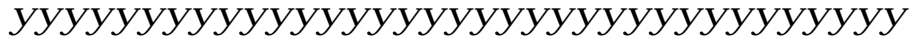




**PSYCHOLOGY DEPARTMENT NEWSLETTER**

*University of South Alabama, June 2005*



**STATE OF THE DEPARTMENT**

According to Psychology Chair **Dr. Larry Christensen**, the major issue with us (as with most USA departments) is the **space problem**. There is now a possibility that Psychology will move to the Commons Complex on the corner of Old Shell and University. Larry recently poled all department members about how they felt about the move and the response was basically “ambivalent”. Moving is never easy, and the important question is whether or not there will be enough classroom space. (But see Dr. Susan Anderson’s solution to the classroom space problem below).

Other departmental news:

Psychology PhD Program: The moratorium has been **lifted** on new PhD Programs in Alabama, so plans are to “resurrect” our Psychology PhD Program and send it off to the Dean again in the near future.

Masters Program: Our program is making progress towards accreditation and this is good news for our Applied Clinical Practice area.

New faculty members in 2004: We now have two brand new faculty members: (1) Dr. Mark Yates (experimental) was hired to replace Dr. Mark Faust, and (2) Dr. John Kline (clinical) was hired to replace Dr. Kati Arata. Both pursue highly interesting areas that should prove most attractive to incoming graduate students. Tune in below to see what our two bright “new guys” are up to.

More new faculty members to arrive soon: Two more “new guys” will arrive this summer to replace retirees Dr. Jerry Downey (social) and Dr. Jerry Williams (experimental). These are: Dr. Josh Foster from U. of Georgia to replace Downey and Dr. Michael Gordon from U. of

Toronto to replace Williams. Foster does work in relationship functioning, infidelity, and sexuality, and Gordon does work in cognitive aging, multisensory integration, and ecological psychology. Both will provide even more opportunity for our incoming students to engage in cutting-edge Psychology research. Be sure to read all about them in next year’s newsletter!

**WELCOME TO THE (ORTHO AND PHONO) NEIGHBORHOODS**

**Dr. Mark Yates**, who comes to us from the University of Kansas where he received his PhD, does work on orthographic and phonological influences on word recognition and reading. For his latest work, see Yates, Locker & Simpson (2004), *Psychonomic Bulletin and Review* 11, 452-457.

Consider the simplest case of recognizing single words in isolation. Recognition as measured by RT can be influenced by both other words spelled similarly (orthographic neighborhood) and words sounding the same (phonological neighborhood). Consider the words: BAIT, GATE, HATE. All words sound alike, but GATE and HATE are more similar in spelling than BAIT. Up till now in the area of visual word recognition most work has been done on studying the effects of the ortho-neighborhood only. Mark has embarked on a new area to study the effects of the phono-neighborhood on visual word recognition. His findings indicate that visual word recognition is enhanced by large phono-neighborhoods. Interestingly, this effect is completely the opposite in spoken word recognition. In spoken word recognition, words with large phono-neighborhoods are responded to more slowly. Why the interaction? Mark will be pursuing this question in his future research. He will also try to disentangle the effects of orthography and phonology in visual word recognition as he seeks to find words that have

HI phono, but LO ortho neighborhoods and words that have HI Ortho, but LO phono neighborhoods. These are hard to find in English Mark admits. Another challenge for Mark: Getting into measuring the effects of the semantic system on word recognition.

Mark also is learning how to use his new eye-tracker set-up. First a headpiece is placed on the head and little cameras calibrate the location of the eyes looking at the visual display on the screen. So the computer can tell exactly where one is looking when reading connected text. With 2 ms time resolution! Additional features of this software include blocking out portions of text where the reader is directly looking, or the opposite condition of blocking out where the reader is not looking. All this to show what the eyes search for in reading, and they do bounce around, fixating on important words and skipping over the unimportant ones (e.g. "the"). Sometimes backtracking even. This set-up should eventually help him attack the more complex problem of word processing in sentences.

## HAPPY AND SAD HEMISPHERES

**Dr. John Kline**, our other new faculty member, is trying to link together the phenomena of olfaction, emotion and laterality. He calls his area "the study of the neurobiology of emotion regulation", and wants to find out how the "asymmetrical brain is linked to mental health". The traditional idea was that the left brain was the **happy** hemisphere (but also involves regulating anger and approach behavior), while the right brain was the **sad** half dealing with fear and withdrawal. Thus split brain patients have a stronger response to snakes presented visually to the right hemi.

John is most interested in surface recording from the frontal (anterior temporal) lobe sites. He gives people smells, both good vs. bad like **vanilla vs. valerian** (smells like dirty feet) and measures whether the left or right hemi reacts more strongly. He can also measure the production of a smile and can differentiate between a real spontaneous vs. fake feigned smile. He shows people pleasant vs. unpleasant pictures and measures who like what (women

like to look at babies, puppies, while men prefer - you guessed it - nude women!).

An old problem is of course individual differences. So John seeks to try to relate all his results to personality differences in affective brain activity. A well-adjusted person can control their hemis better. Depressed people (e.g. as measured by the BECK Depression Inventory) can not. People with right frontal strokes make repeated errors on the Wisconsin Card Sort, and John believes this is related to dysfunctional left frontal activation. (So if you are interested in your own emotional balance, come to room 373, relax, and sit in John's nice comfy lounge chair and get wired up to have your hemis checked out...)

John has also finished co-editing a special issue of *Biological Psychology* with John Allen, dealing with frontal EEG asymmetry and emotion. Also, he has published over the last year five papers in the following journals: *Biological Psychology*, *Personality and Individual Differences*, *J. of Psychopathology and Behavioral Assessment* (with former PhD students of his Steve LaRowe and Jean Minnex).

## NEW TOY FOR BRAIN RESEARCH

**Dr. Jack Shelley-Tremblay's** new project is in collaboration with Dr. Michael Doran and student Thomas Young, both of the Computer Sciences Department. These three are attempting to build and program a remote-control robot with the capability of learning to choose LEFT or RIGHT by sensing the appropriate human brain waves that emerge when a human chooses to make a LEFT or RIGHT response. The specific wave used is the *LRP (lateralized readiness potential)* which is a motor preparation response from the brain. So here we have a true brain-machine interface. The robot is now living in the Computer Science Department. Jack says that right now it doesn't actually resemble a human (or even a monkey) but maybe eventually it will be spruced up with a face and hands and soon hopefully we will all have a chance to meet him/her.

Another project for Jack is his reading training, for which he now has a grant to pursue. Jack believes that reading can be enhanced via a computer program that trains people to sweep their eyes from left to right on a computer monitor. Specifically, a series of

random numbers is flashed sequentially from left to right and the reader must pick out a certain one (e.g. "3") by pressing the space bar. Jack believes this should help readers to selectively attend to the relevant stimuli, improving reading rate and comprehension. But as usual there are a couple of opposing camps with opposing ideas on this question, both from the medical profession. Ophthalmologists do not believe that reading training helps at all, while optometrists believe that training does help. So Jack plans to do some mass testing with his reading training software to determine the definitive answer to this question.

Jack also has a grant from the Literacy Coalition of South Alabama in collaboration with the College of Education. The project uses **Reading Plus** software and the goal is to help people with all kinds of disabilities in furthering their reading skills.

Finally, Jack and Dr. Marty Rohling are collaborating on a project to catch malingerers by using brain patterns, specifically the P300. The graduate student helping with this project is Josh Eyer.

**LIGHT SHINES IN THE DARKNESS**

**Dr. Jenny L-R** had a big write up from the College of Arts & Sciences this academic year. She also had a big publication year, her instrument the **Life Attitudes Schedule** was launched at APA, and she received her first royalty check. She completed her first year as **Youth Violence Research Scholar**, and was invited and served on the review panel at Centers for Disease Control and Prevention. She has developed a new relationship intervention to lower the risk of intimate partner violence in adolescent moms (this work is in conjunction with Dr. Lisa Turner and Marilyn McGowan). Finally, several of the students she has worked with have now found peer-reviewed publication outlets for their theses (Amber Simpler and Jeff Klibert). Natalie O'Brien and Motoko Saito are currently revising their theses for submission.

Jenny L-R loves her work, though she admits that it may seem to others a "study of the dark side of life." But it is just this dark side, she asserts, that needs further exploration, so that harmful and limiting myths about how such things as teen parenting, family abuse, and suicide affect our society and our loved ones, and how we can better understand the forces at work in human lives and relationships. "I'm an optimist," she explains. "I'm motivated to help us evolve."

**STOMACH STAPLING LEADS TO PSYCHOLOGY RESEARCH**

**Dr. Larry Christensen's** new research area (with undergrad Penny Schram Browner) is the psychological effects of **beriatric surgery**. ("beriatric" was a new term for me too folks). This is what we all know now as **stomach stapling** for weight-loss purposes, a last resort for failed dieters that reduces the size of the stomach. Well, the upshot is that the stapling works (physically), but then one has to contend (psychologically) with all the undesirable effects like sagging skin. "Can I look good again?" is the common question. So now one goes to plastic surgery to reduce the skin, etc. Larry notes that ALABAMA is a state that is starting to stop insurance for problems resulting from stomach stapling.

Larry also continues to study the relation between SUGAR CONSUMPTION ⇔ CARBO CRAVING. He tries to get participants to eliminate sugar from their diet, and then he tests if the sugar craving is reduced. What is now complicating his data analysis is that there appears to be a bimodal population for sugar craving. For some, elimination works, for others it does not. Also, it continues to be difficult to find non-sugar-cravers for a comparison group.

And lastly, Larry is working on #10 revision of his classic undergraduate textbook "Experimental Methodology", by which he tutors young scientists in the arts of both quantitative and qualitative research methods.

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**PSYCHOLOGY NOW HAS TOTALLY ON-LINE COURSES**

A true teaching pathfinder, **Dr. Susan Anderson** is now conducting her *General Psychology* summer course totally on-line, via a new system called eCollege. Remember eCompanion, which allows students to communicate about aspects of course work via the WEB? eCollege goes one step further and actually does away with the classroom. So eCollege courses will certainly help to solve the classroom space problem within the university. And this course will never have to close down during hurricanes! The professor never has to meet the students personally for any reason, even for quizzes, which are all administrated on-line. However, there is a way to communicate with the teacher and other students in the class, if necessary. Just enter the **chat room**, done by an easy click on the lounge icon!

Susan has also developed a new course called BioPsychology II, which is a dual-listed course (410 / 510) that will go into more biopsych detail than BioPsych I. This course will reflect the increasing attention being given to **brain research** in Psychology. At present there is no lab component but this is a distinct possibility for the future. Susan also manages the department WEB page, and has authored textbook supplements such as a student guide and test bank. She ends our interview with the comment: "I love teaching".

### THE GRASS IS GREENER AT THE MOBILE ZOO

As many psychologists these days are jumping on the (human) **BioPsychology Bandwagon**, **Dr. Joan Sinnott** will attempt to keep alive the classic field of Comparative Psychology at the USA. JMS holds the Sinnott Chair, an endowed half-time position that was established in 1998 by matching gifts from both the Sinnott family and the University of South Alabama Foundation. The purpose of the endowment is to support the study of Comparative Psychology, which is defined as a field that looks for common characteristics in the

sensory, perceptual or cognitive behaviors of humans and animals.

JMS's specialty is the **Comparative Psychology of Speech, Language and Communication**. JMS first came to the USA in 1989 with an NIH grant from the Institutes on Deafness and Communication Disorders. Since that time, she has obtained 4 NIH/NIDCD grants. Her present grant Comparative Speech Perception uses both monkeys and gerbils to model the process of human speech perception.

JMS thinks that her present NIH grant (ending in 2008) will be her last, due to the decline in suitable animal (especially primate) facilities. More and more animal facilities at various universities continue to **bite the dust**: For example, here at the USA, Dr. Chris Abee's Comparative Medicine Primate Lab is leaving for **greener pastures** in Texas.

JMS predicts that more and more researchers who choose to study animals will be moving to **ZOOS** for potential study sites. Here in Mobile we are lucky to have access to a small private personal zoo (i.e. **THE MOBILE ZOO** in Wilmer AL), owned and directed by Mr. John Hightower, which has thrown out the **red carpet** to any kind of educational or research activity by the USA.

So JMS plans to soon "retire" her five NIH speech-perceiving Japanese macaque monkeys (Chico, Coco, Harpo, Jocko, Mojo) to **THE MOBILE ZOO**, where they will live a life of relative leisure with **blue sky** and **sun** over their heads and **green grass** under their feet. And of course they will also provide valuable study material for JMS's students in her Zoo Animal Behavior class (N.B. This is one class that will **never** go ONLINE. Sniffy the virtual rat is one thing, but virtual zoo animals, **NEVER!**)

Two other colleagues of JMS also plan to make use of **THE MOBILE ZOO** for research purposes. JMS's Post-doc **Dr. Laura Powell** plans a study that will measure if zoo animals are sensitive to human facial "attractiveness" features. Also, **Dr. Jennifer Vonk** of USM plans to use the Zoo to continue her work on animal concept formation.

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**ONWARD PARENT TRAINING**

**Dr. Lisa Turner's and Dr. Jenny L-R's Parenting for School Success** grant is moving forward. In this research, adolescent moms are paired with volunteer mentors and meet for 10 sessions of parent training. Although the project is not complete, graduate students (and former students) Marilyn McGowan, Hester Dooley, and Christy Harville presented preliminary results from the project this spring at SEPA.

**AND FROM BONNIE...**

**Ms. Bonnie Hall**, fills us in on a few new administrative antics she has been up to: First, she attended more training for Banner, the USA's attempt to computerize everything. This year Bonnie is learning the **Budget and Finance System** part. How to handle 2,3,5 ledger accounts, which now have 32 digits instead of 6. There will be new procedures for purchasing that should speed things up, and the old requisitions will be done away with (many will be relieved to hear this since those old reqs took forever to wind their way through the **purchasing labyrinth**). Starting in October, reqs will be done on the computer through Banner and will eliminate all the old paperwork. So hopefully, one won't need to make as many phone calls to various offices to find what is holding up the req. Other miscellany: We have a new fax machine and shredder, and our copier seems to be behaving itself at least for now....

**DOWNEY and WILLIAMS RETIRE**

**Dr. Jerry Downey** will be leaving us after the summer 05 semester. At present he is not sure if he will keep up his professional life, but he toys with the idea of writing some Psych Today articles "for the layman". This will give him the chance to continue to think about his various social theories relating to perception of similarity/dissimilarity, aggression, and personal attraction. He plans to keep in touch with numerous colleagues from his past connections with various universities: Missouri, Iowa, Lincoln, Jacksonville. Jerry delved into many research areas before settling on Social Psych, including Child and Abnormal.

Jerry has a daughter in Maine and two sons in Mobile. He likes a moderate climate, and plans travel to South America, Egypt, or maybe Australia. He

thinks about his new identity "as a retired person" which will allow him more leisure time for reading, golf and tennis. He says to all of us: "It was good to be here, and it was good to work with all you good people". We feel the same about you, Jerry!

**Dr. Jerry Williams** left us after the Spring 05 semester but he plans to continue his tutoring work with athletes, mainly for golf. He plans to stay in town, but aims for a rural environment with a lake or a pond for fishing. He plans to visit former students who are now faculty members at other universities, or successful businessmen out-of-town. He thinks about international travel with his spouse to, perhaps, Paris, Stockholm, Honduras, Australia, New Zealand or China. He is also intrigued by our southwest, the Mesa Verde region of the Anasasi, and toys with taking up archeology as a hobby. Sounds fascinating, so keep in touch with us, Jerry!

**HELLO FROM BILL VITULLI**

Hi to new and veteran faculty and staff, Intermittent academic activities provide some intellectual continuity within primarily a domestic retirement. The 112<sup>th</sup> APA Convention in Honolulu, Hawaii, August 2004, was the first visit to that island of paradise for Betty and me. I enjoyed especially the symposia celebrating the 100<sup>th</sup> birthday of B. F. Skinner.

Critical reviewing of manuscripts submitted to the *Journal of Sport Behavior* and *The Journal of Genetic Psychology* continues to intrigue. And an invitation to write a synopsis of cumulative research in the often controversial field of parapsychology published in a "concise" encyclopedia (Vitulli, 2004)<sup>1</sup> was a challenge.

Anecdotally, the perception of the passage of time during retirement and at my age (69 on July 17) is faster than I had imagined it would be. Though I published a series of research projects studying time perception, they dealt primarily with college-age participants and their attempts to solve short-term memory problems. While we, with the help of graduate students, did sample older adults in humor and in exercise research, yet in retrospect a comparative analysis of subject variables (younger and older) and time perception would have been fun also.

<sup>1</sup>Vitulli, W. F. (2004). Extrasensory perception. In W. E. Craighead and C. B. Nemeroff (Eds.), *The concise Corcini encyclopedia of psychology and behavioral science*, Third Edition, (pp. 352-353). Hoboken, N.J.: John Wiley & Sons., Inc.

Sincerely, Bill

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This newsletter gets by with a little help from JMS