

Penn Colton Center for Autoimmunity

Discovery Pilot RFA for FY2026

Overview

The Colton Center for Autoimmunity at Penn is dedicated to catalyzing new discoveries about fundamental mechanisms of immune function relevant to human autoimmune disease with particular emphasis on avenues that will result in novel therapeutics. Disease areas of interest include all autoimmune diseases, as well as inflammatory and rare diseases with relevance to mechanisms and/or treatment of autoimmunity. There is particular interest in learning from the "human experiment" of perturbing immune pathways in patients with autoimmune disease. The latter offers opportunities to partner with Penn resources including Immune Health, an infrastructure that facilitates deep immune profiling in well-defined patient cohorts, as well as existing biobanking efforts and large-scale data analytics including artificial intelligence programs at Penn. Applicants are encouraged to leverage these, and other, institutional strengths in human immunology and disease cohort profiling.

The purpose of this Request for Applications (RFA) is to invite proposals for high-risk, high-reward pilot grants with the goal to advance mechanistic understanding and treatment of autoimmunity through support of bold new ideas. Indeed, within the focus on the "human experiment" remains an emphasis on fundamental, mechanistic science. Projects will be evaluated based on several factors including innovation, potential for mechanistic insights, and impact on new treatment opportunities. Although excellent science will be the highest priority, projects that identify or develop new intellectual property, develop or exploit new treatments or interventions for mechanistic discovery, introduce new collaborations and are responsive to an upcoming RFA from NIH or other funding agency, future NIH Concept or other future funding mechanisms will be given preference.

Examples of areas of potential interest for autoimmunity include but are not limited to:

- Discovery or defining mechanism(s) and/or development of new therapeutic targets
- Studies that partner with <u>Immune Health</u>, biobanks or other institutional infrastructure to develop cohort-based mechanistic discovery, biomarker and/or precision medicine studies
 - Additional funding of up to \$25K is available for projects that focus on novel autoimmune cohort creation and partner with Immune Health
- CRISPR/Cas9, genetic, and/or small molecule screens related to autoimmunity



- Use of genetics, genomics, high-dimensional immune profiling together with artificial intelligence, machine learning, and large-scale informatics approaches to identify novel therapeutic pathways and/or targets
- New technological approaches including novel applications of gene, RNA, or drug deliver, synthetic biology, and immune system engineering
- Mechanistic discovery in clinical trials of first in human proof of concept or first application of a drug in a particular autoimmune disease

Areas considered to be <u>non-responsive</u> for this request include:

- Pure basic immunology with no plan for patient impact or intellectual property
- Disease types other than autoimmune diseases, inflammatory and/or rare diseases with relevance to mechanisms and/or treatment of autoimmunity
- Late-stage clinical trials
- Development of tool compounds or biosimilars

Funding decisions will be made by the Colton Center for Autoimmunity Leadership Council together with the Advisory Committee of the Colton Center, comprised of academic and pharmaceutical industry scientists, as well as life science investors and technology transfer experts, with confidentiality maintained during review and assessment of proposals. There will also be a final administrative review of applications, which will include feedback from the Penn Center for Innovation.

A specific plan should be articulated on the immunological question that will be developed and executed. It will also be important to describe how the proposed studies will position the investigator(s) to compete more effectively for a future application and/or translated into potential intellectual property development opportunities — successful awardees will interface directly with the Penn Center for Innovation.

Applicant Eligibility

All Penn, CHOP, and Wistar faculty (assistant, associate and full professors, and research track) are eligible to submit proposals. Junior and early mid-career (assistant and associate level) faculty are particularly encouraged to apply. Multi-PI applications, including from inter-disciplinary investigators, are acceptable.



Awards

It is anticipated that 5-6 Pilot Grants will be awarded at \$150,000 in direct costs (up to \$175,000 if submission includes cohort creation). We anticipate announcing award winners and disbursing funds by March 2026.

Submission Instructions and Guidelines

New Submissions

- 1. Each investigator may submit only one proposal per grant cycle.
- 2. The proposal should include:
 - Cover page with Name, Faculty Title, Department (Section or Division, if applicable), Title of Proposal, Type of Grant, and a non-confidential description of the project (limit to 3 lines)
 - o Specific Aims
 - Background and Relevance to Autoimmune or Inflammatory Disease(s)
 - Innovation
 - Research Strategy
 - Milestones (month 6 and 12)
 - Lay Summary of Project and Expected Findings (~100-150 words)
 - Plan for Translational and Intellectual Property Development
 - Any specific inventions, discoveries, materials, software or data that would need to be utilized in the performance of the proposed project
- 3. Written proposal (not including cover page) should be limited to 2 pages and use single spacing, 11-point font, 0.5-inch margins.
- 4. Each investigator should attach a Letter of Support from their Department Chair approving their proposal (not included in page count).
- 5. Please limit Figures to one page, with 0.5-inch margins (not included in page limit)
- 6. Please limit References to one page, with above margins (not included in page limit)
- 7. On a separate single page (form provided below), please provide a budget, including allocation for salaries, supplies, and other necessary items, with budget justification. PI salaries are restricted to no more than 5% of total costs requested. Salaries for other personnel are permitted.
- 8. Append NIH biosketch (5-page max) of PI and other key personnel.
- 9. Prepare entire application as <u>one (1) PDF document</u> containing all sections and with the file name <u>PILastName ColtonDiscoveryPilot2026.pdf</u>
- 10. Applications are due no later than **11:59pm on Friday, December 5, 2025**. Applications must be submitted directly using this form. Please direct questions to



Lisbeth Dennis, Director of Programming and Administration (dennisls@pennmedicine.upenn.edu).

Renewal Submissions (Competitive)

In addition to new proposals, the Colton Center will accept competitive renewal applications from prior year awardees seeking a second year of support. Renewal applications must follow the same format and page limits as new submissions and include the following additional elements:

- 1. Progress Summary Concise status update against the original Specific Aims and 6- and 12-month milestones;
- 2. Preliminary Data generated under the pilot that demonstrates feasibility, impact, and readiness for the proposed Year 2 work;
- 3. Scientific Justification for Renewal explaining how the proposed second-year plan will deepen mechanistic insight and position the team for external funding; and
- 4. Commercial/Translational Justification outlining IP status and plans, market or clinical need, translational pathway and timelines, engagement with PCI and/or industry partners, and anticipated value inflection over the next 6–12 months.

Budgets for renewals should be commensurate with demonstrated progress and proposed scope and may be adjusted at the discretion of the Colton Center.

Terms and Conditions

Grant Term: Typically 1 year

<u>Grant Conditions:</u> Successful awardees must become members of the Penn Colton Center. Membership in the Penn Colton Center requires participation in all Colton Center for Autoimmunity symposia, seminars, as well as both Penn Colton Center and Colton Consortium retreats.

Time and Effort: All personnel must commit time and effort appropriate to their roles on the project. Funding may only be used for research approved by the Colton Center and may not be used for any other purposes. Budget items may not include equipment, computers, or travel, with PI salary limited to 5% effort at NIH cap.



Research Plan and Milestones: Colton Center awards are made upon approval of research plan and research milestones. Continuation of funding for a second year will be considered only via a competitive renewal submission (see 'Renewal Submissions'). Renewal applications must include preliminary data and provide both a scientific and commercial/translational justification for renewal. Projects may be terminated if agreed-upon goals and milestones are not met. It may be possible to revise the research plan and/or budget upon request during the project period, subject to approval from the Colton Center for Autoimmunity Leadership Council.

Research Compliance: Colton Center grants are internal funding and will not require approval of Penn Office of Research Services (ORS). The PI and department are responsible for meeting all compliance requirements with the award, including approval for animal and/or human subjects research, if applicable.

Overlapping Funding: Awardees must inform the Colton Center if internal or external funding is obtained to support any of the specific aims of the Colton Center proposal. Overlapping funds provided by the Center may be reallocated by the PI provided those activities are directly related to the funded project and approved in writing by the Center.

Expenditure of Funds: All funds are expected to be expended within the grant term of the current award. If a carry-over of funding is needed, the PI should contact Lisbeth Dennis, Director of Programming and Administration (dennisls@pennmedicine.upenn.edu) and submit a letter for review at least 30 days before the grant period ends to allow sufficient time to process the request. The carry-over request should include the current expiration date of the project, the requested termination date, and a brief justification for the request. Renewal support for a second year is available only through the competitive renewal process described above and is contingent on progress and review.

Reporting Requirements:

A final progress report, with expense report, is required within 30 days of funding completion. The progress report should be limited to two pages maximum and must include a 100-200 word lay summary of progress, specifically addressing the goals of the project, the key findings, and its broader public health impact.



Inventions and Intellectual Property: All applicants should disclose any inventions, discoveries, materials, software or data of which they are aware, that would be utilized in the performance of the proposed project regardless of whether the IP is owned by Penn ("Background Intellectual Property") in their proposal along with any known third-party obligations involving the Background Intellectual Property such as material transfer agreements (MTA), sponsored research agreements (SRA), licenses, options, foundation awards or other existing contracts.

All Inventions, including significant copyrights and copyrightable software, that are conceived or reduced to practice in the performance of a project funded by a Colton Autoimmunity Pilot Award ("Project Intellectual Property") shall be disclosed in writing to the Penn Center for Innovation (PCI) at least 60 days in advance of any public disclosure (oral presentations [including by students or postdocs], posters, manuscripts, etc.) to allow PCI to pursue intellectual property protection, as appropriate. Project Intellectual Property will be managed and governed in accordance with Penn's "Patent and Tangible Research Property Policies and Procedures"

(https://almanac.upenn.edu/uploads/media/081021-supplement.pdf).

Publications: "The Colton Center for Autoimmunity at Penn" must be acknowledged in all publications resulting from research supported all or in part by the Center. All publications must be forwarded to Lisbeth Dennis, Director of Programming and Administration (dennisls@pennmedicine.upenn.edu) upon submission.

Budget Form

See attached PDF.

DETAILED BUDGET FOR INITIAL BUDGET PERIOD						FROM		THROUGH	
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SUBTOTALS									
CONSULTANT COSTS									
EQUIPMENT (Itemize)									
SUPPLIES (Itemize by category)									
TRAVEL									
INPATIENT CARE COSTS									
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ALTERATIONS AND RENOVAT	TIONS (Itemize by cate	egory)							
OTHER EXPENSES (Itemize by category)									

SUBTOTAL DIRECT COSTS

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