

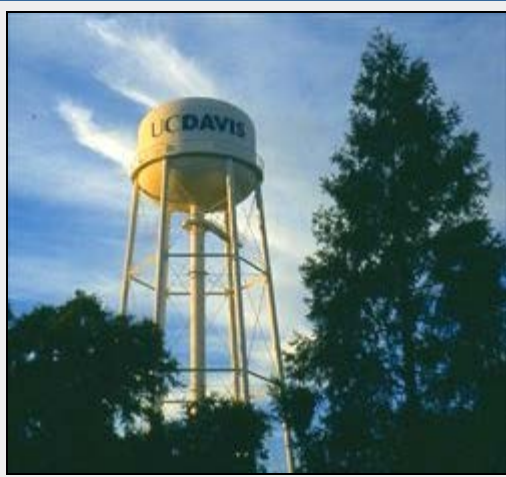
ITS-Davis e-news is the electronic newsletter of the UC Davis Institute of Transportation Studies. Written for alumni and friends, ITS-Davis e-news reports information from ITS-Davis and affiliated campus departments that host transportation-related programs. For previous issues, see the [e-news archives](#).

▶ Issue 25, October 2005

- [Education Highlights](#)
 - [POISED TO GROW: 12 New Transportation/Energy Faculty Positions Approved](#)
 - [IT'S ABOUT THE AIR WE BREATHE: Campus Research Program Expands](#)
 - [NEW FUNDS, NEW PLANS: Federal Grants Seed New Research](#)
 - [INTERNATIONAL ECONOMICS ACCLAIM: Feenstra Wins German Award](#)
 - [MARKING SUCCESS: Seven-Year IGERT Grant Program Comes to a Close](#)
 - [NEW YEAR, NEW SEMINARS: Weekly Seminars Draw a Crowd](#)
 - [NEW YEAR BEGINS: Students Get Active](#)
- [Research Results](#)
 - [ASILOMAR: Building A Policy Agenda for Climate Change](#)
 - [ON THE ROAD TO STEWARDSHIP: UC Davis Road Ecology Center Co-Hosts International Conference](#)
 - [TRANSPORTATION PUBLICATIONS FROM UC DAVIS: Hot off the Presses](#)
- [ITS-Davis and Campus Highlights](#)
 - [ENERGIZING CONGRESS: ITS-Davis Welcomes Energy Roundtable](#)
 - [HYDROGEN WORKSHOP: Societal Costs and Benefits](#)
 - [EAST MEETS WEST: UC-China Collaboration Begins](#)
 - [ITS-DAVIS PEOPLE: Awards and Accomplishments](#)
 - [EXTRA! READ ALL ABOUT IT! ITS-Davis and UC Davis Researchers in the News](#)

▶ Education Highlights

POISED TO GROW: 12 New Transportation/Energy Faculty Positions Approved



The new academic year kicked off with the exciting news that Provost Virginia Hinshaw has approved 12 new full time equivalent faculty positions in transportation and energy studies at UC Davis. The announcement followed a campus competition. The proposed transportation-energy faculty initiative was awarded more positions than any other initiative.

"This is terrific news," said ITS-Davis Director Dan Sperling. "We explained in our proposal that UC Davis has the potential to create the nation's No. 1 university centers in both transportation and energy. The decision-makers agreed this is a very realizable goal."

The Institute paired its new faculty proposal with one submitted by the College of Engineering, a tactic that led to success, notes Dean Enrique Lavernia.

"Pairing our proposals was a natural fit. There are many synergies between the academic and research activities in the College of Engineering and ITS-Davis. Growing our faculties together and coordinating on this *Energy for the Future* initiative present a unique opportunity for the campus to leverage existing expertise and assume a leadership role in addressing these problems of recognized state, national, and global importance."

Recruits will be sought for their expertise in fields such as catalysis, fuel cells and hybrid vehicle technology, energy policy and analysis, transport economics, and energy logistics and infrastructure. The positions will be both tenured and tenure-track. Recruitment will begin next year and continue over the next two years.

IT'S ABOUT THE AIR WE BREATHE: Campus Research Program Expands

UC Davis researchers have been investigating air quality problems for decades and numerous investigators on campus are world-renowned for their expertise. Now the campus itself will become more widely recognized for its capabilities in the field with Chancellor Larry Vanderhoef's recent approval of a new campus-wide Organized Research Unit, the Air Quality Research Center.

"The Air Quality Research Center will join the research and teaching interests of nearly 60 investigators in at least ten departments and six colleges and schools around the unifying theme of air quality," said Director Anthony Wexler, a professor of Mechanical and Aeronautical Engineering, Civil and Environmental Engineering, and Land, Air, and Water Resources, and an affiliate of ITS-Davis.

"The caliber of researchers and faculty here is unmatched," Wexler said. "The new center will enable researchers to explore interdisciplinary topics and share resources."

By facilitating research on the scientific, engineering, health, social and economic aspects of gaseous and particulate pollutants in the atmosphere, the new center will strengthen the already-significant relationship between air quality and transportation researchers on campus.

UC Davis is building its strong tradition in interdisciplinary research and education, noted ITS-Davis Director Dan Sperling. "There are many overlaps between the faculty who will associate with the Air Quality Research Center and the faculty who affiliate with ITS-Davis. A strong air quality center builds our campus capabilities that will benefit all," Sperling said.

The center will increase the funding base for air quality faculty and provide a wider range of educational opportunities and funding sources for students. In addition, it will enable the joint purchase and maintenance of equipment that a single investigator or small group of investigators may not otherwise be able to afford, added Wexler.

Among the center's first new projects is a collaboration with UC Merced to improve Ph.D. programs at UC Davis and launch new programs at UC Merced. Cort Anastasio, an associate professor at UC Davis in Land, Air and Water Resources, and a member of the Atmospheric Science and Environmental Chemistry Graduate Group received a \$1.6 million training grant to support students working in air quality areas such as vehicle exhaust and climate change.



The AQRC will bring together researchers from multiple disciplines. Here, Professor Kent Pinkerton, director of the Department of Anatomy/Physiology and Cell Biology in the School of Veterinary Medicine examines an animal lung cast.

NEW FUNDS, NEW PLANS: Federal Grants Seed New Research



Student Bryan Jungers, with professors Andy Frank, Paul Erickson, and Dan Sperling in the lab with UC Davis's award-winning plug-in hybrid vehicles.

Two recent federal grant announcements reward UC Davis for its excellence in transportation research and energy, ensuring that further growth and development can occur on campus.

The recent reauthorization of the federal government's transportation legislation includes designation of ITS-Davis as a U.S. Department of Transportation University Transportation Center. The authorization means UC Davis will receive \$500,000 per year for the next five years, plus a likely match from the California Department of Transportation.

"This funding announcement was a delightful and unexpected surprise," said ITS-Davis Director Dan Sperling.

Additionally, UC Davis has been selected once again for funding through the five-year U.S. Department of Energy Graduate Automotive Technology Education (GATE) program for the Fuel Cell Hydrogen and Hybrid Vehicle Center.

First named a grant recipient under this program in 1997, the campus has had two GATE Centers of Excellence grants – one for hybrid vehicle research and another for fuel cell vehicle research.

Under the new grant, a single research and education center will focus on both technologies. Led by Dan Sperling and Mechanical Engineering Professor Paul Erickson, the new GATE Center will develop a curriculum in fuel cell hydrogen hybrid vehicles, and continue to support graduate fellowships and industry collaboration.

Upon receiving the news, UC Davis Vice Chancellor Barry Klein sent a note of congratulations. "This is a further tribute to the UC Davis and ITS-Davis team. The right people, in the right place, at the right time!" he wrote. "We are very proud of your efforts on the many important societal issues you are working on."

UC Davis is one of eight universities nationwide sharing the \$4.7 million allocation. UC Davis's share is \$595,000.

"GATE Centers of Excellence are an exciting opportunity to equip a new generation of engineers and scientists with knowledge and skills in advanced automotive technologies," said Douglas L. Faulkner, acting assistant secretary for energy efficiency and renewable energy, in a release. "The technologies developed will benefit the industry as we work to create more efficient gas powered, hybrid and even hydrogen powered vehicles."

INTERNATIONAL ECONOMICS ACCLAIM: Feenstra Wins German Award



Robert Feenstra

Robert Feenstra, a UC Davis Economics professor and ITS-Davis affiliate, has received the 2006 Bernhard-Harms Prize from the Kiel Institute for World Economics. The award is a tribute to Feenstra's unique collection of statistics that track how much nations earn from trading globally in commodities such as diamonds, rice, computer chips, and cars.

Feenstra has recently studied the impact of China's entry into the World Trade Organization on the automobile industry in that country. Through his extensive international research, Feenstra has created an enormous body of trade data at UC Davis that is accessible to scholars, policymakers, and analysts.

"Practically nobody had used these data before I put it together," Feenstra says. "I was able to change the nature of research of international trade economics from being simply theoretical to being based on real numbers."

The German Kiel Institute awards the prize every two years to outstanding economists in the field of international economic research. Previous recipients include Jeffrey Sachs, director of the Earth Institute at Columbia University, and Martin Feldstein of Harvard and president and CEO of the National Bureau of Economic Research.

Feenstra directs the International Trade and Investment Program within Feldstein's bureau, considered the nation's leading nonprofit economic research organization. Feenstra is one of the few West Coast directors of an organization whose researchers have included 16 of the 31 American Nobel Prize winners in economics and six of the past chairmen of the President's Council of Economic Advisers.

MARKING SUCCESS: Seven-Year IGERT Grant Program Comes to a Close

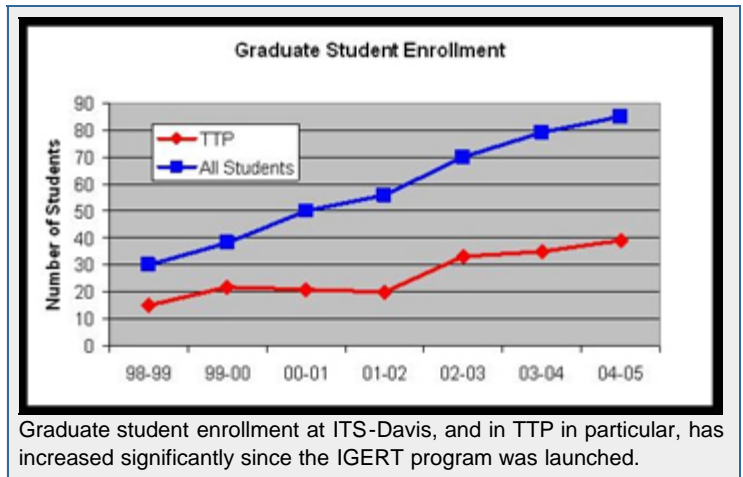
ITS-Davis marks an academic and institutional milestone this fall with the completion of the seven-year, \$2.7 million-dollar IGERT (Integrative Graduate Education and Research Traineeship) program, funded by the National Science Foundation.

IGERT directly funded 43 students in eight different programs (including research, teaching, international internships, and travel activities), 14 distinguished speakers, two graduate research conferences, a variety of recruiting practices, laboratory and computing equipment, and project administration.

When the IGERT program was started in the 1998 – 1999 school year, about 15 students were enrolled in the Institute's Transportation Technology and Policy (TTP) program. A similar number were affiliated with ITS-Davis through the Department of Civil and Environmental Engineering and other transportation-related programs. Now, more than 80 graduate students are conducting transportation-related research at UC Davis, with about half of those enrolled in TTP.

"IGERT has had everything to do with this meteoric rise, both directly and indirectly," explains principal investigator and ITS-Davis Associate Director Pat Mokhtarian .

Directly, IGERT enabled the Institute to fund more students at higher levels than would otherwise have been possible. Indirectly, the IGERT program attracted a higher quality and more eclectic set of students, thus elevating the quality of the Institute's academic offerings and creating a synergistic effect for continuing to attract outstanding students. Additionally, IGERT appears to have helped increase the gender diversity of transportation students at UC Davis; 23 percent of IGERT recipients were female, compared to 19 percent of non-IGERT transportation students enrolled during the same period. This is likely due in part to the program's higher-than-average proportion of women



Graduate student enrollment at ITS-Davis, and in TTP in particular, has increased significantly since the IGERT program was launched.

faculty.

IGERT also helped draw at least five new high-caliber faculty who demonstrate a firm commitment to interdisciplinary education and to the TTP program, Mokhtarian says. "They have enriched our curriculum with many new courses – both ad hoc and permanent – in critical areas such as transportation technology for non-engineers, transportation economics, land use, energy policy, and planning."

IGERT also enabled the Institute to institutionalize program elements that enhance the academic experience for students in transportation: special units on ethics have been incorporated into many classes, the Institute's internship program is more robust, and an exciting new collaboration between the Graduate School of Management, the College of Engineering and other units led to the Little Bang Business Plan Competition. This year, four student teams, three from ITS-Davis, pitched transportation-related business plans to a panel of local venture capitalists and UC Davis judges. Two of the ITS-Davis teams, each containing an IGERT fellow, took first and second prize. Both advanced to the final round along with four other teams in the UC Davis Big Bang Business Plan Competition.

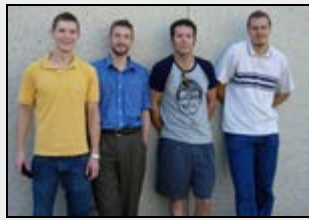
On the research front, IGERT fellows and their co-authors have produced at least 44 journal articles and 53 research reports that reflect the broad themes of Institute's program.

"In less than 15 years, ITS-Davis has vaulted into the top ranks of university transportation centers, due in sizable measure to the IGERT program," Mokhtarian continues. "We are proud of our accomplishments and grateful for the support that IGERT has provided."

NEW YEAR, NEW SEMINARS: Weekly Seminars Draw a Crowd

The continuing ITS-Davis Seminar Series features talks by transportation and energy researchers from UC Davis and other institutions, and by leaders in business, government, and other related fields. Topics are varied and always relevant. Seminars are Fridays from 2:30 – 3:45 in Roessler Hall, Room 55. They're free and open to the public. See the [Fall Seminar Series](#) schedule for details.

NEW YEAR BEGINS: Students Get Active



ITS-Davis Student Council:
Jonathan Hughes, Darius
Roberts, Justin Regnier, and
David Kuperman.

Welcome New Students!

ITS-Davis welcomes new graduate transportation students in a variety of departments.

This year's new Transportation Technology and Policy students are: Chien-Wei Chen, Reno Giordano, Bryan Jungers, Mike Keteltas, Brian Kuo, Hang Liu, Karl Lund, David McCollum, Tai Stillwater, Wei Tang, and Julia Wang.

In Civil Engineering, ITS-Davis welcomes the following: Ramon Alvarado, Yongxi Huang, Andrew McDade, Raghavender Palavadi, Nicholas Santero, and Shailendra Singh.

Students from other departments not listed will also affiliate with ITS-Davis.

Student Council Plans Big Year

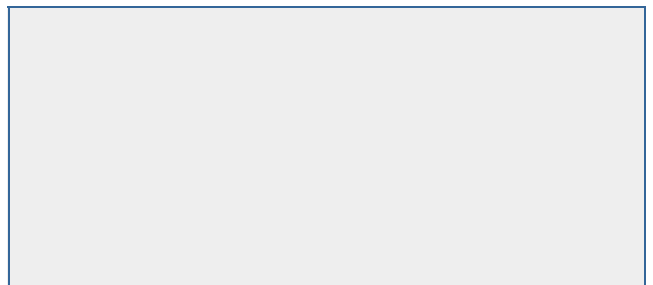
The 2005 – 2006 ITS-Davis Student Council is already making plans for ways to enhance student and faculty interaction this year. Led by Jonathan Hughes, David Kuperman, Justin Regnier and Darius Roberts, the council will continue its efforts to expand marketing of ITS-Davis graduate programs to a larger audience of prospective students. It also will play a major role in organizing the transportation and clean energy technology sector of the UC Davis Little Bang business plan competition.

Research Results

ASILOMAR: Building a Policy Agenda for Climate Change

More than 200 people from around the world came together at ITS-Davis's Asilomar 2005 conference in August to tackle what many agree is the greatest environmental challenge the world faces: climate change.

Participants traveled from as far as Japan, Germany, Canada, and the U.K., and represented state and federal governments, national labs, universities, auto and energy industries, international agencies such as the World Bank, and nongovernmental organizations.



We Ate the Whole Thing!

Lobster • 166.5 pounds

Oysters • 576 half shells

Dungeness Crab Cluster • 125 pounds

Coleslaw • 120 pounds

S'mores • 236 Hershey bars, 944 marshmallows, 472 Graham Crackers

The overarching goal was to expand understanding and try to address the enormity of the climate change challenges and questions facing policymakers. Attendees concluded that a portfolio of policies together with a broader selection of technology options will help the nation and the world move forward in addressing climate change.

But a critical and missing component is

a set of narratives that can communicate what's at stake and mobilize the world's people to make smart energy choices that can make a difference. The greatest need, attendees agreed, is for strong global leadership on climate change.



ITS-Davis Researcher Tom Turrentine and student Deborah Salon at Asilomar.

The conference participants developed the [Asilomar Declaration](#) to capture key findings. Organized under the auspices of the Energy, Alternative Fuel, and Sustainable Transportation Committees of the U.S. Transportation Research Board, the invitation-only event was ITS-Davis's tenth biennial conference on transportation energy and environmental policy.

ON THE ROAD TO STEWARDSHIP: UC Davis Road Ecology Center Co-Hosts International Conference

More than 350 worldwide experts in ecology and transportation attended the sixth International Conference on Ecology & Transportation (ICOET), a biennial gathering co-hosted this year in San Diego by the UC Davis Road Ecology Center and Caltrans. Attendees from Australia, India, Poland, Spain, Canada, the U.S. and other countries converged at ICOET to discuss solutions to ecological issues related to highways and roads.

UC Davis Road Ecology Center Director Alison Berry, a professor of Plant Sciences, played a pivotal role in coordinating this year's event. "The study of road ecology is gaining more attention as societies around the world continue to build road systems to accommodate increasing vehicle use and transportation needs," Berry said. "We have to understand the effects of road networks on the natural world in which we live, and find ways to avoid or mitigate these effects."

The conference focus on stewardship encouraged participants to share information about projects and best practices that demonstrate ways to address regulatory requirements, and to respond to broader scientific and community-driven concerns related to the impacts of roads on the environment.

Berry hosted a panel on acoustics ecology focusing on the effects of roadway noise on wildlife. Mike McCoy, a research scientist in Environmental Science and Policy, who co-directs the Information Center for the Environment at UC Davis, also gave two talks on the use of modeling and GIS systems, and ITS-Davis Director Dan Sperling, co-author of *Road Ecology: Science and Solutions*, welcomed attendees and provided an overview of road ecology. Ed West, a visiting scholar at the UC Davis Road Ecology Center, gave a presentation on road noise and its effects on birds.

The prestigious gathering, which takes place every two years, was organized by the Federal Highway Administration and the Center for Transportation and the Environment at North Carolina State University.



Conference attendees visit Johnson Canyon Vernal Pools (Photo credit: Bruce April, Caltrans).

TRANSPORTATION PUBLICATIONS FROM UC DAVIS: Hot off the Presses

ITS-Davis Publications

For the latest transportation publications list, visit our [publications page](#).

This month's featured publications:

[The Social-Cost Calculator \(SCC\): Documentation of Methods and Data, and Case Study of Sacramento](#). Delucchi, Mark. Prepared for the Sacramento Area Council of Governments (SACOG) and the Northeast States for Coordinated Air-Use Management (NESCAUM). UCD-ITS-RR-05-37.

Transportation planners are increasingly incorporating social cost-benefit analyses in their transportation plans. In support of this effort, ITS-Davis researcher Mark Delucchi has developed an Excel Workbook called the "Social Cost Calculator," or SCC, that estimates so-called external or indirect costs of motor vehicle use as well as additional costs that are often overlooked. His workbook calculates social costs such as noise, accidents, parking, air pollution, travel time, congestion and other costs for up to five different transportation scenarios for up to six different geographic areas. Social costs, which include all external costs plus all non-external costs, are used in social cost-benefit analyses because such analyses seek to compare all of the costs and benefits to society, for each alternative. Social and external costs also are relevant to pricing and hence are useful in analyses of efficient use of transportation modes. Thus, social and external costs inform comparisons of alternative transportation plans and policies for efficient use of transportation systems. This report documents the data and methods used in the SCC, and applies the SCC to a case study of Sacramento .

[Improving Bay Area Rapid Transit \(BART\) District Connectivity and Access with the Segway Human Transporter and Other Low-Speed Mobility Devices](#) . Shaheen, Susan. Transportation Research Record. April 2005. UCD-ITS-RP-05-09.

This paper summarizes the results of research conducted to better understand the risks and potential risk factors associated with low-speed modes. The research was conducted in advance of a planned field test using Segway Human Transporters (HT), electric bicycles, and bicycles linked to a Bay Area Rapid Transit (BART) District station and surrounding employment centers to evaluate the potential for low-speed modes to improve transit access. Authors first review the literature on the safety of low-speed modes and present the regulatory and legislative history of the HT in the U.S. Authors also present the results of 13 previous HT field tests to gather lessons learned during small-scale implementations. The results of stakeholder interviews and meetings include a discussion of how they influenced the project design. Finally, conclusions and future project steps are discussed.

Publications also may be ordered by fax, e-mail or mail.

<http://www.its.ucdavis.edu/publications>

e-mail: itspublications@ucdavis.edu

Fax: 530-752-6572

Mail: Publications, Institute of Transportation Studies, UC Davis,
One Shields Avenue, Davis, CA 95616-8762

Other Publications

The UC Davis-Caltrans Air Quality Project has released its [Fall/Winter 2005 newsletter](#). This issue includes articles on particulate matter emissions from diesel vehicles and conformity determinations, among other topics.

ITS-Davis and Campus Highlights

ENERGIZING CONGRESS: ITS-Davis Welcomes Energy Roundtable

A group of 20 of the state's leading energy and environmental experts gathered at UC Davis recently for a roundtable on shaping our energy future hosted by U.S. Congressman Mike Thompson. UC Davis professors Dan Sperling, Joan Ogden, Bryan Jenkins, and Case Van Dam, with colleagues from industry, government and academia, shared their perspectives on the progress being made and challenges of developing a clean and renewable energy strategy for our nation. Three sessions addressed the status of five important renewable energy technologies; research strategies for energy efficiency and renewable energy; and how innovative technologies can be brought to market. A wrap-up discussion identified ways to champion our nation's investment in renewable energy technologies.



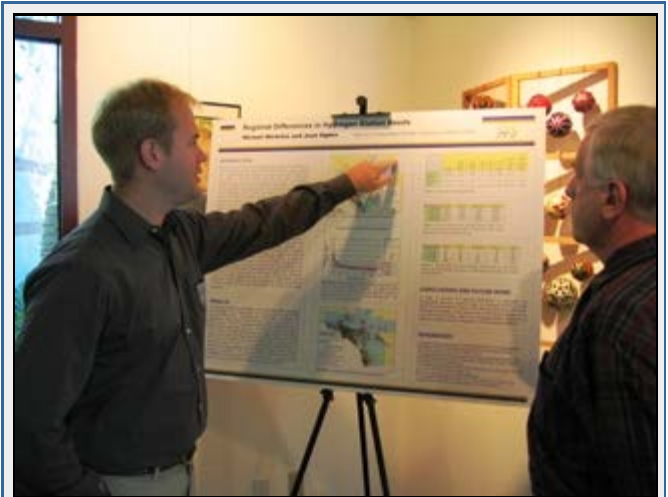
Director of Humboldt State's Schatz Energy Research Center Peter Lehman, Congressman Mike Thompson, Chancellor Larry Vanderhoef, and Dan Sperling

HYDROGEN WORKSHOP: Societal Costs and Benefits

The [Hydrogen Pathways](#) research program recently hosted its second two-day research workshop for 2005. Pathways partners, including speakers from industry, government, academia, and other invited experts, discussed the following subjects:

- Political, economic, and societal drivers of a hydrogen economy;
- Greenhouse gas and air pollutant emissions analyses;
- Costs and benefits of hydrogen use compared to other fuels;
- The potential interplay between hydrogen and other fuels;
- Implications for the security of energy and fuel supplies;

Hydrogen Pathways is an interdisciplinary research program focused on the technical, economic, environmental, business and policy implications of a transition to hydrogen for transportation. It is sponsored by 21 industry and government partners.



Student Mike Nicholas describes his research in a poster presentation to Caltrans representative Lee Barton.

EAST MEETS WEST: UC-China Collaboration Begins



Jason Ni, Ma Jianxin, Robert Dynes, Jonathan Weinert

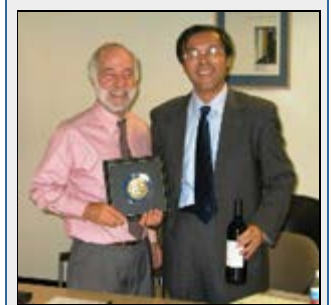
University of California President Robert Dynes traveled to China in early October and a delegation from China visited ITS-Davis in August to kick off what promises to be a fruitful long-term research relationship between universities in China and the UC system.

President Dynes and his delegation visited Tongji University in Shanghai, where ITS-Davis student researchers Jonathan Weinert and Jason Ni are conducting research on motorization and alternative fuel use in Shanghai. Their work with Tongji professor Ma Jianxin is part of the new research partnership between the

Davis campus and Tongji.

Over the summer, ITS-Davis hosted a Chinese delegation from China's Tongji. Representing UC Davis in the discussion were: Institute Director Dan Sperling; Professor Michael Zhang; Associate Vice Chancellor for Research Bernd Hamann; Vice Provost for University Outreach and International Programs Bill Lacy; Associate Vice Provost, University Outreach and International Programs Peggy Shannon; and International Alumni and Visitors Program Director Bob Kerr.

The Chinese delegation included: Tongji University Vice President for Research Dongyuan Yang; Associate Dean of the School of



Dan Sperling and Dongyuan Yang

Transportation Engineering Xiaohong Chen; Vice Chair of the Department of Traffic Engineering Hangfei Lin; and Wei Hua Gu, associate CEO, Shanghai Shentong Holding Company.

ITS-DAVIS PEOPLE: Awards and Accomplishments



David Davieau



Sangho Choo

Outstanding Dissertation and Thesis Award

Sangho Choo, Ph.D. (Civil and Environmental Engineering) and **David Davieau** (Mechanical and Aeronautical Engineering) were the recipients of the first ITS-Davis outstanding dissertation and master's thesis awards. The new program recognizing one outstanding transportation-related master's thesis and one Ph.D. dissertation each year is sponsored by *Friends of ITS-Davis*.

Choo's award-winning dissertation was "Aggregate Relationships between Telecommunications and Travel: Structural Equation Modeling of Time Series Data." Davieau's award-winning master's thesis was "An Analysis of Space Velocity and Aspect Ratio Parameters in Steam-Reforming Hydrogen Production Reactors."

David Grupp, Matthew Forrest, Pippin Mader, C. J. Brodrick, Marshall Miller and Harry Dwyer have been chosen to receive the 2004 SAE Vincent Bendix Automotive Electronics Engineering Award for their paper entitled, "Development of a Retrofit Fuel Cell Auxiliary Power Unit for Truck Idle Reduction" (SAE Paper Number 2004-01-2629). The award will be presented at the SAE World Congress in Detroit, next April.

Ryan McCarthy, a Ph.D. student in Civil and Environmental Engineering, received the 2005-2006 CH2M Hill Fellowship. McCarthy completed his master's thesis in March under the director of Professor Joan Ogden. "I developed a methodology to assess the reliability of energy systems in terms of availability, vulnerability, and energy security, and applied it to assess reliability in hydrogen pathways," he explains. Now he is examining the interaction between hydrogen systems and electricity systems, and analyzing opportunities to co-produce the two products, in a project with Ogden and researcher Chris Yang.

Chris Congleton and Julia Silvis have each been awarded *Friends of ITS-Davis* Competitive Research and Project Grants. Congleton, a Transportation Technology and Policy Ph.D. student, proposed to design and build, with a team of other students, a prototype vehicle—the Pedal Electric Tricycle—that is intended to bridge the gap between bicycles and cars and provide an environmentally friendly solution for around-town use. Silvis, a Ph.D. candidate in Geography, researches the time-space dimensions associated with travel behavior using network theory. For this project she is investigating how social networks interact with travel behavior under the direction of Professor Debbie Niemeier. The grants are awarded each year for student research and special projects. A maximum of \$13,500 is available annually for three awards of up to \$4,500 each.



Hans Strandgaard of CH2M Hill and Ryan McCarthy

ITS-Davis welcomes **Professor Kelvin Cheu**, a visiting professor of Transportation Engineering in the Department of Civil Engineering at National University of Singapore. Professor Cheu, who will be here at ITS-Davis for one year, is interested in intelligent transportation systems, logistics, car sharing, and traffic engineering. His host is Professor Michael Zhang.

EXTRA! READ ALL ABOUT IT! ITS-Davis and UC Davis Researchers in the News

Dan Sperling, September 30, in the *San Francisco Chronicle*, on the timeframe for hydrogen fuel cell vehicles in an article on the California Fuel Cell Partnership Road Rally.

Mark Delucchi, in *The New York Times*, September 29, on the potential environmental benefits of electric vehicles.

Pat Mokhtarian, in *The Mercury News*, September 27, on the effects of rising gasoline prices on consumer driving behavior.

Michael Kleeman, in the *Washington Post*, September 26, on agriculture's contribution to air pollution in California's Central valley.

Dan Sperling, in the *San Diego Union-Tribune*, September 9, on new fuel economy standards for light trucks.

Dan Sperling, referenced in the *Los Angeles Times*, August 29, as someone whom environmentalists would have preferred Gov. Schwarzenegger appoint as chair of the California Air Resources Board rather than the former industry lobbyist he chose.

Anthony Wexler, in the *Washington Post*, August 25, in an article on California, Oregon and Washington's efforts to develop a pact to reduce greenhouse gas emissions from the region's power plants by 2020.

Dan Sperling, in the *Wall Street Journal*, August 4, on the federal transportation bill that granted single-driver hybrids access to carpool lanes but included language designed to favor American manufacturers.

Dan Sperling, in *NOVA online*, the week of July 25, in a week-long online debate with Joe Romm on the future of hydrogen and fuel cells in transportation.

Hydrogen Pathways Program, July 27, in U.S. Department of Energy's *EERE Network News*.

Dan Sperling, in the *Wall Street Journal*, July 24, on fuel cell and hydrogen research that may allow China to leapfrog past petroleum.

Ken Kurani, in the *Edmonton Sun* (Alberta), July 15, on hydrogen powered scooters.
