Focus

In Focus

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Progress is being made! In this year of 2004, women are emerging as leaders in their practices and departments, in their medical schools and radiological organizations in the United States and abroad. They are also receiving more recognition, awarded at the highest levels by national radiological societies.

I am delighted to inform you: Kay H. Vydareny, MD (the AAWR President in 1984) was recently selected as an American College of Radiology Gold Medalist for 2005. This year the President’s Award of the AAWR will be given to two outstanding international leaders in Radiology at the AAWR Annual Meeting on November 29: Professor Helen Carty, Chair of Pediatric Radiology in Liverpool, United Kingdom, and Immediate Past President of the European Congress of Radiology and Professor Malgorzata Trojanowska, Chief of Radiology at the Lublin School of Medicine in Poland, President of the Polish Radiological Society and Board Member of the European Congress of Radiology.

The AAWR has stepped onto the global stage of radiology during the past six years to reach out to women radiologists around the world, as radiology transcends geographic borders: 1998 – The International Membership Category was established. 2000 – The first International AAWR Luncheon was held during the RSNA meeting. Leaders in radiology from four countries (China, Brazil, Poland and Bahrain) presented women’s issues and discussed opportunities for women radiologists in their countries. They urged the AAWR active members to expand their international network and to include international activities on the AAWR website. 2001 – Judith Amorosa, MD, Chair of the AAWR Membership Committee, published a paper entitled “Women Radiologists in the USA and in Hungary” in the leading Hungarian radiological journal. She described the function and impact of the AAWR on Hungarian radiologists, 65% of whom are women. 2001 – Janet L. Strife, MD and Carol Rumack, MD represented the AAWR in Paris at the International Pediatric Radiological Society. They shared the challenges and current activities of the AAWR with over 200 women radiologists. 2002-2003 – The attendance of radiologists from abroad at the annual AAWR-RSNA meeting increased significantly. 2004 – The AAWR sponsored a booth for the first time at the European Congress of Radiology staffed by Ewa Kuligowska, MD and Judy Amorosa, MD. The AAWR’s activities were presented to radiologists from all European countries (and many others). The second International Luncheon will be spon-
sored by the AAWR on Thursday, December 2, at the RSNA, to be chaired by Kasia Macura, MD, PhD who will have assumed the presidency of the AAWR.

The international outreach of the AAWR has identified women who are leaders in many countries, some of whom have been very successful and others who have faced adversity. All have expressed genuine interest in the AAWR. Thanks to the International Page on the AAWR website they are able to enhance their professional development through participation in visiting professorships, mini-fellowships and elective rotations for practicing radiologists, residents and medical students from abroad. As American women assume greater roles in radiology, following the precedent in many foreign countries where the majority of radiologists are women, their motivation, knowledge and leadership will determine the future of our profession.

Alex Margulis pointed out in the opening sentences of his most recent book, Be in Charge: A Leadership Manual - How to Stay on Top. “Leadership is the ability to inspire others to follow and change the future.” The insight, practical and sanguine advice presented in the book provides critically important guidance for us all.

I am pleased to give this book to every active member of the AAWR as my President’s Gift with special thanks to Anna Chacko and FujiFilm Medical Systems for making the gift possible. I encourage you to accept the challenges of leadership in positions, both small and large. I hope this book will serve as a guide and companion during your professional career. As Alex says, “May (your) life be easier after reading this manual.”

In anticipation of our AAWR meeting at the RSNA, I want to thank you for your support and for allowing me to have the privilege of serving as your President this year. I look forward to seeing you all in Chicago.

-Ewa

A Leadership Manual for Every AAWR Member

In October of 2004 every active member of the American Association for Women Radiologists (AAWR) received a President’s gift in the mail, a copy of Alexander Margulis’ “Be in Charge: A Leadership Manual - How to Stay on Top.” In this book Dr. Margulis shares his wealth of experience as a leader in our specialty and provides insight and practical advice for all medical professionals. He provides specific advice for the women in our specialty who have broken through the “glass ceiling” and who (in ever increasing numbers) continue to assume leadership positions in our academic and private practice departments. We are deeply indebted to Anna K. Chacko for her assistance and to FujiFilm Medical Systems for making this gift possible. Mr. Clayton Larsen, FujiFilm Vice President of Marketing and Networking will be our special guest at the AAWR Annual Business Meeting on Monday.

If you are an active member and did not receive a copy, contact Sheryl Trotz, Society Operations Manager at strotz@meetingmanagers.com.

Meet the Editor

The AAWR Executive Committee welcomes a new Associate Editor to the Focus. Lisa Horton Lowe, MD is the Associate Editor in charge of the fall issue. Dr. Lowe is currently a full-time pediatric radiologist at Children’s Mercy Hospital and Clinics in Kansas City, Missouri with an interest in neuroradiology. She is the mother of two boys, ages 2 and 5, and is wife to a stay-at-home Dad. She received her B.S. in Biology at University of Tennessee-Martin, and her M.D. at Meharry Medical College in Nashville, TN. Following her diagnostic radiology residency at Wake Forest University-North Carolina Baptist Hospital, she completed a fellowship in pediatric radiology at Children’s National Medical Center-George Washington University, in Washington, DC. She is actively involved in educational and research activities. She hopes to maintain the excellent material found within the Focus and is open to new ideas from the membership.
Searching for the Garden of Equality: For women in radiology, finding a fair deal is as elusive as Eden


Long gone are the days of glass ceilings, blatant sexism and strident inequality, right? Think again. Although women have made significant strides breaking into business-world boardrooms, there is still a dire need for their gains to be expanded in the field of science — especially radiology, says Ewa Kuligowska, MD, FACR, president of the American Association of Women Radiologists (AAWR).

Women are still under-represented on radiology faculties, underpaid compared to their male colleagues and passed over for promotions time and time again, Kuligowska says. Even more frightening, the latest surveys show that fewer women are choosing radiology as a career path, a situation which she fears will only perpetuate the cycle of inequality.

“Across the country, only nine women currently hold the position of chief radiologist at a hospital or medical center,” says Kuligowska, “and only 12 percent of female radiologists are full tenure professors. When you look at the numbers you realize there is a long way to go to gain the same professional status and recognition as our male colleagues. Unless something changes, we’re looking at generations before we get where we want to be.”

Kuligowska, the chief radiologist of the ultrasound section at Boston University Medical Center, finds the current situation alarming, but even more frightening is that it may get worse before it gets better. Radiology remains the only residency program that is experiencing a decrease in female enrollment, despite other residency programs posting significant gains. “Not only are women in radiology fighting a battle for equality,” she says, “but now there are fewer women entering the field altogether.”

Is it sexism? Gender bias? A good old boy network conspiring against women to keep them from entering radiology? Actually, says Kuligowska, the main culprit can be traced to widely held misconceptions about the practice of radiology itself — although others say unconscious sexism is also partly to blame.

Myths and Misconceptions

“To understand the problem, it’s essential to recognize that radiology has been viewed for many years as a male-dominated field, which makes it very tough for women to enter,” says Kuligowska. “But there’s also a widely held misconception that radiology is far removed from patient care. People outside the field think radiologists sit at their computers and read films all day.”

Kuligowska believes this misconception has a significant effect on women choosing radiology as a career because they are generally “very compassionate and search for patient contact in medicine.” “Women strive for that feeling of being able to make a difference,” she says. “But they think radiologists are distant and in the background. They don’t see that we have a tremendous amount of patient interaction, especially radiologists who work with children, ultrasound or perform interventional procedures. We spend hours with patients.”

Even if radiology is able to shake its reputation as a haven for men who enjoy working out of sight of the patient, there’s still another misconception that has curbed women from entering the field. According to Kuligowska, some women are nervous about being around radiation during their prime reproductive years. There’s a fear among some residents that even extremely low doses of radiation will somehow affect their fertility or that there would be harmful side effects from working with radiation. “It’s simply not true,” she asserts. “And we need to fight these misconceptions.”

“In order to fight these misconceptions, Kuligowska says a war of information needs to be taken to the roots — back to the schools, where med students originally form their perceptions of various practices. Unfortunately, there is a lack of women radiologists mentoring in the schools, and it’s a fact that the AAWR is working to change. “We need to provide an example to female medical students and let them know what we do,” she says. “We’re working very hard to let people know that it’s a safe, rewarding profession for women. And with teleradiology changing the way we practice, combined with the growing specialty of women’s imaging needs, there’s never been a better time for women to enter the field. And we’re trying to get the word out to them.”

The lack of female mentors is something that bothers Cathy Trower, PhD, a research professor at Harvard University’s graduate school of education in Boston. As an expert in gender and education issues, Trower also sees the lack of women mentoring other women as a crucial barrier to gaining equality.

“There is a scarcity of effective women mentors — effective meaning that there is a lack of women in leadership positions who really have the ability to help someone,” says Trower. “Effective mentors are people who are networked. Even if you find women in science and technology, they may not be connected to the power structure that can really help you move up.”

However, developing mentors can be a complicated chicken-or-egg scenario, she adds. In order for women to gain leadership positions, they need more mentors in leadership positions to guide them. Yet, there’s a lack of women in leadership positions to recruit more women leaders, and so the cycle continues.

Gender Bias

If it were a matter of simply breaking down the widespread myths and misconceptions surrounding radiologists, the task of changing the status quo might be possible. However, Trower...
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sees a bigger problem at hand, a dilemma deeply rooted in the minds of men and women alike. And she points to a number of studies about gender bias that have pinned down some of the underlying causes slowing the path of women seeking equal footing. The biggest problem? The fact that many people aren’t even aware of the problem. They may not even know they are a part of it.

One important study Trower cites is the Grace Project from Arizona State University, which examined gender bias in institutions of higher learning. “What it found was that women were not being asked to be in leadership positions,” says Trower. “The issue is not women don’t want to pursue leadership positions or that they don’t have the right stuff to be leaders, the issue is that they are not being asked. So the real problem is why are women not being asked?”

The study pointed to a few barriers. The first restraint is traditional gender roles, which involve the typical family-work balance dilemma. “Traditional gender roles, which place pressure on women to stay home to raise a family, affect women everywhere,” says Trower, “but it hits especially hard at the academy because the tenure clock collides with the biological clock. For a young woman scientist or physician coming out of a doctoral program, she’s going to hit a post doc and then she finally enters her career. By then she’s in her mid 30s.”

Considering that the current tenure system requires six to eight years of “up or out,” says Trower, it’s easy to see the work or family conflict. “Even in your late 30s, it’s high risk to have a child. So what we are finding is that there is incompatibility between family life and work in academia. And the simple fact is that it does affect women more than men. Women have the babies. It’s a pretty obvious thing, but not a whole lot is being done about it.”

Even if women were to successfully navigate the slippery slope of balancing family and work, the study cites a second major barrier – manifestations of sexism. “Sexism still exists in corporate America and it still exists in the academy,” says Trower. “The authors of the study have shown that there are cases of sexism in tenure cases. It may not be what we would consider outright sexism, but there is a certain amount.”

For example, Trower says sexism can be seen in the male-dominated view of science that insists on science being very rational and linear, “a belief leftover from Medieval times,” says Trower. “The institution of science says there is a ‘right’ way which is linear and rational, and women have a ‘different’ way. That may be true. I’m not saying they are irrational, but we do bring instinct to bear. We bring non-linear thinking to science, which often is erroneously viewed as the ‘wrong’ way.”

The fact is that men and women are different, and they think in different ways. Virginia Valian, PhD, a professor of psychology and linguistics at Hunter College in New York City, has written extensively on the subject of cognitive differences between the genders. In her book Why So Slow? (MIT Press, 1998), Valian looks at gender differences in the academy and lack of females in leadership positions and asks, why do so few women occupy positions of power and prestige?

Using psychology, sociology, economics and biology, she analyzes the claim that men and women have implicit hypotheses about gender differences – gender schemas – that create small differences in characteristics, behaviors, perceptions and evaluations between the sexes. According to Valian, the problem lies in the fact that those small imbalances accumulate to advantage men and disadvantage women. The most important consequence of gender schemas for professional life is that men tend to be overrated and women underrated.

“Although most men and women in the professions sincerely hold egalitarian beliefs,” writes Valian, “those beliefs alone cannot guarantee impartial evaluation and treatment of others. Only by understanding how our perceptions are skewed by gender schemas can we begin to perceive ourselves and others accurately.”

In her book, Valian reveals the invisible factors that prevent women’s progress so that fair treatment of both sexes will be possible. For example, Valian says gender schemas explain why men and women are perceived differently by their peers. When women exhibit leadership traits – the same leadership traits that are exhibited by men – they’re viewed negatively. If women exhibit decisiveness or assertiveness, it’s a problem, yet men who exhibit these traits are lauded.

“What’s interesting is that the book uncovers hidden sexism or unconscious sexism in the academy and says that it’s because of these gender schemas held not only by men, but women as well,” says Trower. “Essentially, we treat boys differently than girls. We’re socialized and we see different gender roles as we grow up. We’re led to believe that men and women should act a certain way. Part of that leads into why there are fewer women in leadership positions. So it’s really an unconscious bias as to why we treat men and women differently.”

Concrete Numbers

The discourse about gender schemas, unconscious acts of gender bias, can be a tough pill to swallow for many men and women. It’s difficult to grasp the concept that people may be unfairly judging women or making biased decisions based on
unconscious beliefs. And yet, some people dismiss gender bias altogether because of the lack of measurable differences. How can you be sure if men are favored over women in the work world or professional situations? Isn’t it possible that one candidate is just better than the other, regardless of sex?

While she agrees that is often the case, Trower cites numerous studies that set out to acquire concrete data of measurable differences between the sexes, like salary figures. Numbers, after all, are a little bit easier to put your finger on, a little more concrete than ideas and theories about gender schemas, she says.

“If it’s numbers you are looking for, you can find them all over the place,” says Trower. “From the number of women who are asked to be peer reviewers to those who are on editorial boards to the number of women who are asked to be principal investigators on research grants, there are numbers that clearly show that women are not on equal footing.”

One particular study from Massachusetts Institute of Technology shows that not only are there salary differentials between men and women, but also lab and research space differentials— even a difference in the amount of funding allotted to women. “When you look at lab space, office space and other resources that are distributed on campuses, women are getting the short end of the stick all the time,” says Trower.

And it’s not just in the sciences. Trower points to an article in the July 13, 1997, edition of the Washington Post, that found blind auditions can explain 30 percent to 50 percent of the increase of women getting more jobs in orchestras. “When they couldn’t see who was playing the violin during tryouts, suddenly women were getting hired,” she says. “This takes you outside the realm of academia, science and medicine, but it’s a great illustration of what women are struggling against.”

When you look at the studies, it’s easy to be disheartened, she continues. “I’m concerned that despite goodwill, despite affirmative action, which is now being rolled back, we are still pretty much where we were, especially in the sciences,” says Trower. “During the past 30 years there have been a lot of policy changes to level the playing field. But even if we equalize space and resources are we doing enough? Or is there something else that needs to change to prevent the status quo from perpetuating?”

—— Cathy Trower, PhD

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—— Cathy Trower, PhD

is a strong structure in place for leaders to advance at the state level. It's almost a proving ground for the national society.” Fucillo credits the society for doing a great job mentoring female leaders and preparing them for leadership positions. “There are a number of different women in the field that serve as mentors. It’s a huge part of advancing careers, and as the president-elect, I take the responsibility personally. In a way, I am a role model not only for women, but also for my profession. Mentoring is a very large part of advancing the level of our profession,” she says.

Some people would argue that an all-female board brings a different perspective because of the reversed gender roles, but President Eileen Maloney, ME, RT(R)(T)(OM), CMD, president-elect of the ASRT. “There is not only bringing more women into the discipline, but they’re also molding the leaders of the future. For the first time in its 84-year history, the American Society of Radiologic Technologists has an all-female board of directors. It’s a unique situation, but don’t think these ladies take it for granted.

“All across the country, the ASRT affiliate societies are grooming female leaders,” says Dawn Fucillo, MA, RT(R)(T)(OM), CMD, president-elect of the ASRT. “There’s more diversity in your background other than gender,” she says. “Our current board is completely diverse. From radiation therapists and dosimetrist to radiography educators, we represent a variety of modalities. Yet we are all women, and I think our background has made us one of the most diverse boards the society’s had.”

For all three women, it’s been a rewarding experience. However, balancing their leadership roles with family can be tough, says Donna Newman, BA, RT(R), CNMT, chair of the board. Approaching the end or her term this summer, Newman looks forward to spending more time with her family, but she also appreciates what the opportunity has taught her. “It’s been a wonderful experience. You truly learn more about yourself during the time on the board. Because of the extensive traveling, I’ve missed out on a part of the family life. But there are some sacrifices that are made. I’m glad I’ll be spending more time at home, but also very fortunate to have had the opportunity to lead.”

—— J.K.
AAWR was originally founded as a group of women professionals helping one another and, at its core that is still what the organization is today. AAWR is made up of radiologists, radiation oncologists and medical physicists (both men and women) meeting in a variety of settings to promote and support women in these fields. We have nearly 2000 members and are pleased to welcome 396 new members this year. While the majority of our members are from the United States, we are significantly increasing our international membership.

At the national level we have our web site, our newsletter, AAWR sponsored CME opportunities and luncheons with insightful speakers. Locally, AAWR can be whatever you want it to be. In some parts of the country local groups are well organized, in others less so. Likewise, AAWR is well represented with organized events at some subspecialty meetings and is less well represented at others.

We can be proud of the accomplishments of our senior members. Women have an increasing presence in the upper levels of organized radiology. Unfortunately, women continue to be under represented and underpaid in many radiology work settings and there is a decline in the number of women choosing diagnostic radiology as a specialty. I encourage you all to look around at the women in your practice, in your institution, your city, your societies, your state. Reach out and encourage the women you work with to become AAWR members. Organize your own local gathering. Invite a friend to bring a friend. There are so many good reasons to become or continue being a member. It is up to all of us to make the AAWR what we want it to be.
At the ECR, which met from March 5-9, 2004 in Vienna, I met a number of people practicing radiology in places like: Szolnok, Budapest, Szekesfehervar (Hungary), Stockholm (Sweden), Tbilisi (Georgia), Holland, and Targu Mures (Romania). Guess what? Women have quite a presence in radiology in these countries. For example, thirty-six of 40 residents in a Romanian program were women. In Hungary, Greece and Turkey, 70% of practicing radiologists are women. Over the last several decades, 60% or more of doctors have been women in Russia, Poland, Chech Republic, Hungary, and Romania. Because the government sets salaries for doctors in these countries, salaries have been very low. So low in fact, it is not enough to raise a family on and thus, most men have chosen non-medical careers to make more money. Radiology has been particularly attractive to women in these countries because radiation safety regulations mandate that radiologists work only 36 hours per week, receive starting vacation of 6 weeks, and in a number of these countries, vacation time increases incrementally with age. In contrast, the percent of women radiologists in Paris, Stockholm, London, Geneva, and Milan ranges from 15 to 50%.

Does this mean that now women are leaders in the field of Radiology in Europe? Does it mean that they apply for and receive huge research grants, that their children are raised by the most experienced English nannies or that they are taken care of at the Montessori Center attached to the hospital building? Does it mean that they have dinner prepared by their housekeeper and ready to eat with their husband/partner sitting at the table waiting for them by candle light? Perhaps stories have been read to their children and they are just waiting for a good night kiss from Mommy. Well, not from what I heard. Although, the Swedish woman does get 18 months off for bonding with her infant, during which time she receives 10% of her regular salary, at the end of 18 months she must relearn all the “new stuff” she missed while away and has usually been bypassed for promotion. Consequently, she is way behind in obtaining funds for research, and promotion is further delayed. The woman in Szolnok (a fairly large metropolis in Hungary) is making $750/month as a radiologist. Her 5 year old daughter is in a day care center because she cannot afford to have individual childcare at home.

On the bright side, there is one Chairperson in Poland who has made it. She is chair of a prestigious Radiology Department in Poland. Also, Professor Helen M.L. Carty, is the president of the ECR and led a spectacularly successful ECR meeting. We should even think about giving her an award from AAWR or make her a special perhaps honorary member.

Undoubtedly, as the number of women entering medicine increases, it is likely that in a generation, women will have increasingly equal opportunities as men. Will the coping mechanisms, the ability to manage the household and work improve for women? How will they be able to manage their time between child-rearing, CME, recertification exams, clinical responsibilities research, teaching, marketing, cooking, doing the laundry, exercise and even socializing? Will there be enough of a support system for them? Only time will tell.

Just as my generation and generations of women before me have had less opportunity and monumental challenges to overcome, our daughters have to do the same, but on a smaller scale? To this end, the AAWR can be a leading organization for the advocacy of women radiologists around the world. Learning from radiologists from all over the world is very exciting, and I welcome the opportunity to expand our organization as the Chair of the International Committee.
Mission Possible: Balance Career, Yourself and Family

The 1st AAWR/ASTRO Joint Event for Women in Medicine

Zhongxing Liao, MD, Maria Kelly, MD, Nancy Ellerbroek, MD
October 2, 2004
Atlanta, GA

The AAWR Radiation Oncology Committee hosted the 1st AAWR/ASTRO Joint Breakfast and Panel Discussion at the 2004 ASTRO meeting in Atlanta, GA. The topic of this panel discussion was “Mission Possible: Balance your Career, Yourself, and Your Family”. This panel discussion attracted 50-60 female participants and focused on subjects of interest to women both in academic medicine and private practice, and potential solutions to the conflicts of competing interests such as family/children, research obligations, clinical work, personal time, and continuing education.

The panel discussion was prompted by the fact that some of the best and the brightest young female faculty members decide to leave academic medicine shortly after starting a family in favor of private practice jobs, with four-day work weeks. This kind of story is repeatedly encountered. To help female professionals in radiation oncology and diagnostic radiology overcome these issues, the AAWR Radiation Oncology Committee and ASTRO jointly hosted the panel discussion, which started with opening remarks by Dr. Zhongxing Liao, Chair of AAWR Radiation Oncology Committee.

The principal points contributed by each panelist are summarized below:

Dr. Maria Kelly: “The Accidental Chair”

I accidentally became the department chair when the Dean suddenly decided to change the leadership of the department. Chairmanship was never my ambition, but as Henri Frederick Amiel once said, “Our duty is to be useful, not according to our desires, but according to our powers.”

The most important advice I can give you is to always put your patient’s interests first. You need to care about your colleagues and the department as a whole and you need to be a team player in your organization. Some of the most important things I’ve learned are that a non-clinical decision can easily wait 24 to 48 hours so you can evaluate the whole situation; a moment’s insight can be worth more than years of experience; and no one is ever totally satisfied or completely happy so you cannot please everyone. You need to think about the long-range effects of any career commitment you make. Sometimes women are asked to take on tasks that have no positive impact on their careers, but are time consuming. Do not be too nice when it comes to accepting responsibilities that may be detrimental to your career. You must focus on what you need to get your job done, set goals and be flexible, but steadfast. “Achieving starts with believing”.

Some advice to new graduates: do not stay where you trained for more than a few years. Get some advice with respect to career development early on in terms of mentors, seminars, books, etc. Always put your patients first because their care is all that really matters when all is said and done; they have placed their trust in you. Finally, “success is getting what you want and happiness is liking what you get,” so keep this in mind as you craft your career.

Dr. Nancy Ellerbroek: “How do children fit in?”

“Science is organized knowledge, wisdom is organized life” - Immanuel Kant (1724-1804)

When did my children fit into my life? I have four children, one born during medical school, one during internship, one during residency, and one while I was a junior faculty member at the University of Texas, MD Anderson Cancer Center. No situation or time is perfect or easy for having children while pursuing a career, but with planning and cooperation it is possible to enjoy both. A critical strategy in balancing your family, yourself, and your children is to evaluate maternity issues early on. Find out in advance the policies where you work or train. In my case, there were no official policies at the time, and I had to work with my chairs to establish a policy and plan for maternity leave. It also helps to find the right life partner, if that is ever possible. I wish I could tell you how to do that without fail- my own first marriage did not last, unfortunately. There will be less stress on a relationship if you have an honest and realistic discussion of your expected roles and contributions to child rearing in advance. It is important to do whatever it takes to get the very best childcare you can. That may even include paying for larger living space in order to accommodate a live-in child-care provider. Decide what you can delegate to others, and then do so in order to free up time for what is important.
to you. You can pay someone to clean the house so that you can spend more time reading to your children, for example. Assigning chores to the children is hard work at first, but eventually pays off. Almost every one, including your fellow residents and partners, has personal issues that may occasionally interfere with work. Fairness and sensitivity to the needs of your co-workers are important. Do not feel you need to be overly apologetic if you are called away unexpectedly from work, but do make a point of thanking the person who filled in for you, and when possible, reciprocating. If you can, it does not hurt to get ahead on the favors, such as trading call to help someone else out.

Creativity can be rewarded. For example, sharing an internship spot with another person worked out very well for me. That possibility had not existed until we asked. Part-time work is more commonly a solution for women early in their career; while in contrast, men are more likely to choose that option later in life.

Address serious challenges head on when possible. Address them early on rather than later when a problem becomes significant enough to show up in an evaluation, for example. Be aware that you are not alone, so do not do it alone. Plan everything in advance, prioritize, and re-assess how things are going from time to time, and make corrections in your course. Don’t forget about enjoying your family on the way. Children can and do fit in with a productive professional radiation oncology career.

Excellent reference: The AAWR Pocket Mentor

Dr. Ritsuko Komaki: “How to work effectively at your organization, Prioritize”

Our lives are complex, especially for women with our professional lives and family members to attend to.

I always think about Marie Curie whenever I feel pressure. She quoted “Life is not easy for any of us. But what of that? We must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something and that this thing must be attained. Nothing in life is to be feared. It is only to be understood.”

How could she have managed to work so hard and raise two daughters after losing her husband to an accident? She was brilliant, but she was also persistent. I read her biography many times when I was a teenager. She overcame many obstacles to make her dreams to come true. We must identify our goals and organize our life accordingly. I wanted to be a doctor after I faced Sadako’s death, when she was 11 years old from leukemia caused by radiation exposure from the atomic bomb in Hiroshima. Since then, my priority was and is patient care. In order to give the best care to patients with cancer, I feel I must be both a cancer researcher, and an educator to patients and trainees.

We must work as a team to reach our goals. Nothing can be accomplished by working alone. We all work in a community and an organization. We must know the mission of our organization and follow that mission. This is the best way to achieve our goals.

Chapter three of the book entitled "Hardball for women” written by Pat Heim, Ph.D. with Susan K. Golant, is entitled "Do what the coach says- period". This chapter showed me the different lessons learned by boys and girls.

Boys have learned hardball lessons:
1. Don’t challenge the coach.
2. There is always someone above me and below me.
3. The guy on top gets all the privileges.
4. The only way to get to the top is to do what you are told.
5. If you’ve got your power, use it or lose it.
6. Demonstrate your loyalty to the coach.

Girls have learned house and doll lessons:
1. We are all equal, so the power is dead even.
2. Decisions are discussed and negotiated.
3. Everybody is equal.
4. Power is always shared.

Unfortunately, this is not the way an organization typically works. Try to understand the mission in your organization. Plan ahead. Say "No" to activities that are not conducive to attaining your goals. Meet those deadlines that will advance your career. How many of us have read the mission statements of our workplace or organizations?

It is not always easy, but each morning, I prioritize my daily activities and try to adhere to the plan to the best of my ability and with my hospital’s mission in mind. Some days my plans are not accomplished because of a hectic schedule or unforeseen emergencies. However, I begin anew on the following day and always try to find time to express my appreciation to those individuals who help me accomplish my daily goals.
AAWR Members and Part-Time Employment in Radiology

Melissa L. Rosado de Christenson, MD, FACR
Editor, Focus

I have been interested in understanding the many issues that relate to part-time employment in radiology for many years. In 1998, when I became President of the AAWR I was more acutely interested in understanding these issues as I thought that a significant percentage of my constituents (the AAWR members) would be part-time radiologists. Over the years I approached several AAWR members and colleagues who work part-time to ask them to write an article about their experiences for publication in the Focus. I received the same answer from the majority of these women. Most felt intimidated about publicly voicing their experiences in part-time radiology employment. Many told me, “There is only bad news about working as a part-time radiologist. Why would you want to publish this?” Others agreed to write about part-time employment only if they could remain anonymous. Interestingly, I myself began working part-time this year. I plan to share with the AAWR members several issues that arose during my negotiations with the Ohio State University leadership and the nature of my current practice (after my Chairman has the opportunity to review the article, of course!). In the meantime, I want to share with you the following article sent by one of our members who wants to remain anonymous. I invite those members who work part-time and feel that they can share their views and experiences to send an article, letter or commentary for publication in the Focus. Perhaps we can learn from each other as we seek balance in our professional and personal lives.

Thoughts on Part-time Radiology
By: Anonymous AAWR Member

After many years of training, long working hours, and caring for a young family, I decided it would be worthwhile to work part-time. Obvious advantages included the ability to take more time off, to more readily take vacation and to attend conferences. However, I really wasn't satisfied with “part-time pay”. I subsidized my part-time private practice job at a community hospital with another part-time activity: image interpretation for a new outpatient imaging center. Now, I am busier than I want to be and find it difficult to partake in my children’s activities, and get enough vacation. Due to a perceived “flexible” schedule, I am often asked to take extra call or work additional shifts, which is no longer easy. I now say “no” more often when asked to cover extra duties.

I would advise any colleagues who are considering part-time work to take a good look at their own expectations, as well as those of their partners or employers. Also, if you work a “half-day”, make sure you leave on time, as you are not compensated for staying later, which defeats the purpose of working “part-time”.

Professionally, I am happy with the scope of the practices, the variety of cases, and the clinical experience. I have lost some interventional skills, as many of these cases are done in the early morning before my work begins. However, this hasn’t really had a big impact on my practice. There are so many opportunities now for radiologists, that with a little research and planning, both women and men can tailor their own jobs to suit their needs.

To contain costs, the AAWR would like to send announcements such as this and other news by e-mail. Please provide us with your e-mail address via the AAWR Web site at www.aawr.org. Click the “Contact Us” tab, enter your name and e-mail address in the space provided, and submit.

Thank you!
In an effort to determine which services and activities are valued by the membership, and to what degree, a questionnaire was sent out during Winter-Summer 2004. Many thanks to all who responded, as your input is valuable in future budgeting and planning of AAWR activities. In the first part of the survey, respondents were asked to rank items on a scale ranging from not important, less important, important, very important to most important. In the second part of the survey, questions were asked with answers including a variety of “check the box” answers. Without presenting a huge spreadsheet with each rank included, I have herein summarized the results of the questionnaire.

Surveys received totaled 114 (25 residents/fellows, 85 active members, 4 other). The highest marks were in support of the Focus quarterly newsletter, which 91% of respondents ranked from important to most important. Other services/activities ranked from important to most important by the membership in order were networking opportunities (89%), free membership (88%), mentoring opportunities (85%), academic/award grants to residents (85%), M. Curie/A. Etinger awards (84%), professional leadership seminar awards (80%), seed grants (79%), luncheon program (74%) and refreshers course at the RSNA (74%), on-line membership directory (72%), committee service (72%), web site information (67%), printable on-line membership directory (66%). Other activities and services that were less often ranked by the membership as important to most important are listed in descending order as follows: pocket mentor handbook (58%), new fellows breakfast at the ACR (56%), child care handbook (52%), refresher course at ARRS (52%), luncheon program at ARRS (50%), luncheon program at ASTRO (42%), luncheon program SPR (40%), Journal of Women’s Imaging subscription discount (40%), on-line members-only forum (36%).

Regarding which version of Focus respondents preferred, 64% chose the paper version of Focus over the online version. Of respondents, 87% were ACR members, and of those who were not members, 69% stated it was due to cost, 15% due to irrelevance to work, and 14% “other” unspecified reasons. Part time workers included 21% of respondents. A 1-day AAWR meeting was of interest to 65% of respondents, with the majority (72%) preferring it be held with the RSNA, 18% the ARRS, and 10% the ACR. When asked how often the respondent was likely to attend the aforementioned meetings, 40% chose biennially, 31% annually, and 29% other. Regarding mentoring, 74% of respondents stated they would be interested in mentoring programs, 75% as mentors, and 54% as mentees. With regard to the type of mentoring interaction, e-mail was ranked as preferred or most preferred by 77%, phone contact was ranked as preferred or most preferred by 67%, and in-person meetings were ranked as preferred or most preferred by 70% of respondents. Of respondents, 37% stated they were interested in discounted insurance, and 31% were interested in customized financial services.
Officer Biographies

The 2005 AAWR Officers will be elected by the membership during the AAWR Business Meeting that will take place during the annual meeting of the Radiological Society of North America in Chicago. The following candidates are submitted to the AAWR membership by the Nominating Committee.

President
Katarzyna J. Macura, MD, PhD
Dr. Macura received her MD degree and Ph.D. in Medical Informatics from the Medical Academy of Lodz, Poland. She completed her residency training in Diagnostic Radiology at Medical College of Georgia prior to completing fellowship training in cross-sectional body imaging at the Johns Hopkins University where she currently holds the position of assistant professor. Dr. Macura is a member of the RSNA Public Information Committee and serves on the Review Panel for RSNA infoRAD exhibits. She is a member of the Editorial Board of the Journal of Women’s Imaging and a reviewer for Radiology and Radiographics. Dr. Macura’s current clinical research interests focus on genitourinary MR imaging. She has received an RSNA Seed Grant for her work on MRI in female urinary incontinence and a Young Investigator Award from the Society of Computed Body Tomography and Magnetic Resonance. She has published 30 peer-reviewed papers, received three training scholarships, two software grants, and two seed grants and has served as a consultant or collaborator on seven federal grants. Dr. Macura was instrumental in the development of the AAWR web site and is presently chair of the AAWR Web Site Committee and co-chair of the AAWR Public Relations Committee.

President-Elect
Nancy A. Ellerbroek, MD, FACR
Dr. Ellerbroek received her MD degree from UCLA, and then stayed on to complete her residency in Radiation Oncology. She subsequently joined the faculty at the University of Texas MD Anderson Cancer Center as well as the Loma Linda University Medical Center prior to entering private practice with the Valley Radiotherapy Associates Medical Group. Her areas of special interest include interactions of chemotherapy and radiation therapy as well as the treatment of breast and prostate cancer. Dr. Ellerbroek is Past President of the Southern California Radiation Oncology Society and is co-Chair of its Committee for Continuing Education. She has served on the Program Committee of the Radiological Society of North America and is an Advisor to the Editor of the journal Radiology. She is a member of the Education Committee of ASTRO, and is the Vice-Chair of the Spring Program.

Vice President
Judith K. Amorosa, MD, FACR
Dr. Amorosa received her MD degree and completed her residency and fellowship at St. Vincent’s Hospital in New York. Currently clinical Professor of Radiology and Program Director of the Diagnostic Radiology residency program at UMDNJ-Robert Wood Johnson Medical School, she is a fellow of the American College of Radiology. She has authored 35 journal articles, four books and has served as an oral examiner for the American Board of Radiology. Dr. Amorosa is past chair of the AAWR Membership Committee and also was involved in development of international membership policy and the creation of the AAWR International Committee.

Secretary
Etta D. Pisano, MD, FACR
Dr. Pisano received her MD from Duke University and completed her radiology residency at Beth Israel Hospital of Harvard Medical School. Following a year as Chief of Breast Imaging and Instructor in Radiology at Beth Israel, she relocated to University of North Carolina at Chapel Hill where she is currently Professor of Radiology and Biomedical Engineering and Chief of Breast Imaging. Currently the President of the Association of University Radiologists, she is the Principal Investigator of the Digital Mammographic Imaging Screening Trial (DMIST). Dr. Pisano has served on several AAWR committees and presently chairs the Committee to Promote the Advancement of Women.

Treasurer
Julie Timins, MD, FACR
Dr. Timins is a diagnostic radiologist in private practice in New Jersey. She received her MD from Thomas Jefferson University Medical School and completed a general radiology residency at George Washington University prior to completing a fellowship in Nuclear Medicine at the National Institutes of Health. Board certified in General Radiology and in Nuclear Medicine, she is past president of the Radiological Society of New Jersey and is active in her state medical society where she chaired the Council on Communications and served on the Council on Medical Services. She has also served on the New Jersey Taskforce on Telemedicine and is currently a member of the New Jersey State Interagency Council on Osteoporosis, where she co-chairs the Medical and Scientific Subcommittee. Dr. Timins was recently appointed to the New Jersey Commission on Radiation Protection. A Fellow of the American College of Radiology, she has chaired the ACR Nominating Committee and currently serves on the ACR Council Steering Committee. Dr. Timins has chaired the AAWR Membership Committee and has served as AAWR Treasurer and Finance Committee chair since 1999.

Member-At-Large, Diagnostic Radiology
Ellen L. Wolf, MD, FACR
Dr. Wolf is Professor of Clinical Radiology at Albert Einstein College of Medicine and Chief of Gastrointestinal Radiology and Vice Chief of the Department of Radiology at Montefiore Medical Center. She received her MD from Mount Sinai School of Medicine and, following an internship in pediatrics at Stanford University Hospital, received radiology training at Columbia Presbyterian Medical Center and the Johns...

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Hopkins Hospital. A Fellow of the American College of Radiology and the American College of Gastroenterology, she is past president of the New York Roentgen Society and serves as ACR Councilor from New York. She has been an active member of the AAWR and currently chairs the AAWR Commercial Support Committee. She has also chaired the AAWR Subcommittee on ACR Fellowship and served on the AAWR Membership Committee and Committee to Promote the Advancement of Women in Radiology for several years. She is a nationally recognized speaker, oral board examiner, and author of two books, eight book chapters, and over two dozen articles in peer-reviewed journals.

**Member-At-Large, Radiation Oncology**

**Jeanne Quivey, MD, FACR**

Dr. Quivey received her BA in Genetics from University of California Berkeley and her MD from University of California San Francisco. Following post-graduate training in Radiation Oncology at UCSF, she joined the full-time faculty where she is currently Professor of Clinical Radiation Oncology. She holds special interest in the treatment of eye and orbital malignancies, breast cancer, head and neck cancers, and intensity-modulated radiation therapy. Dr. Quivey currently serves AAWR on the International Committee and Radiation Oncology Committee.

**Member-At-Large, In Training**

**Meghan Blake, MD**

Meghan Blake is a second year radiology resident at Boston University Medical Center. A graduate of Stanford University, she received her MD from the University of Iowa College of Medicine where she was the recipient of a University of Iowa Medical Student Summer Research Grant and was Class Representative to the American Medical Student Association. She currently serves on the AAWR Ad Hoc Committee on Pregnancy during Radiology Residency and holds membership in the American Roentgen Ray Society, Radiological Society of North America, Massachusetts Radiologic Society and New England Roentgen Ray Society.

**ACR Councilor**

**Kimberly Applegate, MD, MS**

Past President of the AAWR, Dr. Applegate received her BA degree from the University of California at Berkeley and MD degree from George Washington University Medical School. After completing a residency in diagnostic radiology at the Dartmouth-Hitchcock Medical Center in New Hampshire, she served as a Pediatric Radiology Fellow at Children’s Hospital in Boston. Dr. Applegate also received a Master’s degree in Epidemiology and Biostatistics from Case Western Reserve University. Currently, Associate Professor of Radiology at Indiana University, Dr. Applegate is the recipient of several research grants, awards, and scholarships, including an American Roentgen Ray Society Scholarship. She is assistant editor of Radiology and serves as a reviewer for several journals, including Academic Radiology, the Journal of Urology, and Radiographics. She has chaired the Committee on Education for the Commission on General and Rural Practices for the American College of Radiology and was recently elected to the ACR Nominating Committee.

**ACR Alternate Councilor**

**Melissa Rosado de Christenson, MD, FACR**

Dr. Rosado de Christenson received her MD from the Uniformed Services University of the Health Sciences in Bethesda, Maryland. Following completion of a residency in diagnostic radiology at the George Washington University Medical Center, Washington, DC, she was commissioned as a Captain in the United States Air Force and assigned to Clark Air Base. She was later assigned to the Armed Forces Institute of Pathology (AFIP) as Chief of Pulmonary and Mediastinal Radiology and subsequently became Chairman and Registrar of the Department of Radiologic Pathology, the first woman and the first Air Force officer ever to serve in this capacity since the establishment of the department in 1947. She served on the faculty of the Department of Radiologic Pathology at the AFIP for over thirteen years and trained over 18,000 radiologists, residents and other physicians. She recently retired from active duty in the United States Air Force as a Colonel after over 25 years of service. Past President of the AAWR, Dr. Rosado de Christenson has been a featured speaker at national and international radiology meetings and a visiting professor at universities throughout the United States and abroad. A Fellow of the American College of Radiology, she chairs the ACR’s Continuous Professional Improvement Panel and serves as Editor-in-Chief of the American College of Radiology Institute Chest Learning File. A member of the Executive Council of the American Roentgen Ray Society, Dr. Rosado de Christenson also co-chairs the AAWR Public Relations Committee and serves as editor of the Focus, the AAWR newsletter.

### New First Year Residents

- Macey Bray, DO
- Lindsey Grandbois, DO
- Catherine Kim-Gavino, MD
- Theresa Kouo, MD
- Vaishali Lafita, MD
- Dejana Radulovic, MD, BS
- Julie Shultz, MD
- Padmaja Surapaneni, MD
- Mylin Torres, MD

### New Members

- Tal Araz-Kleinman, MD
- Twyla Bartel, DO
- Lynne Bliss, MD
- Mikala Brinkman, MD, BA
- Kimberly Chaney, MD, PhD
- Wesley Conwell, MD
- Dawn DeLavallade, MD
- Lisa Dwornik, MD
- Mary Feng, MD
- Danielle Hood, MD
- Valerie Ibom, MD
- Geraldine Jacobson, MD, MPH
- Amy Kirby, MD
- Marie Lacasse, MD
- Ying Li, MD
- Alexander Margulis, MD, FACR
- Angela Mendez, MD
- Resham Mendi, MD
- Mona Mohamed, MD, PhD
- Janet Nguyen, MD
- Jill Saunders, MD
- Kara Schwartz, MD
- Manju Singh, MD, DMRE
- Jadwiga Strzelczyk, PhD, MS, MSc
- Jean Wright, MD
- Judy Yee, MD
- Jingbo Zhang, MD
**The Future Workforce in Academic Radiology: Gender, Generational, and Cultural Influences**

Kimberly E. Applegate, MD, MS

This report was presented at the AAWR luncheon, at the 2004 Society for Pediatric Radiology annual meeting, and also as part of a Society of Chairmen in Academic Radiology Departments (SCARD) panel at the American University of Radiologists (AUR) 2004 annual meeting.

The acute shortage of academic radiologists in the United States and across the world is a multi-factorial issue. Recent literature suggests that radiology residents are discouraged from academic careers by a number of influences, including cultural values, generational values, and gender roles in our society. An in press *Academic Medicine* article by Janet Bickel addresses the future work force from a generational differences perspective (1). Her work identifies a number of value differences between those of us who are baby boomers versus those we are training in residency and medical school today, the generation called “Gen-X.” If you work in academic radiology today, it is easy to notice a different level of commitment to work. The “Gen-Xers” put higher value than baby boomers on freedom and flexibility. They prefer a less hierarchical workplace and fully expect either episodic or discontinuous career paths. There is also growing evidence that controllable lifestyle factors influence the medical student’s decision for subspecialty choice, and the decision to work in private practice rather than in academics (2). The “Gen-Xers” will work hard if balance is allowed between their personal and professional lives, they expect to have many more job searches than baby boomers have had, they believe ‘paying dues’ is not relevant, they question authority, and, finally, they believe that self-sacrifice may have to be endured ‘occasionally’. In contrast to baby-boomers, Gen-Xers value balance between their personal and professional lives and this value runs counter to the traditional view of medicine as one of tremendous sacrifice (and reward), commitment, and devotion of personal time. It is important to understand these general attributes in order to address the future work force needs that we will all have for our own health care and for our future work colleagues, regardless of whether we are in private practice or in academics. The future radiology workforce originates in medical schools and academic radiology departments.

One of the other values cited by “Gen-X” research is the desire for more flexibility. Academic medicine has not traditionally been flexible in its hierarchical structure, training and advancement, or work environment. One challenge to implementing flexibility in academic medicine remains the outdated tenure track positions that require full-time status in the majority of medical schools in the United States. Recently, several medical schools have implemented part-time tenure track faculty positions. These positions benefit the institution by retaining competent academic faculty and promoting loyalty to the institution, in addition to adding flexibility for both women and men who desire or need to work part-time. Another issue that affects women generally more than men is how current academic advancement in the United States penalizes collaboration, which women engage in more frequently. Authorship by women in papers is not as well recognized when they are not the first or final author on a peer-reviewed publication. There is growing evidence that leaders in academic medicine understand the need to re-engineer tenure to value collaborative research. This concern has been discussed and emphasized by the recent NIH Roadmap report [http://nihroadmap.nih.gov/; web site press release September 2003]. The Roadmap initiatives include policy statements to acknowledge collaborative research work in the tenure review process and funding for the development of collaborative research networks. Further threats to the future of academic radiology include the persistent, and perhaps, widening difference in private versus academic radiologists’ income, and also the American cultural value of high income. Most academic institutions have lost their traditional funding for academic medicine. Therefore, cross-subsidy for these efforts has markedly diminished. Further, there is a lack of research training or requirement in many medical and radiology programs to promote the next generation of teachers and researchers. Exposure to the process of research is necessary, but not sufficient to encourage future faculty to perform research. Other important factors include availability of funding, resources such as equipment and time, and mentors to promote a positive environment for research in academic radiology.

There are special issues for women medical students to consider when they make a decision to select a specialty for their career. While there is no doubt that the current structure of academic career advancement must be readdressed to retain both men and women, it is particularly true of women both for academic medicine in general and for academic radiology in particular. One of the most important issues that has not been addressed is the forced congruence of child-bearing years with career building years for women in medicine. On January 7, 2004 the New York Times ran a front-page story describing research published by Rutecki and colleagues in *JAMA* (2). The title of the article was, “Young Doctors and Wish Lists: No Weekend Calls, No Beepers”. The article described dermatology as one of the most popular and competitive fields for new doctors, as compared to more traditional primary care specialties. They note there has been a drop in the general surgery match rates, which many people attribute to the long years of training and long work hours required. In contrast, dermatology is a specialty that allows the “Gen-Xers” to practice medicine while retaining some of their values, including not working on nights or on weekends and having more control over their time at work. Further, unlike most doctors, dermatologists are often paid out-of-pocket so they may avoid having to deal with the difficulties of billing insurance companies. The *JAMA* article concluded that lifestyle considerations accounted for 55% of both men and women medical student’s choice of specialty in 2002 (2).

American medical schools provide annual reports to the American Association of Medical Colleges (AAMC) that document demographic, salary, and benefits data on students, residents, and faculty at these institutions [public information available at www.aamc.org]. There are now an equal number of women and men in American medical schools; the 2003 entering medical school class was comprised of on average 50% women and 50% men. However, 25% of diagnostic radiology residents are women (this is also true for radiation oncology residents). The percent of women radiology residents has remained stable for approximately fifteen years, despite the rapid increase in women in medical schools. Of more concern, diagnostic radiology was the only specialty in the 2003 U.S. residency program match with a decrease in the number of women. We should attempt...
to understand why this is occurring, including the perceptions or barriers to encouraging women medical students into our field. This may be particularly critical for sub-specialties of radiology with both national shortages and higher proportions of women, including pediatric radiology, breast imaging, and women’s imaging.

To understand the distribution of women medical students by specialty, the AAMC tracks these data. There are persistent, generalized inequities in salary and benefits which are lower for women on U.S. medical school faculties, and a lag in academic advancement for women as compared to men. For example, there are 11% female versus 30% male full professors at medical schools in the United States [www.aamc.org]. Despite the rapid increase in the number of women medical students, these rates have remained stable for over 20 years. Interestingly, women represent 30% of medical school faculty members and traditionally select academic more frequently than private practice positions when compared to men. This preference may be changing at least in radiology, and is documented in recent ACR surveys of radiologists.

The highest numbers of female medical students enter the following specialties: internal medicine (28%), pediatrics (16%), family medicine (13%), obstetrics and gynecology (9%), and psychiatry (7%). These 2002 data are relatively stable over ten years. With the exception of obstetrics and gynecology, these are the lowest paid specialties in medicine. The greatest proportions of women in medical residency programs are similar with a few additions. From highest to lowest, 74% of obstetrics and gynecology residents are women, 67% of pediatric, 56% of dermatology, 51% of psychiatry, 50% of family practice, 49% of pathology, and 40% of internal medicine. Except for the growth in dermatology and obstetrics, these proportions have remained stable over the last decade. Recently, Howie Forman and others at Yale began investigating the association between controllable lifestyle characteristics and specialty choice for women medical students (3). They found four factors associated with women medical students’ choice of specialties: the number of weekly work hours in the first year of residency, the number of weekly work hours as staff in that specialty, the number of years for training in that specialty, and salary (3).

Of interest for the future of radiology, there were a few specialties that women chose despite these general associations. They included pediatrics, OB/GYN, and dermatology. These researchers hypothesize that there may be multiple factors that influence women to choose these specialties, despite the longer training years or the longer work hours. For example, pediatrics and OB/GYN may be more attractive to women medical students because of a long history of having women role models, because they involve expected societal roles in caring for women and children, and because they provide a flexible work environment.

The researchers at Yale suggested additional explanations for the reasons why women medical students do not choose diagnostic radiology careers. These ideas include the concept that women medical students may lack confidence in their ability. In fact, sociology research supports this concept. In general, women attribute their success to ‘luck’ whereas men attribute their success to ‘talent’. Other explanations include a lesser interest in ‘hi tech’ equipment and computer games as compared to boys and men; a fear of loss of patient contact; absence of mentoring and role models; unwillingness to face the current high level of competition to obtain a radiology residency position; and a dislike or fear of learning physics, a required part of the radiology training curriculum (3).

At Indiana University, there are 67 radiology residents. Similar to the national average, 25% of these residents are women. We identified through a three year review the number of children born to the men and the women residents in this time period: there were 21 children born to male residents and 5 children born to female residents. Twenty-one male residents had between one and four children at the start of their residency training, whereas only two women residents had one child each at the start of their residency training. Our conclusion is that having a child prior to and during residency is an increasingly common and supported experience. It may, however, contribute to the financial stress on all the residents and contribute to their choice of private practice over academic radiology.

What can we do to improve our work environment to encourage women medical students to choose radiology careers and retain both men and women ‘Gen-Xers? I think the most important thing we can do is provide flexibility. I believe that we can provide a supportive environment for both women and men who want to have more balance in their lives without unreasonable costs or inconveniences. Some strategies might include: a policy for maternity leave and for radiation exposure of pregnant residents. Such policies could be distributed to all medical students inquiring about residency positions. Women faculty should serve on resident selection committees and interview the candidates. Institutions could offer part-time residency and fellowship positions as other specialties do, part-time tenure track positions for both men and women, and subsidized on-site child care for young women (and men) trying to build their careers while raising young children.

One issue provoked much discussion and positive response from the audience at the AUR annual meeting, although it is often not discussed in medical schools today. Increasingly, many young residents opt out of the fabulous Armed Forces Institute of Pathology (AFIP) Radiologic Pathology Course. This six-week course is typically subsidized by their departments, yet more and more residents either opt out of the course entirely or attend only a portion of it due to family obligations. Alternatives could be provided, including a web-based AFIP learning curriculum.

We must encourage women faculty development, nominate women for career development opportunities, support them during the process of promotion, and encourage them to participate in their professional organizations or institutions. I am very proud that the AAWR has supported many of the issues discussed in this article and I encourage us all to continue this important work.

I leave you with this quote from Gandhi: “First they ignore you, then they laugh at you, then they fight you, then you win.”

References
3. Applegate and Forman H. (Personal communication based on research in preparation)

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Focus is published four times a year by the American Association for Women Radiologists (AAWR) for the benefit of its membership. We invite the membership to share its ideas and expertise with all of us by submitting articles for future publication in the Focus.

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