# Psychiatry Grand Rounds

## **WCM Department of Psychiatry**

Psychology CE Announcement

Toward precision psychotherapy: leveraging novel methods to understand and improve psychotherapies for depression.

### Nili Solomonov, PhD

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Wednesday, October 25<sup>th</sup>, 2023 11:00am – 12:30pm https://weillcornell.zoom.us/j/92812036154 Meeting ID: 928 1203 6154 Password: 12345

1.5 CE credit available to WCM Department of Psychiatry full time and voluntary faculty Psychologists and Social Workers who sign in with their full name, attend the majority of the lecture and complete a survey which will be emailed following the completion of the lecture. Note the survey must be completed within 30 days of the lecture. Please contact Stephanie Harper at sth4009@med.cornell.edu for additional CE information

#### SPEAKER DISCLOSURE:

Dr. Solomonov has no relevant financial relationship(s) with ineligible companies to disclose and DOES NOT INTEND to discuss off-label or investigational use of products or services.

Nili Solomonov, PhD is an Assistant Professor of Psychology in Psychiatry, a clinical psychologist, and a psychotherapy researcher. The overarching goal of Dr. Solomonov's research is to develop neuroscience-informed scalable psychotherapies for mid/late-life and postpartum depression, tailored to individuals' specific needs and circumstances. To this end, she applies computational and neuroimaging techniques to identify brain-based and clinical mechanisms of action and develop interventions that target these mechanisms. Dr. Solomonov is a PI on a NIMH K23 Patient-Oriented Career Development Award, a NIMH R01 grant, and several foundation grants. She published over 60 peer-reviewed publications and book chapters, including high-impact journals such as World Psychiatry, JAMA Psychiatry, JAMA Network Open, and Molecular Psychiatry. She also received prestigious awards from national and international organizations and presented talks and workshops in many national and international meetings.

#### Abstract:

Psychotherapy is effective in reducing depression. Yet, ~50% of patients remain symptomatic at treatment end. Identifying brain-based and clinical mechanisms of action that underlie symptomatic improvement can guide the development of neuroscience-informed, scalable and effective interventions. Dr. Solomonov will present studies conducted using imaging and computational approaches to detect mechanisms of action and improve psychotherapies. Studies will focus on understudied populations, including middle-aged and older adults, mothers with postpartum depression and healthcare workers suffering from depression and anxiety.

#### **Learning Objectives:**

- 1. Identify the mechanisms of action in psychotherapies for mid/late-life and postpartum depression
- 2. Identify risk factors and predictors of responses to psychotherapies in depressed individuals
- 3. Translate research findings to psychotherapies for depressed individuals

### References:

- Solomonov, N., Lee, J., Banerjee, S., Chen, S. Z., Sirey, J. A., Gunning, F. M., Liston, C., Raue, P. J., Areán, P. A., & Alexopoulos, G. S. (2023). Course of subtypes of Late-Life depression identified by bipartite network analysis during psychosocial interventions. *JAMA Psychiatry*, 80(6), 621. <a href="https://doi.org/10.1001/jamapsychiatry.2023.0815">https://doi.org/10.1001/jamapsychiatry.2023.0815</a>
- Solomonov, N., Kanellopoulos, D., Grosenick, L., Wilkins, V. M., Goldman, R., Ritholtz, S., Falk, A., & Gunning, F. M. (2022). CopeNYP: a brief remote psychological intervention reduces health care workers' depression and anxiety symptoms during COVID -19 pandemic. World Psychiatry, 21(1), 155–156. https://doi.org/10.1002/wps.20946
- 3. Solomonov, N., Lee, J., Banerjee, S., Flückiger, C., Kanellopoulos, D., Gunning, F. M., Sirey, J. A., Liston, C., Raue, P. J., Hull, T. D., Areán, P. A., & Alexopoulos, G. S. (2021). Modifiable predictors of nonresponse to psychotherapies for late-life depression with executive dysfunction: a machine learning approach. *Molecular psychiatry*, 26(9), 5190–5198. https://doi.org/10.1038/s41380-020-0836-z
- 4. Lynch, C. J., Power, J. D., Scult, M. A., Dubin, M. G., Gunning, F. M., & Liston, C. (2020). Rapid precision functional mapping of individuals using Multi-Echo FMRI. *Cell Reports*, 33(12), 108540. <a href="https://doi.org/10.1016/j.celrep.2020.10854">https://doi.org/10.1016/j.celrep.2020.10854</a>
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