Have you ever wondered what you can see out of the corner of your eyes? What are the limitations of such peripheral vision? What are the neural origins of these limitations? And what can we do about them? These are questions that Dr. Tjan and his collaborators are addressing.

People with normal vision rely on the fovea to perceive shapes, recognize objects, and read. The fovea is a small region on the retina that is densely packed with light-sensitive photoreceptors. It sees only a tiny piece of the visual scene, about the width of a thumb at an arm’s length. When you spot something of interest in a scene, you naturally move your eyes to look at it, placing the target of interest in foveal vision. Such rapid eye movements leave you with the grand illusion that you see everything sharply and clearly. When the fovea is impacted by a disease process such as aged-related macular degeneration, the grand illusion disappears – wherever one looks, the region at the center of gaze is a blank, and the only usable vision is in the periphery, eccentric to the center of gaze. Object looks blurry, and reading is laborious.

Most investigators who study shape perception and reading focus on foveal vision. Dr. Tjan is an exception. A large proportion of efforts in Dr. Tjan’s lab, including two federally funded studies, investigate form vision in the periphery. Dr. Tjan and collaborators measure the limits of peripheral vision, identify the underlying neural causes of form-vision deficits in the periphery, and develop computer-based image enhancement techniques and training regimens to push the limits of peripheral vision.

Getting to know you... Spotlight on Karen Hennigan

In March the department welcomed Dr. Karen Hennigan and her Center for Research on Crime, which includes, Dr. Hennigan, Dr. Malcolm Klein, Graduate Research Assistant Kathy Kolnick and undergraduate staff, to SGM 1004. The Center also includes USC’s Dr. David Sloane, from SPPD, and UCI’s Dr. Cheryl Maxson.

Currently, Dr. Hennigan and her Center are working as consultants with the LA Mayor’s Gang Czar to inform local gang prevention efforts and are working on other related gang prediction and prevention research.

Dr. Hennigan’s interest is in bringing a social psychological perspective to the challenge of reducing the number of youth who became involved in antisocial groups such as street gangs. In particular, she believes that looking at gang joining and gang desistance through the lens of social identity theories brings a fresh perspective that may improve prediction, understanding and ultimately our ability effectively to reduce gang involvement. Her current work in this area is funded by the National Science Foundation.

For the past three years Dr. Hennigan has also worked with a state wide group of stakeholders to develop prototype indicators of outcomes across the continuum of sanctions and services for the county juvenile justice systems. She is currently one of the consultants working to draft an operational plan for the recently formed state Juvenile Justice Commission, charged with realignment toward evidence-based practices.

Stop by SGM 1004 and say hello to Karen and her team!

Congratulations! and Did you know?

- Biederman featured in Wall Street Journal
- Biing Shen’s stress findings
- Recent Colloquia
- Lab Visit with Bosco Tjan
- Getting to know you: Karen Hennigan
- Newsletter at a glance
Colloquium with Eric Kandel

The Department of Psychology and the Brain and Creativity Institute welcomed to USC on February 13, renowned professor, Eric Kandel. Kandel is a Nobel Laureate Psychiatrist, Neuroscientist, as well as a professor of Biochemistry and Biophysics at The Columbia University College of Physicians and Surgeons.

There was standing room only for his colloquium, titled “Mechanisms for the Initiation and Persistence of Long Term Memory Storage”

Prior to his lecture, Dr. Kandel was our guest at the GASP and Department Wednesday morning coffee.

April 9 Colloquium with Wendy Wood, Ph.D.
James B. Duke, Professor of Psychology and Neuroscience, Professor of Marketing, Duke University

“Self-Regulatory Habits: A Contradiction?”

If you missed Dr. Wood’s Colloquium you may view her Vita and 3 articles on the Psych Website, under NEWS and Announcements!

Biing-Jiun Shen’s Anxiety and Heart Attack Findings

Dr. Biing-Jiun Shen found that older men who experience chronic anxiety are at a substantially greater risk of heart attack. This is the first time that a study has been able to link anxiety to heart attack risk, while controlling for other established biomedical and psychological factors. Dr. Shen’s findings have been reproduced in numerous newspapers and other media outlets seen around the world.

The study consisted of data from 735 men who participated in the Normative Aging Study. Each of the men completed psychological testing in 1986 and, at the time, showed no signs of heart problems. They were then followed for an average of 12 years to track their physical and mental states.

The researchers found that men who had chronic anxiety had a 30-40% increase in risk of heart attack. There was also a correlation between the level of anxiety and the amount of risk involved for a heart attack. Even after adjusting their data to account for standard demographic and biomedical risk factors personal health habits, other negative psychological characteristics, the effect of anxiety on heart disease still remained.

However, Shen is unsure whether treating anxiety itself reduces the risk of heart attack. Of the uncertainty, Shen said, “The implication is there. It is something doctors can look out for.” Shen’s team is currently hoping to study the possibility of lowering rates of heart attacks by treating chronic anxiety. Also, they are hoping to apply their findings to women to see if women are also at greater risk for heart attack if they suffer from chronic anxiety.

See…. “Have you Read Anything Good Lately” …..

*****SAVE THE DATE ~~~ WED. APRIL 23*****

9:30 am—11:30 am—GASP & Department Coffee
Honors Students Posters up on SGM 5th floor

12 noon—2 pm -Faculty Meeting  SGM 414

3:30 pm—5:30 pm END OF THE YEAR PARTY SGM 501
Guests Include: Honors Students and SGM College Facilities Remodel Team of Jim, Irina, and Steve
Congratulations!
Undergraduate Honors Students 
And Faculty Advisors

The Psychology Department was well represented at the recent Universitywide Undergraduate Research Symposium. Our congratulations go to all who participated and with special recognition to the following students and their faculty advisors.

First Prizes:
Candide Chen  Frank Manis

2nd Prize
Karoline Brandt  Stan Huey
Michael Kane  Laura Baker

Honorable Mention:
Diana Bennet (Junior Honors Student) Gayla Margolin
Maynard Hughes  Norman Miller
Hilary Feybush  Tom Lyon
Charlina Gozali  Tom Lyon

Interdisciplinary
Ben Paul  Antonio Damasio
Debi Ogbanna  Tom Lyon

Biederman featured in Wall Street Journal article

An article from The Wall Street Journal website titled “Why We’re Powerless To Resist Grazing On Endless Web Data” by Lee Gomes featured insight from Dr. Irving Biederman. Biederman sought to answer the question, “What is it about a Web site that might make it literally irresistible?”

Gomes cited an experiment of Dr. Biederman’s in which he first showed a collection of photographs to volunteer test subjects, and found they said they preferred certain kinds of pictures over others. Preferred pictures shared common features of elements of mystery, as well as a good view of a landscape.

Furthermore, Dr. Biederman found that certain information triggers cause a chemical reaction which makes us feel good, which causes us to seek more of the pleasure sensation. This neurotransmitter chemical reaction could be the source for the addictiveness or allure of the information on the web. Dr. Biederman summarized, “When you find new information, you get an opioid hit, and we are junkies for those. You might call us ‘infovores.’”

Did You Know?

• SGM 10th Floor is now available for use without an elevator key!
• SGM 929 is now a satellite departmental copy/work room, your key to the fifth floor copy room will open the door. See Ann in SGM 931 to set up your copy code to work on the SGM 929 copier.
• The SGM 502 Copier can now make a .pdf (see Sandy or Carlos to set up your e-mail to receive pdf).
• US Postal Rates for first class mail go up to $.42 on May 12th, 2008. Please go to www.usps.com for more information on price increases for other mail.

Have You Read Anything Good Lately?


Allen Azizian has received the Fulbright award to research and lecture in Yerevan State University, Armenia in February of 2009.

Ernest Greene has been elected to the position of Academic Editor of PLoS One.

Gayla Margolin has been selected to receive a USC-Mellon Mentoring Award in the category of Faculty Mentoring Undergraduate Students.

Gerald Davison was the keynote speaker at an international conference at the University of Tokyo which focused on improving physician and psychologist synergy and collaboration to improve patient care.

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Assistant Editor: Kevin Row, Psyc., Comm. Major
Class of 2010