RSNA Resident and Fellows Committee to solicit interest, and promote this opportunity during our visiting editors' program presentations to participating institutions twice a year.

We continue to use a plagiarism detection program, iThenticate/CrossCheck, to screen all submissions for percentage of overlap with previously published content. In addition, each *RadioGraphics* reviewer completes a reviewer profile within the site that uses an adapted version of RadLex to identify areas of interest/expertise for each reviewer and hopefully allows better matching of RadLex-tagged submitted content to reviewers. The structured-review format, which debuted with the *RadioGraphics* ScholarOne site, improves training in manuscript peer review for fellows and junior faculty and provides objective data on manuscript deficiencies to guide editor communication back to authors. This more structured review provides the editor and associate editors more objective data on the quality of a manuscript review, which is necessary for providing constructive feedback to our reviewers and allows the editor to grade the reviews and offer CME credit for high quality reviews. As of October 1 2016, the RSNA has awarded 306 AMA PRA Category 1 CME credits to reviewers for *RadioGraphics* manuscript reviews.

In 2016 we awarded our third annual Editor's Recognition Awards to 46 reviewers who were acknowledged for having provided high quality and timely reviews for the 2015 calendar year. We made a slight change in our eligibility criteria for the award, to include those reviewers in subspecialties, such as medical physics and radiation oncology, where we receive fewer overall submissions and therefore require fewer manuscript reviews. The names of awardees were published in a March 2016 editorial, and several letters have been written on behalf of those individuals who requested a letter from the *RadioGraphics* editor to chairmen or deans in support of reappointment, promotions, and tenure efforts at the parent institution.

We are continuing our efforts to expand international members in our peer reviewer pool. Of our manuscript reviewers, 302 provided a review for the journal in 2016; of these, 280 were North American and 22 were international.

Journal Content, Design, Delivery

RadioGraphics continues to publish an article in each issue from the American Institute for Radiologic Pathology (AIRP) archives series. The rotating subspecialty topics for each year are Chest/Cardiac, Musculoskeletal, Gastrointestinal, Genitourinary, Neuroradiology, and Pediatrics. Education exhibits continue to constitute the majority of our content. Selected commentaries from experts in the radiology and allied clinical disciplines accompanying articles of particular interest or controversy continue. Our Associate Editors, Dr. John Eng (Informatics) and Dr. Jonathan Kruskal (Practice Policy and Quality Initiatives), continue to solicit material for the Journal in their respective areas.

Our recently published October 2016 monograph entitled "Musculoskeletal Imaging", the 18th in the monograph series initiated in 1999, was edited by Dr. Kirkland Davis and Dr. Laura Bancroft, chair and assistant chair of our RadioGraphics editorial Board for musculoskeletal imaging. The monograph include articles on a spectrum of musculoskeletal issues including pediatric and adult topics and several papers focusing on musculoskeletal ultrasound. The 2017 monograph will be dedicated to Pediatric and Adolescent Radiology and will be guest edited by our two pediatric editorial board members, Drs. Harris Cohen and Paul Babyn.

The section of the Journal focusing on our members-in-training, "Training and Fundamentals," continues to feature 1) a collection of peer-reviewed, interactive Powerpoint™ presentations solicited from education exhibits displayed at the annual meeting and 2) *RadioGraphics* manucsripts published since 2005 organized by subspecialty and indexed according to the American Board of Radiology Study Guide for the Core Exam in Diagnostic Radiology. This effort continues to be led by the Journal's Resident and Fellows Education editorial board members, Drs. Jennifer Harvey and Sanjeev Bhalla, and Sara Zimmerman, RSNA Publications Assistant Director for Online Publishing.

The online Journal continues to evolve with new forms of content and functions for readers. The *RadioGraphics* Image Viewer launched from within online papers allows the reader to compare up to four images from the same article, zoom in and out of images, focus on specific areas with the magnifier, and download images and captions to a PowerPointTM deck to use for teaching or self-study. RSNA members can save images or papers as bookmarks in myRSNA to access them anytime. A revised ImageViewer that will allow scrolling through image stacks and the window/leveling of cross-sectional images published in the online journal is scheduled for early 2017.

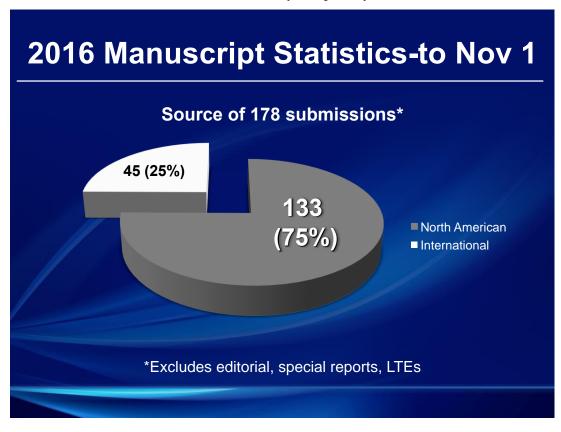
The *RadioGraphics* blog entitled "*RadioGraphics* Views" is a Journal podcast with audio and video material that highlights featured papers in the current issue of the Journal. In October 2016 we began to include video podcasts with authors of current papers who are interviewed by the editor in a question and answer format and discuss their papers with our readers. In 2016 we will have posted 17 podcasts for our readers, with a plan to expand this to 24 (2/month) in 2017.

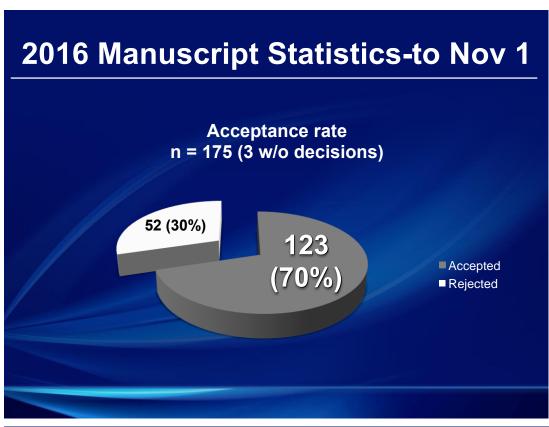
We have reinitiated the solicitation and publication of medical physics papers derived from the Saturday AAPM/RSNA resident session at the annual meeting. A paper on ultrasound physics derived from the 2015 course has been accepted and is scheduled for publication in early 2017, and the upcoming AAPM session focusing on updates in computed tomography has already been invited for submission.

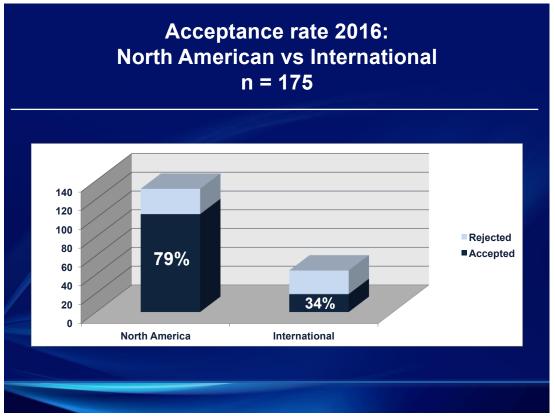
Acknowledgements

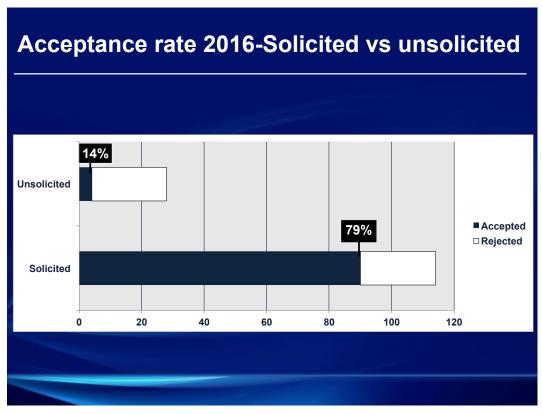
I would like to acknowledge the support of those at RSNA who have worked tirelessly on behalf of the Journal in 2016. My thanks to the Board of Directors of the RSNA, in particular Dr. Mary Mahoney, RSNA Board of Directors Liaison for Publications and Communications, for her ongoing support of the Journal this past year. The *RadioGraphics* Editorial Board, our annual RSNA meeting review panels, and our reviewers have worked tirelessly to help maintain the excellence of the Journal and to help advise on improving our processes and on the development and implementation of new initiatives. Thanks to our authors who develop and submit their educational materials to us for our consideration. The *RadioGraphics* Publications staff continue their invaluable roles in support of the Journal.

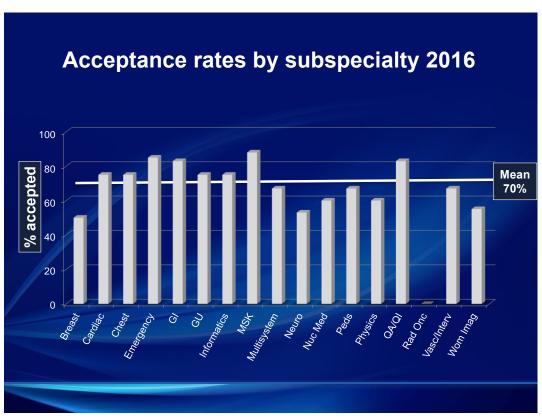
Appendix A. Data on 2016 total submissions: by nation of origin, acceptance/rejection rates overall, by North American vs international authors, and by subspecialty.



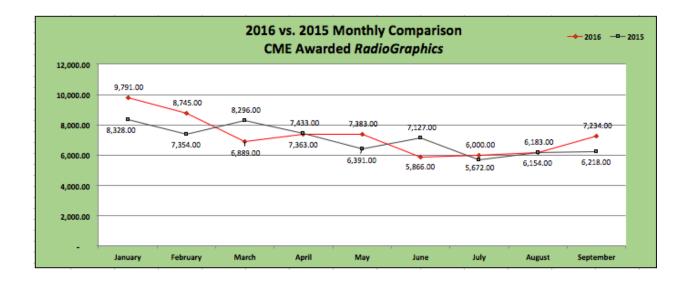






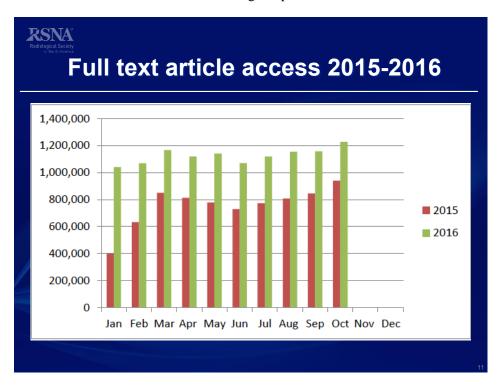


Appendix B. CME credits from RadioGraphics articles 2015-2016 year-to-date.



Appendix C. Online access to RadioGraphics articles

1. Full text access data 2015 through September 2016:



2. List of 5 most accessed RadioGraphics online articles published in 2015:

