**EXCELLENCE IN THE TEACHING OF OPERATIONS RESEARCH**

**Award Recipients for 2004 – 2010**  
**Presented by IIE – OR Division**

Dr. Joel Sokol and Dr. Amy Cohn are the co-recipients of the 2010 Award for Excellence in the Teaching of Operations Research. Dr. Sokol from Georgia Tech was nominated in recognition of his outstanding teaching in the required core “Engineering Optimization” course and the follow-on “Advanced Optimization” elective. In her nomination letter, Dr. Ozlem Ergun writes “The Engineering Optimization class Dr. Sokol teaches is one that I have also taught. From all I have seen and heard from students who took the class when he taught it, it is clear that Dr. Sokol is the “gold standard” for teaching Engineering Optimization. This is not just my opinion, but the opinion of our faculty at large. When a PhD student is assigned to teach a section of Engineering Optimization, the first place our Associate Chair of Undergraduate Programs sends him or her is to Dr. Sokol’s office to get advice (and to get Dr. Sokol’s huge zip file of outstanding course material).” One student commented, “The key to Dr. Sokol’s success was not convincing the class (or at least myself) that optimization was fun or cool, but that he could teach it to everyone. My class had an unusually large number of students, yet Dr. Sokol was still able to communicate important concepts to the class. Based on the way he could explain complex information, most felt Dr. Sokol capable of writing a textbook for the course that could nearly stand alone.”

Dr. Amy Cohn of University of Michigan was nominated for her exemplary teaching in IOE 310, Introduction to Optimization Methods. In his nomination letter, the department chair Dr. Mark Daskin writes, “One of the most innovative aspects of Amy’s approach to IOE 310 is her use of office hours… Amy began her career holding standard office hours. When the crush of students in her office became unbearable, she moved her office hours to an unused classroom. One day, she was late for the office hours and found that the students had self-organized into groups and were helping each other. This led to a new model of office hours, now held in a cafeteria to accommodate all students, in which students work on problems together helping each other.” One of her students commented that “Professor Cohn has a very dynamic and engaging teaching style. Her dedication to the education of all students is evident in the way she presents material in a thorough manner so that everyone understands. Prof. Cohn also possesses a rare ability to recognize each student’s capability and to provide every student with what they want out of the course. For example, when covering the topic of Modeling, students who struggled with the concept were accommodated by having more class time on the topic, while those students who grasped the topic were able to work on more complex problems.”
**Dr. J. Cole Smith** is the recipient of the 2009 Award for Excellence in the Teaching of Operations Research. Dr. Smith taught a class entitled Operations Research 1 (OR 1) at the University of Florida in 2008. His qualifications for the award were based on a nomination letter from one of his students and a letter from his department head. In his nomination letter, the department chair, Dr. Joseph C. Hartman writes “he [Dr. Smith] is a demanding and beloved teacher; he is an outstanding researcher; he is an excellent mentor and advisor; and he is a wonderful colleague. Obviously, the focus of this award is on his teaching, but one must understand that he is a brilliant teacher in the context of being a wonderful professor.”

Dr. Smith has taught a variety of courses, including required B.S. and M.S. courses, Ph.D. level electives, and core courses. He also taught in the Outreach Engineering Management program. Despite large enrollments, his ratings were impressively high, with 4.72/5.0 being the lowest score. Dr. Smith received a perfect 5.0 out of 5.0 on his overall teaching evaluation in this class, which numbered 44 students. The OR 1 students felt that while the course was challenging, Dr. Smith succeeded in sharing his enthusiasm with the course material and relating it to real-world situations. His course was viewed as being very well-organized, and Dr. Smith consistently kept a "blog" that helped students assimilate the concepts from each lecture into the main themes of class. Several of these students have now begun graduate work in the area of Operations Research.

**Dr. Burak Eksioglu** is the recipient of the 2008 Award for Excellence in the Teaching of Operations Research. Dr. Eksioglu was nominated in recognition for his outstanding teaching in the Operations Research I (IE 4713) and Logistics Engineering (IE 4543) courses at Mississippi State University. In his nomination letter, the department head, Dr. Royce Bowden writes “Dr. Eksioglu has provided leadership in ISE through his dedicated service as the chair of the Operations Research and Statistics Technical Committee. The Committee is responsible for defining the content for both the undergraduate and graduate course offerings in operations research. Furthermore, the Committee, under Professor Eksioglu’s leadership, defines outcomes assessments used in operations research courses to help ensure the continual accreditation of our undergraduate program by ABET. Professor Eksioglu’s students benefit from his use of advanced technologies in the classroom. Dr. Eksioglu uses Respondus to create interactive tests for his students and publishes them on WebCT for student convenience. He was one of the first members of the faculty to embrace the use of Horizon Wimba for teaching courses in the distance program, and he helps other members of the faculty learn the technology."
One student commented, “He [Dr. Eksioglu] showed that he valued our opinions and desired to improve his teaching methods by distributing surveys twice during the semester. He discussed the survey responses with us and implemented our suggestions. I think to have professors who are so much more in touch with the student life makes the learning experience so much more enjoyable.” Obviously, Dr. Eksioglu is dedicated to his student’s education, and they are benefiting from that dedication.”

**Dr. Maged Dessouky** is the recipient of the 2007 Award for Excellence in the Teaching of Operations Research. The nomination package included support letters from faculty and students, instructional materials for the course, student teaching evaluations, and reflective statements by the nominee. Dr. Dessouky teaches two undergraduate courses at the University of Southern California, ISE 331 Operations Research II (Stochastic Processes) and ISE 410 Production II: Planning and Scheduling. The board was impressed with his high teaching evaluations, support letters among faculty and students alike, and innovative instructional tools that he has developed. He has won USC Associates Award in Teaching (Top University Award for Teaching), Alpha Pi Mu/Omega Rho Outstanding Teacher of the Year in Industrial Systems Engineering (five times), the USC Award for Excellence in Teaching, and the TRW School of Engineering Teacher Award.

In his nomination letter, the department chair James Moore writes, "I had the pleasure to sit in on one of Maged's last lectures in his undergraduate production class....He excels as a quasi-Socratic style that involves placing questions to students and engaging them, and using their feedback to assess their progress and his. His students trust at a level that most of us never enjoy. They are unafraid of offering an incorrect response. They know it will not be held against them, and that nothing in the way Maged fields the interaction will be a source of embarrassment. I find watching Maged in action very instructive. I would not expect his strategy to be so profoundly effective with respect to quantitative material, but it is. Further, he backs his efforts up with copious office hours. He is highly responsive to students, and they look forward to their classes with him. He will not be delivering his stochastic processes course this spring because he is on sabbatical, and I thought the students were going to riot."
**Dr. Seyed Iravani** is the recipient of the 2006 Award for Excellence in the Teaching of Operations Research. Dr. Iravani was selected among nominated candidates, each of whom must be an IIE member professor teaching an OR course in an Industrial Engineering program. Nomination packages included support letters from faculty and students, an outline and supporting instructional materials for the course, student teaching evaluations, and reflective statements by the nominees. Dr. Iravani was nominated for the course he teaches regularly at Northwestern, IE382 Production Planning and Scheduling. The board was especially impressed by Dr. Iravani’s teaching evaluations and the simulation system that he designed for teaching and research. He had strong support letters and detailed course notes, which were considered positively by the division Board.

In his nomination letter, the department chair Ajit C. Tamhane writes, “Iravani gets uniformly excellent reviews and is one of our best teachers. [His teaching evaluation] average score for the quality of undergraduate teaching has ranged between 5.3 to 5.5 out of 6, which is well in excess of two standard deviations above the average of about 4.7 for the department as a whole. He has also received the Department's Best Graduate Teacher Award. … An example of Iravani’s innovativeness in teaching is the RTMS [Real Time Machine Simulator] simulation system that he has developed to teach (and do research in) production systems design. The system consists of hardware, which gives a realistic experience of loading parts into a machine and processing them (including auditory and haptic feedbacks), process control mechanisms, control panel with readouts, and the software that runs the system. Iravani has built a prototype which students use in the IE 382 lab, and he has applied for a patent.”

The award was presented to Dr. Iravani at the Division Town Hall Meeting on Monday May 22 at the IIE Annual Conference in Orlando, Florida.

**Dr. Mary Beth Kurz** is the recipient of the 2005 Award for Excellence in the Teaching of Operations Research. Her department chair, Anand Gramopadhye, wrote, “Since joining the faculty ranks of the Industrial Engineering Department at Clemson University, Dr. Kurz has been tasked with teaching the introductory Operations Research course at the undergraduate level in our department. Following the first offering of the course, Dr. Kurz has spent a great deal of time and effort in modifying the course and how it is taught for the betterment of students. Dr. Kurz, in her teaching statement, clearly articulated a methodology that maps Bloom’s taxonomy of course objectives to student outcomes to help modify the course. In applying this rigorous methodology, Dr. Kurz has carefully evaluated the content, the methods, and the delivery system used in her course.
The focus has been on improving students’ learning of the material and creating an exciting classroom environment. She has taken special interest in improving the classroom experience by integrating computer exercises and the use of active learning tools… [Her teaching evaluations] place her in the top 1% of the entire faculty in the College of Engineering and Science. Analysis of exit interview surveys of graduating students have also confirmed that she is a truly outstanding teacher… My personal observations of her teaching have shown that she truly cares that the students learn the material in her classroom and enjoy the classroom interactions. For her efforts she was selected twice as the ‘Professor of the Year’ by the IE student body.”

**Dr. Barry L. Nelson** is the recipient of the 2004 Award for Excellence in the Teaching of Operations Research. Dr. Nelson was selected among nominated candidates, each of whom must be an IIE member professor teaching OR courses in an Industrial Engineering program. Nomination packages included an outline and supporting instructional materials for the courses, student teaching evaluations, and reflective statements by the nominee. Nelson was honored for his work on teaching probability and simulation to undergraduate IEs at Ohio State and Northwestern. He believes that the very best engineers have a sense of what the answer to a problem should be before they ever write down an equation or put a number in a computer, and he tries to develop that kind of intuition in his students. For probability, his approach is to use simulation to develop students’ intuition, and his book, *Stochastic Modeling: Analysis & Simulation* (1995), Dover Publications, Inc., Mineola, NY (originally McGraw-Hill), supports that approach. Nelson is also a co-author of *Discrete-Event System Simulation* (2001), third edition, Prentice Hall, New York, with J. Banks, J. S. Carson and D. Nicol (now in its 5th edition and used at over 60 universities).