



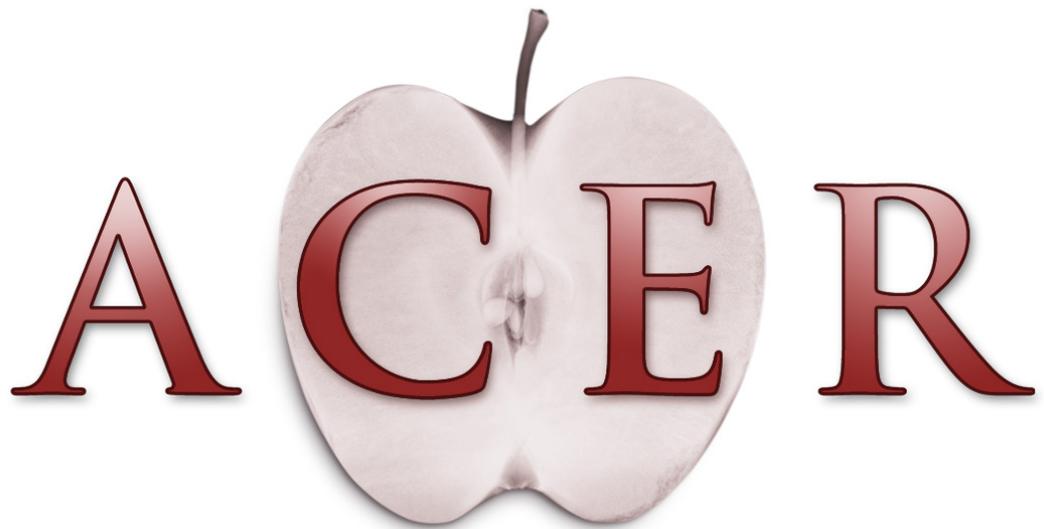
# Alliance of Clinician-Educators in Radiology

Newsletter Volume 8, Issue 2

April 2018

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This newsletter serves to highlight the current ACER goals and available resources and to keep members informed of ongoing projects.

Members and potential new members are encouraged to get involved in the stimulating and worthwhile activities of ACER. One way this can be achieved is through committee membership and organizational leadership, please contact Priscilla Slanetz ([pslanetz@bidmc.harvard.edu](mailto:pslanetz@bidmc.harvard.edu)) ACER president.

Members are also invited to send their contributions to the upcoming ACER newsletters. These contributions may be sent to Matthew Heller ([hellermt@upmc.edu](mailto:hellermt@upmc.edu)) or Ana Lourenco ([alourenco@lifespan.org](mailto:alourenco@lifespan.org)).

## ACER's Mission and Goals

- Providing a formal organization and forum for clinician-educators to meet, exchange ideas, and learn new skills that promote and advance the careers of clinician-educators.
- Providing programming at the annual AUR meeting targeted towards the needs of clinician-educators.

## ACER: Benefits of Membership

- Access to information and networking database for the benefit, awareness, and nurturing of clinician-educators.
- Opportunities for involvement in educational research activities relevant to clinician-educators.

## Membership Update

- As of March 2018, the AUR total membership stands at 1558.
- ACER has 272 members, consisting of 202 full time members and 70 junior members.
- ACER's membership is second to AMSER's (329) among the AUR Affinity Groups; other Affinity Groups include RRA (173), RAHSR (130) and A<sub>3</sub>CR<sub>2</sub> (123).

# ACER At-a-Glance



## Monday, May 7, 2018

Time	Session	Room
8:00–9:30 AM	AUR Plenary Session (Session 102) <b>(R E A L T)</b>	International Ballroom II–III
10:00–11:30 AM	Education Track 1: Key Additions to Your Curriculum (Session 104) <b>(E)</b>	International Ballroom II–III

## Tuesday, May 8, 2018

8:00–9:30 AM	AMSER Lucy Squire and APDR/ACR Keynote Lecture: Cultivating Mindfulness and Resilience for Ourselves and Our Trainees (Session 204) <b>(E L)</b>	International Ballroom II–III
10:00–11:30 AM	Education Track 2: Teaching Value-added Care (Session 208) <b>(E)</b>	International Ballroom II–III
2:00–3:30 PM	<b>(S)</b> Career Well-being (Session 214) <b>(E)</b>	Congressional

## Wednesday, May 9, 2018

8:00–9:30 AM	Education Track 3: Scholarship, Teaching, and Learning (Session 307) <b>(E)</b>	International Ballroom II–III
10:00–11:30 AM	Brogdon Panel: Understanding and Mitigating Burnout across Various Practice Settings (Session 309) <b>(L T)</b>	International Ballroom II–III
3:00–4:30 PM	<b>(S)</b> Education Problem Solving: Trainee and Faculty Well-being (Session 316) <b>(E)</b>	International Ballroom I
5:00–5:30 PM	ACER Business Meeting	ChampionsGate
5:30–6:30 PM	AMSER/ACER Reception and Open House	ChampionsGate

## Thursday, May 10, 2018

8:00–9:30 AM	Academic Success (Interactive Workshop 1) (Session 402) <b>(E)</b>	Colonial
8:00–9:30 AM	Growth Opportunities (Interactive Workshop 2) (Session 403) <b>(E)</b>	Royal Melbourne
10:00–11:30 AM	Presentation Skills and Publication (Interactive Workshop 3) (Session 410) <b>(E)</b>	Royal Melbourne
10:00–11:30 AM	Design Thinking: Mind-set for Success (Interactive Workshop 4) (Session 411) <b>(E)</b>	Colonial

# Integrating Resident Education Into A Busy Interventional Radiology (IR) Service

By Gail Peters, MD and Jonathan G Martin, MD

As clinical and research demands expand, finding time for meaningful resident educational experiences becomes more challenging. Our department does an excellent job of providing daily one-hour resident didactic lectures. Although interventional radiology (IR) participates in this series, we also strive to provide additional learning opportunities through dedicated lectures, rapid-fire debates, hands-on simulation, and “reading room talks.”



We promote tiered learning and believe that fellows provide significant educational benefit to residents. Beyond weekly faculty IR lectures for trainees, fellows give a weekly 1/2 hour lecture to residents. While attending lectures are tailored toward the fellows, the fellow lectures focus on the basics. This lecture series has 24 topics which are given twice each year. Lectures occur prior to procedures and can also be viewed by off-site residents via web broadcast. We envision the continued evolution of tiered learning, with senior residents teaching junior residents, and junior residents teaching medical students.

Debate has been shown to provide higher information retention on controversial topics than lectures (1). Controlled debates are concise, modular and integrate more learners in a discussion. Each week, 2 or 3 on-service trainees are chosen to debate on a controversial topic during lulls in workflow. Debates involve 5 minutes' presentation per participant, 1-minute rebuttal and 8 minutes of audience questions/discussion. Typically, the debate lasts less than 25 minutes, causing only minimal workflow disruption.

Hands-on simulation has demonstrated decreased procedural time, increased procedural success, improved patient safety, and higher practitioner confidence (2, 3). When residents initially rotate on IR, we provide a low-fidelity simulation session. A pimento-stuffed olive placed within a chicken breast provides a biopsy target, and an ultrasound gel-filled straw within a chicken breast mimics a vascular access target. High-fidelity simulations are utilized a few times a year for fellows and on-service residents. As the IR residency progresses, we foresee the increasing use of simulation.

Finally, each faculty member has their “go-to reading room” talk. These are about seven-minutes long, emphasizing topics such as “embolic devices”, “discussing procedure ‘x’ with a patient”, or “wires/catheters”. We keep these discussions interesting by incorporating open-ended questions. For example, “tell me what you know about embolics” or “what do you know about the risks of UAE.” Questions guide the discussion and tailor it to individual learners.

Finding time for education is difficult. By integrating multiple different methodologies, we feel we are creating a consistently excellent and adaptable learning environment.

(See References on page 9)

# Wellness and Burnout

By Hannah Perry, Anu Shenoy-Bhangle, Ron L. Eisenberg, Priscilla J. Slanetz



Burnout is as “a state of mental and physical

exhaustion related to work or caregiving”<sup>1</sup>. Three major components of burnout include emotional exhaustion, low self-esteem, and depersonalization<sup>2</sup>. Professional burnout within the field of diagnostic radiology has been previously studied, and is known to negatively affect happiness, job satisfaction, clinical performance, and patient care<sup>3,4</sup>. Both radiology attendings as well as trainees are at risk for burnout due to long work hours and difficult shifts<sup>5</sup>. In fact, studies show that trainees and mid-career attendings have the highest rates of burnout among physicians<sup>6</sup>. In order to help decrease the risk for burnout, we recommend the following key steps:

- 1. Prioritize lifestyle and balance:** When busy work weeks sap your energy, it can be easy to let important things like exercise, healthy eating, and hobbies fall by the wayside.
  - Many forms of aerobic exercise, including walking, jogging, swimming, and cycling, have been proven to help improve mood<sup>7</sup>. According to the American College of Sports Medicine, adults should build up to 150 minutes of moderate-intensity or 75 minutes of high-intensity exercise each week for maximal health benefits<sup>8</sup>. Consider starting exercise program or expand or improve your current exercise program at your workplace/department-for instance, we have a Radiology Running club in our department; a team-based approach to exercise has been shown to help motivate, increase physical activity and quality of life<sup>9</sup>!
  - Healthy eating is an important part of self-care, and it does not have to be difficult, even on a busy day. When making meal choices, the President’s Council on Fitness, Sports & Nutrition recommends lean protein, whole grains, and lots of fruits and vegetables<sup>10</sup>. Also try to reach for water instead of carbonated sugary sodas.
  - Make time for yourself! Try to dedicate a minimum of 60 minutes each week to a hobby or passion. Enroll in that art class that you have always wanted to try, work on your Spanish, finish writing your novel, go salsa dancing... In order to take the best care of our patients, it’s essential to learn to take care of ourselves!
- 2. Surround yourself by supportive people:** Feeling of isolation at work and or at home can increase the risk for burnout. Positive social connections, which can include family, friends and colleagues is important for overall well-being. In our department, a Wellness Initiative has been formed to help improve wellness among the members. This initiative open to all members of the department, includes activities aimed at breaking down boundaries, fostering a supportive environment, and enhancing the sense of community within the department.
- 3. Seek help when needed:** Understand that burnout is a common phenomenon experienced by medical professionals. It is important to recognize risk factors and symptoms of burnout, and to seek help when needed. The Maslach Burnout Inventory, a self-test available online, is a well-studied measure of burnout, and can help you identify if you are at risk. Reach out to your family, friends, colleagues and mentors for help if you are feeling at risk.

Take action to re-evaluate your priorities, embrace your social supports, make time for self-care, and be aware of risk factors for burnout!

(See References on page 9)

# Ten tips for mentoring residents for radiology research

By **Jordana Phillips, MD**



Participating in research can be an exceptionally rewarding experience for residents. These ten tips will help you find a project that suits each resident's particular circumstances.

## *Tip 1. Review the resident's experience with research*

A resident who has never participated in research will require more guidance than someone who has participated in multiple previous projects. A first project should be smaller in scope with ample check-in opportunities with the research mentor.

## *Tip 2. Review the resident's academic goals*

Residents interested in an academic career may be interested in completing multiple projects during residency while others pursuing private practice may be interested in one small project.

## *Tip 3. Review research topics that might interest the trainee*

Although not always possible, try to link the resident with a research mentor who is studying a topic that interests the resident.

## *Tip 4. Review how much time the trainee has to work on the research project*

Residencies offer trainees different amounts of dedicated research time. It is important to account for this time in project planning. Residents can apply for trainee grants to secure more dedicated research time. First year residents can participate in longer-term projects than those who begin later in training.

## *Tip 5. Review available institutional resources*

Institutional resources such as research assistants, electronic databases, or data entry tools can be helpful. If none are available, it is important to factor in the additional time and experience that might be necessary to accomplish the project.

## *Tip 6. Review whether money is needed to accomplish the project*

Resident projects ideally should not require any additional cost to perform. If needed, residents can apply for trainee grants.

## *Tip 7. Based on these answers, find a project that suits the particular resident*

Most resident projects will be retrospective chart/ imaging reviews or related to quality assurance. Residents with more time and interest can participate in small prospective studies and may be directed to foundation grant opportunities.

## *Tip 8. Review the project goals for presentation or publication*

Residents new to research may not know about opportunities for presentation and publication. You should review the process so they know how to navigate this new experience.

## *Tip 9. Review roles and expectations prior to starting the project.*

It is important to review roles (including authorship) and expectations (including deadlines) at the beginning of the project. The resident's role will vary based on their experience, personal goals, and time availability.

## *Tip 10. Check-in frequently to review progress*

Routinely checking-in is important to identify any potential challenges that may impact project completion. This will lead to a more positive research experience for all involved.

# Enhancing Teaching at the Workstation

By **Priscilla J. Slanetz MD, MPH and Anu Shenoy Bhangle MBBS, MD**



Teaching radiology poses some unique challenges. Depending on how the section is staffed, it can be challenging to teach trainees while keeping up with the clinical workload. Most faculty work with trainees for either a half-day or at most one day at a time, with rare possibility of working with same trainee over extended period. This somewhat sporadic interaction and the inherent lack of continuity due to scheduling can pose a challenge to effective learning environment. Consider implementing some simple strategies and ideas as detailed below, from several people in our department:

1. **Share your thought process during readouts.** Although trainees do help substantially with getting the clinical work done, faculty must remember we are responsible for teaching our trainees. Find something interesting to point out in nearly every case; share your thought process on how you came to the conclusion— it only takes a few extra seconds and it will be greatly appreciated.
2. **Ask the trainee for any specific feedback they need from you.** Due to somewhat limited interaction with trainees due to scheduling, it can be difficult to know what specific areas the trainee might need to improve upon. Therefore, by asking the trainee at the beginning of the day, it becomes much easier to provide useful feedback on specific areas. It also encourages the trainee to reflect on their strengths and areas for growth.
3. **Assign interesting and instructive cases on PACS to the trainee.** Especially for those who interpret radiographs, many of the cases we encounter have special teaching value for trainees; which can be missed if the attending simply reads the case. Therefore, consider assigning the case to the trainee by putting their name on PACS. This permits the trainee to have a much higher percentage of positive and instructive cases than randomly picking up cases from the worklist. It also makes the readout sessions more stimulating and valuable for both trainee and attending alike.
4. **Share best case(s) throughout the day.** It is important to encourage all team members – attending, fellow, resident, medical student – to identify interesting cases so as to create daily “teaching moments”. This could generate at least 4-8 “teaching moments” every day leading to meaningful conversations that might even spark trainee interest in learning more about a topic or possibly be the start of a new research project.
5. **Create a weekly interesting case conference in your section.** Identify a half hour each week for the conference and ask each faculty and trainee to bring at least one case to share with the group.
6. **For trainees: Think of 1-2 specific questions to ask the attending during readout.** When your service is very busy, the time for workstation teaching can become scarce. In coming up with targeted questions for your attending related to studies that you have read that day, you will ensure learning some key teaching points even on the busiest of days.

# Global Health Electives in Radiology Residency Training

By Mai Elezaby, MD

Global health (GH) experience, traditionally part of non-radiology residencies, has started to gain momentum in radiology in the last 7 to 8 years [1-3]. This increasing interest might be driven by the new generation of trainees who seek sense of value and professional fulfillment in their training and may even affect their program ranking [4]. From a program development prospective GH is an educational opportunity to emphasize many of ACME core competencies. It expands residents' medical knowledge; improves clinical knowledge and exam skills; emphasizes appropriate utilization of imaging within limited resources; teaches strategies for communicating effectively across a broad range of social, economic and cultural backgrounds; and lastly improves understanding of global health goals and health care policies. It has also been suggested as a strategy for battling stress and burnout through increasing sense of professional fulfillment and meaning [5].



In 2014 the ACGME published guidelines for radiology GH elective [6]. Some of its key components include:

1. Obtain institutional formal approval through the GME Committee to guarantee time off service, liability insurance and emergency evacuation insurance.
2. Timing for the elective. The ACGME suggests offering the elective to seniors (PGY5/R4), after completion of core rotations and board exam. To guarantee proficiency in basic imaging modalities that would be needed in resource-limited settings.
3. Ensure direct faculty supervision throughout the rotation, which should be performed by an ABR certified physician or physician with significant experience.
4. Identify clear objectives and outline of the GH rotation. Examples of rotation checklists:

#### Pre-trip:

- Identify a mentor and project.
- Pre-travel education on safety and cultural awareness. (Example of some available online resources: <https://www.edx.org/course/practitioners-guide-global-health-bux-globalhealthx>)
- Residents should schedule a visit with the travel clinic for recommended vaccinations. (<https://wwwnc.cdc.gov/travel>)

#### During trip:

- Location: A Program Letter of Agreement (PLA) with the partner institution that is hosting the resident should be in place. Trips should not be planned to areas under U.S State Department travel warning. (The U.S. State Department travel advisory website: <https://travel.state.gov/content/travel/en/traveladvisories/traveladvisories.html>)
- Duration: The length of the trip is determined by project goals (range from 1-4 weeks).
- Outline: Clinical and educational responsibilities should be detailed in project outline.

#### Post-trip:

- Measurable outcomes of trips may include grand-rounds presentation, QI project summary, abstract, etc.
- Objective resident-performance assessment and feedback including resident self-reflection and feedback.

Setting GH electives can have challenges including: limited funding, identifying appropriate timing for trips, lack of faculty mentors, difficulty in sustaining long term international partnerships [4]. However, radiology programs should continue to promote GH electives given the benefits in resident training.

(See References on page 9)

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