

yy

PSYCHOLOGY DEPARTMENT NEWSLETTER

University of South Alabama, July 2006

yy

STATE of the DEPARTMENT

First the GOOD news.....

This year we have two brand new faculty members: (1) **Dr. Michael Gordon** was hired to replace retired Dr. Jeral Williams, and (2) **Dr. Josh Foster** was hired to replace retired Dr. Jerry Downey. Both pursue highly interesting areas that should be most attractive to incoming graduate students. See their write-ups below to see what our two bright “new guys” are up to!!

Also, NO MORE will anyone have to ask: “What can one do with a B.A. in Psychology???” Thanks to much work by **Dr. Lisa Turner** et al., we are well on our way to being able to offer certification for an ABA (**Associate Behavioral Analyst**) Program. See LT’s write-up below for details!!

And now.....

The usual **space issues** continue to plague us, as they do most USA departments. This year, USA administrators mulled over a possible move for us to the **Kingswood Commons**, to the space currently occupied by the **Speech & Hearing Department**. However, that would result in not much more space than we have now, and would also require extensive room renovations. We also looked at adding 2000-3000 more square feet by taking the **Allied Health** area, but the administrators implied we were unlikely to get that. Faculty concerns were also that we would be more off the main campus so more commuting would be necessary. So, after much discussion during our **FALL FACULTY RETREAT**, we decided to count our existing blessings and be

content to leave the **HOME of PSYCHOLOGY**, at least for the foreseeable future, on the 3rd floor of the **Life Science Building**. At least here we are on the mainstream of campus, close to the medical school, library, bookstore, and the old and new student buildings.

The other big issue that we rejuvenate each year concerns our plans for a **Psychology PhD program**. This year, to make this proposal more attractive to USA administrators, we added a new twist: Why not join forces with another USA department to give us more ammunition in our quest? So, we are now collaborating with the **Counseling Department** in the **College of Education** to develop a more integrated, joint PhD Program with them. We have already prepared a short joint proposal, which has been approved by our Deans, and we now await approval from **Dr. Patsy Covey**, VP of Academic Affairs.

If we do get approved for a PhD program, the next question is: What happens to our **Masters program**? Do we keep it or scratch it? The new PhD program would definitely lean towards the applied area, so do we keep the **Masters Program** for the experimental area? Do we first bring all students into the **Masters program**, check them out, and then send them into the PhD program? Or do we try to send them first into the PhD program, but leave the option of a “terminal masters” to students who turn out not to be PhD material? This coming year we will give much thought to such questions.

ANDERSON receives TEACHING EXCELLENCE AWARD

As one of our most gung-ho teachers, no one was surprised when **Dr. Susan Anderson** received this year’s A&S **TEACHING EXCELLENCE**

AWARD. Up to five are given in each college every year, and they reflect “quality and quantity of teaching, extraordinary commitment and effort in accomplishment of the teaching mission, innovations in teaching approaches, outstanding contributions to curriculum development, and educational scholarship”. Susan will reap her reward of \$3000 this November at the **Dean’s Lecture**. Last year Susan worked hard to develop her *on-line* course of General Psychology, and this year she has some interesting data to report: All other things being equal (e.g. same assignments, tests, etc.) she found that students in the *real* classroom in fact do better than those in the *on-line* classroom, although there are some exceptions involving highly self-motivated students. Nevertheless, as with most everything else these days, *on-line* phenomena are *definitely here to stay*, so Susan plans to spend time studying why differences occur in *real vs. on-line* classrooms to try to equalize the situations.

Besides General Psych, Susan also teaches Biopsych II, for which she has plans to introduce actual **human brains** as *hands-on material* for her students to look at (no dissection yet however). She also teaches the A&S Freshman Orientation Seminar (which as of now is required by dorm students, but eventually will apply to all), and also manages our departmental WEB pages. On the personal side, Susan’s daughter Hanne just graduated as valedictorian from Davidson High School, and will enter USA this fall with a full scholarship, to embark on a career in *International Studies and History*.

FOOD <=> MOOD RESEARCH adds NEW QUESTIONNAIRE, BIO- PSYCH COMPONENT

Dr. Larry Christensen continues to add intriguing new facets to his traditional **FOOD <=> MOOD** research. Exactly what is it about the life styles of people who become “addicted” to carbohydrates? Do carbo-cravers eat normal meals, but maybe just snack more on junk food between meals? Or do they choose pasta for dinner whereas others choose steak? Or do they choose more low-fiber carbs (like soft white bread) compared to high-fiber carbs (like beans, veggies)? Until now, there has been no real data on detailed eating patterns of carbo-cravers, but Larry now will obtain such data that should reveal exactly what carbo-cravers eat each day. Combine this with his food-rating questionnaire, where he asks how various foods are craved on a scale from 1-10. All this should yield valuable new data on what

draws people into an addiction for carbs, thus leading them to potentially more serious ailments like obesity, diabetes, and maybe even depression. Also, Larry’s **FOOD <=> MOOD** research is also jumping on the bio-psych bandwagon as he has joined forces with **Dr. John Kline** and student Beth Ryan to look at left frontal hemisphere brain activity in carbo-cravers (see Kline article).

On a personal note, Larry also just got back from a 2-week trip to **CHINA**, where he reports the following non-academic activities: (1) Saw Hong Kong (with a lot of modern buildings); (2) Rode up the Yangtze River (saw a lot of interesting sampans); (3) Ate pork liver congee (a soupy dish with rice); (3) Bought a wind-up Rolex watch for \$5 (which is still running), a case of beer for 80 yuan (about \$10), and a 4’ x 6’ silk rug (\$1500); (4) Saw lots of giant pandas in Zoos (but didn’t make it to the Panda Reserves). (5) Saw the Great Wall, Tianamin Square, the Terracotta soldiers (with no weapons because the peasants took them during a revolt), and the Forbidden City near Beijing (where previous rulers had large harems and only allowed male eunuchs in). As you can see, Larry picked up quite a bit of Chinese history while there....

KLINE seeks EXCESSIVE REASSURANCE SEEKERS

Dr. John Kline continues his work on brain laterality and the role it plays in the regulation of emotion. Like many psychologists, he wants to understand depression. But he wants to separate the *really depressed* people from those who just THINK and SAY that they are depressed. According to Kline, you can’t trust those questionnaires 100% of the time. Some people might report on a questionnaire that they feel depressed, but in fact they are only temporarily *distressed*, because, well, let’s face it, life is a *hard road* from time to time. So John thinks there is a population out there of *distressed* people who believe they are depressed, when in fact they only want and need some sympathy, and he calls these folks **EXCESSIVE REASSURANCE SEEKERS** (henceforth: ERSs). ERSs are highly motivated to meet needs of others and they need a lot of **gratification** for themselves. So John now has a physiological measure that he thinks will help separate the *distressed* ERSs from the truly clinically *depressed*. His measure is the brain activity in the frontal lobes of the left

hemisphere, which as we all know is the “language” half that controls reasoning, planning, and goal orienting behavior. John thinks ERSs have more activity going on there, and this can be reflected in a personality disorder that makes them overactive in the less rational aspects of life, so they become more active in sex, violence, gambling, drugs, etc. They look for rewards in life, but also make a lot of mistakes. When their activities don’t exactly work out for the best, they feel lousy and become angry and irritated and *distressed* (but not *depressed* mind you!). Then things might get even worse if ERS are mis-diagnosed as *depressed* and start taking all those medications like PROZAC when they shouldn’t be. Perhaps this is why we have been hearing in the NEWS lately about kids on PROZAC committing suicide???

John is also bringing his expertise in the neurobiology of emotion to **Dr. Larry Christensen’s** studies on carbohydrate craving (see Christensen article). In his previous work with alcohol-lovers (not necessarily alcoholics), he has found high levels of left frontal brain activity and smiling behavior (which he can also measure physiologically) during moderate drinking. John now wants to see if carbo-cravers react the same way to carbs as alcohol-lovers do to alcohol, as this pattern may reflect the same underlying mechanism of elevated left frontal brain activity. Student Beth Ryan is working on this project, and another student Jim Dineen is working with John on aspects of depression and brain asymmetry relating to events before and after the 911 catastrophe.

On the philosophical side, John has an **organismic** rather than **reductionist** view of the brain, and would like to see more work on “integrating the parts into the whole”. He would eventually like to teach a course on the “Biological basis of Psychopathology”. On the practical side, he has just become licensed as a certified Alabama psychologist, which allows him to practice privately, but for now he will basically work in our Clinic. On the personal side, John and his wife Vivian have various hobbies like running, racquet ball, and playing music. Also, they were both very active in trying to get relief to pet victims of **Hurricane Katrina** in Alabama last fall.

The NEIGHBORHOODS are
 << S P R E A D I N G
 >>

Dr. Mark Yates continues to look at the effects of “neighborhoods” on various word processing tasks. Recall that *phonological neighborhood* reflects auditory similarity between words. He now has three tasks in which he flashes words on a screen to try to untangle neighborhood effects: (1) Simple lexical decision: Is this a word or not? (2) Speeded naming, or say the word ASAP, and (3) Semantic Categorization: Is this word an “animal”? These three tasks reflect increasingly higher levels of cognitive processing. Then he measures reaction time (RT) to see how neighborhood size affects processing. Another task he uses is the “progressive de-masking task”, in which a word “CAT” is flashed alternating with a visual masker “XXX”. He can then measure the amount of time it takes to recognize the word. The basic finding across all tasks is that words with large neighborhoods are processed more rapidly than are words with small neighborhoods. It seems that **MORE** really is better in this case. In addition to the size of the neighborhood, Mark has started to look at a variable known as *spread*. *Spread* is a measure of the positional relationship between a word and its neighbors. The research on *spread* indicates that words with neighbors at many positions are recognized more rapidly than are words with neighbors at only a few positions. Again, **MORE** is better. And let us not forget the *semantic neighborhood* (words that are related in terms of meaning). Here, *big* neighborhoods seem to *enhance* immediate word recognition, but *interfere* with memory tasks. Now on top of all this, Mark is also putting words into actual sentences like “The astronaut was amazed at such a **HALO/SHINE** surrounding the moon”, to measure how various neighborhoods (*small* for HALO, *large* for SHINE) interact with eye movements. Mark sighs, the only way to really deal with *neighborhoods* is to use multiple tasks to study them, and surely someday they will eventually fall into place. Students John Friend and Danielle Ploetz are helping Mark to better understand various aspects of his neighborhoods.

Mark still gets excited over the basic finding that for auditory word recognition, words with lots of phono-neighbors are responded to more *slowly*, but in visual word recognition, words with lots of phono-neighbors are responded to more *rapidly*. Mark also likes to think philosophically about his work in relation to the grand scheme of things: For the human species, speaking/listening behavior is certainly a lot older (phylogenetically, onto-genetically, culturally), than reading behavior, so why could not auditory vs. visual word recognition be based on fundamentally different mechanisms? By the way, congrats to Mark and wife Wendy, who is an Occupational Therapist at Springhill Senior Residence, on the birth of daughter Chloë, born Oct 7, 2005.

yyyyyyyyyyyyyy

GORDON tinkers with TAU (t)

Dr. Michael Gordon is one new faculty member, who comes to us after completing a post-doctoral fellowship at the U. of Toronto. His area of interest focuses on what kind of information people use in **audio-visual processing** and how this may change over the **lifespan**. His immediate interest right now is in **TAU**, which refers to information derived from “rate-of-change” in sensory events to determine when approaching objects are to reach one's position. For example, if you show people a video of a bouncing ball getting closer and closer, what happens to their perceptions if you change the size of the ball, or the intensity of the bounce sound? In his recent research he has examined the case of an approaching train whistle. What parts of the spectrum are used in assessing distance from the listener? Mike presents people with various synthesized frequencies and noises, and asks them to determine when the sound would reach them. He found that τ and psychological qualities such as “urgency” have a big influence on judgments. So what makes a sound like a siren **URGENT**? Is it frequency, intensity, or rate of change of frequency or intensity, etc.? All of the above seem to matter.

Mike has several other projects he is working on: (1) He is studying (with undergrad Suzanne Allen) audio-visual speech perception, and trying to assess the value of **lip-reading**, and how this may differ for younger vs. older people. So far he has begun to confirm previous research that found older adults tend to have more difficulty lip reading as efficiently as younger folks. So he wonders, is this a sensory or cognitive deficit? Also in general how do age-related changes in functions like temporal processing (time-related events) effect one's ability to combine audio and visual streams. (2) He is studying (with undergrad Jose DeAnda) how **football helmets** may impair aspects of auditory perception, both for speech (how well can the players really hear all the quarterback signals) and non-speech (can the quarterback hear all those shuffling cues that may indicate an impending SACK?). (3) Most recently he and **Dr. Chuck Brown** have begun a collaboration to study the effects of various **cancer treatments** (e.g. drugs, chemotherapy) on sensory loss, both audio and visual.

And now or the finale:

(4) Mike is studying **ECHOLLOCATION** in humans! Yes, we humans can indeed echolocate if we have to! To study this little-used (in humans) capacity, Mike

puts a blindfold on a subject, and then instructs them to walk along a wall that has various indentations. It turns out that the walk trajectory changes with such manipulations, because humans are sensitive to things like “acoustic texture” in their environment. Also, by adding earplugs, he can create various “anechoic” (non-echoic) environments to further explore the mysterious world of human echolocation.

Also, congrats to Mike and wife Alexis on the birth of their son Remy (Remie I S. Gordon), who was born just this past Mother's Day! Everyone came through the birth healthy, and the family is enjoying their new life together.

FOSTER studies NARCISSISM, SELF ESTEEM

Dr. Josh Foster is our other “new-guy” who comes to us from U. of Georgia as a social psychologist. He is interested in the **SELF**—how we view ourselves—and how this view affects use in various situations. Specifically, he studies (1) **SELF-ESTEEM**, which is having a more or less positive view of oneself, and (2) **NARCISSISM**, which is having an “over-inflated” view of oneself. As you might expect, Josh thinks that it is good to have high self-esteem, so long as it is genuine and based in reality (Josh is not a believer in raising self-esteem for its own sake). Perhaps surprisingly, Josh views narcissism as neither good nor bad, but something that can be harmful in some situations and helpful in others. For example, Josh says that narcissists probably don't make the best lovers, but they might make excellent politicians and CEOs!

Josh uses a lot of surveys in his research. For example, here is an item from a survey that he uses to measure self-esteem (Rate from 1 [disagree] to 5 [Agree]: “*I feel that I am a person of worth, at least on an equal plane with others.*” Now, contrast this with an item from a survey that he uses to measure narcissism (choose one); “*I like to be the center of attention.*” vs. “*I prefer to blend in with the crowd.*” (Get the point?) What Josh often likes to do in his research is to give people these surveys and then see how they think and behave in various situations. For example, in one study, Josh observed that narcissists were prone to making risky and sometimes even senseless wagers in a gambling situation. (Don't worry—nobody lost any real money in this study!)

Josh is also interested in what are called **individual differences** (age, gender) in narcissism. For example, a few years ago Josh published a study showing that

older people are less narcissistic than younger people. But is this because narcissism actually falls as people get older? Maybe this is really a generational difference (with older people coming from different generations than younger people). Or maybe it's a little bit of both. As you might expect, these are difficult questions to answer, but ones that Josh hopes to answer with time.

Josh also plans some collaboration with **Dr. John Kline** to see whether narcissism correlates with the physiological measure of left frontal lobe brain activity. Speaking of Kline, one cannot help but notice the *amazing resemblance* between Josh's **narcissists** and Kline's **ERSs** (see Kline article). According to Josh, narcissists also strive to feel good, and thus may get overly involved in risky sex, drug abuse, and violence. So let's leave it up to Josh and John to probe with their various surveys and brain wave measures and find out if narcissism ⇔ ERS.

Right now, Josh is having a great time in ACADEMIA and enjoys teaching (he currently teaches Intro and Social Psychology). He is also comfortable with computers, and is working with other faculty to overhaul that Psychology Web Page. Down the line, he tinkers with the idea of getting a job with some kind of match-making outfit like **eHarmony** (of course, after a long and fruitful career at South!). Josh also got married last spring and he and his wife, Dr. Hope Jackson, spent their honeymoon in Acapulco. Hope is a clinical psychologist who specializes in eating disorders (anorexia, bulimia). She is now in private practice, but starting this Fall semester will be moving her practice to our Clinic and teaching classes in Abnormal Psychology. Josh and Hope have three cats—*Zen, Matty, and Felicity*—all adopted from the animal shelter, are both vegetarians, and are strongly committed to promoting the respect and welfare of all animals.

BRAIN WAVE BANDWAGON

Thanks to **Dr. Jack Shelly-Tremblay's** influence, we now have a great group of bio-psychological collaborators in our department, and what ties them together is an interest in **HUMAN BRAIN WAVES**.

For example, Jack is collaborating with **Dr. Marty Rohling** to uncover the event-related-potentials (ERPs) underlying malingering behavior, or "faking that you do not know something". Malingering occurs when certain people try to get compensation for some sort of psychological disability when they are in fact not disabled. As a behavioral measure of malingering, Jack

and Marty use the SVT (Symptom Validity Test) as a self-report of psychological symptoms. Join this with a simultaneous measure of the ongoing brain waves, specifically the P300. They test two groups of subjects, who will be actual clinic patients from our Clinic. One group will be instructed to "be honest" about their symptoms, another group will be instructed "to fake" on certain items. Then P300s will be compared in the two groups to see if the brain waves differ for the "honest" vs. "faked" reported items. (Grad student Josh Eyer is also working on this project for his M.A. thesis.)

Jack is also collaborating with **Dr. Mark Yates** on a study to determine various effects of the phonological neighborhood on word processing. This time the wave of interest is the N400, which automatically activates when a person reads a word for meaning. Jack is also collaborating with **Dr. John Kline** to study EEG patterns and emotion. (see Yates, Kline articles).

Recently, Jack came down off the wagon to engage in a bit of non-brain-wave research. With **Dr. Jenny L-R**, he is looking at the efficacy of using computerized reading training in juvenile detention systems, since youth violence seems to correlate with reading problems.

Back again on the wagon, Jack is also studying the brain waves underlying **pistol-shooting** in law enforcement marksmen. Are novices different from experts in how hesitant they are to shoot targets (or potentially people)? Do levels of arousal or nervousness differ? Are there differential effects of an audience? These effects will be probed using the measures of hemispheric asymmetry in ALPHA and BETA brain waves. Jack predicts that an expert marksman with much practice should have greater hemi-asymmetry than an unpracticed novice who is being watched. Grad student Pam Jones is working on this project.

WHAT CAN'T ONE DO WITH A PSYCH B.A. ????

According to **Dr. Lisa Turner**, we are moving toward offering the coursework necessary for the **Applied Behavioral Analyst Associate certification**. All you need is a B.A., three or four specialized courses, lots of supervised work, and then you are ready to take the certification exam. This endeavor reflects a collaborative effort with **Dr. David Ellis** of the Department of Special Education and **Ms. Ellen Taylor** who is an ABA consultant.

ABA Associates typically work with children and adults with developmental disabilities who also have behavior problems. The ABA Associate's job will be to analyze the antecedents, purposes, and consequences of the problem behavior and then create a plan to modify the behavior. According to Lisa, "The jobs are out there". School systems and group homes would be good sources. So now our undergraduate students will have another important skill when they leave us with their B.A. and will never have to listen to "What can you do with a B.A. is Psychology?????" again.

On the research side, Lisa is still pursuing her studies of what makes a successful parent. Along with Dr. Jenny L-R, she is winding up her parenting intervention with adolescent mothers (the moms liked the intervention and reported increases in social support). She is also collecting self-report data from college students concerning their perceptions of how they were raised. Students Elizabeth Blackwelder and Christi Culpepper (grads) and Lori Westmoreland and Ashley Address (undergrads) are helping with these projects.

BONNIE BEATS BANNER

To the relief of everyone in the department with a grant of some kind, **Ms. Bonnie Hall** figured out this year how to print out monthly budget report statements on the new **Banner** Financial System. This is no mean feat since we have heard through the grapevine that even hi-level administrators in the Business Office are "having trouble" with **Banner**. But here, Bonnie went dutifully to every scheduled **Banner** seminar, and then, by consulting with other administrative assistants, she successfully mastered the printout operation. She still admits she doesn't know everything about **Banner** yet, but continues to learn. Deciphering expenses is rather straightforward, but how to get balances is still a bit of a **mystery**. But she says each month the reports make more and more sense, and she makes a bit more progress. Amazingly, Bonnie was also able to restart a requisition for me (JMS) that was hung up waiting for departmental chair OK (when our chair was in CHINA) by directly contacting "Robert" in the Purchasing Department. Thanks, Bonnie, for the time you save us.....

By the way, Bonnie has another skill that is greatly appreciated by all: She knows exactly how to "tickle" our temperamental copy machine to get the feed-tray mechanism going. Also, she is now taking advantage of the **CALM** (break) before/after the

STORM (next term) to do some major shredding of mounds and mounds of old tests, etc. On the lighter side, Bonnie took a cruise in May to the Bahamas with her husband, and in August she will take a trip to Chicago (her birthplace) with her son and his family.

MOBILE ZOO IS NEW HOME FOR CHICO, COCO, JOCKO, MOJO

In case you haven't had time lately to listen to the TV news (*FOX 10, May 5 '06*) or read the newspapers (*Mobile Press Register, June 9 '06*), **Dr. Joan Sinnott** has "retired" her four speech-perceiving Japanese macaque monkeys (**Chico, Coco, Jocko, Mojo**) to **The Mobile Zoo** in Wilmer AL. Anyone who knew **THE BOYS** when they were living in the **LAB** will hardly recognize them **NOW**. They all have filled out a lot in fur and muscle, and look like little monkey body builders. Negatives of the move were: (1) a few bit fingers as they tried to interact with each other through the chain-link partitions (boys will be boys), and (2) a few cases of sunburn adjusting to life in the great outdoors. But now their faces are all nicely tanned, and all appear to be enjoying **the sun, blue sky** and **green grass**.

JMS plans to let **THE BOYS** spend a rather leisurely summer adjusting to **LIFE IN THE WILD**, before getting them **BACK TO WORK** in the fall. Now that they are living at the Zoo, their appointments will be only part-time: On weekends their job will be to entertain Zoo visitors with various monkey antics, but during the week JMS plans to start them working on a new series of experiments involving **monkey speech comprehension**. Yup, the boys will advance from the phoneme level to the semantic level of speech processing! **NO MORE** sound-isolation chambers for them, **NOW** the real world of the Zoo will be their test chamber! **NO MORE** pushing a lever *left* for /ba/ and *right* for /da/! **NOW** they will be presented with actual objects, e.g. a yellow ball on the left and a red baseball bat on the right, and we will talk to them **interactively**, *as if they were children* "Jocko, go to the **YELLOW BALL**." What will stay the same will be their favorite reinforcement treat for a correct response: the incredibly tasty **Bioserve Banana Pellet**, to which all **THE BOYS** are very strongly addicted.

This newsletter gets by
with a little help from
JMS