**THE COLTON CENTER FOR AUTOIMMUNITY AT PENN**

**Colton Autoimmunity Pilot Awards**

**2022 Request for Proposals**

## Overview

The Colton Center for Autoimmunity at Penn is requesting research proposals.

The Center will support high-risk, high-reward pilot grants with the goal to advance mechanistic understanding and treatment of autoimmunity through support of bold new ideas.  Projects will be evaluated based on several factors including innovation, potential for mechanistic insights and impact on new treatment opportunities. Proposals with the capacity to generate new, or develop intellectual property will be a high priority.  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.

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.

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 Immune Health, biobanks or other institutional infrastructure to develop cohort-based mechanistic discovery, biomarker and/or precision medicine studies
- CRISPR/Cas9, genetic, and/or small molecule screens related to autoimmunity
- Use of genetics, genomics, high-dimensional immune profiling together with artificial intelligence and large scale informatics approaches to identify novel therapeutic pathways and/or targets
- Studies of inflammatory and/or autoimmune manifestations in long-COVID

- 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 non-responsive 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

Although excellent science will be the highest priority, pilot grants 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. 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 and be expected to participate in Colton Center for Autoimmunity symposia, seminars and retreats.

**Application Timeline**

Submission deadline for full applications: **April 15, 2022**

**All applications must be submitted by email to Kaitlyn Piazza ([kbaraldi@pennmedicine.upenn.edu](mailto:kbaraldi@pennmedicine.upenn.edu)) by 11:59pm on April 15, 2022**

Awards made by:  **June 1, 2022**

**Applicant Eligibility**

All Penn and CHOP 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 2-3 Pilot Grants will be awarded each between $100,000 and $150,000 (direct costs).  However, larger project budgets may be possible and could be considered with a Letter of Intent submitted to the review committee by March 15 for review before the submission deadline.

**Guidelines for Proposals**

1. Each investigator may submit only one proposal per grant cycle.
2. The proposal should include:
     1. 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)
     2. Specific Aims
     3. Background and Relevance to Autoimmune or Inflammatory Disease(s)
     4. Innovation
     5. Research Strategy
     6. Milestones (month 6 and 12)
     7. Plan for Translational and Intellectual Property Development
     8. Any specific inventions, discoveries, materials, software or data that would need to be utilized in the performance of the proposed project
     9. Items 1-8 should be limited to 2 pages, inclusive (single spaced, 11-point font, 0.5-inch margins)
     10. Figures (limit to one page, with margins as in h above, not included in page limit)
     11. References (not included in page limit)
3. On a separate page, 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.
4. Append NIH biosketch (5-page) of PI and other key personnel.
5. Prepare as one (1) .pdf document containing 2-5 above.

**Terms and Conditions**
**Grant Term:** June 1-May 31

**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 purpose. 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. An interim progress report will be due no later than 12/1/2022 to assess progress towards the 6 and 12 month milestones. Continuation of funding for a second year will be considered upon PI request if progress on the pilot award would justify a competitive renewal. Projects may be terminated if agreed upon research 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 at Penn 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 the Director of Administration and Operations 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 funds for future years may be possible depending on progress and should be discussed with Colton Center leadership when relevant.

**Reporting Requirements:**

- A final progress report, with expense report, is required within 30 days of funding completion

**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, and such publications forwarded to the Colton Center.

If you have any questions, please email Kaitlyn Piazza directly at kbaraldi@pennmedicine.upenn.edu