

Research Center and Institute Evaluation Protocol
September 1, 2014-August 31, 2016 (Two-Year Report)
(Annual Review per Fiscal Year)

I. CENTER/INSTITUTE INFORMATION

- a. Name of Center/Institute: Texas Institute for Measurement Evaluation and Statistics (TIMES)
- b. Year established: 1999
- c. Website Address for Center/Institute: <https://www2.times.uh.edu/>

II. DIRECTOR INFORMATION

- a. Name: David J. Francis
- b. Title: Hugh Roy and Lillie Cranz Cullen Distinguished University Chair in Psychology
- c. Address: 4849 Calhoun Road, #372, University of Houston, Houston, TX 77204-6022
- d. Phone number: (832) 842-7036
- e. Email address: dfrancis@uh.edu

III. STATED MISSION, GOALS, OBJECTIVES, & VALUE CREATION

a. Provide the mission statement and goals for this organization.

- The primary purposes of the Texas Institute for Measurement, Evaluation, and Statistics, established at its founding, are to advance knowledge about, and to improve the behavioral, psychological, educational and developmental outcomes of children and adults through the application and development of high quality, cutting-edge research methods, and the delivery of state-of-the art research and statistical support services. In addition, TIMES' broader mission is to promote, develop, and advance statistical knowledge and its application in research and decision making, and to establish a university-based resource in measurement, evaluation, and statistics for faculty and administrators. In light of this broader mission, in addition to conducting primary research, TIMES provides essential research support services in four major areas. These include the design of advanced quasi-experimental studies, such as those used for researching developmental and educational questions in natural settings (e.g., such as children in classrooms), as well as the design of more traditional "true" experimental studies. Secondly, TIMES specializes in the application of advanced statistical models for (a) measuring longitudinal outcomes (e.g., student growth), (b) predicting risk and failure (e.g., predicting poor student outcomes at the earliest possible point in development), (c) measuring key constructs and their impact on desired outcomes (e.g., assessing the importance of teacher behaviors in advancing student achievement), and (d) modeling institutional effectiveness (e.g., evaluating the efficacy of school wide reform efforts). Third, TIMES is a leader in the use of advanced psychometric models and technology tools to create research instruments. Finally, TIMES supports the primary data collection efforts of researchers and educators through (a) automated data entry, (b) electronic data storage, (c) computerized data management, and (d) essential reporting services.
- Beginning in 2007, TIMES undertook to transform itself into a multidisciplinary research center focused on the solution of complex problems in society, including health and education,

maintaining an emphasis on application of advanced statistical, computational, and measurement practices as part of its core, but expanding its substantive focus beyond education and health. This transformation was seen as crucial to the future of TIMES and the University of Houston which lacked an administrative infrastructure focused on interdisciplinary research. With that proposed transformation were plans to construct a two story interdisciplinary research space to house TIMES substantive research laboratories. Construction on the two stories was completed in 2015 and although some remodeling to create new laboratories focused on measuring brain electrical activity is planned for spring 2017, the transformation of TIMES into an interdisciplinary research center is well under way.

b. Are the stated goals and objectives being met? Describe by giving specific metrics.

- The near term goals are being met. TIMES supports a variety of funded investigations (see below for grant activity) and unfunded start up investigations with data management and statistical services. Measurement research is continuous and ongoing. External grant support is significant, although competition for federal funding has reduced our hit rate and total funding is less than in some years past. We are at capacity in our space, with the exception of the space being converted into a shared lab for measuring brain electrical activity.
- We believe this yearly performance report shows that we are exceeding our goals of bringing value to the university's faculty, students, and constituents by providing a center and infrastructure to facilitate interdisciplinary research on complex problems and to enhance research through application and development of advanced measurement and statistical methods.

c. How is the unit contributing to the accomplishment of priorities and goals of the department, college, and/or University without duplicating functions of other entities?

- TIMES is the only entity on campus that provides advanced data management and statistical services campus wide as an organized unit. We are not aware of service duplication, although some funds were recently committed to the library to assist investigators in data management, data archiving, and data visualization. However, these services are relatively limited in comparison to the services available through TIMES, and it should be pointed out that the services at TIMES have been available for a much longer period.
- TIMES has also developed research administrative financial support services that allow for automation of many PeopleSoft financial activities related to account reconciliation. These services are provided out to other administrative units and for select investigators with complex accounts in other administrative units when requested. No other UH business unit provides similar account management support. In addition to all TIMES cost centers, TIMES provides research financial and administrative services to the Center for Advanced Computing and Data Systems (CACDS) directed by Dr. Andrea Prosperetti and Co-Directed by Dr. Francis, the Texas Obesity Research Center (TORC) directed by Dr. Marc Hamilton, both of which are university-wide research centers, the Advanced Manufacturing Institute (AMI) directed by Dr. Vinkat Selvamanickam, the Department of

Psychology, multiple departments within the Division of Research, and the Cullen College of Engineering.

d. What value does the unit contribute to the department, college, University, state, and/or nation?

- The contributions of TIMES on measurement issues and in psychological and educational research broadly defined (early school-based intervention, neuroimaging, curriculum evaluation) is known across the community, state, nation, and internationally.
- TIMES supports investigators from a variety of disciplines, including various sub-disciplines in psychology, communication sciences and disorders, education, optometry, computer science, biology and biochemistry, and biomedical engineering. These disciplines reflect the expanding interdisciplinary nature of TIMES to include substantive areas involving animal and human genetics, animal and human neuroscience, and animal and human neuroengineering. By its very nature, TIMES is multidisciplinary and works across disciplinary boundaries.
- TIMES provides sophisticated, state of the art data management and statistical services that underpin many successful grant applications across the university, as well as research financial and administrative services, education and training, and related IT services to investigators within TIMES. Our capabilities in these areas of measurement and statistics as well as in providing a robust research infrastructure to our investigators are widely known and convey immediate respect from a variety of granting agencies.
- Within TIMES are several federally funded, nationally competitive research centers, including the NICHD funded Texas Center for Learning Disabilities (TCLD) directed by Dr. Jack Fletcher, Department of Psychology, and the DHS funded Center for Borders, Trade, and Immigration (BTI) directed by Dr. Ioannis Kakadiaris, Department of Computer Science.
- The intellectual environment and research facilities made available through TIMES have assisted in the recruitment of top investigators in multiple departments, such as Dr. Elena Grigorenko, Molecular Genetics, Department of Psychology.
- In addition, we provide to our investigators and to investigators in the other research centers that we support (TORC, CACDS, and AMI) administrative support in grant preparation, grant administration, and grant management.
- Although the administrative infrastructure and staffing at TIMES is larger than would be necessary to serve only the needs of TIMES investigators, it is substantially smaller than would be needed if TIMES, CACDS, TORC, and AMI each had their own highly trained, fully staffed administrative units. Considering that TIMES serves more than just its own investigators, and even departments beyond the university-wide research centers under its administrative umbrella, TIMES' highly trained and efficient administrative unit brings value to the university's overall research enterprise by minimizing administrative costs while maximizing performance, continuity, and sustainability for all of the administrative units and investigators that we serve.

IV. MEASURES OF PARTICIPATION AND PERFORMANCE – FISCAL YEAR FY201x

a. Personnel and Scope

1. Number of FTE Faculty Members: 41 (29 Tenure Track / 12 Research Faculty / 1 Ph.D. Staff – non-Research Faculty)

(Member: full access to center resources, grants administered by center, some credit split with center)

These are Ph.D. level tenure-track faculty, or research faculty, who have requested and been granted membership, or Ph.D. level Staff hired by a TIMES member on a TIMES administered grant or contract.

2. Number of FTE Faculty Affiliates: 0

(Affiliate: limited access to center resources, grants administered elsewhere, some credit split with center)

3. Number of Staff: 62 (32 Full Time; 30 Part Time)

Twelve of the 30 full time staff members and one of 30 part-time staff are members of the TIMES/CACDS joint Administrative Staff – 8 in Research Financial Services, 3.5 in IT Support, and 1 (Winoske) is the Lab Manager of the Neuroscience Wet Lab (half-time and supported on grants for the remainder of the time). For these individuals, some of their effort is funded on the CACDS state cost center, or on a funding source provided by TORC, AMI, the Center for Borders, Trade, and Immigration (BTI), or the Texas Center for Learning Disabilities. These latter two projects allow some support for administrative personnel. All others are supported on grants and contracts within the center.

4. Number of FTE: (a) Postdoctoral fellows 6 (b) Doctoral students 40 (c) Masters students 26 and (d) Undergraduates 126

5. Provide a list of all personnel in items 1 to 4; give full name, title, and University affiliation. Indicate percent of time associated with center/institute.

TIMES MEMBERS

Last Name	First Name	Position Title	Department	Classification
Bunta	Ferenc	Assistant Professor	Communication Disorders	Tenured/Tenure Track
Gallagher	Matthew	Assistant Professor	Psychology	Tenured/Tenure Track
Hein	Sascha	Assistant Professor	Education	Tenured/Tenure Track
Ince	Nuri	Assistant Professor	Biomedical Engineering	Tenured/Tenure Track
Tolar	Tammy	Assistant Professor	Education	Tenured/Tenure Track
Zhang	Yingchun	Assistant Professor	Biomedical Engineering	Tenured/Tenure Track
Alfano	Candice	Associate Professor	Psychology	Tenured/Tenure Track
Castilla-Earls	Anny	Associate Professor	Communication Disorders	Tenured/Tenure Track
Cirino	Paul	Associate Professor	Psychology	Tenured/Tenure Track
Francis	Joseph	Associate Professor	Biomedical Engineering	Tenured/Tenure Track
Horn	Catherine	Associate Professor	Educational Psychology	Tenured/Tenure Track
Leasure	J. Leigh	Associate Professor	Psychology	Tenured/Tenure Track
Mehta	Paras	Associate Professor	Psychology	Tenured/Tenure Track
Omurtag	Ahmet	Associate Professor	Biomedical Engineering	Tenured/Tenure Track

Santi	Kristi	Associate Professor	Education	Tenured/Tenure Track
Sharp	Carla	Associate Professor	Psychology	Tenured/Tenure Track
Steinberg	Lynne	Associate Professor	Psychology	Tenured/Tenure Track
Vilalta	Ricardo	Associate Professor	Computer Science	Tenured/Tenure Track
Ziburkus	Jokubas	Associate Professor	Biology	Tenured/Tenure Track
Akay	Metin	Professor	Biomedical Engineering	Tenured/Tenure Track
Fletcher	Jack	Professor	Psychology	Tenured/Tenure Track
Francis	David	Professor	Psychology	Tenured/Tenure Track
Grigorenko	Elena	Professor	Psychology	Tenured/Tenure Track
Hannay	H. Julia	Professor	Clinical Psychology	Tenured/Tenure Track
Johnsson	Lennart	Professor	Computer Science	Tenured/Tenure Track
Kakadiaris	Ioannis	Professor	Computer Science	Tenured/Tenure Track
Kosten	Therese	Professor	Psychology	Tenured/Tenure Track
Pavlidis	Ioannis	Professor	Computer Science	Tenured/Tenure Track
Rea	Michael	Professor	Biology	Tenured/Tenure Track
Semendeferi	Ioanna	Instructional Associate Professor	Physics	Research Faculty
Ahmed	Yusra	Research Assistant Professor	Psychology	Research Faculty
Barr	Christopher	Research Assistant Professor	Psychology	Research Faculty
Benoit	Julia	Research Assistant Professor	Optometry	Research Faculty
Carlson	Coleen	Research Assistant Professor	Psychology	Research Faculty
Davidson	Kevin	Research Assistant Professor	Psychology	Research Faculty
Haile	Colin	Research Assistant Professor	Computer Science	Research Faculty
Miciak	Jeremy	Research Assistant Professor	Psychology	Research Faculty
Naumova	Oxana	Research Assistant Professor	Psychology	Research Faculty
Rodgers	Shaefali	Research Assistant Professor	Psychology	Research Faculty
Taylor	Pat	Research Assistant Professor	Psychology	Research Faculty
McIntyre	Teresa	Research Professor	Psychology	Research Faculty
Archilla	Maria	Post Doctoral Fellow	Psychology	Post Doctoral Fellow
Kornilov	Sergey	Post Doctoral Fellow	Psychology	Post Doctoral Fellow
Palo	Amanda	Post Doctoral Fellow	Computer Science	Post Doctoral Fellow
Upadhyay	Sanat	Post Doctoral Fellow	Computer Science	Post Doctoral Fellow
Vrigkas	Michail	Post Doctoral Fellow	Computer Science	Post Doctoral Fellow
Xie	Tian	Post Doctoral Fellow	Computer Science	Post Doctoral Fellow
Konstantinidis	Ioannis	Executive Director DHS	Computer Science	Staff

TIMES STAFF

Employee Name	Job Title	FTE	TIMES Admin (Blank – Not Part of Admin)
Evans, Sabrina D	Coord, Dept HR/Payroll 1	1.00	Research Financial Services
Geesey, Susan	Assistant Business Administrator	1.00	Research Financial Services
Gil, Bertha	Coord, Financial 1	1.00	Research Financial Services
Hernandez, Virginia L	Coord, Financial 1	1.00	Research Financial Services
Hoffman, Michele C	Assoc Dir, Res Ctr Admin	1.00	Research Financial Services
Knotts, Andrew	Coordinator, Communications	1.00	Research Financial Services

Roper, Whitney Lianne	Office Asst 1	1.00	Research Financial Services
Vargas, Adilia	Analyst, Financial 2	1.00	Research Financial Services
Nandula, Srinath	Teaching Assistant	0.50	IT Support
Alexander, Jeremy L	Systems Administrator 1	1.00	IT Support
Anderson, Martin G	Analyst, Microsystems 2	1.00	IT Support
Duong, Minh	Technical Svcs Lead	1.00	IT Support
Winoske, Kevin James	Sr Research Lab Manager	1.00	Wet Lab Manager (50% FTE; Project Support 50%)
Edwards, Philip F	Temporary Staff	0.25	
Lara, Raquel Amalia	Temporary Staff	0.25	
Foster, Andrea Thomas	Temporary Staff	0.48	
Hagan, Elsa Cardenas	Temporary Staff	0.48	
Joiner, James Harold	Temporary Staff	0.48	
Brooks, Brendia Ann	Temporary Staff	0.49	
Colemon, Rozan	Temporary Staff	0.49	
Fraser, Diane Ellen	Temporary Staff	0.49	
Najm, Julia Adnan	Research Staff	0.49	
Wall, Kiana Ellen	Research Staff	0.49	
Agha, Nadia H	Research Assistant/TE	0.50	
Bachhuber, Stephen	Research Assistant/TE	0.50	
Dou, Pengfei	Research Assistant/TE	0.50	
Islam, Mohammad Mainul	Research Assistant/TE	0.50	
Khalaf, Shiva	Research Assistant/TE	0.50	
Le, Ha Anh Vu	Research Assistant/TE	0.50	
Leng, Mengjun	Research Assistant/TE	0.50	
Macdonald, Kelly	Research Assistant/TE	0.50	
Shah, Parth Rakeshkumar	Research Assistant/TE	0.50	
Taamneh, Salah	Research Assistant/TE	0.50	
Tan, Mei	Research Assistant/TE	0.50	
Thomas, Christina	Research Assistant/TE	0.50	
Torres, Stephanie	Research Assistant/TE	0.50	
Wu, Yuhang	Research Assistant/TE	0.50	
Xu, Xiang	Research Assistant/TE	0.50	
Zhang, Lingfeng	Research Assistant/TE	0.50	
McPherson, Rosalva	Researcher 3 Soc Behv Science	0.75	
Raines, Elizabeth	Researcher 1 Soc Behv Science	0.75	
Aziz Nisar, Fauzia	Research Liaison Officer	1.00	
Barcnas, Griselda	Researcher 2 Nat Phys Science	1.00	
Bower, Joanne Louise	Researcher 2 Soc Behv Science	1.00	
Boyce, Eleanor C	Researcher 4 Soc Behv Science	1.00	
Brownlie, Rachel B	Mgr, Project	1.00	
Clement, Kevin	Exec Dir, Strategic Partnershi	1.00	
Garcia, Henry T	Technical Svcs Spec 2	1.00	
Hernandez, Maria	Technical Assistant	1.00	
Konstantinidis, Ioannis	Exec Dir, Research Center	1.00	
Leal, Francisca	Researcher 4 Soc Behv Science	1.00	

McMillian,Lisa K	Researcher 3 Soc Behv Science	1.00
Mehlhaff,Edwin	Technical Svcs Spec 3	1.00
Monroe,Constance Lane	Researcher 3 Soc Behv Science	1.00
Nguyen,Thanh	Technical Svcs Spec 3	1.00
Nieser,Kenneth	Researcher 2 Nat Phys Science	1.00
Perry,Matthew J	Researcher 1 Soc Behv Science	1.00
Roberts,Linda Kay	Spvr, Data Entry	1.00
Roosa,Tiffany J	Dir, Program 2	1.00
Salem,Hibah	Researcher 3 Soc Behv Science	1.00
Vigilla,Laudemer S	Technical Svcs Spec 2	1.00
Woodward,Phillip Sean	Technical Svcs Spec 4	1.00

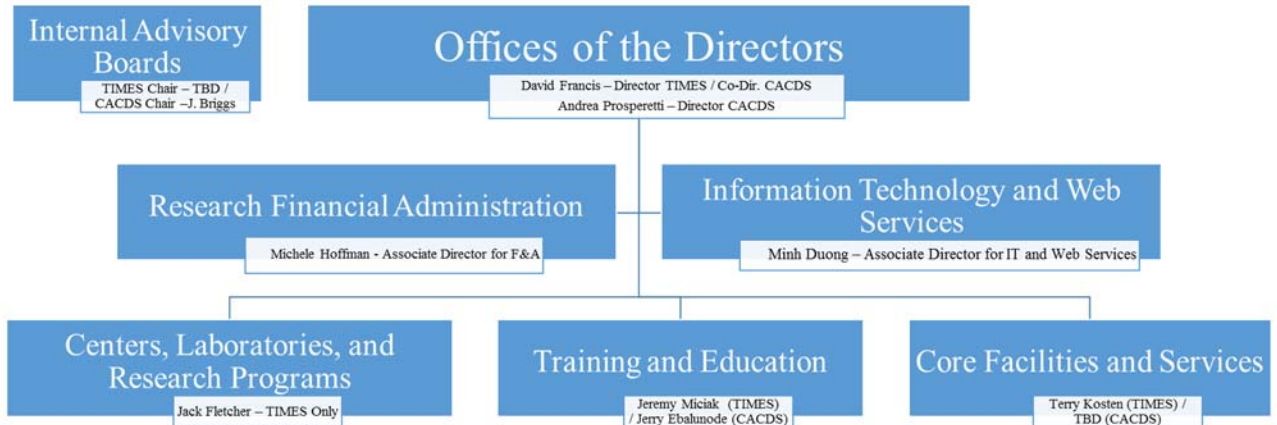
Of the individuals in the faculty table, those listed as tenure/tenure track have 0% effort in TIMES. They are faculty in academic departments. Many have offices and/or lab space in TIMES managed space in HBSB, but they are not on TIMES budget except to the extent that they may have grants managed by TIMES that cover academic year or summer salary. All of the post-doctoral Fellows and Research Faculty are 100% TIMES, but most of these have their support on grants and or contracts. Some are provided partial support on TIMES discretionary funds as part of startup packages for tenure track faculty or to support Research Faculty when they have a reduction in funding. The exceptions are Drs. Coleen Carlson and Kevin Davidson. Dr. Carlson receives some support from TIMES for her role in managing TIMES staff involved in Project Management and Data Collection. Dr. Davidson is the designer and chief architect of the TIMES SAS Data Warehouse which supports many TIMES projects. Dr. Davidson also directs the efforts of TIMES Data Management personnel, who are available to TIMES research projects. That portion of Drs. Davidson and Carlson that are in direct support of funded projects are paid on project budgets, but those portions of their effort that are indirect in support of their administrative roles or indirect support of all projects are covered from TIMES discretionary funds.

Individuals listed in the staff table are 100% in TIMES, although not all appointments are full time as indicated by the FTE column in the table. As noted above, many of these individuals are supported on project cost centers (i.e., grants or contracts and not from TIMES discretionary accounts). TIMES administrative staff are supported on discretionary accounts except where possible to cover them on grants and/or contracts that allow support for administrative staff.

6. Provide a current organizational chart (include advisory board/committee if applicable).

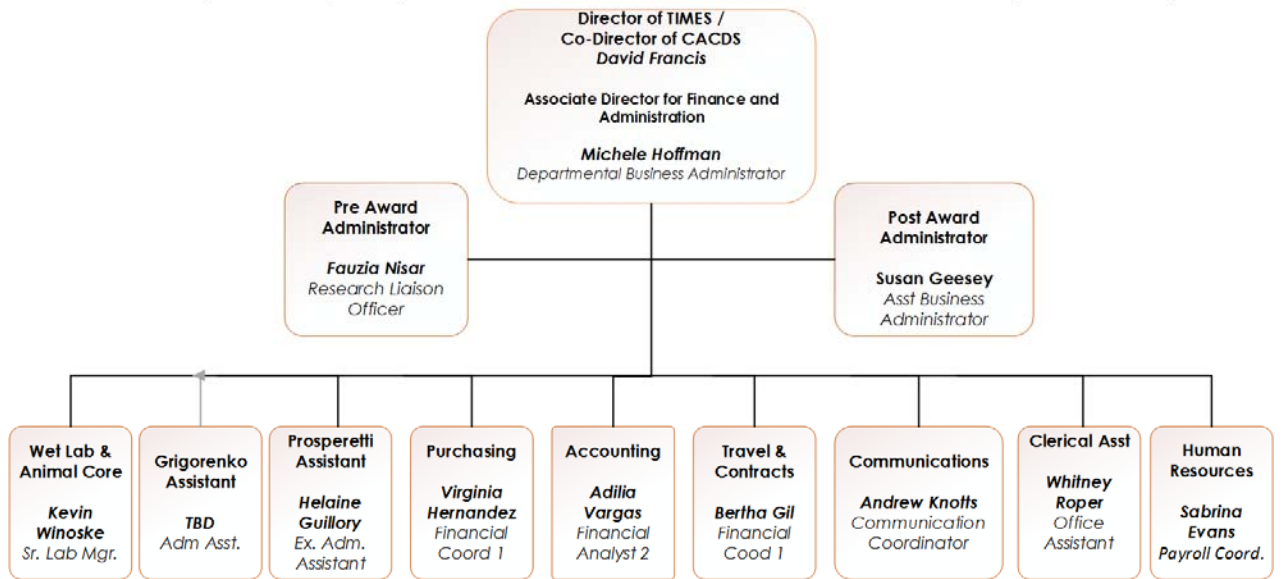
Below is the Joint Organizational Chart for TIMES/CACDS who share an administrative infrastructure. Each Center has its own Internal Advisory Board. The IAB for TIMES is provided below the organizational chart. A Chair of the IAB has not yet been chosen. Because both centers have Training and Education activities and some Core Facilities, each center has a faculty lead for those functions. A Director of Core Facilities for CACDS has not yet been named as no Charge Back Core Facilities are currently in place, whereas TIMES has established an Animal Behavior Core in HBSB. CACDS presently does not have Centers, Institutes, Laboratories, and Research Programs operating within it as programmatic entities. Jack Fletcher serves as faculty lead for Centers, Laboratories, and Research Programs for TIMES. A CACDS faculty lead may be appointed at the discretion of the CACDS Director and IAB.

TIMES / CACDS Joint Organizational Chart



Below we provide an organizational chart for the Research Financial Administrative Services component of the organizational chart. The group provides services to TIMES, CACDS, AMI, and TORC. The group existed within TIMES and then TIMES and CACDS merged their administrative groups in 2015. In the Chart below, Helaine Guillory is exclusively under CACDS as Dr. Prosperetti’s Executive Administrative Assistant. Susan Geesey was the DBA for CACDS, Virginia was the HR manager for CACDS, Andrew Knotts headed up Communications, and Whitney Roper was a student communications assistant prior to the merger into a single administrative group. Michele Hoffman, Adilia Vargas, Bertha Gill, Fauzia Nisar, Minh Duong, the individual who was replaced by Sabrina Evans, and Kevin Winoske were members of the TIMES administrative infrastructure prior to the merger.

TIMES/CACDS/AMI/TORC Research Financial Administration (Summer 2016)



UNIVERSITY of
HOUSTON
CENTER FOR ADVANCED COMPUTING & DATA SYSTEMS

Internal Advisory Board for TIMES 2017

Member Name	College	Department	
Bond, Richard	Pharmacy	Pharm. And Pharmaceut. Sciences	
Frishman, Laura	Optometry		
Harold, Michael	Engineering	Chemical Engineering	
Horn, Cathy	Education	Ed. Leadership and Policy Studies	TIMES Member
Grigorenko, Elena	CLASS	Psychology	TIMES Member
Price, Dan	Honors	Dean of the Honors College	
Subhlok, Jaspal	NSM	Computer Science	
	Ex Officio		Serving As
Ottinger, MaryAnn	NSM	Biology/Biochemistry	Delegate VP/VC for Research
Fletcher, Jack	CLASS	Psychology	TIMES, Assoc. Dir., Research
Hoffman, Michele		TIMES	TIMES, Assoc. Dir. Fin. Svc.
Kosten, Terry	CLASS	Psychology	TIMES, Sci. Dir., ABC
Prosperetti, Andrea	Engineering	Mechanical Engineering	CACDS, Director

7. Provide a list of outside agencies or entities with which this center/institute interacts.

The Department of Homeland Security funded Center for Borders, Trade, and Immigration (BTI) is housed within TIMES under the direction of Dr. Ioannis Kakadiaris, Department of Computer Science and head of the Computational Biology Laboratory, which has been part of TIMES since 2012.. Dr. Kakadiaris and his staff interact with DHS, but TIMES does not interact with federal agencies as a unit. Individual investigators interact with their program officers of their funding agencies, for example the Institute of Education Sciences, the National Institute of Child Health and Human Development, and the National Science Foundation.

b. Financial Support (funding received during specified FY2015 and FY2016)

Table Showing TIMES Support from Various Sources from 2005-2016

TIMES IDC	34116	\$ 381,308	\$ 369,038	\$ 494,797	\$ 388,110	\$ 799,206	\$ 540,229	\$ 335,149	\$ 335,535	\$ 340,536	\$ 440,948	\$ 411,492	\$ 362,128	\$ 5,198,475
	35687	\$ 250,000	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000
	37152	\$ 3,509	\$ 12,533	\$ 48,350	\$ 13,330	\$ 20,130	\$ 9,606	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 107,458
TIMES DOR	41673	\$ -	\$ -	\$ -	\$ 119,921	\$ -	\$ 311,973	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 431,894
TIMES Core	41742	\$ -	\$ -	\$ -	\$ 150,000	\$ 287,395	\$ 337,488	\$ 187,863	\$ 30,000	\$ 63,815	\$ -	\$ -	\$ -	\$ 1,056,561
CREATE Conference	42443	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,356	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,356
TIMES Royalty	47299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 116,082	\$ 18,178	\$ 8,268	\$ 7,020	\$ -	\$ -	\$ 149,548
Classroom Buildout	53084	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,000	\$ -	\$ -	\$ -	\$ 12,000
Camera Services Income	53758	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 762	\$ -	\$ -	\$ 762
MOOC	54172	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,000	\$ -	\$ -	\$ 24,000
TIMES Royalty	56660	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 137,347	\$ 745	\$ 138,092
Hardware	56781	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,072	\$ -	\$ 6,072
I-Phone	56782	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,211	\$ -	\$ 1,211
	32489	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000
TIMES Ledger 1	38604	\$ -	\$ -	\$ 208,973	\$ 300,000	\$ 300,000	\$ 300,000	\$ 309,094	\$ 569,602	\$ 544,500	\$ 100,494	\$ 100,494	\$ 118,685	\$ 2,851,843
	38821	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
	39139	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,599	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,599
TIMES Appropriation	51605	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 444,006	\$ 444,006	\$ 444,006	\$ 448,491	\$ 1,780,509
TOTAL SUPPORT		\$ 734,817	\$ 831,571	\$ 1,002,120	\$ 971,361	\$ 1,406,731	\$ 1,525,652	\$ 969,788	\$ 953,314	\$ 1,413,125	\$ 1,017,230	\$ 1,100,621	\$ 930,049	\$ 12,856,379
TIMES GENERATED SUPPORT		\$ 734,817	\$ 731,571	\$ 793,147	\$ 401,440	\$ 819,336	\$ 576,191	\$ 451,231	\$ 353,712	\$ 360,804	\$ 472,730	\$ 556,121	\$ 362,873	\$ 6,413,973
UH DIRECT SUPPORT		\$ -	\$ 100,000	\$ 208,973	\$ 569,921	\$ 587,395	\$ 949,461	\$ 518,556	\$ 599,602	\$ 1,052,321	\$ 544,500	\$ 544,500	\$ 567,176	\$ 6,442,406

TOTAL Support is from all of the above sources of revenue. These are non-grant sources of revenue.

TIMES GENERATED Support is support from sources that result directly from TIMES research activities, e.g., IDC returned to TIMES from credit splits on grants, TIMES Royalties, MOOCs, CREATE Conference, and internal proposals (viz., Classroom Buildout).

TIMES Royalty accounts reflect royalties from licensed IP. There are two different cost centers tied to royalties.

The three accounts under TIMES Ledger1 are different appropriations accounts that have been used over time by the central administration to allocate funding to TIMES.

Not Included in the above table are revenues from competitive grants and contracts from Federal, State, and Local agencies including Foundations.

1. Provide a table listing the major categories and amounts of expenditures for the unit.

Below is a table showing expenses by category over the past three funding years (2014-2016).

Category	Comparison of Expenditures across three Fiscal Years for Discretionary Cost Centers and All Cost Centers					
	Discretionary Cost Centers (Appropriated Funds)			All Cost Centers (Appropriated Funds, Grants, Contracts, Etc.)		
	2014	2015	2016	2014	2015	2016
Capital Outlay	\$22,926	\$7,062	\$32,449	31,735	\$7,062	\$39,793
Fringe Benefits	\$83,166	\$62,918	\$136,003	627,125	\$581,447	\$699,405
IDC				1,302,226	\$1,150,736	\$1,495,739
M & O	\$491,189	\$351,067	\$436,527	637,812	\$592,694	\$914,616
Salary	\$1,349,817	\$990,885	\$1,205,238	3,804,181	\$3,336,990	\$4,000,017
Sub Contracts	0	0	0	1,555,193	\$1,082,091	\$2,588,596
Travel	\$48,608	\$45,321	\$78,636	69,417	\$106,128	\$204,568
Total	\$1,995,706	\$1,457,253	\$1,888,852	8,127,689	\$6,857,148	\$9,942,734

2. Is current funding of the unit sufficient to continue its operations (give specific details)?

Our base funding allows us to maintain operations, but we are very dependent on IDC generation and recovery and on grants and contracts. Our level of funding is insufficient to expand services so that we could provide more support to the university community at large who are not in a position to pay for statistical support, data management or data warehousing, to offer free workshops on statistical techniques, or to provide new investigators with access to the Animal Behavior Core through TIMES funded seeded grants. If we had sufficient funding to pick up the equivalent of 1.0 FTE of statistical support, and/or data management support, and/or to create a seed grant program for junior faculty, we could open up more service lines to the greater university community. We are also looking at ways to monetize the support that we are offering to academic departments and colleges on electronic reporting of cost centers used in reconciliation.

c. Contracts and grants to unit (count only members unless affiliates credit split; include entire amount of award)

1. Number of proposals submitted (and total funds requested) through RAMP.

See tables below showing proposal, award, and IDC recovery.

2. Number of external awards received; must be verifiable through RAMP

See tables below showing proposal, award, and IDC recovery.

3. Dollar amount of external awards received (and IDC recovered); must be verifiable through RAMP

See tables below showing proposal, award, and IDC recovery.

Information on Proposal Activity and Grant Awards are presented in the tables below for the period of time from 2000-2016. The first table shows historical data from 2000 to 2014, while the second and third tables show data for 2015 and 2016.

The items in the table include Federal awards, foundation research awards, non-profit and for profit competitive grants and contracts, state, and University awards. In most instances, University awards are subcontracts on federal and state competitive grants where the University of Houston, through TIMES investigators, is funded via subcontract to the prime award, which is housed at another university.

All numbers in the Proposal, Award, and IDC tables below were provided by the Division of Research and compiled by the TIMES Director.

Proposal and Award Activity from Various Sources for 2000-2014

Sponsor Type	Total Requested	Total Awarded	Total Expended
FEDERAL	\$130,440,525	\$52,186,270	\$46,564,516
FOUNDATION	\$1,555,672	\$154,000	\$153,669
LOCAL	\$772,304	.	.
NON PROFIT	\$7,092,536	\$391,277	\$370,018
PROFIT	\$3,278,143	\$177,453	\$146,317
STATE	\$36,666,204	\$24,646,601	\$21,440,904
UNIVERSITY	\$14,378,406	\$31,681	\$31,662
	\$194,183,789	\$77,587,282	\$68,707,085

Proposal and Award Activity for 2015

Sponsor Type	Total Requested	Total Awarded	Total Expended
FEDERAL	\$26,821,854	\$3,880,748	\$3,781,754
FOUNDATION			
NON PROFIT	\$295,141	.	\$5,360
PROFIT	\$29,888	\$45,000	\$85,374
STATE	\$843,702	\$350,172	\$256,889
UNIVERSITY	\$4,562,143	\$10,500	.
	\$32,552,728	\$4,286,421	\$4,129,377

Proposal and Award Activity for 2016

Sponsor Type	Total Requested	Total Awarded	Total Expended
FEDERAL	\$19,568,786	\$7,154,972	\$5,686,749
FOUNDATION	\$35,000	.	.
NON PROFIT	\$1,612,610	\$46,349	\$23,972
PROFIT	\$2,506,832	\$830,992	\$115,318
STATE	\$624,327	\$394,631	\$203,104
UNIVERSITY	\$4,640,185	.	\$10,500
	\$28,987,739	\$8,426,944	\$6,039,644

The following tables show TIMES activities related to the recovery of Indirect Costs. The first table provides a historical overview from 2000-2014, whereas the remaining tables provide information for 2015 and 2016, respectively.

In these tables, the Total Recovered is the amount of IDC recovered by the university on the basis of the grant activity in which TIMES was involved multiplied by the percentage of the credit going to TIMES. The Total Returned is the IDC returned to generating unit and the parent unit, which in the case of TIMES is DOR.

TIMES Share is the IDC returned to TIMES of the recovered IDC that was returned to the generating units. The remaining portions were returned to the parent unit, which in the case of TIMES is DOR. Not reflected in the table is the IDC returned to other generating units who are receiving a credit split on the award. For example, the row listed as Psychology indicates that the investigators home department is Psychology. That department would also receive a share of the IDC as would the College of Liberal Arts and Social Sciences, the parent department to which Psychology reports. The Investigator Department shows the departmental affiliation of the particular investigator who is credited with the IDC generation that was credited to TIMES. In the case of grants involving multiple investigators, the amounts included in the table are the amounts multiplied by the investigator share and by the percentage of the credit which that investigator assigned to TIMES. Investigators whose primary affiliation is listed as TIMES are research faculty within TIMES.

A report provided by the Division of Research shows that those grant cost centers where TIMES received some credit for the activity had expenditures of \$7.1M in 2015 and \$10.4M in 2016. Based on those expenditures, a total of \$1.66M and \$1.99M in IDC were generated, of which \$0.9M and \$1.0M was returned to the generating units in 2015 and 2016, respectively. Thus, in 2015 the IDC returned to TIMES was approximately 40% of that returned to the generating units and in 2016 was approximately 44.6% of the IDC returned to the generating units. The rate of IDC recovered as a ratio of expenditures reflects the large number of awards under TIMES management that involve subcontracts to other institutions, which limit the amount of IDC recovered by UH on the subcontracts relative to the prime portion of the award.

IDC Recovery on TIMES Grant Activity for years 2001 - 2014

Investigator Department	Total Recovered	Total Returned	TIMES Share
Center for Advanced Computing and Data Systems	\$2,739	\$1,436	\$1,063
Center for Drug and Social Policy Research	\$2,818	\$1,525	\$1,129
Computer Science	\$453,882	\$243,764	\$180,386
Information & Logistics Technology	\$4,151	\$2,246	\$1,662
Mathematics	\$20,984	\$11,133	\$8,239
Psychological, Health, and Learning Sciences	\$155,325	\$82,229	\$60,849
Psychology	\$8,538,177	\$4,715,776	\$3,489,675
TIMES	\$2,155,913	\$1,131,856	\$837,574
	\$11,333,989	\$6,189,967	\$4,580,575

IDC Recovery on TIMES Grant Activity for 2015

Investigator Department	Total Recovered	Total Returned	TIMES Share
Computer Science	\$90,548	\$49,292	\$36,476
Mathematics	\$11,689	\$6,363	\$4,709
Psychological, Health, and Learning Sciences	\$57,675	\$31,397	\$23,234
Psychology	\$445,793	\$242,680	\$179,583
TIMES	\$298,930	\$162,731	\$120,421
	\$904,635	\$492,463	\$364,423

IDC Recovery on TIMES Grant Activity for 2016

Investigator Department	Total Recovered	Total Returned	TIMES Share
Center for Drug and Social Policy Research	\$2,818	\$1,525	\$1,129
Computer Science	\$342,537	\$185,370	\$137,174
Information & Logistics Technology	\$4,151	\$2,246	\$1,662
Mathematics	\$7,672	\$4,152	\$3,072
Psychological, Health, and Learning Sciences	\$46,004	\$24,896	\$18,423
Psychology	\$537,667	\$290,967	\$215,316
TIMES	\$258,586	\$139,938	\$103,554
TOTAL	\$1,199,435	\$649,094	\$480,330

4. Provide a table listing the title, PI, sponsor, amount of funding, and indirect cost (IDC) recovered for each award received. Identify specifically any multi-PI interdisciplinary awards.

The following tables show individual awards for TIMES for 2015 and for 2016. The table shows the RD2K Project ID, PI, Sponsor, and Awarded Amounts. IDC Recovery follows in the subsequent year and is not reported in these tables. IDC Recovery was reported in preceding tables, keeping in mind that IDC recovered in 2015 is based on expenditures in 2014, and IDC recovered in 2016 is based on expenditures in 2015. Depending on when projects begin in the year in which they are awarded, IDC recovery varies in any given year and does not match the proposed IDC for that grant year (i.e., reporting of expenditures and IDC recovery is tied to calendar year expenditures in the preceding year, but the budget for expenditures and IDC is tied to grant years, which almost always span multiple calendar years. Thus, we find the reporting of IDC recovery in the year by project useful for accounting, but not for reporting or planning. More valuable are the above tables which show IDC activity by participating entities.

Funded Proposals for 2015 Showing Project Number, Title, Sponsor, Investigator, the Home Department, and the TIMES Split on the Proposal.

Fiscal Year	Project ID	Project Title	Sponsor	Pass Thru	Sponsor Type	Investigator	Home Department	Empl ID	%	PI	Total Funding	Prj End Date	Amount
2015 AW	108988	Bridging genetic and phenotypic methods in human studies (Grad Student: Kamil Khanipov)	University of Texas Medical Branch at Galveston		STATE	Pavlidis, Ioannis Dr.	Computer Science	126948	50.00%	Y	\$17,271.00	5/31/2015	\$8,635.50
2015 AW	109089	Peer Facilities VISN Contract FY 14-15 - Sonya Stokes	Michael E. DeBakey Veterans Affairs Medical Center	Veterans Administration	FEDERAL	Mehta, Paras Dr.	TIMES	103650	70.00%	Y	\$12,654.00	9/30/2015	\$8,857.80
2015 AW	109491	International Workshop on Large-scale Biomedical Semantic Indexing and Question Answering (BioASQ)	National Library of Medicine		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	80332	50.00%	Y	\$57,615.00	8/25/2018	\$9,602.50
2015 AW	108989	Bridging genetic and phenotypic methods in human studies (Grad Student:Levent Albayrak)	University of Texas Medical Branch at Galveston		STATE	Pavlidis, Ioannis Dr.	Computer Science	126948	50.00%	Y	\$19,544.00	5/31/2015	\$9,772.00
2015 AW	110311	Yes We Can	Arizona State University		UNIVERSITY	Pavlidis, Ioannis Dr.	Computer Science	126948	50.00%	Y	\$21,000.00	6/30/2016	\$10,500.00
2015 AW	104249	Developing instructional approaches suited to the cognitive and motivational needs of struggling adult readers	Georgia State University	Institute of Educational Sciences	FEDERAL	Barr, Christopher Dr.	TIMES	128115	80.00%	Y	\$277,797.00	8/31/2017	\$14,128.80
2015 AW	109073	Peer Facilities VISN Contract FY 14-15	Michael E. DeBakey Veterans Affairs Medical Center		FEDERAL	Mehta, Paras Dr.	TIMES	103650	70.00%	Y	\$28,302.40	9/30/2015	\$19,811.68
2015 AW	109072	THE BURDEN OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) IN THE VETERANS HEALTH ADMINISTRATION	Michael E. DeBakey Veterans Affairs Medical Center		FEDERAL	Francis, David Dr.	Psychology	82417	70.00%	Y	\$41,400.00	9/30/2015	\$28,980.00
2015 AW	108659	A Follow-up of Children Enrolled in the Management of Myelomeningocele Study 14-UHTX-15	George Washington University	National Institute of Child Health and Human Development	FEDERAL	Fletcher, Jack Dr.	Psychology	180578	80.00%	Y	\$39,285.00	6/30/2015	\$31,428.00
2015 AW	107557	Identification of optimum spectacle prescriptions for patients with Down syndrome	National Eye Institute		FEDERAL	Stuebing, Karla Dr.	TIMES	146864	5.00%	N	\$313,375.00	8/31/2019	\$32,261.35
2015 AW	100232	Understanding Malleable Cognitive Processes and Integrated Comprehension Interventions for Grades 7-12	University of Texas at Austin	U.S. Department of Education	FEDERAL	Fletcher, Jack Dr.	Psychology	180578	40.00%	N	\$2,682,559.00	6/30/2016	\$37,616.00
2015 AW	110413	A Follow-up of Children Enrolled in the Management of Myelomeningocele Study	George Washington University	National Institute of Child Health and Human Development	FEDERAL	Fletcher, Jack Dr.	Psychology	180578	80.00%	Y	\$47,768.00	6/30/2016	\$38,214.40
2015 AW	100232	Understanding Malleable Cognitive Processes and Integrated Comprehension Interventions for Grades 7-12	University of Texas at Austin	U.S. Department of Education	FEDERAL	Francis, David Dr.	Psychology	82417	45.00%	Y	\$2,682,559.00	6/30/2016	\$42,318.00
2015 AW	106149	Data Mining Techniques Applied to Seismic Data	Repsol Services Company		PROFIT	Vilalta, Ricardo Dr.	Computer Science	126953	50.00%	Y	\$450,211.70	12/31/2015	\$45,000.00
2015 AW	107463	Testing Gene-Testosterone Interplay in Adolescent Alcohol Use	University of Texas at Austin	National Institute on Alcohol Abuse and Alcoholism	FEDERAL	Tackett, Jennifer Dr.	Psychology	1164068	80.00%	Y	\$99,639.00	6/30/2016	\$52,360.80
2015 AW	110312	Preventing Dropout among At-risk Youth: A study of Project Goal with English Learners	University of Texas at Austin	Institute of Educational Sciences	FEDERAL	Miciak, Jeremy Dr.	TIMES	1159554	80.00%	Y	\$218,999.00	6/30/2019	\$57,629.60
2015 AW	107513	Consistency Management & Cooperative Discipline (CMCD): An Efficacy Trial with Students in Third and Fourth Grade Urban Schools	U.S. Department of Education		FEDERAL	Francis, David Dr.	Psychology	82417	7.00%	N	\$3,496,854.00	6/30/2018	\$59,083.08
2015 AW	108758	CHARACTERIZATION OF PSYCHOLOGICAL RISK, OVERLAP WITH PHYSICAL HEALTH, AND ASSOCIATED PERFORMANCE IN ISOLATED, CONFINED, EXTREME (ICE) ENVIRONMENTS	NASA - National Aeronautics and Space Administration - Johnson Space Center		FEDERAL	Alfano, Candice Dr.	Psychology	1132419	42.00%	Y	\$916,446.00	11/12/2017	\$65,100.00
2015 AW	107507	TPRI & Tejas LEE Print, Distribution and Development	University of Texas Health Science Center at Houston	Texas Education Agency	STATE	Carlson, Coleen Dr.	TIMES	89897	80.00%	Y	\$198,196.00	8/31/2015	\$79,999.20
2015 AW	106793	Toyota Economic Loss Settlement Safety Research	Toyota Motor Corporation	Texas Transportation Institute	STATE	Pavlidis, Ioannis Dr.	Computer Science	126948	50.00%	Y	\$503,130.00	12/31/2016	\$85,099.00
2015 AW	109103	Center for Borders, Trade, and Immigration Research: A DHS Center of Excellence	U.S. Department of Homeland Security		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	80332	100.00%	Y	\$1,692,980.00	6/30/2020	\$100,000.00
2015 AW	108951	Target Validation Core Rats	National Institute on Alcohol Abuse and Alcoholism		FEDERAL	Kosten, Therese Dr.	Psychology	1330619	50.00%	N	\$446,738.00	8/31/2016	\$109,984.00
2015 AW	110785	Effects of Maternal Interpretation Biases on Child Anxiety and Related Responses	National Institute of Mental Health		FEDERAL	Viana, Andres Dr.	Psychology	8001690	70.00%	Y	\$282,017.00	4/30/2017	\$117,975.20
2015 AW	108743	Predictors of Growth in Algebra Achievement in Adolescents	National Institute of Child Health and Human Development		FEDERAL	Tolar, Tammy Dr.	Psychological, Health, and Learning Sciences	832006	50.00%	N	\$620,022.19	6/30/2017	\$118,423.00
2015 AW	109063	Reading Achievement Multi-Component Program (RAMP-UP)	University of Miami	U.S. Department of Education	FEDERAL	Barr, Christopher Dr.	TIMES	128115	80.00%	Y	\$154,084.82	7/1/2016	\$123,267.20
2015 AW	107513	Consistency Management & Cooperative Discipline (CMCD): An Efficacy Trial with Students in Third and Fourth Grade Urban Schools	U.S. Department of Education		FEDERAL	Carlson, Coleen Dr.	TIMES	89897	16.00%	N	\$3,496,854.00	6/30/2018	\$135,047.04
2015 AW	110146	TRIP MATCH 15 - TIMES - ENTERPRISE PRODUCTS - DUNCAN	Texas Higher Education Coordinating Board	State of Texas	STATE	Fletcher, Jack Dr.	Psychology	180578	100.00%	Y	\$166,666.75	8/31/2099	\$166,666.75
2015 AW	108974	Texas Center for Learning Disabilities Intervention Project	Texas Education Agency	U.S. Department of Education	FEDERAL	Fletcher, Jack Dr.	Psychology	180578	70.00%	Y	\$300,000.00	8/31/2015	\$210,000.00
2015 AW	103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development		FEDERAL	Francis, David Dr.	Psychology	82417	12.00%	N	\$8,626,114.00	11/30/2016	\$218,298.60
2015 AW	103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development		FEDERAL	Cirino, Paul Dr.	Psychology	125999	12.00%	N	\$8,626,114.00	11/30/2016	\$218,298.60
2015 AW	101918	Scale-up Evaluation of Reading Intervention for First Grade English Learners	Institute of Educational Sciences		FEDERAL	Francis, David Dr.	Psychology	82417	40.00%	Y	\$5,201,997.00	7/31/2016	\$266,400.40
2015 AW	101918	Scale-up Evaluation of Reading Intervention for First Grade English Learners	Institute of Educational Sciences		FEDERAL	Carlson, Coleen Dr.	TIMES	89897	40.00%	N	\$5,201,997.00	7/31/2016	\$266,400.40
2015 AW	103586	Best Evaluation Tools & Techniques for Effective Recommendations for Policies (BETTER Policy Decisions)	Centers for Disease Control		FEDERAL	Carlson, Coleen Dr.	TIMES	89897	24.00%	N	\$4,245,862.00	9/29/2016	\$299,007.60
2015 AW	106043	The Autism Impact Measure: A New Tool for Treatment Outcome Measurement	University of Missouri	National Institutes of Health	FEDERAL	Carlson, Coleen Dr.	TIMES	89897	80.00%	Y	\$734,919.00	7/31/2016	\$381,634.40
2015 AW	103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development		FEDERAL	Fletcher, Jack Dr.	Psychology	180578	45.00%	Y	\$8,626,114.00	11/30/2016	\$818,619.75
Total													\$4,286,420.65

Funded Proposals for 2016 Showing Project Number, Title, Sponsor, Investigator, the Home Department, and the TIMES Split on the Proposal.

Project ID	Project Title	Sponsor	Pass Thru	Sponsor Type	Investigator	Home Department	%	PI	Total Funding	Prj End Date	Amount
100232	Understanding Malleable Cognitive Processes and Integrated Comprehension Interventions for Grades 7-12	University of Texas at Austin	U.S. Department of Education	FEDERAL	Fletcher, Jack Dr.	Psychology	40.00%	N	\$2,787,247.00	6/30/2017	\$41,875.20
100232	Understanding Malleable Cognitive Processes and Integrated Comprehension Interventions for Grades 7-12	University of Texas at Austin	U.S. Department of Education	FEDERAL	Francis, David Dr.	Psychology	45.00%	Y	\$2,787,247.00	6/30/2017	\$47,109.60
100232	Understanding Malleable Cognitive Processes and Integrated Comprehension Interventions for Grades 7-12	University of Texas at Austin	U.S. Department of Education	FEDERAL	Wolters, Christopher A. Dr.	PHLS	0.00%	N	\$2,787,247.00	6/30/2017	\$0.00
103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development	FEDERAL	Stuebing, Karla Dr.	TIMES		0.00%	N	\$8,626,114.00	11/30/2017	\$0.00
103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development	FEDERAL	Fletcher, Jack Dr.	Psychology		45.00%	Y	\$8,626,114.00	11/30/2017	\$843,030.90
103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development	FEDERAL	Francis, David Dr.	Psychology		12.00%	N	\$8,626,114.00	11/30/2017	\$224,808.24
103717	Learning Disabilities Research Center	National Institute of Child Health and Human Development	FEDERAL	Cirino, Paul Dr.	Psychology		12.00%	N	\$8,626,114.00	11/30/2017	\$224,808.24
104249	Developing instructional approaches suited to the cognitive and motivational needs of struggling adult readers	Georgia State University	Institute of Education Sciences	FEDERAL	Barr, Christopher Dr.	TIMES	80.00%	Y	\$277,797.00	8/31/2017	\$45,338.40
106149	Data Mining Techniques Applied to Seismic Data	Repsol Services Company		PROFIT	Vilalta, Ricardo Dr.	Computer Science	50.00%	Y	\$450,211.70	12/31/2015	\$15,000.00
106793	Toyota Economic Loss Settlement Safety Research	Texas A&M Transportation Institute	Toyota Motor Corporation	PROFIT	Pavlidis, Ioannis Dr.	Computer Science	50.00%	Y	\$563,810.05	12/31/2016	\$115,992.40
107513	Consistency Management & Cooperative Discipline (CMCD): An Efficacy Trial with Students in Third and Fourth Grade Urban Schools	U.S. Department of Education		FEDERAL	Francis, David Dr.	Psychology	7.00%	N	\$3,496,854.00	6/30/2018	\$62,778.31
107513	Consistency Management & Cooperative Discipline (CMCD): An Efficacy Trial with Students in Third and Fourth Grade Urban Schools	U.S. Department of Education		FEDERAL	Carlson, Coleen Dr.	TIMES	16.00%	N	\$3,496,854.00	6/30/2018	\$143,493.28
108487	UH- A+ UP	Houston A+ Challenge (previously Annenburg Challenge)		NON PROFIT	Francis, David Dr.	Psychology	5.00%	N	\$57,800.00	8/31/2017	\$1,890.00
108758	CHARACTERIZATION OF PSYCHOLOGICAL RISK, OVERLAP WITH PHYSICAL HEALTH, AND ASSOCIATED PERFORMANCE IN ISOLATED, CONFINED, EXTREME (ICE) ENVIRONMENTS	NASA Johnson Space Center		FEDERAL	Alfano, Candice Dr.	Psychology	42.00%	Y	\$916,446.00	11/12/2017	\$199,500.00
108951	Target Validation Core Rats	National Institute on Alcohol Abuse and Alcoholism		FEDERAL	Kosten, Therese Dr.	Psychology	50.00%	N	\$446,738.00	8/31/2017	\$109,983.50
109063	Reading Achievement Multi-Component Program (RAMP-UP)	University of Miami	U.S. Department of Education	FEDERAL	Barr, Christopher Dr.	TIMES	80.00%	Y	\$202,434.00	8/31/2017	\$38,680.00
109103	Center for Borders, Trade, and Immigration Research: A DHS Center of Excellence	U.S. Department of Homeland Security		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	100.00%	Y	\$5,890,482.00	6/30/2017	\$1,244,363.00
109240	Human Methamphetamine Vaccine: Translational Avant Garde Award International Workshop on Large-scale Biomedical Semantic Indexing and Question Answering (BioASQ)	Baylor College of Medicine	National Institute on Drug Abuse	FEDERAL	Kosten, Therese Dr.	Psychology	70.00%	Y	\$30,452.00	8/31/2016	\$21,316.40
109491	Preventing Dropout among At-risk Youth: A study of Project Goal with English Learners	National Library of Medicine		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	50.00%	Y	\$57,615.00	8/25/2018	\$9,602.50
110312	English Learners	University of Texas at Austin	Institute of Education Sciences	FEDERAL	Miciak, Jeremy Dr.	TIMES	80.00%	Y	\$218,999.00	6/30/2019	\$108,024.00
110535	Texas Center for Learning Disabilities Intervention Project	Texas Education Agency	U.S. Department of Education	FEDERAL	Fletcher, Jack Dr.	Psychology	70.00%	Y	\$300,000.00	8/31/2017	\$210,000.00
110537	Identification of Reading & Language Disabilities in Spanish-Speaking English Learners	Institute of Education Sciences		FEDERAL	Francis, David Dr.	Psychology	42.00%	Y	\$699,743.00	7/31/2018	\$143,469.90
110537	Identification of Reading & Language Disabilities in Spanish-Speaking English Learners	Institute of Education Sciences		FEDERAL	Santi, Kristi Dr.	ELPS	6.00%	N	\$699,743.00	7/31/2018	\$20,495.70
110782	Exploiting matching score distributions to improve biometric recognition	National Science Foundation		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	50.00%	Y	\$50,000.00	9/30/2016	\$25,000.00
110783	Salary Reimbursement Agreement: Optical Fusion Platform for Volumetric Rendering	Houston Methodist Research Institute		NON PROFIT	Kakadiaris, Ioannis Dr.	Computer Science	50.00%	Y	\$74,917.00	2/28/2017	\$37,458.50
110785	Effects of Maternal Interpretation Biases on Child Anxiety and Related Responses	National Institute of Mental Health		FEDERAL	Viana, Andres Dr.	Psychology	70.00%	Y	\$282,017.00	4/30/2017	\$79,436.96
111023	A Community-Based Evaluation of Interventions for Orphans and Vulnerable Children	National Institute of Child Health and Human Development		FEDERAL	Grigorenko, Elena Dr.	Psychology	70.00%	Y	\$2,589,409.00	5/31/2020	\$742,082.75
111077	TPRI & Tejas LEE Print, Distribution and Development	University of Texas Health Science Center at Houston	Texas Education Agency	STATE	Carlson, Coleen Dr.	TIMES	80.00%	Y	\$94,938.00	8/31/2016	\$75,950.40
111135	Peer Facilities VISN Contract FY 15-16	Michael E. DeBakey Veterans Affairs Medical Center in Houston		FEDERAL	Mehta, Paras Dr.	TIMES	70.00%	Y	\$30,063.00	9/30/2016	\$21,044.10
111252	CBTIR:Image and Video Person Identification in an Operational Environment (P.1.1)	U.S. Department of Homeland Security		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	50.00%	Y	\$0.00	6/30/2017	\$204,068.50
111252	CBTIR:Image and Video Person Identification in an Operational Environment (P.1.1)	U.S. Department of Homeland Security		FEDERAL	Shah, Shishir Dr.	Computer Science	50.00%	N	\$0.00	6/30/2017	\$204,068.50
111253	CBTIR: Evaluating and Predicting the Operational Effectiveness of Cargo Security Technologies (T.1.3)	U.S. Department of Homeland Security		FEDERAL	Burns, Maria Dr.	Information & Logistics	50.00%	Y	\$0.00	6/30/2017	\$47,035.50
111316	Technical Assistance and Evaluation Services: AVDA Batterer Intervention Prevention Program	Aid to Victims of Domestic Abuse		NON PROFIT	Francis, David Dr.	Psychology	49.00%	Y	\$10,000.00	11/30/2016	\$4,900.00
111316	Technical Assistance and Evaluation Services: AVDA Batterer Intervention Prevention Program	Aid to Victims of Domestic Abuse		NON PROFIT	Miciak, Jeremy Dr.	TIMES	21.00%	N	\$10,000.00	11/30/2016	\$2,100.00
111322	CBTIR: External Projects and Sub-Recipients	U.S. Department of Homeland Security		FEDERAL	Kakadiaris, Ioannis Dr.	Computer Science	100.00%	Y	\$0.00	6/30/2020	\$1,946,879.16
111493	The Florida Learning Disabilities Research Center	Florida State University	National Institute of Child Health	FEDERAL	Grigorenko, Elena Dr.	Psychology	70.00%	Y	\$193,727.00	4/30/2017	\$135,608.90
111623	UH Texas Consortium High Risk Children	Enterprise Products Company		PROFIT	Fletcher, Jack Dr.	Psychology	35.00%	Y	\$1,000,000.00	11/30/2021	\$350,000.00
111623	UH Texas Consortium High Risk Children	Enterprise Products Company		PROFIT	Francis, David Dr.	Psychology	35.00%	N	\$1,000,000.00	11/30/2021	\$350,000.00
111624	Evidence-Based Clinical Diagnosis of Specific Language Impairments in Spanish-Speaking Children	Research Foundation of the State University of New York	National Institute on Deafness and	FEDERAL	Barr, Christopher Dr.	TIMES	80.00%	Y	\$13,838.00	6/30/2017	\$11,070.40
111814	Evaluation of IR Possible Impact of IR Interventions	Texas Education Agency		STATE	Francis, David Dr.	Psychology	70.00%	Y	\$33,829.00	11/30/2016	\$23,680.30
112358	TRIP MATCH 16 - TIMES - DUNCAN FAMILY/ENTERPRISE PRODUCTS CO	Texas Higher Education Coordinating Board	State of Texas	STATE	Fletcher, Jack Dr.	Psychology	100.00%	Y	\$295,000.00	8/31/2099	\$295,000.00
											\$8,426,943.54

d. Publications and Presentations (count contributions by members only unless affiliates credit split)

TIMES consists of several centers and institutes with significant research activity in any given year. The following provides a brief description of some of the Centers, Institutes, and laboratories that comprise TIMES. Not included are free standing centers, such as CACDS, TORC, and AMI, who report separately to the RSC. Included are the Borders, Trade, and Immigration Institute and the Texas Center for Learning Disabilities, both federally funded national research centers who exist within TIMES and do not have independent department status. In addition to a brief narrative description of the research program of the center, institute or lab, the Principal Investigators have identified what their team's major accomplishments for the reporting period.

CENTER AND INSTITUTE DESCRIPTIONS AND ACCOMPLISHMENTS

**TEXAS CENTER FOR LEARNING DISABILITIES (TCLD)
(J. FLETCHER, PI; D. FRANCIS, CO-INVESTIGATOR)**

Jack Fletcher's laboratory is on the fourth floor of HBSB and is anchored by the TCLD, a 10 year NIH funded P50 grant recently submitted for Years 11-15, with 9M in funding for Years 6-10. The TCLD does interdisciplinary research on children with learning disabilities through partnerships with public schools. In addition to intervention studies with struggling readers, we evaluate cognitive factors and do structural and functional brain imaging, adding epigenetic studies in the renewal activity as part of an ongoing effort to understand individual differences in instructional response. Collaborators at UH include methodologists at TIMES (Francis, Taylor), junior faculty (Ahmed, Miciak), neuropsychologists (Cirino), and Neuroscience and educator colleagues at UT-Houston and UT-Austin. The interdisciplinary nature of this research and its focus on cognitive, neural, and genetic factors in neurodevelopmental disorders is reflected in other funded projects, where we currently are the lead institution for the behavioral outcomes of the national fetal surgery trial of spina bifida and a previous 10 year P01 on spina bifida. Our interdisciplinary focus and the TCLD has attracted additional funding from the Texas Education Agency for 11 consecutive years to support dissemination and significant philanthropy, which allowed us to build out half the fourth floor of HBSB and hire a molecular geneticist with an international reputation, Dr. Elena Grigorenko. Recent papers include a structural neuroimaging study of inadequate responders to reading intervention in Cerebral Cortex showing reduced cortical thickness and gyrification in regions of the functional network mediating reading; papers in behavioral science journals on the cognitive correlates of inadequate response to intervention; papers in educational research journals on effective interventions for hard to remediate struggling readers; and papers in measurement journals using statistical simulation and psychometric methods to evaluation diagnostic methods for identifying learning disabilities.

**BORDERS TRADE AND IMMIGRATION INSTITUTE (BTI)
(I. KAKADIARIS, PI; I. PAVLIDIS, CO-INVESTIGATOR; L. TORRES, CO-INVESTIGATOR).**

The Borders, Trade and Immigration Institute (BTI) was established via a Cooperative Research and Development Agreement between the University of Houston (as the lead and prime recipient among eleven institutional partners) and the U.S. Department of Homeland Security (DHS) in July 2015. This 5 year, \$18M award will be up for renewal in 2020 for a 10 year period (through 2030).

BTI advocates that borders in the 21st century are more than lines delineating sovereign domains – they also encompass the transnational flows of people and goods that traverse these lines of demarcation. Thus, global cities are border cities, owing to the transnational nature of their infrastructure (airports, seaports, internet). BTI views security and facilitation as two sides of the same coin, and they are both integral to its approach. This approach is multi-disciplinary, problem-driven, and university-based, grounded in academic excellence. It is guided by the Core Values of Excellence, Impact, Integrity, Leadership, Respect, and Teamwork.

As a DHS designated Center of Excellence, BTI performs research and development activities to provide critical tools, technologies, training, and expertise to the homeland security community. Working closely with academia, industry, DHS components, and first-responders it develops customer-driven solutions to "on-the-ground" challenges and provide essential training to the next generation of homeland security experts.

UH-based projects that are funded through the BTI Institute include research on image and video person identification, the effectiveness of cargo security technologies, a workshop on immigration, and an education project to create a capstone experience in security technologies. Other funded projects deal with face recognition research, human trafficking, queueing control at points of entry, export control reforms, standards development for container security, and training and education for both students and working professionals. Additional projects will be identified and funded through an RFP process.

TIMES support has been instrumental to BTI's success. It has provided an established framework for administrative support that has enabled BTI to perform a full spectrum of activities from day one.

DESCRIPTIONS AND ACCOMPLISHMENTS OF SELECTED INVESTIGATOR LABORATORIES IN HBSB AND SELECT TIMES MEMBERS NOT HOUSED IN HBSB

Human Developmental Genetics and Epigenetics Laboratory E. Grigorenko, Director

Dr. Elena Grigorenko's laboratory is an integral component of TIMES. The laboratory is located on the fourth floor of the HBSB at the University of Houston, and occupies approximately 2,500 square feet, including both dry and wet spaces. The wet space is configured to accommodate projects on the genetics and genomics of complex human traits and contains equipment appropriate for DNA sample processing, storage, and manipulation (e.g., genotyping and sequencing) activities. The dry space is configured to accommodate activities related to the behavioral aspects of the laboratory's projects, including assessment development, data acquisition, sorting, and processing, and analyses of various types of data (i.e., qualitative and quantitative analyses of behavioral data; genetic, epigenetic, and other types of molecular data; and electrophysiological and other types of neuroimaging data). The laboratory currently includes 12 members (4 professors, 1 postdoctoral associate, 3 students, 2 staff, and 2 volunteers) and is actively engaged in grant administration (6 funded grants with a total budget of \$8,282,235 in direct costs) and grant writing (5 applications are currently under review with a total budget of \$6,598,098 in direct costs). In 2016, the laboratory published 19 articles. There are currently 2 articles and an edited volume in press, as well as numerous articles under review or in preparation.

Tolar Lab T. Tolar, Director

My work focuses on typical as well as atypical development of mathematical knowledge and skills, primarily during adolescence but includes early development as well as adults. I examine these issues from an interdisciplinary perspective including cognitive, motivational, and affective processes that influence math learning and achievement; interventions and the mechanism through which they influence math learning; measurement techniques for identifying underlying constructs related to math learning; and sophisticated methodological approaches for developing and validating theoretical models of math learning. TIMES facilitates this interdisciplinary approach by providing convenient access to researchers from the variety of research disciplines that focus on the areas described above as well as data management and administrative resources to facilitate research from preparing and submitting grant proposals through data collection, analysis, and dissemination.

As a result of support from TIMES, my team is in the final year of collecting data for a project funded through an NIH Career Development Grant (5R00HD061689-05 *Predictors of Growth in Algebra Achievement in Adolescents*) which involved collaborations with Drs. David Francis and Jack Fletcher from Psychology as well as Dr. Jeff Morgan from the Mathematics Department. In collaboration with Drs. Paul Cirino (Psychology) and Lynn Fuchs (Special Education, Vanderbilt) we completed the final year of a longitudinal study funded by IES (R305A110067, *Arithmetical and Cognitive Antecedents and Concomitants of Algebraic Skill*). These collaborations have resulted in publications in *Developmental Psychology* (Fuchs et al, 2016) and *Journal of Experimental Psychology* (Cirino et al, 2016), a paper being revised for resubmission to *Developmental Psychology* (Tolar et al.), and a poster presentation at the annual convention of the Association for Psychological Sciences (Tolar et al, 2016). Collaborations with Drs. Paul Cirino and Ioannis Pavlidis have resulted in grant proposal submissions to NIH (*Compensatory Mechanisms for Math Achievement Among Adult Learners with Specific Math Deficits*) and NSF (*Structural Models for, Math Learning Disability Identification Among, and Response Strategies of, College Students in Entry Level Math Courses*).

Hein Lab
S. Hein, Director

I study environmental influences on child development in diverse cultures, and the relation between education, mental health, social-emotional development and delinquent behaviors in children and adolescents. Regarding the former, my work has focused on influences of the school and family environment on different indicators of intelligence of students in Zambia and Saudi Arabia. My interest in the educational and criminal trajectories of adolescents coincides with the need to identify the elements that place individuals at risk for engaging in delinquent behavior, as well as the factors that may mitigate criminal pathways. Employing both person- and variable-centered perspectives, I place a particular emphasis on the role of education and mental health in the continuity of delinquent behavior over time. My current research agenda aims to enhance our view on human development through a resource-oriented perspective on positive factors of children and adolescents who struggle with precarious circumstances and face social marginalization. In this regard, my involvement with quantitative researchers and data scientists at TIMES helps me develop analytic models based on big data that aim to facilitate the education of youth involved in the juvenile justice system. Moreover, the interdisciplinary environment at TIMES enriches my research on the developmental course and remediation of juvenile delinquency by spanning biological (e.g., genetic), psychological, and sociological/criminological perspectives.

Thus, my current research agenda centers on three main aspects: (1) Strengths and positive life outcomes of juvenile justice involved youth with a focus on their social-emotional and moral development, (2) Computerized Adaptive Testing (CAT) of early academic skills in preschoolers, and (3) Utilizing big data analytics to development new and refine existing quantitative methods to study deviant pathways across childhood and adolescence.

Major accomplishments of the lab for 2016 include three submitted: (1) "Improving the education of court-involved students through big data analytics" (PI: S. Hein), Institute of Education Sciences (IES), Role: PI, (2) "Towards preventing reading difficulties and establishing neural correlates of emergent literature in students attending Head Start in inner-city Detroit" (PI: N. Rakhlin, Wayne State University), Eunice Kennedy Shriver National Institute of Child Health and Development (NICHD), Role: Co-I, and (3) "Bringing adaptive testing to classrooms through open platforms" (PI: E. L. Grigorenko, University of Houston/BCM), Institute of Education Sciences, Role: MPI. In addition to those three submitted proposals, we received funding for two projects, (1) "Uno, Dos, Tres, Listos! Monitoring Kindergarten Readiness Bilingually" (PI: E. L. Grigorenko, University of Houston/BCM), Institute of Education Sciences (IES), Role: Co-PI, and (2) "Severe LD in Juvenile Delinquents: Presentation, Course, and Remediation" (PI: E. L. Grigorenko, University of Houston/BCM), Eunice Kennedy Shriver National Institute of Child Health and Development (NICHD). The lab also published or had accepted for publication five papers in peer reviewed journals.

DUAL Lab
F. Bunta, A. Castilla Earls, Co-Directors

Also important to TIMES are collaborations with investigators who are members of TIMES, but whose laboratories are not presently located in the HBSB. For example, Drs. Ferenc Bunta and Anny Castilla-Earls of Communication Sciences and Disorders co-direct and maintain the DUAL lab in the Department of Communication Sciences and Disorders in the College of Liberal Arts and Social Sciences. The mission of the Dual Lab is to investigate dual speech and language development and assessment practices in children with speech/language/hearing disorders and their typical peers. Dr. Bunta's primary area of research is bilingual and cross-linguistic phonological acquisition. His work includes typically developing children and children with communication disorders (such as children with hearing loss who use cochlear implants). He is co-director of the DUAL lab has a number of collaborative projects with researchers locally, nationally, and internationally, including collaborations with TIMES faculty. His research is currently funded by the National Institute on Deafness and Other Communication Disorders of the National Institutes of Health and the US Department of Education, Institute of Education Sciences. In 2016, Dr. Bunta collaborated with Drs.

D. Francis (TIMES Director and Cullen Distinguished Chair in Psychology) and Kristi Santi (TIMES Member, Associate Professor, Department of Educational Leadership and Policy Studies) to obtain a two year grant from the Institute of Education Sciences to examine the identification of learning disabilities in students who speak a language other than English. This proposal was submitted in 2015 and funded in 2016, and also involves collaboration with the University of Texas at Dallas' Dr. Raul Rojas. Dr. Bunta also has funding from NIDCD to study phonological acquisition in dual language learners with cochlear implants. Dr. Earls is a new arrival to UH and through her participation in TIMES recently received a K-23 Award from NIDCD with Drs. D. Francis and J. Fletcher as her mentors. During the year Dr. Bunta published five papers and Dr. Earls published three papers in peer reviewed journals.

Clinical Neural Engineering Laboratory **N. Ince, Director**

The Clinical Neural Engineering Laboratory carries out a variety of basic and translational research activities in the rapidly growing area of neural engineering and biomedical signal processing. Specific foci include neural decoding for neuroprosthetics; machine learning for neuromarker discovery in cognitive and movement disorders; and development of embedded wearable wireless sensors and their integration to intelligent systems for healthcare and assisted living. Dr. Ince's lab develops novel algorithms and machine learning techniques to explore neural activity recorded in clinical settings. The lab focuses on research that contributes not only to algorithm development but also to the discovery of new methods for diagnosis and therapy that can be applied in clinical practice. In this scheme, our group works closely with clinicians and researchers from diverse fields such as neuroscience, neurosurgery and neurology.

Major Accomplishments in 2016

The laboratory published 4 journal and 3 conference papers (total 7) in 2016. A list of these publications are provided at the bottom. In 5 of these publications Dr. Ince's graduate students appeared as the first author. One of the conference papers entitled "Classification of Hand Flexion/Extension Using High-density ECoG" received top paper award. (Dr. Ince's other PhD student, Ilknur Telkes, has been named one of the 2017 North American Neuromodulation Society (NANS) Junior Scientist Award winners (<https://www2.times.uh.edu/2016/12/20/ilknur-telkes-receives-prestigious-nans-grant/>)).

In total 6 grant proposals were submitted to NIH where 2 of them got scored and a revision was resubmitted. In these applications UH is the lead institution and collaborates with medical faculty from Baylor College of Medicine and MD Anderson Cancer Center. The lab also submitted 2 proposals to NSF focusing on mapping physiological and pathological networks in brain using ECoG. All of these applications responded to the Neuromodulation programs of Brain Initiative within NIH and NSF. The industrial grant proposal that was submitted Medtronic entitled "Prospective, Blinded Assessment of Intraoperative Local Field Potentials for the Prediction of Optimal Stimulation Parameters in Parkinson Disease" was funded in November 2016. In this project we collaborate with the Neurology and Neurosurgery departments of Baylor College of Medicine.

Omurtag Lab **A. Omurtag, Director**

Dr. Omurtag's research focuses on the diagnostic utility of portable functional neuroimaging devices. Dr. Omurtag believes that integrating diverse types of signals holds the greatest promise for understanding the brain and for diagnosing its diseases. The brain performs information processing

which is, under normal circumstances, tightly coupled with local vascular mechanisms. Dr. Omurtag utilizes simultaneous EEG and functional near-infrared spectroscopy (fNIRS) to characterize neurovascular coupling and its implications. Both EEG and fNIRS are non-invasive techniques, potentially operating within a miniaturized system, measuring complementary types of information about the brain. Dr. Omurtag is an inventor of microEEG, a battery operated wireless EEG device approved by the FDA. He supervised the use and validation of microEEG for seizure detection in Emergency Departments. In parallel, he conducted a study of the accuracy and reliability of EEG interpretation. He holds two U.S. patents. Dr. Omurtag's work has received funding from NIH and NSF. He has served in NIH study sections on Neuroscience and Ophthalmic Imaging Technologies. He holds a Ph.D. in Mechanical Engineering from Columbia University. His post-doctoral training was at the Mount Sinai School of Medicine in computational neuroscience.

In 2016, the lab published three major articles in peer-reviewed journals, maintained two funded grants from NSF and submitted three additional proposals, two of which are pending review / funding decisions, one from NIH and one from NSF.

Ziburkus Lab
J. Ziburkus, Director

The long-term goal of Dr. Jokūbas Žiburkus' laboratory research is to understand the mechanisms of neuronal interactions in health and disease. The lab employs a multi-disciplinary approach that synthesizes in vitro neurophysiology, neuropharmacology, imaging, molecular biology, immunohistochemistry, and computational neuroscience. Using these techniques, Žiburkus is trying to understand alterations in single neurons and neural networks that lead to epileptic seizures, abnormal excitability in Alzheimer's disease, or occur following a traumatic brain injury. His lab has filed and continue developing patents for novel and combinatorial medications to treat neurological disorders, stroke, and even cancer. Recent work has focused on Dravet syndrome – a severe form of childhood epilepsy that is very hard to treat. Žiburkus is investigating how purines affect mortality, seizures, and other behavioral comorbidities in a transgenic mouse model of Dravet syndrome. He is also investigating other alternative compounds and their combinations for treatment of brain and heart hyperexcitability, seizure activity, and even cancer.

The lab had a very productive year in 2016. Multiple invitations to give talks around the world on the topic of epilepsy, neuronal networks, and cannabinoids resulted in attendance of some high profile international meetings and being a part of distinguished panels, or even leading a panel at the Life Sciences Baltics meeting in Lithuania (the largest life sciences meetings in the Baltic countries). TIMES has enabled me and my laboratory to start developing collaborations with Dr. Joe Francis and Dr. Nuri Ince. Dr. Francis included me in the multi-PI grant application, but unfortunately our group did not get funded. Nonetheless, these two scientific relationships are complementing each other and our work in neurophysiology and epilepsy. At the same time, I serve on Dr. Ince's graduate student's PhD committee and can offer advice on one of my main expertise areas – electrophysiology of epilepsy. TIMES proximity to the animal facility is an invaluable asset.

Other major accomplishments for 2016 include small grants from the Dravet Syndrome Foundation and several major publications, notably 3 papers that were published and 2 papers that were accepted and resubmitted. We also submitted an NIH R01 on the topic of childhood epilepsy and new therapeutic approach using adenosine A1 receptor agonist. This was a scored resubmission, but it did not get funded.

Sleep and Anxiety Center of Houston (SACH)

C. Alfano, Director

The Sleep and Anxiety Center of Houston (SACH) is a clinical research center dedicated to understanding complex connections between sleep and emotion health across the life-span. Research at SACH has been continuously funded by large federal grants from the National Institutes of Health (NIH), the Department of Defense (DoD), and the National Aeronautics and Space Administration (NASA) since its inception. In 2016, Dr. Candice Alfano, the director of SACH, was elected as a fellow of the Association for Psychological Science (APS) and was awarded the Peter Hauri Distinguished Career Achievement Award from the Society of Behavioral Sleep Medicine. SACH also provides clinical research training for undergraduate, graduate, and post-doctoral fellows. In 2016 alone, two post-doctoral fellows at SACH submitted National Research Service Award (NRSA) F32 applications to NIH under Dr. Alfano's mentorship. Because sleep is an interdisciplinary science, SACH's location within TIMES is highly beneficial to its state-of-the-art research program.

Gallagher Lab

M. Gallagher, Director

The Gallagher lab studies novel treatments for anxiety and trauma, mechanisms of change of empirically supported treatments, and how positive thinking (e.g., hope, optimism, self-efficacy) provides resilience to anxiety and trauma and promotes positive aspects of mental health. Dr. Gallagher also provides quantitative consulting to investigators at UH and other institutions. In 2016, the Gallagher lab had 18 articles or chapters published or accepted for publication with an additional 10 articles that were submitted for publication and are currently under review. Many of the published articles were in leading journals such as Psychological Assessment, Journal of Consulting and Clinical Psychology, and Journal of Clinical Psychiatry. I completed work on an edited volume, The Handbook of Hope, which will be published by Oxford University Press in 2017. I was also involved as principal investigator, co-investigator, or consultant on over a dozen grant submissions, received ongoing support from grants funded by the Department of Defense, the Veterans Affairs administration, and PCORI, and received new grant support from the National Institute on Alcohol Abuse and Alcoholism and the Simmons Foundation. Much of my work is at the intersection of clinical psychology, positive psychology, and quantitative psychology and this multidisciplinary work is greatly facilitated by the staff, support, and infrastructure provided by TIMES. The organization and administration of TIMES encourages collaboration among faculty with different expertise and greatly simplifies both the planning and execution of interdisciplinary work.

Developmental Psychopathology Lab

C. Sharp, Director

In the Developmental Psychopathology Lab we examine the social-cognitive basis of psychiatric disorders across the lifespan. Our research falls most clearly under the domain of "social systems and processes" in the NIMH Research Domain Criteria (RDoC) initiative and focus on constructs such as understanding others, understanding self, and attachment. We work both locally and internationally (e.g. South Africa, Denmark). Our research includes a translational focus as we work towards the development of constructs and measures at multiple levels of analyses to facilitate the early identification and treatment of psychiatric disorders in youth, in addition to the development and evaluation of social-cognitive interventions for psychiatric problems and problems of behavioral health, such as HIV and addiction. We use a variety of methods in our research, including behavioral experiments, functional neuroimaging and survey methods.

Our active grants include: **1R01HD081985 (PI: Sharp)**, 09/01/2015 – 09/01/2018, National Institute of Child Health and Development, \$1,008,053, *MISC-CBO: A community-based intervention for HIV affected children*; **No grant number available (PI: Vanwoerden)**, 2017-2018, American Psychological Foundation Division 49, \$1,000, *Group-based Systems Training for Emotional Predictability and Problem Solving (STEPPS) to Address Problems in Emotion Regulations in Adolescents*; **Grand Challenges Explorations Grant (PI: Brown)**, 11/1/16-4/31/18, Bill & Melinda Gates Foundation, \$100,000, *Family Planning Needs of South African Adolescent Girls*; **SPLE-001-14 (PI: Miles)**, 04/06/2016- 03/31/2018, VA Clinical Science Research & Development, \$219, 879, *CAP - Using Emotion Regulation to Decrease Aggression in Veterans with PTSD*.

Selected for funding: **R 34 11644058 (MPI: Neighbors, Sharp, Zvolensky)**, 2017-2020, National Institute on Alcohol Abuse and Alcoholism, \$677,250.00, *Brief Personalized Feedback Intervention for Hazardous Drinking in an HIV Clinic*.

Pending: **1F31MH113291-01 (PI: Vanwoerden)**, 04/01/2017-04/01/2020, National Institute of Mental Health, \$102,660, *The Development and Validation of an Observational Coding System for Real-Time Parent-Adolescent Mentalizing*.

In 2016 we published 8 chapters, and had **39 peer-reviewed publications** accepted for publication.

Involvement in TIMES and the proximity of laboratories and administrative infrastructure has enabled (1) access to data analytic resources (Dr. Chris Barr; Dr. David Francis) (2) general infrastructure for conducting research and (3) facilitating multi-disciplinary collaboration (e.g. Pavlidis lab; Alfano lab; Gallagher lab).

Child Temperament, Thoughts, and Emotions Laboratory

A. Viana, Director

The CTTE lab focuses on the study and assessment of risk factors for childhood psychopathologies, with an emphasis on temperamental, emotional, cognitive, and parenting factors that may exacerbate anxiety, as well as the nature of the covariation among these processes. More recently, research in the lab has focused on the relationship between parental and child information processing styles, and how this association may influence the development, expression, and maintenance of fear and anxiety in children. The focus is on elucidating the effects of parental cognitive processes on multiple child anxiety-related responses (e.g., physiology, observable behavior, self-report of behavior/emotion), and examining how child functioning across multiple domains (e.g., temperament, cognitive ability) can mediate or exacerbate the risk for internalizing problems in the context of family risk. A growing line of research in the lab also involves cognitive and emotion-related factors associated with risky behaviors (e.g., alcohol and substance use) among Latinos. The lab presently has one active grant funded by the National Institutes of Mental Health and two new proposals (K23 and R21) under review at the National Institute for Alcohol Abuse and Alcoholism.

Developmental Behavioral Neuroscience Laboratory

T. Kosten, Director

The overarching theme of the Developmental Behavioral Neuroscience Laboratory is to understand the contributions of genetic and environmental factors that influence and shape behavior via the involvement of the hypothalamic-pituitary-adrenal (HPA) axis and dopaminergic and noradrenergic systems. We study how behaviors reflective of substance use disorders (e.g., self-administration, conditioned place preference, etc.) are affected by stress, sex, and early life manipulations. Another aspect of our research is considered translational as it involves medication development. For example, we are constructing and testing vaccines for methamphetamine abuse and are identifying new pharmacological targets for alcoholism that we test using maintenance and reinstatement of

operant responding for alcohol procedures. Broadly, our research program encompasses the areas of motivation, emotion, and learning with a focus on limbic regions, such as the nucleus accumbens and hippocampus, and the neuropharmacological and epigenetic changes that associate with these behaviors. In the past year, we published 5 papers and 2 chapters and made 4 conference presentations. We submitted 4 grant applications – 2 subcontracts with Baylor College of Medicine (CPRIT; STTR to NIH), an R21 to NIH with TIMES Research Assistant Professor Dr. Paulina Kulesz, and an internal grant with Dr. Colin Haile. Dr. Haile and I were also awarded a grant from the Department of Defense. Our research program is enhanced by being a member of TIMES as it provided the interaction with Dr. Kulesz who brings her statistics expertise to our developmental epigenetic research.

Leasure Lab
J. L. Leasure, Director

The focus of the Leasure Lab is exercise-driven neuroplasticity. We use rodent models of exercise and brain injury to determine the potential of exercise to heal the damaged brain. In particular, we are studying exercise-driven cellular and functional recovery following alcohol-induced brain damage. 2016 was a highly productive year for the lab. Members presented data at 6 conferences, including 2 international conferences. The lab published 3 papers, with a fourth in press and a fifth submitted for review. One graduate student successfully defended his dissertation and 3 graduate students successfully defended masters theses. Lab members submitted a total of 5 grant proposals. Membership in TIMES has been very helpful, for several reasons. First, the pre-award support is outstanding and made submission of 5 proposals as painless as possible. Second, proximity of lab members to other scientists in complementary fields has made writing of proposals easier in that it is simple to bounce ideas off of colleagues. Both the lab director and students have been able to take advantage of such interactions. Third, the ability to use the conference rooms with their up-to-date data presentation and conferencing capabilities has introduced a wonderful new aspect to lab meetings in that it is simple to present graphs and other visuals on the big screen so that all the lab members (including undergraduates) can digest it and offer feedback. We call this collective data digestion and analysis “The Hive”.

Computational Biomedicine Laboratory
I. Kakadiaris, Director

Research in the **Computational Biomedicine Laboratory (CBL)** is motivated by fundamental open problems in image analysis, machine learning, computer vision, pattern recognition, and data mining with an emphasis on applications that address some of society's greatest challenges. Our research is focused on the analysis of multi-dimensional data. The Biomedical Computing Cluster examines research problems arising in cardiovascular informatics, cancer informatics, and neuro-informatics. The Biometrics cluster of CBL examines research problems in the areas of face recognition, facial expression analysis, and understanding non-verbal human behavior. The lab fosters innovative collaborations with other institutions, creates transferable technology, and disseminates results to scientific and medical communities and the general public.

The high standards of academic excellence maintained by CBL have allowed it to attract and maintain a world class team of researchers – in 2016, its members numbered 11 graduate students, 3 postdoctoral researchers, and 3 affiliated faculty members. This past year CBL researchers produced 15 peer reviewed journal articles.

CBL wishes to acknowledge the strong business support of TIMES and the role that this support has played in its success. In addition, the multi-disciplinary nature of the TIMES environment generated a number of ideas that are currently converted to collaborations and applications for funding.

Computational Physiology Lab

I. Pavlidis, Director

The Computational Physiology Lab (CPL) was founded in 2002 by Dr. Ioannis Pavlidis and since then has gained worldwide recognition. The lab presently has three research lines and an educational research effort focused on science ethics. CPL is an interdisciplinary lab and draws additional expertise from partner labs outside of UH in The Mayo Clinic, The University of Texas Medical School, and The Methodist Hospital. CPL research focuses on unobtrusive and sustained monitoring of physiological variables imaginatively embedded in psycho-physiological, biomedical, and behavioral research paradigms. Sensing is effected either through thermal imaging or wearable transducers. This novel methodological work has spurred psychological and medical discoveries and formed the basis for new applications. Substantial technical sophistication is involved in performing physiological measurements of this kind. Elements from mathematics, computing, statistics, medicine, and physiology need to come together. CPL is famous for its work in stress quantification, lie detection, sleep studies, and behavioral gaming. All of these areas have found civilian or military applications. The research of our members has been published in some of the most prestigious science journals and venues, including Nature, Lancet, New England Journal of Medicine, and CHI. We are dedicated to both scientific and engineering excellence and a genuine desire to produce tangible social good. Major accomplishments this year include a publication in the Scientific Reports journal, which documented the way our neurophysiological system handles distractions amidst critical tasking (driving was the working example). The paper received worldwide attention reaching an Altmetric score of about 550, which puts it among the 100 most impactful papers in 2016, worldwide. The paper also scored about 12,000 downloads in just six months.

Advanced Computing Research Lab (ACRL)

L. Johnsson, Director

The focus of the Advanced Computing Research Lab (ACRL) during the last few years has been on the energy efficiency of computation, the primary concern of the entire computing and communications industry in recent years, not only the segments of the industry addressing mobile computing and communications technologies and applications. To achieve the desired orders of magnitude improvement in energy efficiency it is generally recognized that heterogeneous architectures are required with specialized processors for different computational and communication tasks integrated into a system that addresses application domains of limited scope, and new algorithms optimized with energy efficiency in mind rather than operations count. This paradigm shift requires a “vertical” view in which application requirements, algorithms, computer architecture and software are simultaneously considered in a holistic fashion.

ACRL is approaching this by working with vendors of novel architectures that potentially can offer at least one order of magnitude improved energy efficiency compared to dominating server and PC designs for computational tasks frequently occurring in scientific and engineering applications, computational vision and navigation, and analytics. Specifically, during the past year the focus has been on a processor designed by an eight year old company Movidius that has become a leading processor supplier to the drone industry, and also been used by Google in research projects related to vision. The company was acquired by Intel in September 2016.

To address the vertical aspect of design (application down to silicon) an effort was initiated to combine the knowledge in the domains of medical robotics focused on robotic surgery, data mining,

neural networks and distributed computing for effective integration of prior knowledge, and algorithm-architecture co-design into an active research group collaboration between faculty members in Computer Science and Electrical and Computer Engineering with involvement of groups in the Texas Medical Center. The primary UH faculty members are Lennart Johnsson (CS and TIMES), Aaron Becker (ECE), Larry Shi (CS), Nikos Tsekos (CS), and Ricardo Vilalta (CS and TIMES). The physical and intellectual environment provided by TIMES significantly contributed to the establishment and development of this collaboration. The collaboration effort resulted in an NIH proposal with Nikos Tsekos as PI, and the individual research groups of Nikos Tsekos and Ricardo Vilalta also receiving Movidius processor development kits in addition to Johnsson's group.

Invited presentation: "The Impact of Moore's Law and loss of Dennard Scaling: Are DSP SoCs an Energy Efficient Alternative to x86 SOCs?", 17th International workshop on Advanced Computing and Analysis Techniques in physics research (ACAT), January 18-22, 2016, Valparaiso, Chile. A related article was published in the Journal of Physics.

Pattern Analysis Laboratory
R. Vilalta, Director

Research in the Pattern Analysis Laboratory intends to provide state of the art techniques in the analysis of scientific data, with a particular emphasis in the fields of physics and astronomy. The laboratory comes in response to a time where massive amounts of data are being collected by a great variety of sensor devices (e.g., telescopes and satellites capturing a huge amount of images about our solar system and the entire universe). Such large amounts of data, readily available for processing and analysis, call for algorithms that can search for meaningful patterns in an efficient form. Our current projects are the following: Domain Adaptation Techniques Applied to Cepheid Variable Star Classification, Automatic Classification of Supernovae, Cluster Validation Applied to Current Star Taxonomies, Learning to Classify Transients Across Astronomical Surveys. The lab currently includes three Ph.D. students, one M.Sc. student, and two undergraduates students in Computer Science. In 2016, the lab published two peer reviewed articles in journals, produced two chapters in edited volumes, and had three importance conference or workshop presentations that appeared in major published proceedings.

Publication Counts Across All of TIMES

1. **Peer-reviewed journal articles:** For 2015 and 2016 combined we estimate the number of Peer Reviewed Articles at over 303, since not all faculty, research staff, and students have completed their Google Scholar Profiles used to upload data to Activity Insight, which we use to track publications from center activity. We are also experiencing some difficulty with Activity Insight misclassifying some journals as Non-Refereed that are, in fact, refereed. Our publication count shows 367 peer-reviewed articles (included below), but some papers are multi-authored and end up being over counted since the present reporting system reports out by author. Counting the papers that are authored by multiple TIMES faculty only once results in an estimated count of 303 for the included faculty tables below.
2. **Peer-reviewed journal articles that acknowledge center/institute affiliation or support:** Unknown. TIMES does not mandate recognition on publications, and even papers known to include the affiliation do not always surface on electronic searches. We plan to work with our members to improve the accuracy in capturing publications of the center and in ensuring that TIMES affiliation is included in the Institutional Affiliations, but not at the expense of academic departmental affiliations, which we believe to be primary.

3. Non-peer-reviewed (NPR) articles & book chapters: _____ NPRs are not counted.
There are 16 book chapters.
4. NPR articles & book chapters that acknowledge center/institute affiliation or support:

5. Books:

6. Books that acknowledge center/institute affiliation or support:

7. Research presentations and abstracts: _____ We expect these, but do not count them or include them in our metrics.
8. Research presentations & abstracts that acknowledge center/institute affiliation or support:

9. Provide a list of all items counted in 1 to 8; give complete bibliographies.

Intellectual Contributions

University of Houston

January 1, 2015 - January 1, 2017

Biomedical Engineering

Ince, Nuri F. (Assistant Professor)

Refereed Journal Articles

- (1) Liu, S., Sha, Z., Sencer, A., Aydoseli, A., Bebek, N., Abosch, A., Henry, T., Gurses, C., Ince, N. (2016). Exploring the time–frequency content of high frequency oscillations for automated identification of seizure onset zone in epilepsy. *Journal of neural engineering*, 13(2), 026026.
- (2) Jimenez-Shahed, J., Telkes, I., Viswanathan, A., Ince, N. (2016). GPi oscillatory activity differentiates tics from the resting state, voluntary movements, and the unmedicated parkinsonian state. *Frontiers in Neuroscience*, 10.
- (3) Telkes, I., Jimenez-Shahed, J., Viswanathan, A., Abosch, A., Ince, N. (2016). Prediction of STN-DBS Electrode Implantation Track in Parkinson’s Disease by Using Local Field Potentials. *Frontiers in neuroscience*, 10.
- (4) Tekriwal, A., Kern, D. S., Tsai, J., Ince, N., Wu, J., Thompson, J. A., Abosch, A. (2016). REM sleep behaviour disorder: prodromal and mechanistic insights for Parkinson’s disease. *Journal of Neurology, Neurosurgery & Psychiatry*, jnnp–2016.
- (5) Cao, C., Li, D., Jiang, T., Ince, N., Zhan, S., Zhang, J., Sha, Z., Sun, B. (2015). Resting state cortical oscillations of patients with Parkinson disease and with and without subthalamic deep brain stimulation: a magnetoencephalography study. *Journal of clinical neurophysiology : official publication of the American Electroencephalographic Society*, 32(2), 109-18.

Conference Proceedings

- Siddiqui, H. A., Jimenez-Shahed, J., Viswanathan, A., Ince, N. (2016). A Wireless Sensor Interface for the Quantification of Tremor Using Off the Shelf Components. *2016 32nd Southern Biomedical Engineering Conference (SBEC)* (pp. 177–178).
- Jimenez-Shahed, J., Telkes, I., Viswanathan, A., Ince, N. (2016). Globus pallidus interna oscillatory activity differentiates tics from voluntary movements and the Parkinsonian resting state. *MOVEMENT DISORDERS* (vol. 31, pp. S388–S388).
- Liu, S., Sha, Z., Abosch, A., Henry, T., Ince, N. (2016). Identification of seizure onset zone using automatically detected spike and high-frequency oscillation in human intracranial EEG. *Signal Processing and Communication Application Conference (SIU), 2016 24th* (pp. 2241–2244).
- Sen, A. N., Meloni, G., Telkes, I., Ince, N., Abosch, A. (2015). Changes in Subthalamic Nucleus Local Field Potentials Following Administration of Levodopa in Patients with Parkinson’s Disease. *JOURNAL OF NEUROSURGERY* (2nd ed., vol. 123, pp. A534–A535).
- Liu, S., Ince, N., Sabanci, A., Aydoseli, A., Aras, Y., Sencer, A., Bebek, N., Sha, Z., Gurses, C. (2015). Detection of high frequency oscillations in epilepsy with k-means clustering method. *2015 7th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 934–937).
- Telkes, I., Meloni, G., Sen, A., Shahed, J., Viswanathan, A., Abosch, A., Ince, N. (2015). Intraoperative macroelectrode local field potential recordings in Essential Tremor. *2015 7th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 276–279).
- Liu, S., Ince, N., Abosch, A., Henry, T. R., Sha, Z. (2015). Investigation of automatically detected high frequency oscillations (HFOs) as an early predictor of seizure onset zone. *2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 6602–6605).
- Jiang, T., Ince, N., Jiang, T., Wang, T., Mei, S., Li, Y., Wang, X., Prabhu, S., Sha, Z. (2015). Investigation of the spatial and spectral patterns of hand extension/flexion using high-density ECoG. *2015 7th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 589–592).
- Jiang, T., Ince, N., Jiang, T., Wang, T., Mei, S., Li, Y., Wang, X., Sha, Z. (2015). Local spatial correlation analysis of hand flexion/extension using intraoperative high-density ECoG. *2015 37th Annual*

International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) (pp. 6190–6193).

- Meloni, G., Sen, A., Abosch, A., Ince, N. (2015). Spatial distribution of nonlinear interactions in subthalamic nucleus local field potentials in Parkinson's disease. *2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 5557–5560).
- Telkes, I., Ince, N., Onaran, I., Abosch, A. (2015). Spatio-spectral characterization of local field potentials in the subthalamic nucleus via multitrack microelectrode recordings. *2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)* (pp. 5561–5564).

Computer Science

Kakadiaris, Ioannis A. (Professor)

Refereed Journal Articles

- (1) Wu, Y., Xu, X., Shah, S. K., Kakadiaris, I. 2015 IEEE 7th International Conference on Biometrics Theory, Applications and Systems (BTAS).
- (2) Chu, D., Shah, S., Kakadiaris, I. 3D Face Recognition in the Presence of Partial Data: A Semi-Coupled Dictionary Learning Approach.
- (3) Mendizabal-Ruiz, G., Rivera, M., Kakadiaris, I. A probabilistic segmentation method for IVUS images.
- (4) Zouridakis, G., Gabriel, E., Kakadiaris, I., Shah, S., Yuan, X., Zheng, R. AEROSPACE CLUSTER PROGRAM—COLLABORATION AMONG UHS FACULTY.
- (5) Futrelle, R. P., Pescitelli, Jr, M. J., Alexander, J. S., Cleary, M. E., Crisman, J. D., Dunn, C. E., Ellis, D. S., Gauch, J., Kakadiaris, I., Mukherjea, S., others Analyse de document, compréhension et accès aux connaissances. Document analysis, understanding & knowledge access.
- (6) Shumate, S., El-Shenawee, M., Woo, J., Miller, C., Abbas, P., Kurkure, U., Pednekar, A., Muthupillai, R., Flamm, S., Kakadiaris, I. Automatically Generated, Anatomically Accurate Meshes for Cardiac Electrophysiology Problems
- (7) AJ Prassl, F. Kicking, H. Ahammer, V. Grau, JE Schneider, E. Hofer, EJ Vigmond, NA Trayanova, and G. Plank 1318 Integrated Model of Endothelial NO Regulation and Systemic Circulation for the Comparison Between Pulsatile and Continuous Perfusion
- (8) E. Lanzarone, G. Casagrande, R. Fumero, and ML Costantino 1331 Computational Model of Ductal Carcinoma In Situ: The Effects of Contact Inhibition on Pattern Formation.
- (9) Trivedi, M., Bhanu, B., Pavlidis, I., Kakadiaris, I., Regazzoni, C., Lindner, P., Rittscher, J., Shastri, D., Holdsworth, A. AVSS 2008.
- (10) Kakadiaris, I., Ross, A., Nixon, M., Ratha, N., Sun, Z., Tistarelli, M., others BTAS 2013.
- (11) Abdel-Mottaleb, M., Bebis, G., Bellon, O., Beveridge, R., Bhagavatula, V., Bhanu, B., Boles, W., Bringer, J., Campisi, P., Champod, C., others BTAS'10 Organizing Committee.
- (12) Sonka, M., Kakadiaris, I., Kybic, J. Computer vision and mathematical methods in medical and biomedical image analysis (Prague, 15 May 2004, revised selected papers). *Lecture notes in computer science*.
- (13) Trahanias, P., Orphanoudakis, S., Cohen-Or, D., Jain, L., Magnenat-Thalmann, N., Antonis Argyros, F., Baci, G. G., Badler, N. I., Bittner, J., Booth, K. S., others Conference Co-Chairs.
- (14) Aggarwal, J., Bazakos, M., Bhanu, B., Chang, S.-F., Chellappa, R., Davis, L., Ferryman, J., Foresti, G., Gong, S., Jones, G., others CREDS challenge committee.
- (15) Alexander, G., Allen, P., Angeloupoulo, E., Arnold, G., Bouthemy, P., Baker, S., Barrett, E., Belhumeur, P., Bobick, A., Bouguet, J.-Y., others CVPR Program Committee.
- (16) Forsyth, D., Fitzgibbon, A., Taylor, C. J., LeCun, Y., Stewart, C., Maxwell, B., Boulton, T., Kakadiaris, I., Baker, S., Basri, R., others Daniel Huttenlocher, Cornell University.
- (17) Chen, D. T., Kakadiaris, I., Miller, M. J., Loftin, R. B., Patrick, C. Davechen, ioannisk, bowen.
- (18) Kakadiaris, I. Defense & Security A third dimension in face recognition.
- (19) Pednekar, A., Kakadiaris, I. Department of Computer Science University of Houston Houston, TX 77204-3475, USA ioannisk@cs.uh.edu!!!

- (20) Kakadiaris, I. Electronic Imaging & Signal Processing A third dimension in face recognition.
- (21) Rabsatt, V., Kakadiaris, I., Efraty, B., Huang, C. Facial Landmark Detection With Online Learning.
- (22) Bowyer, K., Cohn, J., Ross, A., Li, S. Z., Kakadiaris, I., Todorovic, S. FINANCE CHAIRS.
- (23) Vrigkas, M., Nikou, C., Kakadiaris, I. Identifying Human Behaviors Using Synchronized Audio-Visual Cues. *IEEE*.
- (24) Despiegel, V., Agrafioti, F., Al Nizami, H., Amayeh, G., Andrian, J., Ardabilian, M., Baker, S., Barreto, A., Bartlow, N., Bebis, G., others Jason Corso Bojan Cukic D Koen De Groot.
- (25) Tran, K. N., Kakadiaris, I., Shah, S. K. Modeling Motion of Human Body Parts for Action Recognition.
- (26) DeCarlo, D., Delingette, H., Duncan, F. J., Ebert, D., Essa, I., Faloutsos, P., Fei, G., Imielinska, C., Ip, H., Kakadiaris, I., others N. Adabala, University of Geneva, Switzerland E. Andre, University of Augsburg, Germany N. Badler, University of Pennsylvania, USA D. Ballin, BT, UK R. Boulic, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland.
- (27) Aloimonos, Y., Betke, M., Bhanu, B., Bobick, A., Bregler, C., Carlsson, S., Chellappa, R., Comaniciu, D., Darell, T., DeCarlo, D., others Niels da Vitoria Lobo.
- (28) Kakadiaris, I., Metaxas, D., Bajcsy, R., Part-Decomposition, A. page 1.
- (29) da Vitoria Lobo, N., Bobick, A., El-Gammal, A., Yilmaz, A., Hoogs, A., Smeulders, A., Campilho, A., Vemuri, B., Bhanu, B., Snoek, C., others Publications Chair.
- (30) Glennie, C., Kakadiaris, I., Shah, S., Vipulanandan, C. Real-Time Analysis of Damage from Airborne Active Remote Sensing.
- (31) Unal, G., Slabaugh, G., Kakadiaris, I., Tannenbaum, A., Baldewsing, R., Danilouchkine, M., Mastik, F., Schaar, J., Serruys, P., van der Steen, A., others SPECIAL SECTION ON COMPUTER VISION FOR INTRAVASCULAR AND INTRACARDIAC IMAGING.
- (32) Mejias, Z., Evangelopoulos, G., Kakadiaris, I. Statistical Models of 3D Face Landmarks and Annotations.
- (33) Ramesh, V., Varshney, P., Paragios, N., Aggarwal, J., Bebis, G., Bhanu, B., Boulton, T., Chang, S.-F., Chellappa, R., Collins, R., others Technical Program Chairs.
- (34) Pavlidis, I., He, X., Piccardi, M., Aggarwal, J., Bhandarkar, S. M., Bazakos, M., Bebis, G., Bhanu, B., Brooks, M., Caelli, T., others Technical Program Chairs.
- (35) Bebis, G., Beveridge, R., Dorizzi, B., Bhanu, B., Bigun, J., Chellappa, R., Dong, X., Elgammal, A., Fairhurst, M., Fierrez, J., others Venu Govindaraju.
- (36) Kakadiaris, I., Paragios, N. Video Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Conference.
- (37) Pollefeys, M., Maxwell, B., Kakadiaris, I., Belongie, S., Boulton, T. Workshops Chair.
- (38) Alexa, M. G., Bajaj, C., Bartz, D. G., Bekaert, P. B., Benes, B. M., Bengtsson, E. S., Bouatouch, K. F., Brodli, K., Brunet, P. S., Brunet, G. G., others WSCG 2005.
- (39) Sarafianos, N., Boteanu, B., Ionescu, B., Kakadiaris, I. (2016). 3D Human pose estimation: A review of the literature and analysis of covariates. *Computer Vision and Image Understanding*, 152, 1–20.
- (40) Kakadiaris, I., Toderici, G., Evangelopoulos, G., Passalis, G., Chu, D., Zhao, X., Shah, S. K., Theoharis, T. (2016). 3D-2D Face Recognition with Pose and Illumination Normalization. *Computer Vision and Image Understanding*.
- (41) Endres, B. T., Bassères, E., Memariani, A., Chang, L., Alam, M. J., Vickers, R. J., Kakadiaris, I., Garey, K. W. (2016). A novel method for imaging the pharmacological effects of antibiotic treatment on *Clostridium difficile*. *Anaerobe*, 40, 10–14.
- (42) Mendizabal-Ruiz, G., Kakadiaris, I. (2016). A physics-based intravascular ultrasound image reconstruction method for lumen segmentation. *Computers in biology and medicine*, 75, 19–29.
- (43) Moutafis, P., Leng, M., Kakadiaris, I. (2016). An Overview and Empirical Comparison of Distance Metric Learning Methods. *IEEE*.
- (44) Leng, M., Moutafis, P., Kakadiaris, I. (2016). Joint prototype and metric learning for image set classification: Application to video face identification. *Image and Vision Computing*.
- (45) Hernandez-Herrera, P., Papadakis, M., Kakadiaris, I. (2016). Multi-scale segmentation of neurons based on one-class classification. *Journal of neuroscience methods*, 266, 94–106.
- (46) Vrigkas, M., Nikou, C., Kakadiaris, I. (2015). A Review of Human Activity Recognition Methods. *Frontiers in Robotics and AI*, 2, 28.

- (47) Ochoa-Villegas, M. A., Nolzaco-Flores, J. A., Barron-Cano, O., Kakadiaris, I. (2015). Addressing the illumination challenge in two-dimensional face recognition: a survey. *IET Computer Vision*, 9(6), 978–992.
- (48) Zhao, X., Zou, J., Li, H., Dellandréa, E., Kakadiaris, I., Chen, L. (2015). Automatic 2.5-D facial landmarking and emotion annotation for social interaction assistance. *IEEE*.
- (49) Kalasekar, S. M., Zacharia, E., Kessler, N., Ducharme, N. A., Gustafsson, J.-Å., Kakadiaris, I., Bondesson, M. (2015). Identification of environmental chemicals that induce yolk malabsorption in zebrafish using automated image segmentation. *Reproductive Toxicology*, 55, 20–29.
- (50) Jiménez, D., Labate, D., Kakadiaris, I., Papadakis, M. (2015). Improved automatic centerline tracing for dendritic and axonal structures. *Neuroinformatics*, 13(2), 227–244.
- (51) *Journal Article (Submitted)*
- (52) Le, Y. H., Kurkure, U., Kakadiaris, I. A. (2015). PDM-ENLOR for segmentation of mouse brain gene expression images. *Medical Image Analysis*, 20(1), 19-33.

Conference Proceedings

- Vrigkas, M., Nikou, C., Kakadiaris, I. (2016). Active privileged learning of human activities from weakly labeled samples. *Image Processing (ICIP), 2016 IEEE International Conference on* (pp. 3036–3040).
- Báez-Suárez, A., Nikou, C., Nolzaco-Flores, J., Kakadiaris, I. (2016). Age Classification from Facial Images: Is Frontalization Necessary? *International Symposium on Visual Computing* (pp. 769–778).
- Memariani, A., Nikou, C., Endres, B., Bassères, E., Garey, K., Kakadiaris, I. (2016). DeTEC: Detection of Touching Elongated Cells in SEM Images. *International Symposium on Visual Computing* (pp. 288–297).
- Vrigkas, M., Nikou, C., Kakadiaris, I. (2016). Exploiting privileged information for facial expression recognition. *Biometrics (ICB), 2016 International Conference on* (pp. 1–8).
- Xu, X., Shah, S. K., Kakadiaris, I. (2016). Face alignment via an ensemble of random ferns. *2016 IEEE International Conference on Identity, Security and Behavior Analysis (ISBA)* (pp. 1–8).
- Wu, Y., Shah, S. K., Kakadiaris, I. (2016). Rendering or normalization? An analysis of the 3D-aided pose-invariant face recognition. *2016 IEEE International Conference on Identity, Security and Behavior Analysis (ISBA)* (pp. 1–8).
- Krithara, A., Nentidis, A., Paliouras, G., Kakadiaris, I. (2016). Results of the 4th edition of BioASQ Challenge. *Proceedings of the Fourth BioASQ workshop at the Conference of the Association for Computational Linguistics* (pp. 1–7).
- Kakadiaris, I., Sarafianos, N., Nikou, C. (2016). Show me your body: Gender classification from still images. *Image Processing (ICIP), 2016 IEEE International Conference on* (pp. 3156–3160).
- Tran, K., Yan, X., Kakadiaris, I., Shah, S. (2015). A group contextual model for activity recognition in crowded scenes. *Proceedings of the International Conference on Computer Vision Theory and Applications*.
- Tran, K., Yan, X., Kakadiaris, I., Shah, S. (2015). A Hybrid Approach for Individual and Group Activity Analysis in Crowded Scene. *International Joint Conference on Computer Vision, Imaging and Computer Graphics* (pp. 189–204).
- Zhang, L., Dou, P., Shah, S. K., Kakadiaris, I. (2015). Hierarchical multi-label framework for robust face recognition. *2015 International Conference on Biometrics (ICB)* (pp. 127–134).
- Leng, M., Moutafis, P., Kakadiaris, I. (2015). Joint prototype and metric learning for set-to-set matching: Application to biometrics. *Biometrics Theory, Applications and Systems (BTAS), 2015 IEEE 7th International Conference on* (pp. 1–8).
- Dou, P., Zhang, L., Wu, Y., Shah, S. K., Kakadiaris, I. (2015). Pose-robust face signature for multi-view face recognition. *Biometrics Theory, Applications and Systems (BTAS), 2015 IEEE 7th International Conference on* (pp. 1–8).
- Moutafis, P., Kakadiaris, I. (2015). Rank-based score normalization for multi-biometric score fusion. *Technologies for Homeland Security (HST), 2015 IEEE International Symposium on* (pp. 1–6).
- Balikas, G., Kosmopoulos, A., Krithara, A., Paliouras, G., Kakadiaris, I. (2015). Results of the BioASQ tasks of the Question Answering Lab at CLEF 2015. *CLEF 2015*.

Wu, Y., Xu, X., Shah, S. K., Kakadiaris, I. (2015). Towards fitting a 3D dense facial model to a 2D image: A landmark-free approach. *Biometrics Theory, Applications and Systems (BTAS), 2015 IEEE 7th International Conference on* (pp. 1–8).

Conference Proceeding (Under Review)

Hernandez, P., Kakadiaris, I. A. *A pre-processing step to improve the segmentation of spines*. Brooklyn, NY: Proc. IEEE International Symposium on Biomedical Imaging.

Other Intellectual Contributions

Book Chapter (Published)

(1) Moutafis, P., Kakadiaris, I. (2016). Exploiting Score Distributions for Biometric Applications. *Face Recognition Across the Imaging Spectrum* (pp. 333–353). Springer International Publishing.

(2) Kakadiaris, I. A., Kurkure, U., Bandekar, A., O'Malley, S. M., Naghavi, M. (2015). Cardiovascular informatics. In N. Paragios, N. Ayache, & J. Duncan (Eds.), *Handbook of Biomedical Imaging* (vol. 7, pp. 363-374). New York: Springer Science+Business Media.

Pavlidis, Ioannis

Refereed Journal Articles

- P11. I. Pavlidis, M. Dcosta, S. Taamneh, M Manser, T. Ferris, R. Wunderlich, E. Akleman, and P. Tsiamyrtzis. "Dissecting driver behaviors under cognitive, emotional, sensorimotor, and mixed stressors." *Scientific Reports*, vol. 6, May 12, 2016. DOI:10.1038/srep25651 **[Impact Factor: 5.578][Altmetric: 452] [Views: 11,566]**
- P10. I. Semendeferi, P. Tsiamyrtzis, M. Dcosta, and I. Pavlidis. "Connecting past with present: A mixed-methods science ethics course and its evaluation." *Science and Engineering Ethics*, vol. 22, no 1, pp. 251-274, 2016. **[Impact Factor: 0.963]**
- P9. P. Tsiamyrtzis, M. Dcosta, D. Shastri, E. Prasad, and I. Pavlidis. "Delineating the operational envelope of mobile and conventional EDA sensing on key body locations." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI)*, pp. 5665-5674, San Jose, California, May 7 - 12, 2016. **[Acceptance Rate: 23%]**
- P8. S. Taamneh, M. Dcosta, K. Kwon, and I. Pavlidis. "SubjectBook: Hypothesis driven ubiquitous visualization for affective studies." In *CHI'16 Extended Abstracts on Human Factors in Computing Systems*, pp. 1483-1489, San Jose, California, May 7-12, 2016. **[Acceptance Rate: 20%]**
- P7. A. Ashik, D. Shastri, P. Tsiamyrtzis, I. Uyanik, E. Akleman, and I. Pavlidis. "Effects of simple personalized goals on the usage of a physical activity app." In *CHI'16 Extended Abstracts on Human Factors in Computing Systems*, pp. 2249-2256, San Jose, California, May 7-12, 2016. **[Acceptance Rate: 20%]**
- P.6 M. Dcosta, D. Shastri, P. Tsiamyrtzis, and I. Pavlidis. "Turning security monitoring into an engaging high performance task." In *2016 IEEE International Conference on Technologies for Homeland Security*, Waltham, Massachusetts, May 10-12, 2016.
- P5. A. Turchaninova, A. Khatri, I. Uyanik, and I. Pavlidis. "Role model in human physical activity." In *Proceedings of the Conference on Wireless Health – WH'15*, Bethesda, Maryland, October 14-16, 2015. **[Acceptance Rate: 26%]**
- P4. M. Ugur, D. Shastri, P. Tsiamyrtzis, M. Dcosta, A. Kalpacki, C. Sharp, and I. Pavlidis. "Evaluating smartphone-based user interface designs for a 2D psychological questionnaire." In *Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing – Ubicomp 2015*, pp. 275-282, Osaka, Japan, September 7-11, 2015. **[Acceptance Rate: 22%]**

- P3. M. Dcosta, D. Shastri, and I. Pavlidis. "Perinasal indicators of malevolence." In *11th IEEE Conference on Automatic Face and Gesture Recognition – FG 2015*, Ljubljana, Slovenia, May 4-8, 2015.
- P2. M. Dcosta, D. Shastri, R. Vilalta, J.K. Burgoon, and I. Pavlidis. "Perinasal indicators of deceptive behavior." In *11th IEEE Conference on Automatic Face and Gesture Recognition – FG 2015*, Ljubljana, Slovenia, May 4-8, 2015. **[Acceptance Rate: 14%]**
- P1. I. Uyanik, A. Khatri, D. Majeti, M. Ugur, D. Shastri, and I. Pavlidis. "Using accelerometer data to estimate surface incline and its walking app potential." In *CHI'15 Extended Abstracts on Human Factors in Computing Systems*, pp. 1397-1402, Seoul, South Korea, April 18-23, 2015. **[Acceptance Rate: 25%]**

Papers at Abstract Based Conferences

- A1. S. Taamneh, M. Dcosta, K. Kwon, and I. Pavlidis. "SubjectBook: Web-based visualization of multimodal affective datasets on the cloud" In *Society for Affective Science Conference*, Chicago, Illinois, March 17 – 19, 2016.

Semendeferi, Ioanna (Associate Professor)

Refereed Journal Articles

- Semendeferi, I., Tziamyrtzis, P., Dcosta, M., Pavlidis, I. (2016). Connecting Past with Present: A Mixed-Methods Science Ethics Course and Its Evaluation. *Science and Engineering Ethics*, 22(1), 251-274.

Other Intellectual Contributions

Book (Working Paper)

- Semendeferi, I. *Technocratic Totalitarianism' and the Scientific Soul in the Civilian Nuclear-Power Debate*.

Vilalta, Ricardo

Refereed Journal Articles

- Toti, G., Vilalta, R., Lindner, P., Lefer, B., Macias, C., Price, D. (2016). Analysis of correlation between pediatric asthma exacerbation and exposure to pollutant mixtures with association rule mining. *Artificial Intelligence in Medicine*.

Conference Proceedings

- Toti, G., Vilalta, R., Lindner, P., Price, D. (2016). Effect of the Definition of Non-Exposed Population in Risk Pattern Mining. *5th Workshop on Data Mining for (SDM-DMMH 2016) Medicine and Healthcare 16th SIAM International Conference on Data Mining (SDM 2016)* (pp. 20–25).

Educational Psychology

Horn, Catherine

Refereed Journal Articles

- Horn, C., Santelices, V., Catalan, X. (2015). Modeling the Impacts of National and Institutional Financial Aid Opportunities on Persistence at an Elite Chilean University. *International Journal of Higher Education*.

Other Intellectual Contributions

Working Paper (Working Paper)

Horn, C. *Comprehensive access and outcomes: Modeling the impacts on student-level outcomes of attention to resourcing tertiary education opportunities for underserved students.*

Working Paper (Under Review)

Horn, C., Redondo, J. Construir y sostener las instituciones de la equidad: Lecciones comparativas de los EE.UU. en la segunda mitad del siglo. *Equidad en la Educación Superior.*

Working Paper (Working Paper)

Horn, C., Flores, S. *Does Receipt of the Top 10 Percent Plan Benefit Affect Likelihood of College Completion? A Quantitative Case Study Analysis.*

Working Paper (Under Review)

Flores, S., Horn, C. *Texas Top 10 percent plan: How it works, What are its limitations, and recommendations to consider.* Educational Testing Service Affirmative Action Project.

Working Paper (Under Review)

Wells, A., Horn, C. *The Asian American college experience at a diverse institution: Campus climate as a predictor of sense of belonging.* Journal of Student Affairs Research and Practice.

Psychology

Ahmed, Yusra (Research Assistant Professor)

Refereed Journal Articles

- (1) Arrington, C. N., Ware, A. L., Ahmed, Y., Kulesz, P. A., Dennis, M., Fletcher, J. (2016). Are Shunt Revisions Associated with IQ in Congenital Hydrocephalus? A Meta-Analysis. *Neuropsychology Review*, 1–11.
- (2) Ahmed, Y., Francis, D., York, M., Fletcher, J., Barnes, M., Kulesz, P. A. (2016). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 44, 68–82.
- (3) Barnes, M. A., Ahmed, Y., Barth, A., Francis, D. (2015). The Relation of Knowledge-Text Integration Processes and Reading Comprehension in 7th-to 12th-Grade Students. *Scientific Studies of Reading*, 19(4), 253–272.

Alfano, Candice (Associate Professor)

Refereed Journal Articles

- (1) **Alfano, C.A.** *Patriquin, M. & De Los Reyes, A. (2015). Subjective – Objective Sleep Comparisons and Discrepancies among Clinically-Anxious and Healthy Children. *Journal of Abnormal Child Psychology*, 43, 1343-1353.
- (2) McMakin, D.L. & **Alfano, C.A.** (2015). Sleep and Anxiety from Childhood to Early Adolescence. *Current Opinion in Psychiatry*, 28, 483-489.
- (3) *Reynolds, K., Gradisar, M.G. & **Alfano, C.A.** (2015). Sleep in Children and Adolescents with Obsessive Compulsive Disorder (OCD). *Sleep Medicine Clinics*, 10, 133-141.
- (4) *Reynolds, K. & **Alfano, C.A.** (2016). Things that go bump in the night: frequency and predictors of nightmares in anxious and non-anxious children. *Behavioral Sleep Medicine*, 14, 442-56.
- (5) **Alfano, C.A.**, *Lau, S., *Balderas, J., Bunnell, B., & Beidel, D.C. (2016). The impact of military deployment on children: placing developmental risk in context. *Clinical Psychology Review*, 43, 17-29.
- (6) *Fillo, J. **Alfano, C.A.**, Smits, A.J., Davis, M.L. Rosenfield, D., Marcus, B.H., Church, T., Powers, M.B. Otto, M.W., Baird, S.O. & Zvolensky, M.J. (2016). Emotion Dysregulation

Explains Relations between Sleep Disturbance and Smoking Quit-Related Cognition and Behavior. *Journal of Addictive Behaviors*, 23, 6-12.

- (7) De Los Reyes, A., **Alfano, C.A.**, *Lau, S., Augenstein, T.M., & Borelli, J.L. (2016). Can We Use Convergence between Caregiver Reports of Adolescent Mental Health to Index Severity of Adolescent Mental Health Concerns? *Journal of Child and Family Studies*, 25, 109-123.
- (8) *Cowie, J., *Palmer, C., *Hussain, H. & **Alfano, C.A.** (2016). Parental Over-involvement in Infant Sleep Routines Predicts Differential Sleep Patterns in Children with and without Anxiety Disorders. *Child Psychiatry and Human Development*, 47, 636-646.
- (9) *Reynolds, K. & **Alfano, C.A.** (2016). Childhood Bedtime Problems Predict Adolescent Internalizing Symptoms Through Emotional Reactivity. *Journal of Pediatric Psychology*, 41, 971-82.
- (10) *Clementi, M.A., **Alfano, C.A.**, Holly, L.S. & Pina, A.A. (2016). Sleep-related outcomes following early intervention for childhood anxiety. *Journal of Child and Family Studies*, 25, 3270–3277.
- (11) *Palmer, C. & **Alfano, C.A.** (2016). Sleep and Emotion Regulation: An Organizing, Integrative Review. *Sleep Medicine Reviews*. Online Ahead of Print.
- (12) De Los Reyes, A., **Alfano, C.A.**, *Clementi, M.A. & Viana, A. (2016). Are the Clinical Characteristics of Anxious Youths Participating in Non-Treatment-Related Research Comparable to those of Youths Receiving Treatment? *Child and Youth Care Form*. Online Ahead of Print.
- (13) *Cowie, J., *Clementi, M.A., & **Alfano, C.A.** (2016). Examination of the Intolerance of Uncertainty Construct in Youth with Generalized Anxiety Disorder. *Journal of Clinical Child and Adolescent Psychology*. Online Ahead of Print.
- (14) *Reddy, R., *Palmer, C.A., *Jackson, C., Farris, S.G., & **Alfano, C.A.** (2016). The Effect of Sleep Restriction versus Idealized Sleep on Emotional Experience, Reactivity, and Regulation in Healthy Adolescents. *Journal of Sleep Research*. Online Ahead of Print.
- (15) *Palmer, C. & **Alfano, C.A.** (2016). Sleep Architecture Relates to Daytime Affect and Somatic Complaints in Clinically-Anxious but not Healthy Children. *Journal of Clinical Child and Adolescent Psychology*. Online Ahead of Print.

Other Intellectual Contributions

Book Chapter (Published)

- 1) McLellan, L., **Alfano, C.A.** & Hudson, J.L. (2015). Cognition-focused interventions for social anxiety disorder among adolescents. In K. Ranta, A. La Greca, L.J. García-Lopez & M. Marttunen (Eds.), *Social Anxiety and Phobia in Adolescents: Development, Manifestation and Intervention Strategies*. Springer; Powell, WY.
- 2) **Alfano, C.A.**, *Bower, J. & *Palmer, C.A. (in press). Sleep Disorders in Children. In Butcher, J.N. (Ed.), *APA Handbook of Psychopathology*. American Psychological Association; Washington DC.

Barr, Christopher D. (Research Assistant Professor)

Refereed Journal Articles

- (1) McIntyre, T. M., McIntyre, S. E., Barr, C. D., Woodward, P. S., Francis, D. J., Durand, A. C., Mehta, P., Kamarck, T. W. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of Occupational Health Psychology*.
<http://libproxy.uhcl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2015-56109-001&site=ehost-live&scope=site>

- (2) August, D., Artzi, L., Barr, C. (2016). Helping ELLs Meet Standards in English Language Arts and Science: An Intervention Focused on Academic Vocabulary. *Reading & Writing Quarterly*, 32(4), 373–396.
- (3) Uccelli, P., Galloway, E. P., Barr, C., Meneses, A., Dobbs, C. L. (2015). Beyond Vocabulary: Exploring Cross-Disciplinary Academic-Language Proficiency and Its Association With Reading Comprehension. *Reading Research Quarterly*, 50(3), 337–356.
- (4) Kambanaros, M., Grohmann, K. K., Zhao, L.-M., Alario, F.-X., Yan, Y.-F., Uccelli, P., Barr, C., Dobbs, C. L., Galloway, E. P., Meneses, A., others (2015). journals. cambridge. org/aps. *Applied Psycholinguistics*, 36(5).

Other Intellectual Contributions

Book Chapter (Published)

- (1) Santi, K. L., Barr, C., Khalaf, S., Francis, D. (2016). Different Approaches to Equating Oral Reading Fluency Passages. *The Fluency Construct* (pp. 223–265). Springer New York.

Bunta, Ferenc (Associate Professor)

Refereed Journal Articles

- (1) Bunta, F., Goodin-Mayeda, C. E., Procter, A., & Hernandez, A. (2016). Initial stop voicing in bilingual children with cochlear implants and their peers with normal hearing. *Journal of Speech, Language, and Hearing Research*, 59, 686-698. doi:10.1044/2016_JSLHR-S-15-0212.
- (2) Bunta, F., Douglas, M., Dickson, H., Cantu, A., Wickesberg, J., & Gifford, R. H., (2016). Dual language versus English only support for bilingual children with hearing loss who use cochlear implants and hearing aids. *International Journal of Language and Communication Disorders*, 15(4), 460-472. doi: 10.1111/1460-6984.12223.
- (3) Santos Oliveira, D., Casenhiser, D. M., Hedrick, M., Teixeira, A., & Bunta, F. (2016). Effects of language experience on the discrimination of the Portuguese palatal lateral by nonnative listeners. *Clinical Linguistics and Phonetics*, 30(8), 569-583. doi: 10.3109/02699206.2016.1152508.
- (4) McLeod, S., Verdon, S., Bowen, C., and the International Expert Panel on Multilingual Children's Speech (in press). Tutorial: Speech assessment for multilingual children who do not speak the same language(s) as the speech-language pathologist. *American Journal of Speech-Language Pathology*.
- (5) Bunta, F., Gósy, M., & Bóna, J. (2016). HU-LARSP: Assessing children's language skills in Hungarian. In Martin Ball, David Crystal, and Paul Fletcher (Eds.). *Profiling Grammar: More Languages of LARSP* (pp. 80-98). Bristol, UK: Multilingual Matters.

Other Intellectual Contributions

(Published)

History, C. f., Media, N. *Zotero Quick Start Guide*. http://zotero.org/support/quick_start_guide!!!

Working Paper (Under Review)

Rojas, R., Iglesias, A., Bunta, F., Goldstein, B., Goldenberg, C., Reese, L. *Interlocutor differential effects on the expressive language skills of Spanish-speaking English language learners*.

Working Paper (Working Paper)

Bunta, F., Douglas, M., Dickson, H., Cantu, A., Gifford, R. H., Wickesberg, J. *The benefits of home language use in bilingual children with hearing loss*.

Working Paper (Under Review)

Archila-Suerte, P., Bunta, F., Hernandez, A. *Pre-existing auditory perceptual ability, not bilingualism, predict novel speech learning*.

Book Chapter (In Press)

- (1) Procter, A., Bunta, F., Aghara, R. (2015). Stop VOT productions by young bilingual Spanish-English children and their monolingual peers. In M. Yavas (Ed.), *Unusual Productions in Phonology: Universals and Language-Specific Considerations* (pp. 268). Psychology Press/Taylor & Francis.

Carlson, Coleen D. (Research Assistant Professor)

Refereed Journal Articles

- Branum-Martin, L., Mehta, P., Taylor, W. P., Carlson, C., Lei, X., Hunter, C. V., Francis, D. (2015). How Do We Match Instructional Effectiveness with Learning Curves?. *Society for Research on Educational Effectiveness*.

Cirino, Paul (Associate Professor)

Refereed Journal Articles

- (1) Cirino, P. T., Fuchs, L. S., Elias, J. T., Powell, S. R., Schumaker, R. (2015). Cognitive and mathematical profiles for different forms of learning disabilities. *Journal of Learning Disabilities*, 48(2), 156-175.
- (2) Treble-Barna, A., Juranek, J., Stuebing, K. K., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Prospective and episodic memory in relation to hippocampal volume in adults with spina bifida myelomeningocele. *Neuropsychology*, 29(1), 92-101.
- (3) Williams, V. J., Juranek, J. J., Stuebing, K. K., Cirino, P. T., Dennis, M., Bowman, R., Fletcher, J. M. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida meningomyelocele. *Journal of Neurosurgery: Pediatrics*, 15(4), 410-419.
- (4) Cirino, P., Miciak, J., Gerst, E., Barnes, M. A., Vaughn, S., Child, A. E., Huston-Warren, E. (2016). Executive Function, Self-Regulated Learning, and Reading Comprehension A Training Study. *Journal of learning disabilities*, 0022219415618497.
- (5) Ware, A. L., Kulesz, P. A., Williams, V. J., Juranek, J., Cirino, P., Fletcher, J. (2016). Gray matter integrity within regions of the dorsolateral prefrontal cortical-subcortical network predicts executive function and fine motor dexterity in spina bifida. *Neuropsychology*, 30(4), 492.
- (6) Bradley, K. A., Juranek, J., Romanowska-Pawliczek, A., Hannay, J., Cirino, P., Dennis, M., Kramer, L. A., Fletcher, J. (2016). Plasticity of Interhemispheric Temporal Lobe White Matter Pathways Due to Early Disruption of Corpus Callosum Development in Spina Bifida. *Brain connectivity*, 6(3), 238-248.
- (7) Dennis, M., Cirino, P., Simic, N., Juranek, J., Taylor, P., Fletcher, J. (2016). White and grey matter relations to simple, choice, and cognitive reaction time in spina bifida. *Brain imaging and behavior*, 10(1), 238-251.
- (8) Kulesz, P. A., Treble-Barna, A., Williams, V. J., Juranek, J., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Attention in spina bifida myelomeningocele: Relations with brain volume and integrity. *NeuroImage: Clinical*(8), 72-78.
- (9) Gerst, E. H., Cirino, P., Fletcher, J., Yoshida, H. (2015). Cognitive and behavioral rating measures of executive function as predictors of academic outcomes in children. *Child Neuropsychology*, 1-27.
- (10) Miciak, J., Williams, J. L., Taylor, P., Cirino, P., Fletcher, J., Vaughn, S. (2015). Do Processing Patterns of Strengths and Weaknesses Predict Differential Treatment Response? *American Psychological Association*.
- (11) Williams, V. J., Juranek, J., Stuebing, K., Cirino, P., Dennis, M., Bowman, R. M., Blaser, S., Kramer, L. A., Fletcher, J. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida and hydrocephalus. *Journal of Neurosurgery: Pediatrics*, 15(4), 410-419.

Durand, Angie (Research Assistant Professor)

Refereed Journal Articles

- (1) McIntyre, T. M., McIntyre, S. E., Barr, C. D., Woodward, P. S., Francis, D. J., Durand, A. C., Mehta, P., Kamarck, T. W. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary

Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of Occupational Health Psychology*.
<http://libproxy.uhcl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2015-56109-001&site=ehost-live&scope=site>

Fletcher, Jack M. (Distinguished Professor)

Refereed Journal Articles

- (2) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J. M., Francis, D. J. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212-225.
- (3) Treble-Barna, A., Juranek, J., Stuebing, K. K., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Prospective and episodic memory in relation to hippocampal volume in adults with spina bifida myelomeningocele. *Neuropsychology*, 29(1), 92-101.
- (4) Grills-Tauechel, A. E., Fletcher, J. M., Vaughn, S. R., Barth, A. E., Denton, C. A., Stuebing, K. K. (in press). Anxiety and response to reading intervention among first grade students. *Child and Youth Care Forum*.
- (5) Stuebing, K. K., Barth, A. E., Miciak, J., Fletcher, J. M. (in press). Cognitive predictors of response to intervention: a meta-analysis.
- (6) Roberts, G., Rane, S., Fall, A. M., Denton, C. A., Fletcher, J. M., Vaughn, S. (in press). The impact of a longitudinal intervention for reading on teacher-rated attention in middle school students. *The Journal of Child Psychiatry and Psychology*.
- (7) Williams, V. J., Juranek, J. J., Stuebing, K. K., Cirino, P. T., Dennis, M., Bowman, R., Fletcher, J. M. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida meningocele. *Journal of Neurosurgery: Pediatrics*, 15(4), 410-419.
- (8) Shaywitz, B., Fletcher, J., Shaywitz, S. January, 1995. Defining and classifying learning disabilities and attention-deficit/hyperactivity disorder. *Journal of Child Neurology*, 10(1), 50-57.
- (9) Arrington, C. N., Ware, A. L., Ahmed, Y., Kulesz, P. A., Dennis, M., Fletcher, J. (2016). Are Shunt Revisions Associated with IQ in Congenital Hydrocephalus? A Meta-Analysis. *Neuropsychology Review*, 1-11.
- (10) Barnes, M. A., Stuebing, K., Fletcher, J., Barth, A. E., Francis, D. (2016). Cognitive Difficulties in Struggling Comprehenders and Their Relation to Reading Comprehension: A Comparison of Group Selection and Regression-Based Models. *Journal of research on educational effectiveness*, 9(2), 153-172.
- (11) Taylor, P., Miciak, J., Fletcher, J., Francis, D. (2016). Cognitive Discrepancy Models for Specific Learning Disabilities Identification: Simulations of Psychometric Limitations. *American Psychological Association*.
- (12) Fletcher, J., Miciak, J. (2016). Comprehensive Cognitive Assessments are not Necessary for the Identification and Treatment of Learning Disabilities. *Archives of Clinical Neuropsychology*.
- (13) Miciak, J., Taylor, P., Stuebing, K., Fletcher, J., Vaughn, S. (2016). Designing Intervention Studies: Selected Populations, Range Restrictions, and Statistical Power. *Journal of Research on Educational Effectiveness*, 1-14.
- (14) Ware, A. L., Kulesz, P. A., Williams, V. J., Juranek, J., Cirino, P., Fletcher, J. (2016). Gray matter integrity within regions of the dorsolateral prefrontal cortical-subcortical network predicts executive function and fine motor dexterity in spina bifida. *Neuropsychology*, 30(4), 492.
- (15) Dimitriadis, S. I., Laskaris, N. A., Simos, P. G., Fletcher, J., Papanicolaou, A. C. (2016). Greater repertoire and temporal variability of cross-frequency coupling (CFC) modes in resting-state neuromagnetic recordings among children with reading difficulties. *Frontiers in human neuroscience*, 10.
- (16) Ris, M. D., Grosch, M., Fletcher, J., Metah, P., Kahalley, L. S. (2016). Measurement of neurodevelopmental changes in children treated with radiation for brain tumors: what is a true 'baseline?'. *The Clinical Neuropsychologist*, 1-22.
- (17) Bradley, K. A., Juranek, J., Romanowska-Pawliczek, A., Hannay, J., Cirino, P., Dennis, M., Kramer, L. A., Fletcher, J. (2016). Plasticity of Interhemispheric Temporal Lobe White Matter Pathways

- Due to Early Disruption of Corpus Callosum Development in Spina Bifida. *Brain connectivity*, 6(3), 238–248.
- (18) Semrud-Clikeman, M., Romero, R. A. A., Prado, E. L., Shapiro, E. G., Bangirana, P., John, C. C. (2016). Selecting measures for the neurodevelopmental assessment of children in low-and middle-income countries. *Child Neuropsychology*, 1–42.
 - (19) Kulesz, P. A., Francis, D., Barnes, M. A., Fletcher, J. (2016). The Influence of Properties of the Test and Their Interactions With Reader Characteristics on Reading Comprehension: An Explanatory Item Response Study. *American Psychological Association*.
 - (20) Johnson, R. L., Raphail, A.-M. (2016). Untangling letter confusability and word length effects in pure alexia. *Cognitive neuropsychology*, 1–12.
 - (21) Ahmed, Y., Francis, D., York, M., Fletcher, J., Barnes, M., Kulesz, P. A. (2016). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 44, 68–82.
 - (22) Dennis, M., Cirino, P., Simic, N., Juranek, J., Taylor, P., Fletcher, J. (2016). White and grey matter relations to simple, choice, and cognitive reaction time in spina bifida. *Brain imaging and behavior*, 10(1), 238–251.
 - (23) Kulesz, P. A., Treble-Barna, A., Williams, V. J., Juranek, J., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Attention in spina bifida myelomeningocele: Relations with brain volume and integrity. *NeuroImage: Clinical*(8), 72-78.
 - (24) Gerst, E. H., Cirino, P., Fletcher, J., Yoshida, H. (2015). Cognitive and behavioral rating measures of executive function as predictors of academic outcomes in children. *Child Neuropsychology*, 1–27.
 - (25) Shallice, T. (2015). Cognitive neuropsychology and its vicissitudes: The fate of Caramazza's axioms. *Cognitive Neuropsychology*, 32(7-8), 385–411.
 - (26) Miciak, J., Williams, J. L., Taylor, P., Cirino, P., Fletcher, J., Vaughn, S. (2015). Do Processing Patterns of Strengths and Weaknesses Predict Differential Treatment Response? *American Psychological Association*.
 - (27) Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. (2015). Effects From a Randomized Control Trial Comparing Researcher and School Implemented Treatments With Fourth Graders With Significant Reading Difficulties. *Journal of Research on Educational Effectiveness*(just-accepted), 00–00.
 - (28) Williams, V. J., Juranek, J., Stuebing, K., Cirino, P., Dennis, M., Bowman, R. M., Blaser, S., Kramer, L. A., Fletcher, J. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida and hydrocephalus. *Journal of Neurosurgery: Pediatrics*, 15(4), 410–419.
 - (29) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J., Francis, D. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212.
 - (30) Copp, A. J., Adzick, N. S., Chitty, L. S., Fletcher, J., Holmbeck, G. N., Shaw, G. M. (2015). Spina bifida. *Nature Reviews Disease Primers*, 1, 15007.
 - (31) Denton, C. A., Enos, M., York, M. J., Francis, D. J., Barnes, M., Kulesz, P., Fletcher, J. M., Carter, S. (2015). Text processing differences in adolescent adequate and poor comprehenders reading accessible and challenging narrative and informational text. *Reading Research Quarterly*.
 - (32) Denton, C. A., Enos, M., York, M., Francis, D., Barnes, M. A., Kulesz, P. A., Fletcher, J., Carter, S. (2015). Text-Processing Differences in Adolescent Adequate and Poor Comprehenders Reading Accessible and Challenging Narrative and Informational Text. *Reading Research Quarterly*, 50(4), 393–416.
 - (33) Miciak, J., Taylor, P., Denton, C. A., Fletcher, J. (2015). The effect of achievement test selection on identification of learning disabilities within a patterns of strengths and weaknesses framework. *School Psychology Quarterly*, 30(3), 321.
 - (34) Roberts, G., Rane, S., Fall, A.-M., Denton, C. A., Fletcher, J., Vaughn, S. (2015). The impact of intensive reading intervention on level of attention in middle school students. *Journal of Clinical Child & Adolescent Psychology*, 44(6), 942–953.
 - (35) Fernandez, V. G., Juranek, J., Romanowska-Pawliczek, A., Stuebing, K., Williams, V. J., Fletcher, J. (2015). White matter integrity of cerebellar-cortical tracts in reading impaired children: A probabilistic tractography study. *Brain and language*.

- (36) Fletcher, J. M. (in press). Alternative approaches to outcomes assessment: Beyond psychometric tests. *Pediatric Blood & Cancer*.
- (37) Dennis, M., Spiegler, B. J., Simic, N., Sinopoli, K. J., Wilkinson, A., Yeates, K. O., Taylor, H. G., Bigler, E. D., Fletcher, J. M. (in press). Functional plasticity in childhood brain disorders: when, what, how, and whom to assess. *Neuropsychology Review*.

Non-Refereed Articles, Refereed Conference Abstracts, and Reports

- Thatcher, J., Shaywitz, S., Fletcher, J., Marchione, K., Holahan, J., Stuebing, K., Shaywitz, B. 1. ERN in Attention-Deficit Hyperactivity, Oppositional-Defiant, Reading, and Math Disorder Andrea Burgio-Murphy¹, Rafael Klorman¹.
- Reinking, D., Alvermann, D. E., Mathes, P. G., Denton, C. A., Fletcher, J., Anthony, J. L., Francis, D., Schatschneider, C., Paris, S. G., Weigel, D. J., others A JOURNAL. *CHANGE*, 416, 971–9882.
- Fletcher, J., Stuebing, K., Barth, A. E. Effects of a Response-based, Tiered Framework for Intervening with Struggling Readers in Middle School Greg Roberts and Sharon Vaughn The Meadows Center for Preventing Educational Risk, University of Texas.
- Fletcher, J. Get Email Updates Sign up to receive the RTI Action Network e-newsletter.
- Stuebing, K., Fletcher, J., LeDoux, J., Lyon, G., Shaywitz, S., Shaywitz, B., Vellutino, F., Scanlon, D., Small, S., Fanuele, D. Suggested Readings LD diagnosis. *Analysis*, 39(2), 469–518.
- Fulbright, R. K., Constable, R. T., Skudlarski, P., Marchione, K. E., Jenner, A. R., Fletcher, J., Liberman, A. M. THE ANGULAR GYRUS IN DEVELOPMENTAL DYSLEXIA.
- Yeates, K. O., Fletcher, J., Dennis, M. (2016). 9 Spina bifida and hydrocephalus. *Textbook of clinical neuropsychology*, 128.

Other Intellectual Contributions

Book Chapter (Published)

- (1) Miciak, J., Fletcher, J., Stuebing, K. (2016). Accuracy and validity of methods for identifying learning disabilities in a response-to-intervention service delivery framework. *Handbook of Response to Intervention* (pp. 421–440). Springer.

Manuscript (Under Review)

- Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. M. *Fourth graders with significant reading difficulties*.

Francis, David J. (Distinguished Professor)

Refereed Journal Articles

- (2) Santi, K. L., Francis, D. J., Currie, D., Wang, Q. (2015). Visual-Motor Integration Skills: Accuracy in Predicting Reading. *Optometry and Vision Science*, 92(2), 217-226.
- (3) McIntyre, T. M., McIntyre, S. E., Barr, C. D., Woodward, P. S., Francis, D. J., Durand, A. C., Mehta, P., Kamarck, T. W. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of Occupational Health Psychology*.
<http://libproxy.uhcl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2015-56109-001&site=ehost-live&scope=site>
- (4) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J. M., Francis, D. J. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212-225.
- (5) Santi, K. L., Kulesz, P. A., Khalaf, S., Francis, D. J. (2015). Developmental changes in reading and visual processing: An application of explanatory item response models in grades K-2. *Frontiers in Psychology*, 6(116), 1-13.
- (6) Denton, C. A., Wolters, C. A., York, M., Swanson, E., Kulesz, P. A., Francis, D. J. (2015). Adolescents' use of reading comprehension strategies: Differences related to reading proficiency, grade level, and gender. *Learning and Individual Differences*, 37, 81-95.

- (7) Barnes, M. A., Stuebing, K., Fletcher, J., Barth, A. E., Francis, D. (2016). Cognitive Difficulties in Struggling Comprehenders and Their Relation to Reading Comprehension: A Comparison of Group Selection and Regression-Based Models. *Journal of research on educational effectiveness*, 9(2), 153–172.
- (8) Taylor, P., Miciak, J., Fletcher, J., Francis, D. (2016). Cognitive Discrepancy Models for Specific Learning Disabilities Identification: Simulations of Psychometric Limitations. *American Psychological Association*.
- (9) Kulesz, P. A., Francis, D., Barnes, M. A., Fletcher, J. (2016). The Influence of Properties of the Test and Their Interactions With Reader Characteristics on Reading Comprehension: An Explanatory Item Response Study. *American Psychological Association*.
- (10) Ahmed, Y., Francis, D., York, M., Fletcher, J., Barnes, M., Kulesz, P. A. (2016). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 44, 68–82.
- (11) Denton, C. A., Wolters, C. A., York, M., Swanson, E., Kulesz, P. A., Francis, D. (2015). Adolescents' use of reading comprehension strategies: Differences related to reading proficiency, grade level, and gender. *Learning and Individual Differences*, 37, 81–95.
- (12) Hernandez, A. E., Greene, M. R., Vaughn, K. A., Francis, D., Grigorenko, E. L. (2015). Beyond the bilingual advantage: The potential role of genes and environment on the development of cognitive control. *Journal of Neurolinguistics*, 35, 109–119.
- (13) Branum-Martin, L., Mehta, P., Taylor, W. P., Carlson, C., Lei, X., Hunter, C. V., Francis, D. (2015). How Do We Match Instructional Effectiveness with Learning Curves?. *Society for Research on Educational Effectiveness*.
- (14) Barth, A. E., Barnes, M., Francis, D., Vaughn, S., York, M. (2015). Inferential processing among adequate and struggling adolescent comprehenders and relations to reading comprehension. *Reading and writing*, 28(5), 587–609.
- (15) McIntyre, T., McIntyre, S., Barr, C., Woodward, P., Francis, D., Durand, A., Mehta, P., Kamarck, T. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of occupational health psychology*.
- (16) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J., Francis, D. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212.
- (17) Denton, C. A., Enos, M., York, M. J., Francis, D. J., Barnes, M., Kulesz, P., Fletcher, J. M., Carter, S. (2015). Text processing differences in adolescent adequate and poor comprehenders reading accessible and challenging narrative and informational text. *Reading Research Quarterly*.
- (18) Denton, C. A., Enos, M., York, M., Francis, D., Barnes, M. A., Kulesz, P. A., Fletcher, J., Carter, S. (2015). Text-Processing Differences in Adolescent Adequate and Poor Comprehenders Reading Accessible and Challenging Narrative and Informational Text. *Reading Research Quarterly*, 50(4), 393–416.
- (19) Barnes, M. A., Ahmed, Y., Barth, A., Francis, D. (2015). The Relation of Knowledge-Text Integration Processes and Reading Comprehension in 7th-to 12th-Grade Students. *Scientific Studies of Reading*, 19(4), 253–272.
- (20) Wolters, C. A., Barnes, M. A., Kulesz, P. A., York, M. A., Francis, D. J. (in press). Examining a motivational treatment and its impact on adolescents' reading comprehension and fluency. *Journal of Educational Research*.

Other Intellectual Contributions

Book Chapter (Published)

- (1) Santi, K. L., Barr, C., Khalaf, S., Francis, D. (2016). Different Approaches to Equating Oral Reading Fluency Passages. *The Fluency Construct* (pp. 223–265). Springer New York.
- (2) Baker, R. M., Francis, D. J. (2015). Randomized Controlled Trials: Do They Tell Us What We Want to Know about Interventions for People with Severe Disabilities? In R. A. Sevik & M. Romski (Eds.), *Examining the Science and Practice of Communication Interventions for Individuals with Severe Disabilities*. Baltimore: P.H. Brooks.

Gallagher, Matthew (Assistant Professor)

Non-Refereed Articles, Refereed Conference Abstracts, and Reports

Gallagher, M., Howard, W., Stump, K. KUant Guides.

Paulus, D. J., Valadka, J., Businelle, M. S., Gallagher, M., Viana, A., Schmidt, N. B., Zvolensky, M. J. (2016). Emotion Dysregulation Explains Associations between Anxiety Sensitivity and Hazardous Drinking and Drinking Motives among Adult Treatment-Seeking Smokers.

Schoemann, A. M., Gallagher, M., Little, T. D. (2015). Difference scores. *The Encyclopedia of Clinical Psychology*.

Refereed Journal Articles

- (1) Lu, Q., Wong, C., Gallagher, M., Tou, R., Young, L., Loh, A. (2016). Expressive writing among chinese american breast cancer survivors: A randomized controlled trial. *Health psychology: official journal of the Division of Health Psychology, American Psychological Association*.
- (2) Gallagher, M., Marques, S. C., Lopez, S. J. (2016). Hope and the Academic Trajectory of College Students. *Journal of Happiness Studies*, 1–12.
- (3) Brake, C. A., Sauer-Zavala, S., Boswell, J. F., Gallagher, M., Farchione, T. J., Barlow, D. H. (2016). Mindfulness-Based Exposure Strategies as a Transdiagnostic Mechanism of Change: An Exploratory Alternating Treatment Design. *Behavior therapy*, 47(2), 225–238.
- (4) Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M., Rodriguez, P., Schnurr, P. P., Keane, T. M. (2016). Psychometric Properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders—Fifth Edition (PCL-5) in Veterans. *Psychological Assessment*, 28(11), 1379–1391.
- (5) Payne, L. A., White, K. S., Gallagher, M., Woods, S. W., Shear, M. K., Gorman, J. M., Farchione, T. J., Barlow, D. H. (2016). Second-Stage Treatments For Relative Nonresponders To Cognitive Behavioral Therapy (CBT) For Panic Disorder With Or Without Agoraphobia—Continued CBT Versus SSRI: A Randomized Controlled Trial. *Depression and anxiety*, 33(5), 392–399.
- (6) Taft, C. T., Creech, S. K., Gallagher, M., Macdonald, A., Murphy, C. M., Monson, C. M. (2016). Strength at Home Couples program to prevent military partner violence: A randomized controlled trial. *Journal of consulting and clinical psychology*, 84(11), 935.
- (7) Gutner, C. A., Gallagher, M., Baker, A. S., Sloan, D. M., Resick, P. A. (2016). Time course of treatment dropout in cognitive-behavioral therapies for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(1), 115–121.
- (8) Marx, B., Bovin, M., Szafranski, D., Engel-Rebitzer, E., Gallagher, M., Holowka, D., Schnurr, P., Rosen, R., Keane, T. (2016). Validity of posttraumatic stress disorder service connection status in veterans affairs electronic records of Iraq and Afghanistan veterans. *The Journal of clinical psychiatry*, 77(4), 517–522.
- (9) Gallagher, M., Brown, T. A. (2015). Bayesian analysis of current and lifetime comorbidity rates of mood and anxiety disorders in individuals with posttraumatic stress disorder. *Journal of psychopathology and behavioral assessment*, 37(1), 60–66.
- (10) Gallagher, M., Thompson-Hollands, J., Bourgeois, M. L., Bentley, K. H. (2015). Cognitive behavioral treatments for adult posttraumatic stress disorder: Current status and future directions. *Journal of Contemporary Psychotherapy*, 45(4), 235–243.
- (11) Hayes, M. A., Gallagher, M., Gilbert, K. S., Creech, S. K., DeCandia, C. J., Beach, C. A., Taft, C. T. (2015). Targeting Relational Aggression in Veterans: The Strength at Home Friends and Family Intervention. *Journal of Clinical Psychiatry*, 74, 774–778.
- (12) Gallagher, M. (2015). Treating PTSD with Cognitive-Behavioral Therapies. *Cognitive behaviour therapy*, 44(1), 86–86.

Grigorenko, Elena L. (Distinguished Professor)

Refereed Journal Articles

- (1) Bick, J., Nguyen, V., Leng, L., Piecychna, M., Crowley, M. J., Bucala, R., Mayes, L. C., Grigorenko, E. L. Preliminary associations between childhood neglect, MIF, and cortisol: Potential pathways to long-term disease risk. *Developmental Psychobiology*, 57, 131-139. doi:10.1002/dev.21265
- (2) Boivin, M. J., Kakooza, A. M., Warf, B. C., Davidson, L. L., & Grigorenko, E. L. Reducing neurodevelopmental disorders and disability through research and interventions. *Nature*, 527, S155-S160. doi: 10.1038/nature16029
- (3) Boulware-Gooden, R., Malatesha, J. R., Grigorenko, E. The role of phonology, morphology, and orthography in English and Russian spelling. *Dyslexia*, 21, 142-161. doi:10.1002/dys.1498
- (4) Davidson, L. L., Grigorenko, E. L., Boivin, M. J., Rapa, E., & Stein, A. A focus on adolescence to reduce neurological, mental health and substance-use disability. *Nature*, 527, S161-S166. doi: 10.1038/nature16030
- (5) Ercan-Sencicek, A. G., Jambi, S., Franjic, D., Nishimura, S., Li, M., El-Fishawy, P., Morgan, T. M., Sanders, S.J., Bilguvar, K., Suri, M., Johnson, M. H., Gupta, A. R., Yuksel, Z., Mane, S., Grigorenko, E., Picciotto, M., Alberts, A. S., Gunel, M., Sestan, N., State, M. W. Homozygous loss of DIAPH1 is a novel cause of microcephaly in humans. *European Journal of Human Genetics*, 23, 165-172. doi: 10.1038/ejhg.2014.82
- (6) Grigorenko, E. L. Preface. *New Directions for Child and Adolescent Development*, 147, 3-4. doi:10.1002/cad.20076
- (7) Grigorenko, E. L. Genomic sciences for developmentalists: A merge of science and practice. *New Directions for Child and Adolescent Development*, 147, 5–12. doi: 10.1002/cad.20083
- (8) Grigorenko, E. L., Edwards, L., Chapman, J. Cannabis use among juvenile detainees: Typology, frequency, and association. *Criminal Behaviour and Mental Health*, 25, 54-65. doi: 10.1002/cbm.1913
- (9) Grigorenko, E.L., Macomber, D., Hart, L., Naples, A., Chapman, J., Geib, C. F., Chart, H., Tan, M., Wolhendler, D., Wagner, R. Academic achievement among juvenile detainees. *Journal of Learning Disabilities*, 48, 359–368. doi:10.1177/0022219413500991
- (10) Grigorenko, E. L., Sullivan, T., Chapman, J. An Investigation of gender differences in a representative sample of juveniles detained in Connecticut. *International Journal of Law and Psychiatry*, 38, 84-91. doi:10.1016/j.ijlp.2015.01.011
- (11) Hein, S., Tan, M., Aljughaiman, A., & Grigorenko, E. Gender differences in and school influences on three indicators of general intelligence: Evidence from Saudi Arabia. *Journal of Educational Psychology*, 107, 488-501. doi: 10.1037/a0037519
- (12) Hernandez, A. E., Greene, M. R., Vaughn, K. A., Francis, D. J., & Grigorenko, E. L. Beyond the bilingual advantage: The potential role of genes and environment on the development of cognitive control. *Journal of Neurolinguistics*, 35, 109-119. doi: <http://dx.doi.org/10.1016/j.jneuroling.2015.04.002>
- (13) Kornilov, S. A., Magnuson, J. S., Rakhlin, N., Landi, N., Grigorenko, E. L. Lexical processing deficits in children with developmental language disorder: an event-related potentials study. *Development and Psychopathology*, 27, 459-476. doi:10.1017/S0954579415000097
- (14) Mariani, J., Coppola, G., Zhang, P., Abyzov, A., Provini, L., Tomasini, L., Amenduni, M., Szekely, A., Palejev, D., Wilson, M., Gerstein, M., Grigorenko, E., Chawarska, K., Pelphrey, K., Howe, J., Vaccarino, F. M. FOXP1-dependent dysregulation of GABA/glutamate neuron differentiation in autism spectrum disorders. *Cell*, 2, 375-390. doi:10.1016/j.cell.2015.06.034
- (15) Muhamedrahimov, R. J., & Grigorenko, E. L. Seeing the trees within the forest: Addressing the needs of children without parental care in the Russian Federation. *New Directions for Child and Adolescent Development*, 147, 101–108. doi:10.1002/cad.20080
- (16) Rakhlin, N., Hein, S., Doyle, N., Hart, L., Macomber, D., Ruchkin, V., Tan, M., Grigorenko, E. Language development in internationally adopted children: Adverse early experiences outweigh the age of acquisition effect. *Journal of Communication Disorders*, 57, 66–80. doi:10.1016/j.jcomdis.2015.08.003
- (17) Rakhlin, N., Reich, J., Kornilov, S. A., Grigorenko, E. L. Interpretation of anaphoric dependencies by Russian-speaking children with and without developmental language disorder. *Language Acquisition: A Journal of Developmental Linguistics*, 22, 355-383. doi:10.1080/10489223.2015.1028629
- (18) Tan, M., Mourgues, C., Hein, S., McCormick, J., Barbot, B., Grigorenko, E. L. Differences in judgments of creativity: How do academic domain, personality, and self-reported creativity influence novice judges' evaluations of creative productions. *Journal of Intelligence*, 3, 73-90; doi:10.3390/jintelligence3030073

- (19) Barbot, B., Bick, J., Bentley, M., Balestracci, K. M. B., Woolston, J. F., Adnopoz, J. A., Grigorenko, E. L. Changes in mental health outcomes with the Intensive In-Home Child and Adolescent Psychiatric Service (ICCAPS): a multi-informant, latent consensus approach. *International Journal of Methods in Psychiatric Research*, 25, 33-43. doi:10.1002/mpr.1477
- (20) Barbot, B., Krivulskaya, S., Hein, S., Reich, J., Thuma, P., & Grigorenko, E. Identifying learning patterns of children at risk for specific reading disability. *Developmental Science*, 19, 402-418. doi:10.1111/desc.12313
- (21) Geiser C., Mandelman, S. D., Tan M., Grigorenko, E. L. An application of the Correlated Traits–Correlated (Methods – 1) model. *Structural Equation Modeling: A Multidisciplinary Journal*, 23, 76-90. doi:10.1080/10705511.2014.937792.
- (22) Grigorenko, E. L. Introduction to Special Issue. *Learning and Individual Differences*, 46, 1-2. doi:10.1016/j.lindif.2016.03.005
- (23) Grigorenko, E. L. Mission accomplished: Thank you and goodbye! *Learning and Individual Differences*, 46, I-II, doi:10.1016/S1041-6080(16)30027-9.
- (24) Grigorenko, E. L., Bick, J., Campbell, D. J., Lewine, G., Abrams, J., Nguyen, V., Chang, J. T. The trilogy of GxE: Conceptualization, operationalization, and application. In D. Cicchetti (Ed). *Developmental psychopathology*, Vol. 2 (Developmental neuroscience), 3rd ed., pp. 287-338. New York, NY: Wiley.
- (25) Hein, S., Reich, J., Marks, S., Thuma, P. E., & Grigorenko, E. L. Getting something out of nothing: Analyzing patterns of null responses to improve data collection methods in sub-Saharan Africa. *Learning and Individual Differences*, 46, 11-16. doi:10.1016/j.lindif.2014.11.024
- (26) Hein, S., Tan, M., Reich, J., Thuma, P. E., & Grigorenko, E. L. School effects on non-verbal cognitive skills and physical health in rural Zambia. *Learning and Individual Differences*, 46, 25-37. doi:10.1016/j.lindif.2015.04.004
- (27) Isaksson, J., Grigorenko, E. L., Orelund, L., af Klinteberg, B., Kuposov, R. A., Ruchkin, V. Exploring possible association between D β H genotype (C1021T), early onset of conduct disorder and psychopathic traits in juvenile delinquents. *European Archives of Psychiatry and Clinical Neuroscience*. doi:10.1007/s00406-015-0664-3
- (28) Kornilov, S., Grigorenko, E. L. Molecular genetics methods for developmental scientists. In D. Cicchetti (Ed). *Developmental psychopathology*, Vol. 2 (Developmental neuroscience), 3rd ed., pp. 378-415. New York, NY: Wiley.
- (29) Kornilov, S., Kornilova, T. V., Grigorenko, E. L. The cross-cultural invariance of creative cognition: A case study of creative writing in U.S. and Russian college students. *New Directions for Child and Adolescent Development*, 151, 41–53
- (30) Kornilov, S.A., Lebedeva, T.V., Zhukova, M.A., Prikhoda, N., Korotaeva, I.V., Kuposov, R., Hart, L., Reich, J., & Grigorenko, E.L. Language development in rural and urban Russian-speaking children with and without Developmental Language Disorder. *Learning and Individual Differences*, 46, 45-53. doi:10.1016/j.lindif.2015.07.001
- (31) Kornilov, S., Rakhlin, N., Kuposov, R., Lee, M., Yrigollen, C., Caglayan, A., Magnuson, J., Mane, S., Chang, J., Grigorenko, E. L. Genome-wide association and exome sequencing study of language disorder in an extended pedigree. *Pediatrics*, 137(4) e20152469; doi: 10.1542/peds.2015-2469
- (32) Mandelman, S. D., Barbot, B., Grigorenko, E. L. Predicting academic performance and trajectories from a measure of successful intelligence. *Learning and Individual Differences*, 51, 387–393; doi:10.1016/j.lindif.2015.02.003
- (33) Mourgues, C., Tan, M., Hein, S., Ojanen, E., Reich, J., Lyytinen, H., Grigorenko, E. L. Paired associate learning tasks and their contribution to reading skills. *Learning and Individual Differences*, 46, 54-63. doi:10.1016/j.lindif.2014.12.003
- (34) Naumova, O. Y., Hein, S., Suderman, M., Barbot, B., Lee, M., Raefski, A., Dobrynin, P. V., Brown, P., Szyf, M., Luthar, S. S., & Grigorenko, E. L. Epigenetic patterns modulate the connection between developmental dynamics of parenting and offspring psychosocial adjustment. *Child Development*, 87, 98-110. doi: 10.1111/cdev.12485
- (35) Rakhlin, N., Hein, S., Doyle, N., Hart, L., Kuposov, R., Macomber, D., Ruchkin, V., Strelina, A., Tan, M., Grigorenko, E. L. Sources of heterogeneity in developmental outcomes of children with past and current experiences of institutionalization in Russia: a four-group comparison. *American Journal of Orthopsychiatry*. doi: 10.1037/ort0000146

- (36) Rakhlin, N., Kornilov, S. A., Kornilova, T.V., & Grigorenko, E. L. Syntactic complexity effects of Russian relative clause sentences in children with and without developmental language disorder. *Language Acquisition*, 23, 333-360. doi:10.1080/10489223.2016.1179312
- (37) Zhukova, M.A., Kornilov, S.A., & Grigorenko, E.L. Pediatric speech and language disorders in the context of evidence-based taxonomies. *Psychiatric Annals*, 43, 45-51. doi:10.3928/00485713-20151125-01
- (38) Pakstis, A. J., Kang, L., Liu, L., Zhang, Z., Jin, T., Grigorenko, E. L., Wendt, F. R., Budowle, B., Hadi, S., Salam Al-Qahtani M., Morling, N., Mogensen, H. S., Themudo, G. E., Soundararajan, U., Rajeevan, H., Kidd, J. R., Kidd, K. K. (in press). Increasing the reference populations for the 55 AISNP panel: the need and benefits. *International Journal of Legal Medicine*
- (39) Kornilov, S. A., Grigorenko, E. L. (in press). What reading disability? Evidence for multiple latent profiles of struggling readers in a large Russian sibpair sample with a least one sibling at-risk for reading difficulties. *Journal of Learning Disabilities*

Hannay, H. J. (Professor)

Refereed Journal Articles

- (1) Bradley, K. A., Juraneck, J., Romanowska-Pawliczek, A., Hannay, J., Cirino, P., Dennis, M., Kramer, L. A., Fletcher, J. (2016). Plasticity of Interhemispheric Temporal Lobe White Matter Pathways Due to Early Disruption of Corpus Callosum Development in Spina Bifida. *Brain connectivity*, 6(3), 238–248.

Other Intellectual Contributions

Working Paper (Working Paper)

Armstrong, V., Hannay, H. J., Heaton, S., Papa, L., Robertson, C. S., Robicsek, S. A. *Outcome prediction following severe head injury: Comparison of the Disability Rating Scale (DRS) and the Glasgow Outcome Scales (GOSS and GOSE) as measures of Outcome.*

Working Paper (Working Paper)

Hane, L., Hannay, H. J., Tian, S. *Patterns of performance on the Paced Auditory Serial Addition Test (PASAT) as a predictor of injury severity.*

Working Paper (Working Paper)

Watson, W., Hannay, H. J., Robertson, C. S., Sirinek, J., Schmalfluss, I., Gabrielli, A., Robicsek, S., Heaton, S. *Replication and Extension of the IMPACT Prognostic Model in Severe Traumatic Brain Injury.*

Working Paper (Working Paper)

Biney, F., Hannay, H. J., O'Dell, K. *The relationship between blood alcohol level and global outcome of individual with severe traumatic brain injury.*

Hein, Sascha D.

Refereed Journal Articles

- (2) Graf, F. A., Grumm, M., Hein, S. D., Fingerle, M. The Impact of Acceptance and Usefulness Assessments on the Intended Implementation of a Parent Training Program. *Empirische Sonderpädagogik*, 2.
- (3) Naumova, O. Y., Hein, S. D., Suderman, M., Barbot, B., Lee, M., Raefski, A., Dobrynin, P. V., Brown, P. J., Szyf, M., Luthar, S. S., others (2016). Epigenetic patterns modulate the connection between developmental dynamics of parenting and offspring psychosocial adjustment. *Child development*, 87(1), 98–110.
- (4) Haeffel, G. J., Hein, S. D., Macomber, D., Lee, M., Chapman, J., Grigorenko, E. L. (2016). Evaluating a social problem solving intervention for juvenile detainees: Depressive outcomes and moderators of effectiveness. *Development and Psychopathology*, 1–8.
- (5) Hein, S. D., Tan, M., Reich, J., Thuma, P. E., Grigorenko, E. L. (2016). School effects on non-verbal intelligence and nutritional status in rural Zambia. *Learning and individual differences*, 46, 25–37.

- (6) Rakhlin, N., Hein, S. D., Doyle, N., Hart, L., Kuposov, R., Macomber, D., Ruchkin, V., Strelina, A., Tan, M., Grigorenko, E. L. (2016). Sources of Heterogeneity in Developmental Outcomes of Children With Past and Current Experiences of Institutionalization in Russia: A Four-Group Comparison. *Educational Publishing Foundation*.
- (7) Hein, S. D., Röder, M., Fingerle, M. (2016). The role of emotion regulation in situational empathy-related responding and prosocial behaviour in the presence of negative affect. *International Journal of Psychology*.
- (8) Mourgues, C. V., Hein, S. D., Tan, M., Diffley, III, R., Grigorenko, E. L. (2016). The Role of Noncognitive Factors in Predicting Academic Trajectories of High School Students in a Selective Private School. *European Journal of Psychological Assessment*.
- (9) Mourgues, C., Tan, M., Hein, S. D., Elliott, J. G., Grigorenko, E. L. (2016). Using creativity to predict future academic performance: An application of Aurora's five subtests for creativity. *Learning and Individual Differences*.
- (10) Tan, M., Mourgues, C., Hein, S. D., MacCormick, J., Barbot, B., Grigorenko, E. (2015). Differences in Judgments of Creativity: How Do Academic Domain, Personality, and Self-Reported Creativity Influence Novice Judges' Evaluations of Creative Productions? *Journal of Intelligence*, 3(3), 73–90.
- (11) Hein, S. D., Tan, M., Aljughaiman, A., Grigorenko, E. L. (2015). Gender differences and school influences with respect to three indicators of general intelligence: Evidence from Saudi Arabia. *Journal of Educational Psychology*, 107(2), 486.
- (12) Barbot, B., Krivulskaia, S., Hein, S. D., Reich, J., Thuma, P. E., Grigorenko, E. L. (2015). Identifying learning patterns of children at risk for Specific Reading Disability. *Developmental science*.
- (13) Rakhlin, N., Hein, S. D., Doyle, N., Hart, L., Macomber, D., Ruchkin, V., Tan, M., Grigorenko, E. L. (2015). Language development of internationally adopted children: Adverse early experiences outweigh the age of acquisition effect. *Journal of communication disorders*, 57, 66–80.
- (14) Röder, M., Hein, S. D., Fingerle, M. (2015). The Child Attachment Interview: Application in a German-Speaking Sample and its Correlations With Personality and Aggression. *Child Indicators Research*, 8(4), 789–799.
- (15) Mourgues, C., Tan, M., Hein, S. D., Al-Harbi, K., Aljughaiman, A., Grigorenko, E. (2015). The relationship between analytical and creative cognitive skills from middle childhood to adolescence: Testing the threshold theory in the Kingdom of Saudi Arabia. *Learning and Individual Differences*.

Other Intellectual Contributions

Book Chapter (Published)

- (1) Hein, S. D., Reich, J., Grigorenko, E. L. (2015). Cultural manifestation of intelligence in formal and informal learning environments during childhood. *The Oxford Handbook of Human Development and Culture*.

Kulesz, Paulina A. (Research Assistant Professor)

Refereed Journal Articles

- (1) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J. M., Francis, D. J. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212-225.
- (2) Santi, K. L., Kulesz, P. A., Khalaf, S., Francis, D. J. (2015). Developmental changes in reading and visual processing: An application of explanatory item response models in grades K-2. *Frontiers in Psychology*, 6(116), 1-13.
- (3) Santi, K. L., Kulesz, P. A., Khalaf, S., Francis, D. J. (2015). Developmental changes in reading do not alter the development of visual processing skills: An application of explanatory item response models in grades K-2. *Frontiers in Psychology*, 6, 116.
- (4) Denton, C. A., Wolters, C. A., York, M., Swanson, E., Kulesz, P. A., Francis, D. J. (2015). Adolescents' use of reading comprehension strategies: Differences related to reading proficiency, grade level, and gender. *Learning and Individual Differences*, 37, 81-95.

- (5) Arrington, C. N., Ware, A. L., Ahmed, Y., Kulesz, P. A., Dennis, M., Fletcher, J. (2016). Are Shunt Revisions Associated with IQ in Congenital Hydrocephalus? A Meta-Analysis. *Neuropsychology Review*, 1–11.
- (6) Ware, A. L., Kulesz, P. A., Williams, V. J., Juranek, J., Cirino, P., Fletcher, J. (2016). Gray matter integrity within regions of the dorsolateral prefrontal cortical-subcortical network predicts executive function and fine motor dexterity in spina bifida. *Neuropsychology*, 30(4), 492.
- (7) Kulesz, P. A., Francis, D., Barnes, M. A., Fletcher, J. (2016). The Influence of Properties of the Test and Their Interactions With Reader Characteristics on Reading Comprehension: An Explanatory Item Response Study. *American Psychological Association*.
- (8) Ahmed, Y., Francis, D., York, M., Fletcher, J., Barnes, M., Kulesz, P. A. (2016). Validation of the direct and inferential mediation (DIME) model of reading comprehension in grades 7 through 12. *Contemporary Educational Psychology*, 44, 68–82.
- (9) Denton, C. A., Wolters, C. A., York, M., Swanson, E., Kulesz, P. A., Francis, D. (2015). Adolescents' use of reading comprehension strategies: Differences related to reading proficiency, grade level, and gender. *Learning and Individual Differences*, 37, 81–95.
- (10) Kulesz, P. A., Treble-Barna, A., Williams, V. J., Juranek, J., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Attention in spina bifida myelomeningocele: Relations with brain volume and integrity. *NeuroImage: Clinical*(8), 72-78.
- (11) Santi, K. L., Kulesz, P. A., Khalaf, S., Francis, D. (2015). Developmental changes in reading do not alter the development of visual processing skills: an application of explanatory item response models in grades K-2. *Frontiers in psychology*, 6.
- (12) Kulesz, P. A., Tian, S., Juranek, J., Fletcher, J., Francis, D. (2015). Relations between volumetric measures of brain structure and attentional function in spina bifida: Utilization of robust statistical approaches. *Neuropsychology*, 29(2), 212.
- (13) Denton, C. A., Enos, M., York, M. J., Francis, D. J., Barnes, M., Kulesz, P., Fletcher, J. M., Carter, S. (2015). Text processing differences in adolescent adequate and poor comprehenders reading accessible and challenging narrative and informational text. *Reading Research Quarterly*.
- (14) Denton, C. A., Enos, M., York, M., Francis, D., Barnes, M. A., Kulesz, P. A., Fletcher, J., Carter, S. (2015). Text-Processing Differences in Adolescent Adequate and Poor Comprehenders Reading Accessible and Challenging Narrative and Informational Text. *Reading Research Quarterly*, 50(4), 393–416.
- (15) Wolters, C. A., Barnes, M. A., Kulesz, P. A., York, M. A., Francis, D. J. (in press). Examining a motivational treatment and its impact on adolescents' reading comprehension and fluency. *Journal of Educational Research*.

McIntyre, Maria T. M.

Refereed Journal Articles

- (1) McIntyre, T. M., McIntyre, S. E., Barr, C. D., Woodward, P. S., Francis, D. J., Durand, A. C., Mehta, P., Kamarck, T. W. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of Occupational Health Psychology*.
<http://libproxy.uhcl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2015-56109-001&site=ehost-live&scope=site>
- (2) Loureiro, E., McIntyre, T., Mota-Cardoso, R., Ferreira, M. A. (2015). A relação entre o stress e os estilos de vida nos estudantes de Medicina da Faculdade de Medicina do Porto (The relationship between stress and life style in medical students of the University of Oporto). *Acta Médica Portuguesa (Portuguese Medical Annals)*.

Mehta, Paras (Associate Professor)

Refereed Journal Articles

- (1) McIntyre, T. M., McIntyre, S. E., Barr, C. D., Woodward, P. S., Francis, D. J., Durand, A. C., Mehta, P., Kamarck, T. W. (2015). Longitudinal Study of the Feasibility of Using Ecological Momentary Assessment to Study Teacher Stress: Objective and Self-Reported Measures. *Journal of Occupational Health Psychology*.
<http://libproxy.uhcl.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2015-56109-001&site=ehost-live&scope=site>

Non-Refereed Articles, Refereed Conference Abstracts, and Reports

- Branum-Martin, L., Mehta, P., Taylor, W. P., Carlson, C., Lei, X., Hunter, C. V., Francis, D. (2015). How Do We Match Instructional Effectiveness with Learning Curves?. *Society for Research on Educational Effectiveness*.

Miciak, Jeremy

Refereed Journal Articles

- (2) Stuebing, K. K., Barth, A. E., Miciak, J., Fletcher, J. M. (in press). Cognitive predictors of response to intervention: a meta-analysis.
- (3) Taylor, P., Miciak, J., Fletcher, J., Francis, D. (2016). Cognitive Discrepancy Models for Specific Learning Disabilities Identification: Simulations of Psychometric Limitations. *American Psychological Association*.
- (4) Fletcher, J., Miciak, J. (2016). Comprehensive Cognitive Assessments are not Necessary for the Identification and Treatment of Learning Disabilities. *Archives of Clinical Neuropsychology*.
- (5) Miciak, J., Taylor, P., Stuebing, K., Fletcher, J., Vaughn, S. (2016). Designing Intervention Studies: Selected Populations, Range Restrictions, and Statistical Power. *Journal of Research on Educational Effectiveness*, 1–14.
- (6) Kennedy, M. J., Alves, K. D., Miciak, J., Romig, J., Mathews, H. M., Thomas, C. N. (2016). Evaluating the Relationship between Naturalistic Content Acquisition Podcast Views and Course Performance. *Teacher Education and Special Education*, 39(4), 293–307.
- (7) Cirino, P., Miciak, J., Gerst, E., Barnes, M. A., Vaughn, S., Child, A. E., Huston-Warren, E. (2016). Executive Function, Self-Regulated Learning, and Reading Comprehension A Training Study. *Journal of learning disabilities*, 0022219415618497.
- (8) Williams, J. L., Miciak, J., McFarland, L., Wexler, J. (2016). Learning Disability Identification Criteria and Reporting in Empirical Research: A Review of 2001–2013. *Learning Disabilities Research & Practice*, 31(4), 221–229.
- (9) Cho, E., Roberts, G. J., Capin, P., Roberts, G., Miciak, J., Vaughn, S. (2015). Cognitive Attributes, Attention, and Self-Efficacy of Adequate and Inadequate Responders in a Fourth Grade Reading Intervention. *Learning Disabilities Research & Practice*, 30(4), 159–170.
- (10) Miciak, J., Williams, J. L., Taylor, P., Cirino, P., Fletcher, J., Vaughn, S. (2015). Do Processing Patterns of Strengths and Weaknesses Predict Differential Treatment Response? *American Psychological Association*.
- (11) Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. (2015). Effects From a Randomized Control Trial Comparing Researcher and School Implemented Treatments With Fourth Graders With Significant Reading Difficulties. *Journal of Research on Educational Effectiveness*(just-accepted), 00–00.
- (12) Miciak, J., Taylor, P., Denton, C. A., Fletcher, J. (2015). The effect of achievement test selection on identification of learning disabilities within a patterns of strengths and weaknesses framework. *School Psychology Quarterly*, 30(3), 321.
- (13) Kennedy, M. J., Wagner, D., Stegall, J., Lembke, E., Miciak, J., Alves, K. D., Brown, T., Driver, M. K., Hirsch, S. E. (2015). Using Content Acquisition Podcasts to Improve Teacher Candidate Knowledge of Curriculum-Based Measurement. *Exceptional Children*, 0014402915615885.

Other Intellectual Contributions

Book Chapter (Published)

- (1) Miciak, J., Fletcher, J., Stuebing, K. (2016). Accuracy and validity of methods for identifying learning disabilities in a response-to-intervention service delivery framework. *Handbook of Response to Intervention* (pp. 421–440). Springer.

Manuscript (Under Review)

- Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. M. *Fourth graders with significant reading difficulties*.

Naumova, Oxana

Refereed Journal Articles

- (1) Rychkov, S., Naumova, O., Evsyukov, A., Morozova, I., Shneider, Y., Zhukova, O. Genetic Diversity of the Population of Russia: Gene Pool and Genegeography.
- (2) Naumova, O. Y., Hein, S., Suderman, M., Barbot, B., Lee, M., Raefski, A., Dobrynin, P. V., Brown, P. J., Szyf, M., Luthar, S. S., others (2016). Epigenetic patterns modulate the connection between developmental dynamics of parenting and offspring psychosocial adjustment. *Child development*, 87(1), 98–110.
- (3) Grigorenko, E. L., Kornilov, S. A., Naumova, O. Y. (2016). Epigenetic regulation of cognition: A circumscribed review of the field. *Development and Psychopathology*, 28(4pt2), 1285–1304.
- (4) Naumova, O., Odintsova, V., Arinzina, I., Muhamedrahimov, R., Grigorenko, E., Tsvetkova, L. (2016). Health, Development and Epigenetic Characteristics of Institutionalized Children: A Preliminary Study based on a Small Cohort. *Procedia-Social and Behavioral Sciences*, 233, 225–230.

Perry, Matthew J. (Graduate Student)

Refereed Journal Articles

Journal Article (Working Paper)

Perry, M. J. Intergenerational Relationship Conflict and Selection into Marriage.

Journal Article (Working Paper)

Wagmiller, Jr, R. L., Perry, M. J. Status Inconsistency and Middle Class Realignment.

Journal Article (Working Paper)

Perry, M. J. The Impact of Fluctuation in Subjective Health on Depressive Symptom Trajectories.

Sharp, Carla (Professor)

Refereed Journal Articles

- (1) Abate, A., Marshall, K. K., **Sharp, C.**, and Venta, A. (in press). Trauma and aggression: Investigating the mediating role of mentalizing in female and male inpatient adolescents. *Child Psychiatry & Human Development*.
- (2) Venta, A., *Hatkevich, C., **Sharp, C.**, & Rotenberg, K. (in press). Emotional trust in mothers serves as a buffer against suicide attempts in inpatient adolescents with depressive symptoms. *Journal of Social and Clinical Psychology*.
- (3) *Ibraheim, M., *Kalpakci, A., & **Sharp, C.** (in press). The specificity of emotion dysregulation in adolescents with borderline personality disorder: Comparison with psychiatric and healthy controls. *Borderline Personality Disorder/Emotion Dysregulation*.
- (4) Madan, A., Fowler, J.C., Patriquin, M.A., Salas, R., Baldwin, P.R., Velasquez, K.M., Viswanath, H., Molfese, D.L., **Sharp, C.**, Allen, J., Hardesty, S., Oldham, J., & Frueh, B.C. (in press). A novel approach to identifying a neuroimaging biomarker for patients with serious mental illness. *The Journal of Neuropsychiatry and Clinical Neurosciences*.

- (5) Somma, A., Fossati, A., **Sharp, C.** (in press). Borderline personality disorder features, emotion dysregulation and non-suicidal self-injury: Preliminary findings in a sample of community-dwelling Italian adolescents. *Personality and Mental Health*.
- (6) Hill, R. M., *Mellick, W., Temple, J. R., & **Sharp, C.** (in press). The role of bullying in depressive symptoms from adolescence to emerging adulthood: A growth mixture model. *Journal of Affective Disorders*.
- (7) *Mellick, W., *Vanwoerden, S., & **Sharp, C.** (in press). Experiential avoidance in the vulnerability to depression among adolescent females. *Journal of Affective Disorders*.
- (8) **Sharp, C.** (2017). Bridging the gap: The assessment and treatment of adolescent personality disorder in routine clinical care. *Archives of Disease in Childhood*, *102*(1), 103-108. [IF: 3.231].
- (9) *Sommer, J. M., Babcock, J. C., & **Sharp, C.** (in press). A dyadic analysis of partner violence and adult attachment. Submitted to *Journal of Family Violence*.
- (10) *Garey, L., *Jardin, C., Kauffman, B. Y., **Sharp, C.**, Neighbors, C., Schmidt, N. B., & Zvolensky, M. J. (in press). Psychometric evaluation of the barriers to cessation scale. *Psychological Assessment*.
- (11) *Mellick, W., **Sharp, C.**, & Wilkinson, A. (in press). The moderating role of maternal depression in the relation between adolescent behavioral inhibition and maternal critical expressed emotion. *Child Psychiatry and Human Development*.
- (12) Jardin, C., Marais, L., Bakhshaie, J., Skinner, D., Neighbors, C., Zvolensky, M., & **Sharp, C.** (in press). Caregiver alcohol use and mental health among children orphaned by HIV/AIDS in South Africa. *AIDS Care*.
- (13) *Jardin, C., **Sharp, C.**, *Garey, L., *Vanwoerden, S., *Crist, N., Elhai, J. D., & Zvolensky, M. J. (in press). Compelled to risk: Does sexual compulsivity explain the connection between borderline personality traits and risky sexual behaviors. *Journal of Personality Disorders*.
- (14) *Paulus, D. J., *Jardin, C., *Bakhshaie, J., **Sharp, C.**, Woods, S. P., Lemaire, C., Leonard, A., Neighbors, C., *Brandt, C. P., & Zvolensky, M. Z. (in press). Anxiety Sensitivity and Hazardous Drinking among Persons Living with HIV/AIDS: An Examination of the Role of Emotion Dysregulation. *Addictive Behaviors*.
- (15) Bo, S., **Sharp, C.**, Beck, E., Pedersen, J., Matthias, G., & Simonsen, E. (in press). First empirical evaluation of outcomes for mentalization-based group therapy for adolescents with BPD. *Personality Disorders: Theory, Research and Treatment*.
- (16) Zvolensky, M., *Jardin, C., *Garey, L., Robles, Z., & **Sharp, C.** (in press). Acculturative Stress and Experiential Avoidance: Relations to Depression, Suicide, and Anxiety Symptoms Among Minority College Students. *Cognitive Behaviour Therapy*.
- (17) Kirk, U., Xiaosi, G., **Sharp, C.**, Fonagy, P., & Montague, R. (in press). Mindfulness training increases rational decision-making and recruits mesolimbic processes in economic exchanges. *Neuroimage*. [IF: 6.357].
- (18) Clark, C. B., Weaver, N., Li, Y., **Sharp, C.**, Bowerman, S. E., & Cropsey, K. L., (in press). Preliminary results for an economic exchange game designed to measure of an aspect of antisocial behavior. *Personality and Individual Differences*.
- (19) *Venta, A., *Jardin, C., *Kalpaci, A., & **Sharp, C.** (in press). The development and preliminary psychometric evaluation of an attachment Implicit Association Task. *Bulletin of the Menninger Clinic*.
- (20) Venta, A., *Hatkevich, C., *Mellick, W., *Vanwoerden, S., & **Sharp, C.** (in press). Social Cognition Mediates the Relation between Attachment Schemas and Post-Traumatic Stress Disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*.
- (21) **Sharp, C.** (in press). Current trends in BPD research as indicative of a broader sea-change in psychiatric nosology? *Personality Disorders: Theory, Research and Treatment*.
- (22) *Vanwoerden, S., *Reuter, T., & **Sharp, C.** (in press). Exploring the clinical utility of the DSM-5 conduct disorder specifier of 'with limited prosocial emotions' in an adolescent inpatient sample. *Comprehensive Psychiatry*.
- (23) Brandt, C. P., Bakhshaie, J., Jardin, C., Lemaire, C., Kauffman, B. Y., **Sharp, C.**, & Zvolensky, M. J. (in press). The Moderating Effect of Smoking Status on the Relation Between Anxiety Sensitivity and Hazardous Alcohol Use, Sexual Compulsivity, and Suicidality among Persons Living with HIV/AIDS. *International Journal of Behavioral Medicine*.

- (24) **Sharp, C.**, Fowler, C., Salas, R., Nielsen, C., Allen, J., Oldham, J., Kosten, T., Matthew, S., Madan, A., Frueh, C., & Fonagy, P. (in press). Operationalizing NIMH Research Domain Criteria (RDoC) in naturalistic clinical settings. *Bulletin of the Menninger Clinic*.
- (25) Van der Watt, R., & **Sharp, C.** (in press). Advanced Training in Child Psychology: Key Elements in Offering a Doctor of Psychology (DPsych) Course in South Africa. *Journal of Psychology in Africa*.
- (26) Somma, A., **Sharp, C.**, Borroni, S., Maffei, C., & Fossati, A. (in press). Psychometric Properties of the Borderline Personality Features Scale for Children-11 (BPFSC-11) in a Sample of Community Dwelling Italian Adolescents. *European Journal of Psychological Assessment*. [IF: 1.973]
- (27) *Young, C. M., Neighbors, C., DiBello, A. M., **Sharp, C.**, Zvolensky, M. J., & Lewis, M. A. (2016). Coping motives moderate efficacy of personalized normative feedback among heavy drinking U.S. college students. *Journal of Studies on Alcohol and Drugs*, 77, 495-99.
- (28) *Jardin, C., **Sharp, C.**, Garey, L., & Zvolensky, M. (in press). The role of impulsivity in the relation between negative affect and sexual HIV-risk behaviors. *Journal of Sex & Marital Therapy*.
- (29) *Ha, C., Madan, A., Long, T., & **Sharp, C.** (in press). An examination of incentive strategies to increase participation in outcomes research for an adolescent inpatient unit. *Journal of Psychiatric Practice*.
- (30) Fonagy, P., & **Sharp, C.** (in press). Author response to commentaries on "Mentalization: From Bench to Bedside". *Personality Disorders: Theory, Research and Treatment*. [IF: 3.540]
- (31) *Jardin, C., *Venta, A., Newlin, E., Ibarra, S., & **Sharp, C.** (in press). Secure attachment moderates the relation of sexual trauma with trauma symptoms among adolescents from an inpatient psychiatric facility. *Journal of Interpersonal Violence*. [IF: 1.210]
- (32) Bo, S., **Sharp, C.**, Kongerslev, M., & Fonagy, P. (in press). Hypermentalizing, attachment and epistemic trust in adolescent BPD: Clinical illustrations. *Personality Disorders: Theory, Research and Treatment*. [IF: 3.540]
- (33) Madan, A., **Sharp, C.**, Newlin, E., *Vanwoerden, S., Fowler, J. C., Frueh, B. C., Hardesty, S., & Oldham, J. (in press). Adolescents are less satisfied with inpatient psychiatric care than their parents: does it matter? *Journal of Health Care Quality*. [IF: 1.397]
- (34) Skinner, D., **Sharp, C.**, Serekoane, M. and Ross, M. (2016). The Cultural Adaptation of the DISC-IV: Appropriateness for Sotho Speaking South Africans. *Journal of Ethnic & Cultural Diversity in Social Work*, 25(1), 1-19.
- (35) *Mellick, W., & **Sharp, C.** (2016). Mental state decoding in adolescent boys with major depressive disorder versus sex-matched healthy controls. *Psychopathology*, 49(1), 53-59. doi: 10.1159/000443989.
- (36) *Paulus, D. J., *Vanwoerden, S., Norton, P. J., & **Sharp, C.** (2016). From neuroticism to anxiety: Examining effects of shame, emotion regulation, and psychological flexibility. *Personality and Individual Differences*, 94, 38-43.
- (37) Gambin, M., & **Sharp, C.** (2016). The differential relationships between empathy and internalizing and externalizing symptoms in inpatient adolescents. *Child Psychiatry and Human Development*, 1-9. [IF: 2.032].
- (38) *Paulus, D. J., *Vanwoerden, S., Norton, P. J., & **Sharp, C.** (2016). Emotion Dysregulation, Psychological Inflexibility, and Shame as Explanatory Factors between Neuroticism and Depression. *Journal of Affective Disorders*, 190, 376-385. [IF: 3.939]
- (39) *Jardin, C., *Garey, L., **Sharp, C.**, & Zvolensky, M. J. (2015). Acculturative stress and risky sexual behavior: The roles of sexual compulsivity and negative affect. *Behavior Modification*, 40, 97-119. [IF: 1.605]
- (40) Kim, M.H., Mazenga, A.C., Yu, X., Devandra, A., Nguyen, C., Ahmed, S., Kazembe, P. N., & **Sharp, C.** (2015). Factors associated with depression among adolescents living with HIV in Malawi: A strong association with bullying victimization. *BMC Psychiatry*, 15(264), 1-12. [IF: 2.21]
- (41) *Buitron, V., *Hill, R., Pettit, J., Green, K., *Hatkevich, C., & **Sharp, C.** (2016). Interpersonal stress and suicidal ideation in adolescence: Direct associations and an indirect association through perceived burdensomeness towards others. *Journal of Affective Disorders*, 190, 143-149 . [IF: 3.295]
- (42) *Gambin, M., Gambin, T., & **Sharp, C.** (2015). Social cognition, psychopathological symptoms, and family functioning in a sample of inpatient adolescents using variable-centered and person-centered approaches. *Journal of Adolescence*, 45, 31-43. [IF: 2.638]

- (43) **Sharp, C.**, *Venta, A., *Vanwoerden, S., Schramm, A., *Ha, C., Newlin, E., *Reddy, R., & Fonagy, P. (2016). First empirical evaluation of the link between attachment, social cognition and borderline features in adolescents. *Comprehensive Psychiatry*, *64*, 4-11. [IF: 2.252]
- (44) *Venta, A., & **Sharp, C.** (2015). Mentalizing mediates the relation between attachment and peer problems among inpatient adolescents. *Journal of Infant, Child, and Adolescent Psychotherapy*, *14*(3), 323-340.
- (45) **Sharp, C.**, & Fonagy, P. (2015). Practitioner review: Borderline personality disorder in adolescence: – Recent conceptualization, intervention, and implications for clinical practice. *Journal of Child Psychology and Psychiatry*, *56*(12), 1266-1288. [IF: 6.459]
- (46) **Sharp, C.**, Wright, A. G. C., Fowler, J. C., Frueh, B. C., Allen, J. G., Oldham, J., & Clark, L. (2015). The structure of personality pathology: Both general ('g') and specific ('s') factors? *Journal of Abnormal Psychology*, *124*(2), 387-398. [IF: 4.646]
- (47) **Sharp, C.**, & *Kalpakci, A (2015). Mentalization in borderline personality disorder: From bench to bedside. *Personality Disorders: Theory, Research, and Treatment*, *6*(4), 347-355. [IF: 3.540]
- (48) Ugur, M., Shastri, D., Tsiamyrtzis, P., Dcosta, M., *Kalpakci, A., **Sharp, C.**, & Pavlidis, I. (2015). Evaluating smartphone-based user interface designs for a 2D psychological questionnaire. *Association for Computing Machinery: Digital Library* [acceptance rate 30.5%]. http://www.cpl.uh.edu/publication_files/C73.pdf
- (49) **Sharp, C.**, & *Vanwoerden, S. (2015). Hypermentalizing in Borderline Personality Disorder: A model and data. *Journal of Infant, Child, and Adolescent Psychotherapy*, *14*(1), 33-45.
- (50) **Sharp, C.**, & *Kalpakci, A. (2015). If it looks like a duck and quacks like a duck: Evaluating the validity of borderline personality disorder in adolescents. *Scandinavian Journal of Child and Adolescent Psychiatry and Psychology*, *3*(1), 49-62.
- (51) Claycomb, M. A., Wang, L., **Sharp, C.**, Radcliffe, K. C., & Elhai, J. D. (2015). Assessing relations between PTSD's dysphoria and re-experiencing factors and dimensions of rumination. *PLoS One*, *10*(3), 1-13. [IF: 3.730]
- (52) Jacobsen, M. N., *Ha, C, & **Sharp, C.** (2015). A mentalization-based treatment approach to caring for youth in foster care. *Journal of Infant, Child, and Adolescent Psychotherapy*, *14*, 440-454.
- (53) **Sharp, C.**, *Jardin, C., Marais, L., & Boivin, M. (2015). Orphanhood by AIDS-related causes and child mental health: A Developmental Psychopathology approach. *Journal of HIV and AIDS*, *1*(3), 1-18. doi <http://dx.doi.org/10.16966/2380-5536.114>
- (54) *Jardin, C., Zvolensky, M. J., Schmidt, N. B., Bakhshaie, J., & **Sharp, C.** (2015). Examination of smoking inflexibility as a mechanism linking anxiety sensitivity and severity of smoking behavior. *American Journal on Addictions*, *24*, 374-381. [IF: 1.638]
- (55) *Kalpakci, A., *Vanwoerden, S., Elhai, J., & **Sharp, C.** (2015). The independent contributions of emotion dysregulation and hypermentalization to the 'double dissociation' of affective and cognitive empathy in female adolescent inpatients with BPD. *Journal of Personality Disorders*, *29*, 192-211. [IF: 2.733]
- (56) *Brunson, J., Acitelli, L., & **Sharp, C.** (2015). Exploring the Dynamic Nature of "Us": An Integrative Approach to Relationship Cognition. *Bulletin of the Menninger Clinic*, *79*(2), 131-165. [IF: 0.657]
- (57) *Venta, A., **Sharp, C.**, Shmueli-Goetz, Y., & Newlin, E. (2015). An evaluation of the construct of earned security in adolescents: Evidence from an inpatient sample. *Bulletin of the Menninger Clinic*, *79*(1), 41-69. doi:10.1521/bumc.2015.79.1.41 [IF: 0.657]
- (58) *Meier, S. C., *Herman, L, Reisner, S. L, Pardo, S., **Sharp, C.**, & Babcock, J. (2015). Testosterone treatment and MMPI-2 improvement in female-to-male transgender persons: A prospective controlled study. *Journal of Consulting and Clinical Psychology*, *83*(1), 143-156. [IF: 5.011]
- (59) **Sharp, C.**, *Vanwoerden, S., van Baardewijk, Y., Tackett, J. L., & Stegge, H. (2015). Callous-unemotional traits are uniquely associated with deficits in recognizing complex emotions in pre-adolescent children. *Journal of Personality Disorders*, *29*(3), 347-359. [IF: 2.733]

Book Chapters

- (1) **Sharp, C.**, & Michonski, J. (in press). Personality Disorders. In Ollendick, T.H., White, S.W., and White, B.A. (Eds.). *Oxford Handbook of Clinical Child and Adolescent psychology*. Oxford: Oxford University Press.

- (2) Bleiberg, E., & **Sharp, C.** (in press). Personality Disorders in Children and Adolescents: A Focus on Borderline Personality Disorder. In A. Martin and F. Volkmar (Eds.), *Lewis Child and Adolescent Psychiatry: Comprehensive Textbook (4th Ed)*. Baltimore, MD: Lippincott Williams and Wilkins.
- (3) *Kalpakci, A., *Vanwoerden, S., & **Sharp, C.** (under review). Personality disorders. In M. Pissacroia (Ed). *Textbook of Adolescent Psychopathology*. Piccin.
- (4) **Sharp, C.** (in press). Close-up: General (g) and specific (s) factors in the diagnosis of personality disorders In R. J. Cohen & M.E. Swerdluk (Eds). *Psychological Testing and Assessment*. McGraw-Hill.
- (5) **Sharp, C.**, & Long, T. (in press). Personality disorders: Psychological factors. *The SAGE Encyclopedia of Abnormal and Clinical Psychology*.
- (6) *Kalpakci, A., & **Sharp, C.** (in press). Borderline personality disorder and gender. In *The SAGE Encyclopedia of Psychology and Gender*.
- (7) **Sharp, C.**, & *Mellick, W. (in press). Childhood depression. In B. Hopkins, R.G. Barr, G.F. Michel, & P. Rochat (Eds.), *The Cambridge Encyclopedia of Child Development*. Cambridge, UK: Cambridge University Press.
- (8) **Sharp, C.**, & Trull, T. J. (in press). Emotion dysregulation in adolescents with Borderline Personality Disorder. In Essau, C., Leblanc, S., & Ollendick, T. (Eds.). *Emotion Regulation and Psychopathology in Children and Adolescents*. Oxford University Press.
- (9) *Kalpakci, A., & **Sharp, C.** (2015). Assessing for Personality Disorders in the African American Client. In L. T. Benuto, & B. D. Leany (Eds.), *Guide to Psychological Assessment with African Americans* (pp. 217-236). New York: Springer.

Stuebing, Karla (Research Professor)

Refereed Journal Articles

- (1) Treble-Barna, A., Juranek, J., Stuebing, K. K., Cirino, P. T., Dennis, M., Fletcher, J. M. (2015). Prospective and episodic memory in relation to hippocampal volume in adults with spina bifida myelomeningocele. *Neuropsychology*, 29(1), 92-101.
- (2) Grills-Tauchel, A. E., Fletcher, J. M., Vaughn, S. R., Barth, A. E., Denton, C. A., Stuebing, K. K. (in press). Anxiety and response to reading intervention among first grade students. *Child and Youth Care Forum*.
- (3) Stuebing, K. K., Barth, A. E., Miciak, J., Fletcher, J. M. (in press). Cognitive predictors of response to intervention: a meta-analysis.
- (4) Williams, V. J., Juranek, J. J., Stuebing, K. K., Cirino, P. T., Dennis, M., Bowman, R., Fletcher, J. M. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida meningomyelocele. *Journal of Neurosurgery: Pediatrics*, 15(4), 410-419.
- (5) Barnes, M. A., Stuebing, K., Fletcher, J., Barth, A. E., Francis, D. (2016). Cognitive Difficulties in Struggling Comprehenders and Their Relation to Reading Comprehension: A Comparison of Group Selection and Regression-Based Models. *Journal of research on educational effectiveness*, 9(2), 153–172.
- (6) Miciak, J., Taylor, P., Stuebing, K., Fletcher, J., Vaughn, S. (2016). Designing Intervention Studies: Selected Populations, Range Restrictions, and Statistical Power. *Journal of Research on Educational Effectiveness*, 1–14.
- (7) Williams, V. J., Juranek, J., Stuebing, K., Cirino, P., Dennis, M., Bowman, R. M., Blaser, S., Kramer, L. A., Fletcher, J. (2015). Postshunt lateral ventricular volume, white matter integrity, and intellectual outcomes in spina bifida and hydrocephalus. *Journal of Neurosurgery: Pediatrics*, 15(4), 410–419.
- (8) Fernandez, V. G., Juranek, J., Romanowska-Pawliczek, A., Stuebing, K., Williams, V. J., Fletcher, J. (2015). White matter integrity of cerebellar-cortical tracts in reading impaired children: A probabilistic tractography study. *Brain and language*.

Non-Refereed Articles, Refereed Conference Abstracts, and Reports

- Thatcher, J., Shaywitz, S., Fletcher, J., Marchione, K., Holahan, J., Stuebing, K., Shaywitz, B. 1. ERN in Attention-Deficit Hyperactivity, Oppositional-Defiant, Reading, and Math Disorder Andrea Burgio-Murphy¹, Rafael Klorman¹.
- Fletcher, J., Stuebing, K., Barth, A. E. Effects of a Response-based, Tiered Framework for Intervening with Struggling Readers in Middle School Greg Roberts and Sharon Vaughn The Meadows Center for Preventing Educational Risk, University of Texas.

Other Intellectual Contributions

Book Chapter (Published)

- (1) Miciak, J., Fletcher, J., Stuebing, K. (2016). Accuracy and validity of methods for identifying learning disabilities in a response-to-intervention service delivery framework. *Handbook of Response to Intervention* (pp. 421–440). Springer.

Taylor, William P. (Research Assistant Professor)

Refereed Journal Articles

- (2) Taylor, P., Miciak, J., Fletcher, J., Francis, D. (2016). Cognitive Discrepancy Models for Specific Learning Disabilities Identification: Simulations of Psychometric Limitations. *American Psychological Association*.
- (3) Miciak, J., Taylor, P., Stuebing, K., Fletcher, J., Vaughn, S. (2016). Designing Intervention Studies: Selected Populations, Range Restrictions, and Statistical Power. *Journal of Research on Educational Effectiveness*, 1–14.
- (4) Dennis, M., Cirino, P., Simic, N., Juranek, J., Taylor, P., Fletcher, J. (2016). White and grey matter relations to simple, choice, and cognitive reaction time in spina bifida. *Brain imaging and behavior*, 10(1), 238–251.
- (5) Miciak, J., Williams, J. L., Taylor, P., Cirino, P., Fletcher, J., Vaughn, S. (2015). Do Processing Patterns of Strengths and Weaknesses Predict Differential Treatment Response? *American Psychological Association*.
- (6) Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. (2015). Effects From a Randomized Control Trial Comparing Researcher and School Implemented Treatments With Fourth Graders With Significant Reading Difficulties. *Journal of Research on Educational Effectiveness*(just-accepted), 00–00.
- (7) Miciak, J., Taylor, P., Denton, C. A., Fletcher, J. (2015). The effect of achievement test selection on identification of learning disabilities within a patterns of strengths and weaknesses framework. *School Psychology Quarterly*, 30(3), 321.

Other Intellectual Contributions

Manuscript (Under Review)

- Vaughn, S., Solís, M., Miciak, J., Taylor, P., Fletcher, J. M. *Fourth graders with significant reading difficulties*.

Viana, Andres G. (Assistant Professor)

Refereed Journal Articles

- (1) Viana, A. G., Stevens, E. N. (in press). Parental threatening behaviors and offspring substance use: The moderating role of anxiety sensitivity. *Journal of Child and Adolescent Substance Use*.
- (2) Paulus, D. J., Valadka, J., Businelle, M. S., Gallagher, M.W., Viana, A. G., Schmidt, N. B., & Zvolensky, M. J. (in press). Emotion dysregulation explains associations between anxiety sensitivity and hazardous drinking and drinking motives among adult treatment-seeking smokers. *Psychology of Addictive Behaviors*.

- (3) Viana, A. G., Paulus, D. J., Bakhshaie, J., Garza, M., Valdivieso, J., Ochoa-Perez, M., Lemaire, C., Berger Cardoso, J., & Zvolensky, M. J. (in press). Emotional nonacceptance within the context of traumatic event exposure: The explanatory role of anxiety sensitivity for traumatic stress symptoms and disability among Latinos in primary care setting. *General Hospital Psychiatry*.
- (4) Viana, A. G., Kiel, E. L., Alfano, C. A., Dixon, L. J., & Palmer, C. A. (2017). The contribution of temperamental and cognitive factors to childhood anxiety disorder symptoms: A closer look at negative affect, behavioral inhibition, and anxiety sensitivity. *Journal of Child and Family Studies*, 26, 194-204.
- (5) Bakhshaie, J., Kauffman, B.Y., Viana, A.G., Monica, G., Ochoa-Perez, M., Lemaire, C., Bogiaizian, D., Robles, Z., Zvolensky, M.J. (in press). Synergistic effects of pain intensity and experiential avoidance in relation to anxiety symptoms and disorders among economically disadvantaged Latinos in a community-based primary care setting. *Journal of Anxiety Disorders*.
- (6) Velasco, R., Bakhshaie, J., Walker, R. L., Viana, A. G., Garza, M., Ochoa-Perez, M., Paulus, D., Robles, Z., Valdivieso, J., & Zvolensky, M. J. (in press). Synergistic effects of pain intensity and anxiety sensitivity in relation to anxiety and depressive symptoms and disorders among economically disadvantaged Latinos in a community-based primary care setting. *Journal of Anxiety Disorders*.
- (7) Viana, A. G., *Dixon, L. J., Berenz, E., & *Espil, F. M. (in press). Trauma and deliberate self-harm among inpatient adolescents: The moderating role of anxiety sensitivity. *Psychological Trauma: Theory, Research, Practice, and Policy*.
- (8) Kiel, E. J., Viana, A. G., Gratz, K. L., & Tull, M. T. (in press). Emotion socialization strategies of mothers with borderline personality disorder symptoms: The role of maternal emotion regulation and interactions with infant temperament. *Journal of Personality Disorders*.
- (9) De Los Reyes, A., Alfano, C. A., Clementi, M. A., & Viana, A. G. (in press). Are the clinical characteristics of anxious children participating in non-treatment-related research comparable to those of treatment-seeking youth? *Child and Youth Care Forum*.
- (10) *Dixon, L. J., Lee, A. A., Viana, A. G., McCowan, N. K., Brodell, R. T., & Tull, M. T. (in press). Anxiety sensitivity in dermatological patients. *Psychosomatics*.
- (11) Viana, A. G., *Dixon, L. J., *Stevens, E. N., & Ebesutani, C. (2016). Parental emotion socialization strategies and their interaction with child interpretation biases among children with anxiety disorders. *Cognitive Therapy and Research*, 40, 717-731.
- (12) *Espil, F. M., Viana, A. G., & Dixon, L. J. (2016). Posttraumatic stress disorder and depressive symptoms among inpatient adolescents: The underlying role of emotion regulation. *Residential Treatment for Children and Youth*, 33, 51-68.
- (13) Viana, A. G., & Stevens, E. N.* (2016). Parental threatening behaviors and offspring substance use: The moderating role of anxiety sensitivity. *Journal of Child and Adolescent Substance Use*, 25, 212-221.
- (14) Lim, C. S., *Espil, F. M., Viana, A. G., & Janicke, D. M. (2015). Associations between child anxiety symptoms and child and family factors in pediatric obesity. *Journal of Developmental and Behavioral Pediatrics*, 36, 664-672.
- (15) Ebesutani, C. K., Fierstein, M., Viana, A. G., Trent, L., Sprung, M., & Young, J. (2015). The role of loneliness in the relationship between anxiety and depression in clinical and school-based youth. *Psychology in the Schools*, 52, 223-234.

Non-Refereed Articles, Refereed Conference Abstracts, and Reports

- Paulus, D. J., Valadka, J., Businelle, M. S., Gallagher, M., Viana, A., Schmidt, N. B., Zvolensky, M. J. (2016). Emotion Dysregulation Explains Associations between Anxiety Sensitivity and Hazardous Drinking and Drinking Motives among Adult Treatment-Seeking Smokers.

Other Intellectual Contributions

Manuscript (Under Review)

Dixon, L. J., Lee, A. A., Viana, A. G., McCowan, N. K., Brodell, R. T., Tull, M. T. *Anxiety symptoms in dermatology outpatients.*

Manuscript (Under Review)

Viana, A. G., Stevens, E. N., Dixon, L. J., Ebesutani, C. *Parental emotion socialization strategies and their interaction with child interpretation biases among children with anxiety disorders.*

Manuscript (Under Review)

Espil, F. M., Dixon, L. J., Viana, A. G. *Posttraumatic Stress Disorder and Depressive Symptoms among Inpatient Adolescents: The Underlying Role of Emotion Regulation.*

Manuscript (Under Review)

Viana, A. G., Dixon, L. J., Berenz, E., Espil, F. M. *Posttraumatic stress disorder symptoms and deliberate self-harm among inpatient adolescents: The moderating role of anxiety sensitivity.*

Biomedical Engineering

Francis, Joseph

Refereed Journal Articles

- (1) Dura-Bernal, S., Li, K., Neymotin, S. A., Francis, J. T., Principe, J. C., Lytton, W. W. (2016). Restoring Behavior via Inverse Neurocontroller in a Lesioned Cortical Spiking Model Driving a Virtual Arm. *Frontiers in neuroscience*, 10.
- (2) Dura-Bernal, S., Zhou, X., Neymotin, S. A., Przekwas, A., Francis, J. T., Lytton, W. W. (2015). Cortical spiking network interfaced with virtual musculoskeletal arm and robotic arm. *Frontiers in neurorobotics*, 9.
- (3) Song, W., Francis, J. T. (2015). Gating of tactile information through gamma band during passive arm movement in awake primates. *Frontiers in neural circuits*, 9.
- (4) Bae, J., Giraldo, L. G. S., Pohlmeier, E. A., Francis, J. T., Sanchez, J. C., Principe, J. C. (2015). Kernel temporal differences for neural decoding. *Computational intelligence and neuroscience*, 2015, 25.
- (5) Dura-Bernal, S., Kerr, C., Neymotin, S., Suter, B., Shepherd, G., Francis, J., Lytton, W. W. (2015). Large-scale M1 microcircuit model with plastic input connections from biological PMd neurons used for prosthetic arm control. *BMC Neuroscience*, 16(1), 1.
- (6) Bae, J., Giraldo, L. G. S., Pohlmeier, E. A., Francis, J. T., Sanchez, J. C., Principe, J. C. (2015). Research Article Kernel Temporal Differences for Neural Decoding.
- (7) Choi, J. S., Menzies, R. J., Dura-Bernal, S., Francis, J. T., Lytton, W. W., Kerr, C. C. (2015). Spiking network modeling of neuronal dynamics in individual rats. *BMC Neuroscience*, 16(1), 1.
- (8) Marsh, B. T., Tarigoppula, V. S. A., Chen, C., Francis, J. T. (2015). Toward an autonomous brain machine interface: integrating sensorimotor reward modulation and reinforcement learning. *The Journal of Neuroscience*, 35(19), 7374–7387.

Conference Proceedings

- McNiel, D., Bataineh, M., Choi, J., Hessburg, J., Francis, J. (2016). Classifier Performance in Primary Somatosensory Cortex Towards Implementation of a Reinforcement Learning Based Brain Machine Interface. *2016 32nd Southern Biomedical Engineering Conference (SBEC)* (pp. 17–18).
- Bataineh, M., McNiel, D., Choi, J., Hessburg, J., Francis, J. (2016). Pilot Study for Grip Force Prediction Using Neural Signals from Different Brain Regions. *2016 32nd Southern Biomedical Engineering Conference (SBEC)* (pp. 19–20).
- Li, K., Dura-Bernal, S., Francis, J. T., Lytton, W. W., Principe, J. C. (2015). Repairing lesions via kernel adaptive inverse control in a biomimetic model of sensorimotor cortex. *2015 7th International IEEE/EMBS Conference on Neural Engineering (NER)* (pp. 478–481).

Biology and Biochemistry

Žiburkus, Jokūbas (Associate Professor)

Refereed Journal Articles

- (1) Dulla, C. G., Coulter, D. A., Žiburkus, J. (2015). From Molecular Circuit Dysfunction to Disease: Case Studies in Epilepsy, Traumatic Brain Injury, and Alzheimer's Disease. *Neuroscientist*.

- (2) Lillis, K. P., Dulla, C., Maheshwari, A., Coulter, D., Mody, I., Heinemann, U., Armbruster, M., Žiburkus, J. (2015). The Workshop on Neurobiology of the Epilepsies appraisal: Molecular and cellular imaging to study epileptic microcircuits. *Epilepsia*.
- (3) Perez C, Žiburkus J, Ullah G. (2016) Analyzing and Modeling the Dysfunction of Inhibitory Neurons in Alzheimer's Disease. *PLoS One*.
- (4) Marin MA, Žiburkus J, Jankowsky J, Rasband MN. (2016) Amyloid-β plaques disrupt axon initial segments. *Exp Neurol*.
- (5) Dulla CG, Coulter DA, Žiburkus J. (2016) From Molecular Circuit Dysfunction to Disease: Case Studies in Epilepsy, Traumatic Brain Injury, and Alzheimer's Disease. *Neuroscientist*.

e. Technology Transfer Activity

1. **Invention disclosures:** No new disclosures have been executed. We attempted a disclosure for CPL related to ScholarPlot, but this disclosure has not been completed.
2. **Patent applications (filed & pending):** None.
3. **Patents received:** No new patents received.
4. **Licenses (current & pending):** 2 current related to assessments.
5. **Spin-off companies:** 0
6. **Are there industry members and partnerships with external organizations (please provide details)?** There are many collaborations with investigators at other institutions. These are reflected in joint grants and publications. We pursued a partnership with IBM and EcoHub, but these did not reach fruition.

Dr. Candice Alfano – NASA, University of Central Florida

Dr. Chris Barr – Georgia State University, collaborating with Dr. Daphne Greenberg on a subcontract; Harvard Graduate School for Education, consulted with Dr. Paola Uccelli on statistical and psychometric services, grant submissions; Grant submission with Dr. Paola Uccelli of Harvard Graduate School for Education; Manuscript collaborations with Dr. Diane August of the American Institute for Research, Dr. Maria Carlo of CIRCLE, Dr. Elizabeth Howard of the University of Connecticut, and Dr. Paola Uccelli of the Harvard Graduate School for Education

Drs. Coleen Carlson and David Francis – The University of North Carolina, collaborating with Dr. Lynn Vernon-Feagans on grant submissions; The University of Texas at Austin/The Meadows Center/The Vaughn Gross Center, collaborating with Dr. Sharon Vaughn and Dr. Colleen Reutebuch on funded grants; The University of Texas at Austin-School of Public Health; Aldine ISD, collaborating with district on a funded grant; Educational Testing Service (ETS), collaborating with district on a funded contract; California State University – Los Angeles, collaborating with Dr. Diane Haager on a funded grant; University of Colorado – Boulder, collaborating with Dr. Allison Gould Boardman on a funded grant; Valley Speech Language and Learning Center, collaborating with Dr. Elsa Hagan on funded grants.

Dr. Coleen Carlson - collaborating with Dr. Deanna Hoelscher, Dr. Elizabeth Vanderwater and Dr. Deborah Thompson on a funded grant; The University of Missouri-Columbia/Thompson Center for Autism & Neurodevelopmental Disorders, collaborating with Dr. Micah Mazurek and Dr. Stephen Kanne on a funded grant; Nationwide Children's Hospital, Inc. – Columbus, OH, collaborating with Dr. Eric Butter Mazurek, Dr. Dan Coury, and Dr. Meghan

Norris on a funded grant; Rady Children’s Hospital, Inc. – San Diego, CA, collaborating with Dr. Mary Baker on a funded grant; University of Texas-Houston Health Science Center, collaborating with Dr. Nancy Butte on a funded grant; Texas Obesity Research Center, collaborating with Dr. Alok Bhargava on a funded grant; Harvard School of Public Health – Harvard University, collaborating with Dr. Meghan Perkins on a funded grant; Massachusetts Department of Public Health, collaborating with Dr. Lauren Smith on a funded grant; Massachusetts General Hospital – Harvard University, collaborating with Dr. Elsie Benavides on funded grant; Arizona State University, collaborating with Dr. Rebecca Lee on a funded grant;

Dr. Paul Cirino – Research relationships with: Lynn Fuchs at Vanderbilt University; UT-Austin for the Learning Disabilities grant; UT Houston with Jenifer Juranek

Dr. Jack Fletcher – Joint grants with: UT Austin; UT Houston; Texas A&M University; School district partnerships with Houston ISD, Texas Children’s Hospital consortium.

Dr. David Francis – Joint grants with UT Austin, University of Colorado at Boulder; California State LA; University of California Irvine; Harvard University; Collaboration with the Veteran’s Administration Hospital in Houston; American Institutes for Research.

Dr. Elena Grigorenko – Collaborations with St. Petersburg University; Moscow State University of Psychology and Education; Florida State University; Yale University; and others.

Dr. Lennart Johnsson – Energy efficient computer system design (programming and operations) for: Royal Institute of Technology, Stockholm, Sweden; Umea University, Umea, Sweden; Linkoping University, Linkoping, Sweden; Swedish National Infrastructure for Computing; Partnership for Advanced Computing in Europe; University of Chicago; Texas Instruments, Houston, Dallas, Germantown; Hewlett Packard; Movidius, Dublin, Ireland.

Dr. Teresa McIntyre – Joint grants with University of Houston-Clear Lake.

Dr. Ioannis Kakadiaris – collaborative relationships with Middlebury Institute of International Studies, CA; TAMU; TAMU Transportation Institute; University of Minnesota; Rutgers University; University of Arizona; University of North Carolina at Chapel Hill; University of Texas El Paso; West Virginia University.

Dr. Paras Mehta – The Veterans Affairs Administration.

Dr. Ioannis Pavlidis – subcontract partnership with the Texas Transportation Institute (TTI); Collaboration with Dr. Brian Uzzi from the Northwestern Institute on Complex Systems and Science (NICO) for ScholarPlot development

Dr. Carla Sharp – Research relationships with Baylor College of Medicine; University of Texas; University of Free State, South Africa; University of Stellenbosch, South Africa; University College London, UK; Harvard Medical School; University of Hawaii.

Dr. Pat Taylor – Joint grant with Lee Branum-Martin at Georgia State University.

f. Describe the community outreach and service of the center/institute.

The individual laboratories, Centers, Institutes and Investigators are involved in community outreach and service as it relates to their specific research and training programs. There is considerable outreach related to children with disabilities, training of teachers, and instruction and assessment of English language learners. The Texas Center for Learning Disabilities maintains a website that is

specifically engaged in dissemination of information to teachers, administrators, and practitioners about the prevention, identification, and treatment of learning disabilities, including conducting reviews of research articles and providing lay person reports on the research specifically targeted at school personnel. BTI engages in significant outreach tied to its mission and these activities will increase as the work of the institute gets completed and there are results to disseminate. Individual faculty are also engaged in significant service and community outreach. TIMES assists in underwriting these activities such as in providing financial support for conferences aimed at community outreach. In fall of 2016, a conference was held on campus for an international collection of individuals focused on the identification and instruction of gifted students, especially in developing countries. TIMES underwrote some of the costs of this dissemination effort. TIMES faculty also serve in a number of service roles. For example, Dr. D. Francis, Center Director, recently accepted a Presidential Appointment to the National Board for Education Sciences and also serves as the Chair of the Board on Testing and Assessment, a standing committee of the National Research Council, and served on a recently completed NRC review of the National Assessment of Educational Progress Achievement Levels and Achievement Level Descriptors. These activities are common place and reflective of efforts throughout the center.

V. PLANNED CHANGES FOR PROGRAM IMPROVEMENT

a. Size (personnel, space) – Does the unit require additional space and/or resources for continued operation?

TIMES has seen significant expansion since 2014, when we stood at 27 tenure track faculty, four faculty affiliates, and 54 staff. Some units within TIMES are in need of additional space, particularly BTI. There is, however, no room for expansion within HBSB. We have plans to renovate one lab this spring to create space for electro-encephalography labs for Drs. Johanna Bick (Psychology), Joe Francis (Engineering), Yingchun Zhang (Engineering), and Ahmet Omurtag. The Animal Behavior Core is also scheduled to become fully operational this spring. Equipment has been purchased and is being installed and set up at the time of this report writing. Charge back schedules and paperwork for establishing the Core as a University Core Facility within TIMES are being prepared.

b. Administrative structure and governance (provide projected new organizational chart).

No changes are planned to the organizational chart. The Director anticipates reconstituting an Executive Committee to increase the center's responsiveness to Faculty, Staff, and Student needs, provide improved support and facilities where needed, increase opportunities for members to evaluate the services and facilities provided by the center, and to increase faculty buy-in on competing for multi-disciplinary center proposals, establishing an intellectual identity for the center, and tracking center contributions to science. This committee will be comprised of the current members of the Administrative staff appearing on the Organizational Chart and representatives from TIMES Members, both large centers and institutes like TCLD and BTI, but also smaller labs.

c. Any changes to the mission, goals, or objectives?

The mission and goals of TIMES are not expected to change. To the extent that IDC recovery increases or DOR / UH support increases will allow increased outreach and offering of statistical consulting services to the campus, TIMES is committed to increasing our services offered to the broader campus. However, the expansion of the kinds of laboratories that we support and the increase in the number of faculty, staff, and students continues has necessitated adding administrative support staff and a lab manager for the wet labs and Animal Behavior Core and a Managing Director of that Core. We expect, however, that the additional faculty will result in

- a. Reason for discontinuation.
- b. Proposed activities for phase-out period.
- c. Effective date for discontinuation.