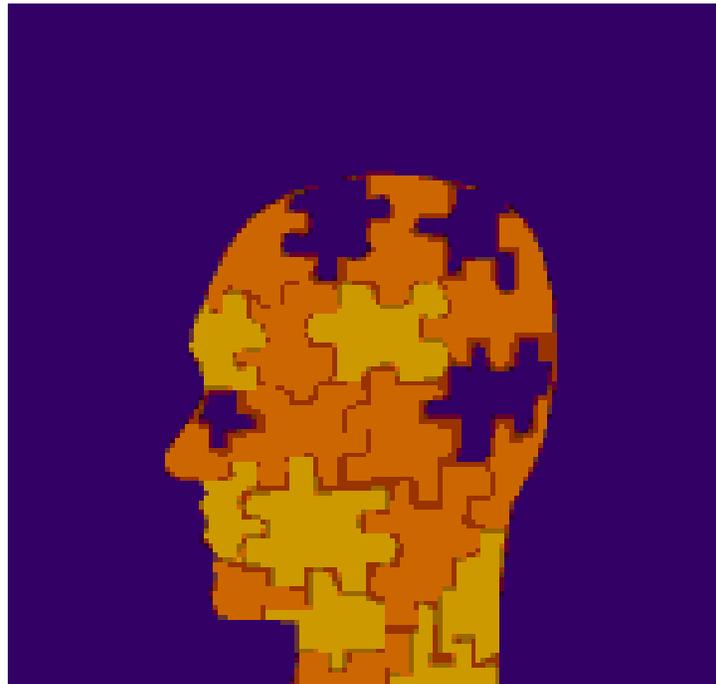


Experimental Psychology



2007-2008 Graduate Program Handbook

Central Michigan University

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About This Handbook

This handbook will provide an overview of the graduate programs in Experimental Psychology and their degree requirements. This handbook, however, is not intended to replace the *CMU Graduate Bulletin* and the faculty advisor. Thus, the student is expected to:

- a. Become familiar with the academic regulations of the university and the requirements of the specific program.
- b. Contact the advisor on a regular basis to keep informed of program requirements and to obtain general assistance in the completion of the program.
- c. Assume primary responsibility for complying with all regulations of the university, the College of Graduate Studies, and the department, and for meeting all requirements for the degree within the allowable time limits.

If you have any questions regarding the Experimental Psychology Program, please contact the program director.

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General Description

The primary objective of the graduate programs in Experimental Psychology at CMU is to produce graduates who can demonstrate excellence in the broad arena of methodologies and general content so as to be prepared for doctoral training or research positions in the public or private sector.

The Experimental Program has the largest faculty membership of any graduate program within the Department of Psychology. The membership represents the complete spectrum of psychology including the areas of behavioral, physiological, developmental, social, clinical, cognitive, measurement, and statistics.

The program faculty members are committed to the traditional academic values of teaching and research. Many of the members have on-going research programs with substantial publication and presentation records, and many have obtained prestigious research grants. In addition, several indices (e.g., teaching awards, student ratings, alumni comments) indicate that many of the program faculty are excellent teachers.

Overall, the Experimental Program faculty are prepared for the opportunity and challenge of providing a quality education to our students. The second floor of Sloan Hall (where many of our faculty reside) is active with students and faculty. A collegial atmosphere exists where leading edge research is being conducted, discussed, and debated. This close student-faculty interaction has provided the foundation for the success of our program.

M.S. in Experimental Psychology Program Description

The major goal of the program is to prepare students for doctoral training in psychology. Our success in placing our students in prominent doctoral programs has been excellent. For example, we have had graduates from our program completing their doctoral training at *University of Southern Mississippi, Albert Einstein, Brown, Emory, Texas A & M, University of Georgia, and University of Illinois*. In addition to preparing students for doctoral programs, the mission of the program also includes preparing students for research positions in the private and public sector.

The program has been very successful, with many of its graduates completing doctoral degrees in psychology. Some of these individuals have attained national and international reputations in scientific psychology. In addition, the program has produced graduates who have become successful in other endeavors including administration, health and legal professions, and business and industry.

Over 350 students have graduated from the program over the past 33 years. Currently, there are about 17 students enrolled in the program. The faculty-student relationship is based on a mentoring system. All incoming students are required to be actively involved in research with a program faculty member throughout their program of study (typically two years). The mentoring system allows students to develop their research skills as well as develop close interpersonal and academic relationships with faculty. Finally, students are provided feedback regarding their progress in the program via evaluations by program faculty at the end of each academic year.

M.S. Degree Requirements

The Master of Science degree in Experimental Psychology is based upon the satisfactory completion of a minimum of 36 semester hours of graduate work, including a thesis. The program is broad yet flexible enough to develop individual scholarship in the student's area of study. Each student is assigned to a faculty member who serves as the student's mentor/advisor. The mentor is responsible for monitoring the student's progress through the program particularly with respect to the development of research skills. Each student is required to be actively involved in research with his or her mentor.

Degree Requirements:

Required Courses:	26	Cr.
PSY 511 Statistics in Psychology	3	Cr.
PSY 609 History and Systems of Psychology	3	Cr.
PSY 690 Research Seminar in Experimental Psychology (Taken each semester in the first year for total of 2 credits)	1	Cr.
PSY 798 Thesis (with oral defense) (See Committee Requirements on page 8)	6	Cr.
Select at least one course from each of the following four groups:		
PSY 611 Research Design	3	Cr.
PSY 612 Applied Multiple Regression and Correlation		
PSY 613 Multivariate and Correctional Methods		
PSY 587 Physiological Psychology	3	Cr.
PSY 687 Physiological Foundations		
PSY 589 Cognitive Psychology	3	Cr.
PSY 680 Learning		
PSY 681 Sensation and Perception		
PSY 624 Advanced Developmental Psychology	3	Cr.

PSY 630 Advanced Social Psychology

Additional Courses: To be chosen in consultation with an advisor. 10 Cr.

In addition to coursework, a student must complete an oral examination over thesis.

Total (minimum hours for first and second years) 36 Cr.

Accelerated M.S. in Experimental Psychology Option

Advanced undergraduate students majoring in psychology who want to obtain additional training in experimental psychology may want to consider an option by which they can obtain their Bachelor of Science with the General Major in Psychology and their Master of Science in Experimental Psychology in five years. The accelerated program requirement is identical to the General Major in Psychology and to the Master of Science in Experimental Psychology; and allows the student to apply 12 credit hours of graduate coursework toward both their Bachelor of Science and Master of Science degrees.

To be eligible for the accelerated program, students must meet all of the admissions requirements for regular admission to the Master of Science in Experimental Psychology program and have completed at least 84 credit hours of undergraduate coursework, including all General Education, University Program, and competency requirements. It is expected that students will already be engaged in research with a faculty member prior to admission to the accelerated program.

The Accelerated Master of Science in Experimental Psychology program is a 12-month program. Students will complete the Bachelor of Science degree requirements and the first year of coursework for the Master of Science by the end of the summer term of their fourth year. Students will complete the coursework for the Master of Science in conducting and defending their thesis by the end of the summer term of their fifth year.

A sample curriculum for a student who has completed 84 credit hours of undergraduate coursework is given below. Undergraduate coursework completed beyond 84 credit hours would lead to conferral of the Bachelor of Science degree prior to the end of the summer term in Year Four.

Accelerated M.S. Sample Curriculum

Year Four			
Fall	Spring	Summer	Degree
PSY 511-3 hrs*	Graduate Requirement-3 hrs*	Undergraduate Courses-10 hrs	BS
Graduate Requirement-3 hrs*	Graduate Requirement-3 hrs*		Degree
PSY 690-1hr**	PSY 690-1 hr**		Conferred
Undergraduate Courses-9 hrs	Undergraduate Courses-9 hrs		
Total - 16 hrs	Total - 16 hrs	Total - 10 hrs	
Year Five			
Fall	Spring	Summer	Degree
Graduate Requirements-6 hrs	PSY 798-3 hrs	PSY 798-3 hrs	M.S.
Graduate Elective-3 hrs	Graduate Elective-3 hrs	Graduate Elective-4 hrs	Degree
			Conferred
Total-9 hrs	Total-6 hrs	Total-7 hrs	

*Courses that apply to both the B.S. and M.S. Degrees. Required courses are (PSY 511, 609, 611 or 612 or 613, 587 or 687, 589 or 680 or 681, and 624 or 630.) Students must register for graduate credit for these courses.

**Applies to the M.S. degree only.

Ph.D. in Applied Experimental Psychology Program Description

The objective of the Ph.D. program in Applied Experimental Psychology is to develop individuals with strong applied experimental research skills for positions in academia, business, industry, allied health, or government agencies. The program is designed to provide advanced training in psychological processes (e.g., biological, cognitive, behavioral, social, personality), quantitative methodological procedures (e.g. statistics, experimental design, computer applications), and their utilization in an applied setting. The program provides students with special applied training, including a pre-doctoral internship. The program uses a mentor system, matching students with faculty members who have interest in closely related areas. The current areas of training include: human factors (ergonomics, psychophysiology, and attention and perceptual processes), behavioral medicine (with special emphasis on behavioral pediatrics, developmental disabilities, and infant sleep disorders), applied cognitive science (with special emphasis on memory, cognitive modeling, decision making, forensic psychology), applied social psychology (social cognition, personality judgments, individual differences, and attitudes), and applied behavioral neuroscience (with specific emphasis on testing potential pharmacotherapy's for neurodegenerative diseases, such as Huntington's and Parkinson's diseases).

Over 10 students have graduated from the program, over the past 9 years. Currently, there are about 18 students enrolled in the program. Applicants to the Program are expected to have a baccalaureate degree, a minimum 3.0 GPA, and at least 15 hours of psychology. The foundation of the program is the M.S. Program in Experimental Psychology. The first two years of the program are identical to those of the M.S. Program in Experimental Psychology. Students accepted into the program must complete all of the requirements of the M.S. Program in Experimental Psychology or its equivalent. The emphasis in third and fourth years is on advanced specialized training, including generating high quality applied research and gaining practical experience through internships.

Ph.D. Degree Requirements

First and Second Years:

The requirements for the first two years in the Ph.D. program in Applied Experimental Psychology are identical to those required for the M.S. degree in Experimental Psychology.

Third and Fourth Years:

Required Courses:

PSY 789	Seminar in Applied Experimental Psychology	3-9	Cr.
PSY 800	Research in Applied Experimental Psychology (with major paper and oral examination)	12	Cr.
PSY 898	Doctoral Dissertation: Design	3-12	Cr.
PSY 899	Doctoral Dissertation: Implementation (with oral defense)	3-12	Cr.
A minimum of 15 credit hours from the combination of PSY 898 and PSY 899 is required. See Committee Requirements on page 8.			

Select one of the following:

PSY 990	Internship A: Professional Services	6	Cr.
PSY 991	Internship B: Professional Services	6	Cr.

Electives 12-18 Cr.

Total (minimum hours for third and fourth years) 54 Cr.

Comprehensive Examination

The paper and oral examination from the PSY 800 project serves as the comprehensive examination. Papers are expected to be publication quality. Papers typically consist of a literature review, method, results, and discussion section reporting the outcome of a year-long empirical research project conducted in collaboration with the student's mentor. The mentor and at least one other experimental faculty member serve as the committee for the oral examination over the paper. **A copy of the approved paper must be given to the Experimental Program Secretary for the student's file.** The student must register for all 12 credit hours and pass the oral examination prior to admission to doctoral candidacy. Students cannot take more than 6 hours of PSY 800 until finished with thesis.

Internship Requirement

Students should complete their 800 Project and pass an oral exam over the project and be admitted to the doctoral candidacy prior to beginning the doctoral internship (PSY 990-991). In addition, doctoral students should have an approved doctoral project proposal on file prior to beginning the doctoral internship.

Thesis and Dissertation Committee

Members 1 and 2 should be from the Experimental Core Faculty and the 3rd member can be either from within or outside the Experimental program but must be a member of the Psychology department. An optional 4th member can be a faculty member from another department.

Thesis and Dissertation Proposal

A Prospectus for Theses and Dissertations must be completed to begin research on a thesis or dissertation. Students must complete the following steps for their prospectus forms:

1. Email thesis/dissertation committee members to schedule prospectus meeting.
2. Email Program secretary to schedule a room with date and time of prospectus.
3. Pick up Prospectus and IRB form from program secretary.
4. Complete Prospectus form prior to proposal meeting and get committee members signature at proposal meeting. A copy of the abstract must be turned in with the form.
5. Bring completed Prospectus form and IRB application to program secretary, who will hold the forms until you receive IRB approval email.
6. Forward IRB approval email to program secretary. Once, IRB approval is received, program secretary will get the required signatures, and forward to the Graduate Office.

Students may not enroll for more than three thesis or dissertation credits until the project prospectus has been approved by the department and the College of Graduate Studies and the College of Graduate Studies has verified the composition of the student's committee. The *Graduate Bulletin* (<https://bulletins.cmich.edu/>) outlines all University policies relating to theses/dissertations.

Thesis and Dissertation Requirements

The same principles generally hold for the master's thesis and doctoral dissertation. As a general concept, the doctoral dissertation, required of all doctoral students, will be related to the student's interests and to some aspect of professional practice. The goal of the doctoral dissertation is to further integration of the student's graduate education in developing the ability to investigate a professional problem in a scholarly manner. Students must have been admitted to doctoral candidacy by the Graduate School prior to defending their dissertation proposal.

A brochure outlining University procedures for thesis or doctoral dissertation preparation is available from the College of Graduate Studies (<http://www.grad.cmich.edu/forms.htm>) and a handbook is available from the Psychology Department. The steps usually followed are:

1. Student discusses their idea with a faculty member.
2. Student obtains a chair and two committee members.
3. Student writes a prospectus for committee approval.
The prospectus includes the following topics:
 - a. Introduction to the problem (a case is made for the importance of the area of study).
 - b. Review of the literature.
 - c. Statement of the problem.
 - d. Method (as appropriate).
 - a. Participants or Sample.
 - b. Instrumentation/Materials.
 - c. Procedures
 - d. Statistical Analysis
4. Student convenes the committee to discuss, fine tune, and approve/disapprove the idea.
5. Thesis and Doctoral Dissertation Prospectus form is filed with the graduate office and department. Also, approval from CMU's Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC), must be obtained before research involving human or animal subjects is started.
6. Thesis/Dissertation is completed.
7. Oral defense of project.
8. Students are expected to provide the Library, department, and their committee chairperson (unless they state otherwise) with a bound copy of the thesis or dissertation.

Dissertation Research Support

The university provides small grants, up to a maximum of \$1,500, for dissertation-related costs such as photocopying, travel, supplies, etc. (wages cannot be covered). Students who have had their dissertation prospectus approved by their dissertation committee are eligible to apply for this support; recipients are selected on the basis of proposals reviewed by the Dissertation Support Selection Committee.

Academic Advisors

Upon admission, each student is assigned a faculty advisor (mentor), who will serve as the student's academic advisor for the rest of that student's enrollment in the program. The advisor will also serve as a mentor for the student's research. At the end of each school year, the advisor will report to the Program Director regarding the student's progress on coursework as well as research involvement. A student may change his/her advisor by submitting a request to the Program Director.

Registration for Classes

Students are encouraged to register for classes during Phase I registration to ensure course requests can be honored. The Psychology Department has no obligation to honor course requests when students fail to pre-register and classes are full. In order to add a class after it has reached capacity enrollment, the department requires written permission from that instructor.

Policy on Degree Time Limits

It is the program's policy that all course requirements for the M.S. degree be completed within seven years after matriculation and within eight years after matriculation for the Ph.D. degree. Both programs are full-time, campus degree programs. See the *Graduate Bulletin* for details at <https://bulletins.cmich.edu/>.

Time Limit for Admission

Admission is valid for one year (four semesters: fall, spring, summer I, summer II). If a student does not register for classes within one year after being admitted to the graduate college, the student is required to reapply before taking classes. The student's credentials are again reviewed by the department and the student may or may not be readmitted.

To Apply

The application deadline is February 1. We require GRE scores, transcripts, and three letters of recommendation. Additional information on the application procedure and financial aid are available in the application materials. For further information and an application packet, please write to the address below or go to our web site at <http://www.chsbs.cmich.edu/Psychology/expadmissions.htm>.

Experimental Psychology Graduate Program
Department of Psychology-Sloan 139
Central Michigan University
Mount Pleasant, MI 48859

Deferred Admission

Newly admitted students may petition the Admissions Committee for deferred admission. Granting deferred admission is at the discretion of the Admissions Committee. However, deferred admission is normally granted for no more than 12 months from the original matriculation date.

Conditional Admission

Students who are deficient in certain subject areas may be granted a conditional admission to the program. Students are expected to make up identified deficiencies in addition to completing the normally prescribed graduate coursework for their degree. Upon completion of all deficiencies, students may apply for regular admission.

International Student Admission

International applications for admission require longer processing time than other applications. Notice of admission may take longer than expected to reach them from the College of Graduate Studies. Required materials include: An International Student Application for Admission (6 months prior to semester of admission); all college and university certificates, diplomas, degrees, official transcripts, and corresponding number of certified literal English translations of any non-English documents.

English Language Proficiency Requirements

CMU welcomes students from a wide variety of backgrounds. All international students must demonstrate English language competency in one of the following ways: (1) Achieved a satisfactory score on the Test of English as a Foreign Language (TOEFL). (2) Satisfactory completion of a course of study in which the language of instruction was English. (3) Successful completion (grade point average of 3.0 on a 4.0 scale, or the equivalent) of at least twelve credit hours of work in a recognized graduate program instructed in English. (4) Employment at a professional level for at least four years, with written verification by the student's current or former employer of the student's competency in English. (5) Employment in the United States at a professional level for at least two years in a position that relies on the use of English, with written verification by the student's current or former employer of the student's competency in English. Further information can be found in the *Graduate Bulletin* at <https://bulletins.cmich.edu/>.

Graduation Procedures

To graduate, a MASTER'S degree student must:

1. Have regular admission to the degree program.
2. File an Authorization of Graduate Degree Program form.
3. Complete a minimum of 36 semester hours of graduate work with a GPA of 3.0 or higher; of these 36 credits, no more than 15 can be transfer credits; no more than 1/3 can be unspecified content or variable credit courses; and no more than 10 can be independent study or thesis credits.
4. Earn at least a C in each course.
5. Earn 15 or more hours for the degree in courses at or above the 600 level.
6. Fulfill all requirements of the chosen curriculum and all other university regulations pertaining to the program.
7. Complete all requirements pertinent to either Plan A or Plan B or any alternative requirements of the department.

8. Send a completed Graduation Application form along with a check or money order for the \$50.00 fee, to the College of Graduate Studies, approximately eight weeks before the end of the semester. Deadline dates are listed on the College of Graduate Studies website at <http://www.grad.cmich.edu/dates.htm>.

To graduate, a DOCTORAL student must:

1. Have a master's degree, if required.
2. Have regular admission in the program.
3. Be admitted to candidacy.
4. Satisfy any research or professional requirements of the department.
5. Complete a minimum of 90 semester hours of graduate work beyond the bachelor's degree with a GPA of 3.0 or higher; individual programs may require additional credits.
6. Receive at least a C in each course; a student will not be awarded a doctoral degree with more than two grades below B- (coursework not part of a student's doctoral program is excluded from this policy). Individual programs may have more stringent requirements.
7. Complete a doctoral dissertation.
8. Earn 15 semester hours in 700 level courses (excluding dissertation and internship credits) and 50 of the total hours at the 600 level or above.
9. Pass a final oral exam in defense of the dissertation.
10. Send a completed Graduation Application form, along with a check or money order for the \$50.00 application fee, to the College of Graduate Studies approximately eight weeks before the end of the semester. Deadline dates are listed on the College of Graduate Studies website at <http://www.grad.cmich.edu/dates.htm>.

Graduation Commencement Ceremony

Students must finish all requirements for their degrees before they can participate in graduation ceremonies. Diplomas are mailed to students about six weeks after commencement. If a student needs evidence of degree completion in less than six weeks, written verification is available through the College of Graduate Studies.

Milestones in Completing Degrees

M.S. DEGREE

Year	Semester	Milestones
1	Fall	Begin Coursework (e.g., PSY 690 & PSY 511)
1	Spring	Begin M.S. Thesis Proposal Submit M.S. Authorization of Graduate Degree Program form
1	Summer	
2	Fall	M.S. Thesis Proposal Approved Submit Prospectus for Thesis and Dissertation form
2	Spring	Complete M.S. Thesis Submit Thesis Plan A & B Completion Sign-off form

ACCELERATED M.S. DEGREE

Year	Semester	Milestones
B.S. 4 / M.S. 1	Fall	Begin Coursework (e.g., PSY 690 & PSY 511)
B.S. 4 / M.S. 1	Spring	Begin M.S. Thesis Proposal Submit M.S. Authorization of Graduate Degree Program form
B.S. 4 / M.S. 1	Summer	Complete B.S. degree
M.S. 2	Fall	M.S. Thesis Proposal Approved Submit Prospectus for Thesis and Dissertation form
M.S. 2	Spring	Continue work towards M.S. Thesis
M.S. 2	Summer	Complete M.S. Thesis Submit Thesis Plan A & B Completion Sign-off form

Ph.D. DEGREE

Year	Semester	Milestones
3	Fall	Begin Comprehensive Project Submit 800 registration form Submit Authorization of Doctor of Philosophy in Applied Experimental Psychology
3	Spring	Finish Comprehensive Project Submit PSY 800 Completion form and copy of the approved project to Experimental Program secretary, SL 139
3	Summer	Complete Internship
4	Fall	Complete Dissertation Proposal Submit Prospectus for Thesis and Dissertations form
4	Spring	Complete Doctoral Dissertation Submit Dissertation Project Sign-off form

Students also need to check with the Graduate College for deadlines to submit their Graduation Application. The Graduate College has developed a checklist for *Self Audit for Graduation* form (<http://www.grad.cmich.edu/forms.htm>) for students to use to make sure that they complete all degree requirements and can submit all forms on time.

Research and Training Facilities

The Department of Psychology has a variety of facilities, which are used for the education of students. The facilities range in focus from those designed primarily for research to those providing direct clinical services. Below is a partial list of the available campus and department facilities:

Graduate Student Offices. - Graduate Assistants and Fellowship recipients have space available to them in faculty laboratories.

Graduate Student Computer Laboratory – The Department of Psychology maintains a computer laboratory with 6 workstations and a printer exclusively for graduate student use in Sloan Hall.

Park Library - The Park Library provides an adequate collection of books and journals in the areas of psychology. The book collection totals about 1,000,000 volumes and an online catalogue which allows students to quickly peruse the holdings in a specific area. Desk and study carrels are also available for students. A wide variety of research databases are available, including *Medline*, *PsycInfo*, and *Social Sciences Abstracts*.

Computer Laboratories - The Department of Psychology maintains computer laboratories for research and teaching purposes in Sloan Hall. The labs include a total of 12 workstations. These machines are networked to a printer and various experiment generation and SPSS software applications are installed. The lab serves students and faculty interested in research in cognitive processes, sensation and perception, learning, and social psychology.

Psychological Training and Consultation Center - This facility in the Health Professions Building provides training, service, and research functions. The Center provides a full range of services to children, parents, and professional personnel from the Central Michigan area. Space and resources are typically made available for faculty and students wishing to conduct research.

Faculty Laboratories

Attention and Performance Laboratory – Dr. John Monahan - This computerized lab is located in Sloan Hall 207. Devices for keyboard, touchscreen, and vocal response are available. Typical studies measure reaction time and accuracy for complex stimuli and for mental rotation of objects.

Audiovisual Speech Research Laboratory – Dr. Sonya Sheffert – This lab is located in Sloan Hall 211 and is equipped with equipment and software to support auditory and visual signal processing, as well as, space to test research participants. Additional resources are available in Park Library 416, including a professional recording studio.

Behavior Analysis Laboratory – Dr. Mark P. Reilly - The Behavior Analysis Laboratory is located on the second floor of Rowe Hall and consists of rodent and avian colony rooms, behavioral testing rooms with state-of-the-art controlling and recording equipment, a wet lab for surgery and pharmacological preparations, computer workstations for data analysis, and a conference/meeting room. There is also a student laboratory fully equipped with behavioral testing chambers for the undergraduate course in behavior analysis.

The Brain Research and Integrative Neuroscience (B.R.A.I.N.) Center – Dr. Gary Dunbar – The B.R.A.I.N. Center is located in the new Health Professions Building. The facilities are used for laboratory classes and individual research projects. The B.R.A.I.N. Center is equipped for small animal surgery, a full array of behavioral tests (including psychophysiology), microscopic and biochemical analyses, and a fully equipped cellular and molecular laboratory.

The Driving Evaluation, Education, and Research (D.E.E.R.) Center – Dr. Rick Backs and Dr. Nicholas Cassavaugh, Research Scientist – The D.E.E.R. Center is located in the new Health Professions Building. The CMU Center for Driving Evaluation, Education, and Research (D.E.E.R. Center) is a collaboration between the College of Humanities, Social, and Behavioral Sciences and the Herbert H. and Grace A Dow College of Health Professions as a component of the CHP Bridges Center for Healthy Life Transitions in collaboration with the Carls Center for Clinical Care and Education. The mission of the D.E.E.R. Center is to provide clinical services to evaluate cognitive fitness to drive, to provide education to improve older driver safety, and to conduct research on older drivers and drivers with attention disorders. The center will have a Drive Safety DS-600 driving simulator for use in research and in evaluation and education. The D.E.E.R. Center will be a place where older adults or persons who have had a stroke or sustained a brain injury can come to have their driving ability evaluated to determine if they are safe to continue, or are ready to resume, driving. The center will also offer driver safety courses for older drivers. Finally, the center is a place where multidisciplinary research on older drivers or drivers with attention disorders can be conducted.

Engineering Psychophysiology Research Laboratory – Dr. Rick Backs -The Engineering Psychophysiology Research Laboratory is located in the Health Professions Building and is equipped with a driving simulator, 128-channel Neuroscan EEG system, computers, and electrophysiological equipment for measuring various central and autonomic responses in humans.

Field Neurosciences Institute Laboratory for Restorative Neurology – Dr. Gary Dunbar – The Field Neurosciences Institute (FNI) Laboratory is part of the Brain Research and Integrative Neuroscience (BRAIN) Center, located on the second floor of the research wing in the Health Professions Building. The research mission of the FNI laboratory is to better understand the mechanisms involved in recovery of function following damage to the central nervous system and to devise strategies to promote these mechanisms in clinically relevant ways. Current research focuses on devising potential treatments for neurodegenerative diseases, particularly Huntington's disease (HD), Parkinson's disease (PD), and Alzheimer's disease (AD). The lab is fully equipped with a wide variety of specialized equipment for testing the efficacy of pharmacological treatments, stem cell therapies, and genetic manipulations to counteract neuropathological and behavioral deficits in rodent models of HD, PD, and/or AD.

Infant & Child Behavior Laboratory – Dr. Carl Johnson - The Infant and Child Behavior Laboratory is located in Sloan Hall and is used for research in behavioral pediatrics. The research specializes in strategies to facilitate infant and preschool learning, promote healthy sleep and decrease bedtime-behavior problems, including sleep problems, temper tantrums, toileting, and noncompliance. Infant and preschool research is carried out in the lab with an emphasis on young children who have low-incidence disabilities. Some of this research is supported by a grant from the Michigan Department of Education, the *Central Assessment Lending Library* [CALL](#).

Law, Cognition, and Emotion Laboratory – Dr. Terry Libkuman - Located in Sloan Hall, this lab is equipped with materials and computers suitable for research in the law, cognition, and emotion.

Neuropharmacology Research Laboratory – Dr. Justin Oh-Lee - The lab is located in the Health Professions Building. Studies are conducted in behavioral and neuronal plasticity and programmed cell death, particularly those that are related to neurodegenerative disorders such as Parkinson's disease, Huntington's disease, Alzheimer's disease, and other related neurodegenerative disorders. The laboratory is equipped with two large chemical safety hoods, stirrer hot plates, a Cryostat brain sectioning station, and numerous other scientific and behavioral instruments. The laboratory is also well equipped to carry out a variety of biochemical, molecular and histological tissue analyses central to the research carried out in this laboratory.

Neurophysiology Research Laboratory – Dr. Michael Sandstrom - This laboratory located in the Health Professions Building, contains equipment for wet work, chemicals, and building/designing probes for experiments involving either brain chemistry (microdialysis) or neuron electrical activity (single unit electrophysiology with combined iontophoresis). Two state of the art high performance liquid chromatography systems (for measuring small concentrations of brain chemicals) are available in the shared space associated with the B.R.A.I.N. Center. Current experiments investigate recovery of motor function in a rat Parkinson's disease model, and neurochemical differences underlying behavioral deterioration in a mouse Huntington's disease model. Future investigations will investigate the physiological ramifications of stem cell transplants in rodent models of deteriorative brain disease. Separate animal procedure and testing rooms provide sufficient facilities to perform experiments using multiple techniques and measures.

Experimental Faculty Descriptions

Renee L. Babcock, Professor

http://www.chsbs.cmich.edu/renee_babcock/

Renee L. Babcock received her Ph.D. in Experimental Psychology from the Georgia Institute of Technology in 1992. She has previously held an appointment at the University of Nebraska-Lincoln, conducting research in aging and cognition. She joined the faculty at Central Michigan University in 1997.

Research Interests

Dr. Babcock's research is in an area called cognitive aging, which deals with normal adult development and aging of cognition. Her specific areas of interest have been in adult age differences in memory and reasoning ability. She is also interested in age differences in worry and has completed cross-cultural studies in the experience of worry. She has completed projects designed to examine the nature of adult differences on a nonverbal intelligence test. In addition, she has studied adult age differences in computer anxiety and how this anxiety may affect performance on cognitive tests administered on a computer.

Recent Research

Babcock, R. L., Smith, M., & Laguana, K. (in press). The experience of worry among young and older adults in the United States and Germany: A cross-cultural comparison. *Journal of Cross-Cultural Gerontology*.

Babcock, R. L. (2002). Analysis of adult age differences on Errors on the Raven's Advanced Progressive

Matrices. *Intelligence*, 30, 485-503.

Foster, R. A., & Babcock, R. L. (2001). God as a Man versus God as a Woman: Perceiving God as a Function of the Gender of God and the Gender of the Participant. *International Journal for the Psychology of Religion*, 11.

Babcock, R. L., Laguna, L., Laguna, K. D., & Urusky, D. A. (2000). Age differences in the experience of worry. *Journal of Mental Health and Aging*, 6, 227-235.

Laguna, K. D., & Babcock, R. L. (2000). Computer testing of memory across the life span. *Experimental Aging Research*, 26, 229-243.

Richard W. Backs, Professor

http://www.chsbs.cmich.edu/richard_backs/

Richard W. Backs received his Ph.D. in Experimental Psychology from the University of Southern California in 1984. He has previously held appointments at Occidental College, Washington University, the McDonnell Douglas Corporation, and Wright State University, conducting research in Human Factors Engineering. He has been at Central Michigan University since 1995.

Research Interests

My research is an area I define as the psychophysiology of attention in human performance. It emphasizes the applied aspects of attention theory, and my recent studies have examined autonomic (electrocardiographic, impedance cardiographic, and pulmonary) and central (EEG and event-related potential) measures concurrently during focused and divided attention tasks in the laboratory and in the driving simulator. I have adopted a cognitive/energetic perspective to account for how cognition is affected by factors such as emotion and environmental and task stressors. I am also interested in how aging and attention disorders affect the psychophysiology of attention, especially during driving.

Recent Research

Boucsein, W., & Backs, R. W. (in press). The psychophysiology of emotion, arousal, and personality: Methods and models. In V. G. Duffy (Ed.), *Handbook of Digital Human Modeling for Applied Ergonomics and Human Factors Engineering*. London: Taylor & Francis.

Backs, R. W., & Boucsein, W. (in press). Psychophysiology in digital human modeling. In V. G. Duffy (Ed.), *Handbook of Digital Human Modeling for Applied Ergonomics and Human Factors Engineering*. London: Taylor & Francis.

Lenneman, J. K., & Backs, R. W. (2007). Diagnosticity of cardiac modes of autonomic control elicited by simulated driving and verbal working memory dual-tasks. In D. Harris (Ed.), *Engineering Psychology and Cognitive Ergonomics, LNAI 4563*, (pp. 541-550). Berlin: Springer-Verlag.

Wetzel, J. M., Quigley, K. S., Morell, J., Eves, E., & Backs, R. W. (2006). Cardiovascular measures of attention to illusory and non-illusory visual stimuli. *Journal of Psychophysiology*, 20, 276-285.

Backs, R. W., Rohdy, J., Barnard, J. (2005). Cardiac control during dual-task performance of visual or auditory monitoring with visual-manual tracking. *Psychologia*, 48, 66-83.

Backs, R. W., da Silva, S. P., & Han, K. (2005). A comparison of younger and older adults' Self-Assessment Manikin ratings of affective pictures. *Experimental Aging Research*, 31, 1-20.

Backs, R. W., Lenneman, J. K., Wetzel, J. M., & Green, P. (2003). Cardiac measures of driver workload during

simulated driving with and without visual occlusion. *Human Factors*, 45, 525-538.

**Neil D. Christiansen, Professor
and Director of I/O Graduate Program**
http://www.chsbs.cmich.edu/Neil_Christiansen/

Neil Christiansen received his Ph.D. in Social and Organizational Psychology from Northern Illinois University. He previously held an appointment at Florida Institute of Technology and joined the Central Michigan University faculty in 1997.

Research Interests

I am broadly interested in personnel psychology in terms of the key areas of personnel selection, performance appraisal, and job analysis. Within those areas, I tend to do research and consult with organizations on ways to improve their hiring processes with an emphasis on employment testing and validation. My primary research interests involve furthering of our understanding of the relationships between personality and work behavior. Within that area, my focus has most often been on personality assessment in the workplace, including applicant faking of personality inventories and alternative methods of assessing personality. More recently, my research has expanded to consider the interaction of personality and work situations as determinants of work behavior, cognitive underpinnings of personality-behavior relationships, and the accuracy of personality judgments made in organizations. Areas of future interest include models of applicant reactions to selection processes and motivational mechanisms whereby personality affects change in behavior.

Recent Research

Lievens, F., Chasteen, C. S., Day, E. A., & Christiansen, N. D. (2006). Large-scale investigation of the role of trait activation theory for understanding assessment center convergent and discriminant validity. *Journal of Applied Psychology*, 91, 247-258.

Phillips, L. & Christiansen, N. D. (2006). A contingency model of attitudes toward affirmative action programs. *Journal of Applied Social Psychology*, 36, 1617-1639.

Burns, G. & Christiansen, N. D. (2006). Use of social desirability in correcting for motivated distortion. In R. Griffith (Ed.), *A Closer Examination of Applicant Faking Behavior*. Greenwich, CT: Information Age Publishing.

Christiansen, N. D., Wolcott-Burnam, S., Janovics, J., Burns, G., & Quirk, S. (2005). The Good Judge revisited: Individual differences in the accuracy of personality judgments. *Human Performance*, 18, 123-149.

Christiansen, N. D., Burns, G., & Montgomery, G. E. (2005). Reconsidering the use of forced-choice formats for applicant personality assessment. *Human Performance*, 18, 267-307.

Stephen M. Colarelli, Professor
http://www.chsbs.cmich.edu/stephen_colarelli/

Stephen Colarelli was educated at Northwestern University, the University of Chicago, and New York University, where he received his Ph.D. He was a Fulbright Fellow at the University of Zambia. Professor Colarelli's scholarly interests are in industrial and organizational (I/O), evolutionary psychology, and the application of evolutionary psychology to I/O psychology.

Research Interests

Professor Colarelli's research interests are in Industrial/Organizational Psychology and evolutionary psychology.

Recent Publications

Topor, D., Colarelli, S. M., & Han, K. (2007). Influences of traits and assessment methods on human resource practitioners' evaluations of job applicants. *Journal of Business and Psychology, 21*, 361-376.

Sheppard, R., Han, K. Colarelli, S. M., Dai, G., & King, D. (2006). Differential item functioning by race and gender in an employment-oriented personality inventory. *Assessment, 13*, 442-453.

Yang, C., D'Souza, G., Bapat, A., & Colarelli, S. M. (2006). A cross-national analysis of affirmative action: An evolutionary psychological perspective. *Managerial and Decision Economics, 27*, 203-216.

Colarelli, S. M., Spranger, J. L., & Hechonova, M. R. (2006). Women, power, and sex composition in small groups: An evolutionary perspective. *Journal of Organizational Behavior, 27*, 163-184.

Colarelli, S. M. (2003). *No best way: An evolutionary perspective on human resource management*. Greenwich, CT: Praeger.

Colarelli, S. M., & Dettmann, J. R. (2003). Intuitive evolutionary perspectives in marketing. *Psychology and Marketing, 20*, 837-865.

Gary L. Dunbar, Professor

http://www.chsbs.cmich.edu/gary_dunbar/

Gary Dunbar received a B.A. in Philosophy and a B.S. in Biopsychology from Eckerd College. He received a M.A. in Psychology and a M.S. in Biology from Central Michigan University, and a Ph.D. in Psychobiology from Clark University. He is currently the John G. Kulhavi Professor of Neuroscience and is Director of the Neuroscience Program and Brain Research and Integrative Neuroscience (BRAIN) Center. Dr. Dunbar is a Past-President of the Faculty for Undergraduate Neuroscience and for the Michigan Chapter of the Society for Neuroscience. He was named Michigan Professor of the Year in 1997. He serves as the scientific advisor for the Michigan Chapter of the Huntington's Diseases Society of America.

Research Interests

Dr. Dunbar's teaching and research interests are in the area of behavioral neuroscience. His recent research is focused on the use of stem cell transplants, dietary supplements, and pharmacological treatments cognitive/or motor deficits following brain damage and neurodegenerative diseases, such as Huntington's, Parkinson's and Alzheimer's diseases. His research has been supported by grants from the National Institute of Health, National Science Foundation, and several pharmaceutical companies. His current work on stem cell transplants is funded by Field Neurosciences Institute, his work on dietary supplements is supported by Cerise Neutraceuticals, and his work on pharmacological treatments for neurodegenerative disorders is being funded by Guilford Pharmaceuticals and Krenitsky Pharmaceuticals Inc.

Recent Research

Andres, A. K, Marble, B. R., Dunbar, G. L., Reilly, M. P., & Maurissen, J. P. J. (in press). Effects of intensity and type of prepulse stimulus on prepulse inhibition in scopolamine treated rats. *Pharmacology, Biochemistry, and Behavior*.

Dunbar, G. L., Sandstrom, M. I., Rossignol, J., & Lescaudron, L. (2006). Neurotrophic enhancers as therapy for behavioral deficits in rodent models of Huntington's disease: Use of gangliosides, substituted pyrimidines, and mesenchymal stem cells. *Behavioral and Cognitive Neuroscience Reviews, 5*, 63-79.

- Dunbar, G. L., Oh-Lee, J. D., & Lescaudron, L. (2006). Use of bone marrow stem cells as therapy for behavioral deficits in rodent models of Huntington's disease. In P.R Sanberg and C. Davis (Eds.), *Contemporary Neuroscience: Cell Therapy for Brain Repair* (pp.117-138). Humana Press, Inc., Totowa, N.J.
- Mortazavi, F., Ericson, M., Story, D., Hulce, V. D., & Dunbar, G. L. (2005). Spatial learning and emotional impairments in pentylenetetrazole-kindled rats. *Epilepsy & Behavior* 7: 629-638.
- Krenitsky, T. A., Dillberger, J., Zotova, E., Arezzo, J. C., Koprach, J. B., Mortazavi, F., Gates, T. A., & Dunbar, G. L. (2004). KP544, an Enhancer of Nerve Growth Factor: Pharmacokinetics, Safety and Efficacy in the Rat. *Drug Development Research* 62: 60-70.
- Wessell, R. H., Ahmed, S. M., Menniti, F. S., Dunbar, G. L., Chase, T. N. & Oh-Lee, J. D. (2004). NR2B selective NMDA receptor antagonist CP-101,606 prevents levodopa-induced motor response alterations in hemi-parkinsonian rats. *Neurpharmacology*, 47, 184-194.
- Swan, L, Otani, H., Loubert, P. V., Sheffert, S. M., & Dunbar, G. L. (2004). Improving balance by performing a secondary cognitive task. *British Journal of Psychology*, 95, 31-40.
- Gates, T. A., Tran, M., Hulce, V. D., Haik-Martines, K. L., and Dunbar, G. L. (2004). Chronic lead treatments produce aggressive behavior in a post-weaning rodent model of lead toxicity. *The Journal of the Pennsylvania Osteopathic Medical Association*, 48(2), 12-16.

Bryan Gibson, Professor

http://www.chsbs.cmich.edu/bryan_gibson/

Bryan Gibson received his Ph.D. in Social Psychology from the University of Utah in 1991. He taught at Carleton College, Mankato State University, and Trenton State College before moving to Central Michigan University.

Research Interests

Dr. Gibson is currently involved in two lines of research. One line of research has focused on the social psychological aspects of exposure to media, including how viewing products in movies can influence attitudes. A second line of research has examined various issues in self-presentation (sandbagging, trash-talking), particularly as it relates to performance. Both of these programs of research have significant overlap with organizational issues.

Recent Research

Dal Cin, S., Gibson, B., Zanna, M., Shumate, R., & Fong, G. (in press). The smoking self: Can portrayal of smoking in film lead to greater identification with smoking? *Psychological Science*.

Gibson, B. (2007). Sandbagging and self-evaluation: Individual differences in the tendency to seek self-assessment information as a function of the public or private nature of the information. *Journal of Research in Personality*, 41, 481-487.

Gibson, B., & Sanbonmatsu, D. M. (2004). Dispositional optimism and gambling: The downside of optimism. *Personality and Social Psychology Bulletin*, 30, 149-160.

Felton, J., Gibson, B., & Sanbonmatsu, D. M. (2003). Preference for risk in investing as a function of trait optimism and gender. *The Journal of Behavioral Finance*, 4, 33-40.

Kyunghee Han, Associate Professor

http://www.chsbs.cmich.edu/k_han/

Kyunghee Han received her Ph.D. in Personality Psychology from the University of Minnesota in 1993. She has previously held an appointment in Educational Psychology at the University of Mississippi. She joined the faculty at the Central Michigan University in 2002.

Research Interests

Dr. Han's broad research interests are in the areas of cross-cultural psychology, personality assessment, and quantitative methods. Her specific areas of interest have been in scientific study of culture, statistical evaluation of the cross-cultural equivalence of measures of personality and psychopathology, and psychological test/scale development.

Recent Research

Topor, D. J., Colarelli, S. M., & Han, K. (2007). Influences of traits and assessment methods on human resource practitioners' evaluations of job applicants. *Journal of Business and Psychology, 21*, 361-376.

Chung, J. J., Weed, N. C., & Han, K. (2006). Evaluating cross-cultural equivalence of the Korean MMPI-2 via bilingual test-retest. *International Journal of Intercultural Relations, 30*, 531-543.

Hatchett, G. T., & Han, K. (2006). Development and Evaluation of New Factor Scales for the Expectations About Counseling (EAC-B) Inventory in a College Sample. *Journal of Clinical Psychology, 62*, 1303-1318.

Roberts, M., Han, K., & Weed, N. C. (2006). Development of a scale to assess Hwa-Byung, a Korean culture bound syndrome, using the Korean MMPI-2. *Transcultural Psychiatry, 43*, 383-400.

Sheppard, R., Han, K., Colarelli, S. M., Dai, G., & King, D. (2006). Differential item functioning by sex and race in the Hogan Personality Inventory. *Assessment, 13*, 442-453.

Carl M. Johnson, Professor
http://www.chsbs.cmich.edu/carl_johnson

Carl Johnson received his Ph.D. in general-experimental psychology from Michigan State University in 1979. He has been on the faculty at CMU since 1978. His primary teaching and research are in three areas: behavior analysis, behavioral pediatrics, and organizational behavior management. He is on the board of editors for the *Journal of Organizational Behavior Management*.

Research Interests

My research concerns behavior analysis and management in medicine, public and private organizational settings, schools, and home settings. We have a grant from the State of Michigan to initiate and run a lending library of assessment materials for infants and young children with low-incidence disabilities (Central Assessment Lending Library or CALL). I have carried out research on infant and preschool sleep disorders in concert with pediatricians and family physicians. My interest in organizational behavior management includes measurements of behavior, contingencies of reinforcement, pay for performance, feedback systems, and behavior analysis of the service sector.

Recent Research

Forquer, L. M., Camden, A. E., Gabriau, K. M., & Johnson, C. M. (in press). Sleep patterns of college students at a public university. *Journal of American College Health*.

Bradley-Johnson, S., & Johnson, C. M. (2007). Infant and toddler cognitive assessment. In B. Bracken & R. J. Nagle (Eds.), *Psychoeducational assessment of preschool children* (4th ed.; pp. 325-357). Mahwah, NJ:

Erlbaum.

- Bradley-Johnson, S., & Johnson, C. M. (2006). *A handbook for writing effective psychoeducational reports* (2nd ed.). Austin, TX:PRO-ED.
- Forquer, L. M. & Johnson, C. M. (2005). Continuous white noise to reduce resistance going to sleep and night wakings in toddlers. *Child & Family Behavior Therapy*, 27, 1-10.
- Bradley-Johnson, S., Johnson, C. M., Swanson, J., & Jackson, A., (2004). Exploratory behavior: A comparison of infants who are congenitally blind and infants who are sighted. *Journal of Visual Impairment and Blindness*, 98, 496-502.
- Subramony, M., Beehr, T. A., & Johnson, C. M. (2004). Employee and customer perceptions of service quality in an Indian firm. *Applied Psychology: An International Review*, 53, 311-327.

Terry M. Libkuman, Professor
www.chsbs.cmich.edu/terry_libkuman

Terry M. Libkuman received his Ph.D. in Experimental Psychology with emphasis in learning and physiological psychology from the University of Oklahoma in 1970. He has been at CMU since 1970. He has taught numerous courses including History and Systems, Learning and Memory, Motivation, Statistics, Research Methods, and Sport Psychology. His current interests include cognitive psychology, sport psychology, and psychology and law.

Research Interests

Early in my career, my interests were concerned with laboratory investigations of human learning and memory, and that interest continues to this day. However, the nature of the research has changed with more focus on individual differences and motivational processes, particularly arousal. In the past 8-10 years, I have developed an interest in applications of industrial/organizational psychology principles to sport. Studies have been completed in football and basketball that were concerned with the prediction of on-the-field performance using coach's ratings of player characteristics, for example, motor and cognitive abilities and skills. A study using collegiate baseball players is currently being completed. I am interested in extending the I/O methodology to validating indices of performance for a particular ability and/or skill within a sport, e.g., putting in golf or jump shooting in basketball. In the psychology and law area, I am currently involved in research dealing with the development of an instrument to evaluate the performance of attorneys in court.

Recent Research

- Otani, H., Libkuman, T. M., Widner, R. L. Jr., & Grave, E. I. (2007). Memory for emotionally arousing material: A comparison of young and older adults. *Journal of General Psychology*, 134, 23-42.
- Libkuman, T. M., Otani, H., Kern, R., Viger, S. G., & Novak, N. (2007). Multidimensional Normative Ratings for the International Affective Picture System. *Behavior Research Methods*, 39, 326-334.
- Bowling, N., Beehr, T., Wagner, S., & Libkuman, T. M. (2005). Adaptation level theory, opponent process theory, and dispositions: An integrated approach to the stability of job satisfaction. *Journal of Applied Psychology*, 90, 1044-1053.
- Pederson, S. L., Libkuman, T. M., Love, K. G., & Donn, P. D. (2005). Validation of player characteristics for the prediction of collegiate basketball performance. *International Journal of Sport Management*, 6(4), 365-387.
- Libkuman, T. M., Stabler, C. L. & Otani, H., (2004). Arousal, valence and memory. *Memory*, 12, 237-247.

John S. Monahan, Professor

<http://www.chsbs.cmich.edu/Psychology/monah1js.htm>

John Monahan received his undergraduate degree in mathematics at the University of North Carolina, Chapel Hill and his Ph.D. in Psychology with a minor in physiology at Duke University. He was a post-doctoral fellow at the Center for Aging and Human Development for two years and taught at Rutgers University for three years before coming to Central Michigan University in 1976.

Research Interests

Dr. Monahan's research interests are in perception and cognition, especially attention. Recent research has included the Stroop phenomenon (interference of words with color naming), visual search, and gender differences in spatial cognition.

Recent Research

Monahan, J. S. (2001). Coloring single Stroop elements: Reducing automaticity or slowing color processing? *Journal of General Psychology, 128(1)*, 98-112.

Justin Oh-Lee, Associate Professor

and Director, Experimental Psychology Graduate Program

http://www.chsbs.cmich.edu/Justin_Oh_Lee/

Recent Research

Justin Oh-Lee received his Ph.D. in 1995 from the University of California, Los Angeles (UCLA) in Psychology (Behavioral Neuroscience). He was a post-doctoral IRTA fellow from 1995-1999 and served as a research fellow from 1999-2001 at the Clinical Pharmacology section, Experimental Therapeutics Branch, NINDS, National Institutes of Health, Bethesda, Maryland, before coming to Central Michigan University.

Recent Interest

Dr. Oh-Lee's principal research interests focus on the treatment of Parkinson's disease and other related neurodegenerative disorders. The major goal of the laboratory is to uncover the underlying molecular, genetic, biochemical, and psychobiological abnormalities that produce clinical symptoms in neurodegenerative diseases such as Parkinson's, Alzheimer's and Huntington's. Current projects include investigations of the pathogenesis of motor response complications associated with chronic levodopa (also known as L-DOPA) therapy in Parkinson's disease.

Recent Research

Smith, C. P. S., Oh, J. D., Bibbiani, F., Collins, M. A., Avila, I., & Chase, T. N. (2007). Tamoxifen effect on L-DOPA-induced response complications in parkinsonian rats and primates. *Neuropharmacology, 52(2)*, 515-526.

Dunbar, G. L., Oh-Lee, J. D., & Lescaudron, L. (2006). Cell Therapy for Brain Repair; Use of bone marrow stem cells as therapy for behavioral deficits in rodent models of Huntington's disease. In P.R Sanberg and C. Davis (Eds.), pp. 117-138. Humana Press, Inc: Totowa, NJ.

Bibbiani, F., Oh J. D., Krilaite, A., Collins, M. A., Smith, C., & Chase, T. N. (2005). Combined blockade of AMPA and NMDA glutamate receptors reduces levodopa-induced motor complications in animal models of PD. *Experimental Neurology, 196*, 422-429.

Bibbiani, F. & Oh, J. D. (2005). Motor Complications In Primate Models of Parkinson's Disease; Animal Models of Movement Disorders (Ed: LeDoux M), pp. 209-218, *Elsevier Academic Press*, London, UK.

Wessell, R. H., Ahmed, S. M., Menniti, F. S., Dunbar, G. L., Chase, T. N., & Oh, J. D. (2004). NR2B Selective NMDA Receptor Antagonist CP-101, 606 Prevents Levodopa-Induced Motor Response Alterations in Hemiparkinsonian Rats. *Neuropharmacology*, 47, 184-194.

**Hajime Otani, Professor
and Chair of the Department of Psychology**
www.chsbs.cmich.edu/hajime_otani/

Hajime Otani has been at Central Michigan University since 1989, the year he received his Ph.D. in Experimental Psychology from the University of Georgia.

Research Interests

Dr. Otani has been investigating basic processes of human memory and cognition. In particular, he has been interested in basic mechanisms of encoding and retrieval. To investigate the mechanisms, he has been examining various memory phenomena, such as hypermnesia, word frequency effects, feeling of knowing, and prospective memory, and how these phenomena are affected by various encoding methods. Recently, he has also developed an interest in cognitive aging. He plans to test older adults to find out how basic cognitive mechanisms change as one ages.

Recent Research

- Otani, H., Kato, K., Von Glahn, N. R., Nelson, M. E., Widner, R. L., Jr., & Goernert, P. N. (in press). Hypermnesia: A further examination of age differences between young and older adults. *British Journal of Psychology*.
- Goernert, P. N., Widner, R. L., Jr., & Otani, H. (in press). Classification accuracy across multiple tests following item-method directed forgetting. *Quarterly Journal of Experimental Psychology*.
- Swan, L., Otani, H., & Loubert, P. V. (in press). Reducing postural sway by manipulating difficulty levels of cognitive task and balance tasks. *Gait and Posture*.
- Libkuman, T. M., Otani, H., Kern, R. P., Viger, S. G., & Novak, N. (2007). Multidimensional normative ratings for the International Affective Picture System. *Behavior Research Methods*, 39, 326-334.
- Otani, H., Libkuman, T. M., Widner, R. L. Jr., & Graves, E. I. (2007). Memory for emotionally arousing stimuli: A comparison of young and older adults. *Journal of General Psychology*, 134, 23-42.
- Goernert, P. N., Widner, R. L., Jr., & Otani, H. (2006). Segregation accuracy in item-method directed forgetting across multiple tests. *British Journal of Psychology*, 97, 245-258.
- Kern, R. P., Libkuman, T. M., Otani, H., & Holmes, K. (2005). Emotional stimuli, divided attention, and memory. *Emotion*, 5, 408-417.
- Widner, R. L., Jr., Otani, H., & Winkelman, S. E. (2005). Tip-of-the-tongue experiences are not merely strong feeling-of-knowing experiences. (Special Issue) *Journal of General Psychology*, 132, 392-407.
- Otani, H., & Widner, R. L., Jr. (2005). Metacognition: New issues and approaches – Guest editor's introduction. (Special Issue) *Journal of General Psychology*, 132, 329-334.

Debra Ann Poole, Professor
www.chsbs.cmich.edu/psychology/poole1d.htm

Deb Poole received her Ph.D. in Developmental and Experimental Child Psychology from the University of Iowa in 1980. She taught for seven years at Beloit College, where she chaired the Psychology Department before relocating to Central Michigan University in 1987.

Research Interests

Dr. Poole is interested in the social policy implications of basic research in language and cognitive development. Her primary research program, on children's eyewitness testimony, has been funded by grants from The National Institute of Health and the National Science Foundation. Deb has translated findings from these projects into guidelines for conducting investigative interviews. In addition to a book on this topic, she wrote the investigative interviewing protocol that was adopted by the State of Michigan's Governor's Task Force on Children's Justice. She also writes on other topics with policy implications, as illustrated by papers on the heritability concept and gender differences in scientific knowledge. Her textbook on lifespan development, *The Story of Human Development*, is published by Prentice Hall.

Recent Research

Poole, D., Warren, A., & Nunez, N. (2007). *The Story of Human Development*. Upper Saddle River, NJ: Prentice-Hall.

Poole, D. A., & Dickinson, J. J. (2005). The future of the protocol movement: Commentary on Hershkowitz, Horowitz, & Lamb (2005). *Child Abuse & Neglect*, 29, 1197-1205.

Dickinson, J. J., Poole, D. A., & Laimon, R. L. (2005). Children's recall and testimony. In N. Brewer & K. Williams (Eds.), *Psychology & Law: An Empirical Perspective* (pp. 151-176). New York: Guilford.

Dickinson, J. J., Poole, D. A., & Bruck, M. (2005). Back to the future: A comment on the use of anatomical dolls in forensic interviews. *Journal of Forensic Psychology Practice*, 5, 63-74.

Nunez, N., Poole, D. A., & Memon, A. (2003). Psychology's two cultures revisited: Implications for the integration of science with practice. *Scientific Review of Mental Health Practice*, 2, 8-19.

Mark P. Reilly, Associate Professor
http://www.chsbs.cmich.edu/mark_reilly

Mark Reilly received his B.S. from the University of Florida in 1989, his M.S. from the University of North Texas in 1993, and his Ph.D. from West Virginia University in 1996. He held a Postdoctoral Fellowship at the University of Michigan and at Wayne State University from 1996 to 1999. He was an Assistant Professor of Research at Arizona State University from 1999 to 2003. He has been at Central Michigan University since 2003.

Research Interests

Dr. Reilly's research interests involve the experimental analysis of human and nonhuman behavior, operant/respondent conditioning, behavioral pharmacology, and substance abuse. His research interests are eclectic but strive to elucidate basic principles of behavior. He has conducted research on self-control and risk taking, schedules of reinforcement, behavioral variability, drug discrimination, drug tolerance, and conditioned reinforcement. His current research focuses on three areas: the motivational properties of response effort or work, the factors related to impulsivity and sensitivity to reinforcer delay, and the environmental factors that establish alcohol as a reinforcer. His research also involves the use of mathematical models of behavior to better understand behavioral processes.

Recent Research

Fox, A. T., & Reilly, M. P. (2007). Integrative Model or Fracturing Framework: Better we hedge our bets. *Analysis of Gambling Behavior, 1*, 1-3.

Hand, D., Fox, A., & Reilly, M. P. (2006). Response acquisition with delayed reinforcement in a rodent model of attention-deficit/hyperactivity disorder (ADHD). *Behavioral Brain Research, 175*(2), 337-342.

Lieving, G., Reilly, M. P. & Lattal, K. A. (2006). Disruption of responding maintained by conditioned reinforcement: Alterations in response-conditioned reinforcer relations. *Journal of the Experimental Analysis of Behavior, 86*, 197-209.

Reilly, M. P., Greenwald, M., & Johanson, C. E. (2006). The stoplight task: A procedure for assessing risk taking in humans. *Psychological Record, 56*, 191-204.

Weiss, S. J., Reilly, M. P., & Kearns, D. N. (2005). Associative mechanisms and drug-related behavior. *International Journal of Comparative Psychology, 18*, 1-6.

Reilly, M. P., & Lattal, K. A. (2004). Within-session delay-of-reinforcement gradients. *Journal of the Experimental Analysis of Behavior, 82*, 21-35.

Reilly, M. P. (2003). Extending mathematical principles of reinforcement to behavioral pharmacology. *Behavioral Process, 62*, 75-88.

Rousche, P. J., Otto, K. J., Reilly, M. P., & Kipke, D. R. (2003). Single electrode micro-stimulation of rat auditory cortex: An evaluation of behavioral performance. *Hearing Research, 179*, 62-71.

George F. Ronan, Professor

http://www.chsbs.cmich.edu/george_ronan/

George Ronan received his Ph.D. in clinical psychology from Fairleigh Dickinson University in 1985. After completing a one-year post-doctoral fellowship in psychotherapy research, he joined the faculty at Alfred University. He has been at Central Michigan University since 1989. From 1995 thru 1999 he served as Director of the psychology department outpatient clinic, the Psychological Training and Consultation Center. From 1999 thru 2005 he served as Director of Clinical Training for the Ph.D. program in Clinical Psychology. He is the past editor for the *Behavior Therapist* (1999 thru 2004) and currently serves as an Associate Editor for the *Journal of Personality Assessment*.

Research Interests

Dr. Ronan's research interests involve basic and applied studies of social/personal problem solving. During the past six years, students and he has developed a system for scoring narratives to assess social problem solving ability. He has several ongoing projects in this area. The application of problem-solving based interventions is another area of interest. For the past 12, years he has been conducting research on violent offenders and coordinated a Violence Reduction Program that provides services to people who are court ordered into treatment. He is currently in the process of completing an outcome study that compares the efficacy of different formats for providing treatment designed to decrease levels of violent behavior.

Recent Research

- Ronan, G. F., & Gibbs, M. S. (2007). Scoring Manual for Personal Problem Solving System-Revised. In S. Jenkins (Ed.), *Handbook of Scoring Systems for the Thematic Apperception Test* (pp.201-219). New York: Taylor and Francis.
- Ronan, G. F., Gibbs, M. S., Dreer, L. A., & Slezak, J. S. (2007). Personal Problem-Solving System-Revised. In S. Jenkins (Ed.), *Handbook of Scoring Systems for the Thematic Apperception Test* (pp. 173-196). New York: Taylor and Francis.
- Dreer, L. E., Ronan, G.F., Ronan, D.W., Dush, D. M., & Elliot, T. R. (2004). Binge drinking and college students: An investigation of social problems solving abilities. *Journal of College Student Personnel, 45*, 303-315.
- Freymuth, A., & Ronan, G.F. (2004). Modeling patient decision-making: The role of base rate and anecdotal information. *Journal of Clinical Psychology in Medical Settings, 11*, 211-216.

Michael Sandstrom, Assistant Professor
http://www.chsbs.cmich.edu/michael_sandstrom/

Michael I. Sandstrom is an assistant professor who joined the Central Michigan University Psychology Department in Spring 2004. Prior to his arrival he held a postdoctoral position at Indiana University, Bloomington campus since receiving his Ph.D. in Neuroscience from Ohio State University in 1998.

Research Interests

Dr. Sandstrom's research interests focus on behavioral neuroscience. Specifically, experiments explore mechanisms that underlie plasticity and recovery of the mammalian brain following neuronal deterioration-induced deficits that disrupt behavior. Most of Dr. Sandstrom's work has been related to Parkinson's disease, exploring the function of the basal ganglia using an animal model. He is currently investigating transgenic mice that model Huntington's disease to delineate neurochemical deficits in both basal ganglia and limbic structures using startling auditory stimulation. The current goal is development of practical strategies to assess the differential impact of putative therapeutic efforts as well as to narrow down on key physiological disruptions that may reduce the ambiguity surrounding Huntington's disease etiology. Techniques include in-vivo microdialysis, single unit electrophysiology, and iontophoresis experiments using awake and unrestrained animals, immunohistochemistry, local intracranial infusions, and future planned bone-marrow derived stem cell investigations.

Recent Research

- Rebec, G. V., and Sandstrom, M. I. (2007). Extracellular Ascorbate Modulates Glutamate Dynamics: Role of Behavioral Activation. *BMC Neuroscience, 8*(32), 1-7.

- Rebec, G. V., Witowski, S. R., Sandstrom, M. I., Rostand, R. D., and Kennedy, R. T. (2005). Extracellular ascorbate modulates cortically evoked glutamate dynamics in rat striatum. *Neuroscience Letters*, 378(3), 166-170.
- Sandstrom, M., Nelson, C. L., and Bruno, J. P. (2003). Neurochemical correlates of sparing from motor deficits in rats depleted of striatal dopamine as weanlings. *Developmental Psychobiology*, 43, 373-383.
- Sandstrom, M. I., and Rebec, G. V. (2003). Characterization of striatal activity in conscious rats: Contribution of both NMDA and AMPA/kainate receptors to both spontaneous and glutamate-driven firing. *Synapse*, 47, 91-100.
- Bruno, J. P., Sandstrom, M., Arnold, H. M., and Nelson, C. L. (1998). Age-dependent neurobehavioral plasticity following forebrain dopamine depletions. (Review) *Developmental Neuroscience*, 20, 164-179.
- Soghomonian, J. J., Laprade, N., Sandstrom, M., and Bruno, J. P. (1998). *c-fos* gene expression is induced in a subpopulation of striatal neurons following a single administration of a dopamine D1-receptor agonist in adult rats lesioned with 6-OHDA as neonates. *Molecular Brain Research*, 57(1), 155-160.

**Sonya Sheffert, Associate Professor
and Director of Undergraduate Programs**
http://www.chsbs.cmich.edu/sonya_sheffert/

Sonya Sheffert research examines applied aspects of memory, cognition and language processing. Dr. Sheffert joined the faculty at CMU in 1998 after completing a post-doctoral research fellowship at Indiana University. She received her Master's and Ph.D. degrees from the University of Connecticut in Experimental Psychology, specializing in psycholinguistics and cognition. Prior to graduate school, she worked for a year in industry as a research analyst for a marketing firm after receiving her B.A. in Psychology from the University of Alaska.

Research Interests

Dr. Sheffert's research interests include: Psychology of language; Multimodal computer-based learning and memory, spoken word recognition, speaker recognition; and perceptual learning.

Recent Research

- Sheffert, S. M., Boyll, D. M. & Olson, E. A. (2005). Audiovisual talker familiarity and long-term memory for spoken words. In D. Rosen (Ed.), *Trends in Experimental Psychology Research* (pp. 1-26). Hauppauge, New York.
- Sheffert, S. M. & Olsen, E. (2004). Audiovisual speech facilitates voice learning. *Perception and Psychophysics*, 66, 353-367.
- Swan, L., Otani, H., Loubert, P., Sheffert, S., & Dunbar, G. L. (2004). Improving balance by performing dual tasks. *British Journal of Psychology*, 95, 1-10.
- Sheffert, S. M. & Shiffrin, R. M. (2003). Auditory "registration without learning". *Journal of Experimental Psychology: Learning, Memory and Cognition*, 29, 22-38.
- Sheffert, S., MacPherson, M., & Wilson, M. (2003). The influence of multimodality, talker variability and noise on immediate serial recall. *Cognitive Technology*, 8, 50-58.
- Sheffert, S. M., Pisoni, D. B., Fellowes, J. M., & Remez, R. E. (2002). Learning to recognize talkers from natural, sinewave and reverse speech. *Journal of Experimental Psychology: Human Perception and*

Performance, 28, 1447-1469.

K. Roger Van Horn, Professor

www.chsbs.cmich.edu/psychology/vanhorn.htm

Roger Van Horn received his Ph.D. in Experimental Child Psychology from Iowa State University in 1969. He came to Central Michigan University in 1971 after two years as an instructional design researcher in an educational research laboratory in Los Angeles.

Research Interests

Dr. Van Horn's research takes a multicultural approach to studying cognitive and social development from late childhood through adolescence. His primary interest is in assessing the impact of cultural values and traditions on social-cognitive development. The main developmental processes he studies include: social skills; social support characteristics in close interpersonal relationships; strategies for resolving interpersonal conflict situations; and personal problem-solving styles. He is currently conducting research projects in Brazil and Japan.

Recent Research

Hechanova-Alampay, R., Beehr, T. A., Christiansen, N. D., & Van Horn, K. R. (2002). Adjustment and strain among domestic and international student sojourners: A longitudinal study. *School Psychology International*, 23, 458-474.

Marques, J. C., & Van Horn, K. R. (2002). Relacoes interpessoais em pre-adolescentes, adolescents e universitarios brasileiros: Um estudo transcultural. *Psico*, 33, 245-272.

Van Horn, K. R., & Tamase, K., & Hagiwara, K. (2001). Teachers' expectations of high school students' social skills in Japan. *Psychologia*, 44, 250-258.

Van Horn, K. R., & Marques, J. C. (2000). Interpersonal relationships in Brazilian preadolescents, adolescents, and college students. *International Journal of Behavioral Development*, 24, 199-203.

Van Horn, K. R., Garian, K. R., Feijó, M., & Souza, E. Z. (1999). Cultural attitudes and everyday activities in Brazilian and U.S. college students. *Interamerican Journal of Psychology*, 33, 173-190.

Experimental Research Scientist Description

Nicholas D. Cassavaugh, Research Scientist

www.chsbs.cmich.edu/psychology/

Nick received his Ph.D. in Experimental Psychology from the University of Illinois at Urbana-Champaign's in 2007. He joined the Psychology Department in January, 2007 as a Research Scientist in support of the Driver Education, Evaluation and Research Center.

Research Interests

Dr. Cassavaugh's research interests focus on human factors in driving; the human element in human-machine interaction. He is chiefly interested in the cognitive effects of normal aging and the impact these changes have on driving ability. Developing ways to identify and counteract the effects of aging and prolong the ability of the older driver to drive *safely* is an important part of his work. He is further interested in discovering the ways in which the older driver "uses, misuses, disuses or abuses" in-vehicle technologies. Other interests include the cognitive effects of sleep disorders (e.g. obstructive sleep apnea) and neurological disorders (e.g. Alzheimer's disease) and their effect on driving ability and performance.

Recent Publications

- Kramer, A. F., Cassavaugh, N. D., Becic, E., & Horrey, W. J. (in press). Influence of Age and Proximity Warning Devices on Collision Avoidance in Simulated Driving. *Human Factors*.
- Cassavaugh, N. D., Kramer, A. F., & Peterson, M. S. (2004). Aging and the Strategic Control of the Fixation Offset Effect. *Psychology and Aging, 19*(2), 357-361.
- Cassavaugh, N. D., Kramer, A. F., & Irwin, D. E. (2003). Influence of Task-Irrelevant Onset Distractors on the Visual Search Performance of Young and Old Adults. *Aging, Neuropsychology, and Cognition, 10*(1), 44-60.
- Kramer, A. F., Kurokawa, K., Cassavaugh, N. D., Joncich, A., Becic, E., Mayhugh, J., & Watson, K. (2002). Efficacy of a Collision Avoidance Warning System in a Simulated Driving Environment. *Technical report to General Motors Corporation*.

Recent Student Theses and Dissertations

2007

- Workplace violence and aggression: An evolutionary perspective-**Connor, J.**-M.S.
- Emotion, attention, and driving behavior in young adults-**Oliver, M.**-M.S.
- Effect of retrieval-induced forgetting on emotional memory-**Migita, M.**-M.S.
- Negative evaluation conditioning of implicit smoking attitudes as an avenue toward cessation-**Schlenkermann, R.**-Ph.D.
- The effects of neural stem cell transplants and neurosteroids on traumatic brain injury-**Shear, D.**-Ph.D.

2006

- Cardiac automatic control in sleep apneas and risk of nocturnal myocardia; ischemia-**Da Silva, S.**-Ph.D.
- The effects of oral administration of the substituted pyridine KP544 in a transgenic mouse model of Huntington's disease-**Dey, N.**-M.S.
- The effects of continuous white noise on sleep patterns, moods, and cognitive performance of college students -**Forquer, L.**-Ph.D.
- Response acquisition with delayed reinforcement: the effects of delay stimuli and housing conditions-**Fox, A.**-M.S.
- Effect of white noise exposure on apomorphine-induced hyperactivity and learning deficits-**Jaskiw, N.**-M.S.
- Controlled versus automatic processes in retrieval-induced forgetting-**Kato, K.**-Ph.D.
- Physical activity in undergraduate psychology and personal health courses: Quantitative baseline comparison and subgroup study of the effects of education and pedometer use-**Perkins, J.**-Ph.D.
- The effects of music on implicit and explicit product attitudes-**Redker, C.**-M.S.
- Effects of age, stress, and basal ganglia dysfunction on motor response timing performance.-**Schondelmayer, T.**-

M.S.

Effects of voluntary exercise and NMDA receptor subunit-selective antagonists on levodopa-induced motor response complications in Hemi Parkinsonian rats-**Wessell, R.**-Ph.D.

Attorney performance, strength of evidence, and courtroom outcome-**Wood, S.**-M.S.

The effects of mortality salience on consumer behavior, materialism, and sensation seeking-**Zimmerman, I.**-M.S.

Course Descriptions

PSY 511 Statistics in Psychology - 3(3-1)

An extension of topics introduced in PSY 211, with emphasis upon hypothesis testing and statistical inference. Prerequisite: PSY 211 or equivalent.

PSY 584 Cognitive Neuroscience - 3(3-0)

Converging evidence from human neuroanatomy and neurophysiology, cognitive psychology, neuropsychology, and neuroimaging research will be examined for topics in attention, perception, memory, language, and emotion. Prerequisite: PSY 387 or permission of instructor or graduate standing.

PSY 585 Psychophysiology - 3(3-0)

Introduction to psychophysiology methods, measures, and applications. Topics include: basic neuroanatomy and neurophysiology; electrophysiological recording; inference using brain, cardiovascular, somatic measures; biofeedback, ergonomic, and other applications. Prerequisite: PSY 387 or permission of instructor or graduate standing.

PSY 587 Physiological Psychology - 3(3-0)

Physiological events which underlie human and animal behavior. Prerequisite: PSY 387 or graduate standing.

PSY 589 Cognitive Psychology - 3(3-0)

Introduction to cognitive processes; survey of theory and research in memory, thinking, concept formation, problem solving, and language. Prerequisite: PSY 383 or permission of instructor.

PSY 609 History and Systems of Psychology - 3(3-0)

Modern psychology is analyzed by tracing its historical roots and early systems. Emphasis is on the influence of historical systems on current areas of specialization.

PSY 611 Research Design - 3(3-0)

Common types of analysis of variance, multiple comparisons tests, the analysis of covariance. Prerequisite: PSY 511 or equivalent.

PSY 612 Applied Multiple Regression and Correlation - 3(3-0)

A study of the general linear model as applied to multiple regression and the analysis of variance. Prerequisite: PSY 211 or equivalent and permission of instructor.

PSY 613 Multivariate and Correlational Methods - 3(3-0)

A survey of multivariate statistical procedures, including multiple regression and correlation, canonical and discriminate analysis, multivariate analysis of variance, and factor analysis. Prerequisite: PSY 612 or permission of instructor.

PSY 624 Advanced Developmental Psychology - 3(3-0)

Basic theory and principles of life-span developmental psychology. Prerequisite: matriculation in psychology graduate program or permission of instructor.

PSY 630 Advanced Social Psychology - 3(3-0)

Intensive examination of the major theories and experiments of social psychology. Prerequisite: matriculation in psychology graduate program or permission of instructor.

PSY 680 Learning - 3(3-0)

Theory and research in basic learning phenomena including classical, operant, and complex behavior. Prerequisite: permission of instructor

PSY 681 Sensation and Perception - 3(3-0)

Cognitive, neuroscience, psychological, and behavioral analysis of perceptual systems. Vision and audition are emphasized. Prerequisite: permission of instructor.

PSY 686 Engineering Psychology - 3(3-0)

An overview of the discipline of engineering psychology including the topics of human error and applications of perception and cognition in human-machine systems. Prerequisite: graduate standing in Psychology or permission of instructor.

PSY 687 Physiological Foundations - 3(3-0)

Extensive survey of advanced knowledge of the physiological, neuroanatomical, neurochemical, and neuophysiological events underlying human and animal behavior.

PSY 690 Research Seminar in Experimental Psychology - 1-3 (Spec)

Study of problems and issues in experimental psychology under faculty guidance via lecture and/or seminar format. CR/NC only.

PSY 696 Directed Research - 1-12(Spec)

For students who desire to investigate some research problem in psychology. Prerequisite: must file written proposal approved by faculty sponsor in departmental office prior to registration.

PSY 697 Independent Study - 1-8(Spec)

For students who accept responsibility for studying a psychological problem of their own. Prerequisite: must file written proposal approved by faculty sponsor in departmental office prior to registration.

PSY 724 Psychology of Aging - 3(3-0)

This course examines theories of adult development and how those theories are related to important issues affecting older adults. Prerequisite: graduate standing or permission of the instructor.

PSY 789 Seminar in Applied Experimental Psychology - 1-9(Spec)

Exploration of specialized areas in the field of Applied Experimental Psychology through the review of the primary literature. May be repeated to a maximum of 9 hours, but no more than 3 hours may be taken per semester. Students should have graduate standing, and have completed most, if not all, of the requirements for the M.S. degree in General/Experimental Program. Prerequisites: permission of instructor.

PSY 798 Thesis - 1-6(Spec)

CR/NC only.

PSY 800 Research in Applied Experimental Psychology - 1-12(Spec)

Directed research course in which students work in close collaboration with instructor on a research topic in the area of applied experimental psychology. May be repeated to a maximum of 12 hours. Prerequisites: permission of instructor; students should have graduate standing, and have completed most, if not all, of the requirements for the M.S. degree in Experimental Psychology.

PSY 898 Doctoral Dissertation: Design - 3-12(Spec)

Design of a doctoral dissertation. CR/NC only. Prerequisite: matriculation in psychology doctoral program.

PSY 899 Doctoral Dissertation: Implementation - 3-12(Spec)

Completion of the doctoral dissertation designed in PSY 898: data collection, analysis, and write-up. CR/NC only. Prerequisite: PSY 898.

PSY 990 Internship A: Professional Services - 3-6(Spec)

Develop competencies in psychological services, program development evaluation, needs assessment and/or delivery systems; PSY 990-991 constitute a full-time year-long experience. CR/NC only. Prerequisites: matriculation in psychology doctoral program, complete M.A. thesis, passed comprehensive exams, dissertation proposal completed and accepted, and permission of instructor.

PSY 991 Internship B: Professional Services - 3-6(Spec)

Continuation of PSY 990 as a full-time, year-long experience. CR/NC only. Prerequisites: matriculation in psychology doctoral program, complete M.A. thesis, passed comprehensive exams, dissertation proposal completed and accepted, and permission of instructor.

Financial Aid

I. Types of Financial Aid Available to Graduate Students in the Psychology Department

1. Fellowships

Fellowships are awarded on the basis of past academic accomplishments and, thus, on one's promise as a scholar. The fellowship provides the student with funds for living and other expenses so that the student can concentrate on academic pursuits.

Because research is part of graduate education, the Department expects all fellows, as part of their fellowship, to work as an apprentice with a professor on a research project.

a. Doctoral Research Fellowships

The Experimental Program has two Doctoral Fellowships. These fellowships cover up to 24 hours of tuition plus a stipend. The stipend for the 2007-2008 academic year is \$12,250.

b. Master's Research Fellowships

The Experimental Program has one Master's Fellowship. This M.S. Fellowship covers up to 24 hours of tuition per year and pays a stipend. For the 2007-2008 year, the stipend is \$10,000.

c. Graduate Fellowships

The Graduate College awards diversity Graduate Fellowships each year to master's and doctoral students. These are competitive and awarded on a university-wide basis. Students in the Experimental Program can submit fellowship applications to the Graduate College. They compete with other students throughout the University for these fellowships. Tuition and stipend for these fellowships are the same as the research fellowships.

2. Assistantships

The Psychology Department's two primary graduate assistant programs are Graduate Assistantships (GA's) and Teaching Assistantships (TA's). A few other types of assistantships are also available. GA's are paid a stipend and cover various amounts of tuition, up to 20 hours.

GA's and TA's typically work for a professor in the department to help him or her with a course or teach an undergraduate course. Traditionally, the Executive Committee assigns GA and TA positions to professors to support instructional programs. Professors who are given a GA or TA choose which GA or TA they want from the list of eligible students'.

Graduate Assistantships (GA's) carry a cash stipend and tuition waiver as well as library privileges. The stipend amount is set yearly by the Board of Trustees. For the 2007-2008 year, the stipend for a M.S. student is \$10,000 and for a Ph.D. student it is \$12,250 for a full assistantship in the department of psychology. Tuition varies up to 20 hours and must be taken during the academic year of the assistantship.

Graduate Teaching Assistantships (TA's) carry a stipend as well as tuition waiver dependent on the level of the award. If full-time, they will get 20 hours of tuition waiver. If half-time, they may get 10 hours. The student receives library privileges.

Expectations for Assistantships: An assistantship is like any other job. The assistant must perform satisfactorily--that is, in line with his or her supervisor's expectations--or the assistant will be fired.

3. Tuition waivers for students in advanced practicum courses

The university has a practice whereby doctoral students in advanced practicum's who are getting paid by the practicum site (at a rate equal to a GA or TA stipend) are eligible for a tuition waiver of up to 10 hours per semester. This practice is reevaluated yearly.

4. Professors' Grants and Contracts

Professors' sometimes receive research grants or consulting contracts. Most of the time they budget for graduate student assistants. Thus, students can earn money and often 10 to 20 hours of tuition by being assigned to professors that have grants and/or contracts.

5. Outside Grants and Student Loans

Foundations and government agencies often have grant programs for which students may compete. Some of these can be quite generous. You can check with the College of Graduate Studies, Office of Research and Sponsored Programs, Office of Veterans' Benefits, or Student Personnel Services for further assistance.

Students may also get loans at favorable terms. You can check into student loans at your local bank or at the Scholarships & Financial Aid Office. Tuition and living expenses at CMU are low compared to many universities. Thus, a modest loan may get you through graduate school at CMU.

II. *Financial Aid Decision Processes*

1. Purposes of Financial Aid:

Financial aid to graduate students serves four purposes. It helps the Experimental Program recruit new students. It provides a means of financial support to students so that they can concentrate on their studies while they are in graduate school. It provides an incentive for students to make satisfactory progress in the program. And it provides the opportunity for students to apprentice themselves to professors to learn about teaching and research.

Academic Standards

LETTER GRADES & POINTS

A	=	4.0 points per semester hour	C+	=	2.3
A-	=	3.7	C	=	2.0
B+	=	3.3	C-	=	1.7
B	=	3.0	E	=	0.0
B-	=	2.7			

Grades below a C do not count toward meeting requirements for any graduate degree.

A 3.0 grade point average (GPA) is required for all graduate degrees.

CR = Credit - **NC** = No Credit - **I** = Incomplete - **W** = Withdrawal - **X** = Audit - **Z** = Deferred

Student Grade Grievance Policy

A student that has a complaint about a grade shall follow the following steps: (1) Contact the instructor (if the instructor is unavailable, they should contact the department chairperson). This may be done in person or in writing as soon as possible, but no later than sixty days after the beginning of the next semester. Exceptions will only be made in the most compelling situations. (2) If still dissatisfied, the student should request, in writing, a joint consultation with the instructor and the department chairperson. If the instructor is also the department chairperson, this request should be addressed to the dean of the college. (3) If the student still feels that the grade is the result of capricious grading, they may file an appeal within ninety days of the start of the next regular semester. This appeal is made to the dean of the college and will be forwarded to the School Committee on Review on Change of Grade.

Academic Probation

If a student's GPA drops below 3.0 in any session, the student is placed on probation. Once placed on probation, a student must show satisfactory progress toward regaining a 3.0 cumulative GPA, by earning a grade point average ABOVE a 3.0 during the next semester. When the GPA reaches 3.0, the student will be taken off probation. If a student fails to obtain a GPA higher than 3.0 in the first session following notification of probation status, the department may recommend to the Dean of the College of Graduate Studies that the student be removed from the degree program. A department may ask to extend the probation for an additional session if circumstances warrant. If a student does not regain a 3.0 GPA by the end of the second session, he or she may be continued only if the department makes a specific request and the Dean of the College of Graduate Studies concurs. (A non-degree student who fails to obtain a GPA higher than a 3.0 the first session after being placed on probation may not continue taking classes.)

Academic Integrity Policy

Because academic integrity and ethical behavior are vital to an academic environment and to the development of qualified psychologists, graduate students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in psychology. In the academic community the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. Written or other work which a student submits must be the product of his/her own efforts and must be consistent with appropriate standards of professional ethics. Academic dishonesty, which includes plagiarism, cheating and other forms of dishonest behavior, is prohibited. Ethical standards, as articulated in the standards of the American Psychological Association and American Psychological Society, must be observed by all graduate students. Allegations of academic dishonesty or unethical behavior will be handled according to the policies given here. Appeals of decisions are processed according to the policies set forth in the "Academic Integrity Policy for Graduate Students," which is published in the Graduate Bulletin. Any appeal decision reached pursuant to this section shall be final and not subject to further review.

Although no specific time lines are included in this policy, it is understood that matters should be handled expeditiously.

1. In cases where an instructor, supervisor, or fellow student believes a student has demonstrated academic dishonesty or professionally unethical behavior, the instructor, supervisor, or fellow student should report the incident to the Program Director.
2. The Program Director will discuss the allegation(s) with the person(s) making them. If the Program Director believes that there is evidence to support the allegation(s), the Director will notify the student of the charges, in writing. In the letter to the student, (s)he will be told the allegation(s) and told that the Program Faculty will be asked to review the allegation(s), look at the evidence, and determine what, if any, sanctions should be issued. The student will be offered the opportunity to admit to the violations, remain silent, meet with the committee to share his/her perceptions of the incident, or submit a written rebuttal to the charges. The student will be given a response deadline, at least two weeks in the future.
3. The Program faculty will review allegation(s) of academic dishonesty or unethical behavior. In any case where a member of the Program faculty made the original allegation(s), the faculty member will be excluded from judging the particular case.
4. If the student elects to meet with the committee to present his/her version of the events under investigation, the student may bring another person (i.e., an advocate) to the meeting to provide support and advice.
5. The Faculty's decision on culpability and appropriate sanctions will be communicated in writing to the student. If the student is found not culpable or if sanctions, other than dismissal or suspension from the program, are issued, this will be communicated in writing to the department Chairperson.
6. If the sanction is dismissal or suspension from the program, the sanction will be communicated through the department Chairperson to the Dean of the College of Graduate Studies who will communicate the decision to the student. This decision shall be final and is not subject to further review.
7. If sanctions are issued, committee records will be retained for at least one year.

Policy on Research Integrity

Integrity in research and creative endeavors is at the heart of many academic endeavors and a fundamental principle of the university community. Faculty, staff, students, and independent contractors all have a responsibility to assure that research and creative endeavors meet accepted standards of scholarly performance. The increasing complexity of the research and creative process, the requirements of federal and state agencies, and the accountability of university personnel to colleagues, students, the university, and the larger community necessitate that CMU specify an acceptable code of conduct, provide a mechanism for investigating alleged violations of accepted standards, delineate appropriate public record follow any discovery of misconduct.

Following is the policy for dealing with allegations of research misconduct at Central Michigan University:

General Provisions

1. Applicability

- a. This policy shall apply to all faculty, staff, students, and independent contractors involved in research or creative endeavors.
- b. Nothing in this policy is intended to diminish or waive an individual's rights under any applicable collective bargaining agreement to which CMU is a party, or other university policies and procedures.
- c. This policy shall apply to students involved in the following research and creative endeavors:
 - Those conducted jointly with a CMU faculty or staff member or with any person from another university.
 - Those externally funded under a grant or contract to CMU or one or more of its employees.
 - Those expected to be published, presented, or shared with the broader academic community outside the student's classroom.
 - Those done in conjunction with a thesis or dissertation, and
 - Those done in conjunction with a graduate Plan B paper.

Except as noted above, this policy does not apply to a student's class assignments, independent study projects, Plan B papers, or directed research work which is not expected to be submitted for publication, presentation, or sharing with a community of scholars other than the members of the class. (Further information can be found in the Graduate Bulletin).

Local Information

CMU is situated in Mount Pleasant and has an on campus enrollment of 20,025. The city and the University have had a long history of friendly relations, and as a CMU student, you will find yourself welcomed and accepted by this community of 25,946 residents. Being at the threshold of Michigan's recreational and vacationland, allows for a spacious community and campus. Stores, restaurants, and churches are within walking distance. For more information about Mount Pleasant, go to <http://www.mountpleasantwow.com/> or <http://www.mt-pleasant.net/>.

Older buildings are located on the north end of campus, with athletic and recreational facilities located at the south end. Residence halls are located on the perimeter and enclose the academic buildings. Offices and classrooms are within easy walking distance. Grassy hills, ponds, and trees cover the landscape of this pedestrian-oriented campus. For a campus map or driving directions to Mount Pleasant, go to <http://map.cmich.edu/>.

Important Contact Information

Career Services is located in the Bovee University Center, Room 215, Telephone (989) 774-3068 or online at www.careers.cmich.edu.

Counseling Center is located in Foust Hall, Room 102, Telephone (989) 774-3381 or online at www.counsel.cmich.edu.

Minority Student Services is located in the Bovee University Center, Room 121, Telephone (989) 774-3945 or online at www.diversity.cmich.edu/mss/.

Student Disability Services is located in Park Library, Room 120, Telephone (989) 774-3018 or online at <http://www.cmich.edu/student-disability/>.

University Health Services is located in Foust Hall, Telephone (989) 774-6599 or online at www.healthservices.cmich.edu.

Sources of Information within this Handbook

Central Michigan University-Department of Psychology - <http://www.chsbs.cmich.edu/Psychology/>.

College of Graduate Studies 2007-2008 GRADUATE BULLETIN - <https://bulletins.cmich.edu/>.

Central Michigan University 2007-2008 UNDERGRADUATE BULLETIN - <https://bulletins.cmich.edu/>.