RESEARCHER ENJOYS WEARING TWO HATS

Tom O’Brien feels he has the “best of both worlds” as METRANS Applied Research Coordinator. He gets to spend time both in the classroom and on the docks.

“I’m in an academic environment, but it’s not traditional,” he explains, “and I’m out in the field a lot, not like most traditional educators.” With offices at Cal State Long Beach and constant work with USC, O’Brien does have one foot in two worlds.

They are united, however, by a theme: goods movement. O’Brien “got hooked on goods movement” while in graduate school. As a doctoral student in planning at USC, O’Brien worked for METRANS Director Genevieve Giuliano. One of his early assignments involved a Federal Highway Administration freight planning workshop. He found it fascinating.

**Goods Movement and Policy.**

Today, O’Brien’s research is far-reaching, embracing both policy and goods movement issues. He feels that his current research is particularly significant. He is evaluating PierPASS, the program of extended marine terminal gate hours at the ports of Los Angeles and Long Beach. “It’s a policy approach that may have national implications.”

“This research is both quantitative and qualitative,” he continued. “We’re looking at Caltrans and California Highway Patrol data to observe changes in traffic and accident patterns.” Conducted with co-author and now colleague Genevieve Giuliano, the work is comprehensive. O’Brien noted that they will assess terminal operators’ responses and trucking companies’ changes, warehouse and distribution centers’ reactions, and opinions among nearby residents and politicians as well.

**PierPass Implications.** “A lot of people around the country are looking at extended gate hours as a way to alleviate port congestion,” according to O’Brien. He expects a number of inquiries from far-flung ports after the report is published.

Their PierPass evaluation will be completed this summer, O’Brien expects.

**From Morocco to Southern California.** The road O’Brien took to his current job has been a very circuitous one. The child of an Albany, New York, politician, O’Brien was introduced to community planning literally at his father’s knee. He did not expect to follow in his father’s footsteps, but in some ways he has.

“Immediately after college,” O’Brien recalls, “I decided that my liberal arts (Continued on page 6)
It is increasingly hard to get the “straight story” about what is the best fuel for automobiles. While there are many proponents of different fuels, it is difficult to weigh their advantages and disadvantages in a systematic manner.

It was that “straight story” that attendees sought at the Future Fuels and Energy Initiative (FFEI) conference, held on USC’s campus May 23-24. The conference was jointly sponsored by METRANS and FFEI, a new cross-disciplinary program at USC.

FFEI’s purpose is to develop a cross-disciplinary community of energy scholars at USC. Nearly 80 chemists, engineers, economists, policy analysts, planners, and corporate executives exchanged research and other information about the state of energy usage in automobiles.

“I deal with this every day, but I learned a lot about the science at a level that made sense,” said Kathryn Higgins of the South Coast Air Quality Management District, following Paul Ronney’s presentation about the internal combustion engine.

METRANS Director Genevieve Giuliano’s session tackled research and policy issues. While there are clear political, economic and scientific challenges, she noted, in the development of the best long term automotive fuel, the biggest issue is probably the existing infrastructure for petroleum-derived fuels (gasoline, diesel, etc.). “It is hard to overestimate the advantage of the vast oil-based infrastructure.”

The conference was the first formal joint event sponsored by METRANS and FFEI. Since they share many common interests related to transportation and the challenges of cross-disciplinary faculty research, there is ample room for cooperation.

“This is such an important issue for our future,” noted Giuliano, “that we anticipate more cooperative research, seminars, and other innovative events.”

The newly drafted FFEI mission is to become the premier center for cross-disciplinary research that creates both short and long-range fuel and energy solutions.

FFEI research is expected to address both conventional and newer fuels—including solar, wind, etc., and will include all phases of the fuel production/consumption process. Further, FFEI researchers will address the economic, environmental, and policy aspects of transition. Carbon based fuels will be a major focus, due to better overall energy density and convenience of use than non-carbon based fuels (e.g., hydrogen).

Research objectives include increasing energy efficiency, developing carbon-neutral energy generation and storage techniques, and employing alternative energy sources.

In order to generate sustainable funding, FFEI will follow...
METRANS Issues Call for Applied Research Program

Nineteen pre-proposals were received in response to the latest Request for Proposals in METRANS’ Monitoring the Ports program. “By the deadline on February 9,” said Tom O’Brien, Applied Research Coordinator, “we received the largest number of proposals ever submitted.”

Funding is reserved exclusively for faculty at California State University, Long Beach. O’Brien noted that several proposals were written by faculty never before funded by METRANS. “We are thrilled,” he said.

Review Process. All two- or three-page pre-proposals are subject to review by the METRANS Executive Committee.

In the spring, faculty were notified about whether they were to be invited to submit a full proposal. The maximum award will be $40,000.

Monitoring the Ports is METRANS’ applied research program designed to support METRANS-funded technology transfer activities conducted by the CSULB Center for International Trade and Transportation. The goal is to develop an information base of seaport operations and goods movement at the local ports.

METRANS Announces Recently Completed Research Projects

Note: All Reports are available at www.METRANS.org.

<table>
<thead>
<tr>
<th>Date</th>
<th>Status</th>
<th>Title</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>04-09</td>
<td>Draft</td>
<td>Reduction of Construction Project Risks to Pedestrians</td>
<td>John Kuprenas</td>
</tr>
<tr>
<td>04-15</td>
<td>Final</td>
<td>Confidence Intervals for Estimated Traffic Demand</td>
<td>Fernando Ordonez and Kurt Palmer</td>
</tr>
<tr>
<td>04-18</td>
<td>Final</td>
<td>Transit Investment and the Capitalization of Access into Land Values</td>
<td>Christian Redfearn</td>
</tr>
<tr>
<td>05-04</td>
<td>Final</td>
<td>Ports and Highways Infrastructure Investment and Interstate Spatial Spillovers</td>
<td>Kristen Monaco</td>
</tr>
<tr>
<td>05-10</td>
<td>Draft</td>
<td>Improving Trucking Safety: Effects of Driver Hours of Service Regulations</td>
<td>Randolph Hall</td>
</tr>
<tr>
<td>05-14</td>
<td>Draft</td>
<td>SURE-FT: Sensor for Unexpected Roadway Events: Field Trials</td>
<td>Genevieve Giuliano and John Heidemann</td>
</tr>
<tr>
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<td>Draft</td>
<td>Development of an Exposure Model for Diesel Locomotive Emissions Near the Alameda Corridor</td>
<td>Hamid Rahai</td>
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<td>AR 05-05</td>
<td>Final</td>
<td>Identification of Port Communication Equipment Needs for Safety, Security, and Interoperability</td>
<td>Henry Yeh</td>
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</table>

Mahyar Amouzegar Joins METRANS Executive Committee

METRANS’ Executive Committee welcomes CSULB’s Mahyar Amouzegar to its ranks, following the departure from CSULB of Mike Mahoney, former Dean of Engineering.

Amouzegar brings a wealth of logistics and engineering background to the task. Having spent nine years with the RAND Corporation, Amouzegar formerly focused on research on military logistics.

Now he serves in several capacities at CSULB, including:

- Associate Dean for Research and Development in the College of Engineering;
- Director of the new CSULB Center for Advanced Logistics Management Systems (CALMS);
- Director of the Center for Commercial Deployment of Transportation Technologies (CCDoTT).

These multiple responsibilities afford Amouzegar a wide range of views of transportation research issues. They include engineering perspectives associated with transportation information systems (CALMS) to military policy and maritime advances (CCDoTT).

“We are pleased to add Prof. Amouzegar’s expertise to our Executive Committee,” noted METRANS Director Genevieve Giuliano. “His unique points of view and background will give a new dimension to our research capabilities.”

Amouzegar’s background at RAND included research on Air Force logistics. He received his Ph.D. in Operations Research from UCLA.
METRANS Education

Masters in Global Logistics Degree Approved as Regular Program

While the logistics industry has been growing by leaps and bounds, those employed in the field have had to patch together relevant education from several programs. No longer.

The California State University (CSU) has approved the innovative Master of Arts in Global Logistics (MAGL), allowing it to move from “pilot” to “regular” status, according to Dr. Joseph Magaddino, Chair of the Department of Economics at CSU, Long Beach. The program applies the analytical tools of a traditional MBA to the dynamic field of global logistics, preparing professionals for opportunities in the growing goods movement industry.

Magaddino explained that CSULB has “fast-tracked” the development of the MAGL degree. “Fast-track” has still been lengthy, but it is faster than the usual 4-5 years with a typical CSU degree program.

The “pilot” program followed an initial 18-month preparation period from the proposal to the admission of students. It has been a resounding success, having graduated four classes, totaling 55 alumni. The first class graduated in 2005.

Requirements for Regular Status. In order to be considered for permanent status, the pilot program was required to be self-supporting (not state-supported) and could only be offered for a maximum of five years.

“Students accepted into the (pilot) program,” said Magaddino, “are full-time employees in the logistics industry and enroll in one course at a time. Courses run on a 6.5 week calendar, allowing students to complete their degrees in 22 months,” he noted.

The self-supported program will continue while the University folds the MAGL into its regular academic processes, said Magaddino. Permanent status will allow development of a state-supported program on the normal semester calendar. In approximately two years, students will be admitted to the state-supported program. Importantly, state support “will allow us to recruit additional permanent faculty to teach in the program,” he said.

Demand. Demand is enhanced through scholarships provided by the Port of Long Beach and through employers who offer tuition reimbursement for MAGL. Typically 25 students have been admitted each September.

Magaddino said a sampling of alumni job titles indicates they are working in their chosen field, including Operations Manager, Transportation Manager, Distribution Center Manager, Inventory Analyst, and Market Operations Director.

Global Logistics Specialist® Program Wins National Honors

Well into its tenth year, the Global Logistics Specialist® program at CSULB has more than an anniversary to celebrate.

The GLS® was named the 2007 Outstanding Program by the University Continuing Education Association (UCEA). The award was presented to Marianne Venieris, Executive Director of CSULB’s Center for International Trade and Transportation (CITT) in April at the 92nd Annual UCEA Conference in Vancouver, British Columbia, in April.

History. Venieris launched the program after much consultation with people working in the logistics industry, which has grown dramatically in Southern California along with the explosion of trade with Asia, particularly China.

The GLS® offers a professional designation for people in the goods movement industry and those new to the industry. The program modules address diverse issues, processes, and technology, and directly reflect training and education needs identified by those in the industry.

The program attracted a large number of students from the very beginning, according to Venieris.

She attributes much of the success of the program to the industry experts who teach in the program. “They have incredible credentials,” she noted, “earned the hard way—

(Continued on page 6)
**METRANS Education**

**Doctoral Student Awarded Summer Fellowship in Washington, D.C.**

It has been one surprise after another for USC doctoral student Sylvia He, who is spending the summer working on a fellowship for the Transportation Research Board (TRB) in Washington, D.C. TRB is part of the National Academies of Science.

First, there was the award itself, of course. Beyond that, she said, “I didn’t expect that TRB would generously offer me an office of my own, with a large window and a view of the Capitol Dome, since most of the fellows in the program (they are not working with TRB) work in cubicles.”

Then there was the “extracurricular education” she has been encouraged to enjoy. “I didn’t expect it, but the fellowship program actually encourages fellows to explore D.C. outside the National Academies,” He continued. “We are given a lot of information on Congressional hearings, briefings, and science policy jobs.”

**The Work.** He’s first project involves examining the relationships among development patterns, vehicle miles traveled, and energy. The project was requested by Congress. He will summarize relevant literature first, and then help arrange for experts to speak at committee meetings.

**Networking.** Learning the value of networking from experts is another surprising benefit of the fellowship. She finds that she enjoys attending policy hearings and watching Congressional voting. “People here are well networked. It seems right that everybody somehow knows everybody in this city. We had an alumni get-together. I was amazed by the number of our alumni who are working for Congressmen, Federal offices on the Hill and other think tanks in D.C.,” she explained.

**Impacting Policy.** It is no surprise that she enjoys working in the capital. “It didn’t take me long to get settled in. It seems that D.C. is the city to work in if you want to see or make an impact of science and technology on policy.”

**STUDENTS ATTEND UCTC STUDENT RESEARCH CONFERENCE AT UCLA**

The University of California Transportation Center Student Research Conference attracted a large number of USC attendees this year. The 13th annual event was sponsored in February by the Institute for Transportation Studies at UCLA and was held at UCLA’s Lewis Center for Regional Policy Studies.

Participants from USC were Ajay Agarwal, Hossein Ataei, Jongkoo Cho, Preeti Ghuman, Sylvia He, Lingqian Hu, Amna Imam, Changsoo Jeong, Alison Linder, Yi Lu, Peter McFerrin, JiYoung Park, Jennifer Shih, Ilgaz Sungur, Yun Wang, Michael Yao, and Xian Zhang.

Their disciplines include Planning, Engineering, Sociology, and Geography.

The conference traditionally offers students working on transportation a chance to present their own work and discuss various related research issues with both students and faculty from other universities.

As such, the UCTC represents an excellent development opportunity for those who may decide on transportation research as a career.

**$5,000 WISE Merit Fellowship Goes to Iris (Zhihong) Shen**

Overcoming a highly competitive field across all departments of the Viterbi School of Engineering, USC student Iris (Zhihong) Shen has been awarded a $5,000 merit fellowship from the Women in Science and Engineering (WiSE) Program.

Shen is a third-year doctoral student at USC. The funding will be matched by her home department, the Daniel J. Epstein Department of Industrial and Systems Engineering, or by USC. The award is designated for the forthcoming academic year, 2007-2008.

**Research Areas.** Shen is specializing in research on vehicle routing to minimize unmet transportation demand. She is working in San Francisco during the summer and will return to USC in the fall.

**WISE Program.** The University of Southern California’s Women in Science and Engineering Program is administered by the Office of the Provost.

The Program is designed to increase the number of women in science and engineering, which historically have attracted very few women in the United States. Other countries, however, have better “track records” for women in science and engineering. Some experts consider attracting a female talent pool to be a matter of national security.
METRANS Research and Education

GLS® Honored, Cont.
(Continued from page 4)
by working in the field and by developing Southern California’s logistics industry as a worldwide leader. Our students are fortunate to have such expertise, and we are grateful to those instructors for sharing their knowledge.” More than 1,000 students so far have participated in the program. Its success led to the development of the Master of Arts in Global Logistics degree program as well (see story on p. 4).

New Media. Beginning in 2004, the Global Logistics Specialist® was offered online. Students have enrolled from around the country and abroad. A new version of the course is now being offered in China with an affiliate program.

Logistics training is in demand worldwide,” offered Venieris, “It is an increasingly important global field, and we are proud to be at the forefront in helping people find that training.”

Two Hats, cont.
(Continued from page 1)
background didn’t give me a lot of skills for employment, so I joined the Peace Corps.” His assignment was Morocco, where he worked as a high school English teacher. After two years in a rural area in Eastern Morocco, O’Brien was sent to the capital where he acted as liaison to volunteers in the field and also did some teacher training. Little did he realize he was preparing for his current position.

Returning to the U.S., O’Brien entered the Planning program at USC, since he had been exposed to a host of planning issues in Morocco. “I got involved in land use and environmental planning at USC while interning with a small consulting firm,” he said.

Replay: Morocco to USC. After another stint in Morocco on a Fulbright grant, O’Brien chose to do his doctoral work at USC and found himself immersed in transportation.

His doctoral dissertation dealt with public transit, says O’Brien, on the challenge of integrating new technologies across different transit agencies. “I found that area was very applicable to goods movement. Any effort to integrate the work of multiple agencies is never a given. They bring different cultures and assumptions to the table.”

Bridging the Divide. Now an expert at straddling two cultures, O’Brien was named Director of Research at the Center for International Trade and Transportation (CITT), a unit of CSULB which is a partner with METRANS. “CITT has traditionally been the outreach arm of METRANS,” said O’Brien. He is challenged to bring the academic and research faculty into contact with the “real world” of goods movement in Southern California.

Part of his role involves helping to develop new educational programs, such as a recent course for public officials on the planning issues associated with the local air freight industry.

A major part of O’Brien’s job, though, is encouraging faculty on the CSULB campus to adapt their research topics and methods to the challenges of goods movement. “Given the proximity of the campus to the two ports and interests of faculty, there should be good synergy.”

For that reason, METRANS created “Monitoring the Ports,” a program providing funds to CSULB faculty for applied research about important port-related goods movement topics. O’Brien cultivates research for Monitoring the Ports.

Over the last two years, “I’ve tried to understand what research expertise we have in various disciplines on the campus, and I try to introduce the idea. Researchers may not understand that what they have done in Economics or Health Sciences has relevance.

“We invite them to come to the Introductory Class of the Global Logistics Specialist program, and we have also given them access to material prepared for the GLS® online class. It gives them information for a well informed research proposal.”

O’Brien finds that those faculty have subsequently developed some very interesting research topics.

Managing Researchers. O’Brien says the job of managing the researchers is “very easy. My job involves little of the administrative drudgery of the research process. Much of what I deal with is determining the ideas, feasibility, access to data, and facilitating relationships between researchers and the goods movement community.”

CALMITSAC. Calling on O’Brien’s policy and goods movement expertise, he recently helped author a report to the California Legislature on behalf of the California Marine and Intermodal Transportation System Advisory Council concerning the State’s infrastructure needs.

“The report,” notes O’Brien, “will be used to help allocate infrastructure spending.”

Balance. No matter how many hats he wears, O’Brien enjoys that his position helps to balance the institutional roles of CITT and METRANS. “It’s three-pronged: outreach, research, and education.”
METRANS Executive Committee

Genevieve Giuliano, Director
Associate Dean, Research and Technology, School of Policy, Planning & Development, USC

Marianne Venieris, Deputy Director
Executive Director, Center for International Trade & Transportation, CSULB

Petros Ioannou, Associate Director
Professor, Electrical Engineering Systems, USC

Mahyar Amouzegar, Associate Dean for Research & Development, College of Engineering, CSULB
Anastasios G. Chassiakos, Executive Director of Assessment, College of Engineering, CSULB
Maged Dessouky, Professor, Daniel J. Epstein Department of Industrial & Systems Design, USC
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Burkhard Englert
Mohammed Forouzesh
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Darin Goldstein
Lisa Grobar
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Ken James
Christine Jocoy
Tim Jordanides
Melody Kiang
Shui Lam
Christopher Lee
Bei Lu
Joseph Magaddino
Kristen Monaco
Tom O’Brien
Emily Parentela
Hamid Rahai
Antonella Sciortino
Tariq Shehab
Seiji Steimetz
Reza Toossi
Jalal Torabzadeh
Suzanne Wechsler
Henry Yeh
Hsien-Yang Yeh

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Information Systems
Computer Eng. & Computer Science
Health Sciences
Computer Engineering
Economics
Mechanical, Aerospace Engineering
Electrical Engineering
Computer Engineering
Geography
Mechanical & Aerospace Engineering
Economics
Ctr for Int’l Trade & Transportation
Civil Engineering
Mechanical Engineering
Civil Engineering & Const. Eng. Mgt.
Civil Engineering
Economics
Mechanical & Aerospace Engineering
Mechanical Engineering
Geography
Mechanical & Aerospace Engineering

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Satish Bukkapatnam
Maged Dessouky
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Randolph Hall
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METRANS Website

Information on transportation research, publications, education, training & technology transfer can be found at the METRANS website: www.METRANS.org. The site also lists faculty, news, links to other relevant sites, and information on USC & CSULB transportation education programs.
Dear Reader:

The end of the academic year is a time for reflection on the past year’s accomplishments. We’ve had an exciting year, starting out with winning our second national competition and thus continuing as a Tier 1 University Transportation Center. The new grant requires a new strategic plan, which was submitted in May. Our new strategic plan calls for selective expansion in research, education and outreach, while retaining and strengthening our focus on metropolitan transportation problems. In order to accomplish our research goals, Prof. Petros Ioannou has been appointed Associate Director. In that position he will lead the development of our test bed activities and manage our proposal review process.

As always, METRANS has had a busy and productive year. We approved a new round of research grants—the largest ever—most of which began in the fall semester. We continue to attract new faculty to transportation research, a fundamental purpose of the UTC program. The ninth Town Hall took place in February, and we offered our first workshop for elected officials soon after. We also co-sponsored a conference on alternative fuels with the USC Future Fuels and Energy Initiative. Our students were busy attending conferences and receiving awards, some of which are described in this issue. We are looking forward to another year of exciting and innovative programs.

Genevieve Giuliano
Director, METRANS Transportation Center