JOHNS HOPKINS
BAYVIEW CAMPUS

ELECTIVES
FOR
PGY-IV PSYCHIATRY RESIDENTS
Johns Hopkins Bayview Campus
Electives for PGY-IV Psychiatry Residents

Psychiatry at Bayview is organized into five thematic sections: Addictions, Behavioral Biology, Behavioral and Psychosomatic Medicine, Community Psychiatry, and Geriatric Psychiatry and Neuropsychiatry. Most sections have several clinical programs led by faculty who provide treatment services and conduct clinical research. In the case of Behavioral Biology, preclinical (i.e., with animals) behavioral pharmacology and physiology research is the main focus.

This handbook is provided to help residents choose the elective that best fits their career interests. It is organized around the Sections described above. Each provides an overview of the faculty clinical research interests, major clinical programs and past and ongoing research projects for each section at Bayview. In addition, a list of faculty members and their general areas of clinical work and research is provided. Elective opportunities for the interested resident would be designed for the applicant’s particular interests and can include involvement in on-going research projects and training in specialized clinical services.

A resident who is interested in spending some (if clinical) or all (whether clinical or research) of their elective time working in one of our programs is encouraged to contact the faculty member directly to discuss specific interests and opportunities. If a resident would like to discuss Bayview elective choices more broadly they are welcome to contact either the individual section head or Meg Chisolm (mchisol1@jhmi.edu).

4/09 version
Addictions
Section Head: Dr. Eric Strain

Overview
Addictions faculty at Bayview provide treatment services to over 500 patients on a daily basis and conduct clinical research with all major drugs of abuse (e.g., alcohol, caffeine, cannabis, cocaine, hallucinogens, nicotine, opioids, sedative-hypnotics).

Clinical programs include:
- Addiction Treatment Services (ATS)
- Behavioral Pharmacology Research Unit (BPRU)
- Center for Addiction and Pregnancy (CAP)
- Center for Learning and Health (CLH)
- Cornerstone

Past and ongoing research has examined:
- Behavioral and pharmacologic components of drug abuse
- Therapeutic efficacy of novel treatments
- Abuse potential of new medications
- Optimization of services for patients
- Characteristics and treatment of psychiatric and somatic comorbidity
- Standardization of treatment protocols
- Interventions for special populations (e.g., pregnant women)
- Cognitive and performance effects of abused and non-abused drugs
- States of consciousness occasioned by hallucinogens
- Psychometric properties of standardized assessments

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Addictions faculty mentors, their area of clinical and/or research interest, and their contact information:

**Dr. George Bigelow** ([bigelow@jhmi.edu](mailto:bigelow@jhmi.edu)) directs and conducts human laboratory clinical pharmacology studies and outpatient treatment trials of behavioral and pharmacological treatments for substance abuse at the BPRU. Recent emphasis has been on opioid dependence and on novel formulations of opioid dependence treatment medications (e.g., depots, implants, patches). Other faculty members at the BPRU (not otherwise listed) include:

**Dr. Meg Chisolm** ([mchisol1@jhmi.edu](mailto:mchisol1@jhmi.edu)) treats psychiatric comorbidities in pregnant substance-dependent women at CAP. Research interests include understanding this population's particular vulnerability to nicotine dependence and developing effective smoking cessation techniques for this group.

**Dr. Roland Griffiths** ([rgriff@jhmi.edu](mailto:rgriff@jhmi.edu)) has a research program at the BPRU characterizing the effects and examining possible therapeutic applications of the classical hallucinogen psilocybin. Studies include exploration of interactions between dose-effects and types of psychological preparation, efficacy in treatment of anxiety associated with cancer, and application to treatment of addictions. Other areas of research interest include clinical pharmacology and abuse liability of caffeine and sedative-hypnotic drugs.
Dr. Matthew Johnson (mwj@jhmi.edu) investigates decision making and self-control in drug dependence from a behavioral economic framework. This includes examining the role of delay discounting, or devaluation of future consequence, as a fundamental aspect of impulsivity observed in drug dependence. Other research areas include the assessment of atypical drugs of abuse in human volunteers, and novel approaches in the treatment of substances dependence.

Dr. Hendrée E Jones (hejones@jhmi.edu) conducts treatment research focused on the pregnant drug dependent population at CAP. Research treatments examined include both behavioral and medication interventions.

Dr. Miriam Z. Mintzer (mmintzer@jhmi.edu) conducts research at the BPRU on cognitive functioning in substance abuse populations and on the cognitive effects of a range of drug classes.

Dr. Karin Neufeld (kneufel2@jhmi.edu) is the educational elective contact for Addiction Treatment Services (ATS). Other ATS faculty are also available to serve as mentors for interested residents [Drs. Robert Brooner (RKBrooner@aol.com), Michael Kidorf (mkidorf@mail.jhmi.edu) and Van King (kingvl@jhmi.edu)]. The ATS faculty group oversees operation of a large clinical service for patients with severe and chronic substance abuse, particularly opioid dependence that is routinely complicated by other substance use diagnoses.
(about 95%) and other psychiatric disorders (between 30% - 40%). A new substance abuse and chronic pain residential service is planned for July 2010. Faculty research Faculty research activities include projects focusing on service delivery models, treatment adherence, individual differences (psychiatric co-occurring disorders), traumatic stress, integrative care, medical (somatic) co-occurring disorders (i.e. HIV, HCV and HBV), the interface between chronic pain and addiction, medical service utilization and cost, and the impact of substance abuse on managed care. In addition to Drs. Neufeld, Brooner, Kidof and King, the ATS faculty group includes:

- Dr. Michael Clark
- Dr. Jessica Peirce
- Dr. Ken Stoller

**Dr. Kenneth Silverman** (ksilverm@jhmi.edu) conducts randomized controlled clinical trials at the Center for Learning and Health to develop and evaluate operant behavioral interventions for the treatment of heroin and cocaine addiction in poor and chronically unemployed adults. Ongoing studies are evaluating the effectiveness of employment-based reinforcement to motivate the use of naltrexone (both oral and depot), to promote engagement in methadone treatment by out-of-treatment injection drug users, and to promote abstinence from heroin and cocaine.
Dr. Maxine L. Stitzer (mstitzer@jhmi.edu) conducts research on behavioral treatments for drug abuse at the BPRU and is a national expert on application of contingency management to drug abuse treatment. She also conducts research on nicotine and tobacco dependence with an emphasis on understanding and preventing relapse in smoking cessation. She leads the Mid Atlantic Node of the National Drug Abuse Treatment Clinical Trials Network (CTN), conducting research on treatment effectiveness in community drug abuse programs.

Dr. Eric C. Strain (ecsgss@aol.com) conducts research examining the abuse liability of opioids, including novel formulations of marketed products at the BPRU. In addition, interests include features of special populations with drug abuse (e.g., drug use in the elderly), non-substance use psychiatric comorbidity, medications development, and clinical trials testing the combination of medications and behavioral treatments.

Ms. Michelle Tuten (mtuten@jhmi.edu) treats substance use disorders in pregnant and non-pregnant populations using operant behavioral interventions. Research and clinical interests include translating evidence-based treatments into community settings, interventions for pregnant women, and aspects of service delivery that impact patient engagement and outcomes.

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Dr. Annie Umbricht (annieumbricht@jhu.edu) is currently conducting outpatient research in the BPRU examining the efficacy and safety of novel pharmacotherapies for the treatment of cocaine dependence.

Dr. Ryan Vandrey (rvandrey@jhmi.edu) conducts research at the BPRU on the characteristics of withdrawal and relapse in dependent marijuana and tobacco users. Current research focuses on the effects of pharmacological interventions on these phenomena.
Overview
Behavioral Biology was established in 1968, and has as its primary, but not exclusive, focus the provision of a supportive research environment within psychiatry for behavioral pharmacology and behavioral physiology research that requires animal subjects, trained as well as untrained behavior, and long-term studies. The Section's drug abuse liability evaluation program, in particular, is recognized internationally. Faculty members are engaged full-time in basic and animal research.

Past and ongoing research has examined:

- Development of behavioral models of drug-taking in nonhuman primates.
- Characterizations of relative reinforcing efficacy across a wide range of classes of psychoactive drugs.
- Developing models of “subjective” drug classifications (i.e., drug discrimination) in rodents and nonhuman primates.
- Characterization of the physical dependence potential of benzodiazepines and related compounds in nonhuman primates.
- Development of models of assessment of cognitive, psychophysical, and other effects of psychoactive drugs in nonhuman primates and rodents.
- Extension of such work to assessments of the effect of space radiation.
- Study of behavioral correlates of the effects of chronic cocaine, alcohol, or opiate use in a nonhuman primate model of HIV-AIDS.
Behavioral Biology faculty mentors, their area of clinical and/or research interest, and their contact information:

Dr. Nancy Ator (ator@jhmi.edu) directs and conducts current research involving the relative reinforcing effects of tryptamines and methylene-dioxy-methamphetamine (MDMA), including development of a model of oral MDMA drug-taking; and the behavioral correlates of selective drug efficacy in modulating gamma-amino-butyric acid (GABA) via GABA-A receptor subtypes. Dr. Ator conducts comprehensive preclinical evaluations of abuse potential, with respect to Food and Drug Administration guidelines, of novel hypnotics and anxiolytics in clinical development. Other members of Behavioral Biology not otherwise listed:

- Dr. Joseph Brady
- Dr. Steven Hursh (Adjunct)
- Dr. Barbara Kaminski

Dr. Amy Goodwin (goodwin@jhu.edu) conducts research on the behavioral pharmacology of drugs of abuse in nonhuman primates. She is currently involved with studies of oral self-administration of MDMA.

Dr. Robert Hienz (bhienz@jhmi.edu) is engaged in developing and applying a rodent model for assessing the effects of simulated space radiation exposures on cognitive, behavioral, sensory, and motor function. Extension of this research to evaluate the short- and long-term effects of solar particle event and galactic...
cosmic ray radiation on a range of neurobehavioral functions is aimed at delineating the likely effects of space radiation on cognitive functioning in astronauts during lunar and planetary exploration missions.

Dr. Paul Soto (psoto1@jhmi.edu) uses neuropsychological tests adapted for nonhuman primates to assess the ability of experimental compounds to improve cognitive function. Current focus is on GABAergic compounds selective for the GABA-A-alpha5 benzodiazepine receptor.

Dr. Elise Weerts (eweerts@jhmi.edu) is engaged in research to understand the behavioral and neuropharmacological mechanisms of drug and alcohol abuse and dependence. Studies are multidisciplinary, and include human subjects and nonhuman primates. In the human laboratory, she utilizes laboratory alcohol administration, physiological measurements, psychological assessments, Positron Emission Tomography imaging, and genetic testing. In the nonhuman primate laboratory, she utilizes pharmacological challenges, schedule-controlled behavior, drug self-administration, intragastric drug administration, and behavioral observation procedures. Current focus is on dopamine, opioid, and GABAergic systems.
Overview
The Behavioral and Psychosomatic Medicine section includes a variety of clinical and research programs that address the intersection of Psychiatry and Medicine/Surgery.

Clinical programs include:
- Consultation-Liaison Psychiatry
- Emergency Psychiatric Consultation Service
- Obesity Psychiatry and Bariatric Surgery
- Burn Unit
- Behavioral Sleep Medicine
- Behavioral Cardiology
- Center for Mind Body Research

Past and ongoing research has examined:
- Risk factors for persistent pain
- Sleep disturbance increases pain sensitivity
- Risk factors for stress disorders following burn trauma
- Depression as a risk for morbidity and mortality in cardiovascular disease
- Neurotoxic effects MDMA (“Ecstasy”)
Behavioral and Psychosomatic Medicine faculty mentors, their area of clinical and/or research interest, and their contact information:

**Dr. Andrew Angelino** ([aangelino@jhmi.edu](mailto:aangelino@jhmi.edu)) participates in departmental and hospital-wide committees and meetings related to daily operations and long-term planning for the department. His research is focused on HIV/AIDS, psychosomatics, and consultation-liaison psychiatry.

**Dr. Ashley Bone** ([abone2@jhmi.edu](mailto:abone2@jhmi.edu)) oversees the Emergency Psychiatric Consultation Service. She anticipates a number of changes in the Emergency Psychiatric Consultation Service in the near future, as this service has not been routinely staffed by a psychiatrist in a number of years. She collaborates with medical/surgical services to improve overall clinical care of patients.

**Dr. James Fauerbach** ([jfauerba@jhmi.edu](mailto:jfauerba@jhmi.edu)) is actively involved in experimental and longitudinal research in the burn center and the cardiology division. His research focuses on the prevalence, predictors, course and impact of posttrauma distress, body image dissatisfaction, pain and depression following illness or injury.
Dr. Jennifer Haythornthwaite (jhayhto1@jhmi.edu) conducts research on psychosocial and neurobehavioral factors (mood, catastrophizing) that influence the experience of pain and contribute to the persistence of pain following illness or injury, and she conducts clinical trials of both behavioral and medical treatments for acute and chronic pain.

Dr. Gina Magyar-Russell (gmagyar1@jhmi.edu) conducts research with cardiac patients, specifically studying adjustment in patients requiring ICDs (Implantable Cardioverter Defibrillators). She also works on several multidisciplinary projects with the Cardiovascular Disease Working group through the Center for Mind Body Research and runs a consultation and psychotherapy service for both in- and outpatient cardiac patients.

Dr. Michael Smith (msmith62@jhmi.edu) focuses his clinical research on the neurobehavioral causes, consequences and treatments of insomnia and sleep loss. His work has recently extended to investigating the pain-enhancing effects of sleep disturbance.

Dr. Una McCann (umccann@jhmi.edu) treats patients with primary medical conditions (e.g., cardiovascular disease, burn injury) and secondary anxiety disorders. Her primary research has focused on the dopaminergic and serotonergic neurotoxic effects of amphetamine-type stimulant drugs (e.g., MDMA, methamphetamine, fenfluramine). She is investigating the neurobiological underpinnings of posttraumatic stress disorder (PTSD) in burn patients with Dr. Ji.
Community Psychiatry
Section Head: Dr. Anita Everett

Overview
Community Psychiatry at Bayview is a network of clinical services that provides contemporary treatment to a wide range of individuals in clinic and local community settings. The focus of Community Psychiatry’s expertise is on programs and treatment for individuals with long term and disabling mental illnesses and illnesses that are complicated by socioeconomic stressors and poverty. Additionally Community Psychiatry strives to positively impact mental illnesses on a broader level that includes participation in advocacy and public health planning initiatives.

Clinical programs include:

Adult
- General Outpatient Service
- Mentally Ill Substance Abuse (MISA)
- Psychosocial Rehabilitation
- Mobile Treatment
- Intensive Outpatient Program
- Creative Alternatives
- Special needs clinic for Developmentally Disabled Adults

Child
- General Outpatient Service
- The Children’s Center after-school hospital program
- Intensive Outpatient Programs for 0-5

Past and ongoing research has examined:
- Services and administrative outcomes
- Mental health policy
- Health management
Community Psychiatry faculty mentors, their area of clinical and/or research interest, and their contact information:

Adult

Dr. Anita Everett (aeveret4@jhmi.edu) is the educational elective contact for the adult division of Community Psychiatry. Dr. Everett is interested in national career development and leadership for community psychiatry. Her specific research focuses on the co-morbid medical illnesses of individuals with long term mental illness (which result in a 25-year shortened life span compared with the general public).

Dr. Tracee Burroughs (tburrou4@jhmi.edu) has an interest in providing mental health services to health disadvantaged populations and within the Creative Alternatives Program. In 2008, a senior resident worked with Dr. Burroughs and Dr. Jacquelyn Sommerville to develop a curriculum to provide CBT in a group setting to persons with schizophrenia who are enrolled in the Creative Alternatives program. Similar programs could be designed and implemented.

Dr. Eric Samsted (esamstad@comcast.net) is the lead psychiatrist working with our special needs clinic. This is a clinic designed to meet the specialized needs of persons with developmental disabilities. There are opportunities to observe provide clinical care as well as participate in research.

Child

Dr. Joan Gerring (igerring@jhmi.edu) is the primary education elective contact for the child division of Community Psychiatry. Additional Child faculty members available as mentors are listed below and can also be contacted directly.
Dr. Shannon Rae Barnett (sbarnett@jhmi.edu) treats mostly adolescents, a number with early schizophrenia who also attend psychiatric rehabilitation program. She is an expert in dialectical behavioral therapy (DBT) and supervises several therapists in this treatment modality. Additional interests include early onset psychosis and she works with Dr. Margolis in our EPIC (Early Psychosis Intervention Clinic). There would be opportunities to provide clinical care as well as consider and/or participate in research projects. (Interested residents should contact Drs. Barnett or Margolis to see what specific opportunities are available depending on the time of year, etc.)

Dr. Joyce Harrison (jharri47@jhmi.edu) directs an innovative intensive outpatient program for preschool aged children and their families. She is an expert in the treatment of children ages 0-5.
Overview
The Bayview Geriatric Psychiatry and Neuropsychiatry program provides clinical services for the assessment and management of psychiatric disorders for patients 65 years and older and patients with acquired brain injury. The primary goal of the program is to uphold the Hopkins tripartite mission of providing excellent clinical care, strengthening educational programs and integrating basic and clinical research activities.

Clinical programs include:
- Memory Center
- Neuropsychiatry & Geriatric Psychiatry Clinic
- PATCH program
- PACE program

Past and ongoing research has examined:
- Premorbid depression and cognitive impairment
- CABG and cognitive impairment
- Geriatric bipolar disorder and cognition
- Restless leg syndrome and neuropsychiatric symptoms
- Pharmacologic treatment of dementia
- Biomarkers of dementia
- Risk Factors for depression after traumatic brain injury
- Neuroanatomical correlates of depression after traumatic brain injury
- Sertraline for the treatment of post-stroke anxiety

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Geriatric Psychiatry and Neuropsychiatry faculty mentors, their area of clinical and/or research interest, and their contact information:

**Dr. Hochang Lee** ([hochang@jhmi.edu](mailto:hochang@jhmi.edu)) is interested in identifying reducible risk factors for late life mental disorders. His current research projects are focused on early and mid-life depression as a reducible risk factor for late life cognitive impairment and the role of pre-surgical intracranial stenosis as a potential risk factor for post-coronary artery bypass surgery cognitive impairment. Other interests include the neuropsychiatric aspects of restless legs syndrome, and cross-cultural geropsychiatric issues for Asian-Americans.

**Dr. Constantine Lyketsos** ([kostas@jhmi.edu](mailto:kostas@jhmi.edu)) has a body of research in neuropsychiatric aspects of dementia (e.g., depression, agitation, delusions), including their nosology, impact, and treatment. He is conducting a series of translational projects investigating biomarkers (both blood and brain imaging based) with specific applications in Alzheimer’s disease therapeutics.

**Dr. Michelle Mielke** ([mmielke1@gw.johnshopkins.edu](mailto:mmielke1@gw.johnshopkins.edu)) is interested in identifying blood-based biomarkers of Alzheimer’s disease progression and in evaluating vascular factors across the lifespan as risk factors for cognitive impairment and dementia.

**Dr. Vani Rao** ([vrao@jhmi.edu](mailto:vrao@jhmi.edu)) is investigating mood and behavioral problems in brain injury, specifically traumatic brain injury and stroke. Her current research projects include determination of risk factors for depression after traumatic brain injury (TBI), investigating neuroanatomical correlates of post-TBI depression and clinical trials in post-stroke anxiety.
Dr. Paul Rosenberg (prosenb9@jhmi.edu) is interested in mood and behavior disorders in Alzheimer’s disease. His current projects are focused on depression as a risk factor for developing MCI and Alzheimer’s disease, PET imaging of neuroinflammation, peripheral blood markers of neuroinflammation, and treatment of neuropsychiatric symptoms of Alzheimer's disease.

Dr. Gwenn Smith (gsmith95@jhmi.edu) focuses on methodology development and applications of in vivo PET neurochemical imaging to understand the regulation of monoamines in late life neuropsychiatric disorders including geriatric depression, psychotic depression and Alzheimer’s dementia. The goal of this work is to understand treatment response variability in order to inform clinical management.

Dr. Martin Steinberg (msteinb1@jhmi.edu) is primarily focused on the epidemiology and phenomenology of neuropsychiatric symptoms in dementia. He is the senior clinical physician of the Cache County Study on Memory, Health and Aging, which longitudinally follows a cohort of dementia participants in a community setting. He is also interested in exploring the cognitive, functional and neuropsychiatric benefits of a physical exercise program for subjects with dementia who reside in Assisted Living.