



# SBI NEWS

The Member Newsletter of the Society of Breast Imaging



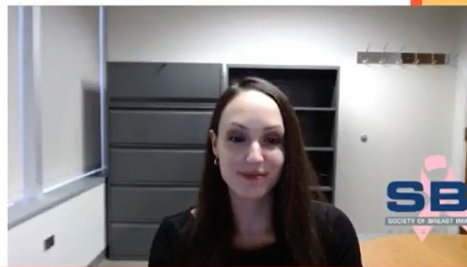
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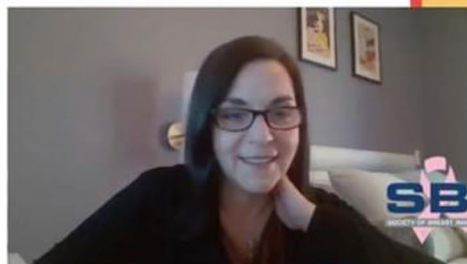
## #SBISUMMERSERIES



#SBI Summer Series  
 Pictured: Tomo Omofoye, MD (top left), Mitva Patel, MD (top right), Rachel Preisser, MD (bottom left), Margaret Yacobozzi, MD (bottom right)



#SBI Summer Series  
 Pictured: Mitva Patel, MD (top left), Rachel Preisser, MD (top right), Matt Miller, MD (bottom left), Nina Vincoff, MD (bottom right)



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### MEMBERS IN TRAINING:

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### WELLNESS COLUMN:

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### THE PATIENT'S PERSPECTIVE:

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### LEGISLATIVE UPDATES:

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### CAREER DEVELOPMENT COLUMN:

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# President's Column

## OUR SBI MISSION:

To save lives and minimize the impact of breast cancer

## OUR SBI VALUES:

Patient-centered and evidence-based care

Excellence in education

Scientific integrity

Collaboration and collegiality

Respect for diversity and inclusiveness



John Lewin,  
MD, FACR, FSBI  
President of the SBI

Since its founding in 1986, the SBI has been a fiercely independent organization. One could be forgiven for thinking that we are part of the ACR because we co-brand our symposium and have office space at ACR headquarters, but we are absolutely not. Twenty-five years ago we entered into a management services agreement with the ACR, through which they have provided certain administrative functions such as database and website management, insurance and legal services, meetings and membership services, and human resources. Our executive director, Yasmeen Fields, and the rest of our beloved and wonderful SBI staff have, in fact, been ACR employees since that time.

Last July the SBI was informed by ACR Chief Executive Officer Dr. William Thorwarth and the Board of Chancellors that the ACR would be moving away from the association management business. Association management is not a core function of their business operations, nor does it align with their mission.

After an extensive evaluation process that started shortly after we received that notice, we have agreed to employ a company in Michigan, Ngage Management Inc, to provide the necessary support needed to continue the society's business operations. Yasmeen will maintain her executive leadership role as the SBI chief executive officer, Jennifer Luettinger will become the senior director of education and meetings, and Kesha Willis will become the senior director of membership, marketing, and communications, making up the core SBI executive leadership team. The staff will also grow from five full-time employees to seven. This move comes at an opportune time for the society that will allow us to continue our growth and increase our ability to expand member benefits and services.

The management transition will be mostly unnoticeable to you, our members, but there are some benefits that we hope you will notice in the medium term. These benefits include a new website and a new database expected to

be launched in mid-November. The frustrations caused by our current website will be alleviated by the new system. Additionally, having a new database will allow us to create a better end user experience when renewing dues, registering for the annual symposium, and purchasing e-learning products like *Journal of Breast Imaging* CME articles and the symposium lecture series.

Because of the database transition, we are asking you to DELAY your dues renewal until mid-November so that everyone is renewing into the new database. At the time of renewal, we will collect everyone's current demographics so that the SBI retains the most up-to-date information.

Speaking of dues (that is what renewal is about), we have implemented a new tiered dues structure so that graduating trainees have a smaller dues burden for the first three postgraduate years. Members in training (including fellows) pay no dues and, as one would expect, we lose a fair number of them as members when we start charging dues. We hope that having a lower initial fee will encourage more graduating residents and fellows to continue their membership with SBI. We are also changing the name of their membership from "transitional member" to "early career member" to better reflect their status. The new dues rate starts at \$125 and increases by \$100 each year until reaching the full physician member rate.

The three-year plan for dues increases will be completed in 2023, with the final United States and Canadian physician member dues having increased to \$425. Given the increased expenses over the last few years, the incremental dues increases will allow the society to be better positioned to continue to offer excellent member benefits while still supporting its ongoing business operations.

As we move into our administrative transition, I am thrilled to announce that Dr. Debra (Debbie) Monticciolo has accepted the position of chair of fellows, filling the opening created when Dr. Elizabeth Morris stepped down after a three-year term. Debbie was president of the SBI when we negotiated the deal with the ACR that led us to an annual meeting instead of a biennial meeting (formerly known as the postgraduate course). Her leadership was key in those negotiations. She will be only the fourth chair of fellows on the Board of Directors, following Drs. Barbara Monsees, Daniel Kopans, and Elizabeth Morris. It is hard to imagine a more elite breast imaging line of succession!

Last, it is with great sadness that I acknowledge the passing of a breast imaging giant and SBI Gold Medal recipient, Dr. Peter Dempsey. Peter was a mentor to many of us, including me. He was a joyful presence at our meetings, even after retiring from his distinguished career in private practice, at the University of Alabama, and as Chief of Breast Imaging at MD Anderson Cancer Center. He will be sorely missed.

A handwritten signature in black ink that reads "John Lewin". The signature is fluid and cursive.

John Lewin, MD, FACR, FSBI  
President, Society of Breast Imaging

# Editor's Note

By Vilert Loving, MD, MMM, FSBI

**I attended a professional development course many years ago.** At the start of the course, the instructor asked everyone to publicly introduce themselves to the participants and to cite one word that best reflected one's life philosophy. I admit that I, like many others, found this to be a cheesy icebreaker activity at first blush. However, I still needed to come up with a word. Ultimately, the word I chose was *balance*. In reality, while the icebreaker activity was somewhat trivial, the philosophy of maintaining balance is often underappreciated in medical fields, including breast radiology.



Vilert Loving, MD, MMM, FSBI

The Merriam-Webster dictionary has several definitions of balance, but in this column, I will focus on one: “equipose between contrasting, opposing, or interacting elements.”<sup>1</sup> In breast radiology, radiologists, technologists, nurses, and all other staff members have devoted their professional careers to reducing the devastating impact of breast cancer on humanity. As the breast imaging community strives for this professional career goal, the hard work and professional obligations may sometimes interfere with personal goals, contributing to work-life imbalance, burnout, and attrition. This is a common theme in this Fall edition of the SBI News: Dr. Claudia Cotes (in the Wellness Column) and Dr. Shinn-Huey Shirley Chou, Ms. Robyn Hadley, and Ms. Sarah Jacobs (What's New in the News Column) explain and provide strategies to address the negative emotional toll of work-life imbalance on breast radiology practices. Beyond breast radiology, this same affliction has unfortunately affected all radiology subspecialties, as discussed at the ACR's Intersociety Summer Conference this year (see the article by Dr. Peter Eby and Ms. Yasmeeen Fields in this Fall edition).

In addition to work-life balance, I encourage you to examine other areas of your professional and personal life that may need rebalancing, specifically your work-work balance and your life-life balance. Regarding work-work balance, a common piece of advice for early-career professionals is to say yes to everything. The thought is that one should take advantage of all opportunities because one does not want to prematurely close the door on potential career-building projects. This motto is true, but only to a point. Time is a finite resource, and whenever we say yes to something, we're saying no to something else. Hence

the importance of work-work balance. I have found it helpful to prioritize which projects are most interesting, gratifying, and/or important, and the other opportunities can be deprioritized for a later date, shared with a colleague, or respectfully declined. Work-work balance must be maintained.

What of life-life balance? Following the same theme, among one's personal goals, time does not allow all priorities to be accomplished in equal measure. Spending time with friends/family/pets, having personal “me” time, taking care of your property, wellness activities, healthful (or nonhealthful!) eating, or even keeping up with your favorite television series: balance! Again, prioritize the activities that are the most interesting, entertaining, and/or important, and delay, outsource, or decline the rest.

Hopefully you will find this *SBI News* edition interesting and useful for facilitating all aspects of balance in your life. Our goal is to generate conversations around important elements of our field, both professional and personal. If you come across a topic that improves your work-life, work-work, and/or life-life balance, I would love to receive that feedback. Additionally, as always, if you have any article ideas or would like to guest author an article, please send me a note: [vilert.loving@bannerhealth.com](mailto:vilert.loving@bannerhealth.com).

## Reference

1. Balance. Merriam-Webster. Accessed September 12, 2022. <https://www.merriam-webster.com/dictionary/balance>



# SBI Committee Highlight: The SBI Social Media Committee

By Mitva Patel, MD; Matt Miller, MD

The SBI Social Media Committee had another successful year using social media to engage our members, patients, and the breast imaging community. The committee is extremely fortunate to have members with a diverse set of social media skills. As a result, the SBI Social Media Committee has a strong presence on all social media platforms, including but not limited to Twitter, TikTok, Instagram, and Facebook. Members are constantly looking for new venues to engage the community and have had several successes this year.



Mitva Patel, MD



Matt Miller, MD

The committee recently completed year three of the SBI Summer Series. These weekly panel discussions (eight in total) covered a wide range of topics relevant to SBI members and the larger breast imaging community, including patients and clinicians. The panel discussion's informal conversational style proved popular, with hundreds of national and international views per webinar.

The Summer Series was born during the COVID-19 pandemic, when in-person meetings were abruptly canceled and replaced by virtual meetings. Virtual meetings, however, were not a complete substitute for in-person meetings because they did not allow for informal interactions or "hallway conversations," in which participants could pull each other aside to discuss any given aspect of a topic. This exchange of ideas is one of the advantages of in-person social interaction that online meetings and webinars

do not provide. The Summer Series helped bridge this gap by hosting weekly informal discussions on current issues.

As a result, beginning in the summer of 2020, the SBI Social Media committee, led by Dr. Amy Patel and Dr. Matt Miller, began hosting weekly panel discussions. Committee members who moderate each session choose the topic. Panelists are mostly Social Media Committee members who share their thoughts, experiences, and problems about the chosen topic during the discussion. The target audience varies, with discussions relevant to patients, clinicians, trainees, and of course breast radiologists. Sessions are live streamed on Twitter and Facebook for questions and comments in order to include viewers in the discussion. Video recordings of the panel discussions are also shared on SBI's social media platforms.



SBI Summer Series 2022 Week 5:  
Breast Is Best (Subspecialty, That Is!).

Clockwise from top left: Toma Omofoye, MD, Mitva Patel, MD, Margaret Yacobozzi, MD, and Rachel Preisser, MD.



SBI Summer Series 2022 Week 8:  
Emerging Technology.

Clockwise from top left: Jules Sumkin, DO, Linda Larsen, MD, Alisa Sumkin, DO, and Matt Miller, MD.

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**SBI Committee Highlight: The SBI Social Media Committee (continued from page 5)**

The SBI Social Media Committee was also active during the 2022 annual meeting. Throughout the conference, committee members were available in the social media lounge to help conference attendees create social media accounts and answer questions about social media use. Members of the committee also contributed to the meeting’s success by tweeting highlights and encouraging discussion on Twitter and Instagram. In addition, two lunch hour panel discussions were recorded and live streamed on Twitter, Instagram, and Facebook simultaneously. Discussions revolved around the previous afternoon’s concurrent educational and scientific sessions. These discussions highlighted the work presented and encouraged members who were unable to attend a session to watch the recording.



SBI/ACR 2022 Breast Imaging Symposium live panel discussion. Left to right: Linda Larsen, MD, Margaret Yacobozzi, MD, Tiffany Chan, MD, Meredith Byers, MD, and Nina Vincoff, MD.

For Breast Cancer Awareness Month in October 2021, the committee organized a Twitter and Instagram campaign. Throughout the month, members created and shared original content, tagging the SBI and using the hashtag #endtheconfusion.

Another campaign for Breast Cancer Awareness Month 2022 is being planned; stay tuned by following SBI committee members on their social media accounts.

**Matt J. Miller, MD** @MattJMillerMD · Oct 27, 2021  
 It’s natural to experience some anxiety because you were “called back” from your screening mammogram. Let’s talk a little about the statistics of breast imaging in relation to call backs in today’s #MillerMammoMinute

#endtheconfusion @BreastImaging

**Nina Vincoff MD** @NinaVincoffMD

It’s [#BreastCancerAwarenessMonth](#) and today is Day 6 of my annual [#31DaysToEndTheConfusion](#)

Are you putting off your mammogram because you are worried about a false alarm or biopsy? Get the facts. [@MammoSaves](#) [#endtheconfusion](#) [@BreastImaging](#)

**Follow-up Testing Risks of Mammography Screening**

Out of every **100** women who get a screening mammogram:

- 90** will be told that their mammograms are normal
- 10** will be asked to return for additional mammograms or ultrasounds
  - 6** will be reassured that their mammograms are normal
  - 2** will be asked to return in 6 months for a follow-up exam
  - 2** will be recommended to have a needle biopsy

**MammographySavesLives®**  
 ...one of them may be yours

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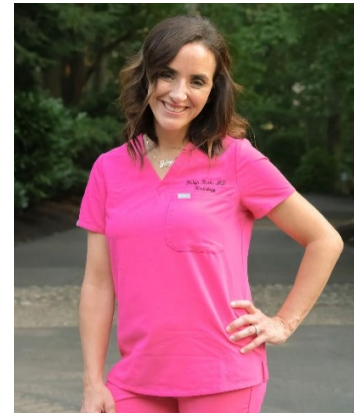
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# A Team Approach to Thriving in the Face of Workforce Shortages

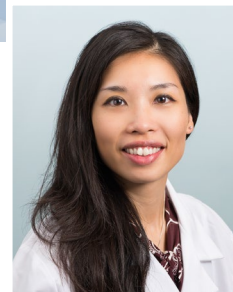
By Shinn-Huey Shirley Chou, MD, MPH; Robyn Hadley, RT(R)(M); Sarah Jacobs, BS, RT(R)(M)(CT)

Breast imaging departments continue to feel the remarkable impact of workforce and supply chain shortages. The COVID-19 pandemic and a multitude of external strains continue to pose challenges for health care organizations. Recent studies show a rise in health care disparities and a decline in breast cancer screening during the pandemic. Along with the concerning declines in breast cancer screening and the urgency to expand quality imaging care, organizations are faced with decreasing profit margins that are prompting rising workloads and drastic cost-cutting measures. Staff burnout and disengagement remain at staggering levels, with breast imaging-related technologist workforce shortages spanning mammography, ultrasonography, magnetic resonance imaging (MRI), and nuclear medicine. Radiologists and technologists must work together as a team to promote a positive work culture, find reasonable and sustainable solutions and workflows, and offer long-term practice-level strategic improvements so they can thrive in the face of these challenges.

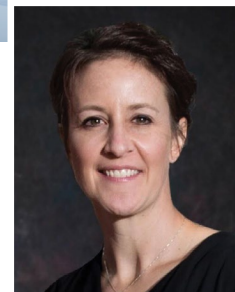
Although workforce fluctuation is generally cyclical, it has become increasingly common in the past few years. The Association of American Medical College's seventh annual analysis of physician supply and demand, published in June 2021, projected a shortage of physician specialists, including radiologists, to range between 10,300 and 35,600 by 2034.<sup>1</sup> At the time of this writing, approximately 20% of the roughly 1750 job postings on the ACR Career Center were breast imaging positions, a fairly consistent trend over the past year. The United States Bureau of Labor Statistics projected that jobs for radiologic and MRI technologists would increase 9% by 2030, with about 20,800 openings annually.<sup>2</sup> The Bureau of Labor Statistics also indicated that the increasing need for imaging services would increase the demand for technologists.<sup>2</sup> The American Society of Radiologic Technologists' recent survey showed an increase from 2003 to 2021 in the average number of budgeted full-time equivalents for the following modalities<sup>2</sup>:

- Mammography, 4.9 in 2021 (2.1 in 2003)
- MRI, 4.7 in 2021 (1.7 in 2003)
- Sonography, 5.0 in 2021 (2.6 in 2003)

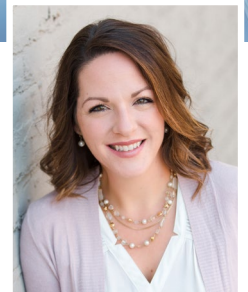
According to a 2021 Area Health Education Centers survey report, the imaging modalities with the highest number of



Shinn-Huey Shirley Chou, MD, MPH



Robyn Hadley, RT(R)(M)



Sarah Jacobs, BS, RT(R)(M)(CT)

unfilled positions were radiography, computed tomography, MRI, ultrasonography, and mammography.<sup>3</sup> In 2009, a decade before the pandemic, the *American Journal of Roentgenology* published a study that forecasted an increasing supply-and-demand mismatch for mammography professionals unless more new practitioners joined the profession.<sup>4</sup> This study predicted that the supply of technologists would decline by about 22% from 2004 to 2025 and that the number of technologists per 100,000 women older than 40 years would decrease by about 40% from 2003 to 2025.<sup>4</sup>

## COVID-19 Pandemic Impact

The pandemic has underscored and exacerbated the magnitude of health care disparities locally and globally, reminding the breast imaging community of the urgency to expand access to high-quality care. In June 2022 Dr. Stacey Fedewa and researchers from the American Cancer Society reported a 6% decline in breast cancer screening (2.13 million fewer women) from 2018 to 2020, with larger declines observed in Hispanic respondents and in people with lower educational attainment.<sup>5</sup> The director of the United States National Cancer Institute, Dr. Norman Sharpless, warned us of modeling results showing nearly 10,000 excess deaths due to breast and colorectal cancers in the next decade.<sup>6</sup> This trend is further supported by recent studies showing fewer patients presenting with stage I breast cancer and more patients presenting with stage IV disease,<sup>7</sup> an alarming trend that underlines the mission and importance of breast cancer screening held dearly by the breast imaging community.

The challenges of workforce shortages are compounded by multifaceted external pressures related and unrelated to the pandemic, such as supply chain shortages, health care landscape changes, financial struggles, the 21st Century Cures Act, surprise billing, and others. The August 2022 issue of the National Hospital Flash Report released by Kaufman Hall showed that margins in United States hospitals are among the lowest since the pandemic





began,<sup>8</sup> prompting health care organizations to increase workloads and cut costs. Private practice and academic radiologists are experiencing significant burnout worsened by the pandemic. In a study published in August 2022 in *Clinical Imaging*, Dr. Jay Parikh and colleagues found a staggering 33% prevalence of burnout among surveyed radiology leaders from the Strategic Radiology coalition of private practices,<sup>9</sup> similar to a previously reported prevalence of burnout among academic radiology chairs.<sup>10</sup> Even before the pandemic, 35.2% of radiologists at an academic medical center reported experiencing burnout, as noted by Dr. Catherine Giess et al.<sup>11</sup> Additionally, department-level initiatives aimed to combat and reduce burnout among radiologists did not seem to work, as Dr. Ivan Ip et al suggested in a study published in August 2022 in *Academic Radiology* in which self-reported burnout worsened or remained unchanged despite these initiatives.<sup>12</sup> “Quiet quitting,” a phenomenon in which individuals reduce their enthusiasm at work and stick to the minimum expectations of their role, is trending on social media.<sup>13</sup> Pervasive burnout in radiology and the ongoing workforce shortages are likely to aggravate the level of disengagement and turnover at work, whether attributed to quiet activism, self-protection, or exhaustion. Contributions from all team members are essential for combating the dangerous implications of disengagement in health care, which could lead to undesirable outcomes such as declining image quality and compromised patient safety.

It is imperative that we thrive in solidarity and rise above all the doom and gloom in the news. Expanding on the Technologists’ Column titled “Staff Shortages in Breast Imaging: Where Do We Go From Here?” in the Summer 2022 issue of *SBI News*,<sup>14</sup> this article discusses avenues for fostering professional engagement and fulfillment of breast imaging radiologists and technologists, along with strategies to tackle the increasing workload during this urgent crisis of staffing shortages.

## Potential Approaches

### Mentoring

In the aforementioned survey by Dr. Giess and colleagues, no significant difference in overall self-reported burnout was found between radiologists and nonradiologist peers, but radiologists were less happy and felt more undervalued at work.<sup>15</sup> Having a work mentor (whether a seasoned member of the breast imaging team or a peer mentor with relatable experiences) who is committed to connecting regularly, even with short greetings and quick, impromptu check-ins, may improve one’s level of satisfaction at work. A mentor in a leadership position has the potential to increase the sense of being valued. Mentorship matters more than ever in academic radiology, given the competing demands of education responsibilities and academic scholarship compounded by the mounting pressure of clinical productivity and lack of academic time, all of which are exacerbated by the ongoing staffing shortages. Most faculty members who leave academia do so within the first year.<sup>16</sup>

Regardless of the practice type, our newly trained breast imaging radiologist and technologist colleagues are entering the workforce during a challenging time. This is a great opportunity to engage these individuals, who have a strong desire to be mentored at work and seek support, development, and encouragement. Traditional mentorship pairing can occur formally through department- or practice-level initiatives, such as a formal mentoring program pairing early-career faculty with senior faculty, as implemented by Dr. Miriam Bredella at Massachusetts General Hospital. Dr. Bredella’s study found an increased sense of value and support in the department as well as career advancement among the mentees.<sup>17</sup> Mentorship building can also occur across disciplines and modalities. This may be particularly helpful in a setting in which cross-training could help staff members gain new skills and facilitate innovative roles. Examples include creating versatility with administrative and clinical coverage by staff members with dual roles and responsibilities and assigning tasks of lower acuity and skill level to nonradiologist, nontechnologist staff members. Seasoned technologists can mentor newly hired technologists, technology assistants, and radiologists. Breast sonographers can mentor mammographers and vice versa. Experienced radiologists can mentor technologists and other members of the breast imaging team. Most importantly, mentoring relationships have the greatest success when time is dedicated for personal interaction and partnership. This partnership may be as simple as brief weekly or monthly check-ins.

### Artificial Intelligence

In a study published in August 2022 in the *Journal of the American College of Radiology*, 46% to 60% of surveyed radiologists from six practice settings in eight states planned to use artificial intelligence (AI) tools during mammography interpretations.<sup>18</sup> Most respondents considered improved cancer detection to be a top priority for AI in breast imaging. Robust vetting of AI-based decision support to meet radiologists’ preferences is critical to its clinical adoption and implementation. In addition to being used for interpretation, AI can improve workflow, help technologists reduce repeat image acquisition and technical recalls, and improve technologists’ confidence, efficiency, and accuracy in recognizing abnormalities, such as on screening ultrasound. Open conversations and messaging around AI tools among radiologists and technologists can foster proactive and balanced considerations through knowledge exchange and avoid deterring prospective hires.

### Creative Scheduling

Feelings of “time poverty,” or lacking sufficient time to fulfill responsibilities, are rampant, as reported by 80% of working Americans.<sup>19</sup> Ashley Whillans, author of the 2020 book *Time Smart: How to Reclaim Your Time and Live a Happier Life* and professor at Harvard Business School, said in an interview, “Time affluence, this feeling of having control and feeling like you have enough time on an everyday basis, can promote happiness.”<sup>19</sup> In 2016 the ACR Commission on Human Resources recommended multiple actions to address radiologist burnout.<sup>20</sup> Given that

*Continued on page 10 >*

adequate staffing, the number one recommended action, seems unattainable at this time for many practices, we should prioritize the remaining remedies, such as reducing prolonged stress, restoring a sense of control, and restoring lifestyle balance. Dr. Eric Brandser and Dr. Tushar Kothari described their “bunker-shift” strategy to restore radiologists’ sense of control over clinical productivity and work-life balance and to overcome long-list anxiety syndrome in their recent article published in the *Journal of the American College of Radiology*.<sup>21</sup> Their strategy encourages offsite reading for breast imaging examinations not performed in real time, such as screening and MRI examinations. Creative scheduling in terms of flexible hours, shifts, and work sites can also be considered for technologists. Radiologists were more interested in telemedicine than were any other specialists even before the pandemic.<sup>22</sup> The trend has increased since the pandemic, as reflected by the remote and hybrid positions available on the ACR Career Center. Dr. Jonelle Petscavage-Thomas and colleagues demonstrated improved wellness among non-breast imaging radiologists who had the flexibility and autonomy offered by a hybrid work-from-home solution.<sup>23</sup> Breast imaging teams could consider leveraging patients’ and technologists’ preferences for proximity to breast imaging sites and using teleradiology for remote diagnostic evaluation. Communication among breast imaging team members is key to promoting effective collaboration and achieving high-quality patient care in this setting.

### Information Sharing

Breast imaging radiologists and technologists work under a great deal of pressure due to time and staffing constraints. As a team, radiologists and technologists must be able to effectively recognize these pressures and have compassion for one another. A culture of open communication and regular, welcoming feedback, combined with routine structured mechanisms like huddles and debriefings, facilitates effective information sharing between radiologists and technologists. These elements help maintain camaraderie and reduce burnout during staffing shortages and are also critical to patient safety and quality care under the time pressures we face. Technologies to foster convenient information sharing, such as integrated messaging systems and universal work lists, can allow for quick communication and real-time awareness of examination status and patient status while also saving time by avoiding redundant phone calls, particularly in the setting of remote diagnostic imaging. With radiologists experiencing intense workloads, technologists who are directly interacting with patients can provide radiologists with relevant patient information to help reestablish that human connection and avoid depersonalization when forgetting the patients behind the pixels, an aspect of burnout.<sup>24</sup> Forums such as SBI Connect support community building and interdisciplinary discussions. Industry and health care organizations can collaborate in recruiting technologists or sharing traveling technologists.

### Conclusion

In a recent white paper, the European Society of Radiology reminded us of the essential and multifaceted roles of radiologists as doctors, protectors, communicators, innovators, scientists, and teachers.<sup>25</sup> The breast imaging community has always been at the forefront of these duties and contributions, helping us stay engaged and prevent burnout. Now more than ever, it is also time to focus our attention on each other. Radiologists and technologists must work together as a team to boost camaraderie and find sustainable solutions in the face of significant workforce shortages impacting breast imaging.

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## OVERVIEW OF THE BREAST IMAGING SESSIONS AND ACTIVITIES DURING EUROPEAN CONGRESS OF RADIOLOGY 2022 IN VIENNA, AUSTRIA

By Iva Biondic, MD; Thiemo van Nijnatten, MD, PhD; Marianna Fanizza, MD; Machteld Keupers, MD; Maria Adele Marino, MD; Simone Schiaffino, MD; Mirjam Wielema, MD; Paola Clauser, MD, PhD; Elisabetta Giannotti, MD; Professor Fiona J. Gilbert

After two years of virtual meetings, the European Congress of Radiology (ECR) returned to Vienna for a memorable summer conference. More than 15,000 participants met in person from Wednesday, July 13, through Sunday, July 17, 2022. Attendants had the opportunity to listen, discuss, and take part in multiple activities. The diversity of the program enabled many interesting topics and lectures in every field of radiology, including an impressive breast imaging program, to be presented.

A hot topic addressed on the first day of the conference was where breast imaging will stand three years from now. The speakers emphasized the efforts to improve and personalize breast cancer screening with new imaging techniques and artificial intelligence support to hopefully move from the current one-size-fits-all approach to better and more individualized screening pathways.

Improvements in structured reporting for breast magnetic resonance imaging (MRI) were also discussed. Structured reports will assist breast radiologists and allow for better and more uniform performance, improved communication between clinicians, and development of artificial intelligence tools.

Contrast-enhanced mammography (CEM) was another hot topic. Wednesday morning started with a session dedicated to the fundamentals of CEM. Basic principles, technical performance, indications, advantages, and limitations of CEM were explained. Additional hot topics in breast imaging included the role of CEM, whether CEM will substitute for breast MRI, and how screening for intermediate-risk patients should be done. The speakers agreed that larger studies on the effectiveness of CEM are needed but that both CEM and MRI are useful.

The assessment of response during neoadjuvant chemotherapy was also discussed. With the increased use of neoadjuvant chemotherapy, assessment of response and proper communication

with other specialists are daily challenges in breast radiology practice. Two excellent sessions were devoted to monitoring treatment response. In these multidisciplinary sessions, surgeons and oncologists participated along with radiologists and presented their points of view.

Friday offered a refresher course about minimally invasive treatment for breast lesions and a multidisciplinary session regarding breast lesions with uncertain malignant potential, for which a pathologist, surgeon, and radiologist provided talks. Valuable discussion was held regarding treatment and whether lesions of uncertain malignant potential should always be excised. European guidelines and discussion on how different countries deal with this dilemma were presented.

The European Society of Breast Imaging (EUSOBI) Young Club organized a sold-out lunch symposium with case quizzes and discussions, emphasizing the importance of research to improve clinical practice. Participants were able to learn from and discuss presented cases and meet colleagues from different countries, with wonderful opportunities to exchange ideas and expertise.

In summary, ECR 2022 was a very successful congress with innovative lectures and inspiring discussions supporting delivery of the best clinical care to our patients in Europe.

## Back to Basics

By Claudia Cotes, MD

The concept of wellness is not new in the medical field. Its importance and influence in the health care system have been well documented, especially during the COVID-19 pandemic years. But what is the definition of wellness? How can we measure it and how can we improve it in our practices? Although most institutions have established wellness committees to address physician wellness, many lack the necessary support to make impactful changes. In times of crisis, it is crucial to focus on the well-being of our teams to increase personnel retention and avoid staffing shortages. We need to get back to the basics, evaluate the wellness of our teams, and explore and implement improvements one step at a time.

Wellness has been mostly defined as lack of distress, but this by itself does not guarantee our well-being. A study by Keri Brady et al in *Academic Psychiatry* described how quality of life and meaning in life are measures that need to be integrated with other operational variables that define wellness, such as burnout, depression, and plain job satisfaction.<sup>1</sup> The authors define physician wellness (well-being) as “quality of life, which includes the absence of ill-being and the presence of positive physical, mental, social, and integrated well-being experienced in connection with activities and environments that allow physicians to develop their full potentials across personal and work-life domains.”<sup>1(p103)</sup> This definition implies that there are several measures, such as guided breathing exercises, online training, and free meditation seminars, that institutions can focus on to increase physician wellness.

The COVID-19 pandemic highlighted the degree of burnout and lack of well-being in the health care workforce. The pandemic contributed to many physicians resigning or planning to do so in the next years. Recent data published by Christine A. Sinsky et al demonstrated that one in five doctors are planning to retire in the next two years, and one-third of doctors are planning to reduce their work hours in the next year.<sup>2</sup> Data for nurses have demonstrated similar findings.

We are noticing the consequences of this “great resignation” in the field of breast imaging as well. A recent article by Hanna S. Milch et al in the *Journal of Breast Imaging* highlighted the impact of the pandemic on breast radiologists in the United States and how their lack of well-being has contributed to a negative impact on patient care.<sup>3</sup> We have all experienced it in our practices. The lack of breast radiologists and technologists is affecting patient care because of

closures, rescheduling, and delays in diagnosis and treatment. In addition, these shortages have increased workloads for those who are still holding their positions.

The staffing shortages affect medical staff and administrators equally. Losing a radiologist is expensive; with recruitment, onboarding, and sign-on bonuses, among other variables, the cost can range from \$500,000 to more than \$1 million per physician, or as much as two to three times the physician’s annual salary.<sup>4</sup> In addition, position vacancies that continue to overload and burn out the remaining radiologists and the initial lower productivity of new hires (who are usually more junior and less efficient while learning new systems) represent additional losses of revenue. The case is built, but unfortunately many institutions and their administrators continue to dismiss the obvious and do not invest enough in physician retention.

Fueled with resilience and our love for our specialty, we continue to show up and do the work, even if it means longer hours, higher volumes, and added stress. I have seen these issues in both the academic and private practice fields. New concepts have been introduced to me recently, such as “pocket lunches”: nibbling on whatever food fits in your pocket in between patients instead of having a full lunch because there is no time. If that is surprising, the very common phrase “I haven’t been to the restroom in the whole day!” may ring a bell. Why is it that in our profession basic needs such as eating and taking bathroom breaks are seen as wasted time and a reflection of not being a hard worker or a committed physician? Why is it that we feel the urge to sacrifice our basic needs to prove our commitment to our patients and our efficiency to administrators?

To bring a positive change, it is time to start with the basics. Leaders should advocate for protected time to cover basic needs of the radiologist on site. Even though our time and productivity are constantly monitored, having reserved time for lunch and a 10- to 15-minute break in both the morning and the afternoon would not result in significant losses if these time slots were replaced with studies for which the physician doesn’t need to be present, such



Claudia Cotes, MD

# The Canadian Society of Breast Imaging

By Jean Seely, MD, FRCPC, FSBI, FCAR

I'm delighted to share some exciting research with Canadian Society of Breast Imaging and SBI members. A new study led by University of Ottawa professors with Statistics Canada, using Canadian Cancer Registry data, has found that Canadian provinces that annually screened women aged 40 to 49 years had lower proportions of advanced breast cancer compared to women aged 50 to 59 years from provinces that did not perform annual mammograms for women aged 40 to 49 years.<sup>1</sup> The study, published in the August 2022 edition of *Current Oncology*, found lower proportions of stage II, III, and IV breast cancer in women aged 40 to 49 years and lower proportions of stage II and III breast cancer in women aged 50 to 59 years in provinces which screened the 40- to 49-year age subset annually. "This is the first Canadian study to show that screening policies for women [aged] 40 to 49 years impact women [aged] 50 to 59 years," said co-lead author Dr. Anna Wilkinson, an associate professor in the Faculty of Medicine at the University of Ottawa. "Women who are not screened in their forties are presenting with later-stage breast cancer in their fifties. This means more intensive treatment and a worse prognosis for these women than if their cancers were diagnosed at an earlier stage."

Dr. Wilkinson and fellow lead author Dr. Jean Seely reviewed the data of 55,490 women between the ages of 40-49 years and 50-59 years from the Canadian Cancer Registry who were diagnosed with breast cancer between 2010 and 2017. They evaluated the impact of the 2011 Canadian breast cancer screening guidelines by looking at changes in the incidence of breast cancer by stage from 2011 to 2017. The authors found that since Canadian guidelines changed in 2011 to recommend against screening women aged 40 to 49 years, there has been a 13.6% decrease in incidence of stage I and a 12.6% increase in stage II cancer for women in their forties. For women in their fifties, the incidence of stage II cancer increased by 3.1% over the same period. In provinces which did not continue to have organized screening programs for women aged 40 to 49 years, there was a 10.3% increase in stage IV breast cancer in women aged 50 to 59 years over the six years included in the study. Survival rates decrease in direct relation to the stage of breast cancer at diagnosis. The five-year survival rate for stage I breast cancer is 99.8%, compared to 23.2% for cancers diagnosed by stage IV. Such outcomes potentially lead to more advanced cancer and intensive treatments and increased mortality.

"This is a great example of the benefit of using Canadian Cancer Registry data housed at Statistics Canada to take advantage of studying the effect of different policies regarding ages to start screening. Our findings align with recently updated National Comprehensive Cancer Network guidelines that recommend annual screening mammography for average-risk women beginning at age 40," said Dr. Jean Seely, senior author on the study, head of breast imaging at the Ottawa Hospital, and professor at University of Ottawa's Faculty of Medicine. "Further work is underway to determine whether finding these cancers at an earlier stage translates into fewer fatal breast cancers and improved long-term outcomes."



Jean Seely, MD, FRCPC,  
FSBI, FCAR

Canadian jurisdictions have different policies for screening women starting at age 40 or 50 years despite evidence that early detection of breast cancer leads to improved survival rates. The provinces and territories utilizing annual screening reminders for women in their forties during the study period were British Columbia, Alberta, Northwest Territories, Nova Scotia, and Prince Edward Island. Currently, only Nova Scotia, Prince Edward Island, and Yukon employ annual reminders.

A summary of the current Canadian breast cancer screening practices is shown in the Table, just published online in the *Canadian Association of Radiologists Journal* by Drs. Charlotte Yong-Hing, Paula Gordon, Shushiela Appavoo, Sabrina Fitzgerald, and Jean Seely.<sup>2</sup> This review provides an overview of the various approaches to screening in Canada. In many jurisdictions, only women aged 50 to 74 years may self-refer for screening. The study confirms that fewer early-stage breast cancers are diagnosed in those locations. These inequities must be addressed. The Canadian Society of Breast Imaging advocates that **all** provinces and territories allow women to self-refer for screening mammography beginning at age 40 years.

Article is sourced from University of Ottawa Media Relations, which can be contacted at [media@UOttawa.ca](mailto:media@UOttawa.ca). Published August 10, 2022, at <https://www2.uottawa.ca/about-us/media/news/study-shows-annual-screening-age-50-leads-lower-proportions-advanced-breast-cancer>

Continued on page 24 >

## Retirement From a Breast Imaging Career: Radiologists' Reflections

By Mary Scott Soo, MD

**This article is the second in the Late Career and Retirement series,** which we hope will be of interest and benefit to breast radiologists in the latter part of their careers and beyond. Based on the results of a 2021 survey submitted to SBI members over 40 years of age, this article includes reflections of breast radiologists who have been retired for one or more years. Factors leading to retirement, associated challenges, reasons to be excited in this phase of their life, and advice for later-career faculty members who are considering retirement are included.



Mary Scott Soo, MD

Of 57 breast radiologists responding to our survey, 10 reported being retired for one or more years, most within the one- to five-year window after retirement. A combination of factors led most of these radiologists into retirement. Echoing the sentiments of radiologists who were contemplating or just entering retirement as reported in our previous article (in the Winter 2022 issue of SBI News), retired radiologists described work becoming too busy or stressful as a common factor in their decision. Specific stressors were long hours, driving to multiple offices, navigating logistics of work and administration, and the COVID-19 pandemic.

Financial security was also a theme supporting retirement. To those contemplating retirement, retirees recommended, “Make certain you are financially secure but don’t overthink it. Working another few years is not likely going to make a difference.” However, they also advised, “Have no debt when you turn off the monitor for the last time.”

Health issues also contributed to the retirement decision. A few retirees commented on the unpredictable state of one’s health at this stage of career, recommending, “Be ready for plans to change due to health or family circumstances” and “Prepare for potential health surprises in early retirement.” Several radiologists reported being 70 years or older at the time of retirement and listed age as their reason to retire, recognizing that it was “just time.”

When asked what most excited them about this stage of their career, most radiologists listed a combination of factors; however, continued involvement in breast imaging was a common

theme. Retired radiologists described enjoying attendance at weekly breast conferences, lecturing four hours a week, engaging in occasional teleradiology practice to keep their mind active, and reflecting on helping patients through their breast cancer diagnoses. One shared this reflection on their career: “When I started I was purely a consultant. Once we could do biopsies I became the primary breast physician for my patients and was also more valued by the referring physicians, including successful breast surgeons, in my state. I was a ‘real’ doctor. Patients from the past are still in touch with me. Very satisfying.”

The retired group also reported enjoying the opportunity to resurrect old interests and discovering new avocations. Exploring new hobbies and activities—including midweek activities—was important, along with spending time with their families. They delighted in having leisure time to drink coffee and live by their own schedule. They did not miss work-related stress, multitasking, or the exhaustion of driving to multiple offices. They enjoyed the freedom to move to a warmer climate and overall were happy to be able to take care of themselves after a long career of taking care of others.

What was the most challenging part of their retirement decision? While two mentioned a combination of factors, by far the most difficult part of retirement reported was missing colleagues, staff, and friends, speaking to the meaningful personal connections that can be made throughout breast imaging careers. Three radiologists also listed losing their identity as a radiologist as one of the greatest difficulties, stating, “Letting go of my identity as a physician/radiologist/breast imager has

been more impactful than I thought. But, on the other hand, it has been somewhat freeing to not have the responsibility that goes with those roles.” Another responded with the converse observation, “It was refreshing to realize my entire self-identity was not being a physician. I still feel good about being me.”

One retiree who wished to remain connected to their breast imaging career recommended that those who enjoy teaching set up lectures for trainees. This radiologist felt there were no challenges in retirement because they had transitioned to part-time work for the last 10 years. Most respondents’ advice for later-career radiologists considering retirement was to do just that: transition to part time over several years if possible. One suggested, “If you have the option to transition to a lower workload, that will do a lot to help you think through and adjust as you get closer to full retirement.” Another concurred, “A part-time transition is the best. [Transition to] four, then three, then two days per week as you and your employer can manage.” Yet one also advised, “Leave or retire at the top of your competency: do not practice too long,” which would avoid burnout, maintain self-esteem, and allow time to find fulfillment in retired life. Most radiologists strongly advised finding a hobby or outside interest long before retirement. One recommended for those still working, “On your off time, enjoy yourself and start doing new things.” Another urged, “When you decide it’s time to retire, break away cleanly with no regrets. Don’t linger. Have other opportunities ready and waiting.”

Retired radiologists further reflected on the meaning of their breast imaging careers with advice for early-career and midcareer radiologists. “Always remember you are helping the patient and their family. It is so rewarding to know how much you can help others.” They recommended embracing breast imaging in your practice at the 100% level: be a subspecialist, attend meetings, find a mentor, and promote the best evidence-based patient care possible in your setting. On a personal level, they recommended to start taking care of yourself and those you love early and to not shortchange your personal life. “Balance your work and leisure time—this is a marathon, not a sprint—enjoy work and personal time. Hire enough colleagues and staff to share the workload and don’t burn out over working!!” Another recommendation was to “start financial planning early!”, with the reminder that “all of these recommendations require periodic monitoring and thoughtful reflection to achieve.” They further urged later-career breast imaging radiologists to mentor and encourage young physicians, reminding us that being a physician is a very special and precious calling: “There is more to this endeavor than just being a job.”

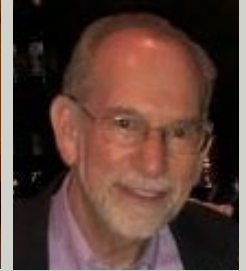
Finally, retirees reflected on the remarkable evolution of breast imaging during their careers. They have witnessed breast imaging’s progression into a more subspecialized and more patient-facing field, becoming an integral part of the multidisciplinary team. “It has gone from being an afterthought to the department to being a very sophisticated specialty. Being a valued team member is extremely gratifying. I can see it only growing.” They remarked on the tremendous technological advancement in breast imaging, significantly improving breast cancer detection and understanding. One respondent stated, “I am 80. I started out with industrial film, tungsten tubes, and had to design a Lucite breast clamp for localizations for biopsies. I used 18-gauge needles and the center tendril of guide wires for localizations. Everything evolved—molybdenum tubes, computer-assisted interpretation, breast tomosynthesis, and Hawkins and Homer needles to ultrasound and nuclear markers. Nomenclature evolved, density had to be reported, and BI-RADS was developed and refined. Old-timers saw it all, stayed current, stayed educated, and evolved as well!!”

The reflections of recent retirees were a salute to breast imaging. Perhaps even more so, these retirees should be commended for their tremendous contributions to the evolving field of breast imaging and their many years of dedicated patient care. It is with gratitude and best wishes to these retired radiologists that we use their own words of thanks: “[Retirement] is all good. You have done your job and served others well. Thank you.”

# In Memoriam: Peter Joseph Dempsey, MD, FACR, FSBI

By Jessica W.T. Leung, MD, FACR, FSBI; W. Phil Evans, MD, FACR, FSBI; Michael N. Linver, MD, FACR, FSBI

**It is with profound sadness that we report the passing of Dr. Peter Joseph Dempsey on September 11, 2022, in Houston, Texas.** Recipient of the 2017 SBI Gold Medal Award, Dr. Dempsey was a giant in our field—as a physician, scientist, mentor, and friend.



Jessica W.T. Leung, MD   W. Phil Evans, MD   Michael N. Linver, MD

Dr. Dempsey was born on September 12, 1940, in New Rochelle, New York. He was a star athlete at Iona Preparatory School in New Rochelle, where he participated in football, basketball, baseball, and track.

Dr. Dempsey attended college at Notre Dame University, thereafter entering medical school at Saint Louis University. While in medical school, he was imbued with the patient-oriented style that he maintained throughout his medical career. After graduating from medical school, he completed a surgical internship at Duke University. From there, he accepted a research position at the National Institutes of Health (NIH), working under the tutelage and strong positive influence of Dr. Ted Cooper, its director. After three years at NIH, he returned to Duke, where he completed his radiology residency in 1974 and stayed on as junior faculty in the Department of Radiology. It was during this time that he met his loving wife, Cindy, who was an x-ray technologist at Duke.

In 1975, Dr. Dempsey was recruited to join the clinical faculty at the University of South Alabama Medical School in Mobile. After four years there, he entered private practice in Mobile and developed his skills in breast imaging with a special interest in a new technology—breast ultrasound. He spoke at many national meetings on the value of sonography in breast evaluation. He further honed his breast imaging skills through his relationship with Dr. László Tabár, joining Dr. Tabár as faculty in his teaching courses throughout the United States, all the while becoming well known for his teaching skills in his own right. Dr. Tabár remained his mentor and close friend for the rest of Dr. Dempsey's life.

In 1991, after 13 years in private practice, Dr. Dempsey was recruited by the University of Alabama at Birmingham to become chief of the breast imaging section and director of outpatient radiology. In 2000, he accepted the position of chief of breast imaging at the University of Texas MD Anderson Cancer Center in Houston. Dr. Dempsey's impact on MD Anderson was felt each and every day. He particularly focused on refining and expanding the clinical applications of breast ultrasound as well as promoting breast imaging as a multidisciplinary practice. He was the consummate patient advocate and the ever-present mentor.

Those who worked with him always felt that Dr. Dempsey “had their backs.” He was instrumental and influential in building the MD Anderson family, including the recruitment of technologist Kelly Cox from Florida and radiologist Jessica Leung from California. Dr. Dempsey retired from clinical work at MD Anderson in 2014 but continued to remain active, serving as a medical director of the MD Anderson Physician Network for the past several years and elevating the quality of cancer care around the world.

Dr. Dempsey was an active contributor to both the ACR and the SBI, developing specialized breast imaging teaching programs and serving on multiple committees within both organizations to develop and expand their activities in the breast imaging community. For his outstanding contributions, he was elected a fellow of both the ACR and the SBI. He served as a board examiner for many years for the American Board of Radiology, also developing a comprehensive teaching file for use on board examinations.

Throughout his professional life, Dr. Dempsey remained focused on treating all his patients and staff with kindness and respect above all else. He demanded excellence of himself and of all those around him, but always with a kind and gentle guiding hand. His prowess as a skilled clinician, teacher, and educator was second to none. Dr. Dempsey's stature within the breast imaging community culminated in his being awarded the Gold Medal of the SBI in 2017.

Dr. Dempsey's life outside radiology centered on Cindy, his wife of 48 years; their two daughters, Claire and Alison; their son-in-law, Jeremy; and their two grandchildren, Andrew and Adeline. He was immensely proud of his daughters, who followed Dr. Dempsey in their choice of health care as a career. He was an accomplished musician, playing trumpet in local and national bands and serving on the boards of several music organizations in the Houston area. He also served on the University Square Board of his townhouse complex, where he was beloved by his neighbors, just as he was by his family and colleagues. He was a licensed pilot, a fine fisherman, a lover of fine wines, a gifted storyteller, a loyal friend, and probably the most kindhearted person on earth.







Left to right: Jeremy, Andrew (toddler), Alison (not sure but she may be pregnant with Adeline), Cindy, Pete, Claire



Left to right: Cindy, Adeline (in Pete's arms), Pete, Alison, Andrew (boy standing in front), Claire, Jeremy (standing in back of Claire)



Left to right: Stephen Feig, Peter Dempsey, Daniel Kopans, Phil Evans, Debra Monticciolo, Edward Sickles, Linda Warren, Carol Lee



Left to right: Cindy Dempsey, Mike Linver, Pete Dempsey, Mina Jo Linver, Jessica Leung

# Global Health Education Outreach: An Online Breast Imaging Curriculum Success Story

By Mai Elezaby, MD

Health disparities in resource-limited countries are often a complex problem of resource scarcity confounded by knowledge gaps and lack of adequate training of the health care workforce. Since its inception in 2008, RAD-AID's mission of creating a sustainable model for global outreach has recognized the importance of collaborating with in-country partners to empower the local health care workforce.<sup>1</sup> RAD-AID's leaders recognized that to achieve the goal of upscaling the delivery of safe and effective diagnostic and interventional radiologic services to improve patient outcomes, two initiatives must work in parallel: investing in technical infrastructure and building human capacity.

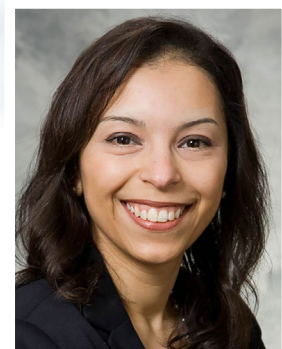
The educational mission of RAD-AID was partly fulfilled by on-site education and training of health care personnel as an essential component of all international outreach efforts. However, for sustainability, online learning resources needed to be available to supplement and maintain these educational objectives between trips, hence the development of the RAD-AID Online Learning Center (LC). This shift in education outreach initiatives is well aligned with the United Nations Sustainable Development Goals' emphasis on health care and education.<sup>2</sup> Since the World Health Organization 2013 Global Health Professionals Forum, health care educators worldwide have been called to action to use innovative teaching methods and communications advancements to increase human capacity development. Technology advancement and online learning management systems have paved the road for knowledge exchange and created a sustainable model of educational collaboration with global partners.<sup>3</sup>

## RAD-AID Learning Center Development

Beginning with the rollout of the RAD-AID LC in 2014 and continuing over the next seven years, the educational content in the LC has expanded to provide access to nearly 1000 users across 15 countries. The LC's 45 courses span system-based imaging interpretation, interventional radiology, radiologic technologist training, and radiology nursing education.

The overarching goal of the LC is to promote diagnostic and interventional radiology education. The LC uses the same approach as the clinical program development framework that RAD-AID upholds: upscaling education and training of the entire health care team within a radiology department, including

medical students, radiology residents, attending radiologists, radiologic technologists, sonographers, physicists, nurses, and information technology personnel. The educational content needs to be easily accessible, follow sound educational guidelines and objectives, and be relevant in the context of the available resources and health care systems in partner countries.



Mai Elezaby, MD

International outreach educational curriculum rollout has adopted RAD-AID's trademarked framework of project development, Radiology-Readiness Assessment, with emphasis on educational goals. This is only possible through close collaboration with local partners that mutually develop and agree on the educational goals of the project. Initial data collection incorporates current educational needs and resources of all stakeholders as well as available clinical services, imaging equipment, technical infrastructure, and health care resources. Ongoing data collection and continual self-assessment are integral components of program deployment and are in line with the RAD-AID principles.

## Educational Framework for Online Education

The current RAD-AID LC platform was chosen for its versatility in course assignments, content formatting, and quiz creation with ease for grading. The platform allows learners to move at their own pace with monitored progress. Individual password-protected accounts are created to monitor learners' progress and provide security for educational content. The LC platform allows the implementation of blended learning models, which have been shown to provide a more learner-centered approach with improved educational outcomes. Some of the common blended learning models are the supplemental model (which supplements in-person teaching by assigning specific online lectures to learners and then testing applied knowledge with in-person case conferences or scheduled web conferences), replacement model (which partially replaces in-person teaching by assigning some topics as online lectures while restricting in-person teaching to hands-on training), and empowerment model (which completely empowers learners and replaces

in-person teaching by giving in-country learners full access to educational content with the freedom to access it according to their preference).

The online educational approach proved its ultimate success when the COVID-19 pandemic halted all travel and outreach trips. Organizations that had online educational content were able to rapidly leverage their content for minimal interruption to their educational mission.<sup>4</sup> During the COVID-19 pandemic and travel restriction, RAD-AID was able to use its LC content to maintain connectivity with international partners and continue its educational mission through expansion of its virtual education outreach.

### The Online Breast Imaging Curriculum

Disparities in breast cancer mortality in resource-limited countries continue to be a significant health concern.<sup>5</sup> The World Health Organization's Global Breast Cancer Initiative aims to reduce global breast cancer death rates by 2.5% annually, which would avert 2.5 million breast cancer deaths between 2020 and 2040. Therefore, upscaling breast imaging screening, diagnostic, and interventional training continues to be a high priority for many of RAD-AID's international partners in their efforts to build breast cancer screening programs. In 2019, the RAD-AID LC and breast imaging teams took the initial steps to create a virtual library of breast imaging lectures geared toward radiology residents, fellows, and junior faculty members using the ACR/SBI Breast Imaging Fellowship curriculum outline.<sup>6</sup> The detailed curriculum facilitated topic selection for relevance in low-resource settings. Breast imaging faculty volunteers within the RAD-AID breast imaging program were able to create approximately two-thirds of the breast imaging curriculum lectures through their individual libraries within a couple of months, and only one-third of lectures had to be solicited. The online delivery allowed for the use of multiple media, including presentations, selected peer-reviewed articles, online videos, and recorded lectures pertinent to each topic. Educational content for mammography technologist training and nursing navigation was also initiated for a comprehensive breast imaging program.

With the onset of the COVID-19 pandemic in 2020, there was unprecedented increase in content creation, accrual, posting, and use of the breast imaging library. In addition, there was a rise in volunteering by radiology faculty members, medical students, residents, and mammography technologists. This educational enthusiasm facilitated the successful implementation of a supplemental blended learning model in the rollout of two dedicated virtual breast imaging fellowships in two partner countries (Ethiopia and Ghana).

Online, prerecorded didactic lectures were available for review by the international trainees and were coupled with weekly scheduled web-based case conferences that emphasized knowledge base. Partnerships between RAD-AID and well-established national radiology organizations (ACR, Association of Program Directors in Radiology, and SBI) facilitated donations of educational content at a reduced or no fee. In keeping with RAD-AID's framework, objective assessment of these educational initiatives is still ongoing and will be used for feedback and program development.

### Summary

Online educational resources are critical for sustaining and advancing radiology education in global health. However, open-access online educational content that lacks direct correlation to capacity building within the context of the health care systems in resource-limited countries may be of limited value. Online educational programs that employ a blended learning approach can achieve success when they follow evidence-based educational frameworks, incorporate stakeholders' goals, supplement existing in-country educational programs, and are relevant to the available health care resources.

If you are interested in participating in the RAD-AID virtual educational programs, email [melezaby@rad-aid.org](mailto:melezaby@rad-aid.org) or visit our website at <https://rad-aid.org/resource-center/learning-center/>.

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# Shannon Beebe

By Danielle Sharek, MD

## DS: Please tell me about yourself and your background.

**SB:** I am a mother of 5 and have been married nearly 25 years. I have been a nurse for 22 years. Most of my career has been in obstetrics until four years ago when I had the opportunity to become an associate director for perianesthesia. I remained there through [the] COVID [pandemic], turning the PACU [postanesthesia care unit] into ICU [intensive care unit] and creating the procedural process for COVID testing to enable the facility to perform outpatient procedures for patients. It was a crazy and stressful ride.

## How were you diagnosed with breast cancer?

I had noticed some nipple changes to my left breast. I knew this to be a concerning sign but still tried to convince myself it wouldn't happen to me. It had been almost two years since my last mammogram so I made an appointment. I was called back for additional imaging, at which time the radiologist let me know I had an area of concern we should biopsy. I asked her what degree of certainty she had [that] this was cancer. She stated "90 to 95%." So few words with so much power to upend my entire world.

## How did you feel when you learned of the news?

I was upset. In shock. My mind ran wild with horrible scenarios where I leave my 5 children motherless. Thankfully, I had a friend who worked in the Women's Center who really helped ground me. She would say things like "This is going to end up being a small tumor, just one page in your story, and on all the other pages to follow will be stories of lives you've touched, people you've helped." I really held on to that, hoping for it to be true. She was a rock in my storm.

## What was your treatment process? Did you face any treatment obstacles? How did you overcome them?

My mother was diagnosed with breast cancer at the age of 46 and here I was at age 45, facing it as well. I wanted to have a bilateral mastectomy, including both the affected

left breast and prophylactically on the right. My surgeon was very pro tissue sparing and encouraged me to have a lumpectomy instead. She ordered breast MRI [magnetic resonance imaging], which ultimately showed a 12.4-cm enhancement. I was given the option to have multiple biopsies along the enhancement but I really pushed to just move forward with the bilateral mastectomy. This would also help with keeping everything symmetrical (low priority but still a concern). My biggest obstacle was reconstruction. Due to my BMI [body mass index] at the time, it was best to lower my BMI prior to starting reconstruction. I was able to lose 60 lb in 6 months, enabling me to begin my reconstruction process 6 months after my mastectomy.



Daneille Sharek, MD

## What motivated you during your diagnosis and treatment process?

I was motivated to be here for my children and family. I think I am also one of those people who is willing to put up a good fight for the right cause. Saving myself was a great cause: I hit this head on.

## What did you learn from your experience?

I learned to appreciate everything! I live in the moment. I take so many more pictures now of me and my family. I appreciate birthdays, as age is truly a gift. Mostly, I learned that by sharing my story I can be a gift to others.

## How has this diagnosis impacted your life? If applicable, how have you used your diagnosis to impact others?

I began a health journey to reduce the toxic load my body is exposed to daily. I changed jobs due to the workload and stress I was under prior to being diagnosed. I am now the RN [registered nurse] manager in the Women's Center at Banner MD Anderson Cancer Center. I hold the hands of patients who are going through biopsies and are terrified.



I encourage them to only battle the beast we know and not make the story in their head bigger than it is, to take it a step at a time. I give results to patients when they have not heard from their providers yet. (The waiting for answers is the worst.) I explain to them the process and help walk them through it. I can answer questions about surgery and why I chose mastectomy over lumpectomy and the pros and cons of the options before them. I educate them on the entire process and when to expect which answers along the way in the process. It has been a beautiful thing to walk with these patients and sharing my story has given my cancer a purpose. I am trying to be that rock for others and let them know the storm can be weathered.

**Are there any lessons that you think the breast imaging community can learn from your experience?**

This is difficult to answer. I know each patient can only handle so much information at one time and so many of the questions are answered with “If this happens then we will do this,” etc. I just know I appreciate open, honest transparency regarding the plan and possible outcomes. My team was very good about this for the most part.

**What advice would you give to other patients who are going through the diagnosis and treatment process for breast cancer?**

My biggest piece of advice I give patients who I work with at this very early stage is to not make the story in their head worse than they know it to be. This is a very scary thing to go through and the word *cancer* is so often associated with death, so I remind them to take this one test at a time and then give it everything you have. There are so many long-term survivors of this disease and there is hope. There is always hope.



Shannon Beebe

# ★ SUMMARY OF THE 2022 ACR INTERSOCIETY SUMMER CONFERENCE

By Peter R. Eby, MD, FACR, FSBI; Yasmeen Fields, CAE

The ACR Intersociety Executive Committee, led by Frank Lexa, MD, MBA, FACR, convened in Deer Valley, Utah, for the first time since 2019 to discuss how we've all been "Recovering From the Great Resignation, Moral Injury, and Other Stressors." Representatives from 27 radiology societies contributed to the dynamic discussion and breakout sessions at high altitude. The major themes are summarized in this article.

The pandemic strained every part of society. In radiology, the pandemic likely exacerbated the growing disparity between the demand for imaging and the supply of radiologists and staff to perform and interpret examinations and procedures. Demand for radiologists is high. Fortunately, radiology remains a popular choice among medical students, who filled 995 of 996 residency positions last year. However, there is no definite plan for the Accreditation Council for Graduate Medical Education or the American Board of Radiology to increase the number of positions. In addition, graduating residents are more frequently seeking first jobs at less than 1.0 full-time-equivalent (FTE) employment, resulting in a decrease in supply of total FTE hours. Some participants wondered if we could convince our recently retired and experienced radiologists to stay on at 0.2 FTE employment to mentor new partners and fill in the staffing gaps.

For all types of radiology practice, pipelines from residency to employment provide our best chance to recruit and retain radiologists. Trainees are acutely aware of ongoing disparities in diversity and pay equity. Senior academic and private practice radiologists possess priceless knowledge garnered through study and experience that will be wasted if not shared with junior colleagues or trainees. We should actively endeavor to transfer our collective wisdom to the next generation as mentors, sponsors, or coaches. It behooves every member of the radiology team to identify, nurture, and recruit high-performing medical students as early as possible. To have any hope of attracting the best talent, we also must project a positive outlook for our jobs and overall happiness in our place of work. This has been very hard for many radiologists since the pandemic exacerbated shortages in technologists and doctors. Radiologists should make a concerted effort



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to adjust their demeanor with all trainees and reiterate the positive aspects of our specialty while adapting to changing environments.

Demand continues to climb, adding to the strain of our work environments and potentially negatively affecting quality. Most radiologists recognize that a significant proportion of what they do is unnecessary. Tests that add no value to patient care but require time from technologists and radiologists are ordered. The society representatives acknowledge that if the predominant model is fee for service, there is little incentive to spend valuable time to cancel a study because radiologists are paid to perform examinations, not cancel them. We discussed the idea of a billable consult service for radiologists (like infectious disease specialists who are consulted about the best antibiotics) to advise other clinicians of the best next imaging test to simultaneously decrease waste and improve engagement and respect. Radiologists across the country should remain dedicated to reducing waste, which will help the supply and demand mismatch. Clinical decision support, ACR Appropriateness Criteria, and ACR Imaging 3.0 are dedicated to this goal but have produced limited results.

Reestablishing balanced supply and demand will likely take time. In the short term, continued active innovation is critical to success and offers potential improvements in efficiency that are quicker than annual graduation of trainees. However, active innovation is becoming harder because of time constraints. For example, many practices have embraced the hybrid work environment that supports working at home 1 or 2 days per week. Hybrid systems can be flexible and are significant selling points for those experiencing stress of the



pandemic. The ability to work from home, even as part of a hybrid model, increases job satisfaction and may be a deciding factor for many applicants who are looking for positions.

Hybrid and full-time work-from-home models are not without risk; they expose radiologists to commoditization. Some radiologists are needed in house to treat emergencies and contrast material reactions and to provide highest-quality teaching. Morale can also suffer when we do not see our colleagues. Although we are all pressed for time, in-person radiologists' meetings are incredibly helpful for morale and camaraderie. Physicians often feel more connected and supported if they take the time to meet and discuss their challenges, even when they return to longer lists or unread examinations at work. Data regarding radiologists meeting for dinner to discuss, vent, and empathize with each other, for example, support continued investment in live meetings.

Contemporary mergers of all types of radiology practices meet with variable levels of success and failure. The most common reason for failed mergers is cultural mismatch, which can create significant dissonance and moral injury. People experience moral injury when external forces prevent them from acting in alignment with their internal moral compass. Moral injury takes many forms, is highly personal, and can be the primary reason for job dissatisfaction and resignation. All groups and practices are currently challenged to uncover moral injury and address it before radiologists or staff members resign. We don't know if changing jobs provides permanent or temporary relief from moral injury. Leaders must be transparent to avoid it. The interactive nature of some patient-facing subspecialties, such as breast imaging, facilitates greater autonomy, control, and direct appreciation from patients and clinicians, and these interactions can insulate from or provide antidotes for organizational moral injury.

Mergers between academic and private practices can bring together generalists and subspecialists and their respective case mixes and interpretive efficiency for the benefit of patients. Specialists could interpret examinations for patients with complex medical conditions and treatment histories who cannot reach an academic center. There is a risk that such a partnership could segregate complex and routine cases across specialist and generalist teams, producing a relative value unit (RVU) imbalance that would exacerbate cultural dissonance. Will specialists who interpret only complex examinations produce low RVUs and burn out more quickly? Will generalists quickly interpret simple, routine examinations with high RVUs? If routine cases are grouped, will advanced practice providers take over that business? Will this provide the best care for patients?

The medical environment surrounding radiology is rapidly evolving every day. Demand for examinations is increasing, the labor force supply is stagnant to decreasing, mergers create opportunity and dissatisfaction, working off site risks commoditization but provides flexibility and control, and diversity and pay equity are not entirely solved. Yet we must continue to represent the best of radiology to trainees and pass on our hard-earned knowledge for the benefit of patients. Radiologists must continue to innovate to survive and thrive. Breast radiology can lead by example. We can share our models of hybrid work environments that allow remote interpretation and require direct patient care. We can also demonstrate how breast radiology can provide an antidote for moral injury and burnout when we are appreciated by colleagues and patients, in control of examinations, and aligned with our conviction that what we do makes a difference in the lives of our patients and their families.

**What's New in the News: A Team Approach to Thriving in the Face of Workforce Shortages (continued from page 10)**

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**Wellness Column: Back to Basics (continued from page 12)**

as screening mammograms. If more than one breast radiologist is available, staggering lunch times is an easier solution. These simple but important changes will likely result in increased stamina and daily well-being of our staff. Moreover, they will also improve radiologists' performance.

The days of exalting physicians who put work ahead of their wellness should be a part of our past. Those in leadership positions should continue to aim for efficiency and productivity but not at the expense of radiologists' and technologists' well-being. Pairing with administrators to ensure our well-being is crucial to get past this COVID-19 crisis and the burnout epidemic that continues to worsen for physicians. If this is not the turning point, then what is?

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**Canadian Corner: The Canadian Society of Breast Imaging (continued from page 13)**

**Table.** Provincial screening access. Alberta (AB), British Columbia (BC), Manitoba (MB), New Brunswick (NB), Newfoundland and Labrador (NL), Northwest Territories (NT), Nova Scotia (NS), Nunavut (NU), Ontario (ON), Prince Edward Island (PE), Quebec (QC), Saskatchewan (SK), Yukon (YT). \*Women can self refer after the first referral is made by the family physician. Reprinted with permission from *Canadian Association of Radiologists Journal*.<sup>2</sup>

Jurisdiction (Province or territory)	AB	BC	MB	NB	NL	NT	NS	NU	ON	PE	QC	SK	YT
Women aged 40–49 year can self-refer for a mammogram	X*	X				X*	X			X			X
Women can self-refer for annual mammograms	X*						X			X			X
All women are directly informed of their breast density	X	X	X	X			X			X			
Only women with BI-RADS D density are informed of their density					X	X			X			X	X
Only women with BI-RADS density D are invited for annual (instead of biennial) mammography					X	X			X	X		X	X

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