

Call for Proposals – Summer 2020

Who we are. The Reversibility Network is a National Institute on Aging (NIA)-funded* network of researchers whose mission is to advance research around remediating the effects of early life adversities (ELA) in mid- and later life (Grant: R24AG065174). This growing network of interdisciplinary ELA experts seeks to foster research that will fundamentally develop and prepare the field for greater scientific discoveries, with a particular focus on the interaction between ELA and interventions for population and patient benefits. Furthermore, we aim to raise awareness in the field about the importance of ELA, ELA measurement, ELA mechanisms, and effective interventions. Specific aims for this call for research proposal are in two themes: (1) ELA mechanisms and (2) ELA interventions. See below for additional detail.

Study PIs: [Eric B. Loucks, Ph.D.](#), Associate Professor, Department of Epidemiology and Dept of Behavioral and Social Sciences, Brown University School of Public Health; [Keith Godfrey BM, FRCP, Ph.D.](#), Professor of Epidemiology and Human Development, University of Southampton; [Margaret Sheridan, Ph.D.](#), Assistant Professor, Department of Psychology and Neuroscience, University of North Carolina, Chapel Hill

RFA Guidelines and Terms of the Award

2020 Grant Cycle

Funding Amount: \$50,000 available*; to be issued in sub-awards of \$10,000-\$20,000

Research Proposal Deadline: 4:30 p.m., Friday, August 14, 2020

Timeline: Expected start date is January 1, 2021, with the awards running one year in length.

* The Reversibility Network pilot award funding mechanism offered through NIA grant #R24AG065174 does not fund indirects. All costs must go directly towards the research project.

A growing body of evidence, both animal and human, highlights the long-term liability that early life adversities (ELAs) – such as low socioeconomic status, adverse early experiences (e.g. abuse and neglect), and malnutrition – confer on mental and physical health outcomes in late life. In addition, novel behavioral interventions aimed at increasing health and wellbeing during adulthood are being developed, which may be effective when provided in mid- and later life for people who experienced ELA. **However, midlife interventions which directly test whether interventions can modify the processes that account for the long-term impact of ELAs on later life health remain minimally researched, representing strong potential for discovery.** Finally, newer methodologies (e.g., neuroimaging, gene expression, epigenetics, ecological momentary assessment) offer significantly greater opportunities to illuminate mechanisms linking ELA to adult outcomes. **Increased understanding of mechanisms will improve our ability to develop more informed and effective interventions.** In sum, this is a particularly ‘ripe’ time for deepening and extending an

interdisciplinary research network on reversibility/remediation for early life adversity (ELA), an opportunity the Reversibility Network aims to foster.

The Reversibility Network will foster research that will fundamentally develop and prepare the field for greater scientific discoveries, with a particular focus on the interaction between ELA and interventions for population and patient benefits. Furthermore, we aim to raise awareness in the field about the importance of ELA, ELA measurement, and effective interventions. This is a call for research proposals on two themes:

1. **ELA Mechanisms:** Catalyze research on key mechanisms through which ELA influences health and aging outcomes (e.g. biological, behavioral, socioemotional) in midlife. Target mechanisms should be evaluated as to whether they are both malleable to interventions and influence aging outcomes, and projects should be designed to contribute to our understanding of causal pathways.
2. **ELA Interventions:** Foster research on: (a) Midlife effects of early life interventions (e.g. preconception through adolescence) for those exposed to ELA; (b) Midlife interventions for those who recall ELA and/or were objectively exposed to ELA. Intervention studies should be designed to test mechanistic hypotheses about malleable targets, utilizing the Science of Behavior Change (SOBC) mechanisms-focused approach.

Examples of possible research projects include: (1) collection of new data (e.g. performing midlife interventions, or contacting completed intervention study participants to ask about ELA or adult outcomes), (2) analyses of archival data, or (3) systematic reviews and meta-analyses.

The approach to achieve these aims will be to extend an interdisciplinary, international Research Network on Interventions to Reverse Effects of Early Life Adversity (aka “**Reversibility Network**”) that was developed over the past five years. During the coming year, the Reversibility Network will **focus on ELA research capacity and community building**, which will cut across the two themes outline above.

One of the major initiatives is a call for Pilot Research Proposals (\$10,000-\$20,000 grants, from a pool of \$50,000), with an emphasis on mid to later life interventions which take into account, and measure, the impact of ELA. These projects should advance the stated goals of this network, and have the potential to lay the foundation for a larger research grant application. Projects should support researchers with expertise in aging, intervention, or ELA, addressing the goal of increasing research into mid-later life reversibility of the impact of ELA on aging.

Proposals should be two pages long, with an NIH-formatted Specific Aims page, and a second page providing further detail on the Methods. In the Methods section, please give careful consideration to rigorous measurement of ELA measures, ELA mechanisms, design of the intervention, as well as statistical analysis and power considerations where appropriate. Successful applicants will participate in a virtual grantees meeting and be welcomed to join additional activities of the Reversibility Network.

Applications with fundable scores will be required demonstrate human subjects research compliance to NIH standards prior to receiving funding. Additionally, please include a CV and budget with justification.

Please submit research proposals by Friday, August 14, 2020 by email to: Senior Project Coordinator, [Frances Saadeh@brown.edu](mailto:Frances_Saadeh@brown.edu). Subject line should read: “*Reversibility Network – 2020 Proposal submission – {PI Last Name}*”