

The ACR Commission on
Publications and Lifelong Learning
2018-2024



American College
of Radiology™



A Legacy of Learning



Building Leaders of the Future

In 2018, when I became a member of the ACR Board of Chancellors as the Chair of the Commission on Publications and Lifelong Learning (CoPLL), I was embraced by the dedicated ACR staff and volunteers who were fully committed to our mission to design meaningful professional development resources and experiences for all career stages and types of practice. Our commitment to this mission has resulted in highly valued education and continuous professional development resources for everyone, from medical students to retirees.

In 2018, we established three Cs of leadership: Communication, Collaboration, and Clarity of vision, which have served to guide us through the years and became critically important during the COVID-19 pandemic. In 2019, we brought our commission members together for a design thinking strategic planning retreat to build on our mission, vision, and roadmap. We communicated the need to think beyond education and move toward a culture of continuous professional development.

Learning is important; however, education is much more than learning. "Education brings members together to get to know each other. Education empowers members in their clinical work and other roles. Education fosters community."

Our commitment to education and continuous professional development empowered us to establish relationships and collaborations with other ACR commissions as well as external organizations such as the AMA, APDR, AUR, and APDIR, among others.

Our ACR Radiology Well-Being program, the first of its kind in radiology, brought people together who were passionate about finding ways to combat burnout and promote well-being. We created medical student activities that introduce our future colleagues to radiology and appropriate imaging. Our publications opened up new ideas and new communities to our members and readership. There are many more projects and programs that have positively impacted our members, profession, and ultimately our patients.



We have accomplished so much together! Our colleagues have earned over 1,488,700 CME credits from CoPLL programs in the last six years.

But our efforts and impact have extended way beyond the number of CME credits earned. Together we have built and empowered not only our current generation but also a future generation of radiology professionals and leaders.

I am incredibly grateful to each of you for all that we have accomplished together. We have built a remarkable legacy of lifelong learning resources that will benefit future generations and the patients they serve.

To creative and transformative ideas, past, present, and future!

Warmly,

Lori A. Deitte, MD, FACR

About the Commission

Having a mission and vision statement for such a large commission helped to focus the direction of efforts, particularly in 2018, when the ACR shifted its focus from education to lifelong learning. Early during the commission's development, its members and leadership met to collaboratively develop a vision and a mission statement that codify the strategic importance of learning and continuous professional development.

Vision

CoPLL is the premier source to meet the lifelong professional development needs of radiologists and other radiology professionals.

Mission

CoPLL is committed to designing meaningful professional development resources and experiences for the membership, inclusive of all career stages and types of practice. Patient input and improved outcomes are priorities integral to program development by CoPLL.

CoPLL commits to:

1. Continue to perform assessments to identify member needs.
2. Provide educational resources to close gaps in radiologic practice performance.
3. Equip members to meet challenges in areas, such as, but not limited to: AI, data science, policy, economics, and quality improvement education.
4. Prioritize physician well-being, leadership, and advocacy collaborations.
5. Produce educational resources for a broad audience, including medical students, residents, radiology professionals, interdisciplinary team members, and patients.

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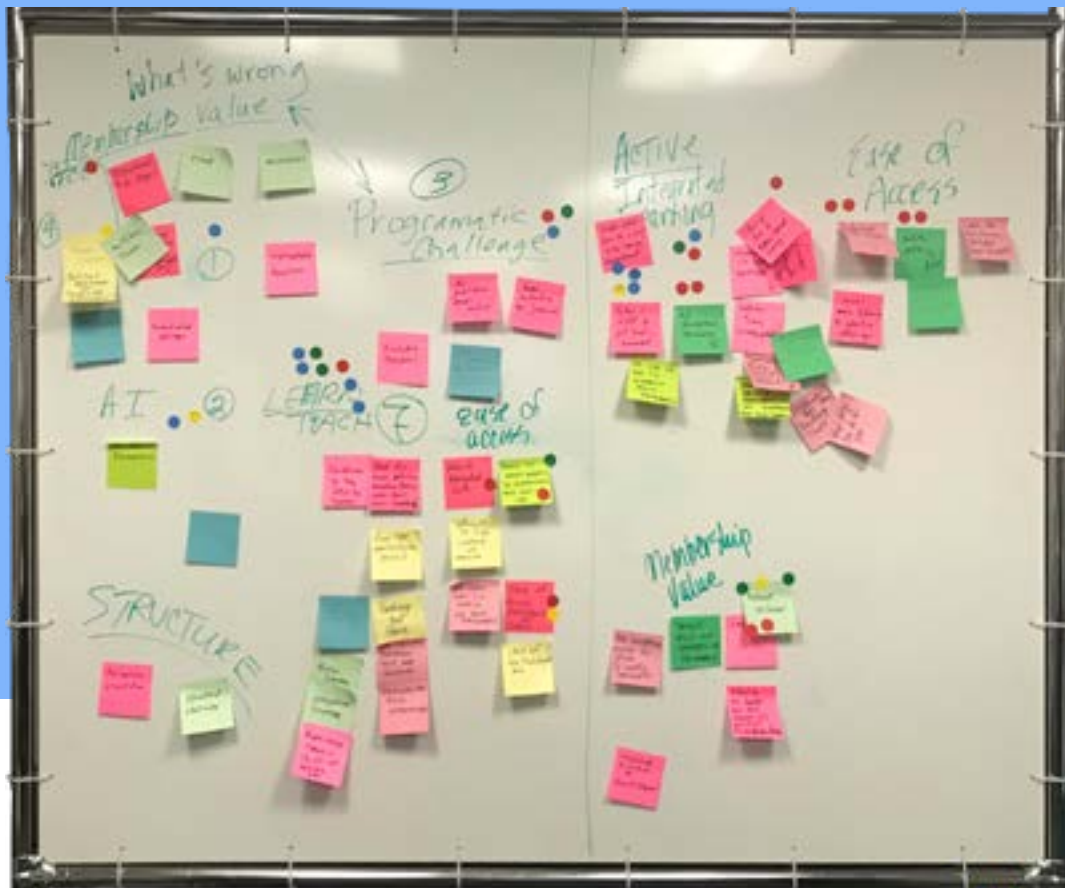
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Thinking Strategically: The CoPLL Retreat in Nashville

With a new roadmap in hand directing future efforts to the commission while recognizing the importance of continuous professional development, in September 2019, CoPLL convened a Strategic Retreat in Nashville for its members to determine priorities and new deliverables for the commission. Among the agenda items was a special session on design thinking, led in part by Vanderbilt University's Director of the Office of Continuing Professional Development Don Moore, PhD.

During the design thinking activity, participants were asked to review the roadmap and identify potential challenges to implementation. After each member provided their own concerns or problems, the larger group voted to determine the biggest concerns or problems and identify the biggest ideas or solutions. From there, individuals considered aspects such as the impact of implementation versus the feasibility.

In this September session, the group identified improvements in areas such as IT, integrated learning, membership value, system organization, and content quality. Small groups also identified short-term, mid-term, and longer-term solutions to challenges related to ACR learning offerings.

What Is Design Thinking?

A method for solving challenges within a group to identify and define problems, empathize with others (the audience), and present possible solutions, reviewing iterations until an optimal choice (“big idea”) is identified.



Building Together

Prior to addressing the education and continuous professional development issues at hand, as a team-building activity, participants followed a basic formula of thinking, doing, prototyping, and iteration (hallmark elements of design thinking), this time with marshmallows, dry pasta, and tape. The goal was to build the tallest possible tower that can support a marshmallow.

COPLL
STRATEGIC PLANNING
RETREAT



“This was an engaging and thought-provoking exercise that highlighted the importance of having a diverse team. Each team member allowed the group to think outside the box and to arrive at a solution that was better than what we would have developed independently.”

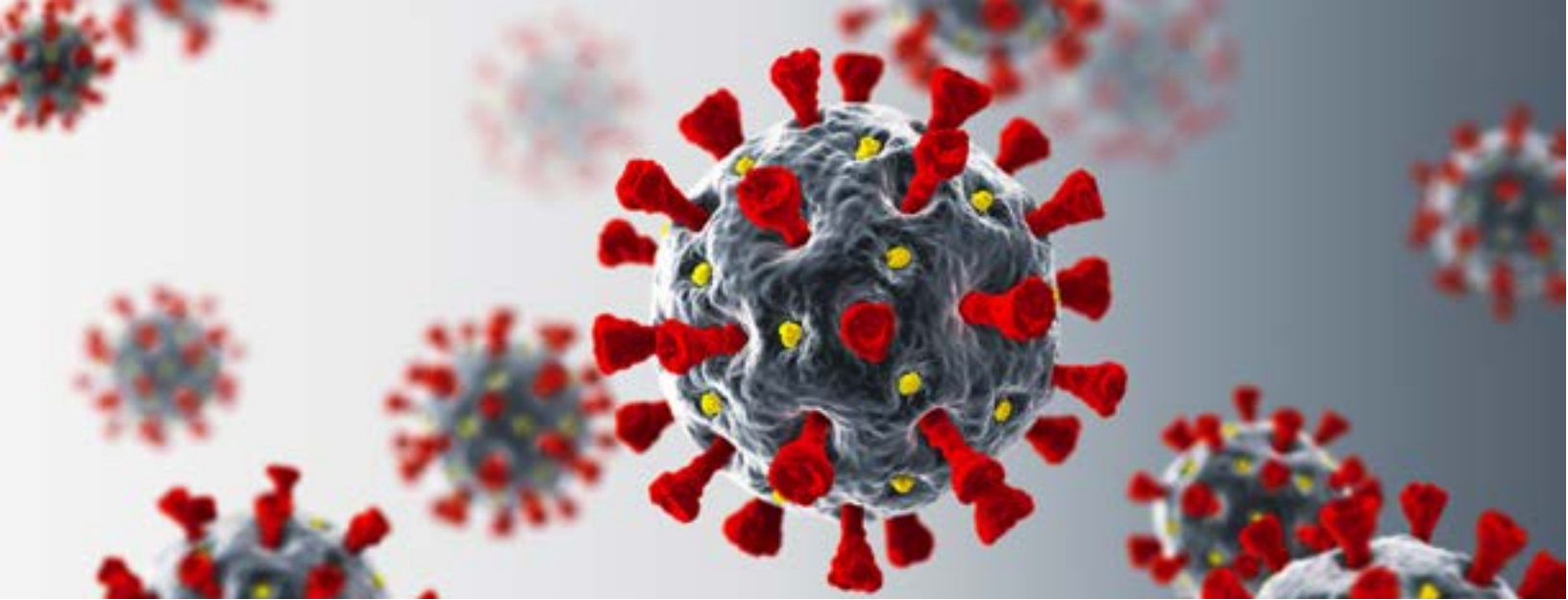
*— Matthew D. Cham, MD,
chair, Enduring Materials Committee*



“I greatly enjoyed the CoPLL retreat we had in Nashville, hosted by Dr. Deitte. It was so nice to get the group together in person. Many thanks to Dr. Deitte for her leadership.”

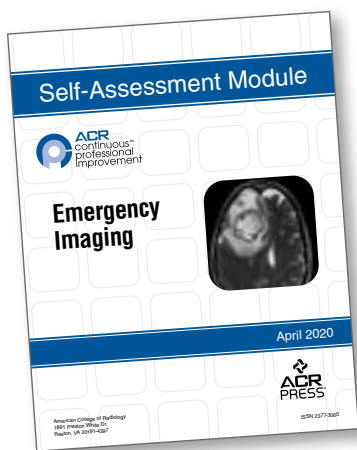
*— Rebecca L. Seidel, MD, chair, ACR Bulletin
Editorial Advisory Group*





Supporting Radiology Communities During a Pandemic

The COVID-19 pandemic was a time of unprecedented stress. The CoPLL staff and commission members made a commitment to continue to deliver the resources needed by the radiology community, including quickly pivoting from in-person offerings to virtual activities and making important resources free.



For residents whose training was impacted by COVID-19, the ACR offered a variety of free assessments, programs, and benefits to provide the tools and resources they needed to continue their professional development, including free access to a variety of **Continuous Professional**

Improvement (CPI) eBooks. Residents were also offered a virtual proctor option for the DXIT 2021 Exam.

A two-week virtual radiology curriculum for medical students provided and continues to provide students with independent reading materials, online

modules, and online scenarios to incorporate evidence-based strategies for imaging services, while allowing them to experience the science and diversity of modern imaging.

Radiology-TEACHES launched a new COVID-19 specific module which provided an introduction to COVID-19, with cases and imaging examples to help medical students understand the role of radiology and the features of COVID-19.

Considering that chest imaging demands greatly increased during the height of the pandemic, the **CPI** Chest module eBooks were made freely available, and 2,514 residents accessed these books in 2020.

Case in Point provided public access to all COVID-19 cases that had been submitted, with 24,492 AMA PRA Category 1 Credits™ claimed for these cases in 2020.

The **Well-Being Committee** created the “Stop and Breathe: Well-Being Resources for the COVID-19 Pandemic and Beyond” webpage, a collection of well-being resources started by committee member Rebecca Seidel, MD, also chair of the Wellness Committee at Emory University. In 2020, this page received more than 4,300 visits.



“In this unprecedented time of the COVID-19 pandemic, it is more important than ever that we support each other and stay connected as a community. The well-being of you and your loved ones is my utmost concern. I am very grateful for all that you do for our patients, radiology community, the larger medical community, and society.”

— Lori A. Deitte, MD, FACR, Chair, ACR Commission on Publications and Lifelong Learning, writing to commission members in June 2020

The Lung Cancer Screening Education Module, which continues to be free to all, had 534 registrants in 2020.

In publications, the **ACR Bulletin** published an article focused on the successful wellness principles of Robert J. Min, MD, MBA, FACR, chair of radiology at Weill Cornell Medicine. Visitors to the **JACR** website could also read the **JACR** article “Coronavirus Disease 2019 (COVID-19) and Beyond” for how quick “micro-practices” can help ease stress and anxiety for even the busiest radiologists and other healthcare providers.

Two of the ACR’s programs, the **Education Center** and the **AIRP** quickly pivoted to virtual offerings. In 2020, the AIRP completed three inaugural virtual Radiologic-Pathologic Correlation Courses, each of which included four weeks of live lectures delivered via Zoom. Meanwhile, the Education Center launched virtual courses in November 2020 in response to the pandemic. These virtual courses continue to be popular offerings.





Planning Annual Meeting Sessions

Over the years, annual meeting CME sessions spanned topics such as well-being and burnout, AI, practice leadership, and health equity. CoPLL staff and program leaders continually seek to collaborate with other commissions and departments within the ACR to find mutually beneficial topics and experts in these subject areas to present their experiences.

CoPLL was formed in **May 2018**, with the induction of chair Lori A. Deitte, MD, FACR. Raj Gupta, MD, was selected as chair of the Meetings Committee and helped lead the planning of all annual meeting CME sessions.

In 2019, CoPLL coordinated The Future Practice Management CME Session featuring popular Ted-talk styled presentations on AI, finance, corporatization, value, and wellness. This was a highly successful collaborative effort among CoPLL, RFS, YPS, and the Council Steering Committee:

- **How the “Robots” Will Help Us Care for Our Patients (Without Taking Our Jobs)**
— Tessa S. Cook, MD, PhD
- **Learn your ABC's and 123's — Personal and Professional Finance Concepts for Radiology Practice Leadership**
— Kurt A. Schoppe, MD
- **Radiology, Consolidation, and the Griswold Family Truckster**
— Richard E. Heller, MD, FACR
- **Rethinking the Radiologist's Value Equation**
— Marta E. Heilbrun, MD
- **Are We Too Burned Out to Even Think of Wellness?**
— Jonathan B. Kruskal, PhD, FACR

In collaboration with RLI, YPS, and Chapter Leaders, CoPLL once again hosted a [joint CME session](#) at the virtual ACR 2020 meeting.

Brave New Work: How to Get Ahead and Meet Leadership Challenges in 2020 and Beyond:

- **Core Issues in Leadership**
— Frank J. Lexa, MD, MBA, FACR
- **How to Lead and Progress in Your Career**
— David T. Boyd, MD, MBA, Lucy B. Spalluto, MD, MPH, Richard E. Heller, MD, FACR, and Ann K. Jay, MD
- **It's a Shared Responsibility: Organizational and Individual Strategies to Promote Well-being**
— Claire E. Bender, MD, FACR
- **Individual Strategies to Wellness**
— Jenny T. Bencardino, MD, Nate E. Margolis, MD



Frank J. Lexa, MD, MBA, FACR, presents at the ACR Annual Meeting.



There is always time for a quick group photo outside of the CoPLL Reception at the 2023 ACR Annual Meeting.



“Working with the incredible CoPLL team and ACR leaders on planning the CME sessions for the Annual Meetings has been such a pleasure. The creativity of the group is boundless, and their dedication to creating content that is meaningful to our members and the next generation of radiologists is inspiring.”

— Raj Gupta, MD, chair, Meetings Committee



In 2021, CoPLL successfully hosted a two-part ACR CME program Leading the Way to Health Equity, a collaborative program between CoPLL, RLI, HR, Women and Diversity, and PFCC. Sessions included:

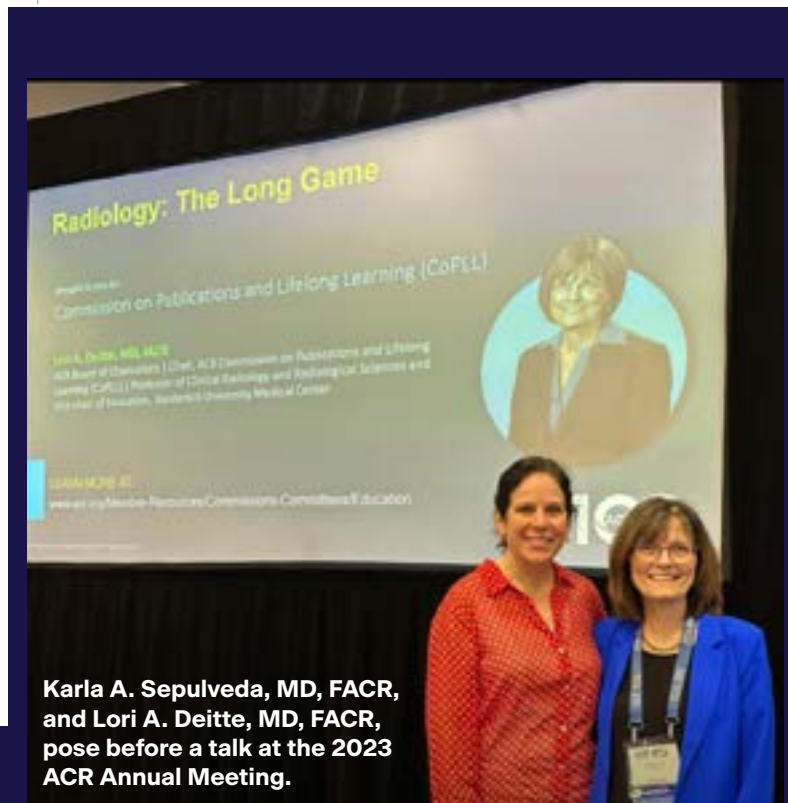
- **Deciding What to Share in Shared Decision Making for Lung Cancer Screening**
— Matthew D. Cham, MD, Moderator, Frederic W. Grannis Jr., MD, Sheila Ross, David Yankelevitz, MD
- **VA Radiology: Innovation, Partnership, and Opportunity**
— Eric B. Friedberg, MD, FACR, Moderator, Lee Becker, Eliot L. Siegel, MD, FACR, Lucy B. Spalluto, MD, Ian Weissman, DO, FACR
- **ACR Military Radiology's Battlelines: Field Hospitals, Cybersecurity, and the Crusade for Women's Health**
— Eric B. Friedberg, MD, FACR, Moderator, Mohammad Naeem, MBBS, MD, FACR, Moderator, Jennifer E. Nathan, MD, Eric A. Roberge, MD, Neris M. Nieves-Robbins, MD
- **Leading the Way to Health Equity Pt I**
— John Lightfoote, MD, FACR, Moderator, Geraldine B. McGinty, MD, MBA, FACR, Moderator, Iris C. Gibbs, MD, FACR, Lucy B. Spalluto, MD, Efron J. Flores, MD, Zahra Khan, MPA, CPA, CGMA
- **Leading the Way to Health Equity Pt II**
— Rajan T. Gupta, MD, Moderator, Geraldine B. McGinty, MD, MBA, FACR, Moderator, Frank A. Lexa, MD, MBA, FACR, Raymond K. Tu, MD, FACR, Karthik Shivashanker, MD, MPH, CPPS, Jacqueline Anne Bello, MD, FACR
- **Hot Topics in Imaging Economics**
— Gregory N. Nicola, MD, FACR, Moderator, Melissa L. Chen, MD, Sammy Chu, MD, FACR, Timothy A. Crummy, MD, FACR, William D. Donovan, MD, MPH, FACR, Lauren P. Golding, MD, Kurt A. Schoppe, MD

A Window into Radiology's Future:

- **Corporatization in Radiology**
— Howard B. Fleishon, MD, MMM, FACR
- **Learning Close, Learning Far**
— Janice M. Newsome, MD
- **The Future of AI: How Do We Get There?**
— Kirti Magudia, MD, PhD
- **Teams and Experimentation; Elements in Maximizing Adaptability**
— Alexander M. Norbash, MD, MS, FACR

Building a Culture of Wellness:

- **Building a Sustained Culture of Wellness from Top Down or Bottom Up**
— Amy K. Patel, MD
- **Your Practice Culture... Do YOU follow it?**
— Colin J. O'Brien, MD, Carrie Cole, Christine Coon
- **Building a Culture of Wellness from Within**
— Kristin K. Porter, MD, PhD



Karla A. Sepulveda, MD, FACR, and Lori A. Deitte, MD, FACR, pose before a talk at the 2023 ACR Annual Meeting.

Radiation Oncology Workforce: Current and Future Direction:

- **Decrease in Applicants to Radiation Oncology**
— Aaron F. Bush, MD
- **Radiation Oncology Residency, Training, and Workforce: From the Academic Perspective** — Arya Amini, MD
- **Rural Radiation Oncology Workforce**
— Join Y. Luh, MD, FACP, FACR

Making a Lasting Difference: Leading Strategic Change:

- **A Paradigm for Success**
— Frank J. Lexa, MD, MBA, FACR
- **Leading Change: Having a Sense of Urgency**
— Ryan K. Lee, MD, MBA
- **Getting From Challenge to Change**
— Jacqueline A. Bello, MD, FACR
- **Timing is Everything**
— Lauren P. Nicola, MD, FACR

Lessons from Technology Development and Dissemination: Our First Century:

- **The Triple Transformation: Modality, Digital, AI**
— Keith Dreyer, DO, PhD, FACR
- **Body Imaging and The Cross-Sectional Modalities**
— Geoffrey D. Rubin, MD, MBA, FACR
- **Radiation Oncology: From Curie to Image-Guided Therapies**
— William Small Jr., MD, FACRO, FACR, FASTRO
- **Neuroradiology, Neuroimaging, and Neurointervention: The First Century**
— Michele H. Johnson, MD, FACR

The Changing Role of the Radiologist:

- **Moderators:** Rajan T. Gupta, MD and Catherine J. Everett, MD, MBA, FACR
- **Speakers:** Tessa S. Cook, MD, PhD; Taj Kattapuram, MD; Richard Duszak, MD, FACR, FSIR, FRBMA; and Gregory N. Nicola, MD, FACR

Radiology: The Long Game:

- **Lessons From the Past**
— James P. Borgstede, MD, FACR
- **Radiology at the Dawn of the 21st Century**
— Eric M. Rubin, MD, FACR
- **The Big Picture: Using Our Voices to Ensure Quality Patient Care in the New Era of Radiology Healthcare Delivery**
— Amy Patel, MD
- **Redesigning Radiology**
— Melissa A. Davis, MD, MBA

The sessions from 2022 and 2023 are freely available [on-demand](#).

Top: Lauren P. Nicola, MD, FACR, looks on as Jacqueline A. Bello, MD, FACR, speaks at the ACR Annual Meeting.

Bottom: ACR Annual Meetings allow time to connect with colleagues..



Sharing Insights Through Publications

The **ACR Bulletin** and **JACR** member volunteers and staff keep their finger on the pulse of the radiology community. They develop relationships, learn and share professional and clinical insights, and continue to keep the radiology community abreast of work in the College and in the specialty at large. As part of CoPLL, the Publishing Ethics Committee ensures compliance and appropriate conduct for ACR Publications.

ACR Bulletin

The **ACR Bulletin** has received more than a dozen editorial and design awards, and recently went fully digital. The *Bulletin* has become the premiere publication for members to learn about ACR activities and exciting new developments in the specialty. Representative achievements are highlighted below.

2019:

The *Bulletin* debuted a new online presence on acr.org with enhanced features, including web-exclusive articles, a podcast, and trending stories in the field of radiology. The **May 2019**

well-being special issue of the *Bulletin* contained personal stories of resilience, as well as strategies for addressing burnout at the individual, institutional, and national levels.

2020:

The *Bulletin* released a special issue on radiology's response to COVID-19 in **May 2020** and a special issue on health equity in **September 2020**. A second *Bulletin* podcast season was launched, featuring Debra S. Dyer, MD, FACR, in conversation with key members of the LCS team: the referring clinician, the pulmonologist, and the radiologist. The podcast was created by

the Population Health Management Committee and Lung Cancer Screening 2.0 Subcommittee, in collaboration with the National Lung Cancer Roundtable (NLCRT).

2021:

The *Bulletin* ca new column that began in January designed to keep members updated on College research initiatives. Meanwhile, the "Overcoming Barriers to Care" **April** special issue discussed how overcoming racial, socioeconomic, and geographical barriers supports high-quality imaging care and vibrant practices. This illuminated the many ways in which radiologists are

taking action to ensure quality care for all members of their communities. In **May**, the *Bulletin* launched a year-long series that explored how the College was reimagining several of its focus areas during the COVID-19 era and beyond, including advocacy, data science, member engagement (including medical students), diversity and inclusion, clinical research, and quality and safety.

2022:

The *Bulletin* launched its coverage of the ACR's centennial. Issues focused on the invention of the X-ray and the development of the Council. The **October** special issue on improving access



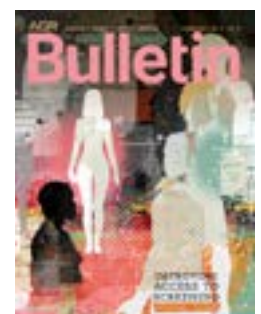
2019



2020



2021



2022



“What I most enjoyed about serving on the Publishing Ethics Committee of CoPLL was seeing the commitment, thoughtfulness, and integrity of my fellow Committee members as we worked through challenging issues. Most ACR committee activities are aimed at supporting the overall practice of radiology. CoPLL is unique in that its programs are aimed directly at supporting the needs of individual radiologists in their careers.”

— James H. Thrall, MD, FACR, chair, Publishing Ethics Committee

to screening delved into how radiologists can make a difference in eliminating disparities in routine screening examinations. The **December** issue covered how the ACR advocates for patients and radiologists as it pushes back against unfair policies discovered in the implementation of legislation to end surprise medical billing.

2023:

This year saw the biggest change to the *Bulletin* since its inception in 1936 with the decision to move the publication entirely online starting in July, reducing the ACR’s carbon footprint and saving the College costs related to printing and mailing.



2023



Celebrating 20 years of publishing in 2024, the *JACR* is an innovative publication that brings together preeminent experts in radiology to deliver important, thoughtful content—as well as articles that provide CME credits—to the radiology community. Importantly, we recognize Ruth C. Carlos, MS, MD, who in 2019 became the first woman to lead this major radiology journal as its editor-in-chief.

Carlos and staff members have led important initiatives in the past several years. In 2022, the *JACR* launched the Trainee Editorial Board to pull future radiologists into the publishing process and connect them with mentors. Meanwhile, the Hillman Fellowship continues to offer mid-career radiologists a concentrated experience in medical editing, journalism, and publishing. A total of 12 members have now completed the fellowship, which is named for the late founding editor of *JACR*, Bruce J. Hillman, MD. Finally, special and focus issues cover topics of interest to members. Issues ranged from Health Equity to Medical Education to Practical AI.

Like many other medical journals, the *JACR* has committed to finding ways to use fewer natural resources to create its monthly issues and will therefore be fully online in 2025.

Elsevier, the journal’s publisher, has calculated the climate footprint of their printed journals taking into account the different journal formats, distribution networks, and emissions data provided by their suppliers. In 2022, printed copies of *JACR* added to our atmosphere over 230 tons of greenhouse gasses (measured in carbon dioxide equivalents). To put this in context, this is the same impact as a person flying around the world 42 times. The digital *JACR* offers the same great articles from the print version, with extended audio and video content, a robust social media presence, and more.



Making Medical Students and Residents a Priority

It's no secret that there is a recognized shortage of radiologists. Over the past six years, the Commission has prioritized the path of medical students and residents in their careers as radiologists and has created ways to satisfy both their curiosity in radiology and clinical development needs. From RadExam for residents to Radiology-TEACHES for medical students and multiple programs in between, these initiatives would not be possible without the committee members who passionately guide their evolutions to what they are today.

RadExam

RadExam offers a versatile set of exams and iterative testing for radiology residency programs. This collaborative effort with the Association of Program Directors in Radiology provides residents with the tools needed for ACGME-required formative assessment with its versatile set of examinations and iterative testing. **As of December 2023, 9,297 residents have participated with 184,527 exams completed to date.**

Petra J. Lewis, MBBS, FACR, is the chair of the RadExam Editorial Board Subcommittee.

Radiology-TEACHES

Launched in 2015, this program for medical students supports education related to appropriate image ordering. From 2020 to 2023, the number of student participants increased by 8,171 to more than 10,000 students. Those **students have completed 51,102 program modules.** Radiology-TEACHES also offers a mentoring program. By the end of 2023, 398 students had registered for this component of the program.



Marc H. Willis, DO, FACR, MMM, is the editor-in-chief of the program and serves CoPLL as chair of the Radiology-TEACHES Editorial Board Subcommittee.

Virtual Escape Room for Medical Students

The ACR has also created a successful [Escape Room](#). This escape room provides puzzles and clues designed to stimulate an interest in radiology for students in medical school.

STARS

The **Standardized Tool for the Assessment of Radiology Students (STARS)** is a collaborative effort with the Alliance of Medical Student Educators in Radiology (AMSER). It provides medical schools with a national, web-based, question-item





Successful escapees from the ACR Live Escape Room hosted at AUR 2023.



database and exam-taking system to use in assessing students throughout their radiology courses. Instructors can even create and administer their own web-based exams using the bank of multiple-choice questions — or use AMSER-created and -vetted exams. In STARS, 5,095 students have participated and completed 15,362 exams to date as of December 2023.

Mahan Mathur, MD, is the STARS editor-in-chief.

In-Training Exams

Most radiologists are aware of the critical and long-standing **DXIT** and **TXIT** In-Training Exams for residents. While in-person proctoring is still an option, many residents taking the DXIT exam have chosen virtual testing, particularly since the COVID-19 pandemic, a change that our commission member volunteers and staff quickly launched to meet demands in 2020. Over their 30-year history, these two exams have helped residents better understand their knowledge gaps relative to their peers, and from 2008 to 2024, a growing number of international residents have taken the exams; 428 international residents completed the DXIT exam in 2023, compared with just 279 in 2013. In 2023, 664 residents completed the TXIT exam. Few realize how much goes into creating these exams; member volunteers create hundreds of questions for each exam as well as a study guide. They also meet in-person as a group to review each question and determine its appropriateness.

Rakesh D. Shah MD, FACR, is the chair of the DXIT Subcommittee, and **Kilian Salerno, MD**, is chair of the TXIT Subcommittee.

Medical Student Building Blocks and Virtual Two-Week Curriculum

The **Medical Student Building Blocks**, launched in 2020 and developed by **Chris M. Straus, MD, FACR**, offers resources to educate medical students on radiology and can also be used by medical educators to build a radiology curriculum. Also released in 2020, the **Virtual Two-Week Curriculum** for medical students was compiled and provided by Benjamin Hyatt Taragin, MD. It can be used within an institution, as a radiology elective or as an independent study resource for medical students. In 2023, the Louisiana State University Health Sciences Center adopted this curriculum for their students.

Other News

In 2019, the ACR became the AMA's first medical specialty society content partner to offer educational activities on the AMA's Ed Hub platform. A selection of free ACR content is being hosted on the AMA Ed Hub and is accessible to all learners, regardless of AMA and ACR membership status, as part of the AMA and ACR's collective mission to educate physicians and healthcare teams. Learners can find, participate in, and claim CME credit for these ACR activities directly through the new platform.



Protecting Radiologists' Well-Being

To address the prevalence of physician burn-out and promote well-being, the CoPLL and the Commission on Human Resources launched the **ACR Radiology Well-Being Program** in May 2019. The Program includes a collection of resources and activities to help radiologists, residents, and medical students take stock of their own level of well-being and offer ways to reduce the feelings of burnout often caused by situations outside of their control.

This launch was a culmination of work by the Well-Being Committee and members of the Commission on Human Resources, who worked quickly to identify research, articles, videos, and other resources that individuals can access to support their well-being.

The first phase of work offered resources for individuals, including residents and in July 2019, the committee created a Well-Being Curriculum for Radiology Residency Programs. The curriculum contains resources and experiential exercises to strengthen residency programs and meet formal ACGME well-being requirements. Within this first phase of work, committee members also took on the responsibility of identifying resources for specific areas within well-being. The set of six

Well-Being Support Guides covers self-care, resilience, communication, mentorship, diversity and inclusion, and conflict resolution.

The second phase of work was directed at creating a Culture of Well-Being in the workplace: health systems, practice environments, and institutional frameworks/systems. Volunteers accepted responsibility to build and lead teams in the areas of professionalism, work-life balance, leadership development, empowerment, restoring personalization in work, and more. An article on the **unsustainability of demands faced by women**, particularly during the COVID pandemic, was published out of these groups. Based on a survey that showed the areas of work-life balance and volume of work were the most pressing drivers of burnout, the group instituted a call for case studies, soliciting input from those members who identified related issues in their own institutions and implemented efforts to ensure positive changes in well-being.

As burnout and well-being were top of mind in 2020 for most of the medical profession, members of the commission and committee helped develop the “Brave New Work” CME session at ACR 2020 in collaboration with the Radiology Leadership Institute. The session provided organizational and individual

strategies to promote well-being and offered insight into ways that leadership can contribute to well-being. Approximately 200 individuals registered for the webinar sessions that occurred over two days. At subsequent annual meetings, the Well-Being Committee collaborated with the PFCC Art Committee to understand the impact of art on wellness.

As part of the phase two work, committee members generated a survey to understand the extent of burnout in private practice in collaboration with the Commission on Human Resources. The [results of the survey](#) are detailed in an article by **Jay Parikh, MD, FACR**, one of the committee members, and **Eric Rubin, MD**, chair of the ACR Commission on Human Resources.

The most recent resource for the program was developed and released in 2022. The Well-Being 360 project began as a result of the ACR's desire to go beyond well-being resources for the individual and investigate what well-being means to the radiology community. There was a desire to better understand the drivers of burnout at departments and practices around the country. Moreover, it was important to know how radiologists could address the problems that cause poor well-being. This project found that the well-being needs were different for all, and their solutions (real and imagined) were equally unique. The result is a [detailed report](#) based on more than 15 hours of interviews with nearly 30 ACR members.



“With burnout being an epidemic in radiology, our work on the Well-Being Committee is so important. Through this committee we are providing resources to help practices as well as individual radiologists promote well-being and combat burnout, paramount to the preservation of the future of the specialty.”

*—Carolynn M. DeBenedectis, MD, co-chair,
Well-Being Committee*



What Does Well-Being Mean to Radiology?

About This Report

This report is based on 15 hours of interviews from a group of 28 radiologists of different career stages and subspecialties gathered from summer 2022 to winter 2023 as part of the Well-Being 360 project, a component of the ACR Radiology Well-Being Program. One-third of participants were women, two-thirds men, and years in practice ranged from 0 (resident) to 25-plus, with half of the participants in the more-than-20-year range. One-half of participants were in private practice, and the other half were in academic or community hospital settings. Identifying information has been removed to protect the anonymity of the participants who discussed the challenges at their organizations.

This project began as a result of the ACR's desire to go beyond well-being resources for the individual and investigate what well-being means to the radiology community. We wanted to better understand the drivers of burnout at departments and practices around the country. Moreover, we wanted to know how radiologists would fix the problems that cause poor well-being. We found that the well-being needs were different for all, and their solutions (real and imagined) were equally unique. The College built this report to assist leaders in navigating the well-being needs of their employees and colleagues to help to prevent burnout and ultimately to build a culture that leads with empathy and collaboration.



Continuing Powerful Case-Based and Other Education

It is difficult to ask our members to contribute more time and casework to educational activities. However, the volunteers who do so truly believe in the power of education and lifelong learning, and have helped the ACR's more clinical, case-based programs to thrive. **Case in Point (CIP), the Continuous Professional Improvement (CPI) Program, the Rectal Cancer Staging Module, and Lung Cancer Screening Module** require high-quality content and have rigorous standards for publication.



Case in Point from 2018 to 2023:
823,586 CME Credits Awarded

In the realm of clinical, case-based activities, **Case in Point** is one of the ACR's most successful and frequently used resources and has continued to flourish under CoPLL. In the past six years, the program has introduced annual case author winners, transitioned from a wonderful, longtime editor, Kitt Shaffer, MD, PhD, FACR, to the also brilliant David R. Pettersson, MD, and recently started offering cases seven days a week.

On average, since its inception in 2005, ACR members complete 500,000 Case in Point cases annually. Rona Woldenburg, MD, was the program's first editor-in-chief and was supported by Larry Davis, MD, FACR. In late 2023, with cases being offered seven days a week, the program passed a milestone of 600,000 cases completed as of December 20, 2023. Cases are designed to take approximately 15



"I joined CoPLL because of my passion for teaching in radiology. I am delighted by the remarkable strides and accomplishments that we have achieved under the vision and leadership of Dr. Deitte. Her creativity, approachability, and engagement has kept us moving forward. Dr. Deitte graciously hosted a most memorable and productive retreat at her institution, facilitating substantial networking and collaboration between several ACR committees. Her incredible resilience carried us through the COVID pandemic and allowed our committees to thrive in spite of it. As Dr. Deitte ends her current term, she will leave behind big shoes to fill and will be sorely missed."

*— Matthew D. Cham, MD, chair,
Enduring Materials Committee*

"The multiple subcommittees that make up the various parts in ACR's herculean efforts for lifelong learning for radiologists have all been enhanced by ACR staff and volunteer efforts, recently guided by a most convivial, inclusive and effective chair in Dr. Deitte."

*— Harris L. Cohen, MD, FACR,
CPI editor-in-chief*

minutes (.25 AMA PRA Category 1 Credits™), and members spent 150,000 hours in 2023 re-viewing cases through Case in Point, collectively earning 150,000 AMA PRA Category 1 Credits™.

Case in Point is part of many members' daily routine, and the format makes it easy to do it on a mobile device or at a workstation. Credit goes to the resources from the ACR IT department, according to Shaffer. "The technical support that I had during my time at CIP was unbelievable," she says. "In most of my past experiences, tech support is mainly there to say 'No, that can't be done,' but at CIP it was the opposite. Every time I thought of a new way to make the website more interactive and to move into fresh areas, the response from ACR was 'We can make that work.' It was a dream situation to have a site that was already wonderful, but could be improved, and to have the resources to make changes that I was proud of."



Case in Point

"I had always enjoyed reading Case in Point and made it a part of my educational program to require elective students to work on a case with a resident and at least submit it. It is a wonderful way to teach beginners about the scholarly publication process at a relatively easy entry level. So, the opportunity to have a leadership position in this wonderful institution was too good to pass up."

— Kitt Shaffer, MD, PhD, FACR

"The provision of this educational tool to the ACR membership ensures that subspecialty-level proficiency is accessible across the full breadth of radiologists, regardless of their level of expertise. Novices in the field have the opportunity to refine and augment their skills, while seasoned practitioners can rejuvenate their understanding and delve into subtle nuances within the subject matter."

— Mukesh G. Harisinghani, MD, and Marc Gollub, MD, content reviewers for Rectal Cancer Staging Module



The Continuous Professional Improvement Program



147,317 CME Credits Awarded

The [Continuous Professional Improvement \(CPI\) Program](#) offers an in-depth look at cases within critical subspecialty fields in radiology. It is one of the most rigorous, case-based programs offered at the ACR. Each module asks readers to review case images, identify diagnoses, and answer multiple choice questions that give way to detailed rationales and additional imaging.

Since its inception in 2005, CPI has released five to six modules each year, on average, each with at least 50 questions and 8 AMA PRA Category 1 Credits™ offered per module. Each module takes more than a year to develop, with the help of a subspecialty-specific editor and several additional authors who contribute cases and write questions. Modules undergo review by CPI Editor-in-Chief Harris L. Cohen, MD, FACR, who ensures it is understandable to all who read the modules, particularly those who work outside of the given subspecialty. “The most enjoyable aspect of working on CPI is in producing educational modules that try to teach in a logical manner to a variable audience of learners,” says Cohen. Readers continue

to rate the modules highly in all areas related to relevance, value, and effectiveness. Since 2018, readers have claimed more than 230,000 AMA PRA Category 1 Credits™. Modules are also provided free-of-charge to Education Center attendees and are significantly discounted for residents.

In 2023, CPI eliminated the print edition of the modules, moving to online-only content. In 2024, five modules are scheduled to be completed. With many more images included in the new online CPI module design, the CME credits have gone up to 10 CME per module. The first module to showcase the new design is a milestone creation: Editor’s Choice, a collection of the best cases and questions in popular subspecialties, the first being Breast imaging.

Rectal Cancer Staging Module



4,015 CME Credits Awarded

Colorectal cancer and in particular rectal cancer have been increasing in incidence, particularly among younger individuals. This module aims to teach learners to adopt and implement evidence-based MRI protocols, standardized reporting, and patient-focused shared decision making as they relate to rectal cancer staging. Co-sponsored by the Society of Abdominal Radiology, the [Rectal Cancer Staging Module](#) was created in 2017 and offers 3 AMA PRA Category 1 Credits™.

Lung Cancer Screening Module



35,628 CME Credits Awarded

Co-sponsored by the Society of Thoracic Radiology, the [Lung Cancer Screening Module](#) offers up to 15 CME credits while preparing the participant to implement a comprehensive, multidisciplinary lung cancer screening program that applies a patient-centered approach to shared decision making. The module has continued to grow in popularity; in 2018, 108 learners claimed 1,550 credits for this module. In 2023, 385 learners claimed 5,775 credits for the LCSE module.

Pivoting Once, Twice, at the Education Center



246,300 CME Credits Awarded

The [ACR Education Center](#) opened in 2007 but had its most interesting timeline of activities in the last six years, primarily due to the COVID-19 pandemic. In 2019, the Education Center had one of its most prolific years with 1,700 course attendees and 52 courses, including Neuroradiology, Cardiac MR, Breast Imaging with Tomosynthesis, Abdominal Imaging, Emergency Radiology, and Nuclear Medicine. Four new courses were also launched: Nuclear Medicine, NIOSH B Reader, a collaboration with the Society of Interventional Radiology on stroke imaging, and a new pediatric radiology course for general radiologists developed in conjunction with the Society for Pediatric Radiology.

In April 2020, the College established the Education Center Advisory Committee, led by Daniel Karolyi, MD, PhD, to oversee design, development, implementation, and evaluation of all Education Center courses and sessions. Karolyi and the committee members quickly pivoted to a virtual model once it was apparent that COVID-19 would indefinitely affect operations. CoPLL and the advisory committee took time to step back and analyze how the Education Center operated and how it could adapt. When the world began to trend toward remote/virtual education, the Education Center successfully launched virtual micro-courses, now simply referred to as virtual courses. Although initially participants could access virtual course content for a week, courses now offer a full month of access to pre-recorded lectures and cases for a self-paced, deep dive on the most challenging topics in a chosen specialty. This is followed by a virtual two-hour group case review and a virtual Q&A with faculty along with two additional days to review the case content.



The ACR Education Center continues to offer premier, in-depth courses both in person and online.



James R. Costello, MD, PhD, an ACR Education Center faculty member, discusses course material with Harpreet K. Judge, MD, during a Body and Pelvic MR class in Reston, Va.

By the end of 2020, the Education Center had delivered 16 micro-courses in Abdominal Imaging, MSK, HRCT and Prostate MR to 305 attendees. From January to March 2021, 407 participants completed the virtual courses. During this time, the Education Center was working on transitioning the cases to the ACR's Cortex platform. This platform change allowed the Education Center to test institute retention and measure longitudinal progress. Nearly 1,200 attendees participated in the virtual courses by the end of 2022.

With the world slowly returning to the new normal, new Senior Director of the ACR Education Center Jennifer Rowley joined the ACR in July 2022 and quickly began preparing for the reopening that September. Despite the lack of time for marketing and promotion, the 10 in-person courses planned for fall filled rapidly and received excellent reviews.

The full course schedule for 2023 was announced in late October and offered more than 40 in-person courses covering a range of clinical topics. In 2023, the Education Center successfully held 41 in-person courses with a total of 997 registrants. The Education Center also partnered with RANZCR to provide three courses (Prostate MR, Body & Female Pelvic MR, and MSK: Commonly Imaged Joints) in Sydney, Australia, with a combined 120 registrants.

Virtual courses continue to be offered (696 registrants took advantage of these courses in 2023). During the past year, staff and committee members started working with course directors and faculty to review all course content, including course descriptions and objectives, course agendas, didactic presentations, and online course materials to present the most up-to-date clinical education. Many courses are also making significant case updates and are uploading new cases captured on newer imaging technology. Updates will be seen in the 2024 courses. The Education Center is also working with the LI-RADS (Liver) and Lung-RADS groups to develop course content as well as with the ACR Commission on Pediatric Radiology to develop a new virtual course for pediatric imaging of non-accidental trauma.



“I continue to participate in developing and delivering Education Center courses because we provide education to our colleagues, radiologists around the country and abroad, in a hands-on-format while reviewing a broad spectrum of cases. These direct interactions with participants help them build or expand clinical services while utilizing new imaging technologies and implementing interpretation and communication standards for improved patient care.”

— Katarzyna J. Macura, MD, PhD, FRCR, member, ACR Education Center Advisory Committee



Setting and Achieving High Standards, Compliance

The Strategic Planning and Compliance Committee of CoPLL is led by Ramesh Iyer, MD, MBA. Despite the hundreds of CME applications reviewed by faculty and staff over the last several years (1,579 from 2021 through 2023), perhaps the biggest accomplishment came in March 2023, with renewed certification with commendation from the Accreditation Council for Continuing Medical Education (ACCME) to grant CME to ACR programs.

“This is their highest level of certification and means that, for the next six years, the College can provide CME credits both for our own programs as well as for our 54 Chapters and other organizations that file requests,” says Bill Thorwarth, MD, ACR CEO. “Congratulations to Dan Reardon who, working with Dr. Lori Deitte (Chair of our Commission on Publications and Lifelong Learning), our AOE consulting colleagues, and multiple staff members, guided our renewal application through a rigorous process and scrutiny by the ACCME reviewers. The extensive documentation that had to be provided (a 92-page “self-study” submission) was followed by a probing interview.”

In October 2022, key CME staff, Thorwarth and Deitte, participated in mock interview preparations ahead of the interview by ACCME surveyors. The ACR was able to achieve Accreditation with Commendation, which is awarded to providers that demonstrate exemplary performance, including demonstrated compliance with all Core Accreditation Criteria and eight commendation criteria.



“I was suggested as someone to work on a CoPLL committee by my local chapter colleague and before I knew it, I somehow became chair of

it. Working with such individuals dedicated to education and paying it forward has been amazing. In reviewing cases for compliance, I get to stay abreast of advancements in the field as well as experience frequent well-thought-out reviews of common diseases. It’s amazing!”

— Julie Bauml, MD, chair, CME and SAMs Compliance Subcommittee



“I have had a fantastic experience chairing the CME/SAM compliance subcommittee and the SPCC. Dr. Deitte never failed to create a supportive and

inclusive environment to share progress and thoughts and was always available to provide insightful input.”

— Ramesh Iyer, MD, MBA, chair, Strategic Planning and Compliance Committee

Ensuring Understanding of Radiologic Pathology at AIRP

In 2019, prior to the pandemic, Mark E. Mullins, MD, PhD, FACR, became chair of the **ACR Institute for Radiologic Pathology (AIRP)** Advisory Committee. That year, AIRP began a year-long faculty development program, offering a face-to-face workshop for 20 faculty members. In addition, to better understand the knowledge gained during the four-week ACR AIRP Rad-Path Course for residents, AIRP leadership began using RadExam to administer pre- and post- testing for residents.

Early in 2020, the AIRP Advisory Committee met to discuss revision of the AIRP strategic plan. Although not part of the plan at the time, AIRP leadership quickly made changes to its course offerings during the pandemic. This was especially difficult given that not only did it hold four-week, in-person courses for residents at the AIRP headquarters in Silver Spring, Md., but AIRP also hosted conferences worldwide. Confronted by COVID-19, AIRP leadership had three months to implement a new learning management system and turn 147 live 40-minute lectures given by 50 faculty into virtual asynchronous or synchronous lectures to launch the full four-week July 2020 course on time and online. Committed to delivering content with the same high quality that AIRP is known for, work among section chiefs, ACR IT, and AIRP staff was nonstop. Typically, the July AIRP attendance is low, but as word got out, the numbers began rising until 350 attendees were registered. AIRP successfully delivered 98 asynchronous lectures, 134 synchronous lectures all approximately 30-40 minutes long with numerous interactive quizzes and all-live talks with chat and polling.

By the end of 2020, the AIRP completed three virtual Rad-Path Correlation Courses for residents. Categorical Courses also moved to virtual offerings, and there was a significant increase in attendees for these courses (183 versus 89 the previous year) delivered via a virtual platform. Like many other organizations that offered virtual options



during the pandemic, these online courses continue to be an option to AIRP students.

The next year was the AIRP's 10th anniversary. It was also the first full year that AIRP's four-week and Categorical Rad-Path courses were held entirely online with both live and self-paced lectures due to the pandemic. The format switch was incredibly successful with no overall drop in attendance and, in fact, there was an increase in categorical course attendance.

In-person courses resumed in September 2022, and the first course that month featured restructured and more interactive case reviews. The AIRP Advisory Committee also added four new positions: one each from the APDR, APDIR, ACR YPS, and an open resident seat. Based on the committee's feedback, a new application/appointment process for visiting faculty was instituted. Among other changes was a complete overhaul of the AIRP Case Archive System, based on feedback and requests from residents and reviewers. The new system was completed in the summer of 2023

Toward the end of 2023, AIRP strengthened its collaboration with RANZCR to provide education to Australian and New Zealand residents, with a successful course held in November 2023. The last four-week course in 2023 at AIRP had more than 400 attendees.



“I have been motivated to be involved with CoPLL because of two major reasons: 1) I think that it is important work and 2) The people. I have enjoyed being part of such a great team. It has also been really cool to be able to contribute to such a great brand as AIRP. The projects under the umbrella of CoPLL are diverse, and that is also something that I have found very interesting—it is great to hear about all of the wonderful work being done in these other areas during our meetings. CoPLL really contributes to our community, and I also find that this gives me a sense of purpose.”

— Mark E. Mullins, MD, PhD, FACR, chair,
AIRP Advisory Committee



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Subcommittee on TXIT - Education

Beth Meehan and Crystal Carter

Well-Being Committee

Raina Keefer

As we celebrate our amazing ACR member volunteers and staff that have made these six years so successful, I also want to express my gratitude to the ACR leadership, particularly two champions of Publications and Lifelong Learning: ACR Chief Executive Officer William T. Thorwarth, Jr., MD, FACR, and Kenneth Korotky, CPA, CGMA, Executive Vice President of Operations and Lifelong Learning. THANK YOU for your support, courage, and wisdom!

With sincere appreciation, Lori Deitte

Past and Present Committee Chairs and Current Staff

Committee Name		Committee Position	Status
ACR Bulletin Editorial Advisory Group	Rebecca L. Seidel, MD	Chair	Current
AIRP Advisory Committee	Mark E. Mullins, MD, PhD, FACR	Chair	Current
Case In Point Subcommittee	David R. Pettersson, MD	Editor-in-Chief	Current
CME and SAMs Compliance Subcommittee	Julie Bauml, MD	Chair	Current
Commission on Publications and Lifelong Learning	Arya Amini, MD	Liaison — RO	Current
Commission on Publications and Lifelong Learning	Benjamin H. Taragin, MD, FACR	Liaison - Pediatric	Current
Commission on Publications and Lifelong Learning	Juan C. Batlle, MD, MBA	CSC Liaison	Current
Commission on Publications and Lifelong Learning	Mahadevappa Mahesh, MS, PhD, FACR	Liaison — Physics	Current
Commission on Publications and Lifelong Learning	Sayed Ali, MD, FACR	Liaison — GSER	Current
Continuous Professional Improvement Subcommittee	Harris L. Cohen, MD, FACR	Editor-in-Chief	Current
DXIT Subcommittee	Rakesh D. Shah, MD, FACR	Chair	Current
Education Center Advisory Committee	Daniel R. Karolyi, MD, PhD	Chair	Current
Enduring Materials Committee	Matthew D. Cham, MD	Chair	Current
Learning Design Committee	Harprit S. Bedi, MD	Chair	Current
Measurement & Assessment Subcommittee	Paula Yeghiayan, MD	Chair	Current
Meetings Committee	Rajan T. Gupta, MD	Chair	Current
Publishing Ethics Subcommittee	James H. Thrall, MD, FACR	Chair	Current
RadExam Editorial Board Subcommittee	Petra J. Lewis, MBBS, FACR	Editor-in-Chief	Current
Radiology-TEACHES Advisory Board	Karla A. Sepulveda, MD, FACR	Co-Chair & Associate Editor	Current
Radiology-TEACHES Advisory Board	Marc H. Willis, DO, FACR, MMM	Chair & Editor-in-Chief	Current
Strategic Planning & Compliance Committee	Ramesh S. Iyer, MD, MBA	Chair	Current

Committee Name		Committee Position	Status
TXIT Subcommittee	Kilian Salerno, MD	Chair	Current
Well-Being Committee	Carolynn M. DeBenedectis, MD	Co-Chair	Current
Well-Being Committee	David S. Sarkany, MD, FACR	Co-Chair	Current
ACR Bulletin Editorial Advisory Group	Scott M. Truhlar, MD, MS, MBA, FACR	Chair	Past
Case in Point Subcommittee	Kitt Shaffer, MD, PhD, FACR	Editor-in-Chief	Past
CME and SAMs Compliance Subcommittee	Anh Wohler, MD	Chair	Past
CME and SAMs Compliance Subcommittee	Ramesh S. Iyer, MD, MBA	Chair	Past
Commission on Publications and Lifelong Learning	Arthur Y. Hung, MD, FACR	Liaison - RO	Past
Commission on Publications and Lifelong Learning	Amy L. Kotsenas, MD, FACR	CSC Liaison	Past
Commission on Publications and Lifelong Learning	Katherine P. Andriole, PhD, FACR	Liaison - DSI	Past
Commission on Publications and Lifelong Learning	Amy Patel, MD	Liaison - YPS	Past
Commission on Publications and Lifelong Learning	David Andrews, PhD	Patient Advocate	Past
Commission on Publications and Lifelong Learning	Julie G. Moretz	Patient Advocate	Past
DXIT Subcommittee	William G. Spies, MD, FACR	Chair	Past
Measurement & Assessment Subcommittee	Daniel R. Karolyi, MD, PhD	Chair	Past
Measurement & Assessment Subcommittee	Joseph J. Junewick, MD, FACR	Co-Chair	Past
Measurement & Assessment Subcommittee	Kate A. Feinstein, MD, FACR	Chair	Past
Skills Assessment Committee	William G. Spies, MD, FACR	Chair	Past
Strategic Planning & Compliance Committee	Mark E. Mullins, MD, PhD, FACR	Chair	Past
TXIT Subcommittee	Sandra S. Hatch, MD, FACR	Chair	Past