Our recent analysis of the gender trends by academic rank at Washington University (published in past issues of AWNings) and similar data available from our comparable institutions nationally, reveals a large and startling gender disparity at the higher academic ranks of prominent US schools of medicine.

Gender gaps were found at the tenure level that differed between 33% and 88% in clinical and pre-clinical departments across the School of Medicine. This statistic particularly stands out in the context of medical school classes that are now on average 50/50 gender balanced. Unfortunately AAMC statistics of national trends suggest that these discrepancies are the rule and not the exception in most areas of sub-specialization. While the gender disparities in the higher ranks of academic medicine are of obvious concern to women who are considering and currently pursuing academic careers, more broadly they are a serious concern to the field of medicine as a whole. In this context, it is important to clarify why it is beneficial to have women in academic medicine and why it is important to have women leaders in the field.

Gender differences in personality, temperament and numerous other aspects of psychosocial and cognitive functioning are well described in the social science literature. Women and men have different perspectives
and approaches to problem solving, different sensibilities and different leadership styles. For the same reason that ethnic and cultural diversity enriches social and academic environments, gender diversity brings essential variation to the table in scientific discovery and administrative problem solving. Further, if opportunity and advancement of women, who represent 50% of the medical workforce, is thwarted or denied, then the field of medicine is denied the same proportion of the potential creative and productive energy. Based on this, the field stands to benefit substantially from fully opening its doors to women.

Gender trends within the school of medicine suggest that equal numbers of men and women start out on academic tracks in most departments. However, women tend to drop off prior to tenure and prior to achieving full professorships, leadership positions and endowed chairs. An article contained in this issue of AWNings illuminates these gender gaps by WUSM department (also showing AAMC trends nationally by department), a level of detail that is of interest in the search for the practices that lead to minimization of these disparities (see interview with Chuck Zorumski, M.D. this issue---a chair with relatively low gender discrepancy rates).

In keeping with the call to embrace gender balance in academic medicine, there is also a need to recruit the energies and solicit the perspectives, of men in the AWN’s efforts to correct the gender gap in the school of medicine. Making such a gender balance correction could make WUSM a true innovator in this domain and could pave the way for other institutions to follow. For this reason, we invite male faculty throughout the school of medicine to weigh in on this topic, to generate ideas and suggestions and to work collaboratively with us on correcting gender inequality. This might translate to attendance at AWN events, submitting thoughts about how to solve the gender inequity problems to us via e-mail or through submission of articles to AWNings, or to participation in a number of upcoming forums pertinent to the issue across the university (see listings from the office of the Vice Provost for Diversity). The overall goal uniting this effort is help WUSM best utilize the creativity and person power without regard to gender, while considering the unique challenges facing women, in the mission to strengthen the already exciting and innovative intellectual environment of the school of medicine.

Did you know…

That you are welcome to attend AWN Board meetings and participate on AWN committees regardless of whether you are a board member?

If you are interested in participating, email Anne Glowinski, M.D., AWN Secretary (glowinskia@psychiatry.wustl.edu)

"I was always looking outside myself for strength and confidence, but it comes from within. It is there all the time."

Anna Freud

Sixth & last child of Sigmund and Martha Freud
Towards our goal of assessing the status of the gender balance at WUSM, we have analyzed different aspects of gender disparities among faculty over the past year. We began with gender differences in current endowed professorships and then asked whether there have been any changes in the last decade in gender equity at higher ranks (Investigator Track only). The conclusions of these analyses were that there are significant gender disparities at higher ranks, summing across all WUSM departments (http://awn.wustl.edu/awntop/newsletter/AWNings_Winter_2010.pdf ; http://awn.wustl.edu/awntop/newsletter/AWNings_Summer_2011.pdf ).

We now turn our attention to these trends at the individual departmental level. Investigating variation in gender balance by department may elucidate several important underlying processes. One is that women are differentially attracted to some sub-specialties and not others. Based on this, comparing WUSM trends to national trends is important and puts this issue into perspective. Another source of variation may be differences in the practices or perspectives of individual department chairs pertaining to promotion. Our goal is to identify specific departments that are matching or exceeding average AAMC percentages for women faculty for their discipline. We hope that by identifying departments that are doing better than average at promoting gender equity, we can find useful practices and key factors that may explain their performance. The interview with Chuck Zorumski, M.D., chair of Psychiatry, later in this issue of AWNings is our first attempt to explore these issues qualitatively. We plan to interview other department chairs who have also had success at beating national averages as we proceed.

Below we display graphs of a few large departments and a few with unique patterns. The graphs of all WUSM departments will be posted on our website (http://awn.wustl.edu). The graphs below suggest that the gender disparity problem at WUSM is not qualitatively different from national averages. However, being on par with the national average means that we are below high achieving institutions and above low achieving institutions. We believe that WUSM, one of our nation’s most prominent schools of medicine should not be average in this domain - we should strive for excellence in gender balance, becoming a leader and role model for comparable medical schools and therefore have the capacity to attract the most talented female scientists.

The AWN is continuing to work with Adrienne Davis, Vice Provost, and other leaders in the administration to develop programs or initiatives that encourage WU to improve its gender balances across all tracks and titles.

A few notes about these graphs: Data combine all 3 tracks (research, clinical, investigator). These patterns can look quite different across tracks, but combining tracks facilitate the comparison to the AAMC data. The AAMC data represent the average of many schools, and do not indicate the range of performance. Future, more detailed analyses could investigate the range of gender representation in WUSM-comparable schools, and compare specific tracks (although in some departments, the numbers in each cell become quite small).
Psychiatry is a field that traditionally has a high percentage of women that enter the field. WUSM, under the leadership of Chuck Zorumski, M.D., has done a good job of exceeding those traditionally high levels at the Instructor, Assistant and Full Professor levels.

WUSM’s Otolaryngology department exceeds the national average for % women at the Assistant and Associate Professor level, but matches the national average for Full Professors. However, the department is small and this can make percentages unstable (e.g. add a few people and the % can change dramatically).

WUSM’s Surgery department exceeds the national average for % women at the Instructor and Assistant Professor levels, which could bode well for the future if this trend continues and these women move up to Associate and Full Professor status.

WUSM’s Orthopaedic Surgery department exceeds the national average for % women at the Assistant and Associate Professor level, but matches the national average for Full Professors. However, the department is small and this can make percentages unstable (e.g. add a few people and the % can change dramatically).

WUSM’s Pediatrics department is a large department. Their gender distribution matches the national average at the Instructor, Assistant and Full Professor level, but is slightly below the norm at the Associate Professor level.
Interview with Charles F. Zorumski, M.D.
Chair of Psychiatry

By Anne Glowinski, M.D., M.P.E.

I had the pleasure of interviewing Dr. Charles Zorumski (“Chuck”), the Samuel B. Guze Professor of Psychiatry and Professor of Neurobiology and Head of the WUSM Department of Psychiatry. Chuck is widely respected in the world of Psychiatry and beyond, both for his own considerable scientific achievements and also for his 14 years of leadership of one of the most successful Departments of Psychiatry in the world. His success can be measured in many ways including departmental contributions to the field, the career success and reputation of its faculty, and NIH grant funding per faculty capita. Chuck’s interview inaugurates a new AWN effort to learn from institutional leaders who are in the forefront on gender equity at WUSM. Incidentally, Chuck is my Chair.

AG: Are you surprised that Psychiatry is doing much better than other WUSM departments in regard to promotion for women faculty on the investigator track?

CZ: Yes, I am surprised. Surprised and pleased.

AG: What are you deliberately doing which may have facilitated this result?

CZ: I am deliberately rooting for the success of each individual faculty that we bring on board. Given our resources, we need every person who joins us to be successful. Caring about, and facilitating the success of each of our faculty is an essential part of my job as Chair. I meet annually, or more, with each of our faculty to give them feedback. I do not value our faculty based on their gender but I value each of our faculty as individuals.

AG: What else do you attribute this result to? In other words: What do you think are other possible factors underlying this result?

CZ: There are many factors. Many of our greatly talented faculty members are women. Another factor is that our department is completely open-minded about the research areas that faculty choose to pursue. This may be confusing to other specialists but it reflects our field –i.e., spanning molecular to societal realms-. Diverse branches of Psychiatric research are welcome and thrive in our department: Genetics, Epidemiology, Metabolic and Medical Interface, Preschool Psychiatry and many more. We also espouse a non-rigid model of success, recognizing that there are detours, vagaries and temporary setbacks (and by the way some of these have to do with reproduction, child rearing and other familial factors which disproportionately affect women). Our faculty’s contributions and skills are welcomed even when initial plans evolve and change, back and forth. Things evolve and so do faculty career paths. This flexibility is a strength. Another strength of our department is that it is filled with people who are succeeding despite the odds. (I asked Chuck to tell me a little more about that and he explained). I mean people who succeed without initially having backgrounds predicting such success. (I ask if he means people who are not “born stars” right from the beginning and he agrees. I also ask him to confirm that he now sees the “born star” model as limiting, and possibly outmoded, and he does.) Yes, we are a department where faculty members are not written off because of a prejudged lack of background or
potential. We are a department where many of our faculty become superstars based on their own drive. We support them to follow the paths they choose as individuals.

AG: I know from previous conversations with you that you are well aware of academic life challenges for all your junior faculty, women and men. Can you summarize what you see as the major challenges and potential barriers to success? *I didn’t get around to specifically asking this question. However, we discussed related topics including the challenges of balancing family life and work. Chuck felt that there are challenges, which affect both men and women with the caveat that women tend to perform more of the child rearing work. Chuck noted that he knew many couples where the family workload is balanced, but that those were still exceptional. We talked about developmental trajectories for MDs and that embarking on a research path for an MD typically entails regressing to the very beginning of skills' building, this after (finally) specifically mastering clinical skills following completion of residency training. This is a difficult transition for many: the juxtaposition of competency in one realm and complete inadequacy in another realm is often frustrating and poorly tolerated. In addition, MD faculty, who typically have been good students for most of their lives and been “rewarded” accordingly (i.e., good grades, acceptance into good schools, good performance on clinical rotations, etc...), may be particularly challenged by the unavoidable setbacks, rejections and uncontrollable vagaries of research. Chuck also discussed the pressures and uncertainties that PhD junior faculty face as they expend efforts to become independent investigators. I told Chuck that one of the most useful sentences I ever heard him say to trainees was that “success is not guaranteed but... it is possible”. I should mention that the department has piloted a very innovative/informative series for junior faculty where Chuck and other senior faculty mentors tackle topics of importance (e.g., grant writing, publishing etc.).

AG: If you had all the resources in the world, what else would you do?

CZ: I don’t think I would want to give to just anyone who came to me with just “any” idea, as is sometimes the expectation. At the junior faculty level, I think it’s important for faculty to learn to do good research, to learn to come up with solutions to their own problems, and to learn to be resilient. It’s difficult to become independent otherwise. Things I would love to do: give more recognition and support to very important faculty contributions such as teaching and mentoring. I would love to have more endowed professorships, to be able to recognize, as they should be, some of our outstanding senior faculty, many of whom are women.

AG: What do you see as potential benefits for WUSM if progress in gender equity is achieved?

CZ: We would immediately benefit from being better known as an environment that promotes faculty success. Second, we would all eventually benefit from a more diverse academic leadership representing both men and women.

AG: What do you see as crucial skills and attitudes for young faculty, women and men, in academia?

CZ: I tell young faculty that to do research, they must acquire research skills and not simply be clinicians who do some research! This is critical, to prevent “dabbling” instead of making high quality contributions and because of the reality of whom they will compete against. Second, related to our conversation: they need to learn to roll with the punches; most careers are non-linear and success is a long-term goal with lots of pitfalls. Finally, time management skills are absolutely critical and can make an enormous difference in terms of what can be achieved. These are really critical skills to learn.
The 2011 Spotlighting Women in Medicine and Science (SWIMS) conference was held on September 14th in the King Center. The annual conference is co-sponsored by the Office of Faculty Affairs and the Pediatrics Department Office of Faculty Development. Diana Gray, M.D., Associate Dean of Faculty Affairs, Bess Marshall, M.D., Associate Director of the Pediatric Office of Faculty Development and Brian Hackett, M.D., PhD, Director of the Pediatrics Office of Faculty Development introduced the speakers. The speakers were chosen to represent women in a wide range of career stages and disciplines at WUSM. In addition, there was a featured guest speaker, WUSM alumna from Hutzel Women’s Hospital, Elizabeth Puscheck, M.D. Each speaker was asked to describe their work as well as reflections on hurdles or learning experiences in their career trajectories. Attendees at the conference included Chancellor Wrighton, and numerous faculty from across the WUSM campus. In addition, the Peer Group Mentoring Program participants presented their posters during a break. The speakers’ remarks are summarized and paraphrased below.

**Chancellor Wrighton:** He noted that he was grateful for the achievements of women faculty at WUSM and was looking forward to hearing the speakers. He believes that science and medicine are moving into an era of additional challenges and that we will need philanthropy and other kinds of financial engagements (e.g. BJC) as well as the continued success of all faculty to rise above these challenges.

**Elizabeth Puscheck, M.D., Professor and Chair of Obstetrics and Gynecology from Hutzel Women’s Hospital, Detroit, MI and WUSM alumna:**

Dr. Puscheck provided a fascinating overview of her career trajectory and research questions, explaining how unexpected dead ends in research can open doors to other research possibilities. She noted her occasional funding challenges and bad luck. However, these experiences led her to develop resilience. As she stated; “What do you do when you run out of funding? You persevere.” As a junior faculty facing funding challenges, she looked for more grants, different opportunities, used her available resources and retooled herself for new skills. Furthermore, she listened carefully to grant and paper reviewers and used constructive criticism to improve. She refocused her research in creative ways to try to address their fundamental issues. In doing so, she discovered new things and new research avenues. However, after realizing that her department was not supportive of protecting her time for research and really wanted her to take on educational roles, she retooled for education, but kept in touch with her lab collaborators. Things took another turn when she and her collaborator husband received letters from NASA requesting that they consider being payload specialists. With 3 children under the age of 5, they decided that this was not a great time to do something like that. However, it raised the question of whether or not NASA might be interested in funding their research. After some searching, they found and applied for a NASA “Reproduction in Space” grant which was funded. This led to a period of active and productive research for Dr. Puscheck that continues to the present. She summarized her pearls of wisdom for junior faculty in this way: Take advantage of failed experiments to learn something new, look for new opportunities, think outside the box, get the training you need, use training grants, have mentors within and outside your department, follow your passion and finally, know your promotions and tenure rules.
Jennifer Duncan, MD, Assistant Professor of Pediatrics, WUSM:

Dr. Duncan is driven by her clinical experiences to understand how hyperglycemia after surgery (stress-induced hyperglycemia) is mediated by the body and how it should be treated. Her previous work had been on cardiovascular aspects of diabetes using mouse models with a strong mentor, who subsequently left the university. At that point in her career, she decided that to address her questions, she should be open to other model systems. To determine how best to do this, she talked to various investigators throughout WUSM to get their advice on whether this was a good idea and to find the right model system and good collaborators/mentors. She ultimately took the ‘road less traveled’ and switched animal models because of her passion and interest. This transition has been productive although a bit challenging. Other challenges have included career balance issues in that she has both a clinical and science career and wants to be a good citizen for both worlds. To resolve those inherent conflicts, she tries to pick and choose what she can do for either world at any particular time. In addition, she has 3 young children and finding enough time for them is a challenge. She believes that the most important thing to understand is that you can’t do it all, and must allow other people to help.

Laura Bierut, M.D., Professor of Psychiatry, WUSM:

Dr. Bierut originally came to WUSM as a fellow and embarked on a successful career of studying the genetics of nicotine dependence. Obtaining a career development award (K08) was critical for her career development in order to get protected time. This led to further NIH funding to look at genetic markers for nicotine dependence and treatment response. Along the way, she has reared two daughters who have helped her with her science in critical ways. By explaining her work to them around the dinner table, she was able to craft her significance section for her grants. She recommends that it is better to get the criticisms from your family than from the study section! Her advice to junior faculty is that the path for research can be rough and rocky and sometimes you have to get off your bike and push. Finally, she acknowledged all of the mentorship and support she has gotten from faculty within and beyond WUSM, noting that it takes a village to raise a researcher.

Tammie Benzinger, M.D., Ph.D., Assistant Professor of Radiology, WUSM:

Dr. Benzinger studies the early, pre symptomatic identification of Alzheimer’s disease related brain changes with cutting edge neuroimaging techniques. Originally, a personal experience with a family member led to her interest in medical school and specifically dementia. Through fellowships and research experiences, she ended up focusing on neuroradiology as she believed it held great promise for addressing Alzheimer’s disease progression. Despite the challenges of having her strong mentor leave the university and being given a new leadership role in the Alzheimer’s Disease Research Center, she has been able to grow towards independence. This transition held some challenges in having to learn how to manage large groups of staff and large budgets very quickly.
Lilianna Solnica-Krezel, Ph.D., Professor and Chair of Developmental Biology:

Dr. Solnica-Krezel has been at WUSM for one year as chair of her department and WUSM’s first female permanent chair. In that time she has set up one of the world’s most extensive and sophisticated zebrafish facility, set up a zebrafish research interest group that includes investigators within and beyond WU and hired new faculty (among many other things). She has found WU to be a very collaborative place, evidenced by new work in the field of human development with physicians in Obstetrics and Gynecology. Her advice to junior faculty is to find something you are fascinated with and pursue it, find good collaborators and mentors, think big and be ambitious. She strongly believes that women can make it in science, but they, their colleagues and the institution need to be flexible and creative. Institutions can go out of their way to help them along.

Following remarks, the speakers gathered for a question and answer session that covered a wide range of topics, including: how to survive change in mentors, participation in mentoring programs, how to get promoted, how to handle mentorship relationships, how to establish independence from mentor, and how to have life balance. Some additional pearls of wisdom that were offered included: Your most precious asset is time. Spend it wisely and carefully. (Dr. Beirut); Set up dedicated time for family; that time is not for work. (Dr. Benzinger). Ask your kids what is the most important thing that they want to get from you – and work around that. Prioritize that and plan for it. (Dr. Puscheck).
On 09/20/2011, Joan C. Williams, UCSF Hastings Law Center Professor, Author and Expert on Gender Bias, visited the WUSM campus to give a lecture entitled: “Why Are Medical Schools So Hard For Women?” Below is a sample of Professor Williams’ (paraphrased) comments.

1) Medical schools, coal mines and investment banking environments are the least woman and family-friendly work environments. Professor Williams explained that academic medicine traditions were founded on individuals who were 500% devoted to their profession, typically the breadwinners who outsourced child-rearing, cooking, housekeeping, laundry and other non-professional distractions. The current system is not well-adapted to dual career couples, especially those with children. The system traditionally recognizes talent and potential only when it is accompanied by absolute prioritization of work over everything else. That prioritization alone is a problem for women in their reproductive years. Professor Williams noted that in more progressive academic environments there are measures specifically countering this tradition, e.g. tenure tracks for part-time faculty or more flexibility to move between tenure and non-tenure tracks.

2) In academic medicine, being child-free (a choice to not have children) or child-less (which Williams defined as the decision to not have children for fear of harming one’s career) is decidedly correlated with making it to- or closer to- the top. Professor Williams noted that one third of non-mothers on tenure track EVER have kids and that many women acknowledge specifically not having children to avoid harming their careers.

3) Women who have children can be seen negatively in academia. This holds true even when controlling for actual patterns of professional performances post reproduction. Men who take leave may be subject to similar biases. Several studies document that supervisor criticism and/or assumptions about an employee’s priorities strongly peak after a parental leave. Professor Williams also cited a famous study where two resumés from women, identical except that one had an additional detail about belonging to a PTA, provoked wildly different responses from subjects. The woman who belonged to the PTA was 79% less likely to be ‘hired’ and 100% less likely to be ‘promoted’ by the subjects.

4) A landmark study at MIT, circa 1999, set out to investigate gender bias and concluded, “It did not look like what we thought discrimination looked like”. The study found that gender bias differed from that which existed a few decades ago in that it was less blatant and more insidious. For example, an unexpected finding was that at same level of funding and rank, women scientists had less lab space than their male counterparts.

5) Professor Williams did not present the concept of double jeopardy in depth but noted that for minority women, there is a ‘double jeopardy’ and that gender bias differs by race. She is funded by the National Science Foundation to study this concept in more depth.

6) She noted that women who engage in “masculine” behaviors such as assertiveness, directness or dominance walk a tightrope, as the same behavior is interpreted more positively for males yet more negatively for females. In general, gender colors much of perception about an individual’s achievement
and potential: i.e., several studies document that gender is a major filter when it comes to perception of an individual’s achievement: “he is skilled” vs. “she is lucky” for a high achieving individual, or “he has potential” vs. “she lacks publications” for an individual moving up the ladder. Apparently female mistakes are also more memorable on average.

7) Professor Williams noted that is against the law to deny or discourage or penalize a parental leave for a mother or a father or to expect that parents on leave find their own coverage for work. She explained that that the standard should be the same as for a person having a heart attack: Such a person would be expected to take a medical leave and get better, not to arrange coverage. In particularly progressive environments, employers offer caretaker parental leave for any individual caring at least 20 hours per week for a child.

8) Finally, Professor Williams pointed out that we must recognize that in an environment where few women are promoted to the top, those that are at the top may not necessarily represent the aspirations and frustrations of most women. Those women may differ systematically from others in that they may be tougher, more tolerant, or may be considered less disruptive. She recommends that women should not just push for more women at higher levels but also should push for institutional and cultural change.

For details of her work, see Professor Williams’ Work Life Law center, (http://www.worklifelaw.org/) or her Gender Bias Learning Project (http://www.genderbiasbingo.com/) where you can play gender bias bingo!
Emily Powell, PhD, a postdoctoral research scholar in the Department of Cell Biology and Physiology, has received a three-year, $324,000 postdoctoral fellowship from the Department of Defense for research titled “From Breast to Bone: Tracking Gene Expression Changes Responsible for Breast Cancer.” ... Excerpted from The Record

Julie Margenthaler, M.D. Associate Professor of Surgery, was featured in the WU Record: http://news.wustl.edu/news/Pages/22616.aspx

Lisa Moscoso, M.D, Ph.D., Named Associate Dean for Student Affairs

Excerpted from The Record http://news.wustl.edu/news/Pages/22603.aspx

Lisa M. Moscoso, MD, PhD, [Former President of AWN and Co-Director of the Peer Group Mentoring Program for Women] has been named associate dean for student affairs at Washington University School of Medicine in St. Louis. She has a 21-year history with the School of Medicine, first as a medical scientist trainee, then as a resident in pediatrics and currently as a faculty member in the Division of Hospitalist Medicine in the Department of Pediatrics.

In her new role, Moscoso will be responsible for the academic and professional development of all medical students and provide oversight for student-run programs, such as the Forum for International Health and Tropical Medicine and the Saturday Neighborhood Health Clinic in the Forest Park Southeast neighborhood.

In addition, she will oversee first- and second-year orientation and commencement. She will continue working as a hospitalist in the Department of Pediatrics and see patients at St. Louis Children’s Hospital, Barnes-Jewish Hospital and Missouri Baptist Medical Center.

*Please email tammy@wustl.edu to share press releases, websites and articles that are relevant to women in science and medicine.
UPCOMING EVENTS:

**AWN Fall Dinner**

Monday, November 21st
Drinks and socializing at 6pm
Dinner at 7pm

*Dr. Karen Seibert*
Washington University

Location: King Center; 7th floor of the Bernard Becker Library

If you would like to attend, **please RSVP to Linda Larson-Prior (lindap@npg.wustl.edu)** and send a check (make out to the AWN) to Linda at Box 8225 or pay at the event ($35 per attendee, check or cash)