ALICIA KOPLOWITZ ADVANCE TRAINING FELLOWSHIPS - 2020 CALL

Centre: Bellevue Hospital Center, NYU Langone Health.

Tutor: Prof. Francisco Xavier Castellanos, MD

Research Area:

- Please list and provide a brief explanation of the research projects that are currently being conducted in your department and in which the future fellows could take part in?

As one of only two independent departments of Child and Adolescent Psychiatry in the United States, the Bellevue/NYU Advanced Training Fellowship takes advantage of its varied research and clinical programs. Currently active research projects are listed below:

DEPARTMENT OF CHILD AND ADOLESCENT PSYCHIATRY JANUARY 2020

IMPLEMENTATION AND DISSEMINATION SCIENCE

The Center for Trauma Recovery and Juvenile Justice

Principal Investigator: Carly Baetz, Ph.D., J.D.

Sponsor: SAMHSA subcontract (UConn)

Improving the Value of Publicly Funded Mental Health Care

Principal Investigator: Molly Finnerty, M.D.

Sponsor: National Institute of Mental Health R01 subcontract (RAND)

Improving Minority Health Through Monitoring of Disparities in Medicaid Care

Principal Investigator: Molly Finnerty, M.D.

Sponsor: National Institute of Minority Health and Health Disparities R01 subcontract (RAND)

Accelerator Strategies for States to Improve System Transformations Affecting Children, Youth and Families

Principal Investigator: Kimberly Hoagwood, Ph.D. **Sponsor:** National Institute of Mental Health P50

Evidence Based Treatment Dissemination Center (EBTDC)

Principal Investigator: Kimberly Hoagwood, Ph.D.

Sponsor: NYS Office of Mental Health

Family Groups for Urban Youth with Disruptive Behavior

Principal Investigator: Kimberly Hoagwood, Ph.D.

Sponsor: National Institute of Mental Health R01 subcontract (NYU School of Social Work)

OnTrackNY's Learning Healthcare System

Principal Investigator: Kimberly Hoagwood, Ph.D.

Sponsor: National Institute of Mental Health R01 subcontract (Research Foundation for Mental

Hygiene)

Navigating Resource-Constrained Systems and Communities to Promote the Behavioral Health of Black Youth

Principal Investigator: Mary Acri, Ph.D.

Sponsor: National Institute of Mental Health R01 subcontract (Washington University)

Scaling-Up Stepped Care for Women's Mental Health in Primary Care in an LMIC

Principal Investigator: Mary Acri, Ph.D.

Sponsor: National Institute of Mental Health R01 subcontract (University of Illinois)

Clinic Technical Assistance Center (CTAC)

Principal Investigator: Sarah Horwitz, Ph.D.

Sponsor: New York State Office of Mental Health

Adult Technical Assistance Center (ATAC)

Principal Investigator: Kimberly Hoagwood, Ph.D. Sponsor: New York State Office of Mental Health

Managed Care Technical Assistance Center (MCTAC)

Principal Investigator: Kimberly Hoagwood, Ph.D. Sponsor: New York State Office of Mental Health

National Collaborative for Innovation in Quality Measurement: Implementing and Improving (NCINQ II)

Principal Investigator: Kimberly Hoagwood, Ph.D.

Sponsor: Agency for Healthcare Research and Quality (National Committee for Quality

Assurance)

NEURODEVELOPMENTAL DISORDERS

Multimethod Measurement of Proximal Risk for Persistent Suicide Ideation and Future Attempts among Adolescents

Principal Investigator: Argelinda Baroni, M.D.

Sponsor: National Institute of Mental Health R01 subcontract (Hunter)

Neuronal Correlates of Autistic Traits in ADHD and Autism

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Institute of Mental Health R01 subcontract (Child Mind Institute)

Neural Signatures of Outcome in Preschoolers with Autism

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Institute of Mental Health R01 subcontract (Child Mind Institute)

Early Life Exposure to Metal Mixtures and Neuroimaging of Internalizing Behaviors in Childhood

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Institute of Mental Health R01 subcontract (Mt. Sinai)

Impact of Circadian Misalignment on Energy Balance Regulation

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Institute of Health R01 subcontract (Columbia University)

Effect of Long-term Sleep Restriction on Energy Balance

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Heart, Lung and Blood Institute R01 subcontract (Columbia University)

Examining Adolescent Outcomes of Severe Temper Outbursts in Childhood

Principal Investigator: F. Xavier Castellanos, M.D.

Sponsor: National Institute of Mental Health R15 subcontract (Fordham University)

Brain Plasticity Underlying Acquisition of New Organizational Skills in Children

Principal Investigator: F. Xavier Castellanos, M.D. *Sponsor:* National Institute of Mental Health R33

Neurobehavioral Basis of Attention Bias Heterogeneity in Adolescent Anxiety

Principal Investigator: Amy Roy, Ph.D.

Sponsor: National Institute of Mental Health R56 Subcontract (Hunter College)

In utero Assessment of the Human Neural Connectome and Later Child Behavior

Principal Investigator: Moriah Thomason, Ph.D. Sponsor: National Institute of Mental Health R01

Investigation of Opiate Exposure and Neurodevelopment (iOPEN)

Principal Investigator: Moriah Thomason, Ph.D. Sponsor: National Institute on Drug Abuse R34

Evaluation of Organization Skills Training Program for Upper Elementary Students

Principal Investigator: Richard Gallagher, Ph.D.

Sponsor: Institute of Education Sciences subcontract (Children's Hospital of Philadelphia)

STRESS, TRAUMA and RESILIENCE

NYU Center for Child Welfare Practice Innovation

Principal Investigator: Glenn Saxe, M.D.

Sponsor: SAMHSA

Computational Models for the Prediction and Prevention of Child Traumatic Stress

Principal Investigator: Glenn Saxe, M.D.

Sponsor: National Institute of Mental Health R01

The Center for the Treatment of Development Trauma Disorders

Principal Investigator: Glenn Saxe, M.D. Sponsor: SAMHSA subcontract (UConn)

EMOTIONAL BRAIN INSTITUTE

Maternal Influence over Prefrontal Cortex and Transition to Independence

Principal Investigator: Regina Sullivan, Ph.D. Sponsor: National Institute of Mental Health R37

Neural Circuitry and Plasticity for Maternal Behavior

Co-Principal Investigator: Regina Sullivan, Ph.D.

Sponsor: National Institute of Child Health and Human Development R01

Cortical Processing

Principal Investigator: Donald Wilson, Ph.D. Sponsor: National Institute of Health R01

Ajinomoto Consultation

Principal Investigator: Donald Wilson, Ph.D.

Sponsor: Ajinomoto Co., Inc.

Brain Circuits of Outcome-dependent vs. Habitual Avoidance

Principal Investigator: Chris Cain, Ph.D.

Sponsor: National Institute of Mental Health R01

OTHER RESEARCH

Autism Clinical Pathway Training

Principal Investigator: Lauren Donnelly, Ph.D. Sponsor: New York City Council Autism Initiative

Metformin for Overweight and Obese Children and Adolescents with Bipolar Spectrum Disorders Treated with Second-generation Antipsychotics

Principal Investigator: Glenn Hirsch, M.D. Sponsor: PCORI subcontract (Northwell)

NYS Regional Centers for Autism Spectrum Disorders to Provide Education/Training and Technical Assistance

Principal Investigator: Rebecca Doggett, Ph.D.

Sponsor: NYS Department of Education subcontract (SUNY University at Albany)

Behavioral Consultation to ADAPT Preschool Programs

Principal Investigator: Rebecca Doggett, Ph.D.

Sponsor: ADAPT Community Network

NEST Training and Consultation (ASD NEST Support Project)

Principal Investigator: Michelle Lee, Ph.D.

Sponsor: NYC Department of Education subcontract (NYU Steinhardt School of Culture,

Education and Human Development)

Expanding Trauma-Informed Care within New York Juvenile Detention

Principal Investigator: Carly Baetz, Ph.D., J.D.

Sponsor: SAMHSA

SNUG Outreach

Principal Investigator: Susan Hansen, Ph.D.

Sponsor: New York State Division of Criminal Justice Services

The NYU Langone Health New York/New Jersey Tourette Disorder Educational Awareness Initiative

Principal Investigator: Rebecca Berry, Ph.D. Sponsor: Tourette Association of America

Building the Capacity for Evidence-Based Early Child Mental Health Services across New York City Health + Hospitals

Principal Investigator: Erica Willheim, Ph.D.

Sponsor: Child Welfare Fund

Beyond active research studies, Alicia Koplowitz Advanced Training Fellows also have access to unique archival datasets that continue to be a resource for original and impactful scientific contributions. The most remarkable of these is the 33-year follow-up of individuals diagnosed with attention-deficit/hyperactivity disorder at an average age of 8 years, the comparison individuals who were recruited during adolescence from the same communities, 270 of whom had brain-imaging scans at an average age of 41.^{1,2} These rich archival data include blinded clinician reports from multiple waves of longitudinal assessments, and have resulted in original observations, such as the novel discovery by a prior Alicia Koplowitz Advanced Training Fellow that ADHD in childhood is associated with an increased risk of homelessness (Garcia-Murillo et al. (2016).³

- In relation to those research projects, please specify the activities in which the fellows will be able to take part? (e.g., data collection, hypothesis formulation, data analyses, writing up papers, etc.)

The specific roles that Alicia Koplowitz Advanced Training Fellows can take vary depending on the study, the Fellow's background and the stage of the project. Certainly, all phases of research (e.g., data collection, hypothesis formulation, data analyses, and writing up results for publication) are available. Dr. Castellanos is available to link Alicia Koplowitz Advanced Training Fellows to specific project principal investigators, to assure a mutually beneficial result. Given the long lead-time for obtaining approvals for participating in human subjects research, determining the preferred domain of research as early as possible in recommended. This approach has been successful in the past.⁴⁻¹²

The focus of the Advanced Training Fellowship is on advancing each Fellow's specific goals and objectives. Given the urgency of expanding the knowledge base in Child and Adolescent Psychiatry, we prioritize academic productivity, including developing required technical skills, and becoming even more proficient in writing and publishing peer-reviewed manuscripts in English. Whenever the opportunity arises, Fellows are supported in the process of organizing and chairing symposiums at international scientific meetings, such as the 2020 Annual Meeting of the Society of Biological Psychiatry.

- Please specify statistical support available to the fellows for the development of their research activity? (e.g., statistician input, attendance to statistical courses, skills meetings, etc.)

All Alicia Koplowitz Advanced Training Fellows are personally and directly tutored by Dr. Castellanos, who although not a statistician, is conversant in mainstream statistical methods. Thanks to the support of the Alicia Koplowitz Foundation, biostatistical support is available to the Advanced Training Fellows as needed, with full access to all major statistical packages, attendance at statistical courses, and specific trainings as required. The Department of Child and Adolescent Psychiatry also has a full-time master's level biostatistician who is available for consultation as needed for specific research projects.

- How much of the fellows' working time will be dedicated to research activities?

The percent working time dedicated to research varies over the two-year duration of the Advanced Training Fellowship, but is expected to average 50%.

Clinical Area:

- Could you list the type of clinical placements the fellows could attend (e.g., generic outpatient services, inpatient units, specialist teams, etc.)?

Alicia Koplowitz Advanced Training Fellows can participate in clinical care of children and adolescents in specialized inpatient units (one unit specializes in young children, another on young adolescents, and a third on older adolescents; each has 15 beds); in the only Comprehensive Children's Emergency Psychiatry Program (emergency service) in the New York City area, which has up to 6 beds for intensive observation; in the Consultation-Liaison Service, in which children and adolescents with primary pediatric health needs are seen in consultation; and in the outpatient evaluation of children and adolescents in various clinics at the NYU Child Study Center. Fellows are also full participants in the weekly Child Study Center Clinical Case Conference, in which the most challenging cases are presented and discussed by the clinical faculty and psychology and psychiatry trainees.

- Could you describe the fellows' role in relation to participation in assessments and treatments in their clinical placements?

Alicia Koplowitz Advanced Training Fellows can gather clinical information in each of the above clinical settings, and then be part of the team process in which the attending physician and child and adolescent psychiatry fellows think through differential diagnoses and treatment planning that are appropriate for the patient and family.

- What are the requirements for psychiatrists and psychologist in order to be able to have a clinical role?

Psychiatrists and psychologists are not able to have direct or primary clinical roles in New York State because of licensing restrictions, but they are able to participate in the clinical management of complex patients.

How much of the fellows' working time will be dedicated to clinical work?

Alicia Koplowitz Advanced Training Fellows will dedicate one to two days a week to participating in clinical work, on average.

Academic area:

- Will the fellows be able to join a specific academic programme? If so, could you briefly describe the structure of this programme?

The Alicia Koplowitz Advanced Training Fellows are full participants in all the educational programs provided to Child and Adolescent Psychiatry Fellows and Clinical Child Psychology Interns. They also attend the weekly NYU Child Study Center Grand Rounds program and are included in the lunch discussions with the national and international presenters immediately following. They are also invited to attend a rich and varied program of scientific talks and presentations across the entire range of medical and psychological fields across the various campuses of NYU.

- Will the fellows be able to attend other training courses outside the specific academic programme (e.g., university courses, therapy workshops, etc.)?

Attendance at external courses is encouraged but not required. There are numerous training experiences and workshops available throughout NYU/Bellevue.

Please specify annual budget available to the fellow for training.

A minimum of US\$10,000 per Alicia Koplowitz Advanced Training Fellow is available for additional expenses required to optimize the Fellows' experiences. These funds can be used to offset additional costs of statistical expertise or software, if required, to pay for research related expenses, such as additional measures, participant fees, or to attend additional scientific conferences, beyond the annual meeting of the American Academy of Child and Adolescent Psychiatry. Recent examples include attending and presenting a poster at the 2020 annual meeting of the American Professional Society of ADHD and Associated Disorders (APSARD). Fellows are also able to take advantage of New York's centrality for scientific meetings, such as the 75th Annual Meeting of the Society of Biological Psychiatry in April 2020. These settings offer exposure to state-of-the-art science, as well as incomparable networking opportunities.

- Please specify the clinical and research supervision offered to the fellow over the 2-years fellowship.

All Alicia Koplowitz Advanced Training Fellows are individually supervised by tutor Castellanos on a weekly basis, in addition to supervision by other clinical and research faculty, as appropriate for each Fellow's program.

Peer-reviewed papers (#3-12) published by prior Alicia Koplowitz Advanced Training Fellows (in **bold**) from their work at NYU/Bellevue.

- 1. Klein RG, Mannuzza S, Olazagasti MA, et al. Clinical and functional outcome of childhood attention-deficit/hyperactivity disorder 33 years later. *Archives of general psychiatry*. 2012;69(12):1295-1303.
- 2. Proal E, Reiss PT, Klein RG, et al. Brain gray matter deficits at 33-year follow-up in adults with attention-deficit/hyperactivity disorder established in childhood. *Archives of general psychiatry*. 2011;68(11):1122-1134.

- 3. **Garcia Murillo L**, Ramos-Olazagasti MA, Mannuzza S, Castellanos FX, Klein RG. Childhood Attention-Deficit/Hyperactivity Disorder and Homelessness: A 33-Year Follow-Up Study. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2016;55(11):931-936.
- 4. **Garcia Murillo L**, Cortese S, Anderson D, Di Martino A, Castellanos FX. Locomotor activity measures in the diagnosis of attention deficit hyperactivity disorder: Meta-analyses and new findings. *Journal of neuroscience methods*. 2015;252:14-26.
- 5. **Garcia Murillo L**, Ramos-Olazagasti MA, Klein RG, Mannuzza S, Castellanos FX. Correlates of nicotine dependence in men with childhood attention-deficit/hyperactivity disorder: a 33-year follow-up. *Attention deficit and hyperactivity disorders*. 2018.
- 6. Linares LO, **Martinez-Martin N**, Castellanos FX. Stimulant and atypical antipsychotic medications for children placed in foster homes. *PloS one.* 2013;8(1):e54152.
- 7. **Mairena MA**, Di Martino A, **Dominguez-Martin C**, et al. Low frequency oscillations of response time explain parent ratings of inattention and hyperactivity/impulsivity. *European child & adolescent psychiatry*. 2012;21(2):101-109.
- 8. **Nieto RG**, Castellanos FX. A meta-analysis of neuropsychological functioning in patients with early onset schizophrenia and pediatric bipolar disorder. *Journal of clinical child and adolescent psychology: the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53. 2011;40(2):266-280.*
- 9. **Serrano-Villar M**, Calzada EJ. Ethnic identity: Evidence of protective effects for young, Latino children. *Journal of applied developmental psychology*. 2016;42:21-30.
- 10. **Serrano-Villar M**, Huang KY, Calzada EJ. Social Support, Parenting, and Social Emotional Development in Young Mexican and Dominican American Children. *Child psychiatry and human development*. 2017;48(4):597-609.
- 11. **Alvarez-Fernandez S**, Brown HR, Zhao Y, et al. Perceived social support in adults with autism spectrum disorder and attention-deficit/hyperactivity disorder. *Autism research : official journal of the International Society for Autism Research.* 2017;10(5):866-877.
- 12. **Gomez-Guerrero L, Martin CD, Mairena MA**, et al. Response-time variability is related to parent ratings of inattention, hyperactivity, and executive function. *Journal of attention disorders*. 2011;15(7):572-582.