



**Florida Atlantic University  
Academic Program Review  
Self-Study Report 2014-15**

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## **A. MISSION AND PURPOSE OF THE PROGRAM**

The undergraduate programs in Psychology are designed to educate students in core areas of the field as well as in research methodology and statistical analysis, to promote critical thinking, and to strengthen oral and written communication skills through participation in didactic courses and directed independent study. The program is offered at the Boca Raton, Davie, and Jupiter campuses to facilitate student access. The graduate programs are designed to train students in Experimental Psychology and research methodology through participation in seminars, directed independent study and formal research projects. Areas of research specialization include Behavioral Neuroscience, Cognitive Psychology, Developmental Psychology, and Personality/Social Psychology. Graduates of the program are qualified for professional employment in academia, government and the private sector.

## **B. DATE AND DESCRIPTION OF LAST REVIEW OF THIS PROGRAM**

The program was last evaluated internally in July 2009 under the direction of the previous Dean of the Charles E. Schmidt College of Science, Dr. Gary Perry. That review contained the following findings:

- Psychology is a popular major, but increases in enrollment growth have not been matched by increased funding.
- Psychology majors, both undergraduate and graduate, tend to be predominantly white and female.
- Students are achieving expected learning outcomes.
- Graduate students are finding employment in academia and in the public and private sector.
- Faculty teaching, research, and service productivity is high.
- Departmental goals and productivity are threatened by faculty attrition and reduced budgets.

In response to these findings, the following recommendations were made:

- Faculty at the partner campuses should be reassigned to the Boca campus to preserve the core mission of the program.
- Courses at the partner campuses should be offered on a rotating basis such that transfer students can complete the major in two years.
- To address increased enrollment growth, additional resources should be allocated to support undergraduate student advising.
- To address decreased university budgetary support, increased extramural funding should be sought to support research.

Major changes since the last review:

a) Although a Consolidation Plan was developed by the Department and approved by the Dean, the plan was not implemented because laboratory space on the Boca Raton campus for reassigned faculty could not be committed at that time. More recently, the University proposed creating campus-specific areas of specialization, spearheaded by the Jupiter Neuroscience Initiative. Dr. Robert Stackman, his graduate students and staff were relocated to the Jupiter campus to participate in this endeavor. At the administration's invitation, the Department proposed a campus specialization at the Davie campus in Successful Aging to take advantage of the developmental interests of the faculty at that campus. So far that proposal has not been approved.

b) Additional advisors were hired by the College of Science to service Psychology majors.

c) The percentage of faculty awarded extramural funding has increased from 31% in 2009 to 44% in 2014.

## C. INSTRUCTION

### C1. Baccalaureate Programs

#### Departmental Dashboard Indicators

The Department has established specific learning outcomes for each of its baccalaureate degree programs and regularly assesses how well students are achieving these goals. A summary of the learning outcomes, assessment methods and student performance during the 2013-14 academic year follows.

#### B.A. in Psychology

**Outcome 1.** *Graduates in Psychology will understand basic concepts, theories, and experimental findings in four core areas of psychology (cognitive, developmental, social, and behavioral neuroscience).* For each of the courses listed below, faculty teaching that course developed a master syllabus that includes student learning outcomes to be addressed in all sections of the course. The courses are Cognition (EXP3505), Psychology of Human Development (DEP3054), Social Psychology (SOP3004), and Biological Bases of Behavior (PSB3002). Exams in each of these courses include embedded items designed to specifically assess student achievement of the learning outcomes identified in the master syllabus. Students are not informed which exam items will be used for assessment purposes. For Cognition, Human Development, and Social Psychology, the criterion for success is 70% of the students correctly answering the embedded content knowledge assessment questions. For Biological Bases of Behavior, the faculty who teach the course set the criterion at 60%. For 2013-14, the percentage of students achieving these goals was 71% (Cognition), 77% (Human Development), 75% (Social) and 68% (Bio. Bases).

**Outcome 2.** *Graduates in Psychology will demonstrate their ability to (1) enter data into a database, (2) select, plan and conduct appropriate statistical analyses on sets of data using computer software, and (3) communicate the scientific conclusions that may be drawn from appropriate statistical analyses in written, tabular, and graphical form following APA style.* A master syllabus for STA3163L Intermediate Statistics Laboratory was developed containing specific guidance on both the content to be covered as well as what should be covered in a "final course project." This project requires students to conduct a set of appropriate statistical analyses on a set of data and to communicate in APA style the results of the analysis via written text, tables, and figures. The grading of the final project gives equal weight to both the inferential component and the descriptive component. The criterion for success is for at least 70% of the students in the course to achieve a grade of 70% or better on the inferential and descriptive components. For 2013-14, the percentage of students meeting this criterion on the inferential component ((including t-tests, correlation, ANOVA) ranged from 73-86%. Data was not reported for student performance on the descriptive component.

**Outcome 3.** *Graduates in Psychology will be able to produce writing that is grammatically correct, well organized, and properly formatted according to the APA Publication Manual.* General writing ability is assessed as part of FAU's "Gordon Rule." In addition, knowledge of APA style is assessed in a paper assigned in Research Methods in Psychology (PSY3213), a course required of all psychology majors. APA style includes reference formatting guidelines as well as guidelines for the use of specific terminology, grammatical structure, and other components of written communication for the dissemination of information within scientific psychology. Master syllabi were developed to ensure that the writing component constitutes a substantial portion of the course requirements. The criterion for success is for 70% of the students completing the Research Methods in Psychology (PSY 3213) course to earn a grade of at least 70% on the written component. For 2013-14, 81% of students met this criterion.

**Outcome 4.** *Graduates in Psychology will use critical thinking to evaluate information and data related to behavioral and psychological processes by applying basic principles of scientific methodology including (1) the nature of scientific explanations, (2) threats to the validity and reliability of observations, (3) the limitations of measurement scales, (4) the use of experimental and quasi-experimental designs to test hypotheses and (5) the proper interpretation of correlational and experimental data.* Master syllabi for Research Methods in Psychology (PSY 3213) were developed, which cover these areas and specific exam questions were formulated to assess students' understanding of scientific methodology, as articulated in the outcome description. The criterion for success is for at least 70% of students to answer these questions correctly. For 2013-14, the percentages for each area were as follows: nature of scientific explanation, 76%; threats to validity and reliability of observations, 86%; limitations of measurement scales, 68%; use of experimental and quasi-experimental designs to test hypotheses, 74%; proper interpretation of correlational and experimental data, 77%.

**B.S. in Neuroscience and Behavior.** This is a joint program with the Department of Biological Sciences. The following learning outcomes and assessment methods have been developed for this major.

**Outcome 1.** *Graduates in Neuroscience and Behavior will understand basic concepts, theories and experimental findings in the core areas of psychobiology.* Faculty teaching the core psychobiology course Biological Bases of Behavior (PSB3002) and Comparative Animal Behavior (CBH 4024) have developed master syllabi that include student learning outcomes to be addressed in all sections of these courses. Ongoing discussions are currently underway with the Dept. of Biological Sciences to create an appropriate master syllabus for Comparative Animal Physiology (PCB 4723). Exams in the core courses include (or will include) embedded items designed to specifically assess student achievement of the learning outcomes identified in the master syllabus. The criterion for success for students in Comparative Animal Behavior is to achieve scores of at least 70% correct on these items. For Biological Bases of Behavior, the goal is 60%. Data for this outcome were included in the assessment of students in the B.A. program in Psychology, who are also required to take this course. The faculty is discussing ways to analyze the data for students in the two programs independently.

**Outcome 2.** *Graduates in Neuroscience and Behavior will demonstrate their ability to (1) enter data into a database, (2) select, plan and conduct appropriate statistical analyses on sets of data using computer software, and (3) communicate the scientific conclusions that may be drawn from appropriate statistical analyses in written, tabular, and graphical form following APA style.* A master syllabus for STA3163L Intermediate Statistics Laboratory was developed containing specific guidance on both the content to be covered as well as what should be covered in a "final course project." This project requires students to conduct a set of appropriate statistical analyses on a set of data (including t-tests, correlation and ANOVA) and to communicate in APA style the results of the analysis via written text, tables, and figures. The grading of the final project gives equal weight to both the inferential component and the descriptive component. The criterion for success is for at least 70% of the students in the course to achieve a grade of 70% or better on the inferential and descriptive components. Data for this outcome were included in the assessment of students in the B.A. program in Psychology. The faculty is discussing ways to analyze the data for students in the two programs independently.

**Outcome 3.** *Graduates in Neuroscience and Behavior will be able to produce writing that is grammatically correct, well organized, and properly formatted according to the American Psychological Association's Publication Manual.* General writing ability is assessed as part of FAU's "Gordon Rule." In addition, knowledge of APA style is assessed in a paper assigned in Research Methods in Psychology (PSY3213), a course required of all psychology majors. APA style includes reference formatting guidelines as well as guidelines for the use of specific terminology, grammatical structure, and other components of written communication for the dissemination of information within scientific psychology. Master syllabi were developed to ensure that the writing component constitutes a substantial portion of the course requirements. The criterion for success is for 70% of the students completing the Research Methods in Psychology (PSY 3213) course to earn a grade of at least 70% on the written component. Data for this outcome were included in the assessment of students in the B.A. program in Psychology. The faculty is discussing ways to analyze the data for students in the two programs independently.

**Outcome 4.** *Graduates in Neuroscience and Behavior will use critical thinking to evaluate information and data related to behavioral and psychological processes by applying basic principles of scientific methodology including (1) the nature of scientific explanations, (2) threats to the validity and reliability of observations, (3) the limitations of measurement scales, (4) the use of experimental and quasi-experimental designs to test hypotheses and (5) the proper interpretation of correlational and experimental data.* Master syllabi for Research Methods in Psychology (PSY 3213) were developed, which cover these areas and embedded exam questions were formulated to assess students' understanding of scientific methodology, as articulated in the outcome description. The criterion for success is for at least 70% of students to answer these questions correctly. Data for this outcome were included in the assessment of students in the B.A. program in Psychology. The faculty is discussing ways to analyze the data for students in the two programs independently.

#### **Use of Assessment Data for Program Improvement**

The faculty last reviewed the assessment data for the undergraduate degree programs at a Departmental retreat in August 2009. A number of problems in the collection of assessment data were identified, including uneven compliance, validity and reliability issues, and lack of standardization, and a plan was developed to improve the process. Because of these shortcomings, the Department decided it was premature to recommend changes in the curriculum at that time. Regarding the B.S. program, the Department voted to change the name from Psychobiology to Neuroscience and Behavior and to add a track in Cellular and Molecular Neuroscience. These changes have been implemented. During the 2012-2013 academic year, faculty in each of the core assessment areas (Behavioral Neuroscience, Cognition, Development, Social, and Research Methods) met to review the assessment data from their

courses and to recommend additional modifications in the process. Among the outcomes of these meetings was the decision to standardize the set of questions embedded in exams for assessment purposes. The Department is scheduled to discuss the implications of the assessment data for program improvement during the 2014-15 academic year.

### Review of Lower Level Prerequisite Courses

The Department of Psychology offers one Intellectual Foundations Program (IFP) course, PSY 1012 General Psychology. The University's Core Curriculum Committee has thoroughly reviewed IFP courses for compliance with State requirements per regulation 6.017. The University Undergraduate Programs Committee (UUPC) has recommended these courses for approval to the faculty senate and we fully expect that all courses will be approved at the next senate meeting.

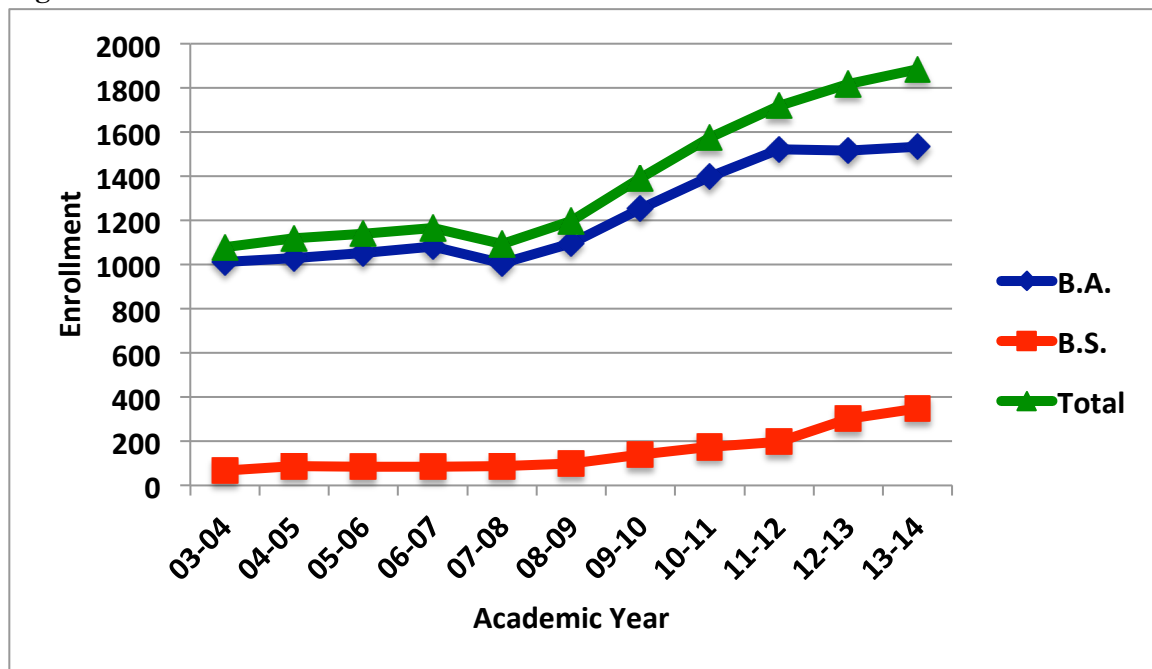
### Admissions Criteria

For both the B.A. in Psychology and the B.S. in Neuroscience and Behavior, incoming majors must meet admissions criteria established by the University, as described in the FAU catalog (<http://www.fau.edu/academic/registrar/FAUcatalog/admissions.php>).

### Enrollment Information (headcount and SCH production)

As shown in **Figure 1**, total headcount enrollment has increased about 75% over the past decade, primarily due to growth in the B.A. program in Psychology from 2007-2011 and in the B.S. program in Neuroscience and Behavior from 2009-2013. Enrollments in the B.S. program are expected to rise dramatically in the coming decade as more preprofessional students choose this major to help them prepare for the soon-to-be-added behavioral and social science subtest of the MCATs.

**Figure 1. Headcount Enrollment**



Data from Departmental Dashboard Indicators for majors enrolled in the B.A. program in Psychology (top table) and the B.S. program in Neuroscience and Behavior (previously named "Psychobiology"; bottom table) as well as data from the College of Science and the University as a whole are shown in **Table 1** below.



**Table 1 Majors Enrolled By Level (Annual Headcount)**

	<b>General Psychology</b>		<b>College Total</b>	<b>University Total</b>
	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Professional</b>				124
<b>Bachelors</b>	1,522	1,517	5,617	28,523

**Neuroscience and Behavior (Psychobiology)**

	<b>Psychobiology</b>		<b>College Total</b>	<b>University Total</b>
	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Professional</b>				124
<b>Bachelors</b>	198	301	5,617	28,523

Data on annualized state-funded FTE (full time equivalents) for the B.A. program in Psychology are shown in **Table 2** and **Table 3** below. Data for the B.S. program in Neuroscience and Behavior were not available. For 2012-13, Psychology contributed about 20% of the FTE generated by the College of Science and about 5% of the FTE generated by the university. At the lower division, non-Psychology majors accounted for about 92% of the total FTE generated during that academic year. This figure represents student enrollment in General Psychology, the only lower division course offered by the Department. At the upper division level, non-Psychology majors accounted for about 38% of total FTE. Thus, Psychology courses at both the lower and upper divisions serve a significant number of students outside the Department and outside the College.

**Table 2 Annualized State-Fundable FTE Produced By Level**

	<b>Psychology</b>			<b>College Total</b>	<b>University Total</b>
	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Undergraduate Total</b>	<b>728.8</b>	<b>760.6</b>	<b>788.3</b>	<b>3,948.6</b>	<b>15,335.0</b>

Table 3 Annualized State-Fundable FTE Produced In/Out Of Department or College

		Courses offered by:				
		Psychology			College of Science	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
Course Level	FTE produced by students who are:					
Lower Division Undergraduate	Majors within the department	11.4	14.1	14.5	202.4	729.1
	Majors outside the department, but within the college	37.7	44.0	43.5	839.9	1,743.9
	Majors outside the college	121.0	120.2	120.6	1,606.2	4,111.2
	Total	170.1	178.4	178.6	2,648.5	6,584.2
Upper Division Undergraduate	FTE produced by students who are:	360.4	357.4	380.6	785.7	5,103.4
	Majors within the department					
	Majors outside the department, but within the college	85.6	115.0	127.7	268.5	2,343.8
	Majors outside the college	112.7	109.8	101.5	246.0	1,303.6
	Total	558.7	582.2	609.7	1,300.2	8,750.8

### Average Class Size and Faculty/Student Ratio

Data on average class size and faculty/student ratio for the 2010-11, 2011-12, and 2012-13 academic years are presented in **Table 4**. A number of trends are evident. First, the average section size of lecture courses has steadily increased over this period and is higher than the average for both the College and for the University as a whole. Second, the percentage of those sections taught by faculty members is below the levels for the College and University. These trends are even more dramatic for lab courses, particularly regarding the percentage of sections taught by faculty. The Department has increasingly been relying on adjuncts and graduate teaching assistants to cover courses. To be credentialed to teach, students must have taken 18 credits of appropriate coursework in the area.

Table 4 Average Course Section Size and Percent of Sections Taught By Faculty

Course Level	Type			Psychology			College Total	University Total
				2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
Undergraduate	Lecture/Seminar	Sections Offered	#	119	119	118	692	5,154
			# Enrolled	9,324	9,781	10,072	47,552	192,004
			Avg Section Enrollment	78.4	82.2	85.4	68.7	37.3
		Sections Faculty-Taught	#	77	69	74	475	3,487
			%	64.7	58.0	62.7	68.6	67.7
	Lab	Sections Offered	#	18	22	22	633	931
			# Enrolled	494	550	586	12,456	18,859
			Avg Section Enrollment	27.4	25.0	26.6	19.7	20.3
		Sections Faculty-Taught	#	3	4	3	345	502
			%	16.7	18.2	13.6	54.5	53.9
	Discussion	Sections Offered	#	6	8	8	125	258
			# Enrolled	204	239	278	3,989	7,208
			Avg Section Enrollment	34.0	29.9	34.8	31.9	27.9
		Sections Faculty-Taught	#	6	8	8	78	211
			%	100.0	100.0	100.0	62.4	81.8
	Other Course Types	Sections Offered	#	106	94	106	322	1,380
			# Enrolled	269	217	273	974	8,897
			Avg Section Enrollment	2.5	2.3	2.6	3.0	6.4
		Sections Faculty-Taught	#	76	92	106	304	1,073
			%	71.7	97.9	100.0	94.4	77.8

## Curriculum

### B.A. in Psychology

The B.A. program in Psychology began in 1964 in the College of Social Science and was transferred to the College of Science in 1968. Students in the program are required to complete at least 40 hours in college-level psychology course work of which at least 37 semester hours must be at the upper-division (3000-4000) level. Up to nine hours of lower-division psychology course work may be applied to the psychology major upon approval of the department.

### Required Courses

Nine courses (25 credits) are required of all majors, one of which (PSY 1012 General Psychology) is at the lower division (see **Table 5**). These courses are designed to provide all students with exposure to the breadth of Experimental Psychology as well as fundamentals of research methodology and statistical analysis.

<b>Table 5 General Psychology Requirements—25 credits</b>		
<i>Nine core courses are required of all majors:</i>		
Psychology of Human Development	DEP 3053*	3
Cognition	EXP 3505*	3
Biological Bases of Behavior 1	PSB 3002*	3
General Psychology	PSY 1012	3
Research Methods in Psychology	PSY 3213*	3
Experimental Design and Statistical Inference	PSY 3234*	3
Social Psychology	SOP 3004*	3
Intermediate Statistics Lab	STA 3163L*	1
Laboratory in Psychology (see below)**		3

**Psychology Laboratory Options:** *This requirement may be met by: a) Existing laboratory courses: DEP 4797C Human Development Lab; EXP 4934C Cognition Laboratory; PSB 3002L Computer Lab in Psychobiology; PSB 4004L Laboratory in Psychobiology; SOP 4230C Laboratory in Social Behavior; OR b) Special Topics laboratory courses – PSY 4930 Research in (Varied Topics); OR c) Upper-division Directed Independent Study laboratory courses (PSY 4906; requires memo from instructor certifying lab experience); OR d) an Honors Thesis (PSY 4970).*

### Elective Courses

A minimum of five additional courses (15 credits) is required as electives. They may be taken from the list of other courses offered within the department (see **Table 6**) and provide the opportunity to acquire greater depth of understanding in particular areas of the field.

<b>Table 6 Psychology Elective Courses</b>		
A minimum of five additional courses are to be selected from the following:		
Comparative Animal Behavior	CBH 4024	3
Abnormal Psychology	CLP 4144	3
Childhood Bilingualism	DEP 3134	3
Personality and Social Development	DEP 4095	3
Infant Development	DEP 4115	3
Language Acquisition	DEP 4130	3
Cognitive Development	DEP 4163	3
Psychology of Adolescence	DEP 4305	3
Human Development Laboratory	DEP 4797C	3
Auditory Perception	EXP 4120	3
Music Perception and Cognition	EXP 4180	3
Human Perception	EXP 4204	3
Psychology of Motivation	EXP 4304	3
Psychology of Learning	EXP 4404	3

Human Memory	EXP 4525	3
Psychology of Reading	EXP 4620	3
Psychology of Language	EXP 4640	3
Cognition Laboratory	EXP 4934C	3
Interpersonal Processes	PCO 4734	3
Personality Theories	PPE 4003	3
Experimental Studies of Personality	PPE 4700	3
Computer Lab in Psychobiology	PSB 3002L	3
Laboratory in Psychobiology	PSB 4004L	3
Biological Bases of Behavior 2	PSB 4006	3
Neuropsychology	PSB 4240	3
Human Psychophysiology	PSB 4323	3
Psychopharmacology	PSB 4444	3
Developmental Psychobiology	PSB 4504	3
Neurobiology of Learning and Memory	PSB 4810	3
Biopsychology of Language	PSB 4833	3
Biological Vision	PSB 5117	3
University Honors Seminar in Psychology	PSY 1930	3
Special Topics	PSY 2930	1-3
Fractals in Psychology	PSY 3502	3
Cooperative Education	PSY 3949	1-3
Personality Test and Measurement	PSY 4302	3
History and Systems of Psychology	PSY 4604	3
Evolutionary Psychology	PSY 4810	3
Advanced Evolutionary Psychology	PSY 4812	3
Directed Independent Study*	PSY 4906	1-3
Special Topics in Psychology	PSY 4930	1-3
Honors Seminar	PSY 4932	3
Honors Thesis**	PSY 4970	1-3
Special Topics in Psychology	PSY 5930	3
Psychology of Women	SOP 3742	3
Social Behavior Laboratory	SOP 4230C	3
Current Issues in Social Psychology	SYP 4002	3
Individuals in Modern Culture	SYP 4010	3
Intra- and Intergroup Processes	SYP 4030	3
Social Cognition	SYP 4120	3

\* Maximum of 3 credits of Directed Independent Study may be counted as a psychology elective for the major.

\*\* Enrollment in Honors Thesis and Seminar is limited to students in the Honors Program.

### Cognate Area Requirements

All students must have six credits of Biological Science (to be chosen from BSC 1010, BSC 1011, BSC 2085, BSC 2086 or equivalents) and six credits of Mathematics at the level of college algebra or higher (in addition to statistics). **Table 7** lists the math courses that meet the mathematics graduation requirement for the B.A. in psychology.

**Table 7 Mathematics Course Options**

College Algebra	MAC 1105	3
Trigonometry	MAC 1114	3
Precalculus Algebra	MAC 1140	3
Precalculus Algebra and Trigonometry	MAC 1147	4 or 5
Methods of Calculus	MAC 2233	3
Calculus for Engineers 1	MAC 2281	4
Calculus for Engineers 2	MAC 2282	4
Calculus with Analytic Geometry 1	MAC 2311	4
Calculus with Analytic Geometry 2	MAC 2312	4
Calculus with Analytic Geometry 3	MAC 2313	4
Fractals in Psychology	PSY 3502	3

### Honors Program

The Honors Program was instituted in 1989. Students may apply to the program after completion of 60 credit hours and prior to the completion of 105 hours. Students must have a grade point average of 3.2 overall and in Psychology for all college-level coursework to be admitted to and be retained in the program. Students in the Honors Program must take Honors Seminar (PSY 4932) and 3 credits of Honors Thesis/Project (PSY 4970).

### Comparison to SUS and Peer Programs

Other universities in the State University System (e.g., University of Florida, Florida International University, Florida State University), several of FAU's peer institutions (e.g., Old Dominion University, Virginia Commonwealth University) and several of the Department's aspirational peers (e.g., University of Missouri, University of California, Santa Barbara and Davis) have similar requirements for their undergraduates programs in Psychology, including courses designed to provide breadth of exposure to the field, courses in research methodology and statistical analysis, elective courses to provide depth of training, and cognate requirements in Biological Science and Mathematics.

### B.S. in Neuroscience and Behavior

The B.S. program in Neuroscience and Behavior dates to the mid-1990s and was originally termed the Program in Psychobiology. It is jointly offered by the Department of Psychology and the Department of Biological Sciences.

### Required Courses

In addition to satisfying all general University and College requirement, majors in this program are required to take all of the courses listed in **Table 8** below.

**Table 8 Required Courses**

Biochemistry 1	BCH 3033	3
Biological Principles	BSC 1010	3
Biological Principles Lab	BSC 1010L	1
Biodiversity	BSC 1011	3
Biodiversity Lab	BSC 1011L	1
Comparative Animal Behavior	CBH 4024	3
General Chemistry 1	CHM 2045	3
General Chemistry 1 Lab	CHM 2045L	1
General Chemistry 2	CHM 2046	3
General Chemistry 2 Lab	CHM 2046L	1
Organic Chemistry 1	CHM 2210	3
Organic Chemistry 2	CHM 2211	3
Organic Chemistry 2 Lab	CHM 2211L	2
Math through Calculus	MAC 2233, 2281, 2282, 2311, 2312 or 2313	3
Genetics	PCB 3063	4
General Physics 1 and 2* <b>or</b> College Physics 1 and 2*	PHY 2048 and PHY 2049 <b>or</b> PHY 2053 and PHY 2054	8
Biological Bases of Behavior 1	PSB 3002	3
General Psychology	PSY 1012	3
Research Methods in Psychology	PSY 3213	3
Experimental Design and Statistical Inference	PSY 3234	3
Intermediate Statistics Lab	STA 3163L	1

### Elective Courses

In addition, students are required to complete a minimum of 12 elective credits from one of three areas of concentration: Ethology/Comparative Psychology, Behavioral Neuroscience, or Cellular Molecular Neuroscience. Courses in each of these areas are listed in **Table 9** below.

**Table 9 Elective Courses**

<b>Ethology/Comparative Psychology</b>		
Psychology of Motivation	EXP 4304	3
Marine Biology	OCB 4043	2
Marine Biology Field Studies and Lab	OCB 4043L	2
Principles of Ecology	PCB 4043	3
Evolution	PCB 4674	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Computer Laboratory in Psychobiology	PSB 3002L	3
Laboratory in Psychobiology	PSB 4004L	3
Developmental Psychobiology	PSB 4504	3
Invertebrate Zoology	ZOO 2203	3
Invertebrate Zoology Lab	ZOO 2203L	2
Functional Biology of Marine Animals	ZOO 4402	3
Functional Biology of Marine Animals Lab	ZOO 4402L	1
Ornithology	ZOO 4472	2
Ornithology Lab	ZOO 4472L	2
Comparative Vertebrate Morphogenesis	ZOO 4690	3
Comparative Vertebrate Morphogenesis Lab	ZOO 4690L	2

<b>Behavioral Neuroscience</b>		
Auditory Perception	EXP 4120	3
Human Perception	EXP 4204	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Computer Laboratory in Psychobiology	PSB 3002L	3
Laboratory in Psychobiology	PSB 4004L	3
Biological Bases of Behavior II	PSB 4006	3
Neuropsychology	PSB 4240	3
Human Psychophysiology	PSB 4323	3
Psychopharmacology	PSB 4444	3
Developmental Psychobiology	PSB 4504	3
Neurobiology of Learning and Memory	PSB 4810	3
Biopsychology of Language	PSB 4833	3
Developmental Neurobiology	PSB 6515	3



<b>Cellular Molecular Neuroscience</b>		
Cellular Neuroscience and Disease* or	PCB 4842	3
Practical Cell Neuroscience*	PCB 4843C	3
Human Morphology and Function 1	PCB 3703	3
Human Morphology and Function 1 Lab	PCB 3703L	1
Human Morphology and Function 2	PCB 3704	3
Human Morphology and Function 2 Lab	PCB 3704L	1
Molecular and Cell Biology	PCB 4023	3
Comparative Animal Physiology	PCB 4723	3
Comparative Animal Physiology Lab	PCB 4723L	1
Neurobiology of Learning and Memory	PSB 4810	3

Due to the problem of faculty attrition, it has become increasingly difficult to offer sufficient courses in each area to meet student needs. Therefore, the Departments recently proposed modifying the requirements to allow students to take elective credits across the areas of concentration. The proposed change has recently been approved by the Faculty Assembly and will be implemented next year.

### **Comparison to SUS and Peer Programs**

In the State University System (SUS), the University Florida offers an interdisciplinary program in Neurobiological Sciences for students interested in Neuroscience. This program has much in common with our program in Neuroscience and Behavior, including basic courses in Biology, Chemistry and Physics, as well as elective courses from three tracks (Cellular & Molecular Neuroscience, Behavioral Neuroscience, and Cognitive Neuroscience). In addition, however, majors in this program are required to complete 7-12 credits of supervised research, culminating in a senior thesis. Neither Florida State University nor Florida International University offers an interdisciplinary program in Neuroscience and Behavior. Among FAU's peer institutions, neither Virginia Commonwealth University nor Old Dominion University offers a comparable program. Three of the Department's aspirational peers (University of Missouri, University of California, Santa Barbara and Davis) have B.S. programs with an emphasis in Neuroscience/Biopsychology and strong science requirements.

### **Description of Internships, Practicum, Study Abroad, Field Experiences**

Students have the opportunity to take Cooperative Education and Study Abroad credits through the Psychology Department. The cooperative education/internship coursework is offered in collaboration with the Career Development Center (CDC). Students have the opportunity to work with employers who list job openings with the CDC or to seek positions independently, subject to approval by the CDC and the Department. The Department's Cooperative Education course offers students the opportunity to gain paid experience in a variety of Psychology- or Neuroscience-related settings. Students may choose to participate in Study Abroad opportunities through university-approved programs.

### **Pedagogy/Pedagogical Innovations**

Faculty in the Department of Psychology have incorporated various pedagogical innovations into their courses to increase student success. For example, in General Psychology, IClickers are used to encourage student involvement in the classroom. Several professors have taught e-learning courses (e.g., Abnormal Psychology) to increase student access. Other innovations employed in the classroom to enhance interest in the material include in-class videos and (student participant) demonstrations, online study guides and quizzes, a YouTube site with faculty-edited copies of psychology based Hollywood films, and online self-experimentation through the APA OPL site (<http://opl.apa.org/>). The use of online experiments allow students to actively participate in research-based courses. In addition, some faculty have participated in Faculty Learning Communities to enhance teaching in both large classes and smaller laboratory-based psychology sections. Others have applied for and received technology fee grants to enhance the quality of instruction. Such funding has been used to upgrade departmental computer labs and to purchase eye tracking equipment, life-logging cameras, and virtual reality software used by undergraduate students taking Directed Independent Study.

### **Contributions to University-Wide Instructional Mission**

The Department contributes to the university's lower division Intellectual Foundations Program through General Psychology (PSY 1012), which may be taken to satisfy the Foundations of Society and Human Behavior general education requirement. To meet student demand, at least four sections of General Psychology are offered on the Boca Raton campus during the fall and spring semesters and two sections are offered in the summer. In addition, the Department collaborates with other University departments to provide educational opportunities for undergraduates. For example, the Department contributes to the University Honors Program by offering at least one section of Honors General Psychology per year. This Honors section also serves as an approved course under the Writing Across the Curriculum program. Similarly, Experimental Design and Statistical Inference (PSY 3234), one of the core requirements for the B.A. and B.S. programs in Psychology, also serves as a "service course" for students majoring in Nursing, Biological Sciences, and Sociology, for whom it is a requirement. In collaboration with the Department of Counselor Education, Psychology has recently gained approval for a certificate program in Applied Mental Health Services. This program is designed to provide students who have an interest in clinical psychology or mental health counseling with a curriculum that will prepare them more fully for their future educational and career experiences. Finally, the B.S. in Neuroscience and Behavior, although administratively housed in the Department of Psychology, is a joint program with the Department of Biological Sciences.

### **Student Profile**

#### **Student Diversity**

Data summarizing the gender and ethnicity of undergraduate students in the B.A. program in Psychology and the B.S. program in Neuroscience and Behavior for 2011-12 and 2012-13 are provided in **Table 10** and **Table 11** below. A graphic summary of the data for the 2012-13 academic year is presented in **Figure 2**. About 3% of the students were Asian, 19% Black, 27% Hispanic, and 47% White. These data are similar to those for the university as a whole. However, about 77% of Psychology majors were female and 23% male, whereas for the university as a whole, the distribution was 57% female and 43% male.

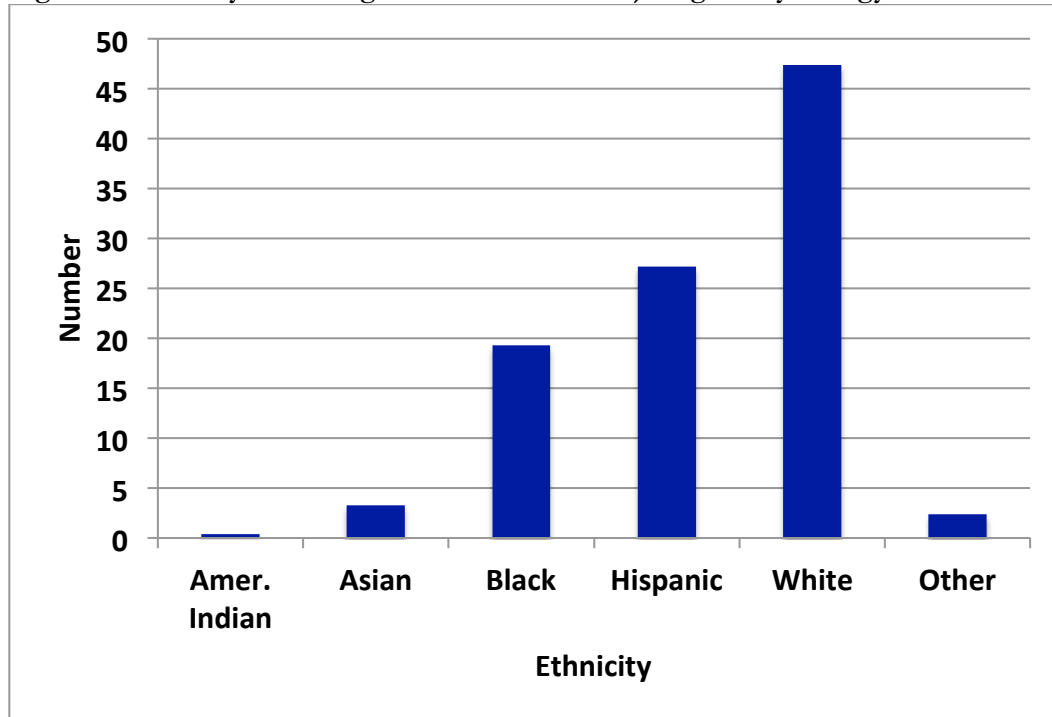
Table 10 Psychology Majors Enrolled (Annual Headcount) By Gender and Ethnicity

			General Psychology		College Total	University Total
			2011-2012	2012-2013	2012-2013	2012-2013
Undergraduate	American Indian/Alaskan Native	Female	5	7	23	96
		Male	0		13	77
		Total	5	7	36	173
	Asian or Pacific Islander	Female	34	35	247	776
		Male	21	15	145	664
		Total	55	50	392	1,440
	Black (Not of Hispanic Origin)	Female	197	228	769	3,535
		Male	75	65	334	2,129
		Total	272	293	1,103	5,664
	Hispanic	Female	326	322	952	3,922
		Male	81	90	435	2,855
		Total	407	412	1,387	6,777
	White (Not of Hispanic Origin)	Female	569	546	1,576	7,431
		Male	185	173	956	6,217
		Total	754	719	2,532	13,648
	Non-Resident Alien	Female	21	24	87	318
		Male	3	3	30	294
		Total	24	27	117	612
	Not Reported	Female	4	8	33	130
		Male	1	1	17	79
		Total	5	9	50	209
	Total	Female	1,156	1,170	3,687	16,208
		Male	366	347	1,930	12,315
		Total	1,522	1,517	5,617	28,523

Table 11 Neuroscience and Behavior Majors Enrolled (Annual Headcount) By Gender and Ethnicity

			Neuroscience & Behavior		College Total	University Total
			2011-2012	2012-2013	2012-2013	2012-2013
Undergraduate	American Indian/Alaskan Native	Female	5	4	23	96
		Male		1	13	77
		Total	5	5	36	173
	Asian or Pacific Islander	Female	9	15	247	776
		Male	4	7	145	664
		Total	13	22	392	1,440
	Black (Not of Hispanic Origin)	Female	27	47	769	3,535
		Male	4	7	334	2,129
		Total	31	54	1,103	5,664
	Hispanic	Female	39	70	952	3,922
		Male	8	15	435	2,855
		Total	47	85	1,387	6,777
	White (Not of Hispanic Origin)	Female	67	95	1,576	7,431
		Male	28	34	956	6,217
		Total	95	129	2,532	13,648
	Non-Resident Alien	Female	4	1	87	318
		Male	2	2	30	294
		Total	6	3	117	612
	Not Reported	Female	0	3	33	130
		Male	1		17	79
		Total	1	3	50	209
	Total	Female	151	235	3,687	16,208
		Male	47	66	1,930	12,315
		Total	198	301	5,617	28,523

Figure 2. Ethnicity of Undergraduate Students Majoring in Psychology in 2012-13



### Scholarly Activity

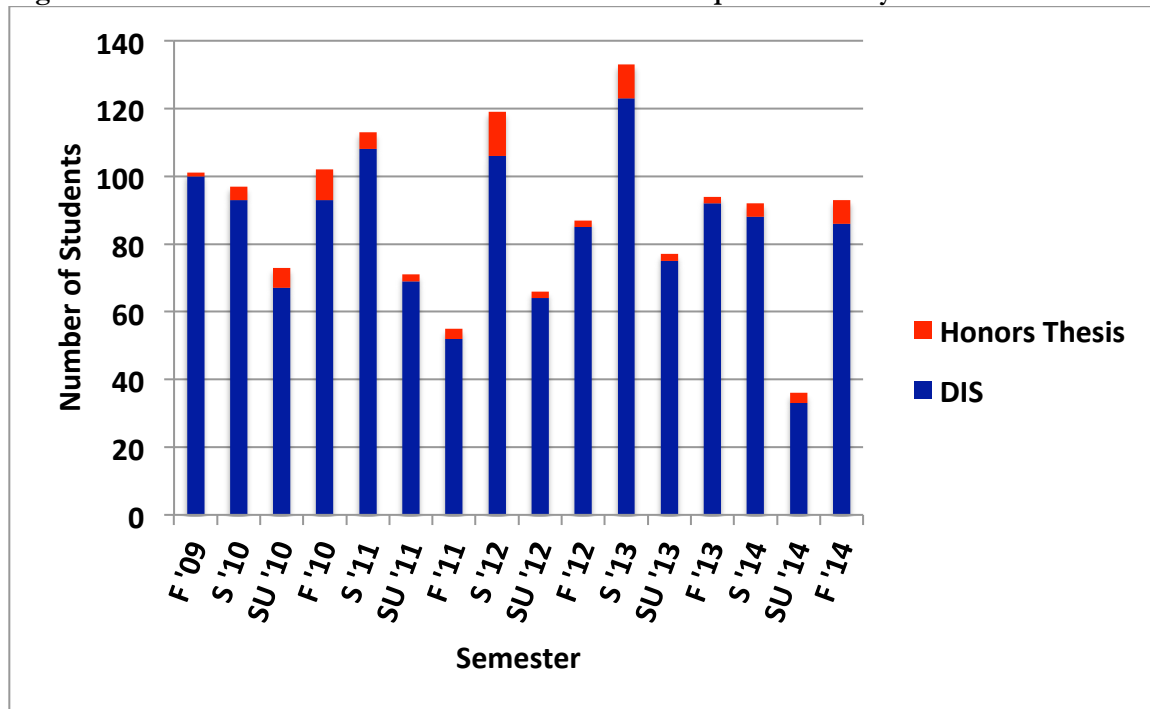
Undergraduate students engage in scholarly activity by participating in Directed Independent Study (DIS) and by conducting research for Honors theses. Examples of student research topics are shown in **Table 12**.

Table 12 DIS Research Topics

DIS Topic	Mentor
Multisensory Perception	Barenholtz
Number Estimation	Bjorklund
Intrasexual Selection	Bjorklund
Bilingual Development	Hoff
Multi-Sensory Integration	Hong
Alcohol Addiction	Hughes
Mother-Infant Bonding	Jones
Pregnancy, Stress and Emotions	Jones
Person Identification	Kersten
Event Memory	Kersten
Perceptual Development in Infancy	Lewkowicz
Social Dynamics	Nowak
Cognition and Aggression	Perry
Situations and Mindfulness	Sherman
Stress, Anxiety and Brain SK Channels	Stackman
Hippocampal Memory	Stackman
Dynamical Social Psychology	Vallacher
Neuroanatomy	Vertes

The number of students enrolled in DIS and Honors Thesis over the past five years is shown in **Figure 3**.

**Figure 3. Number of Students Enrolled in Directed Independent Study and Honors Thesis**



During this period, total headcount enrollment grew from about 1400 to about 1900. Thus, relatively few students participated in research. The lack of growth was undoubtedly due, at least in part, to the loss of six tenure track faculty members during this period.

### Scholarships and Assistantships

The percentage of students receiving need-based federal Pell Grants during the period 2009-2013 is shown in **Table 13** below.

**Table 13 Percentage of Students Receiving Pell Grants**

2009	2010	2011	2012	2013
30.9	39.1	45.7	48.5	48.2

In addition, the Department awards two endowed scholarships each year to deserving undergraduate students, the Susan Dewar Award (\$500.00) and the Lisa Pollack Award (\$1000.00). Both of these have GPA requirements; the Lisa Pollack scholarship is also based on need.

### Advising

During their first two years, all students receive academic advising centrally through University Advising Services. Thereafter, advising is provided by professional staff in the Office of Student Services in the College of Science. Advisement regarding graduate school and post-graduation employment is provided by the Department's Undergraduate Coordinator.

### Placement Rates/Employment Profile

The Department does not have the resources to track placement rates or employment details. The university administers an exit survey to graduating seniors, but the rate of participation is too low for the data to be considered representative. Data for 2012-13 are presented in **Table 14** below.

Table 14 Plans After Graduation

What will be your primary activity after graduation?

	# Responses	%
<b>Employment</b>	42	37.5
<b>Serving in the military</b>	1	0.9
<b>Volunteer work (Peace Corp/Americorp, other volunteer work)</b>	2	1.8
<b>Preparing for certification in my field</b>	2	1.8
<b>Pursuing graduate/professional education</b>	57	50.9
<b>Pursuing a second undergraduate degree</b>	5	4.5
<b>Marriage, starting and raising a family</b>	1	0.9
<b>No Response</b>	2	1.8
<b>All</b>	112	100.0

What are your plans for employment?

	# Responses	%
<b>I am looking for a job</b>	27	24.1
<b>I plan to continue in my current job</b>	12	10.7
<b>I have accepted employment after graduation</b>	3	2.7
<b>No Response</b>	70	62.5
<b>All</b>	112	100.0

If you are currently employed or will soon be, is the job related to your degree field?

	# Responses	%
<b>Yes, directly related</b>	1	0.9
<b>Yes, somewhat related</b>	5	4.5
<b>Not related</b>	9	8.0
<b>No Response</b>	97	86.6
<b>All</b>	112	100.0

What are your plans for graduate or professional school? (either full or part-time attendance)

	# Responses	%
<b>I have been admitted to one or more schools and selected a school to attend</b>	11	9.8
<b>I plan to apply within the next two years</b>	74	66.1
<b>I may attend sometime in the future</b>	22	19.6
<b>I do not intend to pursue graduate or professional education</b>	5	4.5
<b>All</b>	112	100.0

### Retention and Graduation Rates

Selected retention and graduation data for First-Time-In-College (FTIC) students who entered FAU between 2000-2012 are shown in **Table 15**. Using the 2007 cohort as an example, about 20% of the students left the university after two years. This number doubled to about 40% in the sixth year. Only 47% of students in this cohort graduated from FAU or another SUS institution by the sixth year.

Table 15 Data for FTIC Students in the Second, Fourth and Sixth Year

<u>Outcomes through year</u> <b>2</b>		<u>Entering Year</u>												
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Total</b>	#	110	115	102	126	140	159	137	156	200	184	214	279	220
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	-	-	-	-	-	1	-	-	-	1	1	2	-
	%	-	-	-	-	-	0.6	-	-	-	0.5	0.5	0.7	-
<b>Graduate @ other SUS Institution</b>	#	-	-	-	-	-	-	-	-	-	-	-	-	-
	%	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Persist</b>	#	79	77	76	95	103	121	105	122	161	158	171	218	-
	%	71.8	67.0	74.5	75.4	73.6	76.1	76.6	78.2	80.5	85.9	79.9	78.1	-
<b>Transfer to other SUS</b>	#	3	6	2	3	1	5	3	3	7	4	5	9	-
	%	2.7	5.2	2.0	2.4	0.7	3.1	2.2	1.9	3.5	2.2	2.3	3.2	-
<b>Leave</b>	#	28	32	24	28	36	32	29	31	32	21	37	50	-
	%	25.5	27.8	23.5	22.2	25.7	20.1	21.2	19.9	16.0	11.4	17.3	17.9	-

<u>Outcomes through year</u> <b>4</b>		<u>Entering Year</u>												
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Total</b>	#	110	115	102	126	140	159	137	156	200	184	214	279	220
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	13	22	17	20	24	30	29	25	35	42	-	-	-
	%	11.8	19.1	16.7	15.9	17.1	18.9	21.2	16.0	17.5	22.8	-	-	-
<b>Graduate @ other SUS Institution</b>	#	4	6	3	2	3	2	3	2	9	9	-	-	-
	%	3.6	5.2	2.9	1.6	2.1	1.3	2.2	1.3	4.5	4.9	-	-	-
<b>Persist</b>	#	45	31	43	45	51	53	54	70	88	69	-	-	-
	%	40.9	27.0	42.2	35.7	36.4	33.3	39.4	44.9	44.0	37.5	-	-	-
<b>Transfer to other SUS</b>	#	8	4	8	6	8	14	5	9	7	8	-	-	-
	%	7.3	3.5	7.8	4.8	5.7	8.8	3.6	5.8	3.5	4.3	-	-	-
<b>Leave</b>	#	40	52	31	53	54	60	46	50	61	56	-	-	-
	%	36.4	45.2	30.4	42.1	38.6	37.7	33.6	32.1	30.5	30.4	-	-	-

<u>Outcomes through year</u> <b>6</b>		<u>Entering Year</u>												
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Total</b>	#	110	115	102	126	140	159	137	156	200	184	214	279	220
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	40	39	41	47	56	74	63	61	-	-	-	-	-
	%	36.4	33.9	40.2	37.3	40.0	46.5	46.0	39.1	-	-	-	-	-
<b>Graduate @ other SUS Institution</b>	#	11	9	7	6	9	13	6	12	-	-	-	-	-
	%	10.0	7.8	6.9	4.8	6.4	8.2	4.4	7.7	-	-	-	-	-
<b>Persist</b>	#	13	10	10	13	12	9	18	16	-	-	-	-	-
	%	11.8	8.7	9.8	10.3	8.6	5.7	13.1	10.3	-	-	-	-	-
<b>Transfer to other SUS</b>	#	-	4	4	2	3	4	1	5	-	-	-	-	-
	%	-	3.5	3.9	1.6	2.1	2.5	0.7	3.2	-	-	-	-	-
<b>Leave</b>	#	46	53	40	58	60	59	49	62	-	-	-	-	-
	%	41.8	46.1	39.2	46.0	42.9	37.1	35.8	39.7	-	-	-	-	-



Selected retention and graduation data for transfer students during this period are shown in **Table 16**. Again using the 2007 cohort as an example, 16% of the students left the university after two years. This number increased to about 27% in the sixth year. Seventy-one percent of students in this cohort graduated from FAU or another SUS institution by the sixth year. Thus, the six-year graduation rate for transfer students is much higher than for FTIC students.

**Table 16 Data for Transfer Students in the Second, Fourth and Sixth Year**

<b>Outcomes through year 2</b>		<b>Entering Year</b>												
		<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Total</b>	#	118	96	151	167	172	194	179	131	176	205	250	263	286
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	25	26	35	51	39	58	48	34	37	42	53	52	-
	%	21.2	27.1	23.2	30.5	22.7	29.9	26.8	26.0	21.0	20.5	21.2	19.8	-
<b>Graduate @ other SUS Institution</b>	#	-	-	-	1	-	2	1	-	1	1	2	-	-
	%	-	-	-	0.6	-	1.0	0.6	-	0.6	0.5	0.8	-	-
<b>Persist</b>	#	68	60	86	91	100	106	106	75	110	126	160	173	-
	%	57.6	62.5	57.0	54.5	58.1	54.6	59.2	57.3	62.5	61.5	64.0	65.8	-
<b>Transfer to other SUS</b>	#	1	1	2	3	8	3	3	1	4	6	4	8	-
	%	0.8	1.0	1.3	1.8	4.7	1.5	1.7	0.8	2.3	2.9	1.6	3.0	-
<b>Leave</b>	#	24	9	28	21	25	25	21	21	24	30	31	30	-
	%	20.3	9.4	18.5	12.6	14.5	12.9	11.7	16.0	13.6	14.6	12.4	11.4	-

<b>Outcomes through year 4</b>		<b>Entering Year</b>												
		<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Total</b>	#	118	96	151	167	172	194	179	131	176	205	250	263	286
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	66	66	88	108	99	128	114	76	99	125	-	-	-
	%	55.9	68.8	58.3	64.7	57.6	66.0	63.7	58.0	56.3	61.0	-	-	-
<b>Graduate @ other SUS Institution</b>	#	1	-	1	4	5	5	3	4	5	5	-	-	-
	%	0.8	-	0.7	2.4	2.9	2.6	1.7	3.1	2.8	2.4	-	-	-
<b>Persist</b>	#	17	12	17	22	22	23	26	16	22	13	-	-	-
	%	14.4	12.5	11.3	13.2	12.8	11.9	14.5	12.2	12.5	6.3	-	-	-
<b>Transfer to other SUS</b>	#	1	2	2	1	1	-	1	2	2	3	-	-	-
	%	0.8	2.1	1.3	0.6	0.6	-	0.6	1.5	1.1	1.5	-	-	-
<b>Leave</b>	#	33	16	43	32	45	38	35	33	48	59	-	-	-
	%	28.0	16.7	28.5	19.2	26.2	19.6	19.6	25.2	27.3	28.8	-	-	-

<b>Outcomes through year 6</b>		<b>Entering Year</b>												
		<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Total</b>	#	118	96	151	167	172	194	179	131	176	205	250	263	286
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Graduate @ FAU</b>	#	73	70	100	119	110	140	127	88	-	-	-	-	-
	%	61.9	72.9	66.2	71.3	64.0	72.2	70.9	67.2	-	-	-	-	-
<b>Graduate @ other SUS Institution</b>	#	2	-	1	5	5	5	5	5	-	-	-	-	-
	%	1.7	-	0.7	3.0	2.9	2.6	2.8	3.8	-	-	-	-	-
<b>Persist</b>	#	3	5	4	6	8	8	6	1	-	-	-	-	-
	%	2.5	5.2	2.6	3.6	4.7	4.1	3.4	0.8	-	-	-	-	-
<b>Transfer to other SUS</b>	#	1	1	1	-	1	1	-	2	-	-	-	-	-
	%	0.8	1.0	0.7	-	0.6	0.5	-	1.5	-	-	-	-	-
<b>Leave</b>	#	39	20	45	37	48	40	41	35	-	-	-	-	-
	%	33.1	20.8	29.8	22.2	27.9	20.6	22.9	26.7	-	-	-	-	-

The number of baccalaureate degrees awarded between 2002-2014 is shown in **Table 17** below. The total number of degrees awarded during this period grew by 278%.

**Table 17 B.A. and B.S. Degrees Awarded**

	Year Degree Granted													All
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
<b>Degree Awarded</b>														
<b>BA</b>	125.5	172.5	200.0	223.0	217.5	220.0	223.5	232.5	220.5	243.0	298.5	288.0	306.5	2,971.0
<b>BS</b>	10.0	2.5	15.0	15.0	22.0	25.5	20.5	20.0	18.5	24.5	34.5	41.0	70.0	319.0
<b>All</b>	135.5	175.0	215.0	238.0	239.5	245.5	244.0	252.5	239.0	267.5	333.0	329.0	376.5	3,290.0

### Student Recruitment

The Department has a number of tools to reach out to prospective majors. These include a departmental web site (<http://www.psy.fau.edu>), a Psychology Club, a chapter of Psi Chi, the Psychology Honor Society, presentations by faculty members at local high schools, and providing opportunities for high school students to participate in research projects. Recently the Department participated in the Expo hosted by FAU to attract high school students by showcasing research on visual illusions.

## C2. Graduate Programs

### Departmental Dashboard Indicators

#### Ph.D. in Psychology

**Outcome 1.** *Graduates will understand and critically evaluate the scientific literature in the core areas of Experimental Psychology.* The first draft of the Doctoral dissertation is evaluated independently by each member of the dissertation committee using a 3-point scale (1=below expectations, 2= meets expectations, 3= exceeds expectations) to assess (a) the student's ability to summarize and evaluate past literature on the topic; (b) the student's ability to interpret the literature in terms of central conceptual themes in the area; and (c) whether the student's research questions have the potential to make a significant contribution to the field. The criterion for success is that at least 70% of students achieve a mean rating of 2 (meets expectations) or higher. For 2013-14, all six Ph.D. students achieved this goal.

**Outcome 2.** *Graduates will demonstrate competence in applying the scientific method.* The Doctoral dissertation proposal is evaluated independently by each member of the dissertation committee using a 3-point scale (1=below expectations, 2= meets expectations, 3= exceeds expectations) to assess (a) the degree to which key research questions have been successfully operationalized in the proposed study; (b) the appropriateness of the proposed methodology and the quality of the data to be collected for the type of research the student intends to conduct; and (c) the appropriateness and quality of the proposed statistical analyses. The criterion for success is that at least 70% of students will achieve a mean rating of 2 (meets expectations) or higher. For 2013-14, all students achieved this goal.

**Outcome 3.** *Graduates will be qualified for professional employment in academia, government, or the private sector.* The criterion for success is that 70% of students who apply for professional positions will be hired. At this time, data is available on two of six students who completed their doctoral degree this academic year. One accepted a postdoctoral position and the other accepted a professional position.

### M.A. in Psychology

**Outcome 1.** *Graduates will understand and critically evaluate the scientific literature in the core areas of Experimental Psychology.* The first draft of the Masters thesis is evaluated independently by each member of the thesis committee using a 3-point scale (1=below expectations, 2= meets expectations, 3= exceeds expectations), to assess (a) the student's ability to summarize and evaluate past literature on the topic; (b) the student's ability to interpret the literature in terms of central conceptual themes in the area; and (c) whether the student's research questions have the potential to make a significant contribution to the field. The criterion for success is that at least 70% of students achieve a mean rating of 2 (meets expectations) or higher. For 2013-14, all eight of the M.A. students achieved this goal.

**Outcome 2.** *Graduates will demonstrate competence in applying the scientific method.* The Masters thesis proposal is evaluated independently by each member of the thesis committee using a 3-point scale (1=below expectations, 2= meets expectations, 3= exceeds expectations), to assess (a) the degree to which key research questions have been successfully operationalized in the proposed study; (b) the appropriateness of the proposed methodology and the quality of the data to be collected for the type of research the student intends to conduct; and (c) the appropriateness and quality of the proposed statistical analysis. The criterion for success is that at least 70% of students will achieve a mean rating of 2 (meets expectations) or higher. For 2013-14, all students achieved this goal.

**Outcome 3.** *Graduates will be qualified for admission to doctoral programs or for professional employment in academia, government, or the private sector.* The criterion for success is that at least 50% of M.A. students who apply to doctoral programs or for professional positions will be accepted. For 2013-14, data are available for eight of sixteen students who completed their M.A. degrees. All eight were accepted to doctoral programs.

### Use of Assessment Data for Program Improvement

There has been little discussion of the use of the assessment data for program improvement at the graduate level. There are several reasons for this. First, the Department has been collecting assessment data for a relatively short period. Second, the number of students submitting thesis and dissertation proposals each year is relatively modest. Third, virtually all of our Masters and Doctoral students have met the learning outcomes. As a result, the consensus is that there is insufficient data to warrant significant changes in the graduate program at this time.

### Doctor of Philosophy in Experimental Psychology

The Ph.D. program in Experimental Psychology is the oldest doctoral program (outside of the Colleges of Business and Engineering) at Florida Atlantic University, receiving approval in 1985.

### Limited Access

The program is limited access. We have neither the faculty to supervise all applicants nor the funds to support them. A summary of the number of students who have applied to the program, been admitted and attended over the past five years is shown in **Table 18**.

**Table 18 Student Access Data**

<u>Year</u>	<u>Applied</u>	<u>Admitted</u>	<u>Attended</u>
2010-11	85	17	13
2011-12	50	17	12
2012-13	64	14	7
2013-14	55	11	7
2014-15	40	15	9

### Admission Criteria

Admission requirements for the Ph.D. program are as follows: (a) Minimum 153 Verbal Reasoning GRE; (b) Minimum 152 Quantitative Reasoning GRE; and (c) Minimum 3.0 GPA in the last 60 credits of undergraduate work. These requirements may be waived for students who have successfully completed a Psychology MA degree elsewhere or who are currently enrolled in the FAU Psychology MA degree program.

The FAU program has a similar admission requirement to other regional SUS schools, but less rigorous criteria compared to aspirational schools. *Florida International University*: 303 combined Verbal and Quantitative Reasoning GRE and 3.0 GPA in last two years of undergraduate coursework. *University of Central Florida*: 1100 combined Verbal and Quantitative Reasoning (approximately 300-305 using the new GRE) and 3.2 GPA in last two years of undergraduate coursework. *University of California, Santa Barbara*: 80<sup>th</sup> percentile on Verbal and Quantitative Reasoning GRE scales (approximately 158 and 160, respectively) and 3.5 GPA in the last two years of undergraduate coursework. *University of Missouri*: No minimum published criteria for GRE, but a 3.0 GPA is required.

### Enrollment Information

Data on annual headcount enrollment and FTE for 2011-12 and 2012-13 are presented in **Table 19** and **Table 20**. For 2012-13, the most recent year for which data are available, headcount enrollment in Psychology accounted for about 19% of the College total and about 6% of the University total. Most students in the doctoral program are supported by teaching assistantships; only a handful are supported by grant-funded research assistantships. Consequently, the number of students in the program is largely determined by the number of teaching assistantships allocated to the Department. There has been little change in this number during the past five years.

**Table 19 Majors Enrolled (Annual Headcount)**

	<b>Experimental Psychology</b>		<b>College Total</b>	<b>University Total</b>
	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Doctoral</b>	53	54	279	927

**Table 20 Annualized State-Fundable FTE Produced By Level**

	<b>Psychology</b>			<b>College Total</b>	<b>University Total</b>
	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Graduate Total</b>	51.2	48.6	46.3	228.2	2,223.7
<b>Grad I</b>	22.5	20.2	19.7	98.5	1,838.4
<b>Grad II</b>	28.7	28.4	26.6	129.7	385.2
<b>Classroom</b>	40.7	36.6	37.3	183.2	2,085.9
<b>Thesis-Dissertation</b>	10.6	12.0	9.0	45.1	137.7
<b>Grand Total</b>	780.0	809.2	834.7	4,176.9	17,558.6

As shown in **Table 21**, the vast majority of graduate FTE is generated by students in the program. Relatively little is generated by students outside the Department or outside the College of Science.

**Table 21 Annualized State-Fundable FTE Produced In/Out Of Department or College**

		<b>Courses offered by:</b>				
		<b>Psychology</b>			<b>College of Science</b>	<b>University Total</b>
		<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2012-2013</b>	<b>2012-2013</b>
<b>Course Level</b>	<b>FTE produced by students who are:</b>					
<b>Graduate</b>	<b>FTE produced by students who are:</b>					
	<b>Majors within the department</b>	45.4	42.0	38.0	188.3	1,730.7
	<b>Majors outside the department, but within the college</b>	1.9	2.5	3.5	17.0	348.5
	<b>Majors outside the college</b>	3.9	4.1	4.9	22.9	144.4
	<b>Total</b>	<b>51.2</b>	<b>48.6</b>	<b>46.3</b>	<b>228.2</b>	<b>2,223.7</b>

### Average Class Size and Faculty/Student Ratio

Data on average class size and faculty/student ratio for the 2010-11, 2011-12, and 2012-13 academic years are presented in **Table 22**.

**Table 22 Average Course Section Size and Percent of Sections Taught By Faculty**

				Psychology			College Total	University Total
				2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
Course Level	Type							
Graduate	Lecture/Seminar	Sections Offered	#	20	22	19	167	1,575
			# Enrolled	287	290	263	1,386	22,406
			Avg Section Enrollment	14.4	13.2	13.8	8.3	14.2
		Sections Faculty-Taught	#	20	21	19	158	1,318
			%	100.0	95.5	100.0	94.6	83.7
	Lab	Sections Offered	#			1	1	42
			# Enrolled			20	20	465
			Avg Section Enrollment			20.0	20.0	11.1
		Sections Faculty-Taught	#			1	1	26
			%			100.0	100.0	61.9
	Other Course Types	Sections Offered	#	147	145	158	756	1,951
			# Enrolled	241	217	233	1,080	4,840
			Avg Section Enrollment	1.6	1.5	1.5	1.4	2.5
		Sections Faculty-Taught	#	119	139	153	703	1,831
			%	81.0	95.9	96.8	93.0	93.8

All classes, with the exception of Experimental Design I and II, are capped at 25 students. Few courses reach the enrollment ceiling. All courses are open to Psychology M.A. and Ph.D. students. With the exception of one statistics course and two neuroscience courses, none carry prerequisites that would limit enrollment. During the past five years, Cognition courses averaged 10.3 students (range = 6-16), Developmental courses averaged 14.6 students (range = 5-24), Neuroscience courses averaged 13.2 students (range = 3-26), Social courses averaged 13.4 students (range = 4-19), and Quantitative courses averaged 20.8 students (range = 3-41).

### Curriculum

The program is designed to be completed in five years, commensurate with the support provided. Students in the Ph.D. program are required to complete a Masters along the way. The requirements for this degree are the same as those for the terminal M.A. degree (see below). A total of 90 credits is required to complete the Ph.D. program, including the credits used to satisfy the M.A. degree requirements.

All doctoral students are required to take three quantitative courses, with the option of a 1-credit experimental design lab course. A two-course experimental design sequence is offered that covers basic statistical design. The Department has struggled during the past five years to provide an adequate number and variety of advanced quantitative courses, offering only three during this period (linear modeling; multivariate statistics, and structural equation modeling). As a consequence, doctoral students are forced to fill the advanced quantitative requirement with courses from the Colleges

of Education, Business, and, within the College of Science, with courses offered by the Department of Mathematics and the Center for Complex Systems and Brain Science. There has been considerable instability in this area of instruction: Most of the courses have been taught by a visiting faculty member, a faculty member who did not receive tenure, and a faculty member who was in phased retirement. Students and faculty alike identify the current state of quantitative training as a main source of dissatisfaction with the curriculum. An overhaul of the statistics program is required.

Students select a major area of study from one of four areas of psychology: Behavioral Neuroscience, Cognition, Developmental, and Social/Personality. Doctoral students must take five courses (15 credits) in their major area. An additional six courses are required. Of this total, students must take at least one regularly offered seminar in each of the remaining three areas of study. Courses in each of the areas are presented in **Table 23**. Due to faculty attrition only a subset of these courses has been offered in the past decade. The range and variety of seminars offered during the past five years varies according to program. In Cognition, three faculty offered 11 seminars on nine different topics. In Developmental, six faculty offered 22 seminars on 11 different topics. In Neuroscience, five faculty offered 23 seminars on 10 different topics. In Social, four faculty offered 14 seminars on 10 different topics. These totals include faculty members who are no longer members of the department: (a) two departing faculty members taught seven Developmental courses on four different topics; (b) one departing faculty member taught two Social courses on two different topics.

**Table 23 Courses in Each Area of Concentration**

<b>Behavioral Neuroscience</b>	
Special Topics in Behavioral Neuroscience	PSB 6930
Principles of Neuroscience	PSB 6037
Seminar in Behavioral Neuroscience	PSB 6058
Methods of Psychobiology	PSB 6118
Neuroscience 1 and 2	PSB 6345, PSB 6346
Seminar in Developmental Psychobiology	PSB 6509
Developmental Neuropsychology	PSB 6516
Seminar in Biopsychology of Language	PSB 6809
<b>Cognition</b>	
Seminar in Cognitive Development	DEP 6067
Seminar in Individual Differences in Children's Thinking	DEP 6932
Seminar in Human Perception	EXP 6208
Seminar in Cognition	EXP 6609
Special Topics in Cognition	EXP 6930
Cognitive Neuroscience	ISC 5465
Biological Vision	PSB 5117
Seminar in Biopsychology of Language	PSB 6809
Special Topics (Cognition)	PSY 5930



<b>Developmental</b>	
Seminar in Cognitive Development	DEP 6067
Seminar in Personality and Social Development	DEP 6098
Parent-Child Relationships	DEP 6609
Evolutionary Developmental Psychology	DEP 6610
Seminar in Development of Social Cognition	DEP 6931
Seminar in Individual Differences in Children's Thinking	DEP 6932
Special Topics in Developmental Psychology	DEP 6930
Seminar in Developmental Psychobiology	PSB 6509
Developmental Neurobiology	PSB 6515
Developmental Neuropsychology	PSB 6516

<b>Social/Personality</b>	
Seminar in Evolutionary Psychology	CBH 6303
Seminar in Personality and Social Development	DEP 6098
Seminar in Self-Concept and Behavior	PPE 6209
Seminar in Experimental Studies of Personality	PPE 6709
Special Topics in Personality/Social Psychology	PPE 6930
Evolution of Human Sexuality	PSY 6840
Advanced Social Behavior	SOP 6079
Seminar in Social Cognition and Behavior	SOP 6440

The Department also offers one elective course in the area of professional development, taught every third year. The Department has a Teaching of Psychology course on the books as well, but it has not been offered recently due to other instructional priorities. Students often express concern with the lack of opportunities for instruction in this area.

A minimum of nine dissertation credits is required for graduation. The remainder of the credit requirements may be filled with electives, advanced research, and directed independent study coursework.

Students are required to maintain a GPA of 3.0. Courses with grades of C+ or lower will not satisfy program requirements.

Admission to doctoral status requires successful completion of Ph.D. coursework, successful completion and approval of a written M.A. thesis, the formation of a doctoral dissertation supervisory committee and approval of a written dissertation proposal by the doctoral dissertation committee. In addition, comprehensive exams must be completed before a doctoral student is admitted to candidacy. Comprehensive exams are designed to demonstrate a breadth of knowledge in the student's area.

### **Comparison to SUS and Peer Programs**

In the SUS, Florida International University offers five Ph.D. degrees: (1) Clinical Science; (2) Developmental Science; (3) Cognitive Neuroscience; (4) Industrial-Organizational; and (5) Legal. Each requires 75 credits of graduate courses, including the dissertation. Doctoral students do not receive M.A. degrees but do complete a Master's project. All programs require nine credits of statistics, 15 - 18 credits of content, and 6 - 12 credits of electives. A comprehensive exam is required. The University of Central Florida offers three Ph.D. degrees with differing requirements: Industrial/Organizational; (2) Applied Experimental and Human Factors; and (3) Clinical Science. UCF requires 72 credits of graduate courses for an Industrial-Organizational Ph.D. including a dissertation. The Industrial Organization program requires 33 credits of I/O courses, six credits of field courses, six credits of research courses,



and 12 credits of electives. Written comprehensive exams are required. The M.S. degree is optional and does not require a thesis. UCF requires 84 credits of graduate courses for an Applied Experimental and Human Factors Ph.D., including a dissertation. The M.A. degree is optional and does not require a thesis. Applied Experimental and Human Factors program requires 42 credits of required courses and 18 credits of elective courses. Comprehensive exams are required. UCF requires 84 credits of graduate courses for a Clinical Science Ph.D., including an M.A. thesis and dissertation.

Among aspirational peers, the University of California, Santa Barbara offers four Ph.D. degrees: (1) Cognition, Perception, and Cognitive Neuroscience; (2) Developmental and Evolutionary; (3) Neuroscience and Behavior; and (4) Social. No M.A. thesis is offered but a 2<sup>nd</sup> year paper is required. The program requires 18 credits of required courses, six credits of required statistics courses, and at least 12 credits of electives. In addition, students must enroll in one area seminar per quarter. Together, students must enroll in 12 credits per quarter per year. Written and oral comprehensive examinations are required. The University of Missouri offers five Ph.D. degrees: (1) Clinical; (2) Cognition and Neuroscience; (3) Developmental; (4) Quantitative; and (5) Social/Personality. Each requires 83 hours of graduate courses, including an M.A. thesis and a dissertation. The program requires 12 credits of distribution courses from four different content areas, nine credits of statistics, one credit of ethics and professional development, and 24 credits in area of concentration. Comprehensive examinations are required.

### **Scope of Institutional Contribution**

Experimental Design I and II are service courses taken by students in a variety of disciplines. Neuroscience courses may attract a significant number of students from the Department of Biological Sciences and the Center for Complex Systems and Brain Science. Some Cognition courses may enroll students from the Center as well. Developmental courses attract students from Nursing, Social work, and Education. Based on the data in **Table 21** above, about 8% of Psychology FTE is generated outside the Department and about 11% is generated outside the College of Science.

The Department of Psychology participates in the Graduate Certificate Program in Neuroscience. Required and elective courses for the certificate are offered through the Department.

### **Student Profile**

Admission to the Ph.D. program is competitive. For the 2014-15 incoming class, Verbal Reasoning GRE scores ranged from 140 to 167 ( $M = 153.8$ , 62<sup>nd</sup> percentile) and Quantitative Reasoning GRE scores ranged from 146 to 156 ( $M = 153.1$ , 57<sup>th</sup> percentile).

Students are drawn to the program from all over the world. The proportion of students who come from outside Florida has remained steady for the past five years at about 50%. There is no question, however, that the number of applications has declined. Several factors undoubtedly contribute to this decline, including (a) the increasingly uncompetitive value of the stipends that FAU offers to graduate students; (b) the decreasing number of Psychology faculty available to supervise graduate students; and (c) the discontinuation of the graduate program in Evolutionary Psychology, which attracted a large number of highly qualified applicants.

Data summarizing the gender and ethnicity of graduate students during 2011-12 and 2012-13 are provided in **Table 24** below.

**Table 24 Majors Enrolled (Annual Headcount) By Gender and Ethnicity**

			General Psychology		College Total	University Total
			2011-2012	2012-2013	2012-2013	2012-2013
Graduate	American Indian/Alaskan Native	Female			2	11
		Male				8
		Total			2	19
	Asian or Pacific Islander	Female			14	155
		Male	2	2	13	119
		Total	2	2	27	274
	Black (Not of Hispanic Origin)	Female	1	2	10	624
		Male			20	265
		Total	1	2	30	889
	Hispanic	Female	2	4	27	495
		Male	2	1	25	318
		Total	4	5	52	813
	White (Not of Hispanic Origin)	Female	19	18	158	1,926
		Male	11	9	143	1,233
		Total	30	27	301	3,159
	Non-Resident Alien	Female	1	1	38	177
		Male	3	2	53	200
		Total	4	3	91	377
	Not Reported	Female			4	41
		Male				30
		Total			4	71
	Total	Female	23	25	253	3,429
		Male	18	14	254	2,173
		Total	41	39	507	5,602

### Student Support

Students who enter the Ph.D. program with only a B.A. or B.S. degree are guaranteed a stipend and a full tuition waiver (not including student fees) for five years. Students who enter the Ph.D. program with an M.A. degree are guaranteed three years of support with the opportunity to secure a fourth year contingent upon successful demonstration to the Graduate Committee of adequate progress toward the degree. Students who exhaust support may petition the Graduate Committee for an additional year of support. When granted, this support is tied to strict achievement goals linked to progress toward completion of the dissertation. FAU does not admit doctoral students without funding, a policy similar to other regional SUS programs (Florida International University = 97 funded doctoral students; University of Central Florida = 40 funded doctoral students) and to our aspirational peers (University of California Santa Barbara = 65 funded doctoral students; University of Missouri = 89 funded doctoral students).

Most Ph.D. students are funded as teaching assistants. Fewer than 10% receive research assistantships. The stipend of \$20,050 has not changed in many years. The sum compares favorably to stipends offered by other regional SUS programs (Florida International University = \$19,194; University of Central Florida = \$15,000) and our aspirational peers (University of California Santa Barbara = \$18,000; University of Missouri = \$16,585) until one factors in the cost of benefits. FAU does not provide health insurance; graduate students must fund health insurance premiums out of pocket. This is not the case for other SUS programs or for our aspirational peers.

There has been little change in the number of graduate teaching assistantships provided by the college during the past five years. Most of the variability in the number of funded graduate students comes from a decline in research assistantships. The Department does not currently have sufficient graduate teaching assistants to cover the large number of courses needed to keep pace with undergraduate enrollment growth. Increasing the funding to the levels of our regional SUS peers is an urgent priority. The University of Central Florida, with a far smaller program in terms of areas represented, currently has 40 funded Ph.D. slots. Florida International University, with a comparable number of areas represented, currently has 97 funded Ph.D. slots. In addition, the absence of health insurance is a significant recruiting liability. Both of our rival peer SUS programs as well as both of our aspirational peer programs offer health insurance. In the interim, a specific supplemental stipend should be offered to pay for health insurance premiums.

### Advising Procedures

Entering doctoral students attend an Orientation Meeting led by the Graduate Coordinator at the beginning of their first semester and receive a general orientation to the program and staff. Subsequent advising is typically provided by the student's mentor and on occasion by the Graduate Coordinator.

### Placement Rates/Employment Profile

The Department does not have historical records of placement rates. However, the following is a partial listing of doctoral students who graduated in the past five years and their current positions.

**Patrick Cooper** (2014). *Gender self-discrepancies in middle-childhood: Influences on children's personal and social adjustment*.

Currently an Assistant Professor of Psychology, Lynn University, Boca Raton Florida.

Advisor: David G. Perry

**Marisol Parra** (2013). *False recognition driven by meaning and form: The dynamics of bilingual memory representation*.

Currently a Lecturer at the Department of Psychology, University of Central Florida, Cocoa, Florida.

Advisors: Erika Hoff and Alan Kersten

**Dawn DeLay** (2013). *Friend influence on achievement during middle childhood*.

Currently a post-doctoral scientist at the T. Denny Sanford School of Social and Family Dynamics, Arizona State University, Tempe, Arizona.

Advisor: Brett Laursen

**Jay Michaels** (2012). *Attitude and valence dynamics in response to changes in perceived similarity vs. difference: Implications for human conflict.*

Currently an Assistant Professor, Department of Psychology, Presbyterian College, Clinton, South Carolina.

Advisor: Robin Vallacher

**Roger McIntosh** (2012). *Neuropsychological correlates of emotion regulation in HIV.*

Currently a postdoctoral scientist, Department of Psychology, University of Miami, Florida.

Advisor: Monica Rosselli

**Amy Gardiner** (2011). *Preschoolers' use of intentionality in understanding causal structure of objects during imitative learning.*

Currently an Assistant Professor, Department of Psychology, Skidmore College, Saratoga Springs, New York.

Advisor: David F. Bjorklund

**Farnaz Kaighobadi** (2011). *Evolutionary psychological perspectives on individual differences in men's partner-directed violence in the context of perceived partner infidelity.*

Currently a postdoctoral scientist, HIV Center for Clinical and Behavioral Studies, Columbia University, New York.

Advisor: David F. Bjorklund

**Donna R. Marion** (2011). *Patterns of friend influence on school engagement and the moderating effects of maternal affection.*

Currently a Lecturer at the Department of Psychology, Florida Atlantic University, Davie, Florida.

Advisors: Brett Laursen and Robin Vallacher

**Lori Daniels** (2010). *The effect of spatial attention on pupil dynamics.*

Currently a faculty member at the Miami International University of Art and Design, Florida.

Advisor: Howard Hock

**Christopher A. Hafen** (2010). *Who dislikes whom: The characteristics of aversion in adolescence.*

Currently a research scientist, Center for Advanced Study of Teaching and Learning, University of Virginia, Charlottesville.

Advisor: Brett Laursen

**William F. McKibbin** (2010). *Women's rape avoidance: An evolutionary psychological perspective.*

Currently an Assistant Professor, Department of Psychology, University of Michigan, Flint.

Advisor: Todd Shackelford

**Gwen R. Pursell** (2009). *Adolescent conflict with parents and friends: The role of negative affect and resolution strategy in predicting relationship impact.*

Currently an Assistant Professor, Department of Psychology, Saint Mary's College, Notre Dame, Indiana.

Advisor: Brett Laursen

## Graduation Rates

The number of graduate students earning doctorate degrees since 2001 is shown in **Table 25**.

**Table 25 Doctoral Degrees Awarded**

	Year Degree Granted													All
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
<b>Degree Level</b>														
<b>Doctorate</b>	3.0	5.0	1.0	6.0	3.0	7.0	8.0	1.0	4.0	6.0	8.0	5.0	7.0	64.0

## Student Recruitment

Students admitted to the Ph.D. program are assigned an advisor by the Graduate Committee. Advisors identify students for admission and communicate with prospective students prior to notifying the Graduate Committee of their interest in accepting one. Considerable time and effort is devoted to matching students with advisors. As a consequence, few doctoral students change advisors. Those who do, typically change after completing the M.A. degree.

The Department does not have a budget for student recruitment. The Graduate College hosts a competition for recruitment funds to which the Graduate Coordinator applies. Every year the Department of Psychology has been awarded \$2000 for recruitment purposes (except the 2011-12 academic year, when the Graduate Coordinator was on leave and \$1000 was awarded). These funds are used to bring prospective students to campus to meet with advisors and other faculty, members of the advisor's laboratory and other students, and to tour the campus. In most years, 4-6 students come to FAU on recruiting visits. The funds are used to support air travel and meals. Advisors typically arrange lodging with other students in the program. The Graduate Committee prioritizes the allocation of recruitment travel funds. Priority is given to students who are also being recruited to receive a supplemental fellowship (see below).

Every year the Graduate College also hosts a competition for recruitment fellowships to which the Graduate Coordinator applies. Two types of fellowships are available: Presidential (\$5000 stipend per year for the first two years of enrollment) and Provost (\$2500 stipend for the first year of enrollment). These funds are limited to students who would not otherwise come to FAU and so are not awarded to students who currently reside in South Florida or are enrolled in the Department of Psychology M.A. program. During the 2009-10 to 2011-12 academic years, we received one Presidential and one Provost Fellowship. During the 2012-13 to 2014-15 academic years, we received two Presidential and one Provost Fellowship.

## Master of Arts in Psychology

### Limited Access

The program is limited access due to limited faculty and funding.

### Admission Criteria

1. A baccalaureate degree from an accredited college or university. It is not essential for this to be a degree in psychology.
2. A score of at least 150 on the verbal component and 150 on the quantitative component of the Graduate Record Examination.
3. A minimum 3.0 GPA in the last 60 credits of undergraduate work.
4. Approval for graduate admission from the Department of Psychology.

### Enrollment Information

Annual headcount enrollment for 2011-12 and 2012-13 are presented in **Table 26**. Data for annualized state-funded FTE are included in **Table C1** and **Table C2** under the Ph.D. program.

**Table 26 Majors Enrolled (Annual Headcount)**

	General Psychology		College Total	University Total
	2011-2012	2012-2013	2012-2013	2012-2013
<b>Masters</b>	41	39	228	4,675

### Average Class Size

This information is included with the data presented for the Ph.D. program.

### Curriculum

A minimum of 30 credits of coursework and six M.A. thesis credits are required to complete the M.A. program. Three quantitative courses (7 credits) are required, including the 3-credit Experimental Design I course (PSY 6206), the 1-credit Experimental Design 1 Lab course (PSY 6206L) and an additional 3-credit quantitative course approved by the Chair of the Graduate Committee. An additional seven courses (21 credits) are required. Of this total, at least six courses must consist of approved Department graduate seminars, including a minimum of one regularly offered seminar in each of the following areas: Behavioral Neuroscience, Cognition, Developmental and Social/Personality. Courses in each of the areas were presented above, in **Table 23**.

A total of six M.A. thesis credits (PSY 6971) is required. An additional two credits are required, which may be filled with electives and/or Directed Independent Study (EXP 6908).

Students are required to maintain a grade point average of "B" (3.0) or better. Courses with grades of "C+" or lower will not satisfy program requirements.

### Comparison to SUS and Peer Programs

Florida International University eliminated all of its terminal M.S. programs except for a professional counseling program that exists outside and is unconnected to the doctoral training program. No stipend is offered to students. The University of Central Florida has a terminal M.A. degree but it is in a program separate from the Ph.D. program. Again, no stipend is offered. Regarding our aspirational peers, neither the University of California Santa Barbara nor the University of Missouri has a terminal M.A. program.

### Scope of Institutional Contribution

As noted above, Experimental Design I and II are service courses taken by students in a variety of disciplines. Neuroscience courses may attract a significant number of students from the Department of Biological Sciences and the Center for Complex Systems and Brain Science. Some Cognition courses may enroll students from the Center as well. Developmental courses attract students from Nursing, Social work, and Education.

### Student Profile

Data summarizing the gender and ethnicity of Masters students during 2011-12 and 2012-13 are included in the data presented in **Table 24** above.

### Student Support

Students in the M.A. program do not receive Departmental stipends but they do receive tuition waivers.

### Advising Procedures

Entering Masters students attend an Orientation Meeting led by the Graduate Coordinator at the beginning of their first semester and receive a general orientation to the program and staff. Subsequent advising is typically provided by the student's mentor and on occasion by the Graduate Coordinator.

### Placement Rates/Employment Profile

Although the Department does not keep records on the placement/employment of its Masters graduates, many go on to doctoral programs.

### Graduation Rates

The number of graduate students earning Masters degrees since 2001 is shown in **Table 27**.

**Table 27 Masters Degrees Awarded**

	Year Degree Granted													All
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
<b>Degree Level</b>														
<b>Masters</b>	4.0	5.0	7.0	9.0	17.0	14.0	12.0	14.0	15.0	11.0	10.0	15.0	14.0	147.0

### Student Recruitment

The Department does not actively recruit students to our Masters program.

### Faculty

#### Administrative Structure

The Department of Psychology is administered by a Chairperson, David Wolgin, who is appointed by, and who reports to, the Dean of the Charles E. Schmidt College of Science. The Chair is assisted by a three-member Executive Committee elected by the Department. Current members are David Bjorklund, Steven Bressler, and Robin Vallacher. In addition, an Assistant Chair, Monica Rosselli, appointed by the Chair, serves as the coordinator for the program on the Davie campus. The graduate program is administered by the Graduate Committee, chaired by Brett Laursen and the undergraduate program is overseen by the Undergraduate Committee, chaired by Nancy Jones.

#### Faculty Profile

The Department currently consists of 23 faculty members, one of whom is the Associate Dean of Students for the College of Science. Nineteen faculty are tenured or tenure-track and four are Instructors. In addition, two unsalaried Research Professors, who have no formal teaching duties, may mentor graduate students. Faculty members are assigned to one of three campuses, Boca Raton, Davie, and Jupiter. The Boca campus has two Instructors and 14 tenure-track faculty members, one of whom is half-time and resident on campus only during the spring semester. Two members of the Boca faculty have primary appointments in the Center for Complex Systems and Brain Science, but for purposes of promotion and tenure are considered members of the Department of Psychology. (Other members of the Department are also members of the Center although their primary appointments are in Psychology.) The Davie campus has one Instructor and three tenure-track faculty members and the Jupiter campus has one Instructor and two tenure-track faculty members. To meet the Department's instructional mission, varying numbers of adjunct faculty and graduate teaching assistants (GTAs) are employed each semester to teach undergraduate courses at the Boca and Davie campuses. For example, for the Fall 2014 semester, nine adjuncts and 10 GTAs taught undergraduate courses on the Boca campus and seven adjuncts and seven GTAs taught courses on the Davie campus.

A summary of faculty diversity by rank is presented in **Table 28** below.

**Table 28 Faculty Diversity**

<b>Rank</b>	<b>Number</b>	<b>Male</b>	<b>Female</b>	<b>Asian</b>	<b>Black</b>	<b>Hispanic</b>	<b>Caucasian</b>
<b>Professor</b>	<b>10</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>9</b>
<b>Assoc. Professor</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>Assist. Professor</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Instructor</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>Total</b>	<b>23</b>	<b>16</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>21</b>

Faculty areas of specialization are shown in **Table 29**. Campus affiliation is indicated in parentheses (B=Boca; D=Davie; J=Jupiter).

**Table 29 Areas of Specialization**

<b>Cognitive</b>	<b>Developmental</b>	<b>Neuroscience</b>	<b>Social</b>
Barenholtz (B)	Bjorklund (B)	Bressler (B)	Maniaci (B)
Hong (B)	Hoff (D)	Johanson (B)	Monson (B)
Kersten (B)	Jones (J)	Rosselli (D)	Nowak (B)
	Laursen (D)	Stackman (J)	Sherman (B)
	Perry (B)	Vertes (B)	Vallacher (B)
		Wolgin (B)	



Faculty ethnicity during the period 2010-13 is shown in **Table 30 and Table 31**. Faculty ethnicity during the period 2010-13 is shown in **Table 30 and Table 31**.

**Table 30 Instructional Faculty By Gender and Ethnicity**

Instructional Faculty (Tenured, tenure-earning, & non-tenure-earning)		Psychology			College Total	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
American Indian/Alaskan Native	Male					1
	Total					1
Asian or Pacific Islander					1	1
	Female				7	28
	Male		1	1	15	78
	Total		1	1	23	107
Black (Not of Hispanic Origin)						1
	Female				1	30
	Male				3	18
	Total				4	49
Hispanic					1	1
	Female	1	1	1	3	34
	Male				4	23
	Total	1	1	1	8	58
White (Not of Hispanic Origin)		1	0	0	0	3
	Female	5	6	6	23	276
	Male	18	19	18	86	382
	Total	24	25	24	109	661
Total		1	0	0	2	6
	Female	6	7	7	34	368
	Male	18	20	19	108	502
	Total	25	27	26	144	876

Table 31 Adjunct Faculty By Gender and Ethnicity

Adjuncts		Psychology			College Total	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
American Indian/Alaskan Native	Female					1
	Total					1
Asian or Pacific Islander	Female				1	11
	Male				1	11
	Total				2	22
Black (Not of Hispanic Origin)	Female		1		3	33
	Male					14
	Total		1		3	47
Hispanic	Female					10
	Male					10
	Total					20
White (Not of Hispanic Origin)	Female	6	6	6	14	288
	Male	5	8	4	13	219
	Total	11	14	10	27	507
Total	Female	6	7	6	18	343
	Male	5	8	4	14	254
	Total	11	15	10	32	597

### Faculty Attrition

A major challenge affecting the delivery of both the undergraduate and graduate programs in Psychology is the marked attrition of faculty over the past decade. As shown in **Figure 4** below, there has been a steady loss of tenure-track faculty since 2003. Many of these lost positions were held by senior Professors with outstanding reputations in their fields. Combined with an institutional policy of increasing undergraduate enrollments, this has resulted in a large increase in the student/faculty ratio (**Figure 5**). For example, in 2003, there were 31 Psychology majors for each tenure-track faculty member. By 2013, the ratio had increased to 75. Approval of replacement positions has been limited by budgetary constraints and by shifting university priorities. For example, the Department's choice for a well-funded new hire in Neuroscience for the Boca campus this year was vetoed by higher administration because of an unwillingness to commit space for housing animals. The Department's animal space was closed down the previous year as a cost saving measure with the understanding that space would be made available at other locations on campus. However, this space is now considered "shared" and, therefore, not available for dedicated use by a single investigator. This policy means, in effect, that the Department has lost control of its ability to make hiring decisions in certain areas of concentration.

Figure 4 Faculty Attrition

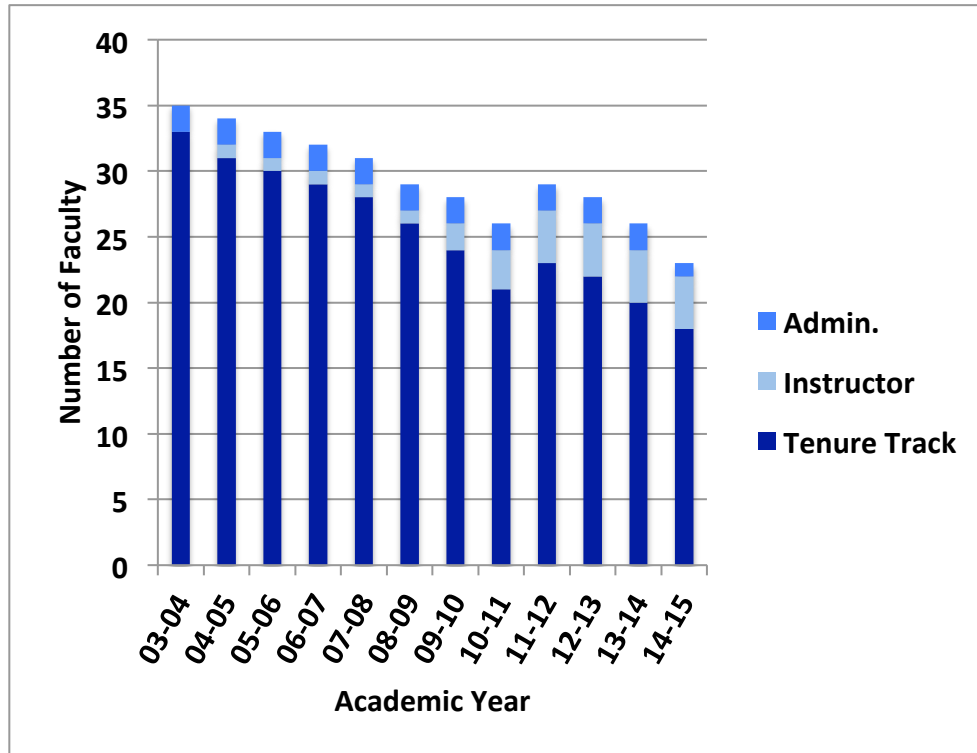
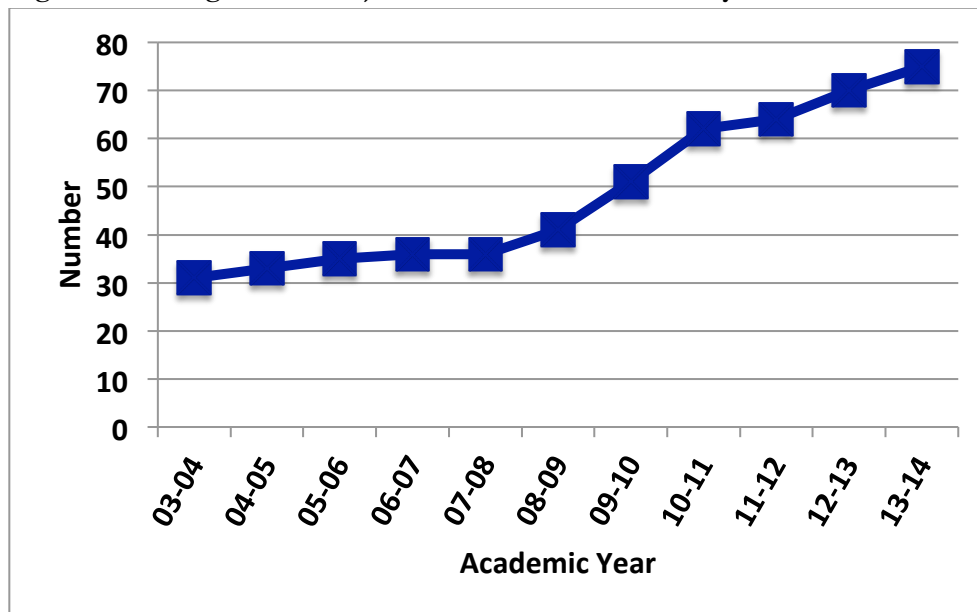


Figure 5 Undergraduate Majors Per Tenure Track Faculty



The loss of faculty has had a profound impact on the quality of the undergraduate and graduate programs. First, the number of undergraduate courses taught by tenure track faculty has decreased sharply with the result that, at present, a large percentage of courses are now taught by adjuncts and GTAs. For example, in Fall 2014, of 63 undergraduate courses offered on the three campuses, 33 (52%) were taught by adjuncts or GTAs. This problem is particularly acute in Davie, where the ranks of tenure track faculty shrank from eight in 2003 to only three today. In the Neuroscience area, the number of tenure track faculty teaching undergraduate courses at the Boca campus is at best one. This is because two of the three faculty members in this area at Boca are also members of the Center for Complex Systems and Brain Science. Although they are assigned to teach one graduate course for the Center and one undergraduate course for the Department each semester, they typically “buy out” of their undergraduate courses. The problem is compounded by the transfer of Neuroscience faculty in Biological Science and Psychology to the Jupiter campus. As beneficial as that has been to the Neuroscience program at Jupiter, the net effect at Boca is that the large population of undergraduate students in both the B.A. program in Psychology and the B.S. program in Neuroscience and Behavior are being shortchanged. They are not being offered the opportunity to take courses taught by faculty who are active researchers in the field, they are not provided opportunities to engage in directed independent study in Neuroscience, and they are not coming in contact with, and being inspired by, faculty who are passionate about brain research. This state of affairs is likely to worsen over the next decade, as College advisors encourage more and more preprofessional students to major in Neuroscience and Behavior in order to better prepare for the behavioral and social science subtest, soon to be added to the MCATs.

Second, the loss of faculty has created problems in meeting the institutional goal of creating a culture of research and inquiry. As part of its recent SACS reaccreditation, FAU developed a wide-ranging Quality Enhancement Plan, *Distinction Through Discovery*, emphasizing undergraduate participation in research. The goal of this effort is to incorporate research into academic programs at various levels, from learning about how research is conducted in a particular discipline to actually conducting research. In both the B.A. and B.S. programs, students are encouraged to enroll in Directed Independent Study where, depending on their level of knowledge and experience, they either participate in ongoing psychological research or design and conduct their own research projects under the supervision of a faculty member. Over the past five years, the mean number of students enrolled in this course each semester, including summers, is about 83, representing fewer than 5% of psychology majors. Clearly the loss of tenure track faculty makes it very difficult to provide research opportunities for the growing number of undergraduate students in the program.

Finally, the loss of faculty has greatly diminished the quality of the graduate program. In some areas of concentration there is barely a critical mass of faculty to attract and train graduate students. This is particularly true in the area of statistical analysis. Although the Department has recently hired two new members with statistical expertise, advanced graduate statistics offerings are so sparse that students are forced to take courses outside the Department that are ill-suited to their needs. The problem, however, is not just numbers. Many of the faculty losses were senior Professors with well-established and funded research laboratories. Their departure resulted in the loss of important areas of expertise from the Department’s research portfolio. Some notable examples from the past five years include David Lewkowicz (multisensory integration in children), Edward Large (music perception), Larry Liebovitch (computational neuroscience), and Todd Shackelford (evolutionary psychology). Even when replacement positions have been granted, they have always been at the junior level because of budgetary constraints. Normally, in an aging department, hiring at the junior level makes sense. However, when there is a net loss of faculty over time it is critical to make at least some senior hires in order to maintain the overall quality of the program.

### Faculty Teaching Load

Faculty teaching assignments include both undergraduate and graduate courses as well as student mentoring (undergraduate and graduate Directed Independent Study, Masters thesis supervision, Ph.D. dissertation supervision). Course loads are assigned on the basis of research productivity/potential. New hires are assigned one course per semester for the first three years, to help them establish their research laboratories and begin data collection, and are then assigned a 2/1 teaching load through their sixth year, when they come up for promotion and tenure. More generally, faculty that have established a track record of high research productivity are typically assigned a 2/1 teaching load and have the option of buying out of the second course if they have release funds from a grant. Faculty with a record of moderate research productivity are assigned a 2/2 teaching load, while those with a modest record of research productivity are assigned a 3/3 teaching load.

### Faculty Research Productivity

The Department has a strong record of research productivity. The number of peer-reviewed articles, book chapters, and books, as well as presentations at professional conferences from the past four academic years is presented in **Table 32**. Note that the data have not been adjusted for the diminishing numbers of faculty members during this period. Faculty publications are typically in high quality, peer-reviewed journals and are often co-authored by students. For example, over the past five years articles have appeared in *American Psychologist*, *Behavioural Brain Research*, *Biological Psychology*, *Child Development*, *Current Biology*, *Developmental Psychology*, *Developmental Review*, *Infancy*, *Journal of Abnormal Child Psychology*, *Journal of Abnormal Psychology*, *Journal of Chemical Neuroanatomy*, *Journal of Cognitive Neuroscience*, *Journal of Comparative Neurology*, *Journal of Experimental Child Psychology*, *Journal of Experimental Psychology: General*, *Journal of Neuroscience*, *Journal of Personality and Social Psychology*, *Journal of Research in Personality*, *Neuropharmacology*, *Neuroscience*, *Perspectives in Psychological Science*, *PLoS One*, *Progress in Neurobiology*, *Psychology of Aging*, *Psychological Review*, *Science*, *Synapse*, and *Trends in Cognitive Sciences*. In addition, many faculty have been successful in obtaining extramural funding for their research, despite the challenging budgetary environment. For example, during 2013-14, the most recent year for which data are available, seven faculty members had multi-year grants from NIH or NSF totaling approximately \$9.42 M. Among the projects funded by these grants are studies on person-situation transactions in real life (Sherman), dual language learning in children from Spanish-speaking families (Hoff), parent-child influence in Latino families on math learning (Laursen), electrophysiological correlates of human attention (Bressler), the role of the midline thalamus on arousal, attention and cognition (Vertes), intersensory perceptual narrowing in human infants (Lewkowicz), and the role of SK channels in brain areas critical for memory (Stackman).

**Table 32 Faculty Research Productivity**

	'10-'11	'11-'12	'12-'13	'13-'14
<b>Articles/Chapters</b>	<b>82</b>	<b>78</b>	<b>100</b>	<b>88</b>
<b>Books</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>3</b>
<b>Conference Presentations</b>	<b>87</b>	<b>98</b>	<b>126</b>	<b>85</b>

### Strategic Planning for Hires

The department's goal is to restore faculty lines to at least the 2003 levels and to strengthen the program in all four core areas—cognitive psychology, developmental psychology, neuroscience, and social/personality psychology—in ways that fit with University-wide initiatives, yet do not duplicate efforts of other University units. Different cluster hires are proposed for each of three campuses, to fit with the expertise of current Psychology faculty at these campuses. These cluster hires are in *Human Neuroscience* on the Boca Raton campus, *Healthy Aging* on the Davie campus, and *Behavioral Neuroscience* (research with nonhuman animals) on the Jupiter campus. We propose three additional hires for the Boca Raton campus—one each in cognitive psychology, developmental psychology, and social/personality psychology—to restore core areas of instruction and research in these areas. To benefit the

Department, these hires must all be new positions, not replacements for current faculty who resign, retire, or leave for other reasons. In addition, new hires with statistical expertise are urgently needed to strengthen quantitative training in the graduate program. The Department envisions making hiring decisions in Human Neuroscience in collaboration with the Center for Complex Systems and Brain Science to advance the development of this area of expertise.

## D. RESEARCH

### Research Productivity

The number of books, peer-reviewed articles/book chapters, conference presentations and submitted grant proposals as well as sponsored research and instructional funding is presented in **Table 33**. The data is presented on a per faculty basis in **Table 34**. As mentioned previously, the Department has a long history of research productivity and this level has been maintained despite the loss of faculty and the enormous growth in undergraduate enrollment.

**Table 33 Research Productivity**

		Psychology			College Total	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
<b>1. Books (including monographs &amp; compositions)</b>	#	5	7	8	22	146
<b>2. Other peer-reviewed publications</b>	#	82	78	100	229	1,161
<b>3. All other publications</b>	#	0	0	0	31	501
<b>4. Presentations at professional meetings or conferences</b>	#	87	98	126	308	1,435
<b>5. Productions/Performances/Exhibitions</b>	#	0	0	0	36	377
<b>6. Grant Proposals Submitted</b>	#	18	13	14	109	385
<b>Sponsored Research &amp; Program Expenditures</b>						
<b>7. Organized Research</b>	#	\$1,119,193	\$1,519,782	\$1,647,134	\$8,625,887	\$15,603,749
<b>8. Sponsored Instruction</b>	#	\$83,992	\$144,462	\$112,938	\$1,242,409	\$6,138,254
<b>9. Other Sponsored Activities</b>	#	\$0	\$0	\$0	\$620,037	\$2,565,166

Table 34 Efficiency Data

	Psychology			College Total	University Total
	2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
<b>1. Books (including monographs &amp; compositions) per faculty member</b>	0.2	0.3	0.3	0.2	0.2
<b>2. Other peer-review publications per faculty member</b>	3.7	3.4	4.3	2.1	1.8
<b>3. All other publications per faculty member</b>	0.0	0.0	0.0	0.3	0.8
<b>4. Presentations at professional meetings or conferences per faculty member</b>	4.0	4.3	5.5	2.9	2.3
<b>5. Productions/Performances/Exhibitions per faculty member</b>	0.0	0.0	0.0	0.3	0.6
<b>6. Grant proposals submitted per faculty member</b>	0.8	0.6	0.6	1.0	0.6
<b>Sponsored Research &amp; Program Expenditures</b>					
<b>7. Organized research expenditures per faculty member</b>	\$50,872	\$66,077	\$71,615	\$80,616	\$24,534
<b>8. Sponsored instruction expenditures per faculty member</b>	\$3,818	\$6,281	\$4,910	\$11,611	\$9,651
<b>9. Other sponsored activity expenditures per faculty member</b>	\$0	\$0	\$0	\$5,795	\$4,033

### Interdisciplinary Efforts and Community Engagement

The Department participates in several interdisciplinary efforts. One is the Jupiter Life Science Initiative in which faculty from the Departments of Psychology and Biological Sciences have joined with Scripps Florida, the Max Planck Institute and other Biotechnology companies at the Jupiter campus to create a world class center for Neuroscience research and education. In addition, faculty from the Department are members of the Center for Complex Systems and Brain Science, an interdisciplinary center whose members have affiliations in Psychology, Physics and Biomedical Science. One member of the Department is a Faculty Fellow of the Peace, Justice and Human Rights Initiative at FAU, comprised of an interdisciplinary group of scholars interested in promoting these themes both locally and globally. Another is involved in collaborative research with faculty in the College of Engineering and the College of Education on improving education in Engineering. And yet another member of the Department is participating in a new federal initiative to plan language-focused interventions for low-income children.

### Establishment of Goals for Research

Departmental goals for research are reflected in the criteria established for promotion and tenure. Promotion to the rank of associate professor requires that a faculty member maintain a consistently high level of research productivity, both qualitatively and quantitatively, as reflected in publications in high quality peer-reviewed journals. Although collaborative research with other investigators is valued, evidence of independent scholarly activity is required. In addition, continuing efforts to obtain extramural funding, and success in achieving such funding, is expected. Promotion to the rank of professor requires that the faculty member achieve a reputation for excellence in scholarship at the national or international level. In addition to establishing a consistent record of research productivity, evidence of national/international visibility is expected, as evidenced by the number of citations in the literature, invited addresses at major professional meetings, and membership on editorial boards or grant study sections. Finally, faculty at all levels are expected to demonstrate an ongoing commitment to training students in research by supervising

graduate student thesis and dissertation research, graduate and undergraduate directed independent study, and undergraduate Honors theses.

Strategic goals for research at the Department level are presented below (**F. Other Program Goals for School or College**).

### Assessment of How Well Goals Are Met

Assessments of faculty research are made annually by the Department's Personnel Committee, which is advisory to the Chair. As shown in Table C and D and in the Section on **Faculty Research Productivity** above, the faculty has been very successful in the quantity and quality of its publications and in securing extramural funding. Many faculty have achieved national and international recognition as evidenced by invitations to deliver keynote addresses and to serve on editorial boards and grant study sections as well as in securing extramural funding and in receiving various honors and awards.

## E. SERVICE/COMMUNITY ENGAGEMENT

### Service Productivity

As shown in **Table 35** and **Table 36**, faculty participate in department, college, university, and professional committees, serve on editorial boards, and are reviewers for scholarly publications.

**Table 35 Service Productivity**

		Psychology			College Total	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
<b>1. Faculty memberships on department, college or university committees</b>	<b>#</b>	21	33	21	273	2,348
<b>2. Faculty memberships on community or professional committees</b>	<b>#</b>	15	9	11	69	972
<b>3. Faculty serving as editors or referees for professional publications</b>	<b>#</b>	19	19	21	96	611

**Table 36 Efficiency Data**

		Psychology			College Total	University Total
		2010-2011	2011-2012	2012-2013	2012-2013	2012-2013
<b>1. Faculty memberships on department, college or university committees per faculty member</b>		1.0	1.4	0.9	2.6	3.7
<b>2. Faculty memberships on community or professional committees per faculty member</b>		0.7	0.4	0.5	0.6	1.5
<b>3. Faculty serving as editors or referees for professional publications per faculty member</b>		0.9	0.8	0.9	0.9	1.0

In addition, members of the faculty have made presentations at local high schools, discussing both the discipline of Psychology as well as the program at FAU. Faculty also provide opportunities for high school students to participate in research projects. Recently the Department participated in the Expo hosted by FAU to attract high school students by showcasing research on visual illusions.

### Establishment of Goals for Service

The Department's criteria for promotion and tenure include serving in leadership positions on university committees and/or professional associations, as well as community service. It is expected, however, that faculty will place more emphasis on research and teaching in keeping with the University goal of attaining Research 1 status.



### Assessment of How Well Goals Are Met

Assessment of service is made by the Personnel Committee on an annual basis. Summary data are provided in **Table 35** and **Table 36** above. All faculty participate in service activity at one or more levels.

## F. OTHER PROGRAM GOALS

As noted above, a major goal for the Department is to establish campus-specific areas of concentration and to make cluster hires in these areas to restore the level of excellence previously enjoyed by the Department. We believe that it is possible to attain national recognition for all of these programs by hiring clusters of faculty in each respective area. Here, we outline the plans for each campus in more detail.

**Boca Raton:** A significant advance in the study of behavior and cognition comes from research in the field of neuroscience, already a major theme at FAU. Thus far, the University neuroscience initiative has focused on research with nonhuman animals in other University units. Because behavioral neuroscience is central to psychology, it should also be offered in the Psychology Department, but in ways unique to psychology rather than in ways that duplicate efforts by other units (e.g., cellular neuroscience). We propose hiring three senior faculty in human neuroscience on the Boca Raton campus, one each in the developmental, cognitive, and social/personality areas. To attract these faculty will require neuroimaging facilities. We propose that arrangements for neuroimaging soon be made with local institutes (e.g., University MRI and Diagnostic Centers, Marcus Neuroscience Institute) and moreover that the University consider purchasing its own imaging equipment. As noted, we also propose three additional hires for Boca Raton (one each in cognitive, developmental, and social/personality). These may be junior hires, and not necessarily with a neuroscience focus.

**Davie:** Healthy aging is a topic particularly relevant to South Florida. It is also a topic central to lifespan developmental psychology. The faculty at the Davie campus are well situated to develop a program emphasizing research in healthy aging. We propose hiring a cluster of three senior faculty in healthy aging on the Davie campus, at least one in the neuropsychology of aging, and the others expert in the social or cognitive aspects of aging. Junior hires in each area (cognitive, developmental, and social/personality) should follow, with specializations reflecting the needs of these areas.

**Jupiter:** An important component of the neuroscience emphasis at FAU is investigation of the relation between brain and behavior (behavioral neuroscience). Much behavioral neuroscience research is undertaken using animal models. The Department of Psychology has well-known senior researchers in this field that are well positioned to participate in the development of the behavioral neuroscience program(s) in Jupiter. We propose hiring a cluster of three senior neuroscience faculty on the Jupiter campus, with junior hires to follow.

At the present time, none of these goals has been met. However, in recent discussions with President Kelly and Provost Perry, we have received verbal assurance that the university will give them serious consideration.

## G. STRENGTHS AND OPPORTUNITIES THAT SUPPORT ACHIEVEMENT OF PROGRAM GOALS

1. Psychology is a popular major that has enjoyed enormous enrollment growth over the past six years. This is a program that generates substantial FTE for the College. The joint program in Neuroscience and Behavior has enormous growth potential, given the emphasis on developing Neuroscience at FAU.

2. The Department has a very productive faculty in all four of its core areas. They publish in high quality peer-reviewed journals and are successful in competing for extramural funds.

3. The proximity of Scripps Florida and Max Planck, world-class research institutes in Neuroscience, on the Jupiter campus is a unique resource for attracting faculty and students interested in brain science.

4. Population demographics for the South Florida region provide a rich resource for a campus specialization in Healthy Aging.

5. The Ph.D. program continues to attract high quality students who acquire excellent research training and co-author papers with their mentors in peer-reviewed journals.

6. The university has a new president who has articulated a clear vision for promoting excellence at FAU. He has expressed support for the Department's strategic plan.

## **H. WEAKNESSES AND THREATS THAT IMPEDE PROGRAM PROGRESS**

1. Faculty attrition and explosive enrollment growth have created problems in delivering the undergraduate and graduate programs, resulting in increased reliance on adjuncts and graduate teaching assistants. In addition, the loss of senior faculty has reduced the breadth of research expertise, including in the quantitative area.

2. Budgetary shortfalls have limited hiring, faculty raises, and research support, leading to decreased faculty morale.

3. Budgetary shortfalls have limited the number of graduate student teaching assistantships, with the result that some courses cannot be assigned teaching assistants. In addition, the limited number of assistantships constrains the growth of the graduate program and research output.

4. Geographic distance between campuses limits faculty interactions and student access to resources. For example, students at the Boca and Davie campuses cannot readily participate in Neuroscience research or courses offered at the Jupiter campus.

5. The Department has not been included in planning the Jupiter Neuroscience Initiative, even though it is a stakeholder. This has created problems in course delivery, supervision of undergraduate and graduate research, and fragmentation within the program.

## **I. RESOURCE ANALYSIS**

Current resources are inadequate to meet the program's goals. The greatest impact can be felt in support of teaching and research. Faculty salaries are not competitive with those at other universities, even within the SUS, prompting faculty to seek positions elsewhere. Faculty attrition has already resulted in a loss of critical mass in some areas of graduate training and has negatively impacted the undergraduate student-faculty ratio. There have been no institutional funds available for faculty travel to professional conferences or for the purchase or maintenance of research equipment. In addition, the university does not provide adequate compensation for the Graduate Coordinator, whose administrative duties go well beyond the normal service assignment of other faculty. The number of teaching assistantships is not sufficient for the number and size of course sections.

The quality and availability of teleconferencing facilities is also inadequate. As a multi-campus department, we require teleconferencing facilities for faculty meetings, colloquia and seminars. Although the university has facilities for these purposes, they are often not suitable for our particular needs. For example, faculty meetings are often assigned to classrooms, rather than conference rooms, resulting in limited viewing of participants. Scheduling is sometimes a problem due to limited availability of facilities. As faculty at the partner campuses grows, there will be increased need for teleconferencing facilities for seminars and colloquia. It is not clear the university will be able to meet those demands.

In other areas resources are sufficient to meet program goals. This includes laboratory and office space, administrative, technical and secretarial staff, library resources, and internet access. However, if the Department's strategic plan is implemented, additional space may be required.

## J. FUTURE DIRECTION

As outlined above, the Department aspires to develop campus-specific areas of specialization in Human Neuroscience, Behavioral Neuroscience and Healthy Aging. If implemented, these changes will result in (a) the addition of 12-15 faculty, some of whom would be senior investigators; (b) a broadening of the Department's research portfolio; (3) an expansion of the undergraduate and graduate curricula; and (4) an increase in the quality and visibility of the program. There are, however, a number of issues with which the Department has been wrestling.

1. The undergraduate curriculum was designed 20 years ago to serve two purposes: (1) broad course coverage of core areas of experimental psychology (cognition, social/personality, developmental, and behavioral neuroscience) as well as research methods and statistical analysis; and (2) in-depth coverage of each area by means of advanced courses with increased opportunities for writing (e.g., essay exams, term papers) and creative activities (e.g., simulations of research, literature reviews, class presentations). The latter is becoming increasingly difficult to accomplish because faculty attrition and enrollment growth has resulted in increased class size even in upper level courses. One solution is to hire multiple Instructors to teach the core courses, freeing up tenure-track faculty to teach upper level courses with smaller enrollments. However, this approach may siphon off resources that might otherwise go toward hiring more tenure-track faculty. How else might this problem be addressed? Is the curriculum still relevant or 'modern' compared to other programs around the country? Are the specializations appropriate? Are there creative instructional models out there that we are not employing, models that would allow us to teach more students with fewer faculty?

2. The development of campus specializations can sometimes bring with it the problem of dis-integration of the program when not managed well. This has already happened to some extent with the Jupiter Neuroscience Initiative. The goal of that program is to make the Jupiter campus a self-contained Neuroscience campus with separate faculty and student populations. The problem is that most students in both the B.A. program in Psychology and the B.S. program in Neuroscience and Behavior attend classes at the Boca campus. Even if some of these students migrate to the Jupiter campus, many more will remain at Boca. How can the Department serve these students if the resources are in Jupiter? For example, how can the Department provide opportunities for these students to participate in the university-wide Quality Enhancement Plan, which encourages undergraduate participation in research?

3. The changes we propose will take time to unfold. What can we do in the short term to enhance the quality of our program at both the undergraduate and graduate levels? What can be done that requires little or no resources while we are waiting for the university to make decisions about allocation of significant funding and lines?

## K. STUDENT FEEDBACK REGARDING PROGRAMS

Student feedback from the Student Satisfaction Survey for the period 2000-2013 is presented in **Table 37**. In general, both undergraduate and graduate students in Psychology assigned a rating of 3 on a 4-point scale (4=excellent) to the quality of the courses, instructors and advising. This was comparable to the mean scores for both the college and the university as a whole.

**Table 37 Undergraduate and Graduate Student Feedback from Student Satisfaction Survey**

			Psychology							College Total	University Total
			2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2011	2012- 2013	2012-2013	2012-2013
Student Level			125	190	152	86	102	91	169	356	2,211
Undergraduate	Quality of courses in degree program	# Responses									
		Mean	3.0	2.9	3.0	3.0	3.1	2.9	3.1	3.0	3.0
	Quality of instructors in degree program	# Responses	125	187	147	82	100	93	157	333	2,137
		Mean	3.0	3.1	3.1	3.1	3.1	3.0	3.1	2.9	3.0
	Quality of advising in college advising office	# Responses	101	167	134	70	85	80	148	310	1,933
		Mean	2.4	2.6	2.5	2.8	2.8	2.3	2.6	2.8	2.8
	Quality of advising by faculty	# Responses	102	147	125	59	80	69	117	257	1,808
		Mean	2.7	2.7	2.8	3.0	2.9	2.6	2.8	2.8	2.9
Graduate	Quality of courses in degree program	# Responses	9	11	29	4	17			13	476
		Mean	3.1	3.0	3.2	3.2	3.3			3.3	3.1
	Quality of instructors in degree program	# Responses	9	12	30	4	18			14	461
		Mean	3.2	3.4	3.6	3.2	3.3			3.4	3.2
	Quality of advising in college advising office	# Responses	3	8	15	2	8			7	308
		Mean	2.0	2.2	2.9	3.0	3.2			2.8	3.0
	Quality of advising by faculty	# Responses	9	10	25	3	16			12	358
		Mean	3.0	2.6	3.3	3.3	3.5			3.1	3.1

## L. FACULTY VITAE (Abbreviated)

## Elan Barenholtz

### A. Professional Preparation

**Ph.D., Psychology**, Rutgers, The State University of New Jersey, New Brunswick, NJ, 2004.

Dissertation: *What does the deforming contour tell us about shape?*

Advisor: Dr. Jacob Feldman

**Certificate of Cognitive Science**, Rutgers University Center for Cognitive Science,  
Rutgers, The State University of New Jersey, New Brunswick, NJ, 2004.

**M.S., Psychology**, Rutgers, The State University of New Jersey, New Brunswick, NJ, 2002.

Thesis: *Visual comparison within and between object parts.*

Advisor: Dr. Jacob Feldman

**B.A., Psychology**, *Summa Cum Laude*, Yeshiva University, New York, NY, 1997-1999.

### B. Appointments

**Associate Professor**, Florida Atlantic University, Department of Psychology/Center for  
Complex Systems and Brain Sciences, 2013-Present

**Assistant Professor**, Florida Atlantic University, Department of Psychology/Center for  
Complex Systems and Brain Sciences, 2007-2013

**Postdoctoral Research Fellow**, Brown University, Department of Cognitive and Linguistic  
Sciences, 2004-2007. Supervisor: Dr. Michael Tarr

### C. Selected Peer-Reviewed Publications

**Barenholtz, E.**, Lewkowicz, D. J., Mavica, L., & Davidson, M. (2014). Categorical congruence facilitates multisensory associative learning. *Psychonomic Bulletin & Review*. Advance online publication. doi:10.3758/s13423-014-0612-7.

**Barenholtz, E.** (2013) Quantifying the Role of Context in Visual Object Recognition, *Visual Cognition* (21), 1-27  
Mavica, L. and **Barenholtz, E.** (2013). Matching voice and face identity from static images. *Journal of Experimental Psychology: Human Perception and Performance*, 39, 307–312

**Barenholtz, E.**, Davidson, M. and Lewkowicz, D. (2011). Multisensory Associative-Pair Learning: Evidence for ‘Unitization’ as a specialized mechanism. *Proceedings of the Cognitive Sciences Society*, 33, 225-230

**Barenholtz, E.** and Tarr, M.J. (2011). Visual Learning of Statistical Relations Among Non-adjacent Features: Evidence for Structural Encoding. *Visual Cognition*, 19, 469-475.

### D. Selected Grants

National Science Foundation, “Identifying Objects Within Scenes: Combining Context and Features in Visual Object Recognition”. E. Barenholtz, P.I. 2010

Award Amount: \$196,647

**E. Synergistic Activities**

- i. Established a new EEG-recording facility to be jointly used by the Dept. of Psychology and the Center for Complex Systems and Brain Sciences, in which I hold joint appointments.
- ii. Co-established a Laboratory for Research in Visuo-Locomotor Coordination with Dr. Howard Hock, of FAU and Dr. Adar Pelah, of Cambridge University.
- iii. Co-founded the Vision Brown Bag series, a weekly meeting of members of 4 labs within the university with an interest in perception science.

**F. Collaborators and Other Affiliations**

Dr. David Lewkowicz, Dept. of Psychology/Center for Complex Systems, Florida Atlantic University; Dr. Howard Hock, Dept. of Psychology/Center for Complex Systems, Florida Atlantic University; Dr. Oge Marques, Dept. of Computer Science, Florida Atlantic University; Dr. Michael J. Tarr, Center for the Neural Basis of Cognition, Carnegie Mellon University; Dr. Vincent Charvillat, Dept. of Computer Science & Applied Maths, University of Toulouse, France.

**G. Courses Taught****Undergraduate Courses taught:**

Cognition

Human Perception

**Graduate Courses developed and taught:**

Foundations of Vision

Principles of Cognitive Science

Multisensory Perception

**H. Community Engagement or Out-reach**

Pine Crest High School student research internships, Mentor (Two students, 2008-2010).

Honors Psychology course at Weinbaum High School, Guest Lecturer (Annually since 2008)

Poinciana Day School in West Palm Beach Half-Day Visit, Lab Guide (2009,2010)

Guest Lecture at Olympic High School, Boca Raton (2014)

## DAVID F. BJORKLUND

### Education

Undergraduate: B.A., (cum laude), 1971, University of Massachusetts, Amherst, Psychology

Graduate: M.A., 1973, University of Dayton, Psychology

Ph.D., 1976, University of North Carolina, Chapel Hill, Developmental Psychology

### Professional Experience

September, 1976- Present                      Professor (since August, 1986), Department of Psychology  
Florida Atlantic University

January, 2002- June, 2002;              Alexander von Humboldt Research Professor, Institut für  
May-June, 2003                      Psychologie IV, University of Würzburg, Germany

May-June, 2004                      Visiting Erskine Fellow, University of Canterbury, Christchurch, New  
Zealand

### Editorial Consultant

*Editor*, Journal of Experimental Child Psychology, 2007 – present; *Associate Editor*, Journal of Experimental Child Psychology, 2005 – 2006; *Board of Editors* (Associate Editor), Child Development, 1997 – 2001

### Selected Recent Publications

#### Books (2007-present)

Gray, P., & Bjorklund, D. F. (2014). *Psychology* (7<sup>th</sup> ed.). New York: Worth Publishers.

Bjorklund, D. F. (2012). *Children's thinking: Cognitive development and individual differences* (fifth edition). Belmont, CA: Wadsworth. (Earlier editions published in 1989, 1995, 2000, and 2005.)

Bjorklund, D. F., & Hernández Blasi, C. (2012). *Child and adolescent development: An integrative approach*. Belmont, CA: Wadsworth.

Bjorklund, D. F. (2007). *Why youth is not wasted on the young: Immaturity in human development*. Malden, MA: Blackwell.

[Translated into Dutch: *Neem de tijd voor de kindertijd*, 2009; translated in Korean, 아이들은 왜 느리게 자랄까 - 행복한 책가게, 2010]

#### Selected Journal Articles and Book Chapters (2007-present)

Bjorklund, D. F., Hernández Blasi, C., & Ellis, B. J. (in press). Evolutionary developmental psychology. To appear in D. Buss (Ed.), *Evolutionary psychology handbook* (Vol. 2). New York: Wiley.

Bjorklund, D. F., & Ellis, B. J. (2014). Children, childhood, and development in evolutionary perspective. *Developmental Review*, 34, 225–264.

Causey, K. B., & Bjorklund, D. F. (2014). Prospective memory in preschool children: Influences of agency, incentive, and underlying cognitive mechanisms. *Journal of Experimental Child Psychology*, 127, 36-51.

Ellis, B. J., Jordan, A. C., Grotuss, J., Csinady, A., Keenan, T., & Bjorklund, D. F. (2014). The predator-avoidance effect: An evolved constraint on emerging theory of mind. *Evolution and Human Behavior*, 35, 245-256.

Bjorklund, D. F. (2013). Cognitive development: An overview. In P. D. Zelazo (Ed.), *Oxford handbook of developmental psychology* (pp. 447-476). Oxford, UK: Oxford University Press

Ellis, B. J., & Bjorklund, D. F. (Eds.) (2012). Beyond mental health: An evolutionary analysis of development under risky and supportive environmental conditions: Introduction to Special Section. *Developmental Psychology*, 48, 591-597.

Gardiner, A., Bjorklund, D. F., Greif, M. L., & Gray, S. K. (2012). Choosing and using tools: Prior experience and task difficulty influence preschoolers' tool-use strategies. *Cognitive Development*, 27, 240-254.

- Periss, V., Hernández Blasi, C., & Bjorklund, D. F. (2012). Cognitive “babyiness”: Developmental differences in the power of young children’s supernatural thinking to influence positive and negative affect. *Developmental Psychology*, 48, 1203-1214.
- Bjorklund, D. F., & Gardiner, A. K. (2011). Object play and tool use: Developmental and evolutionary perspectives. In A. D. Pellegrini (Ed.), *Oxford handbook of play* (pp. 153-171). Oxford, UK: Oxford University Press.
- Bjorklund, D. F., Hernández Blasi, C., & Periss, V. (2010). Lorenz revisited: The adaptive nature of children’s supernatural thinking. *Human Nature*, 21, 371-392.
- Bender, C. E., Herzing, D. L., & Bjorklund, D. F. (2009). Evidence of teaching in Atlantic Spotted Dolphins (*Stenella frontalis*) by mother dolphins foraging in the presence of their calves. *Animal Cognition*, 12, 43-53.
- Schwenck, C., Bjorklund, D. F., & Schneider, W. (2009). Developmental and individual differences in young children’s use and maintenance of a selective memory strategy. *Developmental Psychology*, 45, 1034-1050.
- Schwenck, C., Bjorklund, D. F., & Schneider, W. (2007). Factors influencing the incidence of utilization deficiencies and other patterns of recall/strategy-use relations in a strategic memory task. *Child Development*, 78, 1771-1787.
- Shin, H-E., Bjorklund, D. F., & Beck, E. F. (2007). The adaptive nature of children’s overestimation in a strategic memory task. *Cognitive Development*, 22, 197-212.

### Teaching

**Undergraduate:** Cognitive Development; Evolutionary Psychology; Honors Seminar

**Graduate: Seminar** in Cognitive Development; Seminar in Evolutionary Developmental Psychology; Seminar in Individual Differences in Children’s Thinking



## STEVEN L. BRESSLER

### A. Professional Preparation

1996 Visiting Fellowship in Functional MRI, Massachusetts General Hospital  
 1982 Ph.D., Physiology/Anatomy, University of California, Berkeley  
 1972 B.A. (Honors), Biopsychology, The Johns Hopkins University

### B. Appointments

1997- Professor, Department of Psychology and Center for Complex Systems & Brain Sciences, Florida Atlantic University  
 1990-1997 Associate Professor, Department of Psychology and Center for Complex Systems, Florida Atlantic University  
 1986-1990 Senior Scientist, EEG Systems Laboratory, San Francisco, CA  
 1988-1990 Lecturer, Pacific Graduate School of Psychology, Palo Alto, CA  
 1982-1986 Postdoctoral Fellow, EEG Systems Laboratory, San Francisco, CA

### C. Selected Peer-Reviewed Publications (most recent five from the last 7 years)

Fuster JM, Bressler SL. Past makes future: role of prefrontal cortex in prediction. 2014, *Journal of Cognitive Neuroscience*, in press.

Jackson J, Amilhon B, Goutagny R, Bott J-B, Manseau F, Kortlevel C, Bressler SL, Williams S. Reversal of theta rhythm flow through intact hippocampal circuits. 2014, *Nature Neuroscience*, doi:10.1038/nn.3803, in press.

Bressler SL, Richter CG. Interareal oscillatory synchronization in top-down neocortical processing. 2015, *Current Opinion in Neurobiology*, 31:62-66.

Bressler SL. The function of neurocognitive networks. Comment on "Understanding brain networks and brain organization" by Pessoa. *Physics of Life Reviews*, 2014, 11:438-439.

Matias FS, Gollo LL, Carelli PV, Bressler SL, Copelli M, Mirasso CR. Modeling positive Granger causality and negative phase lag between cortical areas. *Neuroimage*, 2014, 99:411-418.

### D. Selected Other Publications or Products/Grants (most recent five from the last 7 years)

2011- 2014 *Electrophysiological Studies of Human Attention*. NIMH (MH096482) (\$93,506 total direct costs) [Co-PI]  
 2011 *From Brains to Machines: A Special Program at the 2011 International Joint Conference on Neural Networks*. NSF (1110883) (\$19,990 total direct costs) [Co-PI]  
 2009-2014 *Distributed Cortical Processing in Visual Working Memory*. NIMH (MH081162) (\$387,000 total direct costs) [Co-PI]  
 2009 *Conference on Neurocognitive Networks*. NSF (0924414) (\$33,000 total direct costs) [PI]

### E. Synergistic Activities – Invited Lectures

*Beta Synchrony and Top-Down Feedforward Processing in Visual Expectation*, Workshop on Connections & Communications in the Brain, Banbury Center, Cold Spring Harbor Laboratory, April 7, 2014.

*Neurocognitive Networks and Task Set*, Purdue University, February 3, 2014.

*Dynamic Function Interactions in Cerebral Cortex*. FAU Neuroscience Colloquium Series, January 14, 2014.

*Dynamic Function Interactions in Cerebral Cortex*. Laboratory of Cognitive Neuroscience, Ecole Normale Supérieure, Paris, France, December 13, 2013.

*Dynamic Function Interactions in Cerebral Cortex*. SFB Lecture Series, Medical University Hamburg-Eppendorf, Hamburg, Germany, December 9, 2013.

*Workshop on Directed Functional Connectivity Analysis using Wiener-Granger Causality.* SFB Methods Academy, Medical University Hamburg-Eppendorf, Hamburg, Germany, December 5, 2013.

*Neurocognitive Networks and Set.* NSF-Sponsored Special Workshop on Cognitive Science: the Computational Paradigm Symposium, International Joint Conference on Neural Networks, Dallas, Texas, August 6, 2013.

*Set-Related Neurocognitive Networks and Neurodynamic Processing.* 4<sup>th</sup> International Conference on Cognitive Neurodynamics, Sigtuna, Sweden, June 24, 2013.

*Large-Scale Synchronous Beta Rhythms.* Mathematical Biosciences Institute Workshop, Ohio State University, March 20, 2013.

*Directed Functional Connectivity Analysis Based on Granger Causality.* MURI Winter School on Dynamics of Multifunction Brain Networks, UC San Diego, January 11, 2013.

*Set-Related Neurocognitive Networks and Neurodynamic Processing.* MURI Winter School on Dynamics of Multifunction Brain Networks, UC San Diego, January 10, 2013.

*Top-Down Modulation of Visual Cortex in Visual Spatial Attention.* Department of Psychology, University of Amsterdam, September 20, 2012.

*Top-Down Modulation of Visual Cortex in Visual Spatial Attention.* Netherlands Institute for Neuroscience, Amsterdam, The Netherlands, September 19, 2012.

#### **F. Collaborators and Other Affiliations**

Richard Coppola	National Institute of Mental Health
Maurizio Corbetta	Washington University School of Medicine, Saint Louis
Mingzhou Ding	University of Florida
Charles Gray	Montana State University
Richard Leahy	University of Southern California
Hualou Liang	Drexel University
Vinod Menon	Stanford University
Richard Nakamura	National Institute of Mental Health
Craig Richter	Ernst Strungmann Institute in cooperation with Max Planck
Charles Schroeder	Nathan Kline Institute for Psychiatric Research
Anil Seth	University of Sussex
Gordon Shulman	Washington University School of Medicine, Saint Louis
Sylvain Williams	McGill University

#### **G. Courses Taught**

Cognitive Neuroscience (graduate), Cognitive Neuroscience (undergraduate), Advanced Cognitive, Neuroscience (graduate), Neural Time Series Analysis (graduate), Computational Cognitive Neuroscience (graduate)

## Howard Hock

### A. Professional Preparation

1962 Polytechnic Institute of Brooklyn; B.S. in Electrical Engineering  
 1967 New York University; M.S. in Electrical Engineering  
 1969 Johns Hopkins University; M.A. in Experimental Psychology  
 1971 Johns Hopkins University; Ph.D in Experimental Psychology

### B. Appointments

Assistant Professor, Associate Professor , Professor and Research  
 Professor, Florida Atlantic University

### C. Selected Peer-Reviewed Publications

(most recent five from the last 7 years)

Norman, J., Hock, H.S., & Schöner, G. (2014). Contrasting accounts of direction and shape discrimination in short-range motion: Counterchange compared with motion energy detection. *Attention, Perception & Psychophysics*.

Seifert, M. & Hock, H.S. (2014). Independent detection of motion energy and counterchange: Flexibility in motion detection. *Vision Research*.

Pelah, A., Barbur, J., Thurrell, A., & Hock, H.S. (2014). The coupling of vision with locomotion in cortical blindness. *Vision Research*.

Hock, H.S. (2014). Dynamic grouping motion: A method for determining perceptual organization for objects with connected surfaces. *The Handbook of Perceptual Organization*. Editor: J. Wagemans.

Hock, H.S. & Nichols, D.F. (2013). The perception of object vs. objectless motion. *Attention, Perception & Psychophysics*.

### D. Selected Other Publications or Products/Grants

(next most recent five from the last 7 years)

Odic, D., Hock, H.S., & Halberda, J. (2013). The effect of confidence hysteresis on approximate number discrimination in young children. *Journal of Experimental Psychology: General*.

Hock, H.S. & Nichols, D.F. (2012). Motion perception Induced by dynamic grouping: A probe for the compositional structure of objects. *Vision Research*, 59, 45-63.

Daniels, L.B., Nichols, D.F., Seifert, M.S., & Hock, H.S. (2012). Changes in pupil diameter entrained by cortically initiated changes in attention. *Visual Neuroscience*, 29, 131-142.

Hock, H.S., Schöner, G., Brownlow S., & Taler, D. (2011). The temporal dynamics of global-to-local feedback in the formation of hierarchical motion patterns: Psychophysics and computational simulations. *Attention, Perception & Psychophysics*. 73, 1171-1194.

Azzopardi, P., & Hock, H.S. (2011). Illusory motion perception in blindsight. *Proceedings of the National Academy of Sciences*, 108, 876-881.

**E. Synergistic Activities**

Manuscript reviews during past seven years for:

PLOS One  
 Attention Perception & Psychophysics  
 Vision Research  
 Perception  
 Quarterly Journal of Experimental Psychology  
 Seeing and Perceiving  
 Cerebral Cortex  
 Memory & Cognition  
 Journal of Vision  
 Acta Psychologica

**F. Collaborators and Other Affiliations**

Gregor Schöner, University of the Ruhr, Germany  
 Adar Pelah, University of York, England  
 Paul Azzopardi, Oxford University, England  
 Julio Martinez-Trujillo, McGill University, Canada  
 Simone Gori, University of Padua, Italy  
 Jonathan Flombaum, Johns Hopkins University  
 Justin Halberta, Johns Hopkins University

**G. Courses Taught**

None in last seven years

## Erika Hoff

### EDUCATION

- 1981      Ph.D., University of Michigan, Psychology
- 1976      M.S., Rutgers - The State University of New Jersey, Psychology
- 1972      A.B.Ed., University of Michigan, "with distinction"

### PROFESSIONAL POSITIONS (since 2007)

- 1996-      Department of Psychology, Florida Atlantic University
- Present    Position: Professor of Psychology
- Spring    ESRC Centre for Research on Bilingualism in Theory and Practice
- 2011      Bangor University, Wales
- Position: Visiting Researcher
- (on sabbatical leave from Florida Atlantic University)

### EXTERNAL RESEARCH GRANTS (since 2007)

- 2011-      Principal Investigator, "Early Dual Language Development in Children from Spanish-Speaking Families." *Eunice*
- 2016      *Kennedy Shriver* National Institute of Child Health and Human Development (\$3,200,000, plus \$362,000 diversity supplement and \$277,000 administrative supplement).
- 2009-      Principal Investigator, "Patterns of bilingual development and their environmental correlates." *Eunice Kennedy Shriver*
- 2011      National Institute of Child Health and Human Development (\$275,000, plus \$115,000 diversity supplement)
- 2007-      Principal Investigator, "Phonological memory and language in young monolingual and bilingual children." National
- 2009      Institute of Child Health and Human Development (\$142,000, plus \$82,000 diversity supplement)

### OUTREACH ACTIVITIES (selected from those since 2007)

- 2014      Member, Bridging the Word Gap Research Network (Funded by the Health Resources and Services Administration)
- 2014      Bilingual Development: What Every Provider Should Know
- Reach Out and Read Webinar for Pediatric Care Providers, March 5.
- 2013      Early Language Gaps: Sources and Solutions. White Paper summary presented to the White House-sponsored meeting on "Bridging the Thirty-Million-Word Gap" (White Paper authors: Rowe, M., Suskind, D., & Hoff, E.)
- 2010-      Technical Work Group member of the Center for Early Care and Education: Dual Language Learners, Frank Porter
- 2013      Graham Development Institute, University of North Carolina-Chapel Hill
- 2009      Do Vocabulary Differences Explain Achievement Gaps and Can Vocabulary-Targeted Interventions Close Them?"
- Invited contribution to the National Research Council workshop on the Role of Language. October 15-16. Palo Alto, California.

### PUBLICATIONS (selected from those since 2007)

#### Books and Monographs

- 2014      Hoff, E. *Language development*, Fifth Edition. Belmont, California: Wadsworth/Cengage Learning.

- 2009 Naigles, L. R., Hoff, E., & Vear, D. Flexibility in early verb use: Evidence from a multiple-n diary study. *Monographs of the Society for Research in Child Development*, vol. 74, no. 2, Serial No. 293.

### Edited Books

- 2012 Hoff, E. (Ed.), *Research methods in child language: A practical guide*. Wiley-Blackwell, Publishers.
- 2007 Hoff, E. & Shatz, M. (Eds.), *Blackwell handbook of language development*. Oxford, England: Blackwell Publishers.

### Journal Articles (selected from 24 journal articles and book chapters since 2007, \* student author)

- 2014 Hoff, E., Rumiche, R., Burrridge, A., Ribot\*, K. M., & Welsh\*, S. N. Expressive vocabulary development in children from bilingual and monolingual homes: A longitudinal study from two to four years. *Early Childhood Research Quarterly*, 29, 433-444. doi:10.1016/j.ecresq.2014.04.012
- 2014 Ribot, K. M.\* & Hoff, E. “¿Cómo estás?” “I’m good.” Conversational code-switching is related to profiles of expressive and receptive proficiency in Spanish-English bilingual toddlers. *International Journal of Behavioral Development*, 38, 333-341. doi:10.1177/0165025414533225
- 2014 Bridges, K.\* & Hoff, E. Older sibling influences on the language environment and language development of toddlers in bilingual homes. *Journal of Applied Psycholinguistics*, 35, 225-241. doi:10.1017/S0142716412000379
- 2013 McCabe, A., Tamis-LeMonda, C., Bornstein, M. H., Cates, C. B., Golinkoff, R., Hirsh-Pasek, K., Hoff, E., Kuchirko, Y., Melzi, G., Mendelsohn, A., Paez, M., Song, L. Wishard Guerra, A. Multilingual children: Beyond myths and towards best practices. *SRCD Social Policy Report*. vol 27, No. 4.
- 2013 Core, C., Hoff, E., Rumiche, R., & Señor, M. Total and conceptual vocabulary in Spanish-English bilinguals from 22 to 30 months: Implications for assessment. *Journal of Speech, Language, and Hearing Research*, 56, 1637-1649. DOI:10.1044/1092-4388(2013/11-0044
- 2013 Hoff, E. Interpreting the early language trajectories of children from low SES and language minority homes: Implications for closing achievement gaps. *Developmental Psychology*, 49, 4-14. DOI: 10.1037/a0027238
- 2012 Hoff, E., Core, C., Place, S.\*, Rumiche, R., Señor, M., & Parra, M.\* Dual language exposure and early bilingual development. *Journal of Child Language*, 39, 1-27. doi:10.1017/S0305000910000759
- 2011 Place, S.\* & Hoff, E. Properties of dual language exposure that influence two-year-olds’ bilingual proficiency. *Child Development*, 82, 1834-1849. DOI: 10.1111/j.1467-8624.2011.01660.x
- 2011 Parra, M.\*, Hoff, E., & Core, C. Relations among language exposure, phonological memory, and language development in Spanish-English bilingually developing two-year-olds. *Journal of Experimental Child Psychology*, 108, 113-125. doi:10.1016/j.jecp.2010.07.011

### COURSES TAUGHT (since 2007)

Seminar in monolingual and bilingual language development (graduate seminar), Seminar in language development (graduate course), Human development, Research methods, Language acquisition, Childhood bilingualism

### Sang Wook (Sammy) Hong

Department of Psychology, Florida Atlantic University  
 209 Behavioral Science  
 777 Glades Road  
 Boca Raton, FL 33431, U.S.A.  
 Tel : 1-561-297-2905  
 E-mail : [shong6@fau.edu](mailto:shong6@fau.edu)  
 Last update: October 2014

#### (a) Professional Preparation

Institution	Major/Area	Degree & Year
Yonsei University, Seoul, South Korea	Psychology	B.S., 1997
Yonsei University, Seoul, South Korea	Experimental Psychology	M.A., 1999
University of Chicago, Chicago, IL	Experimental Psychology	Ph.D., 2005
Vanderbilt University, Nashville, TN	Cognitive Neuroscience	Post-doc 2006-2011

#### (b) Appointments

Institution	Position	Year
Florida Atlantic University, Boca Raton, FL	Assistant Professor	2011-present

#### (c) Five Selected Peer-Reviewed Publications

- Chong, E., **Hong, S. W.**, & Shim, W. M. (in press, *Journal of Vision*). Color updating on the apparent motion path.
- Hong, S. W.**, & Kang, M. -S. (2013). Perceptual consequence of normalization revealed by a novel brightness induction. *Vision Research*, 91, 78-83.
- Hong, S. W.**, Tong, F., & Seiffert, A. E. (2012). Direction-selective patterns of activity in human visual cortex suggest common neural substrates for different types of motion. *Neuropsychologia*, 50, 514-521.
- Hong, S. W.**, & Shevell, S. K. (2009). Color-binding errors during rivalrous suppression of form. *Psychological Science*, 20, 1084-1091.
- Hong, S. W.**, & Blake, R. (2009). Interocular suppression differentially affects achromatic and chromatic mechanisms. *Attention, Perception, and Psychophysics*, 71, 403-411.

#### (d) Five Selected Other Publications or Products/Grants

##### (d.1) Book Chapter

**Hong, S. W.** (Accepted as a book chapter, *The Oxford Compendium of Visual Illusions*). Large shift in brightness induced by motion in context.

##### (d.2) Grant Applications

National Institute of Health. (pending). "Perceptual consequence of visual competition: Large shift in appearance due to contextual motion". **S. W. Hong, P.I.** Requested Amount: \$971,750

National Science Foundation, Early Career Development Award Grant. (pending). "Perceptual consequence of visual competition". **S. W. Hong, P.I.** Requested Amount: \$874,413

National Science Foundation. (pending). "Representation of dynamic visual object". **S. W. Hong, Consultant.** Requested Amount: \$736,320

National Institute of Health. (not funded, 2012). "Multisensory integration of face and voice in subconscious processing". **S. W. Hong, P.I.** Requested Amount: \$316,318

### (e) Synergistic Activities

#### (e.1) *Service to the scientific community outside of the immediate organization*

- Developing facial expression database for research and education (1999, in Korea)
- Advising a high school, female student in a research outreach program at Vanderbilt University (2011, publish the outcome in peer reviewed journal)
- Peer reviewer for psychological and neuroscience journals, and NSF grant proposal

#### (e.2) *Broadening the participation of groups underrepresented in science*

- From 2010-current, there were 5 women or minority graduate and undergraduate students who spent significant time training in our lab.

### (f) Collaborators and Other Affiliations

#### *Collaborators*

Randolph Blake (Vanderbilt University), Nancy Carlisle (UC Davis), Davis Glasser (U of Rochester), Jutta Joormann (U of Miami), Min-Suk Kang (Sungkyunkwan University), Para Kang (UIC), Sohee Park (Vanderbilt University), Won Mok Shim (Dartmouth College), Dujie Tadin (U of Rochester), Adriane Seiffert (Vanderbilt University), Frank Tong (Vanderbilt University), Melonie Williams (Vanderbilt University), Geoffrey Woodman (Vanderbilt University), Linda Xu (Harvard University), Eunice Yang (UC Berkeley), Lira Yoon (U of Maine)

### (g) Courses Taught

#### Undergraduate Courses taught:

Cognition (Lecture): Fall 2011, Spring 2012, Fall 2012, Fall 2014  
Human Perception (Lecture): Spring 2014

#### Graduate Courses developed and taught:

Attention and Consciousness (Lecture and Seminar): Spring 2013  
Seminar in Cognition (Lecture and Seminar): Fall 2013



**Katherine M. Hughes**

**Department of Psychology/ FAU 5353 Parkside Drive, Jupiter, FL 33458**  
**Office WB 216 Telephone: (561) 799-8616 E-mail: [hughes@fau.edu](mailto:hughes@fau.edu)**

**Education:**

Ph.D. Florida Atlantic University, December 2000  
 Psychology (Behavioral Neuroscience focus)  
 M.A. Florida Atlantic University, May 1996  
 Psychology ((Behavioral Neuroscience focus)  
 B.A. Florida Atlantic University, May 1992/ Psychology

**Positions held:**

2001- Dec. 2005 Assistant Professor, Dept. of Psychology  
 Florida Atlantic University/ Charles E. Schmidt College of Science  
 Treasure Coast Campus, Port Saint Lucie, FL  
 Jan 2006- 2010 Assistant Professor, Dept. of Psychology  
 Florida Atlantic University/ Charles E. Schmidt College of Science,  
 MacArthur Campus, Jupiter, FL  
 2011-present Instructor, Dept. of Psychology  
 Florida Atlantic University/ Charles E. Schmidt College of Science,  
 MacArthur Campus, Jupiter, FL

**Honors:**

2014 NCAA Award for Exceptional Faculty/ Charles E. Schmidt College of Science/ Jupiter  
 2009 MAC Award Outstanding Faculty: Charles E. Schmidt College of Science  
 2007 MAC Award Outstanding Faculty: Charles E. Schmidt College of Science  
 2005 University-wide Award for Excellence in Undergraduate Teaching  
 2005 Charles E. Schmidt College of Science Award for Excellence in Undergraduate Teaching

**Refereed Journal Publications: International**

Hughes, K.M. & Wolgin, D.L. Changes in behavioral contingencies produce a loss of tolerance to amphetamine hypophagia in rats despite continued tests while drugged. *Behavioural Pharmacology*, 2002, 13, 279-286.

Wolgin, D.L. & Hughes, K.M. (2001). Long term retention of tolerance to amphetamine hypophagia following cessation of drug injections and feeding tests. *Pharmacology, Biochemistry and Behavior*, 70, 367-373.

Hughes, K.M., Popi, L. & Wolgin, D.L. (1999). Loss of tolerance to amphetamine-induced hypophagia in rats: Homeostatic readjustment vs. instrumental learning. *Pharmacology, Biochemistry and Behavior*, 64, 177-182.

**Conference Presentations Refereed With Published Abstract: International**

S.B. Linley and K.M. Hughes (2009). Spatial navigation in the water maze is not impaired following high doses of 3,4-methylenedioxymethamphetamine (MDMA) despite substantial serotonergic denervation of the forebrain in the rat. **Annual Meeting of the Society for Neuroscience, Chicago, IL 2009.**

S.B. Linley, M.L. Steigerwald, W.B. Hoover III, K.M. Hughes, and R.P. Vertes (2008). Effects of excitotoxic lesions of the midline thalamus on attention and working memory in the rat. **Annual Meeting of the Society for Neuroscience, Washington D.C. 2008.**

Hughes, K.M., Linley S.B., and Vertes, R.P. Effect of partial serotonergic denervation using parachloroamphetamine on reversal learning and attentional set shifting with an odor texture discrimination task in the rat. **Abstracts of the Annual Meeting of the Society for Neuroscience, San Diego, CA. (2007)**

Linley, S.B. , Hoover, III W.B., Morales G.J., Hughes K.M. and Vertes, R.P. 5-HT

and SERT innervation of the thalamus in the rat. **Abstracts of the Annual Meeting of the Society for Neuroscience, San Diego, CA. (2007)**

Hughes, K.H. and Linley, S.B. Heavy substance abuse during critical adolescent development may lead to deficits akin to cognitive decline characteristic of neurodegenerative disease. **International Brain Conference , Orlando, FL (2007)**

### **Competitive Grants- External Funding**

Hughes, K. M. (2008). Behavioral evaluation of monoaminergic systems. (NIH) Division of Basic Neuroscience and Behavioral Research (DBNBR). (NIDA) Drug Supply Program administered by the Chemical and Physiological Systems Research Branch. Peer reviewed:  
Request: \$28,830 3 grams MDMA (\$96.10 per 10mg) Funded 9/24/08

### **Courses Taught at FAU**

Psychopharmacology, Biological Bases of Behavior, Biological Bases of Behavior II, Neuropsychology, Psychology of Addiction, Research Methods in Psychology, Cognition, Psychology of Motivation, Abnormal Psychology, Social Psychology, Research in Psychopharmacology, Psychology of Women, Personality Theories, Social Behavior Lab, Psychology of Human Development

### **Service Activities**

#### **Departmental Committees:**

2007 – present	Psychology club/fair
2002 – present	Library Committee
2004 – 2007	Undergraduate Committee
2002-2003	Chair, Faculty Search Committee

#### **University Service**

2012	NTT faculty promotion committee, Charles E. Schmidt College of Science
2011 – present	NCAA awards
2008	Student Government MAC Awards
2006 - present	MacArthur Campus Library Committee
2006	Coffee with the Professor/ Community Outreach Talk

#### **Community Service**

2010-2014	Science Fair Judge
2007	Invited lecture, Dreyfoos School of the Arts, Palm Beach County

#### **Professional**

2012-2014	Ad hoc reviewer, Oxford University Press
2007	Ad hoc reviewer, Wadsworth Publishers <i>Foundations of Biological Psychology</i>
2007	Ad hoc reviewer, Cerebral Cortex
2004	Ad Hoc Reviewer, McGraw Hill Psychobiology Text; <i>Brain and Behavior: Foundations of Behavioral Neuroscience</i>
2001-2003	Women in Neuroscience Travel Award Reviewer; Newsletter contributor

### **Professional Affiliations:**

Society for Neuroscience  
Faculty for Undergraduate Neuroscience

## James J. Jakubow

### A. Professional Preparation

Ph.D., Graduate School and University Center of the City University of New York, 2000  
 M.Phil., Graduate School and University Center of the City University of New York, 1998  
 M.A., Western Michigan University, 1988  
 B.A., Temple University, 1986

### B. Appointments

2010-present, Instructor, Florida Atlantic University  
 2006-2010, Visiting Instructor, Florida Atlantic University  
 2004-2006, Adjunct Instructor, Florida Atlantic University  
 2003-2004, Visiting Assistant Professor, Wilkes Honors College, Florida Atlantic University  
 2001-2003, Instructional Specialist, University of South Florida, Department of Child and Family Studies  
 1998-2001, Postdoctoral Researcher, Florida Atlantic University, Department of Psychology

### C. Selected Peer-Reviewed Publications

Jakubow, J. J. (2014). Hello Kitty [Review of the book *Cat Sense*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 59 (No. 5), Article 5. Retrieved [7/18/14], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2013, April 24). Bouncing Back from Adversity [Review of the book *Surviving Survival: The Art and Science of Resilience*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 58 (No. 17), Article 4. Retrieved [5/7/13], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2011, December 7). It's Like Reincarnation All Over Again [Review of the film *Uncle Boonmee Who Can Recall His Past Lives*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 56 (No. 49), Article 9. Retrieved [12/13/11], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2010, September 8). Constructing the Future Constructs [Review of the book *Measuring Psychological Constructs: Advances in Model-Based Approaches*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 55 (No. 36), Article 1. Retrieved [12/14/10], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2010, January 20). Communicating More Effectively [Review of the book *Communimetrics: A Communication Theory of Measurement in Human Service Settings*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 55 (No. 3), Article 7. Retrieved [2/13/10], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2009, April 1). Everything You Always Wanted to Know About Fear But Were Afraid to Ask [Review of the book *Handbook of Anxiety and Fear*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 54 (No. 13), Article 7. Retrieved [9/2/09], from the *PsycCRITIQUES* database.

Jakubow, J. J. (2008, August 27). Motoring Our Behavior [Review of the book *A Theory of the Basal Ganglia and Their Disorders*]. *PsycCRITIQUES—Contemporary Psychology: APA Review of Books*, 53 (No. 35), Article 8. Retrieved [9/2/09], from the *PsycCRITIQUES* database.

### D. Selected Other Publications or Products/Grants

Jakubow, J. J. (2014). *General Psychology: Lecture notes and Study Guide* (4<sup>th</sup> ed.). Dubuque, IA: Kendall Hunt.

Jakubow, J. J. (2012). *Psychology: The scientific approach*. (2<sup>nd</sup> ed.). Dubuque, IA: Kendall Hunt.

### E. Synergistic Activities

None

**F. Collaborators and Other Affiliations**

Dean of Research, American College of Applied Science <http://www.amcollege.us>

**G. Courses Taught**

General Psychology

Biological Bases of Behavior

**H. Community Engagement or Out-reach**

None

## Ingrid B. Johanson

### A. Professional Preparation

B.A.	Cornell University Ithaca, New York Majors: <i>Psychology and Biology (Neurobiology and Animal Behavior)</i>	1973
Ph.D.	City University of New York New York, New York <i>Psychology (Biopsychology)</i> Dissertation: The behavioral development of hypothyroid and hyperthyroid rats	1978
Postdoct.	North Carolina Division of Mental Health Research Section Raleigh, North Carolina <i>Developmental psychobiology</i>	1978- 1981

### B. Appointments

2001- Present	Senior Associate Dean Charles E. Schmidt College of Science	
1996- 2001	Associate Dean for Student Services Charles E. Schmidt College of Science Florida Atlantic University, Boca Raton, Florida	
1990- 1996	Chair, Department of Psychology Florida Atlantic University, Boca Raton, Florida	
1988- 1990	Assistant Chair, Department of Psychology Florida Atlantic University, Boca Raton, Florida	
1985- present	Associate Professor of Psychology Florida Atlantic University, Boca Raton, Florida	

### C. Selected Peer-Reviewed Publications

### D. Selected Other Publications or Products/Grants

### E. Synergistic Activities

### F. Collaborators and Other Affiliations

### G. Courses Taught

**CBH4024 Comparative Animal Behavior**

### H. Community Engagement or Out-reach

Regional director for the Southeast Regional of Florida Science Olympiad

**NANCY AARON JONES, Ph.D.**

*Florida Atlantic University, John D. MacArthur Campus*

5353 Parkside Drive, Jupiter, FL 33458, (561) 799-8632, E-Mail: njones@fau.edu

Associate Professor, Florida Atlantic University

CESchmidt, College of Science, Department of Psychology & Behavioral Neuroscience

**A. Professional Preparation/Education**

Ph.D. University of Maryland-College Park, December 1994. Developmental Psychophysiology. Dissertation: The stability of EEG power and asymmetry and its relation to personality in 4- and 7-year-old children. (Major Professor: Nathan A. Fox, Ph.D.)

M.A. University of Maryland-College Park, May 1990. Developmental Psychophysiology. Thesis: Electroencephalogram asymmetry during emotionally evocative films and its relation to positive and negative affectivity. (Major Professor: Nathan A. Fox, Ph.D.)

B.A. University of Wisconsin-Madison, May 1986. General Psychology. Thesis Paper: The recognizability of infant and monkey facial expressions by naive and experienced observers. (Major Professor: Steve Suomi, Ph.D.)

**B. Appointments**

Associate Professor (tenured), 2003-present and Assistant Professor (tenure-track), 1997 to 2003, Florida Atlantic University, Jupiter Campus.

Research Assistant Professor & Postdoctoral Research Assistant, 1994-1997 University of Miami, School of Medicine, Miami, Florida. Director of the Psychophysiological Development Laboratory at the Touch Research Institute.

Research Project Coordinator, 1993-1994, Sheppard Pratt Hospital, Towson, Maryland.

**C. Selected Peer-Reviewed Publications**

Jones, N.A., Field, T., & Almeida, A. (2009). Right frontal EEG asymmetry and behavioral inhibition in infants of depressed mothers. *Infant Behavior and Development*, 32(3), 298-304.

Diego, M., Jones, N.A., & Field, T. (2010). EEG in 1-week, 1-month and 3-month-old infants of depressed and non-depressed mothers. *Biological Psychology*, 83, 7-14.

Mize, K.D., & Jones, N.A. (2012). Infant physiological and behavioral responses the loss of maternal attention to a social rival. *International Journal of Psychophysiology*, 83, 16-23.

Jones, N.A. (2012). Delayed reactive cries demonstrate emotional and physiological dysregulation in newborns of depressed mothers. *Biological Psychology*, 89, 374-381.

Mize, K.D., Pineda, M., Blau, A.K., Marsh, K., and Jones, N.A., (2014). Infant Physiological and Behavioral Responses to a Jealousy Provoking Condition. *Infancy*, 1-11. DOI: 10.1111/infa.12046.

**D. Selected Other Publications or Products/Grants**

Barrera, C., Jones, N.A., & Mize, K.D., (2014). Feeding Patterns Influence Brain Development in Infancy. *FAU Undergraduate Research Journal*, 3 (1).

Jones, N.A. & Gagnon C. (2007). Neurophysiology of empathy. In T. Farrow & P. Woodruff (Eds.) *Empathy and Mental Health*. Cambridge University Press.

Jones, N.A. & Mize, K. (2007). Touch interventions positively affects development. In L. L' Abate, D. D. Embry, & M. S. Baggett (Eds.), *Handbook of Low-cost Interventions to Promote Physical and Mental Health: Theory, Research and Practice*. Springer-Verlag Publishers.

Pineda, M., & Jones, N.A. (2012). The longitudinal stability of jealousy in infancy. *FAU Undergraduate Research Journal*, 1(1), 55-63.

**Grants Awarded**

National Institute of Mental Health, Behavioral Science Track Award for Rapid Transition (B/START Program). Title: EEG and feeding patterns in infants of depressed mothers. Amount Awarded: \$25,000 Direct costs and 38.5% Indirect costs, Total: \$34,625.

2013-2014 Technology Grant: Developmental Psychophysiology and Neurohormone Lab for updating EEG equipment, lab computers, lab freezer and lab assistant set-up. Amount funded: 50,722.

**E. Synergistic Activities**

2013-2015. University Seed grant Award. Cortisol and Oxytocin Interactions and the Maternal-Infant Socio-Emotional Relationship. Amount funded: \$18,960.

Dr. Christine Williams, Christine E. Lynn College of Nursing, Cortisol Analysis and Seed Grant Award and Dr. Kirchman at the Honor's College and Dr. Weissbach in the Center for Molecular Biology and Biotechnology help provide appropriate lab space for oxytocin and cortisol analysis

**F. Collaborators and Other Affiliations**

Dr. Sybil Hart, Texas Tech University, Jealousy Project

Dr. Tiffany Field, University of Miami School of Medicine, Depression Projects

Dr. Toni Ziegler, University of Wisconsin Primate Laboratory, Neurohormone Project

EEG Mu Rhythm Analysis of Infant Social information Processing. Submitted to NIH, R03 program by Dr. Kimberly Cuevas. October 2013. Role: Consultant.

**G. Courses Taught**

Psychology of Human Development DEP 3053; Research Methods in Psychology PSY 3213; Experimental Design and Statistical Inference PSY 3234, Social Psychology SOP 3004, Intermediate Statistics Lab STA 3163L, Abnormal Psychology CLP 4144, Personality and Social Development DEP 4095, Infant Development DEP 4115, Psychology of Adolescence DEP 4305, Human Development Laboratory DEP 4797C, Personality Theories PPE 4003, Experimental Studies of Personality PPE 4700, Human Psychophysiology PSB 4323, Developmental Psychobiology PSB 4504, Special Topics in Psychology, PSY 4930, Directed Independent Study PSY 4906, Honors Thesis PSY 4970, Psychology of Women SOP 3742, Social Behavior Laboratory SOP 4230C, Current Issues in Social Psychology SYP 4002, Special Topics in Psychology PSY 5930, Masters Thesis PSY 6971, Directed Independent Study EXP 6908, Advanced Research in Psychology PSY 7978, Dissertation Thesis PSY 7980.

**H. Community Engagement or Out-reach**

Boca Raton Community Hospital, Breastfeeding rates research project, 2000-2001.

Palm Beach County Breastfeeding Coalition, Chair-Elect, 2000-2003, Chair 2003-2004. Member 2005-2006, 2010-present.

The Children's Healing Institute. Turn on the Light Conference Presenter on Child Abuse and Neglect, 2010, 2012.

## ALAN KERSTEN

### A. Professional Preparation

December, 1989 - Received Bachelor of Science degree in Psychology from the University of Wisconsin  
 March, 1993 - Received M.S. degree from the Georgia Institute of Technology  
 September, 1995 - Received Ph.D. degree with minor in Linguistics from the Georgia Institute of Technology  
 September 1995 to June 1998 - Postdoctoral research associate at Indiana University as part of a developmental training grant

### B. Appointments

September 1997 to December 1997 - Adjunct professor at Indiana University  
 August 1998 to May 2004 - Assistant professor at Florida Atlantic University  
 May 2004 to Present – Associate professor at Florida Atlantic University

### C. Selected Peer-Reviewed Publications

Kersten, A.W., Earles, J.L., & Berger, J.D. (in press). Recollection and unitization in associating actors with extrinsic and intrinsic motions. *Journal of Experimental Psychology: General*.

Kersten, A.W., Earles, J.L., & Upshaw, C. (2013). False recollection of the role played by an actor in an event. *Memory & Cognition*, 41, 1144-1158.

Kersten, A.W., Meissner, C.A., Lechuga, J., Schwartz, B.L., Albrechtsen, J.S., & Iglesias, A. (2010). English speakers attend more strongly than Spanish speakers to manner of motion when classifying novel objects and events. *Journal of Experimental Psychology: General*, 139, 638-653.

Kersten, A.W., & Earles, J.L. (2010). Effects of aging, distraction, and response pressure on the binding of actors and actions. *Psychology and Aging*, 25, 620-630.

Kersten, A.W., Earles, J.L., Curtayne, E.S., & Lane, J.C. (2008). Adult age differences in binding actors and actions in memory for events. *Memory & Cognition*, 36, 119-131.

### D. Selected Grants

Grant Project Title: The Roles of Frontal and Medial Temporal Lobe Functioning in Memory for Events

Budget Period: 3/1/12 – 2/28/14

Funding Agency: Florida Atlantic University College of Science

Principal Investigator: Alan Kersten

Award Amount: \$5,000

Grant Project Title: Adult Age Differences in Binding Actors and Actions

Budget Period: 9/1/04 – 6/30/08

Funding Agency: National Institutes of Health

Principal Investigator: Alan Kersten

Award Amount: \$206,700



**E. Synergistic Activities**

Dr. Kersten has made a contribution to the science of learning in his research on second language learning. This research was published in the *Journal of Memory and Language* and was also featured in a story by the Nature News Service.

**F. Collaborators**

Julie Earles, Florida Atlantic University  
 Robert Goldstone, Indiana University  
 Christian Meissner, University of Texas at El Paso  
 Bennett Schwartz, Florida International University  
 Linda Smith, Indiana University  
 Laura Vernon, Florida Atlantic University

**G. Courses Taught**

Psychology of Human Development (DEP 3053)  
 Language Acquisition (DEP 4130)  
 Human Learning and Memory (EXP 4525)  
 Memory and the Hippocampus (EXP 6930)  
 Seminar in Aging and Memory (EXP 6930)  
 Language Influences on Thought (PSY 6930)  
 Memory and Eyewitness Testimony (PSY 6930)

**H. Community Out-reach**

Dr. Kersten was interviewed by dugdug.com, a science outreach website, regarding his 2013 publication “False recollection of the role played by an actor in an event.” As part of this interview, he also discussed the strengths and weaknesses of eyewitness testimony as evidence in criminal trials.

## Brett Laursen

### Educational Background

- Ph.D., Child Psychology, Institute of Child Development, University of Minnesota, 1989.
- M.A., Child Psychology, Institute of Child Development, University of Minnesota, 1987.
- B.A., Psychology, Nebraska Wesleyan University, 1984.

### Academic Positions

- Professor of Psychology (tenured), Florida Atlantic University, 2000 to present.
- Director of Graduate Training, Department of Psychology, 2005 to present
- Docent Professor of Psychology, University of Jyväskylä, Finland, 2005 to present.
- Associate Professor of Psychology (tenured), Florida Atlantic University, 1994 to 2000.
- Assistant Professor of Psychology (tenure track), Florida Atlantic University, 1991 to 1994.
- Assistant Professor of Psychology (tenure track), University of Maine, 1989 to 1991.

### Visiting Appointments

- Visiting Research Scientist, Department of Psychology, University of Jyväskylä, Finland, Summer Semester, 2008.
- Research Scientist, Center of Excellence for Human Development and Its Risk Factors, University of Jyväskylä, Finland, Fall Semester, 1999.

### Honors

- Distinguished Alumni Award, College of Education and Human Development, University of Minnesota, 2012
- Honorary Doctorate, Örebro University, Sweden, 2008.
- Fellow, American Psychological Association (Division 7, Developmental), 2004.
- Fellow and Charter Member, Association for Psychological Science, 2003.

### Research Awards

*Math pathways: A longitudinal dyadic study of parent-child influence in Latino families* (NSF 1248598). A total of \$1,064,491 in direct and indirect costs for 3 years (2013-2016) from the U.S. National Science Foundation (Research and Evaluation on Education in Science and Engineering, Division of Research on Learning). (J. Denner and B. Laursen, principal investigators).

*Homophily and peer influence in developmental processes that support learning* (NSF 0923745). A total of \$179,622 in direct costs and \$69,752 in indirect costs for 2 years (2009 to 2011) from the U.S. National Science Foundation (Developmental and Learning Sciences, Division of Behavioral and Cognitive Sciences). (B. Laursen, principal investigator).

*The development of computational thinking among middle school students creating computer games* (NSF 0909733). A total of \$1,092,908 in direct and indirect costs for 3 years (2009 to 2012) from the U.S. National Science Foundation (Research and Evaluation on Education in Science and Engineering, Division of Research on Learning in Formal and Informal Settings). (J. Denner and L. L. Werner, principal investigators; B. Laursen, investigator).

*Friendship and psychosocial adaptation*. A total of \$2,220,167 in direct costs and \$746,786 in indirect costs for five years (2004 to 2009) from the U.S. National Institute of Mental Health. (K. Rubin, principal investigator; C. Booth, K. Burgess, B. Laursen, and L. Rose-Krasnor, co-principal investigators.)

### Select Recent Peer-Reviewed Journal Articles out of 75 total (\*student coauthor)

\*Dirghangi, S., \*Bortman, G., Laursen, B., Brendgen, M., Vitaro, F., Dionne, G., & Boivin, M. (in press). Does corumination cultivate anxiety? A genetically controlled study of friend influence during early adolescence.

*Developmental Psychology*.

Vitaro, F., \*Hartl, A. C., Brendgen, B., Laursen, B., Dionne, G., & Boivin, M. (in press). Genetic and environmental influences on gambling and substance use in early adolescence. *Behavior Genetics*.

Laursen, B., & \*Richmond, A. (2014). Personality, relationships, and behavior problems: It's hard to be disagreeable. *Journal of Personality Disorders*, 28, 143-150. . doi: [10.1521/pedi.2014.28.1.143](https://doi.org/10.1521/pedi.2014.28.1.143)

\*Marion, D., Laursen, B., Kiuru, N., Nurmi, J.-E., & Salmela-Aro K. (2014). Maternal affection moderates friend influence on schoolwork engagement. *Developmental Psychology*, 50, 766-771. doi: [10.1037/a0034295](https://doi.org/10.1037/a0034295)

\*Hafen, C. A., Laursen, B., Nurmi, J.-E., & Salmela-Aro, K. (2013). Bullies, victims, and antipathy in adolescence: The feeling is mutual. *Journal of Abnormal Child Psychology*, 41, 801-809. doi: [10.1007/s10802-013-9720-5](https://doi.org/10.1007/s10802-013-9720-5)

\*Marion, D., Laursen, B., Zettergren, P., & Bergman, L. R. (2013). Predicting life satisfaction during middle adulthood from peer relationships during mid-adolescence. *Journal of Youth and Adolescence*, 42, 1299-1307. doi: [10.1007/s10964-013-9969-6](https://doi.org/10.1007/s10964-013-9969-6)

Seiffge-Krenke, I., Laursen, B., \*Dickson, D. J., & \*Hartl, A. C. (2013). Declining metabolic control and decreasing parental support among families with adolescents with diabetes: The risk of restrictiveness. *Journal of Pediatric Psychology*, 38, 518-530. doi: [org/10.1093/jpepsy/jst006](https://doi.org/10.1093/jpepsy/jst006)

\*Wang, J. M., Rubin, K. H., Laursen, B., Booth-LaForce, C., & Rose-Krasnor, L. (2013). Preference-for-solitude and adjustment difficulties in early and late adolescence. *Journal of Clinical Child and Adolescent Psychology*, 42, 834-842.. doi: [10.1080/15374416.2013.794700](https://doi.org/10.1080/15374416.2013.794700)

Laursen, B., \*Hafen, C. A., Kerr, M., & Stattin, H. (2012). Friend influence over adolescent problem behaviors as a function of relative peer acceptance: To be liked is to be emulated. *Journal of Abnormal Psychology*, 121, 88-94. doi:[10.1037/a0024707](https://doi.org/10.1037/a0024707)

Bukowski, W. M., Laursen, B., & Hoza, B. (2010). The snowball effect: Friendship moderates escalations in depressed affect among avoidant and excluded children. *Development and Psychopathology*, 22, 749-757. doi:[10.1017/S095457941000043X](https://doi.org/10.1017/S095457941000043X)

\*Burk, W. J., & Laursen, B. (2010). Mother and adolescent reports of associations between child behavior problems and mother-child relationship qualities: Separating shared variance from individual variance. *Journal of Abnormal Child Psychology*, 38, 657-667. doi:[10.1007/s10802-010-9396-z](https://doi.org/10.1007/s10802-010-9396-z)

Laursen, B., Bukowski, W. M., Nurmi, J.-E., \*Marion, D., Salmela-Aro, K., & Kiuru, N. (2010). Opposites detract: Middle school peer group antipathies. *Journal of Experimental Child Psychology*, 106, 240-256. doi:[10.1016/j.jecp.2010.03.001](https://doi.org/10.1016/j.jecp.2010.03.001)

Laursen, B., \*DeLay, D., & \*Adams, R. E (2010). Trajectories of perceived support in mother-adolescent relationships: The poor (quality) keep getting poorer. *Developmental Psychology*, 46, 1792-1798. doi:[10.1037/a0020679](https://doi.org/10.1037/a0020679)

#### Select Edited Volumes out of 8 total

Laursen, B., Little, T. D., & Card, N. A. (Eds.) (2012). *Handbook of developmental research methods*. New York: Guilford.

Laursen, B., & Collins, W. A. (Eds.) (2012). *Relationship pathways: From adolescence to young adulthood*. Thousand Oaks, CA: Sage.

Rubin, K. H., Bukowski, W. M., & Laursen, B. (Eds.) (2009). *Handbook of peer interactions, relationships, and groups*. New York: Guilford.

#### Graduate Supervision

Chaired to completion: 8 Ph.D., 16 M.A., and 8 B.A. Honors theses.

External examiner: 6 Ph.D. theses.

Currently Chairing: 1 Post-Doctoral Fellow, 6 Ph.D. students, and 1 M.A. student.

## MICHAEL R. MANIACI

### A. PROFESSIONAL PREPARATION

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<b>Ph.D in Social-Personality Psychology</b> with Certificate in Quantitative Methods <b>University of Rochester</b> , Rochester, NY	Mar 2015
<b>M.A. in Social-Personality Psychology</b> with Honors/Distinction <b>University of Rochester</b> , Rochester, NY	Oct 2009
<b>B.A. in Psychology</b> with Honors and Departmental Distinction Summa cum laude <b>Albright College</b> , Reading, PA	Dec 2004

### B. APPOINTMENTS

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<b>Instructor</b> , Department of Psychology, Florida Atlantic University	Aug 2014 – Present
<b>Lecturer</b> , Department of Psychology, Brock University	Aug 2013 – Jul 2014

### C. SELECTED PEER-REVIEWED PUBLICATIONS

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- Reis, H. T., **Maniaci, M. R.**, & Rogge, R. D. (2014). The expression of compassionate love in everyday compassionate acts. *Journal of Social and Personal Relationships*, 31, 651-676.
- Maniaci, M. R.** & Rogge, R. D. (2014). Caring about carelessness: Participant inattention and its effects on research. *Journal of Research in Personality*, 48, 61-83.
- Reis, H. T., **Maniaci, M. R.**, Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, 101, 557-570.
- Reis, H. T., **Maniaci, M. R.**, Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). In live interaction, does familiarity promote attraction or contempt?: A reply to Norton. *Journal of Personality and Social Psychology*, 101, 575-578.
- Reis, H. T., Smith, S. M., Carmichael, C. L., Caprariello, P. A., Tsai, F. F., Rodrigues, A., & **Maniaci, M. R.** (2010). Are you happy for me? How sharing positive events with others provides personal and interpersonal benefits. *Journal of Personality and Social Psychology*, 99, 311-329.

### D. SELECTED OTHER PUBLICATIONS

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- Maniaci, M. R.** & Rogge, R. D. (2014). Conducting research on the Internet. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (2<sup>nd</sup> edition). New York: Cambridge University Press.
- Reis, H. T., Gable, S. L., & **Maniaci, M. R.** (2014). Event-sampling and other methods for studying daily experience. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (2<sup>nd</sup> edition). New York: Cambridge University Press.

**Maniaci, M. R.** (2009). Couple identity. In H. T. Reis & S. Sprecher (Eds.) *Encyclopedia of human relationships*. Thousand Oaks, CA: Sage.

**Maniaci, M. R.** (2009). Need for belonging. In H. T. Reis & S. Sprecher (Eds.), *Encyclopedia of human relationships*. Thousand Oaks, CA: Sage.

## **E. SYNERGISTIC ACTIVITIES**

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**Ad-Hoc Reviewing**, *Journal of Social and Personal Relationships*, *Personal Relationships*, *The Journal of Positive Psychology*, *CyberPsychology & Behavior*

**Conference Symposium Chaired**, Maniaci, M. R. & Hawkley, L. C. (2012, July). *Recent advances in loneliness research*. Symposium chaired at the biennial conference of the International Association for Relationship Research, Chicago, IL. Speakers: Greg Norman, Michael Maniaci, Maike Luhmann, Louise Hawkley, & Daniel Perlman.

**Preconference Poster Review Committee**, *SPSP 2012*

**Conference Poster Review Committee**, *SPSP 2011*

## **F. COURSES TAUGHT**

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Experimental Design and Statistical Inference  
 Statistics and Research Design for the Behavioral Sciences  
 Introduction to Statistical Methods in Psychology  
 Psychological Research Methods  
 Social Psychology and Individual Differences  
 Psychology of Gender  
 Honors Seminar

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## DONNA ROSE MARION

### **Professional Preparation**

Florida Atlantic University, Boca Raton, FL (2003-2011)

Ph.D.	Experimental Psychology	2011	Developmental/Social/Quantitative
M.A.	Psychology	2008	Developmental Psychology
B.A.	Psychology	2005	Summa Cum Laude

### **Appointments**

Instructor, Florida Atlantic University, Department of Psychology, August 2014 - PRESENT

Managing Editor, International Journal of Behavioral Development, January 2014 - PRESENT

Editorial Board Member, Journal of Youth and Adolescence, 2013 - PRESENT

Adjunct Instructor, Florida Atlantic University, Department of Psychology, 2012-2014

Adjunct Instructor, Nova Southeastern University, 2010

### **Peer-Reviewed Publications**

Marion, D., Laursen, B., Bergman, L. R., & Zettergren, P. (2013). Predicting life satisfaction during middle adulthood from peer relationships during mid-adolescence. *Journal of Youth and Adolescence*, 42(8), 1299-1307. doi: 10.1007/s10964-013-9969-6

Marion, D., Laursen, B., Salmela-Aro, K., Kiuru, N., & Nurmi, J.-E. (2014). Friends influence school engagement: Maternal affection moderates negative influence. *Developmental Psychology*, 50(3). doi: 10.1037/a0034295

Laursen, B., Bukowski, W. M., Nurmi, J. -E., Marion, D., Salmela-Aro, K., & Kiuru, N. (2010). Opposites detract: Middle school peer group antipathies. *Journal of Experimental Child Psychology*, 106, 240-256. doi: 10.1016/j.jecp.2010.03.001

### **Courses Taught**

Social Psychology	Nine sections 2009-2014
Social Behavior Lab	Seven sections 2009-2014
Experimental Design and Statistical	Six sections 2010-2014
Psychology of Women	Six sections 2012-2014
Psychology of Women	DISTANCE LEARNING 2014
Psychology of Human Development	2012
Human Development Lab	2012
History of Psychology	2011
Intermediate Statistics Lab	Five sections 2007-2011

## KRYSTAL D. MIZE

### 1 PERSONAL DATA

Name: Krystal Diane Mize, Ph. D.

Address: 777 Glades Road, Boca Raton, FL 33431

Telephone: 561-297-3369

Email: [kmize1@fau.edu](mailto:kmize1@fau.edu)

### 2 EDUCATION

**Ph. D.** Experimental Psychology, Florida Atlantic University: Aug. 2008

Area of Concentration: Evolutionary Psychology

Dissertation: Infant jealousy responses: Temperament and EEG

Dissertation Co-Chairs: Nancy Aaron Jones, Ph. D. & David F. Bjorklund, Ph. D.

College Honor: 2008 Outstanding Academic Student in Science

**M. A.** Psychology, Florida Atlantic University: Aug. 2006

Thesis: Intimate partner homicide methods in heterosexual and homosexual relationships

Thesis Chair: Todd K. Shackelford, Ph. D.

**B. A.** Psychology, Colorado State University-Pueblo (FKA: USC): Dec. 2002, Cum Laude

Program Concentration: Experimental

Minor Area of Concentration: Evolution

University Honor: Threlkeld Prize

Department Honor: Outstanding Researcher

### 3 PROFESSIONAL & ACADEMIC ACTIVITIES

#### Teaching Activities

2011-present Visiting Instructor and Undergraduate Coordinator, Florida Atlantic University, Boca Raton, FL

#### Undergraduate Courses Previously Taught or Currently Teaching

##### Core Courses

Introduction to/General Psychology (Instructor, TA & Peer Mentor)

Social Psychology (Instructor)

##### Developmental Courses

Introduction to Human Development (Long-Term Substitute Instructor)

Human Growth & Development (Instructor)

Life-Span Human Development (Instructor)

Child and Adolescent Development (Instructor)

Adolescence (Instructor)

##### Statistics Courses

Intro. & Advanced Data Analysis/Data Analysis Methods (Tutor)

Introduction to Quantitative Psychology (Instructor)

Experimental Design and Statistical Inference (Instructor)

##### Research Methods Courses

Psychological Experimentation Methods (TA)

Research Methods in Psychology (Recitation Instructor)

Methods of Social Research (Instructor)

Psychological Research Methods (Instructor)

### *Applied Research Courses*

Directed Independent Study (Instructor & Research Supervisor)  
 Applied Project (Instructor)  
 Structured Research (Instructor)  
 Developmental Research Laboratory (Research Supervisor)  
 Honor's Thesis (TA & Co-advisor)

## **Grants**

### **Active Research Grants**

Charles E. Schmidt College, Florida Atlantic University - PI: N. A. Jones 03/12 - 03/13  
 Neurophysiological development as a function of touch patterns in infants of depressed mothers.  
 Role: Co-PI Amount Awarded: \$8000.00

## **Editorial Consulting & Reviewing Activities**

### **Peer-Reviewed Journals**

*Personality and Individual Differences; Journal of Family Violence; Violence and Victims; S.A.P.I.E.N.S.; Aggression and Violent Behavior; Biological Psychology; Human Nature*

### **Books**

Pratarelli, M. E. (2003). *Niche bandits: Why big brains consumed an ecosystem*. Pueblo, CO: Medici Publishing, Inc.

## **Publications**

- Mize, K. D. & Jones, N. A. (2012). Infant physiological and behavioral responses to loss of maternal attention to a social-rival. *International Journal of Psychophysiology*, 83, 16-23. doi:10.1016/j.ijpsycho.2011.09.018.
- Mize, K. D., Shackelford, T. K., & Weekes-Shackelford, V. A. (2011). Younger women incur excess risk of uxoricide by stabbing and other hands-on killing methods. *Personality and Individual Differences*, 50, 1120-1125. doi:10.1016/j.paid.2011.01.038.
- Mize, K. D., Shackelford, T. K., & Shackelford, V. A. (2009). Hands-on killing of intimate partners as a function of sex and relationship status/state. *Journal of Family Violence*, 24(7), 463-470. doi: 10.1007/s10896-009-9244-5.
- Mize, K. D., & Shackelford, T. K. (2008). Intimate partner homicide methods in heterosexual, gay, and lesbian relationships. *Violence & Victims*, 23(1), 98-114. doi: 10.1891/0886-6708.23.1.98.
- Jones, N. A., & Mize, K. D. (2007). Touch interventions positively affect development. In L. L'Abate, D. D. Embry, & M. S. Baggett (Eds.), *Low-cost approaches to promote physical and mental health: Theory, research, and practice*. NY: Springer.
- Ingo, K., Mize, K. D., & Pratarelli, M. E. (2007). Female intrasexual competition: Toward an evolutionary feminist theory. *Theory & Science*, 19(1). Retrieved from <http://theoryandscience.icaap.org/content/vol9.1/ingo.html>.
- Pratarelli, M. E., Mize, K. D., & Browne, B. L. (2007). What kind of people call themselves environmentalist? *Global Bioethics*, 20, 9-23.



## Thomas C. Monson

### Biographical Data:

Date of Birth: October 16, 1948

Place of Birth: Forest City, Iowa

Office Address: Department of Psychology  
Florida Atlantic University  
Boca Raton, FL 33431

Office Telephone: (561) 297-3373

Home Address: 410 N. Federal Hwy, Apt. 418  
Deerfield Beach, FL 33441

Home Telephone: (561) 306-9101

Email: Monsontc@fau.edu; Monsontc@aol.com

### Professional Preparation:

Graduate: University of Minnesota  
Specialization: Social Psychology and Personality  
Ph.D., Psychology, 1976  
Minor: Statistics

Undergraduate: University of Iowa  
B.S., Honors in Psychology, 1971

### Appointments-Academic Experience:

1982 – Present Associate Professor  
Florida Atlantic University

1976 – 1982 Assistant Professor  
University of Texas at Arlington

1974 – 1975 Instructor, University of Minnesota

Peer-Reviewed Publications in last 7 years : None

Selected Other Publications in last 8 years:

Janowsky, A., Shuhi, B., & Monson, T. (2006) Guide to understanding statistics. Boston: Pearson Custom Publishing.

Synergistic Activities: None

Collaborators and Other Affiliations: None

Courses Taught:

Undergraduate:

- Social Cognition & Behavior
- Personality
- Experimental Studies in Personality
- Social Psychology
- Laboratory in Social Psychology
- Human Relations
- Personality Testing and Measurement
- Research Methods
- Experimental Design & Stat Inference
- Research in Personality
- Intermediate Stat Lab

Graduate:

- Seminar in Experimental Studies of Personality
- Teaching Psychology
- Experimental Design II
- Experimental Design I
- Advanced Social Psychology
- Seminar on Person Perception
- Seminar on the Interaction Between
- Traits and Situations

Community Engagement or Out-reach: None

## Andrzej Nowak

### A. Professional Preparation

University of Warsaw, psychology  
 Stanford University, 1974-1975  
 M.A. University of Warsaw, 1978  
 Educational Testing Service, Princeton, 1979-1980  
 Ph.D. University of Warsaw, 1987  
 Habilitation, University of Warsaw, 1996  
 Full professor, Warsaw, 2004  
 Full professor Florida Atlantic University 2010

### B. Appointments

Assistant Professor, Faculty of Psychology, University of Warsaw, 1981-1986  
 Associate Professor, Faculty of Psychology, University of Warsaw, 1987 –1996  
 Professor, Faculty of Psychology, University of Warsaw, 1996 to present  
 Director, Center for Complex Systems, Institute of Social Studies, University of Warsaw, 1990 to present  
 Professor, Faculty of Psychology, Warsaw School of Social Psychology 1999 to present  
 Associate professor, Florida Atlantic University, 2000 to 2010  
 Professor, Florida Atlantic University, 2010 to present  
 Visiting scholar, Department of Psychology, University of North Carolina at Chapel Hill, 1989  
 Visiting Scholar, Netherland's Institute for Advanced Studies, Wasenaar, 1995  
 Visiting Professor, Center for Advanced Studies in the Social Sciences, Vienna, 1996.  
 Visiting Professor Connecticut College 2002-2003, New London  
 Visiting Scholar Columbia University, 2007, 2008, 2009, 2010, 2011

### C. Selected Peer-Reviewed Publications

Nowak A, Samsona K, Lisecka K., Ziembowicz M, (2011)., Levey weather isnt' it? On the social dynamics of quality judgments *Mind and Society* 10 (2):193-200  
 Andersen JV, Nowak A, Rotundo G, Parrott L, Martinez S (2011) "Price-Quakes" Shaking the World's Stock Exchanges. *PLoS ONE* 6(11): e26472. doi:10.1371/journal.pone.0026472  
 Nowak, A., Bui-Wrzosińska, L., Coleman, P.T., Vallacher, R., Bartkowski, W., Jochemczyk, Ł. (2010). Seeking Sustainable Solutions: Using an Attractor Simulation Platform for Teaching Multi-Stakeholder Negotiation in Complex Cases. *Negotiation Journal*, 26, 49 - 68.  
 A Nowak, A Rychwalska, W Borkowski (2013) *Why Simulate? To Develop a Mental Model* *Journal of Artificial Societies and Social Simulation* 16 (3), 12  
 Ziembowicz, M., Nowak, A., & Winkielman, P. (2013). When sounds look right and images sound correct: Cross-modal coherence enhances claims of pattern presence. *Cognition*, 129(2), 273-278.

### C. Selected Other Publications or Products/Grants

Praszkier R., Nowak A. (2012) *Social Entrepreneurship, theory and practice*, Cambridge, Cambridge University Press  
 Nowak A, Winkowska Nowak K., Briece (Ed.) D. (2012) *Complex human dynamics: From minds to societies*. Springer  
 Anderson, J, Nowak A (2013) *Introduction to Sociofinance*, Springer

Vallacher, R, Coleman P, Nowak A., and Bui Wrzosinska L. (2010) Rethinking Intractable Conflict: The Perspective of Dynamical Systems, *American Psychologist*, 65:4, 262— 278

Roszczyńska-Kurasinska M, Nowak A, Kamieniarz D, Solomon S, Andersen JV (2012) Short and Long Term Investor Synchronization Caused by Decoupling. *PLoS ONE* 7(12): e50700. doi:10.1371/journal.pone.0050700

**D. Synergistic Activities**

**F. Collaborators and Other Affiliations**

University of Warsaw

University of Maryland

Columbia University

**G. Courses Taught**

Dynamical Social Psychology

Models of Social Processes

Dynamics of social issues

Social Dynamics

Cognition Lab

Cognitive Psychology

Complexity in Social Change

Human Machine Interaction

**H. Community Engagement or Out-reach**

Presentation in European Parliament on narratives for Europe 2013

Organization of science and art exhibition on narratives Center for Contemporary Art. Warsaw 2012

Organization of art and science exhibition Extremely rare events Center for Contemporary Art. Warsaw 2012

## David G. Perry

### A. Professional Preparation

B.A. (Psychology), University of Oregon, 1967  
 M.A. (Psychology), University of Wisconsin, 1970  
 Ph.D. (Psychology), University of Wisconsin, 1972

### B. Appointments

1972-1978, Lecturer in Psychology, University of Queensland  
 1978-1980, Associate Professor of Psychology, University of Alberta  
 1980-1982, Associate Professor of Psychology, Florida Atlantic University  
 1982-present, Professor of Psychology, Florida Atlantic University

### C. Selected Peer-Reviewed Publications

Tobin, D.D., Menon, M., Menon, M., Spatta, B.C., Hodges, E.V.E., & Perry, D.G. (2010). The Intrapyschics of gender: A model of self-socialization. *Psychological Review*, 117, 601-622.

Perry, D.G., & Pauletti, R.E. (2011). Gender and adolescent development. *Journal of Research on Adolescence*, 21, 61-74

Pauletti, R.E., Menon, M., Menon, M., Tobin, D.D., & Perry, D.G. (2012). Narcissism and adjustment in preadolescence. *Child Development*, 83, 831-837.

Cooper, P. J., Pauletti, R. E., Tobin, D. D., Menon, M., Menon, M., Spatta, B. C., Hodges, E. V. E., & Perry, D. G. (2013). Mother-child attachment and gender identity in preadolescence. *Sex Roles*, 69, 618-631.

Pauletti, R. E., Cooper, P. J., & Perry, D. G. (2014). Influences of gender identity on children's maltreatment of gender-nonconforming peers: A person x target analysis of aggression. *Journal of Personality and Social Psychology*, 106, 843-866.

### D. Selected Other Publications or Products/Grants

None

### E. Synergistic Activities

Member of the Advisory Panel for the Social and Developmental Psychology Program of the National Science Foundation (grant review panel) (1986–1989).

Member of the Committee of Visitors of the National Science Foundation (committee appointed to evaluate the Social Psychology Program) (1986).

Member of editorial board, *Developmental Psychology* (1990–1992; 1999-2002); *Child Development* (2003-2006).

Associate Editor, *Developmental Psychology* (1993–1998).

Member of NIH Study Section RPHB-4 (Risk, Prevention, & Health Behavior Integrated Review Group) (2000-2006).

Service at Florida Atlantic University: Chair, Department of Psychology, 1982-1986; Member, Institutional Review Board, 2000-present; Member, College of Science Promotion and Tenure Committee, 2006-2013.

#### **F. Collaborators and Other Affiliations**

Collaboration is principally with graduate students.

#### **G. Courses Taught**

Personality and Social Development (upper-division undergraduate level)  
Seminar in Personality and Social Development (graduate level)  
Seminar in Aggression and Gender  
Seminar in Moral Development  
Introductory Statistics  
Human Development

#### **H. Community Engagement or Out-reach**

Member of School Board, A.D. Henderson University School, 2001-2008.

NAME Monica Rosselli		POSITION TITLE Professor and Assistant Chair of Psychology Department of Psychology, Florida Atlantic University		
eRA COMMONS USER NAME (credential, e.g., agency login)				
EDUCATION/TRAINING ( <i>Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable</i> )				
INSTITUTION AND LOCATION		DEGREE ( <i>if applicable</i> )	MM/YY	FIELD OF STUDY
Universidad Javeriana, Bogotá, Colombia		BA	07/1980	Psychology
Ball State University, Muncie, IN, USA		MA	09/1982	Psychology
Universidad Nacional Autónoma de México, Mexico, DF, Mexico		PhD	12/1989	Bio Medical Sciences/ Neuropsychology

#### A. Positions and Honors

##### Positions and Employment:

- 1990-1993 Neuropsychologist, Department of Neurology, Hospital San Juan de Dios, Bogota – Colombia.  
 1994-1996 Assistant Professor of Psychology, Miami Institute of Psychology, Miami, Florida.  
 1995-1996 Consultant Neuropsychologist, Division of Behavioral Neurology, University of Miami/Jackson Memorial Hospital.  
 1996-2003 Adjunct Assistant Professor of Neurology, University of Miami/Jackson Memorial Hospital.  
 1996-1999 Assistant Professor of Psychology, Florida Atlantic University (FAU). Davie, Florida.  
 1999-2002 Associate Professor of Psychology, Florida Atlantic University. Davie, Florida.  
 2000-2002 Chair, Division of Psychology, College of Liberal Arts, Florida Atlantic University.  
 2002-pres Assistant Chair, Department of Psychology, Charles Schmidt College of Science, FAU.  
 2007-pres Professor, Department of Psychology, Charles Schmidt College of Science, FAU.

##### Honors:

- 1997 Colombia National Prize of Science for research on Familial Alzheimer's Disease  
 2000 Fellow National Academy of Neuropsychology  
 2000 Award for Excellence in Undergraduate Teaching -Florida Atlantic University  
 2012 Clinical Neuropsychology Spanish Consortium: Hispano-American Neuropsychology Award

#### B. Selected Peer-reviewed Publications (student co-author in *bold italics*)

1. Tartar, J.L., *de Almeida, K., McIntosh, R.C., Rosselli, M. & Nash, A.J.* (2011) Emotionally negative pictures increase attention to a subsequent auditory stimulus. *International Journal of Psychophysiology*. **83**, (1), 36-44
2. *McIntosh, R.C., Rosselli, M.* (2012). Stress and Coping in Women Living with HIV/AIDS: A Meta-Analytic Review. *AIDS and Behavior*, **16**, 2144-2159
3. Matute, E., Montiel, T., Pinto, N, **Rosselli, M.**, Ardila, A., & Zarabozo, D. (2012). Comparing cognitive performance in illiterate and literate children. *International Review of Education*. **58**, 109-127
4. Tappen, R.M., **Rosselli, M.**, & Engstrom, G. (2012) Use of the MC-FAQ and MMSE-FAQ in Cognitive Screening of Older African Americans, Hispanic Americans and European Americans. *American Journal of Geriatric Psychiatry*, **20**, 955-962
5. Berent, I., Lennertz, T., & **Rosselli, M.** (2012) Universal linguistic pressures and their solutions: Evidence from Spanish. *The Mental Lexicon*, **7**(3), 275-305
6. **Rosselli, M.**, Ardila, A., Jurado, M.B. & *Salvatierra, J.* (2012) Cognates facilitation effect in balanced and non-balanced bilinguals using the Boston naming test. *International Journal of Bilingualism*,
7. Tartar, J., *McIntosh, R., Rosselli, M.*, Widmayer, S., & Nash A (2013). HIV-positive females show blunted neurophysiological responses in an emotion attention dual task paradigm. *Clinical Neurophysiology*. pii: S1388-2457(13)01199-1. doi: 10.
8. Ardila, A., Bernal. B & **Rosselli, M.** (2014). Participation of the insula in language revisited: A meta-analytic connectivity study, *Journal of Neurolinguistics*, **29**, 31–41.

9. Tappen, R., **Rosselli, M** & Williams, C. (in press). Multicultural perspective of Mainstream. *Journal of Cultural Diversity*
10. **McIntosh, R.**, Tartar, J.,., **Rosselli, M** (in press) Negative Attention Bias and Processing Deficits during the Cognitive Reappraisal of Unpleasant Emotions in HIV+ Women. *The Journal of Neuropsychiatry and Clinical Neurosciences*

### C. Research Support

**ACTIVE**

Florida Atlantic University – Seed Research Program	Rosselli/Tappen (PI)	2013-2014
Development and Testing of a Functional Scale for Mild Cognitive Impairment		
The purpose of this study is to develop a brief measure of function based on patient and caregiver report.		
Role: PI		

**COMPLETED**

NIH, NINR 1R01 NR0774	Tappen (PI)	2001-2006
Culture Bias in Testing Expressive Ability in Dementia		
Examine existing and newly created measures of expressive language and mood for culture bias in use with older African Americans and Hispanic Americans and refined and modified those instruments that do not demonstrate adequate reliability and validity until satisfactory levels are achieved. Role: Co-PI		

National Academy of Neuropsychology	Rosselli (PI)	2004-2006
Assessment of Hispanics in the U.S.		
Adapt a neuropsychological battery to the U.S. Hispanic population and to established valid norms. Role: PI		

Johnnie Byrd Alzheimer's Center and Research Institute	Williams (PI)	2008-2012
Comparison of Same and Different Culture Raters of Expressive Abilities in Dementia		
Identify the potential influence of the ethnic/cultural background of the rater on cognitive and psychiatric testing in older adults screened for cognitive impairment. Role: Investigator		

#### D. Courses taught

**Undergraduate:** Neuropsychology, Developmental Neuropsychology, Research Methods in Psychology  
Biological Bases of Behavior, Laboratory in Neuropsychology, Abnormal Psychology

**Graduate:** Developmental Neuropsychology, Neuropsychology Seminars, Neuropsychology of Aging

### E. Professional activities

Associate Editor Journal "Neuropsicología, Neuropsiquiatría y Neurociencias" (Neuropsychology, Neuropsychiatry and Neuroscience) 1998 – present

Editorial Boards	Child Neuropsychology -2012-present <i>Estudios de Psicología</i> -2012- present Psychological Assessment – 2014
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**Ryne A. Sherman, Ph. D.**

Assistant Professor

Department of Psychology

Florida Atlantic University, Boca Raton FL, 33431; rsherm13@fau.edu

**Professional Preparation**

Monmouth College	Psychology & History	Bachelor of Arts, 2006
University of California, Riverside	Personality & Social Psych.	Master of Arts, 2008
University of California, Riverside	Personality & Social Psych.	Ph. D., 2011
Minor Area of Study: Quantitative Psychology, 2009		

**Appointments**

Assistant Professor of Psychology, Florida Atlantic University, 2011-present

**Selected Peer-Reviewed Publications**

(\* indicates graduate student co-author)

- 1) Rauthmann, J. F., & **Sherman, R. A.** (in press). Ultra-brief measures for the situational eight DIAMONDS domains. *European Journal of Psychological Assessment*.
- 2) Rauthmann, J. F., & **Sherman, R. A.** (in press). Measuring the situational eight DIAMONDS characteristics of situations: An optimization of the RSQ-8 to the S8\*. *European Journal of Psychological Assessment*.
- 3) Rauthmann, J. F., Gallard-Pujol, D., Guillaume, E. M., Todd, E., Nave, C. S., **Sherman, R. A.**, Ziegler, M., \*Jones, A. B., & Funder, D. C. (2014). The situational eight DIAMONDS: A taxonomy of major dimensions of situation characteristics. *Journal of Personality and Social Psychology*, 107(4), 677-718.
- 4) **Sherman, R. A.**, & \*Serfass, D. G. (in press). The comprehensive approach to analyzing multivariate constructs. *Journal of Research in Personality*.
- 5) \*Brown, N. A., & **Sherman, R. A.** (2014). Predicting interpersonal behavior using the Inventory for Individual Differences in the Lexicon (IIDL). *Journal of Research in Personality*, 51, 23-28.

**Other Selected Publications & Grants**

(\* indicates graduate student co-author)

- 1) **Sherman, R. A.** (2014). Situation change: Understanding person-environment transactions in real-life. *National Science Foundation* (Award #1420105). Total Award: \$323,314.
- 2) Sobhan, K., An, P. C. E., **Sherman, R. A.**, \*Brown, N., & Romance, N. (2013). Barriers to STEM reform: Exploring the disconnect between self-determination theory and the engineering classroom environment. *National Science Foundation*. Total Award: \$149,995
- 3) **Sherman, R. A.** & Wood, D. (2014). Simple and intuitive statistics for calculating the expected replicability of a pattern of correlations. *Multivariate Behavioral Research*.
- 4) \*Serfass, D. G. & **Sherman, R. A.** (2013). Personality and the perception of situations from the Thematic Apperception Test. *Journal of Research in Personality*, 47(12), 708-718.
- 5) **Sherman, R. A.**, Nave, C. N., & Funder, D. C. (2010). Situational similarity and personality predict behavioral consistency. *Journal of Personality and Social Psychology*, 99(2), 330-343.

### Synergistic Activities

1. 2012-2013 FAU College of Science Teacher of the Year; University Finalist (of 9)
2. 2012-present Organizer, Psychology Department Weekly Statistical Methods and Research Topics meetings
3. Invited Instructor, R Workshop at Association for Research in Personality meeting: Riverside, CA; June 2012
4. Invited Instructor, Summer School in Robust Statistics: Bertinoro, Italy; July 2012
5. Invited Instructor, Summer School on R: Bertinoro, Italy; August 2014
6. Author and Maintainer of the {multicon} R package
7. Peer-Reviewer for 30+ manuscripts per year for past 2 years
8. Editorial Boards: *Journal of Personality and Social Psychology*, *Journal of Research in Personality*, *Frontiers in Social and Personality Psychology*, *Journal of Social Psychology*
9. Psi Chi Advisor (2012-present)
10. Ad-hoc member of Statistical Analysis Team for FAU Task Force for Student Success (2013-14)

### Collaborators & Other Affiliations (Last 48 months)

#### Collaborators (Research)

Nicolas A. Brown, Guillaume Dumas, Aurelio J. Figueredo, David C. Funder, David Gallardo-Pujol, Esther M. Guillaume, Ashley Bell Jones, Todd B. Kashdan, Christopher S. Nave, John Rauthmann, David G. Serfass, Jean M. Twenge, Dustin Wood, Jessica Yarbro, Matthias Ziegler

**Ph.D. Advisor:** Dr. David C. Funder, University of California, Riverside

**Current Graduate Students Advised** (6 Total, 3 Ph. D. & 3 M.A.)

Ph. D. - Nicolas Brown, Ashley Bell Jones, David Serfass,

M. A. - Candace Moreland, Rachel Rosen, Melissa Stiksma

### Courses Taught

Social Psychology (SOP3004): Fall 2011-14, Spring 2014-15

Personality Psychology (PPE4700): Summer 2013

Advanced Personality Psychology (PSY6930): Spring 2012; 2014

Linear Models (PSY6930): Spring 2013; 2015

## Robert William Stackman Jr., Ph.D.

### A. Professional Preparation

Allegheny College	Psychology	B.S.	1986
Rutgers, the State Univ. of New Jersey	Behavioral Neuroscience	M.S.	1990
Rutgers, the State Univ. of New Jersey	Behavioral Neuroscience	Ph.D.	1994
Dartmouth College	Neurophysiology	Postdoc	1995-1998

### B. Appointments

2013-pres: Associate Director, FAU Neuroscience Cluster, Florida Atlantic Univ., Jupiter, FL  
 2013-pres: Associate Professor, Department of Psychology, Florida Atlantic Univ., Jupiter, FL  
 2005-2012: Associate Professor (tenured in 2010), Department of Psychology, Florida Atlantic University, Boca Raton, FL  
 1998-2005: Assistant Professor, Dept Behavioral Neurosci, Oregon Hlth Sci Univ, Portland, OR

### C. Selected Peer-Reviewed Publications

Cohen SJ and **Stackman Jr RW** (in press). Assessing rodent hippocampal involvement in the novel object recognition task. A review. *Behavioural Brain Research* (Invited review).  
 Rabinowitz A, Cohen SJ, Finn DA and **Stackman Jr RW** (2014). The neurosteroid allopregnanolone impairs hippocampal-dependent object memory and contextual fear memory in C57BL/6J mice. *Hormones & Behavior*, **66(2)**: 238-246.  
 Cohen SJ, Munchow A, Rios LM, Zhang G, Ásgeirsdóttir HN and **Stackman Jr RW** (2013). The rodent hippocampus is essential for non-spatial object memory. *Current Biology* **23**: 1685-1690. \*\*  
 \*\* *Highlighted in*: Clark RE (2013). Recognition memory: an old idea given new life. *Current Biology* **23**, R725-727.  
 Zhang G, Ásgeirsdóttir HN, Cohen SJ, Munchow AH, Barrera MP and **Stackman Jr RW** (2013) Stimulation of serotonin 2A receptors facilitates consolidation and extinction of fear memory in C57BL/6J mice. *Neuropharmacology* **64**: 403-413.  
**Stackman Jr RW**, Lora JC and Williams SB (2012) Directional responding of C57BL/6J mice in the Morris water maze is influenced by visual and vestibular cues and is dependent on the anterior thalamic nuclei. *Journal of Neuroscience* **32(30)**: 10211-10225.

### D. Selected Other Publications

Allen D, Bond CT, Luján R, Ballesteros-Merino C, Lin MT, Wang K, Klett N, Watanabe M, Shigemoto R, **Stackman Jr RW**, Maylie J, Adelman JP (2011) The SK2-Long isoform direct synaptic localization and function of SK2-containing channels. *Nature Neuroscience*, **14**: 744-749.  
 Vick KA, Guidi M and **Stackman Jr RW** (2010) In vivo pharmacological manipulation of small conductance Ca(2+)-activated K(+) channels influences motor behavior, object memory and fear conditioning. *Neuropharmacology* **58(3)**: 650-659.  
 Vertes RP and **Stackman Jr RW** (2010). *Electrophysiological Recording Techniques*. Neuromethods Series, Vol. 54. Humana Press, Totowa, NJ.  
**Stackman Jr RW**, Bond CT, Adelman JP (2008) Contextual memory deficits observed in mice overexpressing small conductance Ca<sup>2+</sup>-activated K<sup>+</sup> type 2 (KCa2.2) channels are caused by an encoding deficit. *Learning and Memory* **15**: 208-213.  
 Hammond RS, Bond CT, Ngo-Anh TJ, Adelman JP, Maylie J. and **Stackman Jr R.W.** (2006) Small-conductance Ca<sup>2+</sup>-activated K<sup>+</sup> channel type 2 (SK2) modulates hippocampal learning, memory, and synaptic plasticity. *Journal of Neuroscience* **26(6)**: 1844-1853.

### E. Synergistic Activities

2014: Ad hoc member, NIH CSR Study Section: Pathophysiological Basis of Mental Disorders and Addictions (PMDA), October 1-2, 2014.  
 2014-pres: Vice-chair, Institutional Animal Care and Use Committee, Florida Atlantic Univ.  
 2014: Scientific review member, NSF Modulation II/Neural Systems Cluster Preliminary Proposal Review meeting, April 14-16, 2014.  
 2010-2011: Teacher of the Year, Charles E. Schmidt College of Science, Florida Atlantic Univ.  
 2009-2010: Researcher of the Year at the Associate Professor level, Florida Atlantic Univ.

2008-pres: Ad hoc Scientific review member, NIH, Ctr for Scientific Review, Special Emphasis Panel ZRG1 F02A-J 20L, Fellowships: Behavioral Neuroscience.

2006-2010: Ad hoc member, NSF Scientific Merit Review Panel for Behavioral Neuroscience.

#### **F. Collaborators & Other Affiliations**

**Collaborators & Co-Editors.** Kenneth Dawson-Scully (FAU), Robert P. Vertes (FAU), Kathleen Guthrie (FAU), Rui Tao (FAU), John P. Adelman (Oregon Health & Science University), David Bucci (Dartmouth College), Sathya Puthanveetil (Scripps – Florida), Jeffrey S. Taube (Dartmouth College), Michael Zugaro (College de France).

**Graduate Advisors and Postdoctoral Sponsors:** Thomas J. Walsh (deceased, graduate advisor, Rutgers), Jeffrey S. Taube (postdoctoral advisor, Dartmouth).

#### **G. Courses Taught**

PSB 3002, *Biological Bases of Behavior 1* (Spring 2006, Fall 2006-2009, 2014)

PSB 6037, *Principles of Neuroscience* (Spring 2009)

PSB 6345, *Neuroscience 1* (Fall 2006-2014, with Vertes '06-'10,'14; Dawson-Scully '11-13)

PSB 6346, *Neuroscience 2* (Spring 2007-2014 with Vertes '07-'11; Blanks '12-'14)

PSY 4930, 6930, *Current Topics in Neurobiology of Learning & Memory* (Spring 2008)

PSY 4930, *Research in Psychobiology* (Fall 2010-2011)

PSY 6930, *Hippocampal Damage & Amnesia* (Spring 2010, with Kersten)

EXP 6908, *Neuroscience Seminar* (Fall 2009-2010, Spring 2011, with Dawson-Scully)

EXP 6930, *Memory and the Hippocampus* (Fall 2014, with Kersten)

BSC 6930, *Advanced Neurophysiology Lab* (Spring 2012-2013, w/ Murphey, Dawson-Scully)

#### **H. Community Engagement or Outreach**

*Summer Internship in Neuroscience Research*, Provided local high school students the opportunity to intern in a behavioral neuroscience research lab. This effort enabled Josh Stadlan (2009) and Jeffrey Herr (2013) to gain hands-on experience testing neurobiology of long-term memory.

Invited plenary lecturer at the 2014 Alzheimer's Educational Conference, *Basic research to discover novel treatments of Alzheimer's disease-related memory deficits*. West Palm Beach, FL (March 14, 2014).

## Robin R. Vallacher

### Professional Preparation

- B.A.* San Diego State University, 1969  
(B.A. with Highest Honors; Phi Kappa Phi)
- M.A.* Michigan State University, 1972
- Ph.D.* Michigan State University, 1975  
(NSF Trainee, 1970-1974)

### Appointments

- Navy Medical Neuropsychiatric Research Unit, San Diego, California, summers, 1970, 1971
- Department of Psychology, Illinois Institute of Technology, 1975-1985
- Department of Psychology, Florida Atlantic University, 1985 to date

### Selected Peer-Reviewed Publications (most recent 5 from last 7 years)

- Michaels, J., *Vallacher*, R. R., & Liebovitch, L. (2013). Volatile psychological dynamics in social interactions: Attitudes and emotions react asymmetrically to interaction shifts between agreement and disagreement. *Social Psychological and Personality Science*.
- Wong, A., *Vallacher*, R. R., & Nowak, A. (2014). Fractal dynamics in self-evaluation reveal self-concept clarity. *Nonlinear Dynamics, Psychology, and Life Sciences*, 18, 349-370.
- Parkin, S., Jarman, M., & *Vallacher*, R. R. (in press). On being mindful: What do people think they are doing? *Social and Personality Compass*.
- Jarman, M., Nowak, A., Borkowski, W., Serfass, D., Wong, A., & *Vallacher*, R. R. (in press). The critical few: Anticonformists at the crossroads of minority survival and collapse. *Journal of Artificial Societies and Social Simulation*.
- Vallacher*, R. R., van Geert, P., & Nowak, A. (in press). The intrinsic dynamics of psychological process. *Current Directions in Psychological Science*.

### Selected Other Publications (from the last 7 years)

- Vallacher*, R. R. (2007). Local acts, global consequences: A dynamical systems perspective on torture. *Peace and Conflict: Journal of Peace Psychology*, 13, 445-450.
- Liebovitch, L. S., Naudot, V., *Vallacher*, R. R., Nowak, A., Bui-Wrzosinska, L., & Coleman, P.T. (2008). Dynamics of two-actor cooperation-competition conflict models. *Physica A*, 387, 6360-6378.
- Vallacher*, R. R. & Jackson, D. (2009). Thinking inside the box: Dynamical constraints on mind and action. *European Journal of Social Psychology*, 39, 1226-1229.
- Vallacher*, R. R., Coleman, P. T., & Nowak, A., & Bui-Wrzosinska, L. (2010). Dynamical foundations of intractable conflict: Introduction to the special issue. *Peace and Conflict: Journal of Peace Psychology*, 16, 113-125.
- Vallacher*, R. R., Coleman, P. T., Nowak, A., & Bui-Wrzosinska, L. (2010). Rethinking intractable conflict: The perspective of dynamical systems. *American Psychologist*, 65, 262-278.
- Fernandez-Dols, J. M., Aguilar, P., Campo, S., *Vallacher*, R. R., Janowsky, A., Rabbia, H., & Brussiho, S., & Lerner, M. J. (2010). Maligned cooperative participants: Experimenter induced normative conflict in zero-sum situations. *Journal of Experimental Social Psychology*, 46, 525-530.
- Vallacher*, R. R., Coleman, P. T., Nowak, A., Bui-Wrzosinska, L., Liebovitch, L., Kugler, K., & Bartoli, A. (2013). *Attracted to conflict: Dynamic foundations of destructive social relations*. Heidelberg, Germany: Springer.

### **Collaborators and Other Affiliations**

Research Affiliate, *Center for Complex Systems*, University of Warsaw, Poland, 1997 to date

Research Affiliate, *Advanced Consortium on Cooperation, Conflict, and Complexity*, Columbia University, 2008 to date

Visiting Scholar:

- o Department of Psychology, University of Texas at Austin, 1982
- o Psychological Institute, University of Bern, Switzerland, 1990
- o Max Planck Institute for Psychological Research, Munich, Germany, 1992
- o Department of Psychology, University of Montpellier 1, France, 2007

### **Courses Taught**

#### Undergraduate

Introductory Psychology  
 Psychology for Business Majors  
 Social Psychology  
 Social Cognition  
 Experimental Studies of Personality  
 Research Methods  
 Honors Seminar  
 Directed Independent Study  
 Research in Dynamical Social Psychology

#### Graduate

Advanced Social Psychology  
 Social Psychology (M.B.A. program)  
 Group Dynamics  
 Social Cognition  
 Self-Concept and Behavior  
 Advanced Social Behavior  
 Experimental Studies of Personality  
 Evolutionary Psychology  
 Dynamical Social Psychology  
 Conflict and Complexity

NAME Robert P. Vertes	POSITION TITLE Professor		
eRA COMMONS USER NAME Rvertes			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Dayton, Dayton, OH	B.A.	1968	Psychobiology
The New School University, New York, NY (doctoral training and dissertation done at The Rockefeller University under Dr. Neal E. Miller)	Ph.D.	1975	Neurophysiology
University of Michigan, Ann Arbor, MI	Post-doc	1975-1977	Neurophysiology

#### A. Positions and Honors

1978-1981	Assistant Research Scientist, Department of Physiology, University of Michigan, Ann Arbor, MI
1982-1984	Assistant Professor, Department of Physiology, Wayne State University, Detroit, MI.
1984-1986	Assistant Professor, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA
1986-1989	Associate Professor, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA
1989-1993	Associate Professor, Center for Complex Systems and Brain Sciences, Florida Atlantic University, Boca Raton, FL
1993-pres.	Professor, Center for Complex Systems and Brain Sciences, Florida Atlantic University, Boca Raton, FL

#### B. Selected Peer Reviewed Publications

- Kocsis, B. and Vertes, R.P. Dorsal raphe neurons: Synchronous discharge with the theta rhythm of the hippocampus in the freely behaving rat. J. Neurophysiol. 68: 1463-1467, 1992.
- Kocsis, B. and Vertes, R.P. Characterization of neurons of the supramammillary nucleus and mammillary body that discharge rhythmically with the hippocampal theta rhythm in the rat. J. Neurosci. 14: 7040-7052, 1994.
- Vertes, R.P. and Kocsis, B. Brainstem-diencephalo-septohippocampal systems controlling the theta rhythm of the hippocampus. Neuroscience 81: 893-926, 1997.
- \*Vertes, R.P., Albo, Z and Viana Di Prisco, G. Theta rhythmically firing neurons in the anterior thalamus: Implications for mnemonic functions of Papez's circuit. Neuroscience 104:619-625, 2001.
- \*Viana Di Prisco, G., Albo, Z., Vertes, R.P. and Kocsis, B. Discharge properties of neurons of the median raphe nucleus during the hippocampal theta rhythm in the rat. Exp. Brain Res. 145:383-394, 2002.
- Vertes, R.P. Differential projections of the infralimbic and prelimbic cortex in the rat. Synapse 51:32-58, 2004.
- \*McKenna, J.T. and Vertes, R.P. Afferent projections to nucleus reuniens of the thalamus. J. Comp. Neurol. 480: 115-142, 2004.
- Vertes, R.P. Memory consolidation in sleep: Dream or reality. Neuron 44: 135-148, 2004.
- Vertes, R.P. Hippocampal theta rhythm: a tag for short term memory. Hippocampus 15:923-935, 2005.

- Viana Di Prisco, G. and Vertes, R.P. Excitatory actions of the ventral midline thalamus (rhomboid/reuniens) on the medial prefrontal cortex in the rat. *Synapse* 60:45-55, 2006.
- \*Vertes, R.P., Hoover, W.B., do Valle, A.C., Sherman, A. and Rodriguez, J.J. Efferent projections of reuniens and rhomboid nuclei of the thalamus in the rat. *J. Comp. Neurol.* 499:768-796, 2006.
- Vertes, R.P. Interactions among the medial prefrontal cortex, hippocampus and midline thalamus in emotional and cognitive processing in the rat. *Neuroscience* 142:1-20, 2006.
- \*Vertes, R.P., Hoover, W.B., Szigeti, K. and Leranth, C. Nucleus reuniens of the midline thalamus: link between the medial prefrontal cortex and the hippocampus. *Brain Res. Bull.* 71:601-609, 2007
- \*Vertes, R.P., Linley, S.B., and Hoover, W.B. Pattern of distribution of serotonergic fibers to the thalamus of the rat. *Brain Struct Funct* 215:1-28, 2010.
- \*Hoover, W.B. and Vertes, R.P. Collateral projections from nucleus reuniens of thalamus to hippocampus and medial prefrontal cortex in the rat: a single and double retrograde fluorescent labeling study. *Brain Struct Funct* 217:191-209, 2012.

(\*) denotes publications done with students of the PI

## Research Support

Current Research Support: 2013-2016 Agency, NIMH, Project Title: Role of the midline thalamus in arousal, attention and cognition. Role: PI; Total award: \$423,421.

## Service

### Local:

Personnel Committee, Department of Psychology  
Graduate Committee, Center for Complex Systems and Brain Sciences

### National:

Editorial Board: *Journal of Comparative Neurology*  
Review Editor, *Frontiers in Neuroscience*  
Review Editor, *Frontiers in Sleep and Chronobiology*



## DAVID L. WOLGIN

Professor and Chair  
Department of Psychology  
Florida Atlantic University  
Boca Raton, Florida 33431

### Education

Ph.D.     1973   Rutgers University, New Brunswick, NJ  
M.A.     1968   Vanderbilt University, Nashville, TN  
B.A.     1967   Rutgers University, New Brunswick, NJ

### Academic Experience

1996 - Present	Chair Department of Psychology Florida Atlantic University Boca Raton, FL
1999 - Present	Professor of Biomedical Science Florida Atlantic University Boca Raton, FL
1990 - Present	Professor of Biological Science Florida Atlantic University Boca Raton, FL
1985 - Present	Professor of Psychology Florida Atlantic University Boca Raton, FL
1979 - 1985	Associate Professor of Psychology Florida Atlantic University Boca Raton, FL
1975 - 1979	Assistant Professor of Psychology Florida Atlantic University Boca Raton, FL
1974 - 1975	Research Associate, Department of Psychology, University of Illinois Champaign, IL
1972 - 1974	Postdoctoral Fellow Institute of Neurological Sciences University of Pennsylvania, School of Medicine Philadelphia, PA

### Selected Peer-Reviewed Publications

Wolgin, D.L. & Jakubow, J.J. Tolerance to amphetamine hypophagia: A microstructural analysis of licking behavior in the rat. *Behavioral Neuroscience*, 2003, 117, 95-104.

Wolgin, D.L. & Jakubow, J.J. Tolerance to amphetamine hypophagia: A real-time depiction of learning to suppress stereotyped movements in the rat. *Behavioral Neuroscience*, 2004, 118, 470-478.

Wolgin, D.L. & Munoz, J.R. Role of instrumental learning in tolerance to cathinone hypophagia. *Behavioral Neuroscience*, 2006, 120, 362-370.

Bachand, K.D., Guthrie, K.M. & Wolgin, D.L. Expression of c-fos mRNA in the basal ganglia associated with contingent tolerance to amphetamine-induced hypophagia. *Behavioural Brain Research*, 2009, 198, 388-396.

Wolgin, D.L. Amphetamine stereotypy, the basal ganglia, and the “selection problem.” *Behavioural Brain Research*, 2012, 231, 297-308.

### Synergistic Activities

#### Grant Support

1990-1993 PHS Grant RO1DA 04592, Role of instrumental learning in tolerance to stimulants, National Institute on Drug Abuse. \$156,373 (direct costs).

1993-1996 PHS Grant R01DA 04592, Role of instrumental learning in tolerance to stimulants, National Institute on Drug Abuse. \$331,393 (direct costs).

1997-2002 PHS Grant RO1DA 04592, Role of instrumental learning in tolerance to stimulants, National Institute on Drug Abuse. \$608,577 (direct costs)

Ad hoc reviewer for *Behavioral Neuroscience*, *Behavioural Brain Research*, *Behavioural Pharmacology*, *Brain Research*, *Developmental Psychobiology*, *Experimental & Clinical Psychopharmacology*, *Journal of Neuroscience*, *Journal of Psychopharmacology*, *Neuroscience Letters*, *Pharmacology Biochemistry and Behavior*, *Physiology and Behavior*, *Proceedings of the National Academy of Sciences USA*, *Psychobiology*, *Psychopharmacology*, *Science*, U.S. - Israel Binational Science Foundation, PLOS ONE, *Journal of Neural Transmission*

### Courses Taught

#### Undergraduate

PSY 3213 Research Methods in Psychology

PSB 4406 Biological Bases of Behavior 2

PSB 4444 Psychopharmacology

#### Graduate

PSB 6058 Seminar in Behavioral Neuroscience

PSY 6930 Special Topics in Psychology