

MIST application solicitation:

MIST Scholar Award in Mucosal Immunity (<http://www.mucosal.org/>)

Research Objectives:

Purpose:

The purpose of this MIST solicitation is to encourage young scientists, physician-scientists and clinicians to pursue careers in understanding immune defense mechanisms and immune regulation at mucosal surfaces, including respiratory, gastrointestinal and urogenital tract mucosa. The ultimate goal of the Mucosal Immunology Studies Team (MIST) is to contribute to the knowledge base needed to facilitate future development of vaccines and immunotherapies to protect mucosal surfaces from infection and immune-mediated pathology. High emphasis will be placed on proposed studies that provide a more sophisticated understanding of mucosal immune defense mechanisms and explore novel hypotheses to address difficult unsolved questions in mucosal immunity, inflammation and repair by employing cutting-edge technologies. Projects that have the capacity to develop into independently supported research programs will also be of high priority.

Background:

The mucosal epithelium, with a combined surface area more than 100 times larger than skin, is both an initial barrier to pathogen entry and the primary site of entry for many pathogens. Since many pathogens first contact the host through the mucosal surface, and efficient person-to person transmission of many pathogens results from an initial mucosal infection, development of vaccines and therapies that target and protect mucosal surfaces would be a significant achievement. Despite several successes in mucosal vaccination and substantial research devoted to mucosal vaccine development, the critical elements required for protective mucosal immunity are not well understood.

Research Objectives and Scope:

While the overall scientific objective and scope of this proposal follow those of the original RFA-AI-20-027 (<https://grants.nih.gov/grants/guide/rfa-files/RFA-AI-20-027.html>), the specific objective of this solicitation is to encourage and provide critical support for young investigators who are in the process of establishing independent research laboratories working to define fundamental aspects of immunity, inflammation and repair at mucosal surfaces.

Examples of research areas supported by this RFA include, but are not limited to:

Studies of mucosal epithelia; host-microbiota interactions, neuro-immune interactions, mucosal IgA and mucosal B cell responses; mucosal vaccines, mucosal antigen sampling and presentation; immunoregulation at the mucosal surface, cross talk of mucosal immune system with other systems, and mucosal immunity, inflammation and tissue repair.

Examples of research NOT supported by the RFA:

Clinical trials; HIV/AIDS/SIV; studies that focus on skin or epidermis; projects focused on autoimmune or inflammatory diseases such as inflammatory bowel disease, celiac disease, cystic fibrosis, etc., or on asthma/allergy that do not provide a clear justification of how the study would provide new information about mucosal defense or mucosal immunoregulatory mechanisms relevant to infection or related immunopathology/inflammation; studies focused primarily on specific microbes, infections, vaccines, or adjuvants that do not use these agents as probes to gain new insights about mucosal immune mechanisms, including studies focused on non-immune mechanisms of pathogenesis; investigations that do not focus on the study of mucosal immune defense mechanisms.

Submission guidelines

Eligibility Requirements

Individuals with the skills, knowledge and resources necessary to carry out the proposed research are invited to work with their institution/organization to develop an application for support.

Applicants must have a junior faculty position (assistant professor, instructor, or equivalent) at the time of application and must not have been awarded an R01 or R00. Applicants who had previously been awarded a K award or other career development award remain eligible.

Applicants may submit only one application with the applicant as the Principle Investigator. There is no limit to the number of awards from each institution. Prior MIST Young Scholars are not eligible to apply to this RFA.

Application deadline:

Applicants must submit application by midnight **10 September 2024**. Applications received after the deadline will not be considered for funding.

Budget and Project Period:

We anticipate this award has a maximum project period of one year, and a maximum budget of \$125,000 total costs (direct and indirect) per year. It is expected that 4-5 awards will be made, contingent upon availability of funds.

Indirect Costs and other Award Information:

MIST is funded by the NIH Immune Defense Mechanisms at the Mucosa Cooperative Study Group Infrastructure and Opportunities Fund (RFA-AI-20-027). Weill Medical College of Cornell University administers this fund and these awards will be made as a sub-award from Weill Cornell. As such, all federally negotiated indirect cost agreements apply to this application.

MIST Scholars will be requested to present their research at the annual MIST steering committee meeting.

Application Review

The grant review process begins after receiving a completed application and usually requires up to 4-6 weeks provided the applicant has complied fully with the application procedures/guidelines. The submission of an incomplete grant proposal may cause delays in MIST's review and consideration of the request.

Reviewers with relevant expertise will be assembled by MIST and will consider the scientific merit of the proposal and whether or not the application was responsive to this RFA. The review panel may include MIST and non-MIST members.

The final funding decision will be made by the MIST steering committee no later than **10 October 2024**. Applicants will receive notification of final outcome via e-mail. Telephone or e-mail requests for results prior to this date will not be responded to.

Dates of Award:

The earliest anticipated start date will be **1 November 2024**. The award will be for one year, with the second year of funding contingent upon availability of funds and administrative review of progress made.

Important dates

Announcement date:	15 July 2024
Submission deadline:	10 September 2024
Award announcements:	10 October 2024
Funds active:	1 November 2024

Funds expended by: 30 June 2025

Resubmissions and Renewals:

Resubmission and renewal applications are not permitted in response to this MIST solicitation.

Application Procedures

Applications for grants must be formatted using standard NIH grant submission guidelines and follow the structure outlined below.

Applications must be labeled as:

PI name_MIST scholar RFA_date.

Questions and final applications should be emailed to:

Shawn Davison, Administrative Specialist, Weill Cornell Medicine, Cornell University

shd4024@med.cornell.edu

IMPORTANT NOTES:

APPLICANTS WHO ARE DEEMED INELIGIBLE FOR THIS AWARD AND/OR DO NOT FOLLOW THE INSTRUCTIONS FOR PREPARING AN APPLICATION MAY BE ADMINISTRATIVELY DISQUALIFIED AND NOT REVIEWED. LATE APPLICATIONS WILL NOT BE CONSIDERED.

Grant Application Instructions and Checklist

An incomplete grant application will cause delays in the Committee's review of your request.

PHS398 Form Page 1

Please fill out all the sections of the PHS398 Form Page 1 (see NIH PHS398 instructions) including:

- Title of the project/program
- Investigator's information
- Request for initial budget
- IRB information
- Institutional Signature Required

Biosketch (Current NIH format) for Key Personnel

Biosketch must include the following with a page limit of 4 pages:

- Personal statement
- Positions and Honors
 - Professional and research experience
 - Professional affiliation
- Contributions to Science
- Research
 - Current research
 - Completed research

Budget Sheets (PHS398 Form Pages 4 & 5)

Budget sheet must include the following:

- Budget dates
- List personnel using Cal, Academic, or Summer to enter months devoted to project
- Enter dollar amounts requested (omit cents) for salary requested and fringe benefits
- Enter total costs for consultation, equipment, supplies and others.
- Budget justification

Research Strategy

Concept sheet has a 3 page limit and must include the following:

- Specific aims/Research Strategy
- Describe how this project contributes to novel aspects of mucosal immunity
- References

NIH Checklist Form Page