

THE BRIEFING

The Newsletter of the INFORMS Section on Public Programs, Service, and Needs (SPPSN)
Volume 2, No. 2 • November 2011

Welcome from the Presidents

Michael Johnson, President of SPPSN

The INFORMS Section on Public Programs, Services and Needs is now in its fourth year of existence. SPPSN's mission is to apply operations research and management science to questions of public policy and the management of public resources in support of decision making and the management of operations in the public sector. All of our members have in common a passion to do research and practice that improves the quality of life for individuals and communities through provision of goods and services by government, non-governmental organizations and public-private partnerships.

Our two past presidents, John Hall (2009) and Pinar Keskincaak (2010) have laid the foundation for SPPSN to play a significant role within INFORMS by drawing together members reflecting diverse disciplinary and practice roots. Our membership has grown from 73 members in December 2009 to 164 members in 2011. This fall's business lunch at the 2011 national meeting will, like last year's lunch, offer an opportunity for SPPSN members and non-members alike to network and contribute ideas for the future growth of the section. President-elect Julie Swann and I share a vision that SPPSN become the premier source within INFORMS of research and practice expertise for decision sciences in the public interest.

Our section recently concluded elections for the 2012 board of directors, and besides the automatic movement of some officers (President-elect Julie Swann to president; me to past president; Junior VP of Programs Karen Smilowitz to Senior VP of programs), we are happy to welcome to the board Özlem Ergun as President-elect and Jessica Heier-Stamm as Junior VP of Programs. Secretary/Treasurer Dionne Aleman and VP of Communications Laura McLay were re-elected to their respective offices.

Of the many worthy ideas for expanding SPPSN's influence within INFORMS, our board has inaugurated a best paper award. Intended to recognize outstanding research of diverse origins and applications, it is open to students, academics and practitioners, as well as SPPSN members and non-members. Four finalists, who will present their papers during SPPSN conference sessions at the INFORMS Fall 2011 national conference, will be recognized at the SPPSN business lunch on November 13.

SPPSN continues to play an important role in INFORMS' efforts to perform and recognize scholarly activities in the public interest and to build bridges with other organizations. Since July 2010, SPPSN President-elect Julie Swann and I have participated in the INFORMS Governmental/Nonprofit Taskforce, chaired by INFORMS president Rina Schneur. This task force has succeeded in developing a database of INFORMS experts to share with the Office of Management and Budget as well as a proposal for a program whereby INFORMS members may serve for a limited time 'sabbaticals' at OMB and other Federal agencies. This year, I am co-chair, with Donna Llewellyn of Georgia Tech, of the third annual "Doing Good with Good OR" student paper competition. Finally, Julie Swann, Özlem Ergun and Pinar Keskinocak have co-edited a special issue of *Interfaces* titled "Humanitarian Applications: Doing Good with Good OR" that I hope will be the first of many special journal issues highlighting the innovative work of SPPSN members.

Other initiatives, such as a student paper or dissertation award, short conference or young investigator award, are under consideration for implementation in upcoming years. I encourage you to share with me and other

SPPSN board members ideas you have to increase the reach and influence of SPPSN and its members' activities. I am especially interested in ways that SPPSN may use new media (such as Laura McLay's "Punk Rock Operations Research" blog, at <http://punkrockor.wordpress.com/>) to broaden its reach and impact with younger members.

I encourage you to contact Laura McLay (lamclay@vcu.edu) with any news of interest to our members, and to contact Julie Swann with ideas for new initiatives. In an era of increased threats to public programs and initiatives, I hope that SPPSN can serve to highlight the promise of high-quality public services and programs in service of the public good.

– *Michael Johnson*

Julie Swann, President-Elect of SPPSN

I am very excited about serving the SPPSN and INFORMS communities this year, along with our broader audiences! I'm sure that you'll agree that the activities that SPPSN members and section have ongoing are quite exciting. This year, I would also like us to see what we (as a section) can do to enable others in the INFORMS community to contribute to areas that are close to the heart of SPPSN around public impact. I look forward to discussing that further with you at our business meeting at INFORMS and to hearing your comments and feedback. Please feel free to contact me at jswann@isye.gatech.edu with your ideas or suggestions.

– *Julie Swann*

SPPSN at the 2011 INFORMS National Meeting

This year, the INFORMS Annual Meeting will be held at the Charlotte Convention Center from November 13-16, 2011. The theme is "TransfORMation". SPPSN assembled 19 sessions at the INFORMS Annual Meeting on topics ranging from humanitarian logistics to homeland security. The following list summarizes the session title and chair. We are very grateful to our officers, keynote speakers, panel and session organizers, and participants for putting together these sessions.

2011 INFORMS Annual Meeting Sessions

Sunday Nov 13, 08:00 - 09:30 : Joint Session LA/SPPSN: Community-Based Operations Research Chair: **Michael Johnson**, Associate Professor, University of Massachusetts Boston

Sunday Nov 13, 08:00 - 09:30 : Joint Session SPPSN/HAS: Organizational Decision Making in

Disaster Relief and Recovery Operations Chair: **John Coles**, Graduate Student, University at Buffalo

Sunday Nov 13, 11:00 - 12:30 : Health Delivery Infrastructure in Africa Chair: **Jeremie Gallien**, Associate Professor, London Business School

Sunday Nov 13, 13:30 - 15:00 : Joint Session Doing Good/SPPSN: Doing Good with Good OR Competition: Finalist Presentations I Chair: **Michael Johnson**, Associate Professor, University of Massachusetts Boston

Sunday Nov 13, 13:30 - 15:00 : Pharmaceutical Procurement and Distribution in Africa Chair: **Jeremie Gallien**, Associate Professor, London Business School

Sunday Nov 13, 16:30 - 18:00 : Joint Session HAS/SPPSN: Disease Monitoring and Medical

[Decision Making](#) Chairs: **Jonathan Helm**, and **Marriel Lavieri**, University of Michigan

[Sunday Nov 13, 16:30 - 18:00: Joint Session Homeland/SPPSN/MAS: Sensors in Homeland Security](#) Chair: **Gary Gaukler**, Texas A&M University

[Sunday Nov 13, 16:30 - 18:00: Joint SPPSN/LAW/CPMS: Threats to Life and Limb](#) Chair: **Arnold Barnett**, Professor, Massachusetts Institute of Technology

[Monday Nov 14, 08:00 - 09:30: New Directions for Emergency Medical Services](#) Chair: **Laura McLay**, Assistant Professor, Virginia Commonwealth University

[Monday Nov 14, 11:00 - 12:30: Humanitarian Logistics and Disaster Relief I](#) Chair: **Irina Dolinskaya**, Assistant Professor, Northwestern University

[Monday Nov 14, 13:30 - 15:00: Humanitarian Logistics and Disaster Relief II](#) Chair: **Irina Dolinskaya**, Assistant Professor, Northwestern University

[Monday Nov 14, 16:30 - 18:00: Humanitarian Logistics and Disaster Relief III](#) Chair: **Irina Dolinskaya**, Assistant Professor, Northwestern University

[Tuesday Nov 15, 08:00 - 09:30: Joint Session SPPSN/LA/Minority: Community-Based Operations Research I](#) Chair: **Michael Johnson**, Associate Professor, University of Massachusetts Boston

[Tuesday Nov 15, 11:00 - 12:30: Community-Based Operations Research II](#) Chair: **Michael Johnson**, Associate Professor, University of Massachusetts Boston

[Tuesday Nov 15, 13:30 - 15:00: Joint Session HAS/SPPSN: Infectious Diseases and Interventions I](#) Chair: **Hamed Yarmand**, North Carolina State University

[Tuesday Nov 15, 13:30 - 15:00: Joint Session](#)

[SPPSN/CPMS/LAW: Fairness and Equity in OR Models](#) Chair: **Laura McLay**, Assistant Professor, Virginia Commonwealth University

[Tuesday Nov 15, 16:30 - 18:00: Community-Based Operations Research III](#) Chair: **Michael Johnson**, Associate Professor, University of Massachusetts Boston

[Wednesday Nov 16, 08:00 - 09:30: Joint Session SPPSN/LAW: Problems in Real-World OR](#) Chair: **John Hall**, Division Director--Fire Analysis, NFPA

[Wednesday Nov 16, 11:00 - 12:30: Policy Potpourri: Pandemic Response and Sustainable Operations](#) Chair: **Dionne Aleman**, University of Toronto

Other sessions

The INFORMS Pierskalla Award committee selected four papers as finalists. The authors of these papers will present their work in a special session at the upcoming INFORMS annual meeting in Charlotte, NC on **Monday Nov 14, 16:30 - 18:00**. You are encouraged to attend to hear some very interesting work and to support the Healthcare Application Society's premier research award. The winner will be announced in the HAS business meeting on the evening of **Monday Nov 14**.

- An Evidence-Based Incentive System for Medicare's End-Stage Renal Disease Program (by Donald Lee and Stefanos Zenios)
- Fairness, Efficiency and Flexibility in the Organ Allocation for Kidney Transplantation (by Nikolaos Trichakis, Dimitris Bertsimas, and Vivek Farias)
- Optimal Selection of Screening Assays for Infectious Agents in Donated Blood (by Ebru Bish, Douglas Bish, Anthony D. Slonim, and Ryan S. Xie)
- Optimizing Colonoscopy Screening for Colorectal Cancer Preve

SPPSN Special Events at the Annual Meeting

SPPSN Business meeting

In addition, the SPPSN business meeting will be held during the SPPSN lunch on Sunday, November 14. We are grateful to the following sponsors for supporting this year's SPPSN business meeting and lunch: School of Industrial and Systems Engineering at Georgia Tech and the McCormack Graduate School of Policy and Global Studies at University of Massachusetts Boston. Tickets are \$10 for SPPSN members and \$15 for non-members.

SPPSN Best Paper Award

The first SPPSN best paper award competition is in full swing. The judging committee, consisting of Michael Johnson, John Hall, Julie Ivy, Karen Smilowitz and Vicki Sauter, agreed on the following finalists:

- Carri Chan, Columbia University, "Triage of Burn Injured Patients in a Catastrophic Scenario"
- Jeremie Gaillen, London Business School, "Rationality and Transparency in the Distribution of Essential Drugs in Sub-Saharan Africa: Analysis and Design of an Inventory Control System for Zambia"
- Jessica Heier Stamm, Kansas State University, "Quantifying and Explaining the Equity of H1N1 Vaccine Distribution"
- Morgan Doty (and others), Georgia Tech (Julie Swann faculty advisor), "Gwinnett County Public Schools: OR/MS Drives Improvements in School Bus Logistics"
- Michael Fry, University of Cincinnati, "Using Operations Research to Improve Voting Systems"

The committee will choose first-place, second-place and honorable mention awardees.

Notices



SPPSN is now on twitter, [@INFORMS_SPPSN](https://twitter.com/INFORMS_SPPSN). Follow us!

Call for Submissions: SPPSN Best Paper Award

The INFORMS Section on Public Programs, Services and Needs is sponsoring the second annual award for best paper presented at the INFORMS fall national conference in Phoenix, AZ from October 14, 2012 - October 17, 2012. This award is intended to encourage journal-quality research in all of the disciplines and application areas represented within SPPSN, and to build a tradition of scholarly exchange of knowledge at our research meetings beyond attendance at sessions. Participation is open to all INFORMS members, whether students, academics or practitioners. Each submission must be associated with a presentation at an SPPSN-sponsored or co-sponsored session at the fall national conference. Submissions will be judged by an awards committee consisting of two SPPSN officers and three regular SPPSN members. One first prize of \$250 and one second prize of \$100 will be awarded at the SPPSN business meeting, to take place at the INFORMS fall 2012 conference.

The submission process consists of the following:

- A nomination letter, not to exceed two pages, explaining the relevance of the paper to SPPSN's mission and the paper's significance to research and/or practice, as well as a paper abstract, not to exceed 250 words, are due on June 29, 2012.
- Eligible participants will be invited to present a full paper to the judging committee by July 18, 2012.
- Final drafts of papers are due on August 31, 2012. Papers must be a maximum of 25 pages long, including title, abstract, all text, references, figures and tables. Papers must be formatted to one-inch margins on all sides, a font size of at least 10 point, and at least 1.5 line spacing.

An announcement of this award will be made via the INFORMS e-newsletter and SPPSN listserv by April 13, 2012. By-laws for this award, detailing judging committee membership requirements and procedures, detailed guidelines for submissions and judging criteria will be posted on the SPPSN website by June 1, 2012.

All inquiries about this award should be made to:

Julie L. Swann
SPPSN President
Georgia Institute of Technology
julie.swann@isye.gatech.edu
404-385-3054

Özlem Ergun
SPPSN President-Elect
Georgia Institute of Technology
oergun@isye.gatech.edu
404-894-2369

Upcoming Conferences

[Society for Risk Analysis Annual Meeting](#), December 4-7, Charleston South Carolina.

[Winter Simulation Conference](#), December 11-14, Phoenix, Arizona.

[INFORMS Conference on Business Analytics and Operations Research](#), April 15-17, 2012

[International Sunbelt Social Network Conference](#), March 12-18, 2012, Redondo Beach, CA

[INFORMS International](#), June 24-27, 2012, Beijing, China

[INCOSE International Symposium](#), July 9-12, 2012, Rome Italy

Books

[Community-Based Operations Research: Decision Modeling for Local Impact and Diverse Populations](#) (Springer, ISBN 978-1-4614-0805-5), edited by Michael Johnson. This book consists of eleven

original chapters by OR/MS academics and practitioners, as well as an introductory overview and a reprint of an INFORMS TutORials 2007 chapter by Michael and SPPSN Junior Vice President of Programs Karen Smilowitz that introduced this concept. Details of the book are available on the Springer website, at. *The book will be on sale at the Springer booth at the INFORMS 2011 national conference in Charlotte at a 20% discount.*

Here is Michael Johnson's description of the mission and importance of his book:

"Community-based operations research" is the name of a collection of applications and methodologies in the decision sciences that is intended to help individuals and organizations, especially those living in or serving local, well-defined communities, and especially communities with diverse, under-served or under-represented populations, make better decisions about services to provide or initiatives to develop. CBOR has its roots multiple OR subfields, including 'soft OR', public-sector OR and urban OR. I've received my training in operations research, and spent my academic career teaching in departments or schools of public policy. As a 'hybrid' researcher, I have noticed the gap between social sciences, which seek to explain various social phenomena but are not intended to provide specific guidance on the design and implementation of policies and interventions, and operations research/management science, which has often not focused on providing model-based solutions for community-focused individuals and organizations without advanced training in technical disciplines. My book is an effort to bridge this gap. The book's eleven original chapter, plus my introduction, and a reprint of a 2007 article introducing the notion of community-based operations research, represent an impressive range of topics: equity in public applications, pricing policies for the transit-dependent, design of urban parks, models for long-term care provision, among many others. I hope the book can inspire researchers, teachers and practitioners to address the very difficult problem of using quantitative methods to design solutions to important but localized and challenging social problems. I continue to do research in CBOR-related topics, such as foreclosed housing acquisition and development, municipal decline, and collaborations among non-profit organizations, and am developing a course in CBOR. I welcome the opportunity for collaborations with other researchers interested in CBOR."

Profiles in Operations Research: Pioneers and Innovators (International Series in Operations Research and Management Science, Vol. 147, ISBN 978-1-4419-6280-5), edited by Arjang Assad and Saul Gass. ORMS Today writes a nice summary of this book:

[T]his new book recounts the development of operations research via the profiles of 43 OR pioneers and relates how these individuals, with varying backgrounds and diverse interests, were drawn to the OR field.

The profiles also describe how OR techniques and applications expanded considerably beyond their military origins during the WWII era to find new domains in business and industry today. In addition to their scientific contributions, the profiles capture the life stories of the individuals—interwoven with personal tales, vivid vignettes, family backgrounds and views of the mission and future of OR. Collectively, the profiles recount the fascinating story of the growth and development of a field enriched by the convergence of different disciplines.

The individuals profiles represent a "Who's Who of OR," including Philip Morse, John con Neumann, George Dantzig, George Kimball, West Churchman, William Cooper, Russ Ackoff, John D.C. Little, Al Blumstein, and many more.

Fundamentals of Supply Chain Theory (Wiley, ISBN 978-0-470-52130-4) by Larry Snyder and Max Shen. This new text book's web page offers the following description.

Fundamentals of Supply Chain Theory presents the methodology of supply chains, discussing the foundations of this emerging supply chain theory and demonstrating how recent developments build

upon classical models. The authors focus on long-term strategic location decision and tactical inventory planning for supply chain management, covering a broad range of topics from forecasting, inventory management, and facility location to process flexibility, contracting, and auctions.

Fundamentals of Supply Chain Theory is a suitable book for business and engineering courses on supply chain management at the graduate level. It also serves as an authoritative reference for academics and practitioners working in the areas of operations research, business, management science, and industrial engineering.

About the INFORMS Section on Public Programs, Services and Needs

The Section for Public Programs, Service, and Needs (SPPSN) is the INFORMS subdivision dedicated to, in the words of the INFORMS slogan, “doing good with good OR.” The section furthers the use of operations research and management science in the following areas:

- *Public Policy* – improving governmental decision-making at the legislative and strategic levels.
- *Public Programs* – improving the management of government programs, services and operations.
- *Public Safety* – improving decision-making in support of homeland security, law enforcement, emergency preparedness, and disaster response.
- *Public Service* – supporting community development and public service organizations, and encouraging members of the ORMS professions to volunteer their know-how in public service causes.
- *Public Needs* – Improving logistics and other national and international programs to address humanitarian needs.

The section carries out its mission by sponsoring presentations at INFORMS national meetings and providing publicity for ORMS conducted in the public and civic spheres.

SPPSN was formed from a 2009 merger of three efforts devoted to “doing good with good OR”. The first was the Public Programs and Processes

Section (PPPS), which was the INFORMS section devoted to OR conducted in the areas of public policy, public programs and public safety. The second was an initiative to start an INFORMS forum devoted to community operations research and the third was an initiative to start an INFORMS forum devoted to supporting humanitarian assistance. The three groups, in consultation with the INFORMS Subdivision Council, decided that the best approach was to have a single expanded section that would broadly address ORMS conducted in the public and civic spheres.

Membership is \$8 for INFORMS members, \$10 for non-members, and \$5 for students.

2012 Officers:

- *President:* **Julie Swann**, Georgia Institute of Technology, jswann@isye.gatech.edu
- *President-Elect:* **Ozlem Ergun**, Georgia Institute of Technology, oergun@isye.gatech.edu
- *Secretary/ Treasurer:* **Dionne Aleman**, University of Toronto, aleman@mie.utoronto.ca
- *Senior Vice President of Programs:* **Karen Smilowitz**, Northwestern University, ksmilowitz@northwestern.edu
- *Junior Vice President of Programs:* **Jessica Heier-Stamm**, Kansas State University, jlhs@k-state.edu

- Vice President of Communications: **Laura A. McLay**, Virginia Commonwealth University, lamclay@vcu.edu

Cluster chairs for the 2012 INFORMS Annual Meeting include **Renata Konrad** (rkonrad@wpi.edu), **Karen Smilowitz**, and **Jessica Heier-Stamm**

From the editor

Dear SPPSN members,

This newsletter provides an opportunity to share information about news of interest to our members. The newsletter can also be expanded to share the news of member achievements, milestones, awards, publications (particularly those in non-OR journals), calls for papers in journal focus issues, and non-OR conferences of interest to our members. Please share your accomplishments, publications, calls for papers in journal focus issues, and conferences announcements so that we may expand the newsletter. We cannot do this without your help. The newsletter will be available on a semi-annual basis. The next addition of the newsletter will be available in April.



[We are at @INFORMS_SPPSN.](https://twitter.com/INFORMS_SPPSN)

Sincerely,

Laura A. McLay
lamclay@vcu.edu