# Picker Interdisciplinary Science Institute

The mission of the **Harvey Picker Interdisciplinary Science Institute** at Colgate University is to foster the creation of new knowledge that is obtainable only through the development of sustained interdisciplinary research. The Institute supports internal and external collaborations among faculty who bring expertise from different disciplines to bear on current and emerging scientific problems that remain intractable to the methods used within a single discipline. The Institute also encourages interdisciplinary approaches to learning through innovative curricular and research opportunities for students that may arise from the pursuit of interdisciplinary research projects.

# Request for Minor Grant Proposals (up to \$30,000) Proposal: Deadline January 26, 2024

Minor Grant Proposals are solicited for funding from the Picker Interdisciplinary Science Institute (Picker ISI) for 2024-2025 academic year. Projects that have a budget of no more than \$30,000 and a duration of up to two years will be eligible for consideration. Applicants are encouraged to discuss possible projects with the Institute Director (Ahmet Ay) or members of the Executive Advisory Committee (listed below) before beginning proposal preparation. Descriptions of previously funded projects are available at our webpage:

http://pickerisi.colgate.edu/

#### PICKER ISI MINOR GRANT PROPOSALS

The Picker ISI supports interdisciplinary research projects and collaborative activities that enhance interdisciplinary research and teaching in science and mathematics. Interdisciplinary research projects and collaborative activities may include:

- ♦ low-cost research projects
- sponsoring workshops
- \* activities that support diversity, equity, and inclusion in interdisciplinary science
- inviting speakers
- \* travel or course release to explore potential projects
- travel or course release to develop an interdisciplinary science course
- or other interdisciplinary scholarly initiatives

These grants are awarded once a year following the February meeting of the Picker ISI Executive Advisory Committee. The funding can begin as soon as March. One-year grants end on August 31, 2025; two-year grants conclude on August 31, 2026. Budget categories may include travel, lodging, living expenses, release time for Colgate faculty, supplies, services, fees, wages and fringe benefits, consultant fees, software, books, and equipment.

While the guidelines in this document aim to provide clear instructions, it's impossible to anticipate every situation. When in doubt, seek guidance from the director.

#### MINOR GRANT GUIDELINES

Minor grant proposals should be led by tenure-stream or tenured faculty from any Division at Colgate University.

## A. Interdisciplinary Research Project

Two criteria are the primary considerations for **interdisciplinary research project** support from the Institute:

- **I.** The proposed project must be scientifically sound. It should result in significant contributions to scientific knowledge (e.g., peer-reviewed publications) or have the potential for transformative or groundbreaking scientific results. Ambitious and innovative project proposals are welcome. The term science is interpreted broadly, yet rigorously, as methods that increase knowledge through evidence-based inquiry, including experimental, mathematical, and/or simulation evidence.
- **II.** The proposed project must involve a scientific question/problem that requires an interdisciplinary approach. It is recognized that the term "interdisciplinary" is not easily defined. The spirit of this criterion is that a proposed project should investigate a topic that an individual investigator could not satisfactorily study alone. The proposed project should foster collaboration between investigators with complementary expertise to take advantage of a synthesis of training by opening a new area of study or tackling existing problems in creative new ways. Collaborative relationships may be intra- or interinstitutional. Collaborators may be from the same academic department or program; however, distinctions between the expertise each brings to bear on the proposed project and the potential advantages of synthesizing these perspectives must be clear.

#### Additional Characteristics Used for Prioritizing Projects Include:

- The proposed project should have reasonable potential for sustained activity or impact beyond the period of institute support (e.g., peer-reviewed publication(s), external grant funding, or an ongoing contribution to the curriculum).
- The proposed project should involve students to the extent appropriate in order to enhance interdisciplinary learning.
- Satisfactory progress on the proposed project would not be possible through other Colgate funding sources (e.g., departmental funds, Research Council funds, etc.).

#### **B.** Collaborative Activities

To be eligible for support from the Institute, **proposed activities** must satisfy the following criteria:

- **I.** The proposed activity must have a clear interdisciplinary element and support the mission and goals of Picker ISI.
- II. The proposed activity must have an impact beyond the lifetime of the grant. For example, it is expected that the developed course will continue to be taught after the

grant period concludes.

**III.** The proposed activity should request funding from any other readily available internal sources of funds (e.g., departmental, divisional, Research Council, etc.).

#### SUPPORTED FUNDING CATEGORIES

- Travel for participants to come to Colgate and for faculty and students to travel as part of the project and to disseminate the project results.
- Release time for Colgate faculty (budgeted as \$20,000 per course; maximum one course per participant per year). The justification for course release time should be consistent with the mission and objectives of the Picker ISI.
- Supplies and general operating costs.
- ❖ Wages and fringe benefits for staff. Staff are paid as Colgate employees. They are typically on campus but, in special circumstances, can be at a remote location.
- ♦ Undergraduate wages and salaries that cannot be funded by other Colgate sources.
- Consultant fees.
- Fees for access to equipment or data.
- ❖ Equipment that is clearly required for the proposed project/activity will be considered and should be discussed with the director. Large equipment expenses may be better provided through external funding (e.g., NSF, Research Corp., etc.).

**Note:** Please contact the director if you have questions about additional funding categories not listed here.

#### PROPOSAL GUIDELINES FOR MINOR GRANTS: Deadline January 26, 2024

Proposals should be well-written and clear and avoid excessive technical jargon, ensuring that they are understandable to non-experts. Each proposal should include the following:

- **1.** A cover page listing project/activity title, principal investigators, and affiliations.
- **2.** A one-paragraph project/activity summary.
- **3.** A project/activity narrative (limit: 1000 words, 12-point font, references can be separate). Please bear in mind the variety of backgrounds of the committee members (listed below). While ideas and methods that frame the proposal must be rigorous and academically sound, the narrative should be clear and understandable to faculty in other disciplines.
- **4.** A brief statement concerning how the proposed research/activity relates to your longer-term research and/or teaching plans. The statement should be no more than 250 words.
- **5.** A timeline indicating how research/activity during the grant period will be organized, what main tasks will be accomplished, and the estimated date for completion of the project or activity (one page at maximum).

- **6.** A detailed budget breakdown, itemizing expenses for each category and discussing the anticipated timing for any course release. The proposed budget must list actual expenses by category rather than approximate costs. Do not guess; consult suppliers' catalogs, travel agencies, and so forth. Justify each budget request explicitly, showing how they relate to the proposed research/activity. See the guidelines provided by the Office of Corporation, Foundation, and Government Support for budgets and travel: <a href="https://www.colgate.edu/offices-and-services/grantsinformation/budgetguidelines">https://www.colgate.edu/offices-and-services/grantsinformation/budgetguidelines</a>
- **7.** A two-to-three-page CV (<u>SciENcv</u> or similar) of PI(s) and other personnel. Longer CVs will not be accepted.
- **8.** Supporting letters or other documents as appendices not to exceed five pages.
- **9.** Previous Grant Support and Other Grant Applications. List previous grants received from the Picker ISI in the past and indicate the results you obtained from them (i.e., papers and publications, presentations, or additional grant proposals). List outside grants and current or pending outside support relating to your proposed project. Indicate other attempts to obtain funding within the University.

#### Notes:

- ❖ If a course release is requested, the applicant should notify their department chair or program director before submitting the grant. The Picker ISI director will inform your department chair (or program director) and division director about the leave request.
- The Executive Advisory Committee's recommendations for funding are subject to final approval by the Dean of Faculty/Provost and President.
- ❖ Changes to Minor Grants awarded by the Picker ISI must be approved in advance by the director if the changes exceed 10% of the total budget awarded by the Institute. The limitations that apply to initial grant applications also apply to requests for changes to minor grants following the initial award.
- ❖ Minor Grant recipients must submit a short (1–2 page) summary of the outcomes resulting from their project/activity funding within four months of the completion of their grant (December 31, 2025, for one-year grants, and December 31, 2026, for two-year grants). Additionally, faculty members involved in a research project are expected to share their findings at a divisional colloquium or a similar event on campus.
- ❖ In some rare cases, the committee may consult external reviewers for proposal evaluations. The director may request a list of people who should not be reviewers (due to a conflict of interest) or who would be good reviewers.

Proposals are due on January 26, 2024. Awards will be made in March. Please send proposals as PDF files by email to Char Howard at <a href="mailto:choward@colgate.edu.">choward@colgate.edu.</a>

### Picker Interdisciplinary Science Institute Executive Advisory Committee 2023-2024

Ahmet Ay (Director; Biology and Mathematics)

Tim McCay (Biology)

Jacob Goldberg (Chemistry)

Aaron Gember-Jacobson (Computer Science)

Michael Loranty (Geography and Environmental Studies)

Karen Harpp (Earth & Environmental Geosciences)

Joe P. Chen (Mathematics)

Jeff Bary (Physics & Astronomy)

Yukari Hirata (Division of Arts and Humanities)

Janel Benson (Division of Social Sciences)

Rebecca Upton (Division of University Studies)

Christian DuComb (Associate Dean of Faculty; ex-officio)

Laura Festine (Director of University Grants and Sponsored Research; ex-officio)