

April 20, 2006

To Whom It May Concern:

Our symposium entitled *"Balancing the Equation: Finding a personal ↔ professional equilibrium"* was held Sunday, March 26th 2006, as part of the Division of Chemical Education technical program. By all accounts, the symposium was a success. Both the morning and afternoon sessions were well attended with an average of fifty attendees throughout the day and a peak attendance of sixty-three. Our speakers and their talks were well received. Many speakers chose to share personal experiences from their lifelong quest to find a personal ↔ professional balance; others chose to give information on alternative careers and how to pursue such careers.

This symposium was organized by a group of graduate students from the University of Illinois at Urbana-Champaign, Sandra Lee, Marja Engel, Dotti Miller, Alexis Thompson, Courtney Tucker and Tim Vaden. In conjunction with the Division of Chemical Education these graduate students created an entity in order to facilitate on-going graduate student involvement in planning symposia at ACS National Meetings. This entity, the Graduate Student Symposium Planning Committee (GSSPC), is tasked with providing quality programs organized by graduate students at ACS National Meetings and providing a sustainable source of graduate programming.

Next year two new GSSPC groups will plan symposia for American Chemical Society National Meetings. From Ohio State University, the spring 2007 GSSPC comprises Nicole Dickson, Soumya Mitra, Stephen Reith, Michelle Roettger and Peng Tao. This enterprising group of graduate students is planning a CHED sponsored symposium entitled *"Exploring and Exploiting Nature with Biomimetics"*. Their symposium will present a multidisciplinary discussion on utilizing natural processes as platforms for technological advancement. The fall 2007 GSSPC, from Purdue University, includes Murukkuwadura Aruni DeSilva, Amanda Lee, Sen Li, Melanie Wyche and Shucha Zhang. We were happy to have members from both GSSPC groups as our guests in Atlanta. While there current and future GSSPC members had a lively discussion wherein current members shared information we learned and answered the future GSSPC members' questions. During the symposium itself, members from the next GSSPC shadowed current GSSPC members and observed first-hand how our symposium was run.

In addition to the abovementioned in-person mentoring, the current GSSPC has condensed what we have learned into a *GSSPC Handbook*. This handbook has been published to assist the planning of future GSSPC symposia. Additionally, a GSSPC Project Charter has been prepared to define the scope and purpose of future graduate-student lead symposia. Several documents, including the symposium speaker synopsis, symposium report, GSSPC Project Charter, *GSSPC Handbook* and the Graduate Education Newsletter article introducing the GSSPC are included.

Sincerely,

Sandra Lee
Marja Engel
Dorothy Miller
Alexis Thompson
Courtney Tucker
Timothy Vaden



GSSPC Symposium Report

231st American Chemical Society National Meeting

Balancing the Equation: Finding a Personal ↔ Professional Equilibrium

Friday, April 14, 2006

The redefinition of traditional gender roles during the past century has led to increased professional flexibility, economic productivity and social equality among chemists. Traditional divisions between “breadwinner” and bread “maker” have been blurred, introducing the question: “How do we balance our personal and professional life?” This question transcends gender, age, education, family size and economic status. Given the inherent complexities no simple solution exists; the symposium, *Balancing the Equation: Finding a Personal ↔ Professional Equilibrium*, provided a forum for the chemists of all ages to exchange ideas, advice and experiences working on a balance.

Several aspects of the work/life balance were discussed. The morning session emphasized professional issues, such as navigating the professional landscape, negotiation skills and various corporate work/life policies. The afternoon session included personal discussions on the two-(or more) body problem and innovative career solutions for a realistic work/life balance. Each session reflected a range of perspectives on personal/professional balance.



Additional information about the speakers and their talks may be found in the speaker synopsis.

Three measures of success were identified and used to evaluate the symposium.

- 1) **Submissions** – Number and variety of contributed and invited talks. This provided an indicator of the interest in the symposium had generated among experienced chemists.
- 2) **Attendance** – Symposium interest among younger chemists was gauged by monitoring attendance levels at each half-day session and requesting demographic information on the questionnaire.
- 3) **Feedback** – Both formal and informal methods were used to solicit feedback on the symposium's organization, content and effectiveness. Over two hundred questionnaires were distributed to attendees, speakers and ACS representatives with whom we have worked.

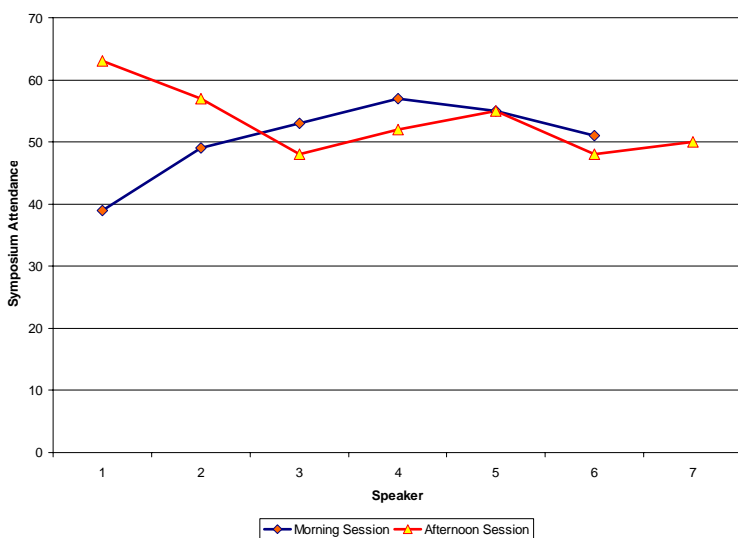
The first measure of success, submissions, reflects the ratio of contributed talks versus invited talks and the diversity in gender, occupation and age of the speakers. Five speakers were specifically invited to share their personal views on work/life balance; an additional eight talks were contributed in response to our call for abstracts. We had a total of sixteen speakers (counting the three dual author talks). The speakers were primarily female, possibly reflecting a perception that women have a greater burden when establishing a work/life balance. There were a variety of careers represented including chemists from academic, industrial and governmental institutions. The majority (61 %) of symposium attendees agreed that the speakers were of high caliber, 33 % of attendees somewhat agreed and 17 % had no opinion. No symposium attendee indicated that the speakers were not of high caliber. A majority (64 %) also indicated that the topic, work/life balance, was adequately covered.

Attendance is an important measure of success, to the GSSPC, CHED and ACS. This day long symposium was held the first day of the ACS National Meeting, which may have prevented interested parties arriving that day from attending the symposium. However, an average of forty-eight people attended the morning session, an average of fifty-three people were in attendance for the afternoon session and our maximum attendance was sixty-three. The symposium was geared towards undergraduate and graduate students, post doctorates and young chemists interested in combining successful careers with fulfilling family lives. Several avenues were used to target these individuals. In conjunction with the Office of Graduate Education, 1028 postcards were printed and mailed to graduate students registered for the meeting. Additionally, a large poster was placed near registration and flyers announcing the symposium were sent to PhD granting institutions. The most effective advertisement, however, was the symposium

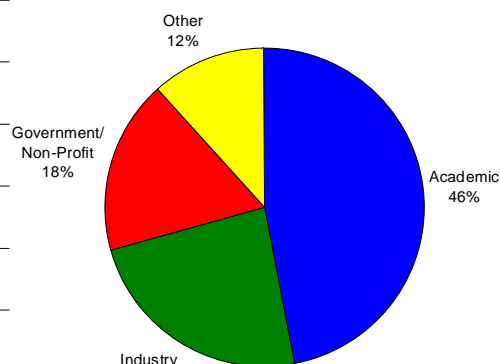


listing in either *Chemical and Engineering News* or the ACS Schedule of Events. The symposium was heavily attended by academic professionals and graduate students, possibly reflecting the targeted advertisement to PhD granting institutions.

Symposium Attendance



Attendee Careers



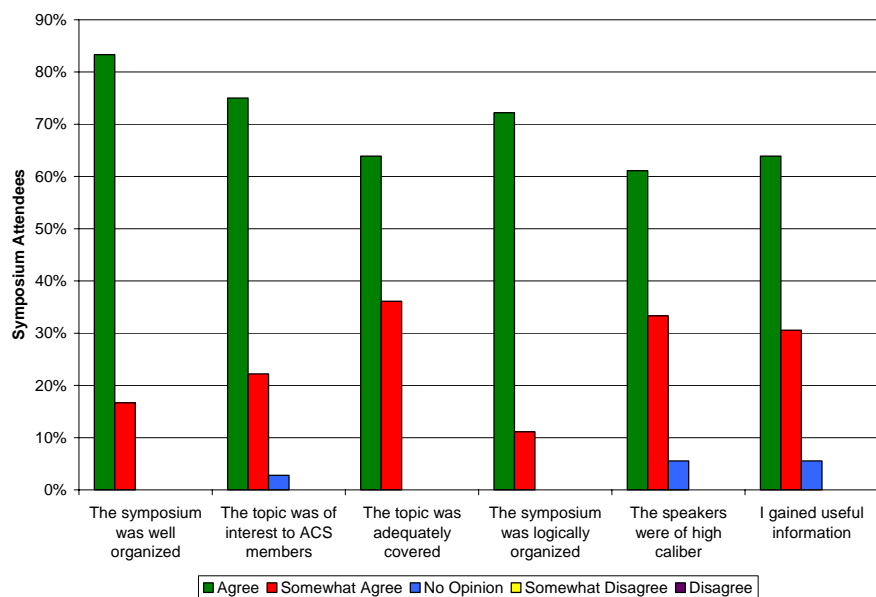
Several forms of feedback both from symposium attendees and speakers and from ACS officials have been compiled. The majority of symposium attendee respondents indicated that the symposium was well planned, executed and informative. One attendee had the following to say:

What new information did you gain by attending the symposium?

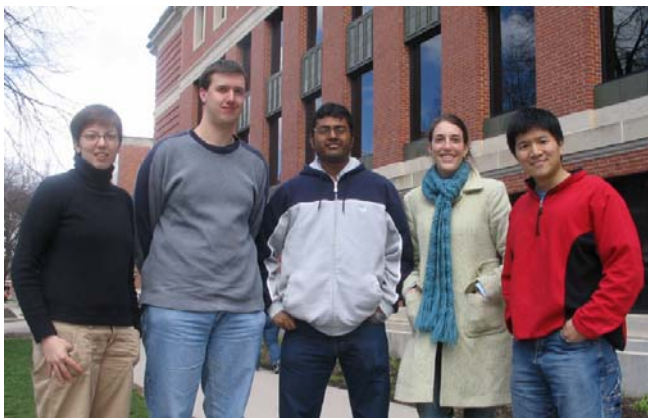
Attending the symposium really made an impact on me as far as thinking about the balance of my life in the future. It was good to see how a variety of professionals handle that struggle for balance. Several things that the symposium taught/reminded me of: (1) to start appropriate habits in balancing work/family NOW, (2) some corporate jobs can have flexibility in schedule to assist in this balance, (3) "Where there is a will there is a way!" – I am in control and set my own priorities. Based on this premise it is truly possible to have a successful career while also having a healthy family-life. I really think this is an important message to get out to the scientific community –especially [to] women because, at least in my personal experience, such values have not been supported at all.

–Symposium Attendee

Speaker feedback was also positive, with one speaker even suggesting that this graduate student planned symposium was organized better than other symposia to which they had contributed.



By each of the three measures of success used to evaluate the symposium, *Balancing the Equation: Finding a Personal ↔ Professional Equilibrium* was a success. The success is manifested by the formation of two new graduate student groups planning symposia for each of the 2007 ACS National Meetings. For more information directly contact:



Ohio State GSSPC – spring.gsspc@gmail.com



Purdue GSSPC – fall.gsspc@gmail.com

GSSPC Speaker Synopsis
231st American Chemical Society National Meeting
Balancing the Equation: Finding a personal ↔ professional equilibrium
Personal – Professional Balance
April 13, 2006

Geraldine L. Richmond

Richard M. & Patrice H. Noyes Professor of Chemistry, University of Oregon, Eugene
“Negotiating for what you need to achieve your personal and professional goals”

Prof. Richmond discussed the need for negotiation in settings such as graduate school, faculty positions and personal life. She emphasized the importance of discovering your “best alternative to a negotiated agreement”, or the best option available if the negotiations go poorly. The competitive negotiation technique can be successful in the short run and increases tangible benefits while the collaborative technique builds trust between the parties, can increase intangible benefits and is a long term strategy.

Samuel Pazicni

Graduate Student, University of Wisconsin, Madison

“Must one sacrifice “personal” to achieve “professional”?”

A graduate student at the University of Wisconsin, Mr. Pazicni noted that many students believe that anything less than receiving a doctoral degree is considered failure. He encouraged students to define success for themselves and to maintain outside interests while in graduate school. Graduate faculty and departments should discuss and support non-traditional careers.

Elsa Reichmanis

Director, Materials Research Department, Bell Laboratories Lucent Technologies

“Collaborative endeavors in materials chemistry”

Dr. Reichmanis discussed recent changes in research from a model based on the accomplishments of individuals to the achievements of teams of scientists. Current science requires groups that are interdisciplinary, team oriented and international. It is important that the team members exhibit technical expertise, communication and cooperation.

Carolyn W. Ribes and Al J. Ribes

Core Research and Development, Dow Chemical Company

“Shifting the work/life equilibrium: Innovative examples from industry”

Dr. Ribes examined some options in industry for balancing work life and family life including flexible starting hours, a compressed work week, telecommuting and reduced hours. She emphasized the need to have supervisor support for the modified work schedule. While more companies are implementing flexible work options, many employees do not take full advantage of them



Susan B. Butts

Director, External Technology Dow Chemical Company

“Finding the win-win proposition in your work-life balance”

After reviewing statistics regarding the reasons men and women take time off from the workforce, Dr. Butts shared her personal experience of a six hour work day when she had young children. She encouraged people to decide on their personal goals and concentrate on the things that matter most to them.

Debra R. Rolison

Head, Advanced Electrochemical Materials, Naval Research Laboratory

“Federal service as the ultimate in flexible research careers”

Dr. Rolison described the career paths of four women who worked at the Naval Research Laboratory. Some women spent parts of their careers working part-time and another switched her focus to intellectual property. She believes that if you create a good working environment, you attract talented workers and you then do good science.

GSSPC Speaker Synopsis

231st American Chemical Society National Meeting

Balancing the Equation: Finding a personal ↔ professional equilibrium

The Two-Body Problem

April 13, 2006

Stacey Lowery-Bretz and Richard Bretz

Professor of Chemistry/Visiting Assistant Professor of Chemistry, Miami University

“Equilibrium and Stress: Balancing One Marriage, A Two-Body Problem, and Three Children”

Prof. Lowery-Bretz discussed flux in a two-body problem, noting that while her husband Prof. Richard Bretz had planned to give this talk with her, their childcare arrangements fell through and he was unable to attend the meeting. Prof. Richard and Prof. Stacey Lowery-Bretz were able to balance their lives by one partner (Prof. Richard Bretz) having a more flexible career path while the other (Prof. Stacey Lower-Bretz) followed a more traditional academic path. When it came to having children, Prof. Stacey Lowery-Bretz was more flexible by stopping her tenure clock and taking modified duties. Their motto has always been “as long as you do good science, they’ll get over it”.

Mary Lowe Good

Dean, Donaghey College of Information Science and Systems Engineering, University of Arkansas, Little Rock

“Can You Have It All?”

Dr. Good shared her experience shattering glass-ceilings in academia, industry, government, and in retirement and gave a critique of the short-falls these areas still have when hiring and retaining top quality women professionals. Dr. Good’s advice for all those at the beginning of their own extraordinary lives was to know your limits and never regret the choice you have made; you can not do it all.



Robert Peoples

Director of Sustainability, Executive Director Carpet and Rug Institute, Carpet America
Recovery Effort

“Business World vs. Real World: The Shifting Sands”

Dr. Peoples started by stating that he does not have the answers, but he does know some of the mile posts along the road: Mile 1 The mind is lazy; Mile 2 Step-back and enjoy simple pleasures; Mile 3 Chronic Stress is BAD; Mile 4 Be flexible, life is nonlinear; Mile 5 Be a sponge, listen. Dr. Peoples then engaged the audience by having them write down the ten most important thing they want in their life five to ten years from now, and then mark out item, 2,4,5 and 7, making the point that you can not have nor do it all.

Melissa Hellman and Casey C. Raymond

Founder, Cubic Communications/Assistant Professor of Chemistry, Oswego State University of
New York

“Communication and Compromise: Balancing the Equation for Two People”

Ms. Hellman and her husband met while they were still in graduate school. When Prof. Casey Raymond left for a post doctoral position their relationship morphed into a long-distance love affair. When they married, Ms. Hellman opted not to finish her doctoral degree in order to be with her husband. Since graduate school, Melissa has explored new opportunities and has founded her own business. This arrangement has given Prof. Raymond and Ms. Hellman the necessary flexibility for their marriage to last.

Mark A. and Karen J. C. Muyskens

Professors of Chemistry, Calvin College

“Balancing Work and Family: Sharing a Faculty Position in Chemistry at an Undergraduate Institution”

Professors Muyskens share a single tenured faculty position at Calvin College, an arrangement they negotiated when jointly applying for a single academic position. Such shared tenured positions are becoming more available as more couples seek-out these opportunities. Their dual position has allowed the Prof. Muyskens to share typical academic responsibilities (teaching, committees, and research) and child rearing responsibilities equally and is an arrangement that they plan to maintain throughout their careers.

Charles Campbell

Lloyd E. & Florence M. West Professor of Chemistry, University of Washington, Co-Director,
PNNL/UW Joint Institute for Nanotechnology

“Personal Views on the Difficult Question of Personal/Professional Balance”

Both Dr. Campbell and his wife are each top professionals in their respective fields. Part of their balance arises from each partner having a high-demand high-intensity career. Their separate careers are jointly balanced by their son. In order to make time for family and career, time is scheduled in advance and their son is active in many of his own activities, including music; a recording of which was shared with the audience.



Mary Anne and Craig Teague

Freelance Chemistry Lecturer/Assistant Professor of Chemistry, Cornell College

“Should K=1?”

Prof. Teague shared the experiences his wife, Ms. Mary Anne Teague, has had while following a nontraditional academic career path. While Dr. Teague has followed a more traditional academic path, his wife Ms. Teague, is a freelance chemistry teacher/lecture. Ms. Teague teaches chemistry, either in person or on-line, at up to four institutions simultaneously. Freelance teaching also allows Ms. Teague to choose which classes and how many classes she wishes to teach each semester. Their arrangement has allowed the Teagues to both have satisfying careers.

