



Research PULSE

Message from the SVPR

Since starting at Downstate on June 1, it has become obvious to me that there is strong enthusiasm and drive — led by President Riley and throughout the faculty and staff — to make a real difference in medicine and science locally and globally. I am thrilled to lead the efforts to advance Downstate's already impressive research, in part by leveraging the significant opportunities afforded to the institution by its local Brooklyn environment and community. We are launching this newsletter as a means to provide updates on initiatives from our office (some of which are described on p. 3), updates from the Office of Research Administration, and highlights of research successes of our trainees and faculty and their centers, departments, colleges, and schools.

Our main focus for the summer months was reactivation of the research activities that were shut down or reduced in the spring due to COVID-19. A subcommittee of the Back to New Normal committee, chaired by me and comprised of laboratory- and human-research faculty and staff, developed ramp-up plans designed to ensure workforce and human-subject safety, while providing flexibility for researchers. Through those efforts, 26 human research groups and 42 laboratory research groups have resumed their activities while adhering to strict social distancing and mask usage rules.

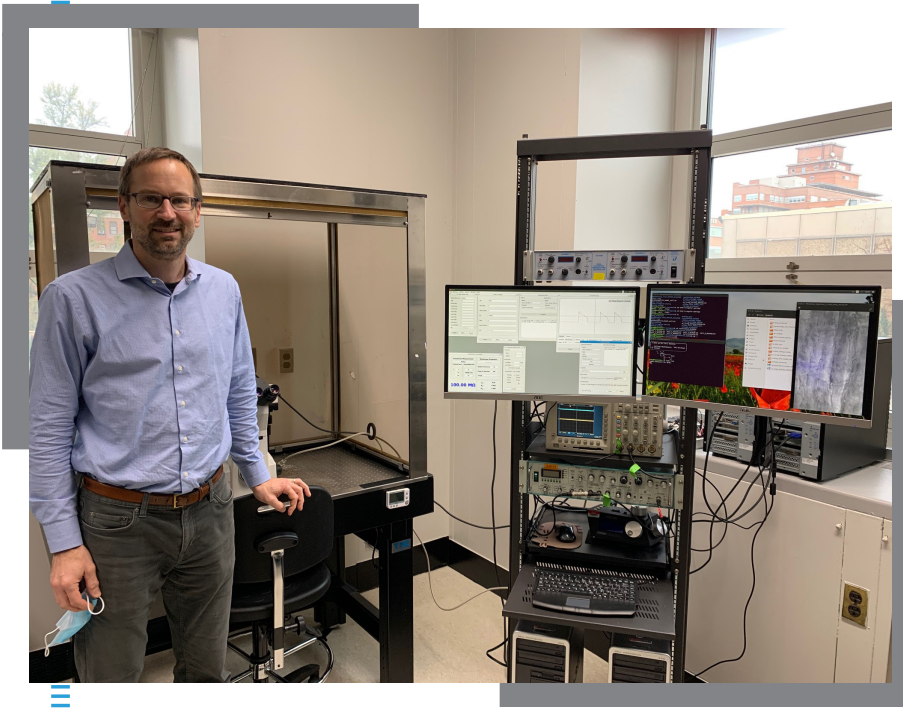
As we know, COVID-19 not only ravaged our community and disrupted our academic and research enterprises, but also made clear to the entire nation what was already well known to Downstate: social injustice and systemic racism are not only grievous problems in their own right, but are also fundamental drivers of racial health disparities. My office is committed to working tirelessly to support the outstanding Downstate research initiatives in health disparities, but also commits to creating a more racially diverse and inclusive research community that recognizes, respects, and welcomes the experiences of marginalized groups. In service of that, I chair the research subcommittee of the Health Equity and Social Justice Workgroup (led by Dr. Carla Boutin-Foster); it has been inspiring to work together with an outstanding group of students and faculty to chart our path forward.

We have also been working hard to improve the processes and services of the Office of Sponsored Programs and other groups within the Research Foundation (I am in charge of Downstate's RF, as the Operations Manager). As described on page 10 of this newsletter, there are new and forthcoming developments that will enable the RF to better serve the faculty and trainees, thereby enabling the growth and success of research at Downstate.

In my 5 months at Downstate, I have been impressed by the ideas of the Downstate community, as well as the significant opportunities that exist for research growth: from the basic sciences; to translational investigation; to clinical trials; to population research and health equity; to health information technology; to evidence-based research in nursing. To help ensure that my office engages in thoughtful brainstorming and implementation planning, we have put in place a faculty advisory structure. As described on page 4, President Riley has asked me to chair a new Research Advisory Council (RAC, meeting quarterly), which is comprised of subsets of two committees advising my office, the Human Research Advisory Committee (HRAC) and the Laboratory Research Advisory Committee (LRAC), both of which meet monthly.

My overarching goal is to ensure that we have an environment that facilitates your ability to make discoveries by: providing support structures for trainees, faculty, and programs (including spearheading new program and training grant applications); fostering collaborations and networks within Downstate and with external partners; and reducing administrative burden and roadblocks. I hope the information in this newsletter will convince you that we are pushing in a positive direction.

David Christini, Ph.D.
SVP for Research
SUNY Downstate Health Sciences University



Dr. Christini in his lab in the BSB building

New Initiatives from the Office of the SVPR

Since its establishment, the SVPR's Office has stewarded several initiatives and put in place committees to support the research mission of Downstate as outlined below. In addition, the office was closely involved in developing the Back To the New Normal (BTNN) human and laboratory research ramp-up plans to ensure safe return to work during the pandemic. We are growing, with the hiring of Ayesha Joshi, PhD in the new position of Director of Research Programs Development and look forward to working with faculty in supporting their research programs.

INITIATIVES

NIH Grant Writing Workshop

Write Winning NIH Proposals, a 1.5 day virtual workshop, organized by SUNY's Office of Research and Economic Development and sponsored for Downstate faculty by our office, guided attendees through strategies for writing various sections of a NIH proposal such as project summaries, specific aims, research strategy, rigor and reproducibility. In addition, strategies for re-submission were also discussed. Thirty eight Downstate faculty participated in this workshop.

Clinical Trials Study Coordinator Program

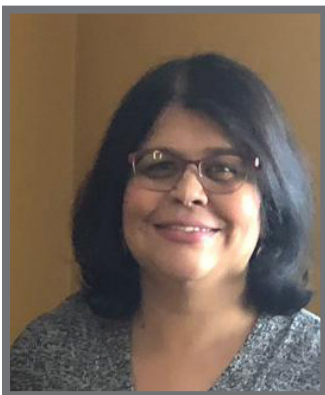
This [program](#) allows investigators to request study coordinators for funded trials. Study coordinators will be assigned from a pool of current underutilized full-time staff or temporary employees hired through Aerotek, a staffing agency. The requests will be handled through the Sponsored Programs Office.

Grant-Writing Support

We are pleased to launch initiatives to provide [grant writing support](#) to faculty at Downstate. **The Grant-Writing Consultancy Service Initiative** is designed to provide faculty with funds to avail of recommended grant-writing consultancy services to develop highly competitive and well-written applications. Researchers can request copy editing or an idepth consultancy. **The Grant Writing Mentorship Financial Support Request** enables faculty to work with a newly identified grant-writing mentor and request funds to compensate the mentor for their time and effort.

NEW MEMBER OF THE OFFICE

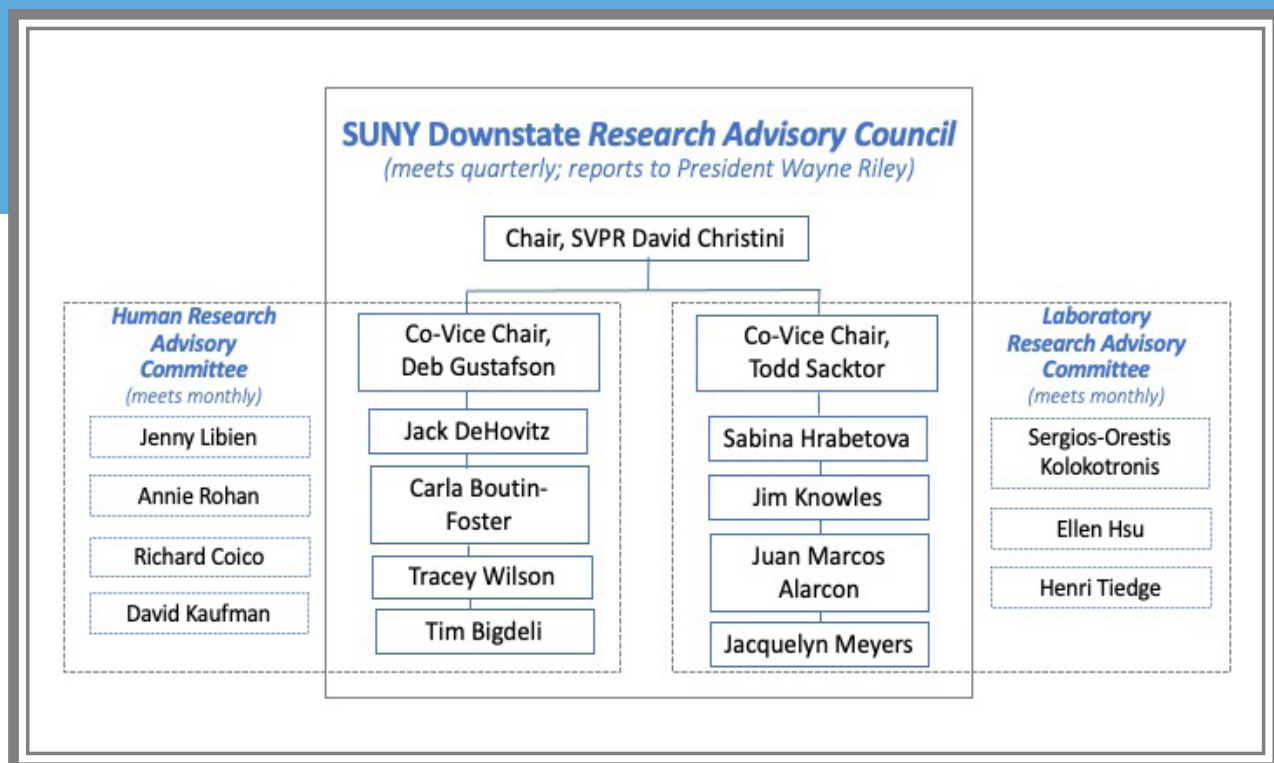
Ayesha Joshi, Ph.D. Director of Research Programs Development.



Dr. Joshi trained as a biomedical scientist, with a PhD in Reproductive Biology from the Indian Institute of Science, Bangalore, India. She received her Bachelors and Masters degrees in Zoology from the University of Pune, India. After two productive postdocs at Columbia University and Weill Cornell Medicine, she switched careers to research administration, accepting the position of Manager, Training Grants and Data Analytics at Weill Cornell Graduate School. In her role as Director of Research Programs Development at SUNY Downstate Health Sciences University, she oversees all initiatives from the SVPR's office and supports faculty in developing multi-PI grant proposals and institutional training grants. Please reach out to her with ideas and accomplishments to highlight in future issues.

RESEARCH COMMITTEES

The research advisory structure depicted below is designed to ensure that there is a process for exchange of ideas between Downstate's leadership and a representative cross-section of faculty engaged in research. These groups will discuss and develop recommendations for administrative improvements, measures or programs designed to fulfill unmet research needs, and research strategy, with the overarching goal of advancing all aspects of Downstate's research enterprise.



Extramural research grants are the building blocks of any research enterprise. Below, we are proud to highlight recent successes of our faculty in obtaining sponsored funding for their research and clinical trials, through Research Foundation awards (funding start dates 6/1/20 – 12/1/20).

Research Grants

Carlos Pato, Michele Pato*, Ayman Fanous, Tim Bigdeli, *Contact PI	IGH	U01 NIMH	09/2020-07/2025	African Ancestry Genomic Psychiatry Cohort
Carlos Pato*, Michele Pato *Contact PI	IGH	R01 NIMH	09/2020-07/2025	Powering Genetic Discovery for Severe Mental Illness in Latin American and African Ancestries
Susana Martinez- Conde, Steve Macknik	Ophthalmology	R01 NEI	09/2020-08/2025	Visual cortical mechanisms for the perception of self-generated vs. external motion
Carlos Pato*, Michele Pato, Ayman Fanous, Tim Bigdeli, *Contact PI	IGH	R01 NIMH	09/2020-07/2025	Latino Ancestry Genomic Psychiatry Cohort
James Knowles	IGH	R01 NIMH	09/2020-07/2025	The GEN-BLIP Study (GENetics of BipoLar Disorder In Pakistan)
MaryAnn Banerji	Endocrinology	NIDDK		SUNY Downstate identified as a clinical center as part of the Rare and Atypical Diabetes Network (RADIANT), the first NIH funded nationwide network.
Jessica Yager	Medicine	HRSA	09/2020-08/2022	Special Projects of National Significance
Chongmin Huan	Surgery	US Army	08/2020-09/2021	Targeting SMS2-Regulated Germinal Center B Cell Tolerance for Lupus Treatment
Salva Dura- Bernal	Physiology & Pharmacology	NSF	08/2020-07/2021	Deciphering the brain's neural code through large-scale detailed simulation of cortical circuits. This proposal was selected for Phase 2 of funding.
Henri Tiedge	Physiology & Pharmacology	Rheumatology Research Foundation	07/2020-06/2022	An RND Mechanism in Systemic Lupus Erythematosis
Stacy Blain	Pediatrics	R21 NCI	08/2020-07/2022	Targeting Cell Cycle Plasticity in Pancreatic Ductal Adenocarcinoma
Yeun-po Chiang	Cell Biology	American Heart Association	07/2020-06/2020	Effect of Sphingomyelin on Atherosclerosis

Clinical Trials

Subodh Saggi	Medicine	Vertex Pharmaceuticals Inc.	09/2020-09/2021	A Natural History Study of Patients with Biopsy-proven Focal Segmental Glomerulosclerosis and Nephrotic Range Proteinuria Who Are of Recent African Ancestry or Have 2 APOL1 Risk Alleles
Jared Jagdeo	Dermatology	Allergan Sales	10/2020-12/2021	Combination Facial Aesthetic Treatment in Millennials
Arthur Grant	Neurology	Marinus Pharmaceuticals	10/2020-10/2021	A Double-Blind, Randomized, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Intravenous Ganaxolone in Status Epilepticus
Steven Levine	Neurology	Bristol Meyers Squib	08/2020-08/2021	A Global, Phase 2, Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging, Study of BMS-986177, an Oral Factor Xla Inhibitor, for the Prevention of New Ischemic Stroke or New Covert Brain Infarction in Patients Receiving Aspirin
Stephan Kohlhof	Pediatrics	Pfizer	09/2020-09/2021	A Phase 3, Randomized, Double-Blind Trial to Evaluate the Safety and Immunogenicity of A 20-Valent Pneumococcal Conjugate Vaccine in Healthy Infants
Jeannette Jakus	Medicine	Takeda Pharmaceuticals	08/2020-08/2021	A Randomized, Double-blind, Placebo-Controlled Multicenter Phase 1b Study to Evaluate the Safety, Pharmacokinetics, and Efficacy of 2 Different Intravenous Doses of TAK-671 for the Treatment of Coronavirus Disease
Patrick Geraghty	Medicine	Atux Iskay Group	07/2020-06/2022	Pharmacological Activation of PP2A as a Novel Treatment Approach for Pulmonary Fibrosis
Aaliya Burza	Medicine	Lilly Research Laboratories	07/2020-07/2022	A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Phase 3 Study of Baricitinib in Patients with COVID-19 Infection
SUNY Center of Excellence for Alzheimer's Disease		Biogen		ICARE AD - an observational study of aducanumab

Funding Highlights



M. Pato



C. Pato



J. Knowles



T. Bigdeli



A. Fanoush



J. Meyers

Drs. Michele Pato, Carlos Pato, James Knowles, Ayman Fanous, Tim Bigdeli, and Jackie Meyers, from The Institute for Genomic Health (IGH) (and their partners Harvard University, the Broad Institute, Queens University and UCLA) have recently been awarded four NIH grants, totaling over \$40M dollars, to continue their work on addressing racial disparity in genetic studies of psychiatric disorders such as schizophrenia, bipolar disorder and obsessive compulsive disorder. Majority of genetic studies of these disorders include patient cohorts with European Ancestry. The Genomic Psychiatric Cohort (GPC) formed by Drs. Michele and Carlos Pato have enrolled participants with African-American and Latino Ancestry to ensure appropriate inclusion from diverse communities. Two of these studies, the **African Ancestry-Genomic Psychiatry Cohort (AA-GPC: 100,000 African Ancestry participants)** and the **Latino Ancestry-Genomic Psychiatry**

Cohort (LA-GPC: 76,000 Latinx Ancestry participants), will continue the work of the GPC in Brooklyn and other sites in the United States. Another component of the GPC, the **GEN-BLIP Study (GENetics of BipoLar Disorder In Pakistan)**, will enroll 12,000 individuals of South Asian ancestry in Pakistan.

In addition to the studies mentioned above, Drs. Michele and Carlos Pato will also co-lead and contribute participants to the **Populations Underrepresented in Mental Illness Association Studies (PUMAS)** Project, which includes subjects from both Africa and the Americas. The PUMAS study involves whole genome sequencing analysis of 45,000 individuals suffering from schizophrenia, 45,000 individuals suffering from bipolar disorder and 60,000 individuals with no disorder to understand the genetic architecture of severe mental illness in multiple diverse ancestries in the context of various environments.

Salvador Dura-Bernal, an Assistant Professor in the Department of Physiology and Pharmacology works on



developing and analyzing of large-scale, biophysically detailed brain circuit models. His lab is developing a software tool, NetPyNE, which can be used to build detailed models of brain circuits and functions on a molecular, cellular as well as neuron-network scale (see [publication](#)).

The unique feature of NetPyNE is the fact that neuroscientists and clinicians without a computational background can build sophisticated brain models for neurological disorders and has been used by over 40 laboratories across the world to build more than 80 models of complex brain regions and conditions such as schizophrenia, epilepsy, and ischemic stroke. Recently, in collaboration with MetaCell LLC, [Salvador's team](#) at SUNY has released a state-of-the-art graphical user interface (GUI) for NetPyNE. The web-based GUI allows users to define network models, visualize cells and networks in 3D, run simulations, and analyze output data. The NetPyNE GUI is being integrated into widely used online neuroscience platforms such as [Open Source Brain](#) and the Human Brain Project [E-BRAINS](#).

Initially funded by 5-year \$1.2M NIH U24 grant, Dr. Dura-Bernal's research continues to break boundaries in computational neuroscience. His proposal for deciphering the brain's neural code through supercomputer simulations that explore neural coding mechanisms in cortical circuits has been selected for Phase 2 of a program called 'Exploring Clouds for Acceleration of Science' (E-CAS) led by the Internet2 organization and funded by NSF.

Faculty Highlights

☘ Marlene Camacho-Rivera, Assistant Professor of Community Health Sciences, co-authored an [article](#) in Cancer Epidemiology, Biomarkers, and Prevention, examining disruptions in care among a nationally representative sample of cancer survivors in the U.S.

☘ Azure B. Thompson, Assistant Professor of Community Health Sciences, presented "An examination of individual and neighborhood level police exposure and health outcomes in New York City" to the NYC Health & Justice Working Group, an initiative of Punishment to Public Health (P2PH), a collaboration led by John Jay College of Criminal Justice and the NYC Department of Health and Mental Hygiene (DOHMH).

☘ Aimee Afable, Associate Professor Community Health Sciences is part of a multi-disciplinary team which received a SUNY Research Seed Grant for studying "Community-Health Centered informatics solutions to reduce health disparities in underserved stroke populations." Project PI: Dr. David Kaufman

☘ LaToya Trowers, Assistant Professor of Health Policy and Management received a SUNY seed grant for her research on the widening adoption of telehealth during the COVID-19 pandemic.

☘ Janet Rosenbaum, Assistant Professor of Epidemiology and Biostatistics, has been invited by BioMed Central (BMC) to write a [blog](#) on contact tracing for Syphilis and Gonorrhea, and how COVID contact tracing apps can help.

☘ Sergios-Orestis Kolokotronis, PhD, Assistant Professor of Epidemiology, was co-senior author of a paper on evolutionary genomics of SARS-CoV-2 that uncovered previously undetected genetic features linked to the COVID-19 pandemic (<https://doi.org/10.7554/eLife.59633>).

Student Highlights

☘ DrPH alumnus Harrynauth Persaud recently published a [study](#) focused on barriers to prostate cancer among Indo-Guyanese populations, based on his dissertation research along with Drs. Bruno and Afable.

☘ Environmental and Occupational Health Sciences DrPH candidate, Eric Persaud, received funding from the National Institute for Environmental Health Sciences (NIEHS) to study "Opioids and the Workplace Prevention and Response Training Evaluation".

☘ MPH students Lee Hoff and Thomas Reid authored Op-Eds on 'aging and isolation' as part of an SPH course led by Dr. Lori Hoepner. See Lee's [article](#), at The Brooklyn Daily Eagle and Thomas' [article](#) at Newsday.

☘ SPH alumna, Judy Yan, DrPH, MPA, published her dissertation manuscripts "[Association between Urinary Triclosan and Serum Testosterone Levels in U.S. Adult Males from NHANES, 2011–2012](#)" and "[Association between triclosan levels and white blood cell counts in US adults from NHANES, 2011–2012](#)".

☘ Students Rebecca Walton, Alexandra Greenberg and Bethel Ozed-Williams along with Drs. Ehlike and Sola developed the curriculum for a Health Policy elective for medical students. The team's curriculum and research design was [published](#) in PRIMER, a journal of the Society of Teachers. Other collaborators include Dr. Roman, Dr. Faber, and Dr. Ganjbakhsh.

When Dean Lewis arrived at the SOHP approximately five years ago, he put in place strategies to enhance research capacity of SOHP as outlined below.

1. Organizing monthly research capacity building meetings to expose faculty to new research topics, brainstorm research ideas, and form intra- and interprofessional collaborative teams to complete research projects.

2. Encouraging SOHP faculty to strive for redundancy of effort in teaching and research so that activities in either of these two areas would be related to and naturally improve activities in the other area.

3. SOHP faculty should consider “feeding the family first” by engaging in collaborative research with fellow colleagues within SOHP before seeking research partners outside of the SOHP.

4. Make SOHP monthly research capacity building meetings as inclusive as possible by inviting anyone in the Downstate campus community who is interested and inclined to participate.

To date, the SOHP research capacity building efforts have achieved several early successes. Faculty in the school have become more attuned to research. There is more routine research activity generally among faculty in the school. There are several faculty and staff in the SOHP who have recently acquired or are currently pursuing doctorates, and most are research doctorates.

The SOHP is seeing an increase in the number of submissions of research grant applications (several have dispositions currently pending), where heretofore primarily workforce training grants were pursued. Several SOHP research grants have recently been funded to include the Society for Diagnostic Medical Sonography research grant for the Diagnostic Medical Imaging team to investigate the role of placenta location on maternal and fetal outcomes as well as the SUNY Seed Grant for the Medical Informatics team to explore health disparities in underserved and minority populations with stroke.

Looking forward, the SOHP is fully engaged in continuous quality improvement of its research capacity building efforts and is currently reviewing research process enhancement ideas from the Office of the SVP for Research.

The Office of Research Administration (ORA) is committed to serve as the central resource for faculty, staff, residents and students by providing the financial and regulatory stewardship required in today's research environment. As part of this commitment, we support faculty and departments in their mission to pursue and conduct research and the management of those funds. In alignment with our mission we are excited to launch several new initiatives in the coming months.

Pivot ProQuest

Locating and securing research funding is becoming increasingly competitive, as funding opportunities are limited and the number of researchers vying for those dollars continues to grow. Pivot accelerates the research process by integrating funding, collaborator discovery, and publishing opportunities into one powerful tool.

Researchers can access the most comprehensive global source of sponsored funding opportunities and through their Pivot profiles, they will be able to identify financial partners and collaborators. User profiles integrate with ORCID which in turn integrates with ScienCV to make tracking publications easy. Researchers can modify their profile to include any projects and/or publications from intramurally funded research. Pivot is expected to go live at Downstate by end of 2020. Pivot allows researchers to:

- ◆ Access broad global coverage of available funding opportunities in a single, editorially curated database;
- ◆ Discover a wide variety of funding types, including government, foundations, non-profit, corporate, academic and much more;
- ◆ Track opportunities and get alerts and updates on deadlines and other significant changes;
- ◆ Enable 'Funding Advisor' that automatically recommends funding based on a researcher's specific profile;
- ◆ Locate potential collaborators from within and outside Downstate across millions of integrated scholarly profiles;
- ◆ Search thousands of conferences requesting "call for papers" where researchers can present and publish their work by leveraging the built-in Papers Invited database.

MyResearch

The ORA and SUNY RF Central have collaborated to bring together a new product to streamline research administration. MyResearch, formerly known as PACS and/or Huron Click, is comprised of six modules that provide faculty and administrators the ability to manage a faculty's research portfolio. The modules available are Agreements, Grants, COI, IRB, IACUC and Safety. Each module uses a smart form to build the protocol or grant submission based on the answers to the questions in the system. The Grants module will be the first to be rolled out, with training beginning in the Fall/Winter of 2020 continuing into 2021. The other five modules will roll out one at a time after. The implementation team will provide training and support throughout the process as each module goes live. Training Videos and Guidance will be available and posted on the ORA website.

Research Volunteer Onboarding

Downstate fully supports hosting domestic and international visitors on campus. It is important to ensure that all individuals are properly authorized to engage in collaborative research and equally important to ensure that the individual is only given access to University space and systems that are appropriate for the proposed work. In an effort to streamline the onboarding and offboarding of external students and laboratory personnel to participate in volunteering, we are developing a process that will provide requisite training based on the proposed work and IDs for our research volunteers.

Voluntary faculty appointments will continue as is, by going through the State HR process and hospital volunteers will continue to go through the processes as outlined by the Volunteers' office.

Stay tuned for the rollout of this new process, which we expect to roll out in November 2020.

The CTSC bimonthly newsletter will now be incorporated into the Office of the SVPR's research newsletter. In this first issue, we thought it would be helpful to summarize what's happened to the Center since the COVID-19 crisis began in March. We temporarily had to close the Center but we are now fully operational once again, despite the need to temporarily downsize our footprint within UHB Nursing Station-52. Downsizing was needed to enable a section of NS-52 to be used as a hospital COVID-19 testing facility for pre-procedural operations. We have preserved enough subject rooms to enable CTSC investigators to conduct their research. Reactivation of all research programs was first approved by the Office of the Senior Vice President for Research to ensure that required safety precautions are being followed.



SUNY Downstate Health Sciences University
Clinical & Translational
Science Center



CTSC services have been restored including phlebotomy which is now a fee-for-service core. In addition, we have acquired a new refrigerated centrifuge which will soon be put into service. Biospecimen storage (freezer) is still available for short-term overnight use. Finally, we have updated our scheduling system which now offers a phone app to schedule use of subject rooms. Authorized CTSC users will receive additional information regarding that app. Downstate faculty are welcome to apply to become authorized users of the CTSC. There are no fees associated with becoming an authorized user. For additional information, visit <http://www.downstate.edu/ctsc>

Featured below are studies by two CTSC members, Dr. Zehtabchi and Dr. Gustafson.

Efficacy of Treating Patients with COVID-19 using Convalescent Plasma

Shahriar Zehtabchi, MD
Professor of Emergency Medicine

The Departments of Emergency Medicine (Shahriar Zehtabchi, MD, Walter Valesky, MD) and Neurology (Steven Levine MD, Nadege Giles, MPH) in collaboration with the SUNY Downstate blood bank (Steven Kang, MD), and the Department of Pathology (Jenny Libien, MD, PhD; Alejandro Zuretti, MD) are conducting a randomized, placebo-controlled clinical trial assessing the efficacy and safety of convalescent plasma in patients with mild COVID-19. The “Clinical Trial of Covid-19 Convalescent Plasma in Outpatients (C3PO)” is a multicenter trial funded by the National Heart, Lung, and Blood Institute and the “Strategies to Innovate EmergENcy Care Clinical Trials Network (SIREN). Subjects are being recruited in the emergency medicine department. They will be eligible if they have COVID-19 symptoms for 1-7 days, have at least one ‘high risk feature,’ and test positive for COVID-19. The subjects must be deemed stable for outpatient management without requiring supplemental oxygen by the clinical team. If the eligibility criteria are met, subjects will be randomized to convalescent plasma or placebo. The primary efficacy endpoint is disease progression defined as death or hospital admission or seeking emergency or urgent care within 15 days of randomization.



Dr. Shahriar Zehtabchi

For questions, please contact:

Principle Investigators: Dr. Walter Valesky (walter.valesky@downstate.edu) and Dr. Shahriar Zehtabchi (Shahriar.zehtabchi@downstate.edu).

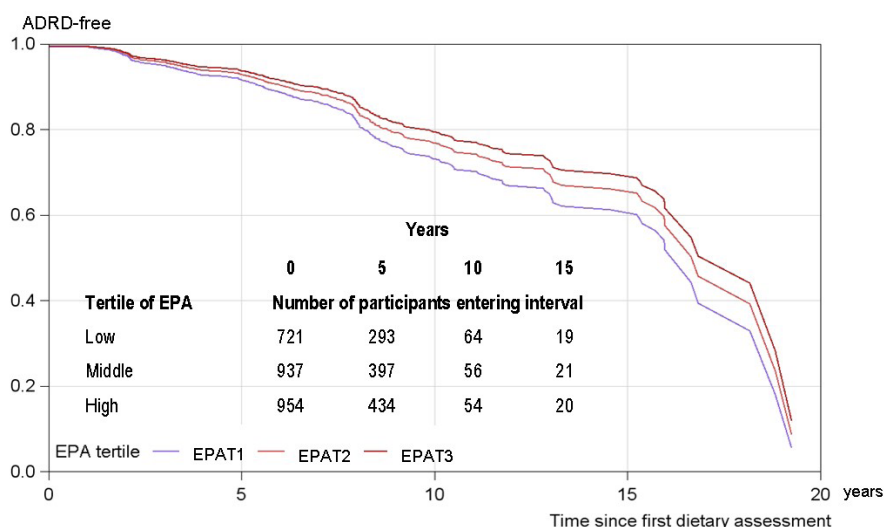
Study Coordinator: Ms. Nadege Gilles (nadege.gilles@downstate.edu)

Diet and Alzheimer’s Disease

Deborah Gustafson, Ph.D.
 Professor of Neurology



Working with colleagues at the University of Gothenburg, Sweden; Columbia University and The New York Presbyterian Hospital, New York; and Kapodistrian University, Athens, Greece, lead investigator Dr. Deborah Gustafson, Professor of Neurology at SUNY Downstate, recently published an important article linking diet to the risk of Alzheimer’s disease (AD). A multiethnic, longitudinal observational study of aging and dementia among elderly (≥ 65 years) on the Upper West Side of Manhattan, demonstrated that high dietary intake of long chain, polyunsaturated fatty acids is associated with lower AD risk.



Tertile of dietary eicosapentaenoic acid (EPA) intake by Alzheimer’s disease and related dementia-free survival in Washington Heights-Inwood Columbia Aging Project.

Dietary intake was measured using a food frequency questionnaire. What this study adds to current knowledge and makes it novel, is that a detailed look at dietary fatty acid types was accomplished. Intakes of short-, medium-, and long-chain fatty acid intakes with consideration for number of carbons and double bonds (e.g., monounsaturated versus polyunsaturated fats, those predominant in animals versus plants) were estimated. Associations between AD risk and intake of the aforementioned dietary fatty acid categories and cholesterol were estimated using multivariable Cox proportional hazards regression models. Specifically, higher intake of docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are protective for AD.

This study confirms the longstanding protective effects of DHA and EPA for health of the brain. Additional information can be found at <https://pubmed.ncbi.nlm.nih.gov/32715635/>