



About THINC

The Therapeutic Innovation Center at Baylor College of Medicine (THINC@BCM) is a team of interdisciplinary scientists nucleated around a central idea: discovery of the fundamental mechanisms of gene control can provide therapeutic insights in a wide range of human diseases. THINC integrates 3 key pillars (genetics/genomics, computation, and chemistry) in order to bring together and amplify BCM and Texas Medical Center (TMC) talent, facilitate discovery, provide leadership, and generate therapeutic solutions in this important area of science.

The study of gene control is at the center of life science and medicine. Proper control of when genes turn on and off is essential to normal health, and a wide variety of human pathology can be attributed to aberrant control of gene expression. Indeed, basic and translational discoveries in gene control have led directly to new therapies and improvements in ameliorating disease. After a century of important study into the fundamentals of gene control, new technologies are bringing an inflection point to this cornerstone of biomedical science. Breakthroughs in genetics, computation, chemical biology, and other disciplines are priming our ability to study and manipulate gene control in key areas like transcription, chromatin, and RNA processing. **The mission of THINC@BCM is to bridge innovation in the science of gene control with therapeutic development.** In the context of this mission, THINC seeks to:

- Drive rigorous and focused therapeutic discovery campaigns against targets and diseases specifically where aberrant gene control is a culprit.
- Form an academic nexus of expertise in gene control for interactions with pharma, biotech, venture capital, and other stakeholders.
- Recruit leaders and technology innovators in the fields of RNA and chromatin biology to BCM and TMC.
- Create technology platforms that enable development of small molecule probes in the areas of transcription, chromatin regulation, RNA processing, and protein translation.
- Provide a forum for education in therapeutic development and the science of gene control.

Becoming a faculty member of THINC

THINC projects are driven by the overarching goal of generating clinical leads for testing therapeutic hypotheses in humans. Therapeutic discovery is an exceptionally challenging endeavor and requires researchers with collective expertise from the bench to the bedside. Membership in THINC will place BCM faculty and their trainees within a dynamic community of diverse scientists and physicians who are actively innovating the science of drugging diseases of aberrant

gene control. To achieve this, THINC projects will be bolstered by expertise and enabling technologies within three scientific pillars (genetics/genomics, computation, and chemistry).

Membership within THINC is available by application on a rolling basis. Two types of membership are possible. *Associate Members* are valued members who regularly participate in THINC scientific meetings and are eligible to submit proposals for THINC seed awards in response to Requests for Applications. *Core Members* are expected to contribute expertise and capabilities within one of the pillars. In addition to the privileges of Associate Membership, Core Members will have greater access to THINC-based technology platforms.

Ways to interact with THINC

- Apply for a THINC seed award — These awards will provide both funding and THINC technological platform support for therapeutic proof of concept experiments. Requests For Applications (RFAs) will be released fall 2018.
- Present your project idea at a therapeutics trainee round table as a great way to get feedback and meet other trainees with diverse backgrounds.
- Attend our annual therapeutics symposium, weekly RNA club, special research seminars, or trainee round tables (visit www.thincbcm.org/events).
- Join the team — we provide exciting career opportunities at the interface of academia and industry and the chance to work with a diverse group of scientists committed to therapeutic discovery (www.thincbcm.org/careers).

