



Canadian Association of Radiologists
L'Association canadienne des radiologistes

CAR RESIDENTS' REPORT

American College of Radiology

2016 Annual Meeting

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OVERVIEW

Drs. Will Guest and Mitch Wilson had the pleasure of attending the Resident and Fellow Section (RFS) Meeting held in conjunction with the American College of Radiology Annual Meeting (formerly the Annual Meeting and Chapter Leadership Conference – AMCLC) held in Washington, DC in May 2016, as the CAR resident delegates. The theme of the meeting was *The Crossroads of Radiology*, offering members and colleagues “one-of-a-kind programming, exhibits, and idea exchange with educators, policy makers, and industry partners.” ACR 2016 is the second annual meeting of the ACR to include all ACR members, residents, fellows, industry partners, and radiology professionals from across the specialty.

The meeting was organized around ACR Knowledge Pathways, aimed at focusing learning and promoting skill-building in:

- Advocacy, Economics, and Health Policy
- Clinical Education
- Clinical Research
- ACR Governance
- Informatics and Innovations
- Leadership
- Quality and Safety
- Resident and Fellows Section
- Young and Early Career Physician Section

BACKGROUND

What is the American College of Radiology?

Founded in 1924, the American College of Radiology (ACR) is a professional medical society dedicated to serving patients and society by empowering radiology professionals to advance the practice, science, and professions of radiological care. The ACR is composed of 54 chapters (50 states, DC, Canada, Puerto Rico, and CARROS [Council of Affiliated Regional Radiation Oncology Societies]).

The ACR serves as “the voice of Radiology” in matters of legislation and regulation in the United States of America. The ACR represents nearly 38,000 members with core values including leadership, integrity, quality, and innovation.

What is the Resident and Fellow Section?

The Resident and Fellow Section represents ACR members-in-training in residency or fellowship, totalling over 5000 members. Together, the group works to develop resources that benefit current trainees and the specialty as a whole.

2016 RFS SESSIONS/SPEAKERS

- Welcome and Meeting Overview
- ACR RFS Updates
- Legislative Update and Radiology Advocacy Network
- RLI Part I: The Practice Environment of Modern Day Radiology
- Student Loan Refinancing Basics for Members of ACR
- Career Development Part I
- MACRA 101
- ACR Caucus
- ACR Workforce Update for Members-in-Training
- RLI Part II: The Practice Environment of Modern Day Radiology
- American Board of Radiology Update with Q+A
- Career Development Part II
- Closing of RFS Business

Welcome and Meeting Overview

Neil Lall, ACR RFS Chair

- Dr. Lall thanked the RFS team for a productive year. He reviewed the sessions to come, and introduced RFS Fellowships as well as current social media activities (including a blog, journal club, Facebook, and Twitter). The Radiology Leadership Institute (RLI) was cited and thanked. The website can be accessed here: www.radiologyleaders.org.

ACR RFS Updates

Colin Segrovis, RFS Secretary

- The *ACR bulletin* is published 12 times per year. The Bulletin keeps members up-to-date on current research, advocacy, efforts, the latest technology, and relevant education resources (<http://www.acr.org/News->

[Publications/Publications/ACR-Bulletin](#)). This year, the RFS transitioned to the ACR Bulletin to provide its' members with up-to-date information, with 54 RFS articles published since 2015. 4760 total views of the RFS articles have occurred to date, with multiple articles in the top 50 most read on ACR Bulletin website.

- The *RFS eNEWS* is a monthly eNewsletter to the residents (over 5000 recipients) (<http://www.acr.org/Membership/Residents-and-Fellows/Resident-Resources/RFS-ENews>). This eNewsletter highlights news around the country relevant to residents.

Naiim Ali - Advocacy Liaison/AMA Delegate

- The *Radiology Advocacy Network (RAN)* is a group of program reps from 177/226 radiology programs dedicated to legislative/advocacy updates throughout year. This year, call to action responses resulted in real-change increasing number of co-sponsors and bills passes (specifics are mentioned in articles below).
- *RADPAC* (The Radiology Advocacy Alliance Political Action Committee) is a subsidiary of the ACR serving as an annual fundraising campaign for advocacy at the national level. In 2015, \$1,348,240 was raised from over 2,800 radiologists, the second highest total in RADPAC's 16-year history. *RADTOBERFEST* is an annual campaign challenge with residents and attending's competing for the most number of donations (residents won again).
- Radiology residents and fellows are present in *AMA*, with 1/8th of AMA delegates from Radiology. Active AMA issues relevant to resident/fellows include a formal definition for residents and fellows which will be voted on at an annual meeting in June. In addition, and increased number of GME positions will be available in the near future. *Hot topics* at the AMA level include a recent vote to ban direct to consumer advertising for prescription meds, in addition to current modernization of the code of medical ethics.

Christina, Membership

- Christina introduced us to many active membership campaigns. Firstly, the RFS was active on Twitter, with a 1-hour "tweet chat"

surrounding a central theme in Radiology occurring on the fourth Thursday of every month. Secondly, the *Journal of the American College of Radiology (JACR)* has tailored content for Radiology residents. Christina reviewed the ACR 2016 Poster Competition, which included a high level of quality applicants, and 123 abstracts accepted. Ongoing work includes an economic committee on Economic issues in American Radiology, and establishment of a Nuclear Medicine resident's organization vice-chair for education.

Manisha Bahl, Communications Officer

- Commented on *Social Media*, ACR RFS active on Facebook and Twitter. Facebook has over 450 likes/members, and Twitter has over 1500 followers. As mentioned, the ACR RFS uses a varieties of methods to communicate with its' members. These include the ACR Bulletin, regular updates on the ACR RFS website, RFS eNews, and contributions to the RLI

Nikhil Thaker, Radiation Oncology Representative

- Nikhil brought attention to the 2nd annual AIRP Rad-Path course for Radiation Oncology, which occurred this year. His updates include a Rad Onc resident will serve as the next Amis Fellow for Safety, and that the group is actively working to improve ACR membership in Radiation Oncology.

McKinley Glover, Vice Chair (incumbent Chair)

- McKinley reminded us that the Vice Chair serves as an intermediary between chair and executive committee. He plays an active role in ACR 2016 planning and serves on the RFS nominating committee and RFS caucus.

Kari Visscher, Past CAR Resident Section Chair

- Kari provided an update on the status of the CAR RS. She opened mentioning that CAR has some 2000 members, of which 400 are residents though we have had relatively little role in the CAR to date. The CAR RS was established in 2015 and recently received members from all 16 Canadian programs. This past year, a questionnaire was completed by each institution identifying the needs of

residents. A focus on creating a comprehensive Fellowship project has been the primary goal for the past number of months. The future will focus on a jobs database in addition to a centralization of services aimed to specifically benefit Canadian radiology resident's needs will occur over the next couple years.

Amy Patel, Women and General Diversity Advisory Group Update

- Amy introduced us to a new group aimed at assisting the Commission for Women and Diversity with various projects within the college. A shortfall was identified for women and minorities in radiology, with a focus aimed at a general lack of female medical students entering radiology. A medical student questionnaire was completed identifying the difference between female and male interest in Radiology. The main reason identified for excluding Radiology as a career choice was a general lack of knowledge of the specialty. Students choosing radiology as a career generally favored lifestyle and salary as the two most important factors in their decision. It was determined that the third year of medical school was the best year to recruit female medical students to Radiology. Future projects will explore under-represented minorities in Radiology

Monica Wood, AMA Update

- Monica presented AMA's strategic focus, currently on improving health outcomes with preventing opioid abuse through prescription drug monitoring as the prominent priority. There is an aim to transform medical education by creating a consortium to share best practices. Innovation in medicine is targeted is through two approaches including a health website start-up co-founded by the ACR (www.health2047.com), and \$50,000 in innovation grant money available for applications on how to transform physician education and have patients live longer

Ashley Prosper, Med Student Task Force

- The Med Student Task Force was founded by the ACR in 2015 as a response to the NRMP match (sharp decline in positions filled in

2015) (lowest numbers of total applicants in 15 years). Goals of task force included identifying medical student needs when exploring radiology, clarifying existing medical student resources currently available, and removing barriers that prevent entry into radiology. Current work includes reworking the ACR medical student application, establishing an ACR RFS medical student interest group database, and completing an IRB-approved medical student survey. Results revealed only 86% of residency positions were filled in 2015, but 96% of residency positions were filled in 2016 – hopefully an indicator of improved match rates in the coming years.

Melissa Chen, RFS Journal Club

- The RFS Journal Club is a 16-member group with bi-monthly journal clubs to discuss current topics in healthcare economics (available to all residents). Dr. Chen also serves as the trainee representative on committees with the ACR Commission on Economics.

Henry Chou, International Outreach Subcommittee

- Objective of the IOS is to serve as a primary resource for trainees interested in seeking information about global health imaging opportunities. Global checklists are available for residents looking to travel for an international elective (guidelines, packing-list, resident scholarship).

Rob Mackey and Amy Patel, RADPAC

- RADPAC is a bipartisan political action committee affiliated with ACRA. It is one of the strongest healthcare provider PACs in the country, advocating at the national level in Washington DC has achieved the second highest hard money raised for DOC PAC community, and RFS contributed 9%. An example of RADPAC victory includes the multiple procedure payment reduction (MPPR) which was written to identify duplication of work and label as "efficiencies". Essentially, if two or more images were read for the same person the second and subsequent images would be paid out at 25% less the standard rate. Research showed that

efficiencies related to same patient studies was only 5%, and negotiation was successful to decrease the MPPR from 25% to 5%; saving the average Radiologist \$1600/year. Other current bills relevant to Radiology include HR2029 - protecting access to life saving screenings act (PALS), and HR 1151 USPSTF transparency and accountability act.

Chris Sherin, Legislative Update and Radiology Advocacy Network

- Chris serves as the Director of Congressional Affairs for the ACR in Washington. Key topics for discussion included the 2015 passage of legislation to permanently repeal the sustainable growth rate (SGR) - Medicare access and CHIP (children's health insurance program) reauthorization act (MACRA). MACRA sets up 2 track payment system to prod physicians into risk-based payment models; MIPS and alternative payment models (APM). Plan is that beginning June 2015-Dec 2019 – physicians get 0.5% annual update. A MIP essentially modified fee for service and streamlines many incentive programs. A composite score will be provided to each Radiologist based on outcome quality metrics which will determine their reimbursement bonus from Medicare or penalties up to 8% on a net zero budget (i.e.: those that receive bonuses for performance will be collected directly from the penalties applied to other Radiologists). APMs are a more loosely defined in statute which are based on accountable care organizations. The annual 5% incentive payments from 2019-2024.
- MACRA provides greater flexibility for “non-patient facing physicians” whom are required to report fewer measures, overall compared to “patient facing physicians”.
- Enactment of HR 2029, the consolidated appropriations act of 2016, though MPPR was lowered from 25% to 5% (save hundreds of millions over next several years)
- Mammography screening tool includes task force recommendations of biannual mammograms for women 40-49 (c-grade), and biennial mammograms for women 50-74 (b grade). RAN was successful for negotiating biannual mammograms for women 49-49 as

part of the task force recommendations, which sets responsibility for private insurance companies to fund this screening cohort without any form of cost sharing.

Andrew Woo, Radiology Advocacy Network (RAN) Update

- RAN functions as grassroots advocates, and was founded in 2012 because individual responses for Radiologists were not generally returned. By instituting a formal method of reaching individual radiologists, an increased response from 5% to 25-40% has occurred, which directly translates into policy changes. In recent past, RAN went from 4 to 49 states, and updated their website and provided improved advocacy tools which has made it easier for Radiologists to advocate (sounds as though it's as simple as checking a few boxes on an iPhone app). Recent results as a consequence of RAN have included the SGR patch (2014), lung cancer screening (2014), Medicare access and CHIP reauthorization act (MACRA) (2015), and Consolidated Appropriations Act (2016).

RLI Part I: The Practice Environment of Modern Day Radiology

Frank Lexa, How to nail a job interview – secrets from Wharton

- Dr. Lexa outlined his talk as understanding that good interviews matter. Preparation is important, and touched on reasons that interviews go poorly
- His reasons why interviews matter included: people look similar on paper, residency and fellowship program directors are often not helpful with clarity, not about grades anymore, and compatibility is important – airplane test (“would this be someone I would sit next to on a plane for five hours?”).
- For preparation, he recommends getting mentors inside and outside institution to help advise you, developing a smart and realistic target list, developing an “elevator” pitch, that the best jobs are not advertised – you need to look for them, and to network, network, network – at the local and national level.

- Keys to a good interview include: interviewer gains insights beyond letter and CV, you have an opportunity to talk about self-including setting your agenda, and making your own points, as well as information gathering – make a list of what you need to know.
- Job questions include: What will I need to read? Is it different on call? How much will I read (and earn)? How many sites are there? What does the group own? Joint ventures, tele contracts in/out? Daylight hours, call and weekend responsibilities? Egalitarian? Group meetings, votes, ownership, call, vacation, pay, etc.? Turnover: who is leaving, hiring, non-partnering, etc.? Buy-ins, tails, non-monetary compensation?
- What not to do: Don't do homework, arrive late, be rude to administrator who is setting up your interview, ask your interviewer out, don't dress up, text during interview, not make eye contact, reveal tattoos and piercings, do wear underwear
- Illegal questions (US) include: Religion, race, colour, national origin, disability, genetics, age, gender, sexual orientation, marital status, children, pregnancy, native language, citizenship, how long have you lived here, what social organizations/clubs you belong to, smoking or drinking history, height, weight, health. There are, however, legal workarounds such as: any reasons you can't work 7 days per week? Any reason can't do myelograms or LPs? Hypotheticals can be illegal depending on how posed?
- Bad topics include politics, sex, race, and religion.
- Bad questions include: How is the weather here? How big is the hospital? Do you work hard here? Are you allowed to date the medical
- Smart questions include: What does it take to succeed here? What is your vision for the future of this practice/department/institution? What needs to change? What are you looking for in a candidate for this job? Is the institution growing (and why and how)? Give me an example of why someone didn't work out in your group or department?
- Preparation should include: Do homework – learn about group, intensively research, network and look for connections (past and present) to anyone in the group/department but especially the key members, clean up social media and web presence, consider tattoo removal procedures early on, plan your travel logistics in detail.
- Core issues include: Get a good sleep, no hangovers, review both the job description and your CV, arrive early – the global business standard is 15 minute before the interview
- On morning of interview: Comb your hair, shave, brush your teeth, clean shoes, dress up – dark suit, white shirt, conservative tie, leather shoes, etc.
- During interview: Turn off phone, shake hands, smile and look at interviewer, be yourself (or better than yourself), answer the questions you are asked, don't answer illegal questions, but be polite if interviewer asks, make sure that you make your points during the interview, gently bring the interview back on track if your interviewer goes off tangents, have intelligent questions to ask the interviewer if she/he gives you an opportunity.
- Beyond the interview: Order from the middle menu, be careful with alcohol, don't order lobster or spaghetti and meatballs, be polite, interview not over until out of building.
- After the interview: Make sure that you understand the next steps in process, prepare to follow-up on any items from the interview, send a thank you, and don't burn bridges.
- Questioning styles: Hypothetical – can you handle stress? Situational – how would you hand a stressful day in practice? Behavioral – give me an example of you managed a stressful situation
- Panel interviews: Work the room, speak to everyone and look at everyone, see how they respond and work with them, make your points regardless of the number of interviews.
- Tricks: Awkward silence is okay, pay attention to pronouns usage, active versus passive voice, track qualifier usage, track use of absolutes: “always” “never.”
- Smart answers: I am the right person because..., I can improve because..., I can improve because..., I would fit in because..., In given years, I expect to accomplish...

Richard Gunderman, The Story of Radiology's Richest Man

- This parable was based on Bill Cook, a pioneer in angioplasty and founder of Cook Inc. While he grew the company into a successful multi-billion-dollar business, he was "rich" because he always focused on the meaningful things in life – family, patient care, etc. By focusing on what mattered, Mr. Cook was able to create a business in which employees and customers were happy, patient outcomes improved, and he was able to live a personally fulfilling life. Money is not everything, and Dr. Gunderman wanted to remind us to keep our values in check.

Student Loan Refinancing Basics for Members of ACR

There is a student loan crisis in US; currently residents average about \$170,000USD of debt, with interest rates between 5-15% in the US. This talk explained options for consolidation and refinancing in the American market. Direct load consolidation offers blended average interest rate, though there is more interest over long term. Student loan refinancing allows the individual to receive a new (ideally lower) rate, with private and federal loans included. Deferral loan refinancing considerations include deferment and forbearance. Forgiveness programs exist for residents who sign on to a not for profit hospital after 10 years of work.

Career Development Part I

Tom Hoffman, JD - Professional liability for the radiologist

- Changes have occurred within the past 10 years including shifts from volume to value (MACRA), integration of care, and more Radiologists working as employees. As an independent contractor, traditionally the Radiologists was solely liable for their reports, however this is changing with the hospital now bearing shares responsibility in some cases. As an employee (i.e.: a resident/fellow, or employed staff), you are often responsible for acts and omissions – confirmation of insurance is critical
- Current liability challenges include:

- Communication – identifying when staff should be contacted with specific findings. Structured reporting (Imaging 3.0) will be necessary with value based reports and will help with clarity. Emphasis should be placed on the use of plain language in reports (J. Hoan – June 2015 JACR).
- Intellectual property – the University often owns the work, and permission to present at conferences and publish from institution is needed if done on duty for institution.
- Image use and sharing – can be use patients' image in education and QA (remove identifiable info)
- ACR Resources include a national attorney referral list, federal info on national and state trends, RADLAW columns in bulletin, an open door/phone/inbox for questions.

Sanjay Shetty and Alex Misono, Nonclinical careers

There are a variety of options outside diagnostic radiology that radiologists can consider as part of or in replacement for their career – decision should ultimately come down to what makes you happy/fulfilled. Common concerns include: financial security, work/life balance, passion for job, prospects for a fulfilling career, job stability, sense of satisfaction, continuous development. Examples of nonmedical careers for Radiologists include: healthcare admin, med writing, VC/private equity/finance, disease management, management consulting, tech & IT, pharmaceuticals/devices/biotech, research and CRP, entrepreneurship, expert witness/legal consulting. How do you consider a nonmedical career: network and create a "board of advisors." Test the waters slowly before making a complete transition from Radiology.

MACRA 101

Zeke Silva III and Gregory Nicola

- The Medicare Access and CHIP Reauthorization Act (MACRA) outlines two parallel but complimentary payment methods – MIPS, and APMs. These programs are complimentary as a quality payment program and can be thought of as a transitional process in translation from a fee for service based system, to MIPS, to APMs.

- The current payment system in the US is a fee for service model, and MACRA shifts the model from a volume to value based payment structure.
- Merit-based incentive payment system (MIPS) offers a means for consolidation of clinical data systems.
- Radiologists will be considered “non-patient facing” physicians and will be assessed based on quality and clinical practice improvement activities (as compared to “patient facing” physicians who are also assessed on cost and advancing care information).
- Radiologists will require 6 or more quality reporting measures (based on a list of about 40 measures) with reports of rates and performance as new standard (previously only rates reported), in addition to two clinical practice improvement measures. A score out of 100 will be calculated (67% based on quality and 33% based on clinical practice improvement), and each Radiologist/group will be compared across the country. A net zero bonus and penalty structure will occur whereby a Radiologist/group can be provided a bonus or be penalized up to 9% of their Medicare billings dependent on their performance score. The money of the bonuses will be accounted for by the penalized monies from the lower performers (a net zero structure). All scores will be available online starting 2019, and the public will be able to search their Radiologists' performance score. Alternative payment methods (APMs) are less well defined in the legislation.

Structure of the ACR Governance

The second day of the RFS meeting began with a brief review of the structure of ACR governance. The ACR is led by 34 chancellors, from which several executive officers are selected who conduct day-to-day business. In addition, there is a House of Delegates (Council) comprising approximately 350 members (1 for every 100 ACR members), drawn from state chapters, the RFS, and the Young Professional Society (YPS). A steering committee of the Council provides general oversight of activities. Finally, reference committees are formed to perform specific delegated

functions or studies within the ACR and accept testimony from all ACR members.

ACR Workforce Update for Members-in-Training

A 2016 workforce survey was sent to 1920 radiology department heads, of which 579 (32%) responded. The response rate from teleradiology groups was lower than for groups in other categories. Statistics of interest included:

- there are currently approximately 33600 radiologists in the US;
- 57% are in private practice, 21% in academic practice, and 12% are in non-academic hospital practice;
- 78% of radiologists are male and 22% are female;
- 9% of male radiologists and 30% of female radiologists work part time;
- 2-3% of radiologists switched from full to part time;
- 6% of radiologists are over age 65; 22% are between 55 and 65; 550 to 715 radiologists retired in 2015;
- The most numerous categories of radiologist principal practice are: body imaging (15%), general IR (14%), general diagnostic radiology (13%), and neuroradiology (12%);
- The fraction of general radiologists continues to decrease;
- 1500 to 1900 jobs were created in 2015, more than predicted;
- 55% of jobs went to first time hires, while 45% went to people changing jobs;
- In 2016, 1700 to 2200 jobs are predicted.
- Most new hires are expected to be in breast radiology, general IR, neuroradiology, general diagnostics, body imaging, and MSK;
- The greatest demand is for people with a single fellowship willing to do general radiology;
- Most new jobs are expected in the south and central US; the lowest number are in New England and the mid-Atlantic region;
- **Overall hiring trends in the US are positive!**

RLI Part II: The Practice Environment of Modern Day Radiology

Lawrence Muroff, How to evaluate a radiology job offer

- According to a recent survey, 45% of practices are looking to hire immediately, and 30% are planning on hiring in the near to medium term. Fellowship training is more or less required in order to be hired. The starting salary for new hires is \$250,000-350,000 USD, which has been trending slightly downward. In addition to salary, it is important to consider other benefits and perks such as education, insurance, pensions, and bonuses. Some practices are more egalitarian in their treatment of new hires, while others are more hierarchical.
- The requirement for buy-in when joining a group depends on whether the group has a technical component (that is, owns their own imaging equipment), or derives its income solely from professional fees. If the group has no technical component, the median buy-in is less than \$50,000. Buy-in for a group with a technical component is generally \$100,000-200,000. Average annual income for radiologists in groups with no technical component is \$400,000-500,000, while income for radiologists in groups with a technical component is \$600,000-700,000. Benefits will generally add approximately \$50,000-100,000 to total compensation. The average vacation time (including time for CME) is 11-12 weeks.
- The average time to partnership is 2 – 3 years. There has been a slight increase in migration between practices, although radiologists who do change practices will usually have to start over in accruing time toward becoming a partner in the new practice. On the subject of job security, approximately 60-80% of groups have let a radiologist go in the past 5 years. Some of the problems encountered with new hires included unsatisfactory work ethic, unrealistic financial expectations, little interest in building the practice, and reluctance to take call or agree to buy-in conditions.

Alex Norbash, "Romneycare" in Massachusetts and its implications for universal healthcare

- The universal health care system deployed in Massachusetts in 2006 is a test case for the use of Accountable Care Organizations (ACOs) that play an important role in the nationwide implementation of the Affordable Care Act ("Obamacare").
- Prior to adoption of state health care reforms in 2006, Massachusetts had the highest health insurance premiums in the country, averaging roughly 10% of gross income.
- The state introduced an individual mandate requiring people residing in the state for more than 63 days to either purchase insurance or pay a penalty. Insurance coverage was provided for free to people with incomes up to 150% of the federal poverty income level, and people with incomes between 150% and 300% of the poverty level received a sliding subsidy.
- Employers were required to provide insurance coverage to a proportion of their employees, depending on the size of the employer. Since the reforms, overall mortality decreased by 4.5%, although there was no significant change in the hospital readmission rate.
- Employer-based coverage increased from 70 to 77%, and the number of uninsured decreased from 530,000 to 130,000.
- However, the cost of care has continued to increase and remains 27% above the national average. Primary care wait times have also increased to an average of 44 days.

American Board of Radiology Update with Q+A

Kay Vydareny, Associate Executive Director for DR and the Subspecialties

- There are no plans to adjust the current timeline of examinations, which involves writing the core exam in the 36th month of radiology training and the certifying exam in the October after finishing a one-year fellowship.
- If a trainee writes the core exam later than the 36th month of training, he or she must wait 27 months after writing the core exam to take the certifying exam. The exams are

delivered in June and October, at testing centres in Chicago and Tucson.

- Question topics are allocated following a two-dimensional grid describing subject categories (chest, MSK, breast, etc.) and modalities (CT, US, MR, etc.). Physics has more than twice as much weight as other categories.
- The radionuclide safety exam (RISE) is embedded in the core and certifying exams but is only scored after the certifying exam.
- A number of preparation materials are available from the ABR, including study guides, the quality and safety syllabus (which will be revised for the 2017 exam), core exam blueprints (which provides the percentage content in different domains), and sample question content.
- A practice exam is available on the website with 110 content items: the software interface for the practice exam is the same as at the testing centre. The exam is criterion referenced, not norm referenced, so performance is compared to an external standard set by committee.
- A two-stage scoring process is applied: first, the candidate score must exceed the external standard; second, the candidate must exceed a "conditioning threshold" for all 18 subject categories. This threshold is set higher in physics. If the candidate falls under the threshold in less than five categories, the candidate conditionally passes the exam.
- So far, the exam has an 87% pass rate with 1% conditionally passing (all in physics). The certifying exam is taken 15 months after satisfactorily finishing residency. It comprises five modules, two of which are required (non-interpretative skills and diagnostic essentials). Three modules are optional and are available at both fundamental and advanced difficulty levels.
- If one chooses more than one module from the same subject, the first module is at the fundamental level, and the next module is at the advanced level.

- Each module contains at least 60 questions; the exam takes 5 hours and is graded as pass/fail. 100% in the current resident cohort finishing fellowship have passed.

Career Development Part II

Tessa Cook, MD, PhD – Academic Radiology – University of Pennsylvania, PA

Josh McDonald, General, Small & Rural Practice – Cedar Rapids, IA

Kurt Schoppe, Private Practice, North Texas

Garrett Walters, Teleradiology, Charlottesville, VA

- The RFS meeting concluded with a *career pathways panel*, with representative radiologists from academic, general, private, and teleradiology practices. The audience posed the greatest number of questions to the teleradiologist, focusing on the practicalities of his daily work. He explained that he worked a 7 day on/7 day off schedule, from 9pm to 3am, with the opportunity to pick up additional shifts during his days off if desired. Most of the teleradiology work is general coverage for emergency rooms, with some outpatient studies in the radiologist's area of subspecialty. Using the teleradiology software platform, it is possible to message other radiologists to discuss difficult or ambiguous cases. It is generally necessary to obtain multiple state licenses, but the teleradiology company assists with the application process.
- The general and private practice radiologists emphasized the importance of choosing a practice in a location that is acceptable to everyone in the radiologist's family. The academic radiologist discussed the need to negotiate protected time for research if this is a career priority. The amount of protected research time and the ability to use research salary grant funds to obtain additional protected time varies considerably from group to group.

SUMMARY

Overall, the 2016 ACR RFS offered a positive outlook on the current landscape of Radiology in North America. Recent advocacy successes will translate in hundreds of millions of dollars saved for Radiologists across the US. Active investigation is ongoing into the implementation of MACRA and other new/active legislation pertinent to Radiologists in the US. As residents, the current market for fellowships and jobs is positive in the US. We were offered advice to be successful in our journeys, in addition to gentle reminders of maintaining meaningful values in whichever form of "success" we pursue. We are deeply grateful to CAR for providing us the opportunity to represent our Canadian resident cohort in Washington. The experience was wonderful and we hope this synopsis will offer a fraction of our education at ACR 2016.

Thank you and respectfully,

Will Guest and Mitch Wilson