



We hear you. We *are* you.



ABR Volunteer Governors and Trustees. 2017-2018

Photo by Aaron Gudenkauf, ABR staff

Thank you to the volunteer members of our Boards of Governors and Trustees for their dedication and hard work!

Front row, from left: Kaled Alektiar, MD; Donald Flemming, MD; Matthew Mauro, MD; Brent Wagner, MD; Lisa Kachnic, MD; Anthony Seibert, PhD; Patricia Hardenbergh, MD; and Vincent Mathews, MD Middle row, from left: Kalpana Kanal, PhD; Cheri Canon, MD; Ann Covey, MD; Mimi Newell, MD; Sanjeev Bhalla, MD; Elizabeth Oates, MD; and Jerry Allison, PhD

Top row, from left: Christopher Wood, MD; Lynn Wilson, MD; Matthew Podgorsak, PhD; John Kaufman, MD; Lane Donnelly, MD; Donald Frush, MD; Brian Davis, MD, PhD; James Spies, MD; and Robert Barr, MD Not pictured: Mary Mahoney, MD

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Dear ABR Candidates, Diplomates, and Friends,

As you probably noticed on the front cover, the theme of this year's annual report is "We hear you. We are you." You might be wondering why we chose that theme, and what it really means.

For several years, we've been hearing your suggestions, especially regarding our Maintenance

of Certification (MOC) program. Based on your input, we've been steadily making changes to improve the relevancy of MOC and make it more convenient for you to meet requirements while still ensuring ABR certification upholds the standards expected by the public, patients, and credentialers. The changes we've made to MOC are discussed further in this report.

But what about "We are you"? The ABR employs approximately 80 staff members to carry out the directives of its boards—primarily through exam-related and administrative functions. But we also have more than 1,000 volunteers who serve as committee chairs, question writers and reviewers, exam standard setters, advisory committee members, and board members—all of whom are unpaid, including me. And that doesn't count our many volunteer oral examiners.

ABR volunteers donate thousands of hours each year to help develop and administer ABR exams, and to offer their advice and input. They are all ABR diplomates and candidates just like you, from private practice, academia, and other settings all over the U.S. That's why we are you. To this end, I want to share 10 "true" facts about your current volunteer president:

- 1. I was born in Yonkers, New York, in 1965 to a firefighter (former 50s Doo-Wop singer/ guitarist) and a homemaker.
- 2. My brother is a heavy metal guitarist; his band's name is Malignancy. I promise this did not influence my career choice.
- 3. My initial intersection with health care began with a bit of divine intervention. During my Catholic high school years in New York, my passions were journalism, science, music, and sports. I had important plans to become a big city news anchor, or perhaps, more secretly, a music television video jockey (MTV VJ). As a junior, I recall a particular morning when the principal, Sister Mary Margaret, summoned the top 10 academic students to her office and placed us against the wall akin to a police lineup. She then tapped each of us with her long ruler and assigned our lifelong vocations. I happened to be anointed as a "physician."
- 4. Lattended Boston College (BC) on an academic scholarship at the same time Doug Flutie attended on an athletic scholarship. While Doug won the Heisman, I met my husband Steve. Interestingly, Steve played BC baseball (not football) and later coached the BC baseball team.
- 5. As my husband was a Boston native, I decided to remain in Beantown for my graduate studies. In my third year of medical school at Tufts University, I met another medical student whose older sister was a radiation

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oncologist. He thought rad onc would be a great fit for me as I especially enjoyed the lab, surgical procedures and 3-D imaging, and taking care of patients with cancer. I was fortunate to perform my rad onc residency at the Massachusetts General Hospital Harvard program, and I became instantly hooked on my specialty.

- 6. After four years as a junior assistant professor at Virginia Commonwealth University, I returned to Boston, where I became the chief, and later professor and chair, of the radiation oncology department at Boston University. At this safety net hospital, I was privileged to care for a very diverse and thankful patient population.
- 7. Having spent close to 15 years at Boston University, I made the move to Nashville in fall 2015, along with my husband Steve and daughter Sammi, to chair Vanderbilt's radiation oncology program. While I miss my New England Patriots and Boston Celtics, I quickly warmed to the city's live music scene and embraced the Predators, the Nashville hockey team, as a proud resident of Smashville.
- 8. Although much of my career has been focused on developing clinical trials for gastrointestinal (GI) malignancies within the National Cancer Institute's adult research bases. one of my training program mentors, Chris Willett, a former ABR radiation oncology trustee, recruited me to become an ABR GI item-writing volunteer in 2004.
- 9. After chairing the Rad Onc GI Item-writing Committee from 2006-2010, I was fortunate to become an ABR trustee in 2010, and more recently, I became an ABR Board of Governors member and President (assuming this role in October 2016).
- 10. So while I didn't receive the family music gene or become an MTV VJ, I am thankful for the divine intervention, mentors, ABR colleagues and programs, and many patients, who have all helped to guide and shape me into the physician I am today.

So why do people like you donate so much time to the ABR? Many say it's because they believe board certification is very important. Others note it's to give back to a profession that's given so much to them and to ensure the future of our profession.

Being an ABR volunteer has truly meant so much to me. I feel privileged in supporting the mission of the ABR to certify, through our initial exam administration and maintenance program, that our diplomates demonstrate the requisite knowledge and skills to best serve our patients. I also love networking with the ABR staff, our many volunteers, and all of you.

Throughout this report, we've included quotes from our volunteers, and we hope you'll also consider volunteering for the ABR. But whether you volunteer or not, please know that we're always open to

listening, that we hear you, and

we are you.

And cheers from my family to yours for a wonderful 2018!

Sincerely,

Lisa A. Kachnic, MD, FASTRO **ABR President**





Sabino Canyon, photo by Carrie Olson, ABR staff

At the time of this report, the ABR had 1,400 volunteer positions. Volunteers write and review items and assemble all ABR exams. They also serve as board members, oral examiners, self-assessment module (SAM) reviewers, members of Angoff (standard-setting) committees, and members of Initial Certification and Maintenance of Certification advisory committees.

We can never thank you enough
We can never thank you enough
for the valuable time and expertise
for the valuable time and expertise
you donate to us. Although it again:
you donate to us. Although it again:
you donate to us. Although it again:
without saying, we'll say it again. mission without you! With our sincerest appreciation, The American Board of Radiology

For volunteer information, go to www.theabr.org, select your specialty, and then click on the volunteer link.



Catalina State Park, photo by Emily Rubin, ABR staff

- ♦ In 2015, we established a Customer Service Center so ABR candidates and diplomates could receive answers to their questions more quickly. The staff members of the Certification Services Department, as it is now known (pictured below), are dedicated to assisting you as well as fulfilling many other duties. They responded to 9,344 phone calls and 10,960 emails in 2017.
- ♦ In 2017, we launched a new website to make it easier for you to find information online. The site has four separate sections—one for each ABR specialty. Check it out at www.theabr.org.



The Certification Services Department staff are ready to assist you! Front row, from left: Breann Brown, Claudia Rosales, and Jessica Smith. Second row, from left: Rachael Noble, Leticia Valenzuela, Michelle Brugger, and Susan Marsala. Back row, from left: Meckenzie Breckenridge, Lee Ann Bonasera, Kelly Trapp, and Tina Henson. Photo by Donna Breckenridge. ABR staff



Dear ABR Candidates, Diplomates, and Friends,

The ABR celebrated its 83rd year in 2017. Since our founding in 1934, we've issued 70,932 certificates. Through all the changes over the years, one thing has remained constant: our commitment to supporting you, our candidates and diplomates, for the benefit of patients and the public. We could not do this without your help, and we thank you.

Through our collaboration with you, we have all accomplished a great deal in 2017. Here are some of the highlights:

- ♦ Welcomed two new governors and six new trustees
- ♦ Held 61 in-person volunteer committee meetings
- Administered 32 exams, including the first interventional radiology/diagnostic radiology (IR/DR) initial certification exam
- ♦ Issued 2,123 new certificates
- ♦ Approved a 16-month pathway to certification in diagnostic radiology and nuclear radiology
- ♦ Launched a new, improved ABR website (www.theabr.org)
- Continued developing Online Longitudinal Assessment (OLA), which will replace the 10-year MOC exam beginning for diagnostic radiology in 2019

Without your support and input, self-regulation of the radiology profession would not exist. Please know how sincerely we appreciate you. At all times, we want to have an open system of collaboration. As this year's annual report cover says, "We hear you."

Sincerely,

Valerie P. Jackson, MD, Executive Director

P.S. We hope you enjoy the Arizona photos in this report, all taken by ABR staff members.



Photo by Sherri Tradup, ABR staff

"I want to express my sincere thanks to the kind and caring leadership and support staff at the American Board of Radiology. Thanks for being friends on the other end of the phone, letters, or emails. Your roles are infinitely valuable and greatly appreciated!"

> —ABR Volunteer Mario E. Torres-León, MD Diagnostic Radiologist, Hesperus, Colorado

"Before medical school, my training was in social and public policy, economics, and the history of medicine. For that reason, I locate board certification within a big-picture, long-range perspective of the function of any professional certifying body in America. Without the ABR, we would have a public policy vacuum that would inevitably be filled by a formal governmental regulatory body. Because I don't think that's an optimal endpoint, I want the ABR to succeed in its mission."

—Scott M. Truhlar, MD, Member of ABR's MOC Advisory Committee Diagnostic Radiologist, Iowa City, Iowa







"I feel a tremendous responsibility to the patients and staff who depend on my work. Board certification serves as an independent validation not only that I'm appropriately knowledgeable and skilled to accept this responsibility, but also that I'm continually working to improve those capabilities."

—ABR Volunteer Jay W. Burmeister, PhD Medical Physicist, Detroit, Michigan



The Grand Canyon, photo by Emily Rubin, ABR staff

- ♦ In 2012, we expanded Part 2 activities that meet self-assessment CME (SA-CME) requirements, adding activities from radiology journal articles with self-assessment tests. Self-Assessment Modules (SAMs) are still available from in-person, society-sponsored activities.
- ♦ In 2013, we launched the MOC Team Tracker program so group practices can appoint authorized administrators to help with bookkeeping and payments.
- ♦ In 2015, we expanded the ways diplomates can fulfill Part 4 (Improvement in Medical Practice) requirements by including active participation in many activities such as peer review, quality or safety review committees, and root cause analysis teams.
- ♦ In 2016, we introduced MOC annual attestation, eliminating the need for diplomates to upload or enter detailed information in myABR.
- ♦ As announced in 2016, we will go live in 2019 with Online Longitudinal Assessment (OLA), replacing the traditional 10-year MOC Exam for Part 3.

"I think Online Longitudinal Assessment will help me identify weak areas and focus my CME, as well as help keep me regularly doing CME rather than batching. It is difficult to get this sort of feedback in other forums without paying additional fees. It also seems more practice relevant than a postcertification exam and sounds like it will take very little time out of my day. That will be a big factor in making it a success."

—ABR Volunteer Richard L. Becker, MD Diagnostic Radiologist, Pensacola, Florida



Therapeutic medical physics volunteers meet with ABR staff for OLA item-writing training.

"Things change quickly in our field, and it's important that all of us remain current and knowledgeable about new data, techniques, and equipment."

—ABR Volunteer Michael J. Yunes, MD Radiation Oncologist, Southhampton, Massachusetts



Oracle State Park, photo by Elena Luevano, ABR staff

- ♦ Online Longitudinal Assessment (OLA) will replace the traditional 10-year MOC examination to meet requirements for Part 3.
- ♦ A pilot will begin in 2018, with anticipated live rollout for diagnostic radiology (DR) in 2019. OLA for other specialties will follow as soon as possible.
- ♦ Each year, diplomates will receive 104 opportunities to answer questions. They will be required to answer 52 questions per year, and they may decline 10 per year. Questions will be available weekly.
- ♦ DR subspecialty questions will count toward OLA requirements for both DR and one subspecialty. Additional subspecialties will require more content.
- ♦ Immediate feedback will include the correct answer, the rationale, and at least one reference.
- ♦ Initial performance evaluation will be based on the first 200 questions answered.
- ♦ Advantages include no travel to complete the MOC Part 3 requirement, minimal impact on the workday, options for when and how frequently questions are answered, the potential for retesting in areas of weakness, and an available history of performance.



Saguaro National Park East, photo by David Laszakovits, ABR staff

2017 ACCOMPLISHMENTS

- ♦ Formed Online Longitudinal Assessment (OLA) item-writing committees and began development of OLA content.
- ♦ Created a new and downsized Noninterpretive Skills (NIS) Syllabus.
- ♦ Conducted three administrations of the Core Exam, two administrations of the Certifying Exam, four subspecialty exams, and two Maintenance of Certification (MOC) exams.
- ♦ Awarded 1,160 new specialty certificates in diagnostic radiology and 291 new subspecialty certificates.

www.theabr.org/diagnostic-radiology

"Board certification was just a beginning, a start of a career-long evolution to (hopefully) finish better than I started. I believe the current Continuous Certification structure, in a curious way, promises to be more coach and cheerleader than umpire. Continuous certification is a nudge, a reminder that it takes great effort to make our professional work seem effortless."

—ABR Volunteer Frederick A. Mann, MD Diagnostic Radiologist, Anacortes, Washington

"Board certification serves as a benchmark and a reminder that learning is lifelong. It is the currency that earns our profession public trust, credibility among our peers, and the respect of legislators and credentialers."

> —ABR Volunteer Jacqueline A. Bello, MD Diagnostic Radiologist, New York, New York



The Diagnostic Radiology Core Exam GI Committee met in Chicago in August 2017. From left are ABR volunteers Erik V. Soloff, MD; Desiree E. Morgan, MD (Chair); Caroline R. Taylor, MD; Kathryn J. Fowler, MD; Ashok K. Gupta, MD; and David A. Zamora, MS.

ABR BOARD OF GOVERNORS

We extend a warm welcome to the ABR volunteer governors below, who began their service in October 2017.

The following governors rotated off the Board in October 2017. Thank you for your volunteer service to the ABR!



Secretary/Treasurer Neuroradiolgist, Private Practice in NC



Robert M. Barr, MD J. Anthony Seibert, PhD ABR Trustee, 2013-2017 Medical Physicist, **UC Davis**



2015-2017



Geoffrey S. Ibbott, PhD Duane G. Mezwa, MD ABR Trustee 2008-2015 ABR Trustee 2007-2015

ABR BOARD OF TRUSTEES

We extend a warm welcome to the new ABR trustees below, most beginning in October 2017.





Anne M. Covey, MD Brian J. Davis, MD, PhD



Hardenbergh, MD



Kalpana M. Kanal. PhD



(began Feb. 2017)



Christopher P. Wood, MD

The following trustees rotated off the ABR Board in 2017, most in October. Thank you for your volunteer service to the ABR!



Top left: Desert rosemallow (Hibisucus coulteri) seed pod Bottom left: Fairy duster (Calliandra eriophylia) flower Photos by Valerie Jackson, MD, ABR executive director

Background photo taken near the ABR Office by Donna Breckenridge, ABR staff





Stephen M. Hahn, MD Michael G. Herman, Jeanne M. LaBerge, MD PhD, Oct. 2015-Feb. 2017

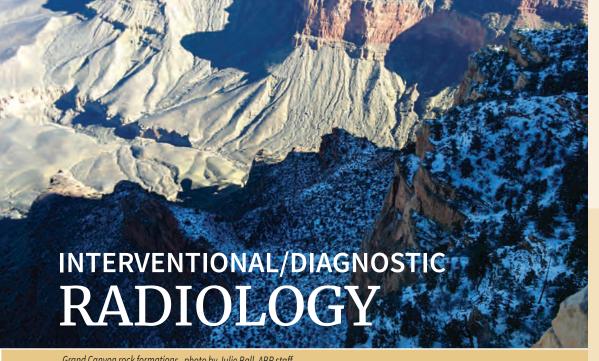




Dennis C. Shrieve, MD, PhD, 2009-2017



Robert D. Zimmerman



Grand Canyon rock formations, photo by Julie Ball, ABR staff

"Board certification means that an objective, knowledgeable professional board of dedicated experts has stated to the public that I am competent and worthy of trust in performing my medical work."

> -ABR Volunteer M. Victoria (Vicki) Marx, MD Interventional Radiologist, Los Angeles, California

2017 ACCOMPLISHMENTS

- ♦ Administered the first oral exam for interventional radiology/ diagnostic radiology (IR/DR) specialty certification in October.
- ♦ Converted 2,601 DR specialty and Vascular and Interventional Radiology (VIR) subspecialty certificates to IR/DR certificates.



"As a physicist, I find it satisfying that we have a process like that of our radiologist colleagues that provides a measure of proficiency."

—ABR Volunteer Michael V. Yester, PhD Medical Physicist, Birmingham, Alabama

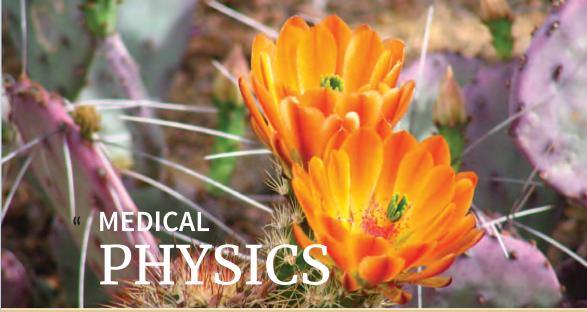
MILESTONES IN MEDICAL PHYSICS

- ♦ 2017 marked the 70th anniversary of ABR certification in medical physics.
- ♦ Before 1937, medical physicists were certified by the Radiological Society of North America (RSNA).
- ♦ The ABR is one of only two member boards of the American Board of Medical Specialties that certifies nonphysicians; the second is the American Board of Medical Genetics and Genomics in Bethesda, Maryland.
- Among the early medical physics diplomates was Rosalyn Yalow, the only ABR diplomate to be a Nobel laureate. She was co-winner of the 1977 Nobel Prize in physiology or medicine for development of the radioimmunoassay technique.

"It's critical for medical physics as a profession to demonstrate to the general public that its practitioners are able to meet a common set of standards as defined by the certification process.

—ABR Volunteer Kiaran P. McGee, PhD Medical Physicist, Rochester, Minnesota

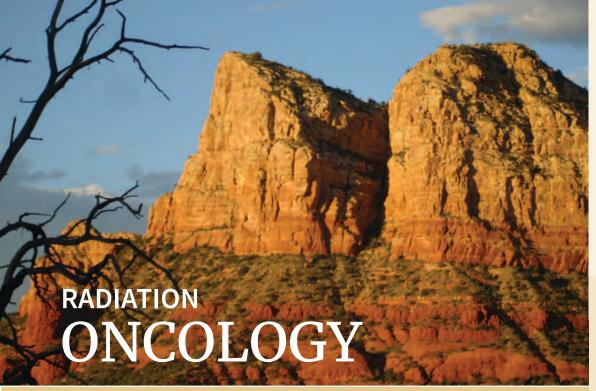
www.theabr.org/medical-physics



Prickly pear cactus blooms, photo by Carrie Olson, ABR staff



A large group of medical physics volunteers attended Online Longitudinal Assessment (OLA) item-writing training at the ABR Office in July 2017. Almost 40 physicists participated and created about 230 OLA items.



Cliffs of Sedona, photo by Sherri Tradup, ABR staff



ABR radiation oncology volunteers use red and green cards to rate the difficulty of a question at the January 2017 Test Assembly meeting.

www.theabr.org/radiation-oncology

"Board certification demonstrates an ongoing commitment to excellence in the field. I volunteer because I'm grateful for the opportunity to help maintain the high standards of our specialty. The best part of volunteering is the collegiality of the ABR volunteers and staff."

—ABR Volunteer John C. Breneman, MD Radiation Oncologist, Cincinnati, Ohio

2017 ACCOMPLISHMENTS

- Significantly increased the size of clinical category committees to give greater opportunity for volunteer participation.
- Re-organized the clinical category committees to support ABR Online Longitudinal Assessment (OLA) development.
- ♦ Established standards and schedules for revision of the non-clinical skills syllabus and item inventory.

"Through the certification and recertification exams, the ABR defines the knowledge base required for standard of care radiation oncology practice. It is an honor to help with the important work of defining these standards together with my colleagues."

—ABR Volunteer Elizabeth H. Baldini, MD, MPH Radiation Oncologist, Boston, Massachusetts

STATISTICS

ALL CERTIFICATES ISSUED BY DECADE

1934- 1939 ¹	1940- 1949	1950- 1959	1960- 1969	1970- 1979	1980- 1989	1990- 1999	2000- 2009	2010- 2017	TOTAL
1,413	1,844	3,303	4,175	9,318	10,083	12,391	12,994	15,411	70,932
¹ Founded	d in 1934								

SPECIALTY CERTIFICATES ISSUED 2008-2017

YEAR	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	TOTAL
Diagnostic Radiology	1,207	1,233	1,239	1,257	1,328	1,334	125¹	1,092	1,273	1,160	11,248
Interventional/ Diagnostic Radiology	-	-	-	-	-	-	-	-	-	256	256
Medical Physics	200	204	204	315	263	266	279	248	242	217	2,438
Therapeutic ²	[181]	[169]	[181]	[263]	[232]	[213]	[217]	[211]	[196]	[155]	[2,018]
Diagnostic ²	[14]	[28]	[22]	[41]	[29]	[45]	[54]	[30]	[41]	[52]	[356]
Nuclear ²	[5]	[7]	[1]	[11]	[2]	[8]	[8]	[7]	[5]	[10]	[64]
Radiation Oncology	123	166	139	148	155	170	164	154	196	194	1,609
TOTAL	1,530	1,603	1,582	1,720	1,746	1,770	568*	1,494	1,711	1,827	15,551

¹Because of the transition from the diagnostic radiology (DR) oral exam to the DR Certifying Exam, only those who took and passed a DR oral exam were certified in 2014. The first DR Certifying Exam was administered in October 2014. ²Specific specialty of medical physics

SUBSPECIALTY CERTIFICATES ISSUED 2008-2017

YEAR	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	TOTAL
Neuroradiology	148	158	167	185	197	189	158	170	149	211	1,732
Nuclear Radiology	3	2	5	7	7	13	11	10	2	5	65
Pediatric Radiology	34	41	40	53	59	60	57	81	65	74	564
Vascular & Interventional Radiology¹	81	103	98	117	133	150	177	103	177	-	1,139
Hospice & Pallia- tive Medicine ²	9	-	11	-	42	-	5	-	2	-	69
Pain Medicine ³	-	-	-	14	-	-	-	-	1	1	3
TOTAL	275	304	321	363	438	412	408	364	396	291	3,572

¹No longer issued; replaced by IR/DR in 2017.



Hopi House at the Grand Canyon, photo by Eva Wilson, ABR staff

EXAMINATION STATISTICS

Average pass rates for residents taking the exam for the first time (2014-2016)

Exam	Average Number of Examinees	Average Pass Rate
Diagnostic Radiology Core Exam	1,174	90%
Medical Physics Part 1 General Exam	192	69%
Medical Physics Part 1 Clinical Exam	185	73%
Medical Physics Part 2 Exam	143	79%
Medical Physics Part 3 (Oral) Exam	230	67%
Radiation Oncology Clinical Exam	176	95%
Radiation Oncology Physics Exam	192	92%
Radiation Oncology Biology Exam	192	90%
Radiation Oncology Oral Exam	163	90%

MOC ENROLLMENT

As of December 4, 2017, a total of 28, 248 diplomates were enrolled in ABR Maintenance of Certification (MOC).



²Certification administered by the American Board of Internal Medicine beginning in 2008; exams offered every other year. ³Certification administered by the American Board of Anesthesiology beginning in 2016; exams offered every year. ⁴Diplomate was originally certified by the American Board of Physical Medicine and Rehabilitation and later transferred.



American Board of Radiology headquarters in Tucson, Arizona

- The American Board of Radiology (ABR) is located farther west than any of the other 23 ABMS member boards. Next are the American Board of Obstetrics and Gynecology in Dallas and the American Board of Otolaryngology in Houston.
- ♦ The largest number of ABR diplomates lives in California (5,897), followed by New York (4,028), Texas (3,551), and Florida (3,147).
- The smallest number of ABR diplomates can be found in Wyoming (57), followed by Alaska (81), Vermont (103), and North Dakota (117).
- ♦ U.S. external areas (outside the 50 states and Washington, D.C.) have 204 ABR diplomates. The U.S. military has 73 ABR diplomates overseas.
- ♦ Canada has 1,498 ABR diplomates, and 359 ABR diplomates live in other foreign countries.

Statistics are from the 2016-2017 ABMS Board Certification Report.

