

WORMS

Women in Operations Research and Management Science

ANNUAL NEWSLETTER

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BRINGING WORMS NEWS TO YOU

IN THIS ISSUE

20th Anniversary of WORMS

by BANAFSHEH BEHZAD

In 2015, WORMS is commemorating its 20th anniversary. In 1995, INFORMS was established as the largest society in the field of operations research and management science, with the merger of the Operations Research Society of America (ORSA-(1952-1994)) and The Institute of Management Sciences (TIMS-(1954-1994)).

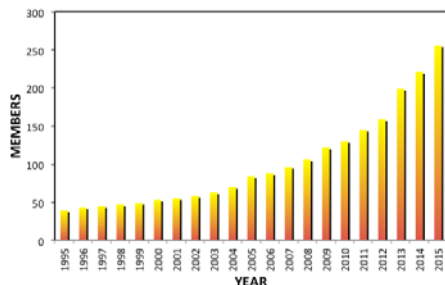
operations research and the management science. Since then WORMS has grown larger, with 256 members in 2015. The increasing number of women presidents of INFORMS in recent years (one in 1998 versus six in 2007-2015) shows the increasing involvement of women in the profession and this further emphasizes the significant role of WORMS.



WORMS AT INFORMS 2015

From special sessions and panels to networking luncheons and socials. Read on to learn all the exciting events WORMS hosted at INFORMS this year.

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The graph shows a fivefold increase in WORMS membership over the past 20 years

In the same year, WORMS also opened its doors to encourage discussion and interaction among individuals having interest in the issues facing women and their relationship to the profession of

Each year during the INFORMS Annual Meeting WORMS hosts several events such as networking and social events, the business meeting, luncheons, and sessions including panel discussions. Furthermore, each year WORMS recognizes an individual with the WORMS award for the advancement of Women in OR/MS. In recent years, WORMS supports childcare travel and Doctoral Colloquium participants. Lately, the membership and involvement of students in WORMS has increased considerably, with two students currently serving as student liaisons in the WORMS committee. Also, for the first time this year, WORMS had industry liaisons to better represent professional women in OR/MS.



WORMS MENTORSHIP NETWORK

We all need role models and mentors to guide us down our arduous career paths. WORMS has been successful in pairing several mentors with mentees. Read more to find out how.

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WORMS AT INFORMS

Sponsored Session: Gender Inspired Research

Sunday, November 1st 1:30pm-3:00pm
Marriott, SDo4-Room 304

Innovative Pedagogical Interventions to Increase Retention of Women in Engineering

Bridging the Gap: Responses to Equal Pay Legislation

Work-life balance for Women

Special Panel on 20th Year Anniversary of WORMS: Strategies for Advancing Women in OR/MS

Sunday, November 1st 4:30pm-6:00pm
Marriott, SDo4-Room 304

Panelists: Candace Yano (Professor, UC Berkeley, WORMS founder), Laura Mclay (Associate Professor, UW-Madison, WORMS Past President), Margarit Khachatryan (WORMS Industry Liaison), Paula Lipka (Student, UC Berkeley, WORMS Student Liaison)

Chair: Guzin Bayraksan (Associate Professor, Ohio State University)

WORMS Business Meeting

Sunday, November 1st 6:15pm-7:15pm
Convention Center, Room 108B

Networking/Dessert Reception

Monday, November 2nd 8:00pm-10:00pm
Maggiano's Little Italy
1201 Filbert St, Philadelphia, PA 19107

WORMS Luncheon

Tuesday, November 3rd 12:30-1:30pm
Marriott, Salon H

WINNERS!!!Doctoral Colloquium Support

-Jessye Bemley
North Carolina A&T State University
-Sara Saberi
University of Massachusetts Amherst

Childcare Travel Fund

-Kelly Bartlett
Kennesaw State University
-Zeynep Ertem
Texas A&M
-Huiyin Ouyang,
UNC Chapel Hill



PC: David Morrison

WORMS had organized several exciting events this year at the INFORMS Annual Meeting in Philadelphia. Given the 20th year anniversary of WORMS, there was a special panel to discuss strategies for advancing women in the fields of OR/MS. The session began with an introduction on the past, present, and future of WORMS. The panelists (refer left pane) included a group of dynamic women that shared, with the attendees, stories and lessons learnt from their own experiences. It was interesting to hear different perspectives and to understand what got other women interested in our field. There was active audience participation and the session ended well.

During the WORMS business meeting, the new logo was unveiled and the state of the business was presented. It was encouraging to hear about the new initiatives launched by WORMS such as a lactation suite at the conference, childcare travel fund, coffee with a member program, and inclusion of student/industry liaisons in the committee. The rise in WORMS membership over the years (currently over 300 members) was also very motivating.

The WORMS luncheon was sold out this year! It was a great success with cake cutting and also with the award ceremony. We were honored to present the 2015 WORMS Award for the Advancement of Women in Operations Research and Management Science to Prof. Margaret Brandeau. You can read her interview on Page 3.

The networking/dessert reception at Maggiano's Little Italy was also popular with a great turn out. Overall, WORMS had a great presence at INFORMS this year and wishes to see you again next year in Nashville!

An informal chat with our 2015 WORMS Awardee,

Prof. Margaret Brandeau

1. What do you think was your biggest achievement in the area of OR/MS?

Broadly speaking, I have extended operations research into interesting areas in health care, particularly public health, where OR-based analyses can add value. These areas include, for example, optimal control of diseases, resource allocation for control of HIV, network models of disease spread and control, and logistics models to support public health preparedness.

A particular achievement that I am proud of is my work (with colleagues David Hutton and Sam So) on hepatitis B control. Our analyses influenced the government of China to institute a law offering free hepatitis B catch-up vaccination to all children up to age 15 in China. This affects approximately 140 million unvaccinated children. We estimate that this new policy could prevent some 70,000 deaths from hepatitis B in China and save nearly \$1 billion in health care costs. Our analyses have also informed new hepatitis B screening recommendations of the US Centers for Disease Control and Prevention. We estimate that these new screening recommendations could prevent some 50,000 premature deaths from hepatitis B in the US. It is very exciting to think that our OR-based analyses have helped save lives.

2. What is one advice that you will give to the students in this field?

Don't let other people set your agenda. If you think a problem is interesting and important, go for it! I remember when I first started working in the area of HIV and our Dean of Engineering asked me,

"Margaret, what does engineering have to do with AIDS?" I had a vision for how we could apply OR to HIV policy and, even though others did not see the connection, I went ahead with research in this new area – and I've never regretted it.

3. If we were sitting here a year from now celebrating what a great year it's been for you, what would we be celebrating?

Well, of course, I'll be celebrating my Award for Advancement of Women in Operations Research and Management Science! I'll also be celebrating the graduation of yet another of my female doctoral students, and the imminent graduation of a number of other women doctoral students whom I'm supervising. And, I'll be celebrating my induction into the Omega Rho Honor Society and my Philip McCord Morse Lectureship Award.

4. What do you think are the most significant barriers for women/minorities in STEM careers? How could they be remedied?

One of the most significant barriers is lack of role models. In all my years of study, I never had a woman engineering, math or science professor. Slowly this is changing. For example, now at Stanford we have our first female Dean of Engineering and our first female Associate Dean of Engineering. As more women rise to positions of visibility in STEM fields, more young female students will be inspired to join these fields. Slowly, slowly change is happening. We can be part of this change by providing encouragement to young women who want to pursue careers in STEM fields.

5. What is your perspective on how 20 years of WORMS have impacted the women in OR/MS and what would you like to see for future of Women in OR/MS?

When I first joined ORSA and TIMS in 1978, very few women were involved



in operations research. In fact, at the ORSA/TIMS meetings, we women (all eight of us!) would get together informally for a sandwich at lunch in one of the conference rooms. We were delighted to find another woman to talk to at the conference. It is wonderful to now see the hundreds of women who attend each INFORMS meeting and the many women in positions of leadership in INFORMS. In the future, I'd like there to be no notice of gender when evaluating someone's work. When I first started my academic career, I signed all of my papers "M. Brandeau." I did not want my work to be judged as work done by a woman, but rather as work done by a person. (In fact, at an INFORMS conference someone once said to me, "You're M. Brandeau? I was expecting M. Brandeau to be an old French guy!") In the future, I'd like to see every paper with a woman's name judged the same as every paper with a man's name; every lecture given by a woman judged the same as every lecture given by a man; and every idea put forth by a woman judged the same as every idea put forth by a man.

6. What interests do you have outside of work?

I am a widow and have three great sons, ages 21, 23, and 25 who are the joys of my life. I enjoy working out (particularly swimming and hiking), cooking, gardening, beekeeping and travel. I've been to numerous countries around the world – and have a list of many more I'd like to visit.

WORMS Mentorship Network Successfully Completes its First Year

by SUDHARSHANA SRINIVASAN

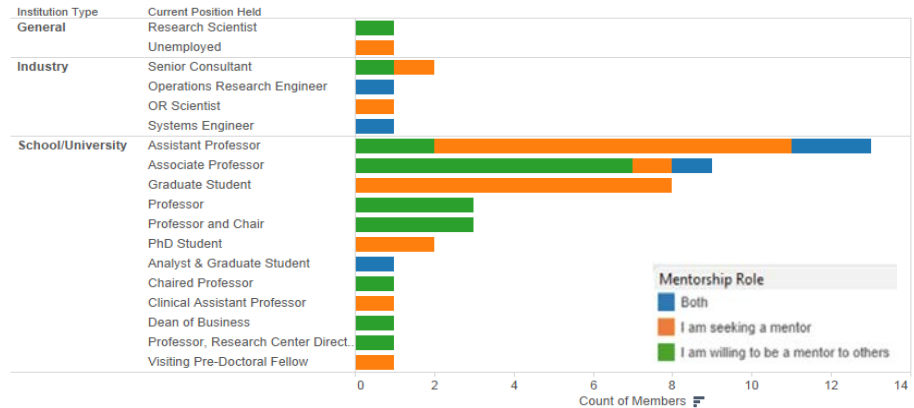
If you were to ask any accomplished woman in the room, what it took for them to get where they are today, the answer would most probably suggest that good things are rarely accomplished alone. We all need a *mentor* to succeed in the *odyssey* of our careers.

The Forum for Women in ORMS (WORMS) has established a mentorship network to pair the mentees with appropriate advisers. This past year, 57 members have signed up to be a mentor, a mentee, or both; with participation from both academia and industry.

The mentorship program wishes to connect people with relevance to their areas of interest. They collect information on the familiarity of mentorship topics and application/theoretical domain knowledge of participants. In the first year, since its inception in May of 2014, the mentorship program has been successful in linking over 50 participants and wishes to expand its coverage in the future.

“My mentor has offered advice in using web-tools to show my work and as a result, I created a website to summarize my work and keep up to date with the advances in my career.”- A mentee

“As a mentor, I have talked with colleagues about a critical decision they were making. I was happy to help out in a small way.” - A mentor



The graph above shows the number of participants in each category of institution/role that are currently seeking mentors, would be open to mentoring others, or interested in both.

From my own experience, I truly believe that a mentor can have a tremendous impact in boosting your self-confidence. I have been told to have a mentor at work, but sometimes you may wish to talk to someone outside of work that understands your field. In such cases, it is a lot easier to chat with someone you met at a conference or a networking event. So what are you waiting for, sign up today and grow your professional network. Lastly, to all of our mentor *nodes*, we say THANK YOU; for taking the time to answer yet another email, for your unwavering support during times of uncertainty, and for the knowledge you have so readily imparted. You continue to inspire us!

FAST FACTS



22%

of participants are Assistant professors, who are either seeking mentors or are willing to mentor.



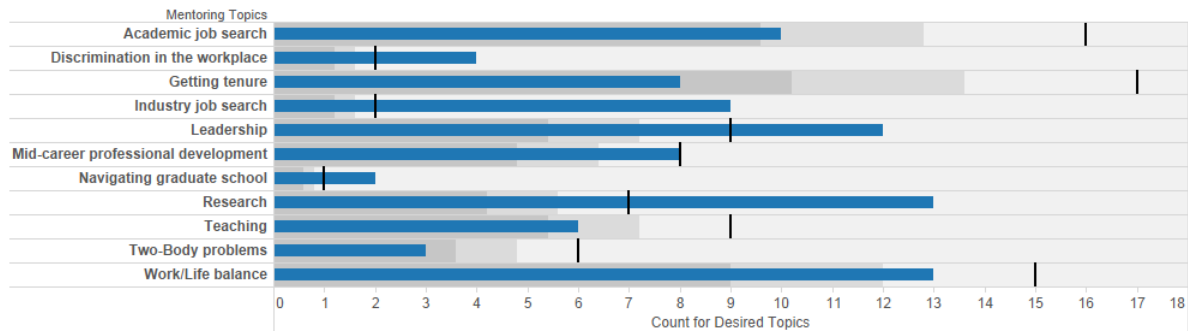
88%

of participants are affiliated to a school/university.

FOR MORE INFORMATION

If you are either looking for a mentor or interested in mentoring someone, please visit the link to sign up.

<https://www.informs.org/Community/WORMS/Mentoring>



The bar shows the number of people that are interested in the mentoring topic, while the black reference line indicates the number of people that currently feel comfortable mentoring on that topic.

Thanks to All Our Sponsors!

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- Southern Methodist University, Lyle School of Engineering
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- The University of Texas at Arlington, IMSE
- Texas A&M University, Mays Business School
- University of Illinois at Urbana-Champaign, ISE
- Dr. Gilbert Laporte (HEC, Montréal)
- Dr. Candace Yano (UC Berkeley)
- Dr. Haoying Sun (Texas A&M)

ARE YOU A WORMS MEMBER YET?

WORMS MISSION:

- Encourage all forms of support for women's careers in OR/MS, and to publicize women's successes
- Facilitate communication among women in the field of OR/MS about career opportunities and challenges
- Encourage discussion and interaction among individuals having interest in the issues facing women in relation to the profession of OR/MS
- Encourage interest among women in the field of OR/MS, and
- Advise the INFORMS Board on issues facing women in the profession of OR/MS and to keep the Board apprised

MEMBERSHIP BENEFITS

- ✓ Mentorship network – meet other WORMS members and learn from their experiences
- ✓ Childcare travel fund – help cover childcare costs when attending the Annual Meeting
- ✓ Student travel award – offset costs for graduate students traveling to conferences
- ✓ Job opportunities – discover new job postings or advertise for open positions
- ✓ Resources and support – access articles and tools for women in OR/MS, STEM fields
- ✓ WORMS Award – celebrate significant contributions towards the advancement of women in OR/MS

JOIN WORMS TODAY!

www.informs.org/Community/WORMS

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