National Institute of Mental Health

Symposia

Saturday, May 5

1:00 – 4:00 PM
Room: 1E17 Javits

Harnessing Technology for Clinical Research and Practice

Chair: Joel Sherrill, Ph.D. (NIMH)

- **Rosalind Picard, Sc.D. (MIT)** What can we learn about the brain from a wristband sensor, connected smartphone, and AI?
- **Stephen Schueller, Ph.D. (Northwestern University)** Personalizing digital mental health
- **Colin Depp, Ph.D. (UCSD)** Applications of real-time data to improving care for serious mental illness
- **Benjamin Druss, M.D., MPH (Emory U)** Health information technology in mental health care treatment settings: Current practices and future opportunities

Moderator: David Mohr, Ph.D. (Northwestern University)

Sunday, May 6

8:00 AM – 11:00 AM
Room: 1E11 Javits

Suicide Prevention in Medical Settings

Chair: James Churchill, Ph.D. (NIMH)

- **Gregory Edward Simon, M.D. (University of Washington)** Population-based suicide prevention: Machine learning comes to the clinic
- **Edwin Boudreaux, Ph.D. (University of Massachusetts)** ED-SAFE 2: Early lessons learned
- **Cheryl King, Ph.D. (University of Michigan)** Recognizing teen suicide risk in emergency departments

Moderator: Mark Olfson, M.D. (Columbia University)
Seizing opportunities to prevent suicide in medical settings

Plenary Lecture

Sunday, May 6

1:00 PM – 2:30 PM
Room: 1A14 Javits

Computational Psychiatry

Lecturer: Joshua Gordon, M.D., Ph.D.
Director, National Institute of Mental Health

Chair: Philip R. Muskin, M.D.

National Institute of Mental Health

Symposia

Monday, May 7

8:00 AM – 11:00 AM
Room: Astor Ballroom, Seventh Floor, Marriott Marquis

Coordinated Specialty Care for First Episode Psychosis (FEP): Science-to-Service Updates

Chair: Robert Heinssen, Ph.D. (NIMH)

- **Lisa Dixon, M.D., MPH (Columbia)** Scaling evidence-based services for first episode psychosis: New opportunities for community psychiatry
- **Michael Birnbaum, M.D. (Zucker Hillside)** Digital biomarkers of first episode psychosis
- **Vinod Srihari, M.D. (Yale)** The Mindmap campaign: Population based early detection of psychosis
- **Delbert Robinson, M.D. (Hofstra)** A computer decision support system for FEP pharmacotherapy
- **David Penn, Ph.D. (UNC)** Expanding HORYZONS for long-term recovery in first episode psychosis

Discussant: Patrick McGorry, M.D., Ph.D. (University of Melbourne)

Tuesday, May 8

8:00 AM – 11:00 AM
Room: Soho/Herald/ Gramercy, Seventh Floor, Marriott Marquis

Model Based Classification in Mental Health

Chair: Bruce Cuthbert, Ph.D. (NIMH)

- **Deanna Barch, Ph.D. (Washington University)**
- **Martin Paulus, M.D. (Laureate Institute for Brain Research)**
- **Roy H. Perlis, M.D. (Harvard University)**
- **Michael Frank, Ph.D. (Brown University)**

Discussant: John H. Krystal, M.D. (Yale University)

Wednesday, May 9

8:00 AM – 11:00 AM
Room: 1E14 Javits

Big Data in Mental Health

Chair: Michele Ferrante, Ph.D. (NIMH)

- **Bing Brunton, Ph.D. (University of Washington)** Unsupervised pattern analysis of large psychiatric datasets
- **Leanne Williams, Ph.D. (Stanford University)** Identifying brain-behavior biotypes for depression and anxiety
- **Justin Taylor Baker, M.D., Ph.D. (Harvard University)** Mining the depths: Going big (and wide) to understand single individuals with mental illness
- **Raquel E. Gur, M.D., Ph.D. (University of Pennsylvania)** Multi-level integration of deep phenotyping of behavior and brain structure and function in the Philadelphia Neurodevelopmental Cohort

Discussant: Alik Sunil Widge, M.D., Ph.D. (Harvard University)

National Institute of Mental Health

Plenary Lecture

Sunday, May 6

1:00 PM – 2:30 PM | Room: 1A14 Javits

Computational Psychiatry

Lecturer: Joshua Gordon, M.D., Ph.D.
Director, National Institute of Mental Health

Chair: Philip R. Muskin, M.D.

Learning Objectives

1. Foster an ongoing dialog between theoreticians and psychiatrists
2. Accelerate knowledge and improve the lives of individuals with mental illnesses
3. Test how dysfunction could create a progressive, chronic disorder by impacting neural development and plasticity
4. Understand how computational approaches can help take advantage of large data sets, categorizing brain dysfunction in a way that has the potential to lead to better diagnoses and improved biomarkers

National Institute of Mental Health (NIMH) RESOURCES

VISION

NIMH envisions a world in which mental illnesses are prevented and cured.

MISSION

To transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure.

NIMH Strategic Plan

www.nimh.nih.gov/about/strategic-planning-reports/index.shtml

NIMH Website

www.nimh.nih.gov

Director's Messages

www.nimh.nih.gov/about/director/messages/index.shtml

News and Events

www.nimh.nih.gov/news

Inside NIMH Newsletter

www.nimh.nih.gov/research-priorities/inside-nimh/index.shtml

NIMH Outreach Partnership Program

www.nimh.nih.gov/outreach/partnership-program/index.shtml

Alliance for Research Progress

www.nimh.nih.gov/outreach/alliance/index.shtml

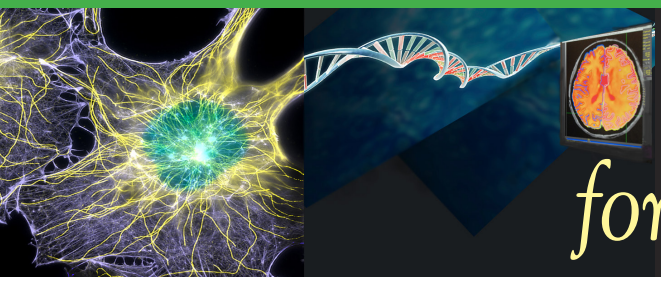
Professional Coalition for Research Progress

www.nimh.nih.gov/outreach/coalition/index.shtml

NIMH Social Media

www.nimh.nih.gov/news/social-media/index.shtml

National Institute of Mental Health, Intramural Research Program



Opportunities *for* Research Training

PGY4 Psychiatry Residency Program and NIMH Clinical Fellowship

Overview

The National Institute of Mental Health (NIMH) Division of Intramural Research (DIRP) offers both an Accreditation Council for Graduate Medical Education (ACGME) approved residency program for the fourth year of post graduate psychiatric training (PGY4) and a non-accredited post-residency research fellowship program. These allied programs offer full-time research training on the campus of NIH in Bethesda, Maryland. The PGY4 Residency and Clinical Fellowship programs are designed to attract and train physician-scientists for successful research careers in clinical neuroscience. Both programs offer extensive training opportunities in clinical, translational and basic research that focuses on the neurobiology of mental illnesses. The core training program is mentorship-driven with the goal to acquire and refine research skills, including the evaluation and clinical care of research participants, development of research protocols, performance of clinical and/or laboratory research studies, and the analysis and presentation of study results. Residents and Clinical Fellows join specialty research groups that study the mechanisms or treatments of major psychiatric illnesses in adults or children. Emphasis in these programs is on psychopharmacology; novel therapeutics; behavioral endocrinology; neurobiology; neurodevelopment; functional, structural and molecular brain imaging; and neurogenetics.

Program Structure

Those who enter the program as PGY4 residents, transfer from ACGME accredited psychiatry residency programs having completed their general psychiatry residency requirements in their first three years. Clinical and research training are integrated during the PGY4 year and lead to board eligibility in General Psychiatry.

Clinical fellow applicants can come from psychiatry residencies, subspecialty fellowships, e.g. child and adolescent psychiatry, or graduate medical training in related fields, e.g. neurology.

The 3-year full-time training program is mentorship driven and individually tailored. Skills are developed through close interactions with experienced research mentors, and hands-on experience conducting research. Each fellow develops an Individual Development Plan that defines their specific training goals and activities.

Additional Information

NIH Graduate Medical Education Programs:
https://www.cc.nih.gov/training/gme1.html

NIMH Psychiatry Residency and Clinical Fellowship Programs:
https://www.cc.nih.gov/training/gme/programs/psychiatry.html

Application Information

Successful candidates to both programs have a strong background in research, a specific research interest and commitment to a research career. PGY4 applicants must successfully complete three years in an approved ACGME general psychiatry residency (including all clinical requirements for certification) by the time they enter the program. Interested applicants are encouraged to apply early in their PGY-3 training year. The expected length of stay for residents participating in the program is three years (an additional two years of fellowship follow the conclusion of residency training).

Electronic Application

https://ocrtmeapps.cc.nih.gov/gme

Program Contact

For further information, the applicant should contact:

Joyce Chung, M.D.
Program Director
PGY4 Residency and Clinical Fellowship Program
National Institute of Mental Health
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Join A Clinical Research Study

Frequenty Asked Questions

www.nimh.nih.gov/JoinAStudy

Our research mission is to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure. NIMH research studies are conducted at the National Institutes of Health (NIH) Clinical Center in Bethesda, Maryland, near Washington, D.C. The Clinical Center is the nation's largest research hospital. Since 1953, patients from all 50 states have participated in research on an inpatient or outpatient basis.

Clinical Research Study Areas

Enrolling Adults & Children Nationwide

- Depression
- Fragile X Syndrome
- Irritability
- Schizophrenia
- X&Y Chromosome Variations

What is a clinical research study? A clinical research study is often called a clinical trial or a protocol. All are scientific studies in which people participate in the research. Clinical research has many goals such as developing new treatments, identifying causes of illnesses, studying trends, or evaluating ways genetics may be related to an illness. Some types of research studies do not require changes to current mental health treatment.

Why participate in a research study? People participate in research for many reasons and some want to help with scientific discovery. Research is our best hope for understanding and treating mental illnesses. Thanks to volunteers, researchers are learning more about the causes of mental disorders, and are finding new ways to treat and prevent illnesses.

How does a person enroll in a study? If you are interested in one of our studies, visit us at www.nimh.nih.gov/JoinAStudy or call us at 301-496-5646.

What are participants' rights? Before you enroll in a study, all volunteers are given the details of the study, including risks and benefits, during an informed consent process. As a safeguard to protect participants' rights and answer questions, the Office of the Clinical Director also has a team of social workers who monitor some volunteers over the course of their research participation. All participants have the right to withdraw from research at anytime.

Where are the studies conducted? Most of our research studies are conducted at the NIH Clinical Center in Bethesda, Maryland. There are some studies in which volunteers can participate from home.

How much does it cost to participate?
There is no cost to participate.

Is there compensation? Compensation is available for some studies. Travel and transportation may be reimbursed for participants in some studies.

What types of research studies are being conducted?

- **Non-Treatment Studies:** Detailed screenings and evaluations, computer tasks, neuropsychological testing, brain imaging, epidemiological and longitudinal studies are all examples of non-treatment studies.
- **Research Treatment Studies:** These studies test the effectiveness of standard or experimental drugs, procedures, or interventions. Some compare different treatments, while others compare a treatment to a placebo. In some cases, after study completion participants receive short-term follow-up care while transitioning back to the community.
- **Genetic Studies:** These identify how genes may relate to mental disorders and may include donating a blood or tissue sample.
- **Family Studies:** These are studies that aim to discover patterns of disorders among families, and may include brain imaging or genetic studies.
- **Brain Imaging Studies:** These may involve PET, MRI, fMRI, MRS, or MEG brain scans.

Adult Research Studies

Enrolling Participants Nationwide

www.nimh.nih.gov/JoinAStudy

DEPRESSION

AV-101 & Major Depression
(Inpatient: 8- to 10-weeks) This study assesses the effectiveness of the oral drug AV101 (an antagonist of glycine receptor) versus placebo. Procedures include a medication taper and medication-free period, administration of the oral drug, and 4 brain scans. Recruiting ages 18-65. [15-M-0151]

Repeated Doses of Ketamine and Neuroimaging
(Inpatient: 14- to 20-weeks) This study evaluates the rapid and sustained antidepressant effects of repeat doses of ketamine; enrolling eligible depressed adults, who are free of other serious medical conditions. Procedures include tapering off antidepressants, a medication-free period, 10 infusions of low-dose ketamine (an FDA-approved anesthetic), brain scans (MRI), electroencephalography (EEG), transcranial magnetic stimulation (TMS), and psychological evaluations. Recruiting ages 18-65. [17-M-0060]

Depression and Brain Function
(Inpatient and/or Outpatient: 8 weeks, and 3 once-a-month follow up visits or phone calls.) This depression research study tests the effects of the combination of transcranial magnetic stimulation (TMS) and psychotherapy on brain function. Participation includes research evaluations, brain scans, and active TMS and psychotherapy, or inactive TMS and psychotherapy. Recruiting ages 18-65 with major depressive disorder, who are free of other serious medical conditions. If you are currently taking anti-depressants, you may still be eligible. [17-M-0147]

GENETIC STUDIES

Fragile X Syndrome & Brain Proteins
(Inpatient: One visit over several days) This research seeks to understand how protein formation in the brain is affected in fragile X syndrome (FXS). Recruiting young men ages 18-24. [06-M-0214]

X & Y CHROMOSOME VARIATIONS
NIH Behavior and Brain Imaging Research Study
(Outpatient: 2-day initial visit) This study is currently enrolling children and young adults (5-25 years old) with X & Y chromosome variations. Participation includes an initial 2-day outpatient visit and a visit every 2 years to the NIH Clinical Center in Bethesda, Maryland. Compensation, transportation within US, lodging, and meal allowance provided. [89-M-0006]

SCHIZOPHRENIA

Schizophrenia and Genetics
(Outpatient: 1-2 days) This study examines the role genes play in schizophrenia. Eligible participants have a diagnosis of schizophrenia and no serious drug or alcohol abuse. If possible, the siblings and/or parents of the individuals are invited for interviews and blood donation. Travel and lodging assistance may be available. Recruiting ages 18-55. [95-M-0150]

Schizophrenia and Brain Processes
(Inpatient: 6 months) This study examines the way the brain works in individuals with schizophrenia or schizoaffective disorder to better understand the underlying biology of the illness and the brain processes that cause severe psychiatric symptoms. Medical and psychiatric tests are done first to make sure participants are suitable for the research while standard psychiatric care is given. The second part of the study is off medications, with close monitoring and support, for up to five weeks while brain imaging tests are done. Research is stopped if a participant becomes too sick to continue. After the research is completed, the participant is treated with standard psychiatric treatments. Eligible participants must have no current alcohol or drug abuse. Recruiting ages 18 years or older. [89-M-0160]

Pediatric Research Studies

Enrolling Participants Nationwide

www.nimh.nih.gov/JoinAStudy

DEPRESSION

Depression in Teenagers:
(Outpatient & Inpatient) This study seeks to find causes and treatments of depression in teenagers. The study is recruiting participants ages 11-17 who are depressed and have a pediatrician or medical provider. The study begins with an outpatient evaluation (clinical assessment, interviews, and questionnaires). Annual outpatient visits may include assessments, research tasks, and brain imaging, up to age 25. Eligible participants, if clinically indicated, may receive treatment (inpatient or outpatient) of evidenced-based cognitive-behavioral therapy (CBT), or standard medicines. [18-M-0037]

IRRITABILITY

Descriptive Study of Severe Irritability/Severe Mood Dysregulation, SMD
(Outpatient: Recruiting ages 7-17. 1-day evaluation and may include follow-up visits until age 25) This study describes, over time, the moods and behavior of children and the associated brain changes. Participants must be in treatment with a physician, medically healthy, and not currently hospitalized, psychotic or suicidal. Symptoms include chronic anger, sadness, or irritability, along with hyperarousal (such as insomnia, distractibility, hyperactivity) and extreme responses to frustration (such as frequent, severe temper tantrums). The study procedures include research & computer tasks, neuropsychological testing and brain imaging. [02-M-0021]

GENETICS

X & Y Chromosome Variations
NIH Behavior and Brain Imaging
(Outpatient: 2-day initial visit) This study is currently enrolling children and young adults (5-25 years old) with X & Y chromosome variations. Participation includes an initial 2-day outpatient visit and a visit every 2 years to the NIH Clinical Center in Bethesda, Maryland. Compensation, transportation within US, lodging, and meal allowance provided. [89-M-0006]