Welcome to the Winter 2006 edition of *The Supernetwork Sentinel*, the newsletter of the Virtual Center for Supernetworks at the Isenberg School of Management, UMass Amherst. *The Supernetwork Sentinel* is published in Fall, Winter, and Summer editions. Its purpose is to keep you informed of events, activities, and successes of the Virtual Center for Supernetworks, the Center Associates, and the Supernetworks Laboratory for Computation and Visualization. In this newsletter, we include news items, a report on the Radcliffe Fellowship program experience, events/activities of special interest, noteworthy recognitions, as well as upcoming conferences. We also have a list of our recent publications.

Anna Nagurney  
John F. Smith Memorial Professor  
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Participants in the INFORMS Sessions with

Professors Martin Beckmann and Bart McGuire (in the center with plaques) honoring the 50th Anniversary of the publication of their book, *Studies in the Economics of Transportation*.  

INFORMS Sessions in Honor of the 50th Anniversary of the Publication of *Studies in the Economics of Transportation* a Big Success

Two sessions marking the 50th anniversary of the publication of the book, *Studies in the Economics of Transportation*, and organized by David Boyce and Anna Nagurney for the INFORMS National Meeting, November 13-16, 2005, in San Francisco, California were a big success. The authors of the book are: M. Beckmann, C. B. McGuire, and the late C. B. Winsten. The book was published by Yale University Press in 1956. These special sessions took place on Monday morning, November 14, 2005, to a standing room only audience.

Both Professors Martin Beckmann and Bart McGuire attended the sessions and spoke and their wives were in attendance as well. Professor McGuire is a Professor Emeritus of the University of California at Berkeley whereas Professor Martin Beckmann is a Professor Emeritus of Brown University.

Professors Beckmann and McGuire were presented with commemorative plaques provided by Dr. Philip Haile, the Director of the Cowles Foundation at Yale University, and a citation from Dr. Haile was read by Anna Nagurney.

The presentations by the session invited speakers as well as photos from the event and the luncheon that followed can be found at http://supernet.som.umass.edu/classics.htm

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Center Director Reports on her Radcliffe Institute Fellowship Experiences

Anna Nagurney began her year-long appointment as a Radcliffe Institute Fellow at the Radcliffe Institute for Advanced Study, Harvard University, Cambridge, Massachusetts in September 2005. The title of her project is, “Dynamic Networks with Applications: A Unified Theory of Projected Dynamical Systems and Evolutionary Variational Inequalities.” She is also working on completing a new book.

Nagurney reports that the fellowship year has been an incredible experience. There are 51 Fellows this year (selected out of about 800 applicants) and she is one of 13 Science Fellows. The Fellows meet several times a week for organized lunches and seminars as well as other special events. Scientists, artists, novelists, historians, playwrights, and other scholars in the humanities and the social sciences work on their year-long projects in a rich intellectual and supportive community. The discussions at the lunches, after the seminars, and on numerous occasions in which the Fellows see one another at Harvard and Cambridge provide a wonderful backdrop to the hard work that accompanies the projects. The administration of the Radcliffe Institute and the staff are commended for their professionalism. Nagurney thanks the Fellows for their warmth, friendship, wonderful advice, fascinating seminar presentations, and spirited conversations!

More information on the Radcliffe Institute can be found at: http://www.radcliffe.edu

Spring 2006 INFORMS Seminar Series Announced

The Spring 2006 University of Massachusetts INFORMS Speaker Series in Operations Research/Management Science, organized under the auspices of its Student Chapter, will be announced and online soon. We are extremely pleased and delighted that the following speakers have been confirmed: David Lazer from the Kennedy School of Government at Harvard University, Georgia Perakis of the Sloan School at MIT, Dietrich Braess of Ruhr University Bochum, Ed Kaplan of the Yale School of Management and the Yale School of Medicine, and Albert-Laszlo Barabasi of the University of Notre Dame.

Updated information regarding the UMass Amherst INFORMS seminar series is available at: http://supernet.som.umass.edu/informs/speakers.html

Professor Nagurney with Professor Aura Ganz and several students at the luncheon following her INFORMS Student Chapter Seminar Presentation on November 18, 2005

Center Associates Well-Represented at the INFORMS National Conference in San Francisco

Student Associate, Tina Wakolbinger, joined Center Associates: Ding Zhang, Jose Cruz, Monica-Gabriela Cojocaru, and Anna Nagurney at the INFORMS National Meeting in San Francisco, California, November 13-16, 2005. Tina also participated in the Doctoral Colloquium for Future Academicians preceding the conference and presented a paper co-authored with Nagurney.

UMass Amherst INFORMS Student Chapter members: Christian Wernz, Dayo Shittu, and Tina Wakolbinger (see photo below) were at the FORA breakfast meeting at which Anna Nagurney received the 2005 INFORMS Moving
**Spirit Award** for her work with the UMass Amherst INFORMS Student Chapter. Having the UMass Amherst students present at the awards ceremony was a wonderful surprise for Professor Nagurney!

The various activities of the student chapter, including presentations of seminar speakers and photos, can be found on the chapter's website: [http://student.som.umass.edu/informs/](http://student.som.umass.edu/informs/)

**Two Talks Presented at Harvard**

On November 9, 2005, Anna Nagurney gave a talk entitled, "Dynamic Networks with Applications," in the Fellows Seminar Series at the Radcliffe Institute for Advanced Study. Her doctoral students traveled from Amherst to attend her talk and presented her with a big bouquet of flowers.

On December 12, 2005 Anna gave the talk, "The Evolution and Emergence of Integrated Social and Financial Networks," at the Kennedy School of Government at Harvard in the Cambridge Colloquium on Complexity and Social Networks series. Her host was Dr. David Lazer. Both Harvard presentations can be downloaded from: [http://supernet.som.umass.edu/visuals.html](http://supernet.som.umass.edu/visuals.html)

For additional information regarding this colloquium series, its sponsorship, as well as discussions related to the presentation(s), including a blog on social networks, see: [http://www.ksg.harvard.edu/netgov/html/index.htm](http://www.ksg.harvard.edu/netgov/html/index.htm)

**Kudos and Congratulations**

Dmytro Matsypura, a doctoral candidate in Management Science at the Isenberg School of Management, successfully defended his proposal dissertation, "Dynamics of Global Supply Chains and Electric Power Networks: Models, Pricing Analysis, and Computations," on December 8, 2005. Congratulations to Dmytro!

Dmytro expects to complete his doctoral dissertation in 2006 and is hoping to assume a tenure-track academic position.

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**More Center Associate News**

Patrizia Daniele has completed her book on dynamic networks and variational inequalities and it will be published in 2006 in the **New Dimensions in Networks** series by Edward Elgar Publishing. For more information about books in this series, please see the following: [http://supernet.som.umass.edu/newdimne.html](http://supernet.som.umass.edu/newdimne.html)

Tina Wakolbinger will be attending a course on Complex Systems at MIT in Cambridge in mid-January 2006. The course is hosted by the New England Complexity Systems Institute. See: [http://www.necsi.org](http://www.necsi.org)

Anna Nagurney was featured in the most recent **INFORMS Computing Society Newsletter**; see: [http://mason.gmu.edu/%7Easofer/ics/v26n1.pdf](http://mason.gmu.edu/%7Easofer/ics/v26n1.pdf)
Professor Ariela Sofer of George Mason University, for the writeup in the Member Profile.

Anna Nagurney's essay, “Transportation and Energy: The Route to Prosperity and Sustainability,” will appear in the Spring 2006 issue of UMass Magazine. In the essay, Anna discusses the relationships between transportation and energy consumption and provides a prescription for reducing our dependence on oil and associated emissions.

Anna Nagurney was appointed to the editorial board of the new journal, The Journal of Financial Decision Making, whose Editor-in-Chief is Professor Constantin Zopounidis. The first issue of the journal appeared in June 2005. Congratulations to the Editor-in-Chief and members of the editorial board!

Taylor & Francis has announced a new journal for 2007, the International Journal of Sustainable Transportation, which will be co-edited by Dr. Chang-Ho Park of Seoul National University and Dr. S. C. Wong of The University of Hong Kong. Anna Nagurney has agreed to join the editorial board.

Global Supply Chain Network Dynamics with Multicriteria Decision-Making under Risk and Uncertainty, A. Nagurney and D. Matsypura, appears in Transportation Research E (2005), 41, 585-612 (special issue on Global Logistics).


Upcoming Conferences

Upcoming conferences in which the Director of the Virtual Center for Supernetworks and several of its associates will be participating are as follows.


The 12th International Conference on Computing in Economics and Finance will take place in Limassol, Cyprus, June 22-25, 2006. See: http://www.csdassn.org/europe/cef06

The 21st European Conference on Operational research will be in Iceland, July 2-5, 2006. For information, see: http://www.euro2006.org/

Center Publications

Copies of these (and other) center articles may be found at: http://supernet.som.umass.edu/dart.html


In closing, the Center Director and its Associates wish everyone a wonderful New Year and we thank everyone for their support!

Students and guests enjoying the end of the semester UMASS INFORMS Holiday Party in December 2005 (right)