A. Brief Executive Summary:

This past year was a productive one for the University of Maryland School of Medicine (UMSOM), Department of Psychiatry. This report includes achievements for FY15 in our research, education, and clinical programs as we embark toward FY16. The following highlights and accomplishments may be considered for inclusion in the annual State of the School Address:

- **Bankole A. Johnson, DSc, MD, MBChB, MPhil, FRCPsych, DFAPA**, was formally invested as The Dr. Irving J. Taylor Professor and Chair during the Investiture ceremony on August 7, 2014, by the late Dr. Irving J. Taylor. The generous endowment was made by Dr. Taylor, who, along with his family, had longstanding relationships with the field of psychiatry and UMSOM.

- **Professor Johnson** was appointed as a member of the Heroin and Opioid Emergency Task Force by Governor Larry Hogan and Lieutenant Governor Boyd Rutherford. The team is comprised of law enforcement, elected officials, and substance abuse experts to address Maryland’s growing heroin and opioid crisis, and is segmented into workgroups. **Christopher Welsh, MD**, is a workgroup member. On July 20, 2015, the workgroups submitted a report that detailed objectives and principles, key testimony from summits, progress reports, preliminary recommendations, and more.

- **Eric Weintraub, MD, Christopher Welsh, MD, Jewell Benford, LCSW–C, and Denisha Pendleton, RN, of the Alcohol and Drug Abuse (ADA) Division**, continue to work with the University of Maryland’s Institute of Human Virology and the Center for Disease Control to develop Medication Assisted Treatment in Kenya. The team has made several trips to Africa and hosted a delegation from Kenya for two weeks. The team recently opened the first methadone clinic in Kenya, which is successfully treating patients.

- The Memorandum of Understanding with the Department of Health and Mental Hygiene and the **Maryland Center of Excellence on Problem Gambling** was renewed for another 3-year period (FY 2015 to FY 2018) for $4,938,000.

- The **Brain Science Research Consortium Unit (BSRCU)**, directed by Professor Johnson and coordinated by Annabelle (Mimi) Belcher, PhD, has united more than 25 Departments and 20 Centers, programs, and Institutes to propel the transdisciplinary research of “big brain” science. To date, members of the BSRCU have received funding for three grants (a total of $2,191,240), and are submitting or have submitted a total of eleven more grants for close to $40 million. The BSRCU held its inaugural retreat on October 8, 2014, and themes were segmented according to workgroups: 1) Focused Ultrasound, 2) Neuroinflammation, and 3) Neuropsychiatric and Substance Abuse Disorders. Two new workgroups are in formative stages that will focus on Sleep Disorders research, and Inflammation and Psychiatry research. Members of the Consortium have been meeting in small groups, based on these defined areas of research. Come fall, the BSRCU will begin its monthly seminar series to serve as a conduit for discourse on topics, of which ideas (and not Departments) will be unifiers. Finally, on December 11, 2015, the BSRCU will help spearhead the 2015 Festival of Science to highlight “Understanding Disorders of the Brain,” featuring renowned keynote speakers and UMSOM presenters.
B. FY 2015 Accomplishments in Research, Education, and Clinical:

1. Research:

Overall, during FY15, the success of our research programs has continued. For FY15, our overall grants and contracts growth was 32%. The Department has also recorded an impressive 34% growth in NIH funding. There were 4 new R01 awards in FY15, compared to 6 in FY14. This growth excludes our highly successful MIRECC at the VA. See the attached New Research Funding for FY15 for this year (Appendix). Note that these figures may need to be modified once the June reports are received from the Dean’s office for reconciliation.

- The Consultation Liaison (CL) Division has been awarded $468,000 in service grants and contracts, and $667,000 in federal grants, totaling to $1,135,000. As part of the Women’s Health Initiative with the state, Catherine L. Harrison-Restelli, MD, has served on/participated with the Women’s Health, Maternal and Child Health Bureau Task Force Intimate Partner Violence as well as on the Women’s Health Surveillance and Quality Initiatives with Anique K. Forrester, MD.
- The Division of Psychiatric Services Research (DPSR) has been awarded six new grants in FY15 -- more than half a million dollars.
- The Memorandum of Understanding with the Department of Health and Mental Hygiene and the Maryland Center of Excellence on Problem Gambling (Center) was renewed for another 3-year period beginning on July 1, 2015 (FY 2015 to FY 2018) for $4,938,000. The Center co-hosted with the National Council on Problem Gambling the Annual Conference on Problem Gambling, and was honored with achievement awards for its website and social media campaigns. The Center developed the Disordered Gambling Integration (DiGIn) Pilot Project within five county health departments and two residential treatment programs in Maryland to address gambling as a co-occurring issue among those in treatment for substance use and/or mental health disorders.
- The State approved the budget request for the Maryland Early Intervention Program (MEIP) in FY 2016 for $1.224 million.
- Through the HIV/HCV Initiative, the Consultation Liaison (CL) Division established STIRR-IT and HEART2HAART. STIRR-IT provides HIV/HCV testing, Hepatitis A & B immunization, and risk reduction counseling for people with severe mental illness attending outpatient mental health clinics. HEART2HAART provides smartphone intervention to increase adherence to antiretroviral medications for people with HIV who have co-occurring substance use disorders.
- The Maryland Psychiatric Research Center (MPRC) reports the total awarded direct costs for all contracts and grants as $8,816,902, and total all costs as $11,695,044. The total awarded direct costs for FY 2015 represent a 13% increase over FY 2014.
- Melanie Bennett, PhD, and Amy Drapalski, PhD, of the Division of Psychology, obtained grant funding from the NIH (R34) for motivational interviewing for individuals with HIV who are medication noncompliant, as well as for two large projects funded by the VA (treating negative symptoms in schizophrenia, and assisting families of Veterans with TBI – amounting close to $2 million). Dr. Bennett has completed her VA funded MERIT project, involving the testing of psychosocial interventions to assist Veterans with serious mental illness to reduce/smoke, and will begin testing a psychosocial intervention for negative symptoms in Veterans with schizophrenia. Additional research includes reducing internalized stigma in people with serious mental illness (and more).
• Award highlight: Dr. Ana Pocivavsek was selected as a K12 BIRCWH scholar. This is a highly competitive process and Dr. Pocivavsek was one of only two UMB faculty selected for this honor. She was the only person selected with a basic science/neuroscience background.

• The Brain Science Research Consortium Unit (BSRCU) has coordinated the collaboration of basic and clinical UMSOM researchers from more than 25 Departments and 20 Centers, programs, and Institutes. The BSRCU is directed by Professor Johnson, and Annabelle (Mimi) Belcher, PhD, assists as scientific coordinator. It hosted its first annual retreat on October 8, 2014, which featured keynote speakers, presentations, and panel discussions to spark transdisciplinary dialogue. Retreat themes were based upon regularly meeting workgroups: 1) Focused Ultrasound, 2) Neuroinflammation, and 3) Neuropsychiatric and Substance Abuse Disorders. Two new workgroups are in formative stages that will focus on Sleep Disorders research, and Inflammation and Psychiatry research. Members of the Consortium have been meeting in small groups based on these defined areas of research. Come fall, the BSRCU will begin its monthly seminar series, and on December 11, 2015, it will assist with the Festival of Science. To date, members of the BSRCU have received funding for three grants (total of $2,191,240), and have submitted or are in the process of submitting eleven additional grants totaling close to $40 million.

See the attached New Research Funding for FY 2015 (Appendix).

Publications: During FY 15, our faculty authored 230 peer-reviewed publications and 6 books/chapters [MPRC excluded]. The MPRC faculty authored 86 peer-reviewed publications and 0 books/chapters.

2. Education:
The Department has extensive educational programs for a range of students and trainees. These programs include medical student education as one of the largest and most competitive psychiatry residency programs in the nation: with 62 residents; a total of 21 additional trainees in subspecialty fellowships in child and adolescent psychiatry, forensic psychiatry, psychosomatic medicine, and addictions; a psychology internship program in collaboration with the VA (19 interns); and the Graduate School Program in Neuroscience that boasts strong and successful participation. Some of the most notable accomplishments in the areas of student education are described below:

• The development of an international elective based at the Centre for Resolution of Intractable Conflicts of the Harris Manchester College at Oxford University for the PGY4 residents. The first residents will rotate there during the 2015-2016 Academic Year.

• The 3-year renewal of the Sheppard Pratt contract (~$1.5 million per year).

• The transition to the Next Accreditation System. The program received approval from the ACGME with no citations.

• The graduates’ maintenance of a 100% pass rate on the American Board of Psychiatry and Neurology (ABPN) board exam.

• The establishment (with the Division of Child and Adolescent Psychiatry) of the Costa Rica training collaboration, which was the first international case conference and rotation that began during the last two weeks in June 2015.

Medical Student Education: The Department continues to maintain its strong focus on medical student education during FY 15, which is reflected by the number of students who elected psychiatry as a career post graduate medical education. 14 MS1 Combined Accelerated Program in Psychiatry (CAPP) students were interested in careers in psychiatry (as compared to the 8 MS1 CAPP students from last year). The Department has also kept the
number of graduating medical students entering the field of psychiatry above the national average, at 5.13%, or at 5.77% if counting psych/family medicine. (The National average per NRMP is 4.6%). Additionally, the Department noted a medical student rating of clinical clerkship as 4.23. Students’ overall rating of the P & T Course was 4.41 out of 5, and all of the individual Psychiatry lectures were highly rated at 4 out of 5.

**Graduate Student Education:** The Department has improved its resident performance on the in-service examination by 8.5% from the 2013 exam (exceedingly more than the 2% minimum). Additionally, 7 out of 12 program graduates entered academic fellowships (58%).

**Resident Education:** The Department has one of the largest and competitive psychiatry residency programs in the nation. The program is partnered with the University of Maryland Medical Center, Sheppard Pratt Health System, State of Maryland Mental Hygiene Administration, and the VA. This year, the total number of residents and fellows (83) displayed diverse backgrounds: Women (71%), African-Americans (6%), Asian-Pacific Islanders (22%), and Hispanics (5%). Post-residency fellowships include those in addiction psychiatry, child and adolescent psychiatry, forensic psychiatry, geriatric psychiatry, and psychosomatic medicine.

Additionally, the Psychology Internship Program has been APA accredited since 2003, and is the largest internship program in the country with 19 interns. Post-internship positions include those to: Postdoctoral fellowships (14), a faculty position (1), and an independent practice (1); and, the completion of a degree (2).

**Awards:** Stephanie Knight, MD, of the Adult Division (Inpatient Service) was awarded the Virginia Huffer Post-Graduate Teaching Award. Constance Lacap, DO, was awarded the 2014 Huffer Award for Excellence in Medical Student Teaching from the Education Division. Robert Schloesser, MD, was given the Society for Biologic Psychiatry 2015 Travel Award.

**Presentations and Publications:** 15 residents compiled individual presentations for national meetings, and 8 residents participated in the publication of 5 papers. The Irving Taylor MD Award for Best Resident Research Paper was given to Dr. Benjamin Israel in 2014 and, the following year, to Dr. Emily Bomasang-Layno in 2015.

3. **Clinical:**

- Drs. Eric Weintraub and Christopher Welsh; Jewell Benford, LCSW-C; and Denisha Pendleton, RN; of the **Alcohol and Drug Abuse (ADA) Division**, opened the first methadone clinic in Kenya, which is successfully treating patients.
- The **Clinical Neurobehavioral Center** was formally opened on September 12, 2014. It will focus on alcohol use disorders as a subset of brain disorders, substance use, and gambling disorders. It will host its first clinical grant, the Ondansetron Alcohol Pharmacogenetics study, which is a multi-site study conducted with the University of Pennsylvania.
- Christopher Welsh, MD, and Eric Weintraub, MD, of the **Alcohol and Drug Abuse (ADA) Division**, with the assistance of the **Telemedicine Group**, set up a contract to provide Suboxone Treatment via telemedicine to patients at the Wells House in Frederick, Maryland.
The Divisions of Psychology and Community Psychiatry, Psychiatric Services Research, and MPRC are collaborating upon early intervention for young adults with psychosis through Recovery After Initial Schizophrenia Episode Implementation and Evaluation Study (RAISE IES). The aim is to observe outcomes within two years of onset of a schizophrenia-type illness to improve social/occupational functioning, recovery, and quality of life. SAMSHA identified it as the “Gold Standard” for new programs.

The Division of Psychology, under the leadership of Dr. Bennett, has created a smoking cessation program for veterans with serious mental illness as part of the SMI Patient Aligned Care Team (PACT). It also provides care for veterans with comorbid trauma and stress-related disorders and substance use disorders; develops programs to provide psychological, health, and other resources to homeless veterans in Baltimore communities; and more.

The Division of Child and Adolescent Psychiatry coordinates telepsychiatry services and has started direct clinical services to 7 Baltimore City Schools and ongoing services to Garrett County Health Department, as well as new consultation services to 26 Baltimore City PRIDE Program schools and for rural pediatric primary care at 3 sites. In addition, the Behavioral Health in Pediatric Primary Care (BHIPP) provided 322 telephone consultations in the past year, and its Maryland Medicaid Peer Review Program provides child psychiatrist telephone consultations for pediatric antipsychotic treatment authorization and has approximately 4500 youth enrolled.

The Division has also: (1) Established www.MDBehavioralHealth.com, an online training platform developed in partnership with the Maryland Department of Health and Mental Hygiene, and the Mental Hygiene Administration, to train individuals interested in supporting the behavioral health of youth and their families. (2) Provided direct clinical services in 52 schools through the Center for School Mental Health, which was awarded a new 3-year contract to provide comprehensive services to 33 schools in southwest Baltimore City. (3) Responded to recent Baltimore unrest with its “Look for Helpers” program to provide support to young children. The Center for School Mental Health developed resources and consulted to Baltimore City Public Schools and the U.S. Department of Education.

Community Psychiatry established a Behavioral Health Home, which is accredited by The Joint Commission (upon completion of a separate survey). Additionally, the Academy of Independent Living reported that its first graduate level program was completed by 6 clients and its undergraduate program is in its second round of classes.

Since December, the Department has been involved with the initiation of an establishment of psychiatric and substance abuse expertise to Upper Chesapeake and Union (Elkton) Hospital. Specific deliverables would include moonlighting fellows, video broadcasting of Grand Rounds, assistance with recruitment of psychiatrists, and tele/video consultation to specific primary care/specialty care sites.

C. Appendices:

1. Financial Summary: The Department of Psychiatry has substantial clinical and public service programs in Baltimore and Maryland. In FY15, the Department’s budget included $11.4 million for clinical service contracts, $10.9 million from UMMC for the Community Psychiatry Program, $7.4 million for the UMMC Physician Services, and generated $5.2 million through the practice plan, exceeding its FY15 collection budget, including $2.05 million in FFS revenue, $548K in grant-mandated FFS revenue, and the remainder in contracts. These figures reflect two important points: our services
continue to be in high demand; but, due to poor fee-for-service rates, we primarily strive to provide services through full-cost service contracts. We expect these strengths and threats to continue in FY16.

The overall financial performance of the Department during FY15 has been positive, including a final All Funds budget net income of over $700K and total PA cash reserves at the end of FY15 of $6.7 million, compared to $6.0 million in FY14.

2. New Research Funding for FY 2015: See attached, which includes MPRC.

<table>
<thead>
<tr>
<th>PI Lead Dept Desc</th>
<th>Principal Investigator</th>
<th>Sponsor Name</th>
<th>NIH Mechanism</th>
<th>Fin. Award Title</th>
<th>Prime Sponsor Name</th>
<th>Total Award ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buchanan, Robert W.</td>
<td>National Institute of Mental Health</td>
<td>R01</td>
<td>3/3-Social Processes Initiative in Neurobiology of the Schizophrenia(s)</td>
<td></td>
<td></td>
<td>345,375</td>
</tr>
<tr>
<td>Buchanan, Robert W.</td>
<td>Maryland Department of Health and Mental Hygiene</td>
<td>R01</td>
<td>Center for Excellence on Early Intervention for Serious Mental Illness</td>
<td></td>
<td></td>
<td>1,224,000</td>
</tr>
<tr>
<td>Chiappelli, Joshua J.</td>
<td>Brain &amp; Behavior Research Foundation</td>
<td>R01</td>
<td>Stress Biomarkers in Schizophrenia: Kynurenic Acid Response to Somatic versus Psychological Stressors</td>
<td></td>
<td></td>
<td>29,999</td>
</tr>
<tr>
<td>Hahn, Britta</td>
<td>National Institute on Drug Abuse</td>
<td>R03</td>
<td>Effects of Nicotine on Dependence-Related Associative Learning Processes</td>
<td></td>
<td></td>
<td>76,750</td>
</tr>
<tr>
<td>Hong, L. Elliot</td>
<td>Pfizer Incorporated</td>
<td></td>
<td>The Genetic Architecture of Schizophrenia</td>
<td></td>
<td></td>
<td>424,281</td>
</tr>
<tr>
<td>Hong, L. Elliot</td>
<td>Pfizer Incorporated</td>
<td>A Randomized, Double-Blind, Placebo Controlled Parallel Group, Sponsor Open, Phase 1B Study to Examine the Safety, Tolerability, Pharmacokinetics and Pharmacodynamics of PF-06412562 in Psychiatically Stabile Subjects with Schizophrenia*</td>
<td></td>
<td></td>
<td>302,740</td>
<td></td>
</tr>
<tr>
<td>Kelly, Deanna L.</td>
<td>National Institute of Mental Health</td>
<td>R56</td>
<td>(BRIDGE FUNDING) Microsystem Development for Clozapine Monitoring in Schizophrenia</td>
<td>National Institute of Biomedical Imaging &amp; Bioengineering</td>
<td>377,149</td>
<td></td>
</tr>
<tr>
<td>Kochunov, Peter V.</td>
<td>University of Southern California</td>
<td>U54/sub</td>
<td>ENIGMA Center for Worldwide Medicine, Imaging and Genomics</td>
<td></td>
<td></td>
<td>31,408</td>
</tr>
<tr>
<td>MPRC</td>
<td>Schwarcz, Robert</td>
<td>Johns Hopkins University - SOM</td>
<td>R01</td>
<td>Maryland Brain Collection**</td>
<td>National Institute of Mental Health</td>
<td>51,301</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
<td>-------------------------------</td>
<td>-----</td>
<td>----------------------------</td>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>MPRC</td>
<td>Waltz, James A</td>
<td>National Institute of Mental Health</td>
<td>R01</td>
<td>Neurocomputational and fMRI Studies of Motivational Deficits in Schizophrenia</td>
<td>287,558</td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Fishbein, Diana</td>
<td>National Institute on Alcohol Abuse and Alcoholism</td>
<td>R01</td>
<td>Development of fMRI Study of Alcohol Use in Adolescence</td>
<td>739,333</td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Goldman, Howard H.</td>
<td>Maryland Department of Health and Mental Hygiene</td>
<td>Pre-Admission Screening Resident Review</td>
<td>24,507</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Gould, Todd D.</td>
<td>Janssen Research &amp; Development, LLC</td>
<td></td>
<td>Replication and Validation of Effects of NR1 Antagonists in Ketamine Sensitive Models for Depression, Abuse and Addiction, and Schizophrenia</td>
<td>159,173</td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Himelhoch, Seth</td>
<td>Substance Abuse and Mental Health Services Administration</td>
<td>STIRR-IT: Co-located HIV/HCV Prevention and Treatment (Baltimore)</td>
<td>500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Medoff, Deborah R.</td>
<td>Center for Social Innovation</td>
<td>R21/sub</td>
<td>NIMH Social Media &amp; Young Adults with Schizophrenia Agreement</td>
<td>National Institutes of Health</td>
<td>21,599</td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Postolache, Teodor T.</td>
<td>Michigan State University</td>
<td>R01/sub</td>
<td>(1500127) - The Role of Kynurenine Pathway Metabolites in Perinatal Depression and Suicidality</td>
<td>National Institute of Mental Health</td>
<td>34,673</td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Senevirante, Chamindi</td>
<td>National Institute on Alcohol Abuse and Alcoholism</td>
<td>K23</td>
<td>Biomarkers to Measure Treatment Response for Alcohol Dependence</td>
<td>146,769</td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Stephan, Sharon Ann Hoover</td>
<td>Maryland State Dept of Education</td>
<td>MD-AWARE Maryland Advancing Wellness and Resilience in Education</td>
<td>Center for Substance Abuse Prevention, SAMSHA</td>
<td>166,018</td>
<td></td>
</tr>
<tr>
<td>Non-MPRC</td>
<td>Stephan, Sharon Ann Hoover</td>
<td>School Based Health Alliance</td>
<td>CollIN-Collaborative Improvement and Innovation Network on School-Based Health Services</td>
<td>Health Resources and Services Administration</td>
<td>277,000</td>
<td></td>
</tr>
</tbody>
</table>

**Total of Newly Funded Awards in FY15** $5,219,633

*Note- Contract has been processed by UBIZ but not routed through KC yet
**Note- This does not have an account number or a fully executed contract in the system