

INNOVATION LAB:

Staying Power: Developing Lifestyle Interventions that Last

Why this topic?

Ample research is aimed at achieving weight loss, fitness habits, and improved metabolic profile. A wide range of intervention types have significant short-term effectiveness but few have proven long-term success. One can accept this frustrating reality represents a struggle against our human nature to return to ingrained patterns, or propose that we are simply not adequately focused on the next step which is supporting change, preventing relapse, and exploiting novel tools to do so.

A focus on sustaining the effects of obesity, fitness, and lifestyle interventions is an essential extension of the majority of studies that focus on 12 to 16 week interventions in narrow populations, with comparatively short follow-up. While longer, more naturalistic trials are being conducted, the need remains for new research on retaining or enhancing the benefits of interventions over time and on supporting lifestyle choices of healthy adults. This requires a next generation of research on promoting and sustaining healthy lifestyles. Completely new modes of intervening, measuring behaviors and outcomes over time, and collaborations across disciplines will be essential to achieving breakthroughs.

What is an Innovation Lab?

Innovation Lab methodology is designed to counteract the myriad forces that tend to favor monodisciplinary, incremental science. Innovation Labs move quickly but deliberately to scope the problem and gather data, and then to generate novel combinatorial solutions, “stretch ideas,” and to create and refine solutions/research proposals with real-time peer-review. The idea is to develop sketches of high-impact, novel proposals within five days. Throughout the process, we focus deliberately on creatively combining expertise, lateral thinking, paradigm disruption, and the amplifying trust and shared understanding among participants.

The Innovation Lab on *Staying Power: Developing Lifestyle Interventions that Last* will be facilitated by an interdisciplinary team of mentors who are experienced researchers and mentors. Stay tuned to the website as we announce experts and provocateurs who will be joining us for the week.

Innovation Labs bring together scholars from across the CTSA network, facilitators, and mentors who guide participants through the early stages of proposal development. The lab Scholars need not bring “canned” research ideas to the Lab. Rather, teams and ideas are developed through real-time peer review. Ideas rapidly iterate, in public, with the benefit of constant commentary. A small team of scientific experts play dual roles of coaches and reviewers, reinforcing novel ideas while balancing them with the realities of funding and scientific politics.

Timeline

- February 9, 2018 Application submission deadline
- Early-March Applicants selected and notified of outcome
- April 23-27, 2018 *Innovation Lab*, Warrenton, VA

Applicant Eligibility

Any early career investigator intrigued by seeking new approaches to tackle the challenge of building interventions that last are encouraged to apply. Innovations labs thrive on diversity of disciplines and perspectives. We need broad representation across areas like these:

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| ▪ Bariatrics | ▪ Health economics |
| ▪ Behavioral economics | ▪ Health services |
| ▪ Behavioral intervention | ▪ Injury prevention |
| ▪ Biostatistics / Mathematical modeling | ▪ Large data (state, national, health systems) |
| ▪ Body composition | ▪ Metabolism |
| ▪ Chronic disease management | ▪ Microbiome / Fecal transplant |
| ▪ Community based research | ▪ Nutrition |
| ▪ Complementary and alternative medicine | ▪ Patient reported outcomes |
| ▪ Computational modeling | ▪ Payors / Health plans |
| ▪ Drug development / Repurposing | ▪ Physical activity |
| ▪ E-health | ▪ Population health |
| ▪ Exercise physiology | ▪ Psychology / Psychiatry |
| ▪ Genetics | ▪ Remote measurement / Tracking devices |

Imagination is key – early career investigators from any discipline and background who can bring a novel look at the challenge will enrich the work of the Innovation Lab.

Applicants should be early stage investigators (NIH-defined as “within 10 years of completing his/her terminal research degree or is within 10 years of completing medical training (residency or fellowship)”) who are emerging as independent scholars. We anticipate that many participants will currently hold their first NIH R01 or equivalent. However, to ensure content coverage and participant diversity, we will recruit a broad range of early career scholars from diverse disciplines. Women and under-represented minorities are especially encouraged to apply. We are committed to providing reasonable accommodations for qualified individuals with a disability.

The *Innovation Lab* is an intensive, residential workshop. By submitting an application, you are committing to complete all five days of the workshop. Travel and lodging will be provided in accordance with NIH policy.

Submitting an Application

To apply, complete the [application form](#), where you will upload your:

- [NIH](#) (or [NSF](#)) Biographical Sketch
- [NIH](#) (or [NSF](#)) Other Support
- Answers (no more than 200 words each) to each of the following questions:
 - What would you personally and professionally gain from participating in this Innovation Lab?
 - What is your personal experience with working in teams? What strengths do you bring to a team effort?
 - How would you describe your ability to explain your research to non-experts?
 - The Innovation Lab environment is especially suited to individuals who are willing to step outside their particular area of interest or expertise, who are positively driven, who enjoy creative activity, who can think innovatively and who can settle in easily in the company of strangers. Please describe an experience you have had in a comparable environment.

This *Innovation Lab* is being funded by NCATS both to advance collaborative science on the specific grand challenge topic (curbing opioid misuse) and to provide a state-of-the-art evaluation of Innovation Labs as a potential best practice for enhancing collaboration in the CTSA network. Details of the research aspects of the project are provided in a consent form at the beginning of the REDCap application form.

Review and Selection of Innovation Lab Participants

All complete applications received by the deadline noted above will be reviewed. We anticipate between 1 in 2 and 1 in 8 applicants will participate in the Innovation Lab. Although expertise and merit will be emphasized in the review process, we will also select to enhance diverse representation across disciplines and demographics.

Leadership

These Innovation Labs to Drive Early Career Grants (supported by the National Center for Advancing Translational Sciences of the National Institutes of Health UL1TR001412) are directed by:

Timothy F. Murphy, MD
Senior Associate Dean for Clinical and Translational Research
Director, Clinical and Translational Science Institute
University at Buffalo

Katherine Hartmann, MD, PhD
Associate Dean for Clinical and Translational Scientist Development
Director of Education, Training and Career Development for VICTR
Vanderbilt University

Larry Hawk, Jr, PhD
Professor, Department of Psychology

College of Arts and Sciences
University at Buffalo

Further information

If you are selected for the Innovation Lab, we will cover lodging, airfare and per diem for the immersive Innovation Lab.

For administrative questions/issues, contact Erin O'Byrne at erinoby@buffalo.edu.

For scientific inquiries, contact Larry Hawk at lhawk@buffalo.edu.