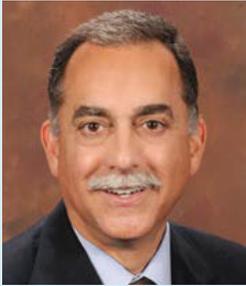


PSYCHIATRY

News and Research
from the Department of
Psychiatry and Health Behavior

NEWSLETTER



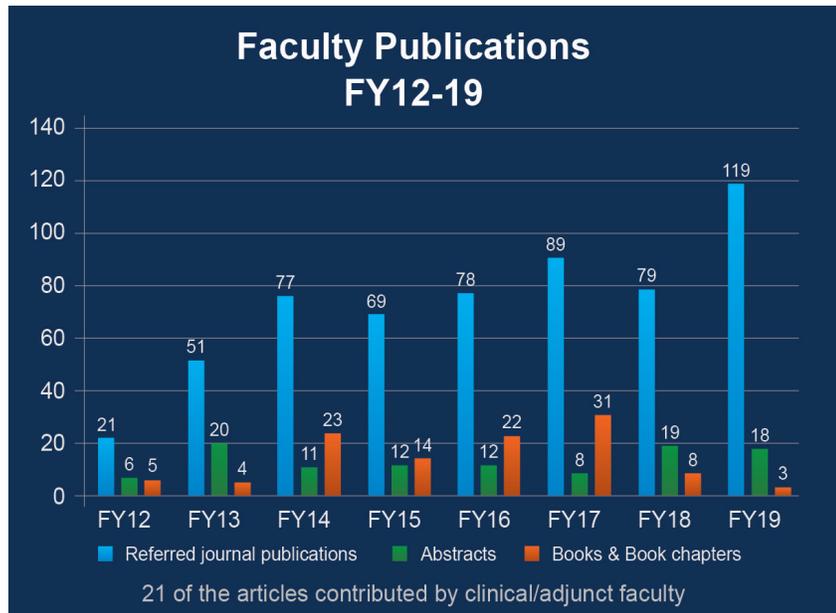
Dr. W. Vaughn McCall

Case Distinguished
University Chairman,
Department of Psychiatry
and Health Behavior

Executive Vice Dean,
Medical College of Georgia

Welcome to the Fall 2019 Newsletter from the Department of Psychiatry and Health Behavior at the Medical College of Georgia. This is the 9th installment of the newsletter and this time we highlight the research activities within the department. While every Chair of Psychiatry cherishes extra murally funded research, the real fruit of our research labors are the peer-reviewed journal article and other academic products that come from our research.

While we have almost 60 regular faculty members, our department is predominately an education and clinical engine for mental health. Still, we have about 5 full-time equivalents of faculty effort devoted for research. Remarkably, we have had a steep acceleration in our collective publications of peer-reviewed journal articles, as you can see from the Figure:



I too have been active in research pertaining to depression, suicide, sleep, and electroconvulsive therapy, and hope to continue to be so in the foreseeable future.

Meanwhile, let's take a look at what the departmental faculty are doing!

W Vaughn McCall





The LGBTQ Research Group

by Dr. Christopher Drescher, PhD
and Dr. Lara Stepleman, PhD

The LGBTQ (Lesbian, Gay, Bisexual, Transgender, and Questioning/Queer) research group, under the direction of Dr. Stepleman, focuses on a range of issues that affect LGBTQ health and mental health. The group includes three additional faculty researchers from the department, Dr. Christopher Drescher, Dr. Tracy Casanova, and Dr. Jessica Britt, as well as postdoctoral fellows, psychology interns, medical students, and other health sciences students.

The group's most recent research project focused on a health needs assessment of the LGBTQ community in the Central Savannah River Area. The project has already resulted in multiple presentation and publications on various topics including suicide, minority stress, anxiety, substance use, trauma, and health behaviors. Some key findings from the study so far include the high prevalence of negative experiences with treatment providers among transgender individuals (Stepleman et al., 2018), evidence of a protective role for community connectedness in terms of reducing anxiety (Griffin et al., 2018), and indications that poor mental health, particularly Bipolar Disorder, may contribute to cigarette use in this population (Drescher et al., 2017). In progress analyses are examining how trauma and discrimination suffered by LGBTQ individuals influence a range of outcomes including loneliness, health behaviors, and even suicide. While the group continues to actively pursue projects related to the LGBTQ health needs assessment, it also plans to develop new projects, especially in partnership with the Equality Clinic, a free interdisciplinary primary care clinic serving low-income LGBTQ individuals.

Drescher, C. F., Lopez, E. J., Griffin, J., A., Toomey, T., Eldridge, E. D., & Stepleman, L. M. (2018). Mental health correlates of cigarette use in LGBT individuals in the Southeastern United States. *Substance Use & Misuse*, 6, 891-900. doi:10.1080/10826084.2017.1418087

Griffin, J. A., Drescher, C. F., Eldridge, D. E., Rossi, A. L., Loew, M. M., & Stepleman, L. M. (2018). Predictors of anxiety among sexual minority individuals in the southern US. *American Journal of Orthopsychiatry*. doi:10.1037/ort0000363

Translational studies to understand the neurobiology of depression and suicidal behavior

by Dr. Anil Pillai, PhD

ONE SUICIDE EVERY 40 SECONDS... Approximately 800,000 people die from suicide each year and the recent data show that the suicide rate in the United States has increased 33% from 1999 to 2017. United States military veterans have an increased risk of suicide compared with the general population, and approximately 18 to 22 veterans die from suicide each day. The risk for suicidal acts is multifactorial, and consists of a range of biological, psychiatric, psychosocial and cultural risk factors. It has been reported that up to 90% of individuals who complete suicide have an underlying psychiatric disorder.

Suicidal ideation in war veterans is often associated with post-traumatic disorder (PTSD) or depression, conditions that often coexist. However, the neurobiological mechanisms involved in suicidal behavior are not clear. Dr. Pillai's research laboratory is conducting studies to understand the role of inflammation and neuroprotective pathways involved in depression and suicidal behavior. They are trying to identify novel therapeutic targets for treating these neuropsychiatric disorders. Dr. Pillai's team uses human tissue samples (postmortem brain tissues and peripheral fluids) and animal models to investigate the problem. Their findings have been published in highly reputed journals in the field of psychiatry and neuroscience research such as *Molecular Psychiatry*, and *Neuropsychopharmacology*. These studies are supported by funding from federal as well as non-federal agencies.

The ongoing projects are:

- 1) understanding the role of complement immune system in suicidal behavior,
- 2) investigating the mechanisms mediating chronic stress-induced depression, and
- 3) examining the link between peripheral inflammation and cognition.

Any Student or Resident interested in learning more about these projects, please contact Dr. Pillai (apillai@augusta.edu).



Research related to forensic psychology and mental health has been very active at Augusta University. Two words that are most reflective of the type of research is collaborative and mentoring. Collaborative in involves relationships with professionals from around the United States. Mentoring in that disseminated information is useful for the larger scientific audience, but provides students critical experience for their professional development. Our research program is primarily housed at East Central Regional Hospital, a state-operated facility in Augusta.

State-Wide Collaborations on Conditional Release *by Dr. Michael Vitacco, PhD*

A key area of focus on forensic research has been on working with states at improving services for individuals with serious and persistent mental illnesses who are residing in state hospitals and are preparing for conditional release. Conditional release, in this instance, is defined as the release of an individual found not guilty by reason of insanity (NGRI) who is allowed to return and remain in the community providing they adhere to specific conditions (e.g., medication follow-through). These release decisions are critical as they are subjected to high levels of public scrutiny and bad outcomes are unacceptable at both societal and policy levels.

Our program has recently completed collaborations with Georgia, Virginia, and Oregon to determine factors leading to the safe release of individuals found NGRI and returned to the community. Some of this research was featured on the Mean's Report, a local television show dealing with topics of interest to the local community. Given individuals adjudicated NGRI are frequently returned to the

community, their safe return to communities generates discussion.

Currently, the AU forensic program is working with the states of Minnesota and Louisiana at evaluating their system of release and the



initial groundwork has been laid to begin a collaboration with the state of Colorado. These collaborations have been profitable in developing innovative ways of considering release of individuals residing in state hospitals and how to most appropriately evaluate their risk.

Psychopathy and External Correlates

Psychopathy consists of personality and behavioral features of callousness, glibness, superficial interpersonal relationships, and illegal and unethical behavior. It is the most widely studied personality disorder in the world today. We at Augusta University have recently completed several studies that evaluated psychopathy with a variety of external constructs like moral development, malingering, and helping behavior. Far from embracing traditional approaches we have looked at various behaviors that have provided insightful findings. For example, developing a novel way to evaluate moral development or helping behavior has been both challenging and rewarding. In a recent article, we even evaluated the relationship between psychopathic traits and morality pre- and post-2016 Presidential election. Follow-up studies and papers are currently underway with multiple collaborators from around the United States.

Future collaborations and mentorship will continue to propel the forensic research program forward. We are excited about the future and exciting research projects are waiting in the wings.

Schizophrenia Research Team *by Dr. Joseph McEvoy, PhD*

The research team directed by Dr. Joseph McEvoy focuses their work on schizophrenia research. They are currently working on projects funded by the National Institute of Mental Health, National Institute of Diabetes and Digestive Kidney Diseases, as well as several industry-sponsored studies. One of their current studies focuses on exercise and its effects on cognition. Another study is focusing on treatment for weight loss in people diagnosed with schizophrenia. Other studies that they are conducting are looking at treatment options for negative symptoms, cognition improvement, early onset, and early intervention. They are actively recruiting for new patients that are interested in being a part of these research projects.

One recent study that the team worked on, funded by NIMH, in collaboration with Maryland Psychiatric Research Center as the lead site found that prescribing aripiprazole as an adjunct treatment in pre-menopausal women not only helps reduce serum prolactin levels, but also prolactin-related adverse effects. Female participants diagnosed with schizophrenia or bipolar disorder and symptomatic hyperprolactinemia were randomized into a double-blind, 16-week trial of adjunct aripiprazole for this study.

Other recent studies that the research team has worked on that are awaiting analysis consist of a DNA study and a brain imaging study on participants diagnosed with schizophrenia, schizoaffective disorder, and bipolar disorder.



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Immunology of Schizophrenia *by Dr. Brian Miller, MD, PhD, MPH*

The Miller Research Lab at the Augusta University Department of Psychiatry continues its focus on the immunology of schizophrenia. Funded by the Stanley Medical Research Institute and the Brain and Behavior Research Foundation, we are conducting two randomized placebo-controlled trials of anti-cytokine monoclonal antibody immunotherapy, in adjunct to antipsychotics, for the treatment of cognitive impairment in schizophrenia. These trials build on evidence that treatment with agents with anti-inflammatory

properties may improve symptomatology in some patients with schizophrenia. The advantage of monoclonal antibody immunotherapy is specificity—these agents target specific components of the inflammatory response and have no “off-target” (i.e., non-immune) effects, thereby directly testing for a pathophysiological role for inflammation in schizophrenia.

In another study, funded by the Augusta University Intramural Grants Program, we are investigating the potential role of the autonomic nervous system in the association between insomnia and suicide in schizophrenia. Participants complete questionnaires about sleep, and have a comprehensive evaluation of autonomic nervous system function, including a detailed vascular assessment in the lab of Dr. Ryan Harris at the Georgia Prevention Institute, as well as an assessment of pupil size and reactivity using pupillometry.



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Please designate your gift:

- Williard E. Quillian, III, MD Professorship in Psychiatry, supports a faculty member with teaching expertise in psychodynamically-oriented psychotherapy.
- Emily S. Baumann Child and Adolescent Psychotherapy Fund supports psychotherapy services for uninsured kids and teenagers.
- Department's Greatest Need

For more information or to support this fund, contact Eileen Brandon at 706-721-2515 or ebrandon@augusta.edu. To give online, visit mcgfoundation.org.