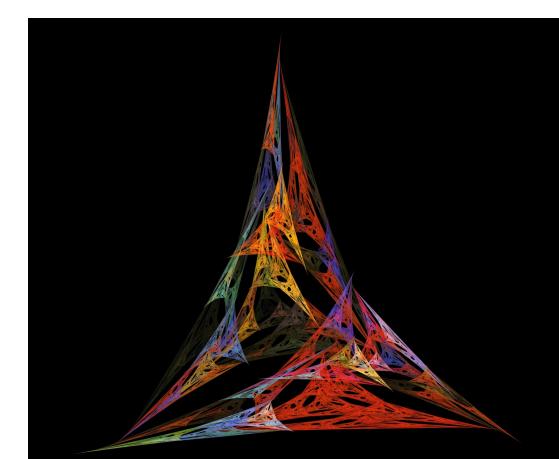


BEHAVIORAL NEUROSCIENCE/ GRADUATE PROGRAM/

UNIVERSITY OF ALABAMA AT BIRMINGHAM



ABOUT/

The Behavioral Neuroscience Graduate Program at the University of Alabama at Birmingham (UAB) is one of three Ph.D. granting programs (i.e. Behavioral Neuroscience, Lifespan Developmental Psychology, and Medical/Clinical Psychology) within UAB's Department of Psychology. Behavioral Neuroscience at UAB is focused on elucidating the biological bases of behavior and cognition.

MISSION/

The mission of the Behavioral Neuroscience Program in Psychology is to provide students with the knowledge and skills required for successful scientific research and teaching careers. It is the philosophy of our program that this mission is best achieved by having each student obtain a firm academic foundation in both psychology and neuroscience curricula, and to engage students in systematic research under the supervision of one of the program faculty. Graduates of the Behavioral Neuroscience Ph.D. program have shown excellence in their work and have successfully obtained positions in institutions of higher learning, medical schools, research institutions, and private industry.

HISTORY/

The field of behavioral neuroscience evolved from several traditional sub-disciplines within psychology (physiological psychology, experimental psychology, sensation and perception, conditioning and learning, motivation, cognition, and regulatory biology) to interface with the emerging field of neuroscience. In this manner, the behavioral neuroscientist provides a vital contribution to the field of neuroscience by emphasizing behavioral, cognitive, and functional endpoints in their research.

The Behavioral Neuroscience program at UAB is viewed as a campus-wide training program supported by faculty from the College of Arts and Sciences and the School of Medicine. This program was approved by the Board of Regents in 1980. Research in Behavioral Neuroscience at UAB occurs within an interdisciplinary context that provides a rich and diverse experience for graduate students. Faculty in the Behavioral Neuroscience PhD program hold primary appointments in the Departments of Psychology, Physiological Optics, Ophthalmology, Cell Biology, Neurobiology, Physiology, and the Behavioral Neurobiology Division of Psychiatry. This breadth of perspective is reflected both in the courses offered by the program and the research pursued by Behavioral Neuroscience students. In this spirit, students study core areas of psychology including statistics, behavioral neuroscience, learning, cognitive neuroscience, and neurorehabilitation.

*Artwork by Dr. Frank Amthor

WELCOME/

Welcome to the UAB Behavioral Neuroscience Ph.D. Psychology Program. Behavioral Neuroscience emphasizes the neural underpinnings of behavior. The mission of the Behavioral Neuroscience Ph.D. program is to produce outstanding young scientists capable of pursuing successful teaching and research careers. This goal is achieved by having each student obtain firm academic and research training in both psychology and neuroscience-based domains. A major strength of the program is that it is an interdisciplinary program that includes programmatic research and training under the supervision of any faculty member within any department at UAB who has research interests that lie in the area of behavioral neuroscience. Current training and mentorship are provided by faculty in the departments of Anesthesiology, Biostatistics, Neurobiology, Physiology and **Biophysics, Psychiatry and Behavioral** Biology, Psychology, and Vision Sciences. This system gives our students an advantage over other programs because it enables them not only to obtain faculty positions in psychology, but also in many other neuroscience-related departments within university settings, medical schools, research institutions, and private industry. We encourage you to investigate our training page on our website (www.psy.uab.edu) that provides a brief glimpse into the facilities and faculty that make up our program, the department, and the university. We encourage and welcome you to learn more about our program through the links to the left. You can also directly contact faculty members whose research intrigues you. We all look forward to hearing from you!

Sincerely, Frank Amthor, Ph.D. Interim Director, Behavioral Neuroscience Doctoral Program

INSIDE/

RESEARCH OPPORTUNITIES PAGE 3

COURSE OF STUDY PAGE 3

BN DEPARTMENTS PAGE 3

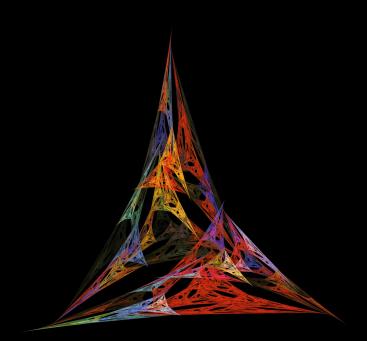
CURRICULUM & REQUIRMENTS PAGE 4

STUDENT SUPPORT PAGE 5

ADMISSIONS PAGE 5

CORE PROGRAM FACULTY PAGE 6

UNIQUELY UAB PAGE 10



COURSE OF STUDY/

RESEARCH EXPERIENCE

Students begin laboratory research upon entry into the program by completing two or three laboratory rotations during their first year. Based on these rotations, students select a mentor and laboratory in which to conduct their pre-dissertation and dissertation research. A unique aspect of the Behavioral Neuroscience program is the ability to choose a mentor that is engaged in behavioral neuroscience research from virtually any department at UAB. Thus, although the Ph.D. is awarded in Psychology, the program is truly interdisciplinary in terms of classroom and laboratory experience.

RESEARCH OPPORTUNITIES FOR BEHAVIORAL NEUROSCIENCE STUDENTS/

NEURAL MECHANISMS OF

pain, emotion, learning and memory, working memory, neurorehabilitation, circadian rhythms, visual processes, treatment intervention, and appetite

DISORDER AND DISEASE

autism spectrum disorders, depression, anxiety, schizophrenia, traumatic brain injury, stroke, cerebral palsy, mutliple sclerosis, pain, macular degeneration, neurodegeneration, neuroinflammation, effects of drugs on brain, obesity, and eating disorders

VISION

ocular movement control, visual attention, visual information processing, retinal physiology, anatomy, and information processing

TECHNIQUES

human brain imaging, psychophysiology, animal models, rehabilitation training, computational modeling, electrophysiology, and transcranial direct current stimulation

BEHAVIORAL NEUROSCIENCE DEPARTMENTS/

Faculty from multiple departments across the UAB campus mentor our graduate students.

PSYCHOLOGY RADIOLOGY CELL BIOLOGY ANESTHESIOLOGY OPHTHALMOLOGY NEUROBIOLOGY NEUROLOGY PHYSIOLOGY PSYCHIATRY AND BEHAVIORAL NEUROBIOLOGY

> PHYSICAL MEDICINE AND REHABILITATION



DAUPHIN ISLAND SEA LAB/

One of the best experiences described by our Behavioral Neuroscience students is their visit to the Dauphin Island Sea Lab. Prior to starting the first semester of courses at UAB, students attend a three-week (end of July to middle of August) course held at the Dauphin Island research facility on the gulf coast of Alabama. This unique course is taught by an interdisciplinary team of UAB faculty and introduces incoming students to many of the basic techniques and issues in the field of neuroscience via didactic coursework, extensive laboratory activities, and a final student research project. Students and faculty live in the Sea Lab housing and eat together in the cafeteria. Students from a number of UAB graduate programs visit Dauphin Island at the same time and become a tightly knit, interdisciplinary group that provides a strong social infrastructure once they return to Birmingham and begin their graduate studies.

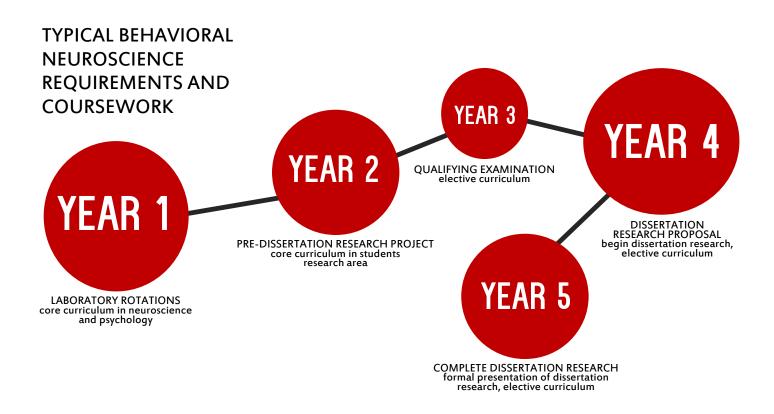


VISION SCIENCES

COURSE OF STUDY/

CURRICULUM AND REQUIREMENTS

The first year Behavioral Neuroscience program requirements include two to three laboratory rotations and course work in Behavioral Neuroscience and Statistics. In the second year, students complete the Pre-dissertation Research requirement and select an additional four courses that are germane to their own research interests. In the third year, students complete the Qualifying Examination, typically a research grant in the form of a National Institutes of Health (NIH) R01 proposal. In the fourth year, students complete the Dissertation Proposal. In the fifth year, the Dissertation is defended and the doctoral degree is awarded. In years three through five, students are encouraged to select additional coursework, with advice from their mentor, that will further develop their background in areas related to their research. Students also participate in journal clubs, workshops, colloquia, and seminar programs throughout all years across a number of departments at UAB.



PARTIAL PROGRAM REQUIREMENTS/

PRE-DISSERTATION RESEARCH REQUIREMENT

Students complete a research project under the direction of their mentor. A copy of a manuscript submitted for publication or a written research report is submitted for evaluation and approval by the Behavioral Neuroscience Steering Committee to satisfy the pre-dissertation research requirement.

QUALIFYING EXAMINATION

Students complete one of two options (i.e. a grant proposal or review paper) for the comprehensive examination requirement of the Graduate School. The student's choice is proposed in consultation with the research mentor and approved by the qualifying examination committee.

DISSERTATION PROPOSAL

The dissertation proposal is prepared in the format of an NIH R01 grant proposal. After the proposal is approved by the dissertation committee, the student is admitted to candidacy.

DOCTORAL DEGREE

The doctoral degree is awarded after successful defense of the dissertation and submission of a final copy to the Graduate School.

ADMISSIONS

Application materials for graduate study in Behavioral Neuroscience are submitted to the UAB Graduate School by January 15 of the year preceding admission. Students are typically invited for interviews in February. Notification of acceptance in the program is typically made by the end of March.

Students admitted to the Behavioral Neuroscience Graduate Program must have demonstrated excellence in academic performance typically by:



Outstanding undergraduate academic performance, (including courses in experimental psychology, biology, chemistry, and mathematics)



Outstanding Graduate Record Examination scores



Undergraduate research experience

The Behavioral Neuroscience faculty strongly encourages applications from students of diverse ethnic backgrounds. More information on UAB's Behavioral Neuroscience program is available at: www.uab.edu/cas/psychology/ graduate/behavioral-neuroscience

Application material is available at: www.uab.edu/graduate

STUDENT SUPPORT/

Graduate students in the Behavioral Neuroscience Program are supported by university fellowships in their first year. Faculty members in the Behavioral Neuroscience PhD program typically have extramural funding sources that are used to support graduate students in their second year and beyond. Most students select mentors that have funding to support research assistantships. However, students are also supported through university fellowships, training grant fellowships, and teaching assistantships. Students are also encouraged to write grant proposals for externally funded pre-doctoral fellowships to provide support during their dissertation research. Tuition and stipends are virtually always provided for the duration of the graduate student's tenure in the Behavioral Neuroscience program.

Students may apply for travel funds available both through the Psychology Department and the Graduate School to present findings at scientific meetings.

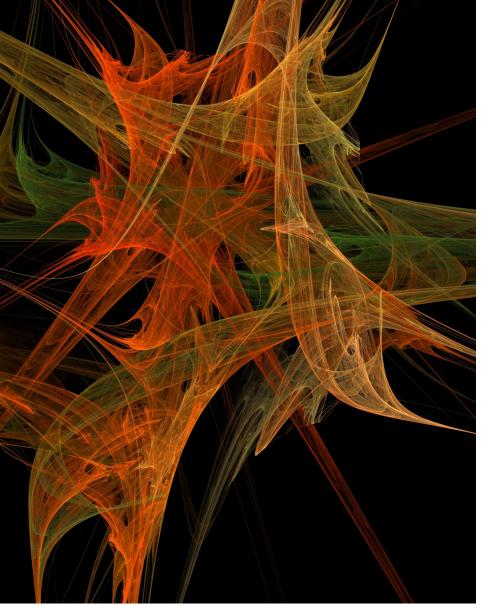


COMMUNITY INVOLVEMENT/

Students in the Behavioral Neuroscience program regularly connect with the local community through service learning and other volunteer activities. This type of student involvement offers a number of opportunities for students to connect with each other and with the greater Birmingham community. For example, students typically support Brain Awareness Week activities each year at the McWane Science Center. Brain Awareness Week is the global campaign to increase public awareness of the benefits of brain research. UAB faculty, students, and other trainees share their knowledge of the brain, cognition, and behavior with the children of Birmingham during Brain Awareness Week via demonstrations that include sheep brain and cow eve dissections, protecting the brain, illusions, and other activities that are both fun and educational. Behavioral Neuroscience students also support CORD (Community Outreach Development), which offers children and teachers in grades K-12 in-depth and hands-on science experiences at local area schools, McWane Science Center, and UAB classrooms. Students also give back to the community through education and service projects, associated with the Civitan International Research Center, that benefit children and adults with developmental disabilities. Students in the Behavioral Neuroscience program regularly share information about scientific findings and local resources at annual charity events like the Multiple Sclerosis and Autism Walks.



Behavioral Neuroscience students and faculty share information about scientific findings and local resources at the annual Autism Walk.



UNIVERSITY-WIDE INTERDISCIPLINARY RESEARCH CENTERS/

Comprehensive Neuroscience Center Civitan International Research Center McKnight Brain Insitute Comprehensive Center for Healthy Aging Center for Clinical and Translational Science Spain Rehabilitation Center Epilepsy Center Center for Exercise Medicine Center for Glial Biology in Medicine Heflin Center for Genomic Science Injury Control Research Center Intellectual and Developmental Disabilities Research Center

*Artwork by Dr. Frank Amthor

CORE FACULTY BEHAVIORAL NEUROSCIENCE GRADUATE PROGRAM

A critical feature in our training program is that each student has a faculty mentor, who is responsible for both funding and guiding the student through the program and teaching the student how to function as a behavioral neuroscientist. The faculty mentor-doctoral student relationship is formed by mutual consent in the second year of training. Therefore it is important that a student can identify a faculty member whose research is of significant interest to him or her at the time of applying to our program. Consult the faculty descriptions at www.psy.uab.edu for more information about current research. The doctoral student develops a systematic line of research in collaboration with one (or more) faculty mentors, and in the process completes the research requirements for the Ph.D. Students are actively engaged in research every semester, including summers.

FRANK AMTHOR, PH.D. MARY BOGGIANO, PH.D. BUREL GOODIN, PH.D. RAJESH KANA, PH.D. DAVID KNIGHT, PH.D. ROBERT SORGE, PH.D. EDWARD TAUB, PH.D. BULENT TURAN, PH.D. JARRED YOUNGER, PH.D.



FRANK AMTHOR, PH.D./

Interim Director/ Behavioral Neuroscience Doctoral Program Professor of Psychology

ABOUT/

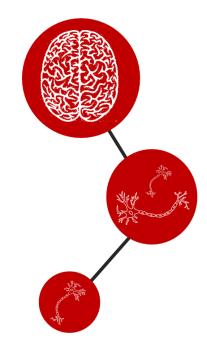
Dr. Amthor's career has been devoted to understanding neural computation, both for its own sake, and for the sake of making neural prosthesis that restore and augment human function. His specific research has been to investigate complex neural computations in retinal ganglion cells, the first locus in the visual system of highly specific and nonlinear analyses such as motion and directional selectivity.

The response properties of retinal ganglion cells arise from bipolar and amacrine cell inputs interacting with mechanisms exhibited by ganglion cells' dendritic trees. The first task Dr. Amthor took on as a retinal researcher was to identify, by intracellular recording and staining, all the major ganglion cell classes in a mammalian retina (rabbit), including directionally selective, orientation-selective and edge-detecting ganglion cells.

Following this necessary, pioneering, and now "classic" work, Dr. Amthor has investigated the retinal circuitry and mechanisms underlying complex receptive field properties such as directional selectivity, including the receptor types exhibited by various ganglion cell classes, and their projection targets in the brain in order to understand the role of different ganglion cell classes in various aspects of visual acuity and perception. These investigations have used virtually the entire suite of single cell neurophysiological techniques, including single cell extracellular recording, sharp electrode intracellular recording and staining, patch clamp recording, optical imaging with both calcium and potentiometric dyes, dual electrode recording, and, most recently, microelectrode array recording.

This research has been supported by the NEI over a continuous, 20 year period of support. Some computational aspects were also supported by the Sloan Foundation and the Office of Naval Research, while the EyeSight Foundation of Alabama has supported some efforts having clinical implications. His current interests involve further translating his basic research on the retina to the development of neural prostheses both for the visual system and for other disabilities. The penetrating microelectrode arrays he has developed have the capabilities of high bio-compatibility in terms of materials and mechanical flexibility, as well as very large size electrode counts. Dr. Amthor also has two other active projects involving haptic (skin) stimulation to improve mobility in blind and low vision patients. He believes that combining a variety of interfaces between humans and computational machinery is the most promising approach for replacing functions lost, such as vision or paralysis.

ABOUT CORE FACULTY/





MARY BOGGIANO, PH.D./

Associate Professor of Psychology

ABOUT/

Past areas of research involved the development of animal models of binge-eating using environmental manipulations such as access to highly palatable food, dieting, stress, and non-food cues. Drug, in vivo microdialysis HPLC, and

RIA studies implicated changes in mu-opioid and Y2-receptor function, mesolimbic monoamine release, and HPA axis hormones to explain bingeeating.

Dr. Boggiano's animal models ("stress-induced binge-eating" and "Binge-eating Prone/Resistant (BEP/BER)" models are being used in academic and industry labs to gain a better understanding of the physiology of binge-eating disorders and obesity and to indemnity novel treatments. Current interests are focused solely on human research and including the development, validation, and administration of a novel "Palatable Eating Motives Scale" in adolescents, teens, college students, and weight-loss seeking adults. The scale should improve treatments for obesity by identifying one's motive behind eating palatable foods. She is also testing the efficacy of transcranial direct current stimulation (tDCS) to reduce food cravings and binge-eating symptoms in humans.

Future studies will aim to identify gene and neuroendocrine markers that distinguish various palatable-eating motives types and the neurochemistry behind tDCS effects on eating behavior.





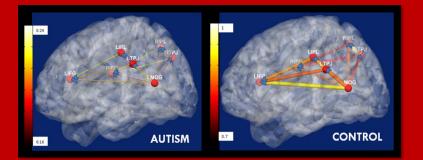
RAJESH KANA, PH.D. Associate Professor of Psychology

ABOUT

Dr. Kana studies the brain mechanisms underlying cognitive and social functions in people with autism spectrum disorders (ASD). His research has contributed to the disrupted brain connectivity model, a promising neurobiological account of autism (Image below shows patterns of posterior to anterior connectivity in individuals with autism and in typical control

participants). His Cognition, Brain, and Autism Lab (www.uab.edu/cbra) has been using multimodal neuroimaging techniques, such as functional and structural MRI, diffusion tensor imaging (DTI), and magnetic resonance spectroscopy (MRS) to characterize the brain in autism at functional, anatomical, and neurochemical levels. Recent publications from Dr. Kana's lab report the neural mechanisms of social cognition and language processing in children and adults with ASD. Translational neuroimaging is another important area of focus in his research.

Dr. Kana's Ph.D. was in Psychology from Indian Institute of Technology (IIT), Delhi, India, where he studied language and communication in autism. His initiation into neuroimaging research was at UCLA where he was a William Fulbright pre-doctoral visiting fellow in 2001. His postdoctoral training was in neuroimaging and autism at the Center for Cognitive Brain Imaging, Carnegie Mellon University, Pittsburgh. Dr. Kana has published a number of studies in the last few years that have contributed significantly to a better understanding of the brain in autism.





BUREL GOODIN, PH.D./

Assistant Professor of Psychology and Anesthesiology

ABOUT/

Dr. Goodin is a licensed clinical health psychologist with specialty training in pain-related behavioral medicine. As the director of the Biobehavioral Pain Research Laboratory at UAB, Dr. Goodin has expertise and experience with experimental models of evoked pain using quantitative sensory testing.

He has developed and refined methods to assess pain sensitivity and modulation (e.g., endogenous inhibition and facilitation) using dynamic experimental pain stimulation modalities such as heat, cold, pressure, and induced ischemia. Alongside his research team, Dr. Goodin has recently incorporated quantitative sensory testing into several studies aimed at better understanding risk factors for clinical pain severity and poor physical function among older adults with knee osteoarthritis.



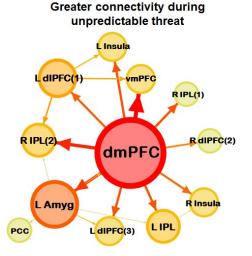
DAVID KNIGHT, PH.D./

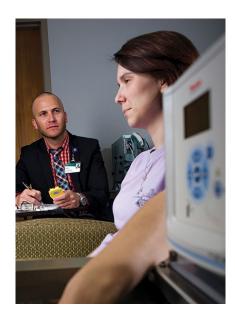
Associate Professor of Psychology

ABOUT/

Dr. Knight earned a B.S. in Psychology at Truman State University, a M.S. and Ph.D. in Neuroscience and Clinical Psychology at the University of Wisconsin-Milwaukee, and completed his post-doctoral research at the National Institute of Mental Health.

Dr. Knight's laboratory is focused on better understanding the neural substrates of human learning, memory, and emotion using magnetic resonance imaging (MRI) techniques that include functional MRI, diffusion tensor imaging, and magnetic resonance spectroscopy. Behavioral and MRI studies from the lab investigate questions that are important for understanding healthy, as well as dysfunctional, emotion processes. For example, recent work from the Knight lab has investigated the neural circuitry that supports emotion regulation processes. Disruption of these processes appears to play an important role in the emotional dysfunction associated with mood and anxiety disorders. Studies from the Knight lab will help determine neural mechanisms that mediate susceptibility/resilience to stress, and offer insights into the development of emotion-related disorders. To learn more, please visit labs.uab.edu/knightdc.







ROBERT SORGE, PH.D./ Assistant Professor of Psychology

ABOUT/

Dr. Sorge's research follows a few central themes:

IMMUNE SYSTEM MODULATION OF PAIN: It is now accepted that the immune system plays a primary role in the experience and development of

chronic pain. Dr. Sorge's lab is currently investigating the nature of this role and ways in which the immune system can be altered to alleviate chronic inflammatory and neuropathic pain through the use of genetic, pharmacological and behavioral interventions.

IMMUNE SYSTEM MODULATION OF ADDICTION: Drugs of abuse elicit an immune response in the body and within the brain. Dr. Sorge's lab is currently investigating how changing the functioning of the immune system and the inflammatory processes alters the reinforcing value of classical drugs of abuse in rodent models of addiction. To learn more, please visit uabimpactlab.com.





BULENT TURAN, PH.D./

Assistant Professor of Psychology

ABOUT/

Dr. Turan's research examines the mechanisms underlying the relationship between social bonds and well-being. One area of focus is understanding how people use (or do not use) supportive relationships effectively at times of stress and how this affects emotional and physical health.

A second area of focus is the effects of negative social evaluation on psychological and physical well-being (particularly hormonal responses including cortisol, testosterone, and alpha amylase reactivity). Current projects involve laboratory stress procedures to specify the mechanisms underlying hormone responses. These studies generally use the Trier Social Stress Test and other laboratory procedures, and aim to understand the role of negative evaluation and social support on hormonal reactivity. Such reactivity is hypothesized to be an important determinant of chronic emotional (as well as physical) health problems. Other projects apply the construct of fear of negative evaluation to the context of HIV/AIDS to examine the effects of HIV-related stigma and discrimination among persons living with HIV.



JARRED YOUNGER, PH.D./ Associate Professor of Psychology

ABOUT/

Dr. Younger received his Ph.D. in Experimental Health Psychology in 2003 at the University of Tennessee, Knoxville. He then completed postdoctoral fellowships at Arizona State University and the Stanford University School of Medicine before taking an Assistant Professor position at Stanford.

He is now joining the UAB faculty in Psychology, with secondary appointments in Anesthesiology and Rheumatology. He is currently funded by the National Institutes of Health and the Department of Defense to study new techniques for diagnosing and treating neuroinflammation.

The Neuroinflammation, Pain and Fatigue Laboratory uses neuroimaging, pharmaceutical, and immunological techniques to understand and treat chronic diseases. "We believe that low-level inflammation of the brain drives pain, fatigue, depression, and cognitive decline in millions of people. Low-level inflammation may also drive memory problems and fatigability as people age. We also investigate the impact that addictive drugs (such as opioid pain medications) have on the human brain. We use magnetic resonance imaging (MRI), pharmacologic MRI (phMRI), diffusion tensor imaging (DTI), and magnetic resonance spectroscopy (MRS) neuroimaging techniques. ' - Dr. Jarred Younger.



Edward Taub, Ph.D./

University Professor of Psychology

ABOUT/

Dr. Taub has developed a set of techniques, termed Constraint-Induced Movement Therapy (CI therapy), effective in reducing the incapacitating motor impairment often associated with stroke.

traumatic brain injury, and other types of damage to the CNS. The work stems from research with monkeys given

somatosensory deafferentation and is based on the principle that a portion of the chronic motor deficit after CNS injury is due to a learning phenomenon, termed "learned nonuse," rather than to the organic damage per se. Constraint-Induced Movement therapy has been shown to produce a substantial increase in "use-dependent cortical plasticity.

Recent research has correlated the motor improvement in patients with brain damage changes in brain plasticity as revealed by structural magnetic resonance imaging (MRI). The work to date shows that (a) CI therapy increases the cortical grey matter of patients given CI therapy after stroke, MS, and cerebral palsy. There are changes in white matter tracts as well as revealed by TBSS. The grey matter increase is in the sensorimotor cortex, other motor areas, and the hippocampus. (b) In control subjects given an alternate therapy there is no change. New projects involve using CI therapy for the rehabilitation of movement in veterans of the Iraq/ Afghanistan Wars with traumatic brain injury and in tetraplegic patients with high spinal cord injuries.

UAB QUICK FACTS/

//UAB has experienced its fifth consecutive year of record enrollment, with a student body of exceeding 18,500 who can select from 137 degree programs in arts and sciences, business, dentistry, education, engineering, health professions, medicine, nursing, optometry and public health.

//UAB has been ranked for four consecutive years among *Princeton Review's* top 10 universities for diversity. More than 35 percent of students are minorities and nearly 61 percent are female; they hail from every region of the country and more than 110 nations.

II U.S. News & World Report ranks 11 UAB programs in the top 25 and five in the top 10 in its list of "Best Graduate Schools."

// The Carnegie Foundation identifies UAB as one of a handful of institutions rated for "very high research activity" that also is a leader in "community engagement."

UNIQUELY UAB/

UAB CAMPUS GREEN

Birmingham is a growing, diverse, and progressive city located in the foothills of the Appalachians. The hospitality of the people and the temperate climate of the "Magic City" complement a wide variety of educational offerings, cultural and entertainment activities, and sporting events. Health care and education have replaced industry as Birmingham's economic base, and UAB is now the city's leading employer.

UAB is a comprehensive, urban research university with an enrollment of more than 18,000 students. The university is a nationally and internationally respected center for educational, research, and service programs. The UAB campus encompasses an 83-block area on Birmingham's Southside, offering all of the advantages of a university within a highly supportive city. A particular strength of the school is its many interdisciplinary programs, like the BEHAVIORAL NEUROSCIENCE PROGRAM/, that cross departmental and school lines. UAB attracts over \$400 million annually in external research funding and ranks consistently in the top 25 nationally in funding from the National Institutes of Health. For graduate students, this funding status means availability of financial support, access to well-equipped research laboratories, and interaction with faculty members who have earned research support based on the favorable judgment of their colleagues nationwide.

UAB is regularly ranked in the top 10 best medical schools in the U.S. and offers a wide selection of research opportunities spanning cellular/ molecular, behavioral, cognitive, genetic, and patient oriented studies. Researchers at UAB actively support and encourage students to explore questions beyond disciplinary boundaries. This collaborative atmosphere allows students to tailor educational and research experiences to individual research questions and career goals. In fact, UAB offers access to over 100 Core Facilities with cutting edge instruments and resources to support student research and career development. Further, UAB provides ongoing professional development and support to young scientists through the Comprehensive Neuroscience Center, Center for Clinical and Translational Science, the Office of Postdoctoral Education, and the Graduate Career Awareness and Trends programs which offer courses in grant writing, manuscript publication, lab management, translational science, and other professional development skills.





ALABAMA JAZZ HALL OF FAME/

RED MOUNTAIN PARK

THE BIRMINGHAM ZOO/

CAMPUS LIFE/

Campus life at UAB is characterized by the bustle and diversity of the university's urban setting. UAB has an active international community of students and faculty. The ALYS ROBINSON STEPHENS PERFORMING ARTS CENTER provides an acoustically superb setting for a broad range of world-renowned performers who are brought to the UAB campus. Dance groups offer opportunities in ballet and jazz. Artwork is continuously exhibited in the Visual Arts Gallery and several other galleries on campus.

The BIRMINGHAM CIVIL RIGHTS INSTITUTE exhibits a self-directed journey through the civil rights movement, as well as temporary exhibits which include interactive video and computer programs. The Institute also houses a resource gallery for teachers, students, and others seeking information on civil and human rights. The BIRMINGHAM MUSEUM OF ART houses one of the most comprehensive permanent collections in the southeast with more than 24,000 paintings, sculptures, drawings, and prints.

Birmingham offers COLLEGIATE SPORTS, such as basketball, soccer, baseball, and football, as well as MINOR LEAGUE BASEBALL. Birmingham is frequently selected as the site for college basketball tournament events, including various rounds of the NCAA Tournament. The UAB Blazers basketball team regularly earns a berth in the NCAA tournament, most recently in 2011.

The state's largest park, located just 15 miles south of town at OAK MOUNTAIN, offers boating, swimming, camping, hiking, golf, tennis, and fishing.

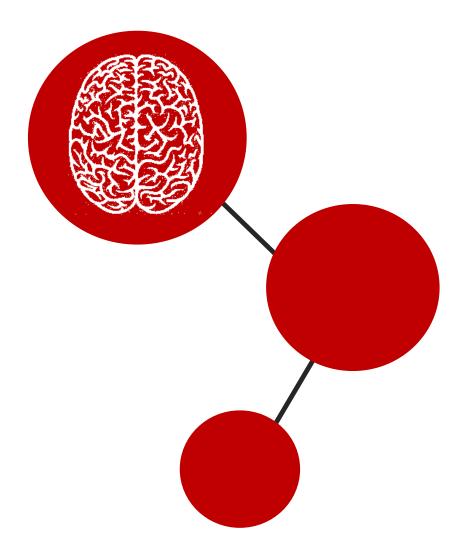


RAILROAD PARK

CIVIL RIGHTS INSTITUTE

BIRMINGHAM MUSEUM OF ART





FOR MORE INFORMATION VISIT/ WWW.PSY.UAB.EDU

OR CALL/ 205-934-8723

