

If you want to go fast, go alone
If you want to go far, go together

# THHI-building - Call for Multidisciplinary, Thematic Research Teams

## **Background**

The *THHI building for Transformative Biomedical Sciences and Engineering* is a new research institute for collaborative research in the realms of Human Health, Biomedical Sciences and Engineering.

The Institute is planned to serve as a home for multidisciplinary, thematic research teams, composed of investigators from multiple faculties and academic units, that wish to work together, under the same roof, and collaboratively tackle a major scientific problem or grand challenge in the aforementioned realms.

In the first phase, two floors of lab space will be completed, with the aim to house one thematic research team on each floor. The completion of this first phase is scheduled for December 2026.

The selection of thematic research teams to house the building will be based on a competitive process as outlined below.

# This document is a call for proposals for thematic teams that that wish to take up residence in the THHI building.

#### **Theme**

The core theme of the team should be a fundamental scientific problem or important challenge that stands to gain significantly from a multi-disciplinary approach.

The theme should have a life span of at least one decade, preferably longer.

#### Team composition

A thematic research team can be of any size, but must include at least four research groups composed of principal investigators (PIs), staff and students

Up to seven of the teams' PIs (and their staff and students) will be full-time residents of the THHI building.

A thematic research team should include at least two positions for yet-to be-recruited new faculty (PIs), which will thereafter be housed in the space allocated to the thematic group in the THHI building.

Thematic teams must be multidisciplinary in nature, and should ultimately include PIs from at least three academic units.

## Occupancy

Each thematic research team will occupy one floor.

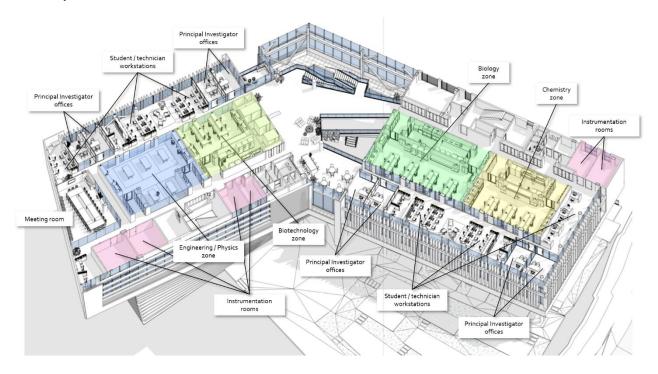
At least three research groups of each theme will be expected to relocate fully to the space allotted to the team in the THHI building (*resident groups*). The rest of the space in each floor will be reserved for:

- 1) New faculty (PIs) new team members recruited to the Technion that will create resident groups.
- 2) Team partners investigators from the campus at large hosted within the thematic team space on a temporary basis, as required by needs and developing research directions.

At steady state, the floor allocated to each team will be occupied by at least seven resident groups (including new Faculty). Note that each floor was designed to accommodate about seven resident groups, depending on the mix of experimental and computational/theoretical groups.



#### Floor layout



Each team will receive, share and collectively manage a common space, composed of 'zones' grouped by experimental requirements (chemistry, biology, biotechnology, physics/engineering, theory/computation).

The biology and biotechnology zones will include work benches, cell culture and instrumentation rooms for biological work; the chemistry zone will be set up with numerous fume hoods and dedicated spaces for synthetic and analytical chemistry. The physics/engineering zone will contain spaces for optical tables, sensitive instruments and advanced setups.

Each floor will contain eight PI offices, eight lab manager or engineer workspaces, workstation spaces for 48 postdocs/students (beyond workbench places), six rooms for dedicated instrumentation, a meeting room, and a lobby with allotted spaces for discussions, coffee and light meals.

A 3D floor walkthrough can be found here.





In addition, the building's ground floor will include an auditorium, lobby and open spaces for meetings and conventions.

**Technion - Israel Institute of Technology** Technion City, Haifa 3200003



Within the floor allotted to each team, space will be allocated <u>by need</u> (biological work, chemistry, optical/physical, fabrication, cell culture etc.) rather than allocating arbitrary fixed spaces to each PI and his/her group.

An initial space allocation plan is to be included in the full proposal.

In this allocation plan, space is to be reserved for new investigators recruited down the road, so at steady state the floor will fully house at least seven resident groups.

Additions and future changes in team composition and investigator group sizes, including hosting of external investigators, are to be accommodated by space reallocations within teams' floor.

The overall floor plan is final; only minor adjustments will be allowed when taking up residency.

As noted above, the space will be managed collectively by the thematic team.

# Proposal and selection process

The selection process will be kicked-off with a campus-wide event aiming to expose the building and its concepts to interested investigators. This event will also include opportunities for individual investigators with exciting ideas for research themes to pitch these ideas to the attending audience and potential future partners.

Potential thematic teams will then be invited to submit a non-committing letter of intent (LOI) to THHI management, prepared using the attached form. The letter of intent must be approved by the Deans of all the academic units to which the applicants belong. The deadline for LOI submission is **July 31, 2024**.

LOIs will be discussed by Council for Science and Engineering of Biology and Medicine which will consider each proposal and ultimately provide a recommended ranking of the proposals. The ranked list will be forwarded to the President of the Technion.

The President, together with other management members as deemed appropriate, will decide on the proposals selected for the next step, which is the submission of full proposals.

Teams whose LOIs are selected, will then be invited to submit full proposals prepared according to instructions and forms that will be distributed separately. The deadline for the submission of final proposals is November 30, 2024.

At all times, team representatives and prospective PIs will be welcome to consult with THHI management on expectations, learn more about the Institute, its design and its facilities, raise questions and secure answers to the best of the ability to provide these.

THHI staff will assist fledgling teams in setting up activities such as seminars, meetings and retreats.

# Criteria for selection

The research theme is expected to be related to Human Health, Biomedical Sciences and Engineering.

Priority will be given to themes perceived as compatible with Technion strengths, and as such likely to create an edge on a national and international scale.

Preference will be given to thematic teams with diverse compositions in terms of core disciplines (scientific, engineering, clinical).

Preference will be given to teams composed of PIs with demonstrated accomplishments and collaborations, as well as demonstrated ability to secure research funding.



Priority will be given to teams in which the PIs have demonstrated leadership qualities, are willing to take initiatives and promote collaborative work within the team.

## Evaluation of full proposals and decisions

The proposals will be evaluated by a committee composed of members of the Council for Science and Engineering of Biology and Medicine, excluding members who are part of submitted proposals, as well as external reviewers from academia, the industry and from medical fields.

The Committee will evaluate the proposals and prepare a prioritized recommendation that will be passed to the President of the Technion and Technion management for approval.

#### Clarifications

The Technion is not obliged to populate all floors at once, and maintains the prerogative to select less than two themes during this first round of proposals.

The Technion will participate in the relocation costs of investigators belonging to the selected proposals who commit to relocating to the THHI building.

The population of the building with thematic groups will be carried out from the start in tight collaboration with Faculty Deans, in particular following the completion of the prioritization process and the naming of specific PIs belonging to the high priority thematic groups.

For further information, please contact Prof. Noam Ziv (<u>dsvp.mlse@technion.ac.il</u>) or Dr. Merav Saker (<u>meravs@technion.ac.il</u>)