

Vanderbilt University

November 27, 2001

Psychological Science at Vanderbilt University has a powerful new look and an enhanced presence bringing together vital capabilities to tackle important psychological issues. The Department of Psychology (Arts and Science) and the Department of Psychology & Human Development (Peabody College) are integrating select graduate and undergraduate degree programs to take advantage of the combined resources of over 50 faculty members. This process involves a number of key faculty hires.

FACILITIES

Brain Institute – <http://braininstitute.vanderbilt.edu>

Center for Integrative & Cognitive Neuroscience – <http://cicn.vanderbilt.edu>

Department of Psychiatry – www.vanderbilt.edu/ans/psychology/homepage.html

Kennedy Center – www.vanderbilt.edu/kennedy

Learning & Technology Center – <http://peabody.vanderbilt.edu/depts/tandl/>

Susan Gray School – www.vanderbilt.edu/kennedy/sgs

Vanderbilt Institute for Public Policy – www.vanderbilt.edu/vipps

Vision Research Center – <http://vision-research.vanderbilt.edu>

FACULTY

AHN, Woo-kyoung

ASHMEAD, Dan

BACHOROWSKI, Jo-Anne

BENBOW, Camilla

BICKMAN, Lenord

BLAKE, Randolph

BRANSFORD, John

BROOKS, Penny

BURISH, Thomas

CAUL, William

CASAGRANDE, Vivien

CHUN, Marvin

COLE, David

CORDRAY, David

DAVIS, Denise

EBNER, Ford

FOX, Robert

FRANKS, Jeffery

GARBER, Judy

GAUTHIER, Isabel

McCARTY, Richard

McNAMARA, Timothy

MAROIS, Rene

ODOM, Richard

NOVICK, Laura

PALMERI, Thomas

PARK, Sohee

PION, Georgine

RAY, Oakley

RIESER, John

SANDLER, Howard

SAYLOR, Megan

SCHALL, Jeffrey

SCHLUNDT, David

SMITH, Craig

SMITH, Leslie

SMITH, William

STONE, Wendy

TOMARKEN, Andrew

TROSETH, Georgene

HESPOS, Susan
HOGGE, James
HOLLON, Steven
HOOVER-DEMPSEY, Kathy
KAAS, Jon
LAPPIN, Joseph
LOGAN, Gordon
LUBINSKI, David

VAN EYES, Patti
WALDEN, Tedra
WALKER, Lynn
WALLER, Niels
WEISS, Bahr
ZALD, David
ZBRODOFF, Jane

UNDERGRADUATE PROGRAM

The two departments offer a major in psychology, with specialties paralleling many of the graduate programs. Peabody also awards an undergraduate degree in child studies.

DOCTORAL PROGRAM

CLINICAL

Clinical Psychology at Vanderbilt has long drawn on both the College of Arts and Science and Peabody College. For example, the two programs share a common core curriculum, a training grant in the area of Developmental Psychopathology, several collaborative research programs, and similar philosophies of training. Research foci include: (1) Developmental Psychopathology, particularly the identification, treatment, and prevention of psychopathology among children and adolescents; (2) Adult Psychopathology, stressing a. the development of interventions for treating and preventing affective disorders and b. the neurobiological and psychosocial causes of schizophrenia, affective disorders, and anxiety disorders; (3) Emotion, particularly the interpersonal, cognitive, and biological factors influencing basic emotion processes and individual differences in affective traits; and, (4) Health Psychology, particularly the identification of behavioral factors implicated in biomedical diseases and interventions promoting healthier lifestyles. Underlying each of these areas is a common philosophy that emphasizes the development and testing of theories, empirical validation, methodological rigor, and the establishment of linkages between normal and abnormal processes using multiple levels of analysis. While both programs subscribe to the scientist-practitioner model, the primary goal is the training of clinical scientists. Contact information for Developmental Psychopathology Judy Garber (judy.garber@vanderbilt.edu), for Adult Clinical Andrew Tomarken (andrew.j.tomarken@vanderbilt.edu).

COGNITIVE

The Program in Cognition marshals the talents of over 20 faculty members to examine fundamental problems in perception, attention, memory, causal reasoning, thinking, and problem solving. Within these broad areas of research exist specialties in binocular vision, motion perception, perception of geometric structure, visual attention, perceptual learning and expertise, visual cognition, categorization, conceptual structure, spatial memory and orientation, knowledge representation, attitudes and memory, text comprehension, learning in real-world contexts, decision making, numerical reasoning, and analogical problem solving. Mathematical and computational modeling are widely used as research tools. Several faculty members study the development of perceptual and cognitive capabilities in the

individual, and how these abilities are influenced by social institutions. We have an outstanding group of cognitive neuroscientists, with particular strength in functional neuroimaging. The Program in Cognition also has an excellent program in the learning sciences, and several members' work in interdisciplinary teams focused on learning in schools. Contact information: Marvin M. Chun (marvin.m.chun@vanderbilt.edu) or John J. Rieser (rieserjj@ctrvax.vanderbilt.edu).

DEVELOPMENTAL

The Developmental Program concentrates on basic processes of development in childhood and adolescence in the areas of cognition, social processes, emotion, and language. This work also examines family and school contexts of development. A focus on basic processes of development as they apply to both typical and atypical development (e.g., as in mental retardation and psychopathology) is stressed throughout graduate training. Therefore, how developmental processes contribute to both the usual course of development and more aberrant developmental outcomes are given commensurate attention. The program provides training in the design and analysis of research focusing on questions of growth and change, at the group and individual level. Contact information: Tedra Walden (tedra.walden@vanderbilt.edu).

NEUROSCIENCE

The Neuroscience Program is designed to train students in current research strategies aimed at understanding the relations between the nervous system and behavior. Faculty in the neuroscience program are broadly interested in the neural bases of perception and cognition, and in nervous system development and plasticity. Several faculty use psychophysical, anatomical, neurophysiological and neuroimaging methods to explore the role of central nervous system structures and pathways involved in vision, other senses, and high-level cognition. Included in this research is the study of the development of neural connections early in life and the plasticity of neural connections in adult and regenerated nervous systems. Other members of the neuroscience faculty utilize psychophysical techniques and mathematical modeling to study the visual capabilities across the developmental stages (infant to elderly) in healthy and mentally retarded individuals. Still other faculty use behavioral techniques to study behavioral pharmacology, emphasizing animal models of drug dependence. Training in neuroscience includes both coursework and intensive laboratory experience with one or more faculty members. Extensive new research facilities in neurophysiology, neuroanatomy, and optical imaging are available. Significant technical and graphic support is available through the Vision Research Center. The recent acquisition of state-of-the-art neuroimaging (3T fMRI scanner) and electrophysiological facilities at Vanderbilt will permit students to join research programs that are at the forefront of human cognitive neuroscience. Contact information: Rene Marois (rene.marois@vanderbilt.edu).

QUANTITATIVE METHODS & EVALUATION

The Quantitative Program focuses on methods for designing studies and analyzing data for two interrelated forms of behavioral and social change: (1) change that comes about due to naturally occurring developmental processes; and (2) change that is instigated through deliberate intervention strategies and experimentation. In both arenas, an integrated approach to the analysis of change is emphasized that involves in-depth consideration of measurement, research design, statistical theory,

principles of data analysis, research synthesis and the reporting of findings. In particular, the program focuses on development and application of statistics, measurement, and research design to applied practical problems in social research generally, with specific emphasis on problems in psychology, education and program evaluation. Contact information Niels G. Waller (niels.waller@vanderbilt.edu).