Computer science professor wins NSF ‘Career’ award

By Susan Hellstrom

Andy Wang, an assistant professor of computer science at The Florida State University who calls himself a “digital plumber,” has won a prestigious award from the National Science Foundation (NSF).

Known officially as the NSF Faculty Early Career Development (CAREER) Award, the NSF says it is the agency’s most prestigious award for “junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research.” Wang is the second person in the Department of Computer Science to win an NSF CAREER Award in the last three years, said Chair David Whalley.

“This award is continuing confirmation of the outstanding young faculty we are attracting to Florida State,” said Vice President for Research Kirby W. Kemper.

Wang’s winning grant proposal, for which he will receive $400,000 over five years, is titled “Tags: A Unifying Primitive to Build Storage Data Paths for Swiftly Evolving Workloads and Storage Media.” Tags are proposed digital building blocks that will form the basis of a framework for organizing digital data.

Five years is a long time in the high-tech arena, Wang said, and the NSF money will allow him to lay the foundation of a lifelong research program. Because his research involves applying ideas from various computer science disciplines, he also believes the project will encourage collaborations within the department.

“My research aims to improve the data flow through operating systems such as Linux and Windows, so that the flow becomes simpler, faster and more secure,” Wang said. “Unfortunately, the plumbing in operating systems has changed very little over the years and often assumes the use of hard disks to store data. Therefore, it behaves poorly when we use new data storage devices such as thumb drives and camera memory cards.

“In addition, we expect computers to do more, which means a wider variety of data types and data flow patterns. My research will revamp the plumbing of modern operating systems from scratch, so that data flows can be streamlined to match the characteristics of new storage devices and data flow patterns.”

Wang joined Florida State’s Department of Computer Science in 2003, shortly after receiving his doctorate from the University of California, Los Angeles, and is grateful for the support he has received from peers and mentors at both universities.

“I thank the computer science department at FSU for providing the culture for systems research to thrive, which takes substantially more resources and time to bear fruit, and I am thankful to my hard-working students who are not afraid to design and build experimental systems with little precedence to follow,” he said.

Wang also credits his mentors in California and attributes his passion toward systems research to his graduate work at UCLA.

“Basically, the digital plumber club is really, really fun, and really, really cool,” he said. “I feel blessed that I have transplanted the culture to my research group at FSU.”

For more information about Wang’s research, visit www.cs.fsu.edu/~awang.
Researchers:
Foreign investments may be destabilizing financial markets

Stabilizing or destabilizing? Good or bad? Many have debated the positives and negatives of sovereign wealth fund investments, which are pools of money that foreign governments, China in particular, have invested for profit in a number of U.S. investment banks. None, however, have shed light on the fundamental question: Do such investments help or hurt?

Until now.

Researchers at the Florida State University College of Business have found evidence that suggests such foreign investments are destabilizing to financial markets, confirming media speculation that sovereign wealth funds could do more damage than good.

“Our research, which is based on recent empirical techniques to establish statistical relationships, finds that risk and return decrease after sovereign wealth fund investment,” said Bong-Soo Lee, the Patty Hill Smith Eminent Scholar Chair in Finance at Florida State and lead author of the research findings. “Furthermore, we find that risk is not sufficiently reduced to offset the change in return, at both the firm and market levels, which suggests that the sovereign wealth fund investment is destabilizing.”

“‘Sleeping with the Enemy’ or ‘An Ounce of Prevention’: Sovereign Wealth Fund Investments and Market Destabilization,” the paper authored by Lee, finance Assistant Professor April Knill and a graduate student in the College of Business, will be presented at the Darden International Finance Conference in Charlottesville, Va., in March.

As the current economic crisis continues to rage throughout the world, market destabilization related to sovereign wealth funds continues to be discussed:
- President Barack Obama, during his presidential campaign, expressed concern that sovereign wealth funds are motivated “by more than just market considerations.” (Reuters.com, Feb. 7, 2008)
- A study done by the Government Accountability Office found that six out of 10 countries surveyed expressed discomfort with sovereign wealth funds.
- The U.S. Senate’s Security and International Trade and Finance Committee, led by Sen. Evan Bayh, D-Ind., will convene to debate sovereign wealth funds’ potential for destabilization/national security risks. (www.tinyurl.com/bvfdnx)

Although the news media have covered the issue of sovereign wealth funds extensively, the researchers found no connection between the destabilization of the investments and the coverage.

“After reviewing all articles written about sovereign wealth fund investments, in both academic and popular press, we gathered a data set of sovereign wealth fund transactions,” Lee said. “We analyzed these transactions for performance of the firms and markets involved. We found no evidence to suggest that media coverage caused any of the destabilization seen with these sovereign wealth fund investments.”

Richard Lapchick has been described as “the racial conscience of sport.” He is a human rights activist, a pioneer for racial equality and is internationally recognized for his expertise on sports issues.

This spring, Lapchick, founder and director of the Institute of Diversity and Ethics in Sport at the University of Central Florida, will deliver the fifth annual Dr. M. Dianne Murphy Distinguished Lecture Series on Monday, April 20, at 5:30 p.m., in 1101 Moore Athletic Center. The series, established by a gift from Murphy to Florida State University, is sponsored by the university’s Sport Management program.

Lapchick, who also is the president and chief executive officer of the National Consortium for Academics and Sport, will discuss his strong commitment to equality and belief that sport can be an effective instrument of positive social change.

Each spring semester, the Sport Management program invites a speaker to talk with students, faculty members, administrators and community members on the role of persons of color and women administrators in college and university athletics and recreation programs.

For more information, call Cecile Reynaud at 644-4298 or send an e-mail to reynaud@coe.fsu.edu.
A knack for news writing

News and Public Affairs, Research In Review make impressive showing in ’09 CASE District III competition

For the third year in a row, The Florida State University’s News and Public Affairs office has virtually swept the news writing awards in the 2009 CASE District III competition, taking home four out of the five that were presented. CASE stands for the Council for the Advancement and Support of Education (www.case.org).

The five-person office competed against peers at public and private universities and colleges from across the Southeast, from Louisiana to Virginia, and against each other. In the “General News or Feature Story” category, two Awards of Excellence were presented, one to Florida State’s Libby Fairhurst for “Landmark Study Unlocks Stem Cell, DNA Secrets to Speed Therapies” on research conducted by biological science Professor David Gilbert, and the other to Florida State’s Jill Elish for “Low Grades, Bad Behavior? Siblings May Be to Blame,” on the research of sociology Assistant Professor Kathryn Harker Tillman. Three Special Merit Awards were given: one to Fairhurst for “Geometry Shapes Sound of Music” with music Associate Professor Clifton Callender, one to Florida State’s Barry Ray for “FSU Classics Professor Exploring a ‘Lost’ City of the Mycenaeans,” with Classics Professor Daniel Pullen, and one to James Madison University.

The stories were edited by News and Public Affairs Director Browning Brooks.

The News and Public Affairs staff is on quite a roll. The staff won the Silver Award for news writing in CASE’s National Circle of Excellence competition in 2008.

The staff of Florida State’s Office of Research publication, Research In Review, also was recognized. “Pain in Paradise: Florida’s Failed Fix-All” by Frank Stephenson and “The Chemistry of Love,” by Christine Suh, won Awards of Excellence for feature writing. Bob Celander won two Awards of Excellence in the “Visual Design: Illustrations” category for “The Great Florida Dream Debacle” and “The Chemistry of Love.”
Researchers look to **THE PAST** and **THE FUTURE** in new book on evolution

By Barry Ray
NEWS AND PUBLIC AFFAIRS

One is a biologist; the other is a historian and philosopher. Together, two Florida State University professors from very different backgrounds have assembled what many are already calling the definitive work on the subject of evolution.

“Evolution: The First Four Billion Years” is the name of a new, nearly 1,000-page book edited by Joseph Travis, the Robert O. Lawton Distinguished Professor of Biological Science and dean of Florida State’s College of Arts and Sciences, and Michael Ruse, the Lucyle T. Werkmeister Professor of Philosophy and director of the university’s Program in the History and Philosophy of Science.

Working together over more than six years, Travis and Ruse enlisted some of the world’s top scholars from a variety of fields — genetics, paleontology, epidemiology, theology and philosophy, to name a few — to write a series of “big picture” essays describing their particular areas of expertise as they relate to evolution. What emerges is a multifaceted picture of what is perhaps the most discussed and debated scientific concept of the past 150 years.

“We wanted to provide a single source where we could make a definitive statement about all that we currently know about evolution, as well as what we don’t know,” Travis said. “We also wanted to look forward at where modern science is going as it pertains to the study of evolution. People have this idea sometimes that evolution is just some dusty old relic
from the 19th century, but in fact our knowledge base is growing every day.”

Ruse said that the variety of disciplines contained in “Evolution: The First Four Billion Years,” and the new ideas that such a mix can inspire, make the book unique.

“I’m a historian and philosopher, Joe’s a biologist, and we collaborated,” he said. “A lot of the articles in the volume reflect this interdisciplinary perspective. We have history, we have philosophy, we have religion, but we also have world-class biologists like Francisco Ayala, who’s one of the leading, still-active evolutionary biologists today.”

While the first half of “Evolution: The First Four Billion Years” is composed of contributors’ essays, the second half — more than 500 pages’ worth — is an encyclopedic compendium containing “almost everything you’d want to know about evolution,” Travis said. Concise, accessible entries include traditional topics such as mass extinctions, challenging ones such as the evolution of altruism, and controversial ones like industrial melanism or race. Also featured are summaries of the works of historic figures ranging from Aristotle to Charles Darwin, as well as modern leaders such as E.O. Wilson and David Jablonski.

You might fear that a body of work this comprehensive is not for everyone, Travis acknowledged.

“I would envision that the book would have its greatest appeal to graduate students, advanced undergrads and secondary school teachers,” he said. “However, we wanted this book to be something fun and informative for the layperson as well.”

Ruse added: “Keep it by your couch or bedside table and dip into it whenever you have a few minutes. The ideas are compelling and the personalities intriguing.”

 Appearing at the beginning of the Darwin Year of 2009 — the 200th anniversary of the birth of Charles Darwin and the 150th anniversary of the publication of his groundbreaking “On the Origin of Species” — “Evolution: The First Four Billion Years” couldn’t have come out at a better time.

“Obviously, much of what we now know about evolution has its roots in the truly revolutionary work of Darwin,” Travis said. “Hopefully our book will honor his legacy in this landmark year.”

Perfect timing: The book “Evolution: The First Four Billion Years” has been published as The Florida State University prepares to honor Darwin and others whose discoveries in science, religion, philosophy, history and the arts have shaped our understanding of life and of humanity. “Origins ’09: Celebrating the Birth & Life of Beginnings” will be held from March 17 to March 28. It will bring to Tallahassee such world-renowned scholars as biologist and two-time Pulitzer Prize winner E.O. Wilson and anthropologist David Johanson, co-discoverer of “Lucy,” one of the most important fossils ever found. Visit www.origins.fsu.edu for a complete schedule of events.
Grants from external funding agencies don’t simply materialize out of thin air. Preliminary research must be conducted and applications must be properly prepared. These activities, which can be costly, might include research-related travel, photocopying or paying a stipend to a research assistant. Fortunately, The Florida State University’s Council on Research and Creativity (CRC) comes to the rescue with Planning Grants. Twice a year, the CRC awards planning grants of up to $12,000 to be used for preliminary research planning.

The 2008 Fall Planning Grant awards, which total $156,000, go to:

- **Kenn Apel** (Communication Disorders), “Relation of Eye Gaze to Orthographic Fast-Mapping”;
- **Anne Coldiron** (English), “The Press and the World: Translation and Transnationalism in Early English Print Culture”;
- **Mu-Min Deng** and **Brian Storz** (Biological Science), “Epigenetic Regulation of Polyphenism in Nemoria outina”;
- **Matthew Goff** (Religion), “Book of Giants from Qumran and Conceptions of Giants in Ancient Judaism”;
- **Young-Suk Kim** (Florida Center for Reading Research), “Decoding Component Skills of Oral Reading Fluency for Hispanic English Language Learners”;
- **Efstratios Manousakis** (Physics/MARTECH), “Computational Studies of Correlated Condensed Matter Systems”;
- **Jerrilyn McGregor** (English), “In Total Darkness: Boxing Day in the African Diaspora”;
- **Briley Proctor** (Educational Psychology and Learning Systems), “Developing a Clinical Dataset of Children Evaluated for Emotional, Behavioral and Learning Disabilities”;
- **Christopher Wiebe** (National High Magnetic Field Laboratory/Physics), “New High Temperature Superconductors in the Iron Antimonides”;
- **Heidi Williams** (Music), “Albany Records Commercial CD Project: Variations on America”; and

The 2009 Spring Planning Grant awards, which total $71,887, go to:

- **Yingmei Cheng** (Finance), “How Do CEOs Benefit from Share Repurchases?”;
- **Zhenhai Duan** (Computer Science), “Detecting Spam Zombies by Monitoring Outgoing Messages”;
- **Randall Hughes** (Florida State University Marine Lab), “Clonal Variation in Salt Marsh Cordgrass (Spartina alterniflora): Effects on and Responses to Associated Species”;
- **Hee Ok Park** (Nursing), “Effect of Music on Agitation in Persons with Dementia Across Settings”;
- **Nora Underwood** (Biological Science), “Evolution of Adaptive Plasticity in the Chemical Defenses of Solanum Carolinense”; and
- **Yanyun Yang** (Educational Psychology and Learning Systems), “SEM Estimates of Reliability for Ordered Items with Non-Normal Underlying Distributions.”

The Council on Research and Creativity has awarded its 2008-2009 COFRS (Committee on Faculty Research Support) grants for summer salary support. Of the 65 proposals received, 39 were funded for approximately $546,000 in support. The COFRS award provides up to $14,000 in summer salary support for research or creative activity.

The recipients are:

- **Paolo Aluffi** (Math), “Geometry and Physics”;
- **Michael Bishop** (Philosophy), “Well-Being: In Defense of a New Approach and a New Theory”;
- **Patricia Born** (Risk Management/Insurance/Real Estate), “Catastrophes and Performance in Property Insurance Markets”;
- **Ming Cui** (Family and Child Sciences), “Romantic Relationships in Emerging Adulthood”;
- **Barry Faulk** (English), “Detachment, Poverty and the Victorian Arts”; 
- **Richard Feiock** (Public Administration), “Metropolitan Governance: Self-Organizing and Multiplex Service Networks”;
- **Laurel Fulkerson** (Classics), “Being Sorry: Remorse, Apology and Reconciliation in Classical Antiquity”; and

Please see COFRS, 7
By Barry Ray
NEWS AND PUBLIC AFFAIRS

The Florida State University has ushered in a new era for the development of composite materials that promise a wide variety of commercial and industrial uses.

On Feb. 17, Florida State President T.K. Wetherell officially opened the university’s new, 45,000-square-foot Materials Research Building during a ceremony on Florida State’s Southwest Campus in Tallahassee. With the opening of the building, The Florida State University is prepared to vault to the very top of the list of American universities conducting state-of-the-art research on cost-efficient, high-performance composite materials.

“This building affords us research opportunities that most other universities simply don’t have,” said Kirby Kemper, Florida State’s vice president for Research. “I anticipate that the work done here in the coming years will lead others to acknowledge The Florida State University as one of the nation’s best research centers in advanced composites. This truly marks the beginning of the next generation of lightweight, high-performance composite materials.”

The $20 million building is a two-story facility that houses 13 laboratories for the design, processing and characterization of advanced materials and systems. It will be home to Florida State’s High-Performance Materials Institute, a world-class research center that has emerged as a leader in the development of “buckypaper,” a film made with carbon nanotubes, which are incredibly lightweight but capable of making a composite material that is amazingly strong. Buckypaper also has other exceptional properties, such as electrical and thermal conductivity.

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For information on all of the programs of the CRC, visit www.research.fsu.edu/crc/crc.html.
**Professor honored for research on history of addiction**

By Barry Ray  
NEWS AND PUBLIC AFFAIRS

A Florida State University historian who specializes in the history of medicine, cultural history and intellectual history has received a major award given to young scholars in his field.

Joseph M. Gabriel, an assistant professor in Florida State’s Department of Medical Humanities and Social Sciences and a courtesy professor in the Department of History, has received the Jack D. Pressman Burroughs Wellcome Award from the American Association for the History of Medicine. The association (www.histmed.org) is North America’s oldest continuously functioning scholarly organization devoted to the study of all aspects of the history of the health professions, disease, public health and related subjects.

Gabriel was honored for his scholarly project “Gods and Monsters: Drug Addiction and the Origins of Modern America.”

In its award citation, the association stated in part that Gabriel “sets out to trace what it means to be addicted in the United States. Through graceful writing and powerful research, he incorporates intimate aspects of personal experience alongside piercing analysis of the central role of addictive substances in American military, medical, and commercial life. Gabriel’s manuscript argues that the physical experience of use of strong substances is a product not simply of social constraints but also of market forces and political anxieties.”

The award and a stipend of $1,000 is given yearly for outstanding work in 20th-century history of medicine or medical science, as demonstrated by the completion of a Ph.D. and a proposal to turn the dissertation into a publishable monograph.

For his part, Gabriel described himself as “both honored and humbled to be given this award. It’s really exciting for me to be recognized by my peers in this way. Jack Pressman was a wonderful historian, and I’ll do my best to live up to his legacy.”

Pressman was a distinguished historian of medicine and an associate professor of the history of the health sciences at the University of California, San Francisco until his death in 1997.

Gabriel received his Ph.D. in history from Rutgers University in 2006. His dissertation was titled “Gods and Monsters: Drugs, Addiction, and the Origins of Narcotic Control in the Nineteenth-Century Urban North.” In it, Gabriel argues that the feeling of “loss of control” that is at the heart of the addictive experience grew out of complicated changes in the culture and economy of the 19th century.

Among other topics, Gabriel is interested in the changing experience of health and illness, the history of medicine and psychiatry, the history of pharmacy and pharmaceuticals, cultural history, the history of technology, and the history of pragmatism and neo-pragmatism.

He will be presented with the Jack D. Pressman Burroughs Wellcome Award at the 2009 meeting of the American Association for the History of Medicine, which is scheduled to be held in Cleveland on April 23-26.

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**Georgia Tech professor to discuss ground-penetrating radar**

For anyone curious about how science is improving the images derived from ground-penetrating radar, this is one lecture not to be missed.

James H. McClellan, the John and Marilu McCarty Professor of Signal Processing at the Georgia Institute of Technology, will visit Florida State University as part of the Sprint Lecture Series of the Florida A&M University-FSU Department of Electrical and Computer Engineering.

There are two kinds of ground-penetrating radar: “stepped-frequency, continuous-wave” and “impulse.” In his lecture “Compressive Sensing Data Acquisition and Imaging for Ground-Penetrating Radars,” McClellan will discuss how new data acquisition strategies and new imaging strategies are producing images with less clutter and better resolution. His lecture will be Tuesday, March 17, at 3 p.m. in B210/B211 College of Engineering.

When the subterranean target space in question has only a small number of point-like targets, the theory of compressive sensing, according to McClellan, suggests that making measurements at only a small number of random frequencies, or times, is sufficient to construct an image of the target space.

McClellan is widely known for the McClellan transform and the Parks-McClellan FIR filter design algorithm. He is a fellow of the IEEE (Institute of Electrical and Electronics Engineers). He earned his master’s and doctoral degrees from Rice University in 1972 and 1973, respectively.
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The public celebration of women’s history in America began in 1978 as Women’s History Week in Sonoma County, Calif. The week including March 8, International Women’s Day, was selected. In 1981, U.S. Sen. Orrin Hatch, R-Utah, and U.S. Rep. Barbara Mikulski, D-Md., co-sponsored a joint congressional resolution proclaiming a national women’s history week. In 1987, Congress expanded the celebration to a month, and March was declared Women’s History Month. As of Oct. 1, 2008, the female population in the United States was 154.7 million, or 50.7 percent of the total population.

Office of Diversity and Equal Opportunity

Women’s History Month: March is Women’s History Month, and The Florida State University has scheduled a variety of events to mark the occasion. “This year’s theme is ‘Honoring, Celebrating, Inspiring: The Legacy of FSU Women,’” said Mary Coburn, the vice president for Student Affairs at Florida State. “These words are especially significant, given that The Florida State University has its origins in a highly regarded women’s college, the Florida State College for Women.”

This year’s Women’s History Month also features the start-up of the FSU Garnet Hat Society. To celebrate the legacy of women past and present, and be a part of creating the future, all women attending Women’s History Month events are encouraged to wear a garnet-colored hat. Participants are urged to get creative — no hat is too large or too small.

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For a complete schedule of events, visit the Web site www.fsu.com/pages/2009/02/24/womens_history_month.html.

Human Resources

New Electronic I-9s: Human Resources is moving to an electronic format for all new hires. Employees who manage their department’s I-9s, and have not yet received a communication from Human Resources, call David Amwake at 644-7939. Human Resources has a limited amount of user licenses and in order to be able to access the system, an employee has to successfully complete the training offered by LawLogix.

Retirement Planning Seminar: The Benefits Office will host their annual retirement planning seminar on Thursday, March 26, from 8:30 a.m. to 3:30 p.m., in the State Ballroom, Oglesby Union. Discussions will include information regarding retirement issues, estate planning and retirement benefits. Representatives will be available to answer questions about optional retirement programs and tax sheltered annuities. The seminar is a university-sponsored training program therefore, attendance may be considered as time worked with supervisory approval. As always, door prizes will be given away. Registration: Michael Horgan, mhorgan@admin.fsu.edu or 644-4017.

Double Deductions for Benefits: All nine- and 10-month faculty members and seasonal employees enrolled in state health, life and supplemental benefits will begin to have double deductions taken from their paychecks beginning with the Feb. 13 paycheck. The deductions will end on the May 8 check. These additional deductions are taken out to prepay premiums for the months of June, July, August and September. Regular deductions will resume on the first paycheck in September. Employees should review their paychecks during the double deduction period to insure that the deductions are correct. Information: Benefits Office, 644-4015, or e-mail insben@admin.fsu.edu.

Taking a Leave of Absence? If employees take a leave of absence for any reason, their benefits may be affected. Faculty and staff members only have 31 days from going on leave to make necessary adjustments to their benefits. If employees know they are going on leave, contact the Benefits Office at 644-4015 or insben@admin.fsu.edu for assistance to ensure there is no lapse in coverage.

2009 Elective Retirement Contribution Limits Have Increased: The Internal Revenue Service recently announced cost-of-living adjustments for elective contributions to retirement accounts, including Florida State-sponsored tax sheltered annuity plans (403(b)), post-tax Roth 403(b) and state of Florida-sponsored Deferred Compensation (457) plans. Beginning with the first paycheck in January, the annual contribution limit for 403(b) plans increased to $16,500. The contribution limit for the 457 Deferred Compensation plan also increased to $16,500. Employees who are age 50 and above at any point in the 2009 calendar year are eligible to contribute an additional $5,500 to each plan. Information: Michael Horgan, Human Resources, 644-4017.

Recognitions

Bruce Boehrer, Ph.D. (Bertram H. Davis Professor of English), edited the book “A Cultural History of Animals in the Renaissance,” which has been named an Outstanding Academic Title of 2008 by Choice, the review publication of the American Library Association.

Pat Villeneuve, Ph.D. (Art Education), will receive the National Art Museum Educator of the Year award at the National Art Education conference, Minneapolis, April.