THE BRIEFING

The Newsletter of the INFORMS Section on Public Programs, Service, and Needs (SPPSN) Volume 2, No. 1 ● April 2011

Welcome from the President

Michael Johnson, President of SPPSN

The INFORMS Section on Public Programs, Services and Needs is now in its third year of existence. Formed by the merger of the Section on Public Programs and Processes and two proposed sections, Operations Researchers for Public Service Efforts and Humanitarian Applications, SPPSN has a diverse membership reflecting interests in health policy and health services, crime and public safety, emergency management and homeland security, disaster response and recovery, government and nonprofit services, community-based applications and many others. 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 inaugural president, John Hall, has laid the foundation for SPPSN to play a significant role within INFORMS by drawing together members reflecting diverse disciplinary and practice roots. Past president Pinar Keskinocak spearheaded a dramatic increase in membership, from 73 members in December 2009 to 160 members in 2010, and organizing a sold-out business lunch at the 2010 national meeting. I have been privileged to lead an organization that is poised to develop high-impact initiatives that increase the recognition provided to members doing outstanding research, to increase ties with other INFORMS sections and societies, and to create multi-disciplinary research collaborations. My vision is for SPPSN is to become the premier source within INFORMS of research and practice expertise for decision sciences in the public interest.

Of the many worthy ideas for expanding SPPSN's influence within INFORMS, our board has endorsed a Best SPPSN Paper award. This award, to be presented at the next SPPSN business meeting at the INFORMS Fall 2011 national conference in Charlotte, consists of a first prize of \$250, a second prize of \$100 and an honorable mention. 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. Additional details on this award may be found below in the newsletter. 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.

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, persuaded Shelley Metzenbaum, Associate Director for Performance and Personnel Management at OMB to give a keynote address at the upcoming INFORMS Conference on Business Analytics and Operations Research and is working on a program whereby INFORMS members may serve for a limited time 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.

In closing, I would like to highlight the comments from the editor of this newsletter, Laura McLay, requesting that SPPSN members contribute any news of interest to our members, such as conference announcements, calls for papers and books published. News from other INFORMS sections and societies, and from other professional societies are especially welcomed. I hope that SPPSN can be a bridge to cross-disciplinary collaboration, discovery and service for the public good, and that this newsletter can help you stay abreast of all activities towards this goal.

SPPSN at the 2010 INFORMS National Meeting

Last year's INFORMS Annual Meeting was held at the Austin Convention Center from November 7-10, 2010. The theme was "Energizing the Future". SPPSN assembled 23 sessions at the INFORMS Annual Meeting on topics ranging from humanitarian logistics to the legalization of marijuana. 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 making the 2010 INFORMS Annual Meeting a successful event.

2011 INFORMS Annual Meeting Sessions

<u>Threats to Life and Limb</u>, Chair: Arnold Barnett, Massachusetts Institute of Technology

<u>Decision Making for Wildfire Response and Evacuation</u>, Chair: Nada Petrovic, UC Santa Barbara

<u>Public Health Models</u> [Joint with Health Applications Section (HAS)], Chair: Hannah Smalley, Georgia Institute of Technology

Humanitarian Logistics [Joint with Minority Issues Forum (MIF) /Transportation Science and Logistics (TSL)], Chair: Lauren Davis, North Carolina A&T State University

<u>Surveys and Models for Logistics Management in Disasters</u> [Joint with TSL], Chair: Burak Eksioglu, Mississippi State University

Health and Humanitarian Applications of Revenue Management [Joint with HAS], Co-Chairs: Melih Celik and Mallory Soldner, Georgia Institute of Technology

<u>Statistical Issues in Public Policy</u> [Joint with MIF], Chair: Kobi Abayomi, Georgia Institute of Technology

Models in Public Health [Joint with HAS], Co-Chairs: Jacqueline Griffin and Hannah Smalley, Georgia Institute of Technology

<u>Community-Based Operations Research</u> [Joint with MIF], Chair: Michael Johnson, University of Massachusetts Boston

<u>Public Health - Strategies for Population</u> <u>Protection</u> [Joint with HAS], Chair: Eva Lee, Georgia Institute of Technology Emergency Medical Services: New Directions [Joint with HAS], Chair: Laura McLay, Virginia Commonwealth University

<u>Decision Support for Emergency Response and Public Safety</u> [Joint with TSL], Chair: Alex Savachkin, University of South Florida

Health and Humanitarian Supply Chains [Joint with MSOM], Chair: Paul Griffin, Penn State University

Methods to Support Regional Evacuation [Joint with TSL], Chair: Irina Dolinskaya, Northwestern University

Mitigating Disaster Impact through Planning for Emergency Response [Joint with TSL], Chair: Elise Miller-Hooks, University of Maryland Aiding Disaster Relief through Optimization [Joint with TSL], Chair: Irina Dolinskaya, Northwestern University

<u>Pandemic Planning and Modeling</u> [Joint with Junior Faculty Interest Group (JFIG) /HAS], Chair: Dionne Aleman, University of Toronto

Risk and Recovery of Transportation Networks to Disaster [Joint with TSL], Chair: Nicholas Lownes, University of Connecticut

Resource Allocation Modeling for Infectious Disease Control [Joint with HAS], Chair: Sabina Alistar, Stanford University

OR and Public Health Care [Joint with HAS], Chair: Ruben Proano, Rochester Institute of Technology

Optimization Models for Disease Management [Joint with HAS], Chair: Jennifer Mason, North Carolina State University

<u>Mathematical Models for Infectious Disease</u> <u>Control</u> [Joint with HAS], Chair: Elisa Long, Yale School of Management

Analyses of Several Public Health Problems and Solutions [Joint with HAS], Chair: Nilay Argon, University of North Carolina

In addition, the SPPSN business meeting was held at during the first SPPSN lunch. The lunch was a large success. We are grateful to the following sponsors for supporting this year's SPPSN business meeting and lunch: Lehigh University (College of Engineering), Georgia Institute of Technology (School of Industrial and Systems Engineering), and Penn State (Industrial and

Manufacturing Engineering). We hope to make the business lunch a SPPSN tradition in the years to come

Additional Clusters on Public Programs, Public Service, and Public Needs

INFORMS Annual Meeting in Charlotte, NC, November 13-16, 2011: Call for Papers

We would cordially like to invite you to submit sessions and presentation abstracts for SPPSN's cluster at the 2011 INFORMS Annual Meeting. This year, we have already identified eight different topics for our presentations. These are listed below, along with the SPPSN member who is coordinating the area.

- Disaster relief and humanitarian logistics (Irina Dolinskaya, dolira@northwestern.edu)
- Global health (Jeremie Gallien, igallien@london.edu)
- Community service (Karen Smilowitz, ksmilowitz@northwestern.edu)
- Health policy (Dionne Aleman, aleman@mie.utoronto.ca)
- Fire & EMS (Laura McLay, lamclay@vcu.edu)
- Criminal justice (John Hollywood, jshollywood@gmail.com)
- Homeland security (John Hollywood)
- Problems in real-world OR (John Hall, jhall@nfpa.org)

We invite SPPSN members interested in presenting on one of the above topics, or chairing a session, to contact the area coordinator listed above.

These are not intended to be all-inclusive; SPPSN members are invited to suggest additional ideas.

Please contact Senior Vice President of Programs: John Hollywood, jshollywood@gmail.com, with any questions or ideas for additional topic areas.

<u>INFORMS Conference on Business Analytics</u> & Operations Research, Chicago, IL, April 10-12, 2011

The Public Sector and Nonprofits Analytics has the following tracks:

Track 4: Public Sector Analytics – Monday.

9:10am-10:00am, Analytics in DHS: Supporting Homeland Security Decision Making, Steven Bennett, PhD, Assistant Director, Office of Risk Management and Analysis, U.S. Department of Homeland Security

10:30am-11:20am, Providing a Scientific Basis for Managing Illegal Drug Problems, Jonathan P. Caulkins, PhD, Professor of Operations Research and Public Policy, Carnegie Mellon University

11:30am-12:20pm, Preparing for a Tidal Wave of Air Traffic for the Soccer World Cup, Norm Fujisaki, MS, Chief Strategy Officer, Metron Aviation

1:50pm-2:40pm, Analytic Support to Operation Enduring Freedom, *Colonel Christopher M. Hill, PhD, Military Deputy Director, Center for Army Analysis, U.S. Army.*

3:40pm-4:30pm, Special Session: 2010 INFORMS Prize Winner, Operations Research at Jeppesen, Stefan E. Karisch, PhD, Director, Operations Research and Optimization, Jeppesen, a Boeing Company

Track 14: Public Sector Analytics – Tuesday

9:10am-10:00am, Leveraging Operations Research and Analysis for Public Sector Challenges, *Keith Catanzano, MA, Vice President, Booz Allen Hamilton*

10:30am-11:20am, Analytics in the Fog of War, Scott T. Nestler, PhD, Assistant Professor of Operations Research, Naval Postgraduate School, Lieutenant Colonel, U.S. Army

11:30am-12:20pm, Affordable Readiness Model: Using Surrogate Modeling to Enable Rapid Trade-Off Analysis, *Philip A. Fahringer, MS, Operations Analyst, Lockheed Martin Corporation*

3:40pm-4:30pm, Cities in Crisis: Analytics Help Rationalize the Delivery of Police, Fire, and Emergency Medical Services, Kenneth Chelst, PhD, Director of Engineering Management Program, Professor of Operations Research, Wayne State University

4:40pm-5:30pm, Visual Analytics in a Change of Cultures (Paradigm Shift), *Sriram Chellappan, MS, Director of Information Technology, Amtrak*

Presentations on Public Sector & Nonprofits in Other Tracks:

Track 3: Supply Chain Management - Monday 11:30am-12:20pm, Supply Chain Analysis Impacts the Lives of Malnourished Children, Jayashankar M. Swaminathan, PhD, Senior Associate Dean for Academic Affairs and Glaxo Distinguished Professor of Global Business, University of North Carolina Chapel Hill, Kenan-Flagler Business School

Track 6: Analytics at Work – Monday, 3:40pm-4:30pm, Modeling in Support of Long-Range Facilities Master Planning, *William Davis, Assistant Chief of Staff for Facilities, Marine Forces Reserve*

Track 8: Innovation – Monday, 1:50pm-2:40pm Process Redesign and Optimization-Based Tools to Improve Outpatient Appointment Scheduling, Pablo Santibáñez, MA, Operations Research Scientist, British Columbia Cancer Agency

Track 7: Supply Chain Optimization – Monday, 1:50pm-2:40pm, Operations Research Enlarges the World's Busiest Artificial Waterway, Marco Lübbecke, PhD, Full Professor & Chair of Operations Research, RWTH Aachen University

Track 11: Forecasting – Tuesday, 3:40pm-4:30pm, Deciding Which SKUs to Forecast: Simulating Business Outcomes to Reduce Risk and Investment while Improving the Forecasting Process, James Hoover, MBA, Director, DoD Supply Chain Solutions, Accenture

Track 15: Decision Analysis – Tuesday, 4:40pm-5:30pm, Junior Achievement Uses Multiobjective Decision Analysis to Educate and Inspire More Students, *William K. Klimack, PhD, Senior Consultant, Kromite, LLC*

INFORMS Healthcare Conference, Montreal, Canada, June 20-22, 2011

SPPSN will be co-sponsoring a few sessions at the first INFORMS Healthcare conference in June. The program is not yet available, so stay tuned for additional details.

Other Conferences of Interest

Society for Risk Analysis Annual Meeting, Charleston, SC, December 4-7, 2011, [Abstracts due on May 27, 2011],

http://www.sra.org/events 2011 meeting.php

Notices

Call for Submissions Best SPPSN Paper award

The INFORMS Section on Public Programs, Services and Needs is sponsoring an award for best paper presented at the INFORMS fall national conference in Charlotte, November 11 – 14 2011. 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 cosponsored 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, one second prize of \$100 and one honorable mention will be awarded at the SPPSN business meeting, to take place at the INFORMS fall 2011 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 July 1, 2011.
- Eligible participants will be invited to present a full paper to the judging committee by July 15, 2011.
- Final drafts of papers are due on September 16, 2011. 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.
- The paper under consideration for this prize shall not have not been published elsewhere."

An announcement of this award will be made via the INFORMS e-newsletter and SPPSN listserv by April 15, 2011. 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, 2011.

All inquiries about this award should be made to:

Michael P. Johnson SPPSN President University of Massachusetts Boston michael.johnson@umb.edu 617-287-6967 Julie L. Swann SPPSN President-Elect Georgia Institute of Technology julie.swann@isye.gatech.edu 404-385-3054

Call for Submissions Doing Good with Good OR - Student Competition

INFORMS is again sponsoring a competition to encourage student research and practice that has societal impact. The "Doing Good with Good OR Student Competition" will feature the most exciting work performed by students in partnership with public and private organizations that yields tangible and beneficial

outcomes for individuals, communities, and organizations. Such work will be infused with OR/MS methods and could appeal to multiple disciplinary and application-area interests.

Submission Process:

- · Nomination letter by the partner organization or a faculty member describing the societal impact of the work and the portion of the work (including the project duration) solely completed by the student entrant(s) during the time they were enrolled full-time in a degree-granting program.
- · Two-or three-page summary document that describes what the entrants accomplished (focusing on the societal impact and the centrality of the operations research and management science tools used).
- · 60-word abstract of the achievement
- · Submissions should be e-mailed to either of the Prize Competition co-chairs listed below.
- Entrants will be expected to report on a project done in partnership with an organization that can certify that the results of the project have had, or are likely to have, a significant societal impact.
- · Any work with positive societal impact that has been completed within the last 3 years (class project, thesis research, independent study, internship, voluntary work) is eligible unless it has already received an INFORMS award.

Please see this page online for complete details:

http://www.informs.org/Recognize-Excellence/INFORMS-Prizes-Awards/Doing-Good-with-Good-OR/Doing-Good-with-Good-OR-Application-Process

INFORMS must receive completed submissions for this competition by May 15, 2011. The finalists will be announced by June 30, 2011, and the competition winner will be selected at the Fall 2011 INFORMS national conference in Charlotte.

2011 Committee Co-Chairs:

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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.

2011 Officers:

- President: Michael P. Johnson, Jr., University of Massachusetts-Boston, michael.johnson@umb.edu
- President-Elect: Julie Swann, Georgia Institute of Technology, jswann@isye.gatech.edu
- Secretary/ Treasurer: Dionne Aleman, University of Toronto, aleman@mie.utoronto.ca
- Senior Vice President of Programs: John Hollywood, RAND Corporation, jshollywood@gmail.com
- Junior Vice President of Programs: Karen Smilowitz, Northwestern University, ksmilowitz@northwestern.edu
- Vice President of Communications: Laura A. McLay, Virginia Commonwealth University, lamclay@vcu.edu

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 later this year.

Sincerely,

Laura A. McLay lamclay@vcu.edu