

INVESTIGATORS IN THE PATHOGENESIS OF INFECTIOUS DISEASE (PATH)

Letter of Intent deadline:

July 17, 2023

Invited full proposal deadline:

November 15, 2023

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KEY DATES

Letter of Intent applications due	July 17, 2023 by 3:00 pm Eastern Time
Invitation to submit a full proposal	October 6, 2023
Full proposal due	November 15, 2023 by 3:00 pm Eastern Time
Finalist interviews	April 15-17, 2024
Notice of award	By May 31, 2024
Award start date	July 1, 2024
Award end date	June 30, 2029

PROGRAM BACKGROUND

The Investigators in the Pathogenesis of Infectious Disease program provides opportunities for assistant professors to bring multidisciplinary approaches to the study of human infectious diseases. The goal of the program is to provide opportunities for accomplished investigators still early in their careers to study what happens at the points where the systems of humans and potentially infectious agents connect. The program supports research that sheds light on the fundamentals that affect the outcomes of these encounters: how colonization, infection, commensalism, and other relationships play out at levels ranging from molecular interactions to systemic ones.

This award provides \$500,000 over a period of five years to support accomplished investigators at the assistant professor level to study pathogenesis, with a focus on the interplay between infectious agents and their hosts, shedding light on how both are affected by their encounters. Associate professors may not apply. This is a career development award for individual investigators and does not support collaborative teams.

The awards are intended to give recipients the freedom and flexibility to pursue new avenues of inquiry and higher-risk research projects that hold potential for significantly advancing understanding of the pathogenesis of infectious disease. Researchers who start from the human host are appropriate applicants, as are those who start from the microbe or virus. Research on under-studied infectious diseases, including emerging diseases as well as well-established ones, is encouraged. Work on fungal, protozoan, and metazoan diseases and emerging infections is especially of interest. In addition, excellent animal models of human disease, including in veterinary research settings, are within the program's scope. Interdisciplinary approaches are encouraged. Work connecting pathogenesis itself to climate change is also encouraged. Work that additionally involves more elements, for example, vector biology, is very welcome.

ELIGIBILITY REQUIREMENTS

The ideal candidate is an accomplished investigator at the mid-to-late assistant professor level with an established record of independent research in a tenure-track position or its well-supported equivalent in non-tenure offering departments.

Applications must be approved and signed by an official responsible for sponsored programs (generally from the grants office, office of research, or office of sponsored programs) at a degree-granting institution. Candidates will generally have a Ph.D. and/or a clinical doctorate (M.D., D.V.M., etc.).

- Candidates must have an established record of independent research.
- Citizens and non-citizen permanent and temporary residents of the U.S. and Canada who are legally qualified to work in the U.S. or Canada are eligible. Candidates who are temporary U.S. residents must hold a valid U.S. visa (J-1, H1B, F-1 or O-1 visas). Temporary Canadian residents must hold a valid Canadian visa (Study Permit, C-43, C44, C-10, or C-20 work permits/visas).
- Candidates who will be promoted to Associate Professor by November 13, 2023 are not eligible to apply.
- Candidates who have completed a Burroughs Wellcome Fund career development award (CAMS or CASI) are encouraged to apply but must contact BWF before writing the pre-proposal. Having had BWF travel, career guidance for trainees, preterm birth, regulatory science, or PDEP grants does not impact PATH support.
- Microbiome-related proposals must be infectious disease-focused to compete well in this program.

Important Notes

- BWF strongly encourages applications from women and underrepresented minorities.
- BWF encourages submissions from those working in protozoan and metazoan parasites, protists, and fungi. Viral, bacterial, immune, and multi-species work is likewise encouraged. Work related to malaria, tuberculosis, and AIDS is appropriate for this program. BWF particularly encourages human health-relevant applications from veterinary scientists.
- The PATH award can only be made to accredited, degree-granting institutions in the U.S. or Canada. An Internal Revenue Service determination letter of the institution's non-profit status is required.
- BWF encourages submissions focusing on climate change and its impact on the pathogenesis of infectious disease and human health.

SELECTION PROCESS

The [PATH Advisory Committee](#) will review pre-proposals and full proposals, interview finalists, and make recommendations to BWF's [Board of Directors](#) for funding.

See Key Dates on Page 3 for important grant deadline dates.

BWF does not provide critiques of unfunded proposals.

TERMS OF GRANT/ USE OF FUNDS

Indirect costs may not be charged against BWF grants.

PATH is a career development award made to a degree-granting institution on behalf of an awardee. Institutions are responsible for disbursing the funds and for maintaining adequate supporting records and receipts of expenditures.

Award recipients are required to devote at least 75 percent of their overall time to research-related activities. There is no explicit minimum percent effort that must be dedicated to the PATH award.

Awardees must provide BWF with an annual report detailing scientific progress. Institutions must provide an annual financial report. Both reports must be submitted by September 1 of each award year. Continued funding will depend on both the timely submission of these reports and their favorable review by BWF and its program advisory committee.

Award recipients may obtain funds from other sources for research in areas similar to that conducted under these grants, so long as there is no conflict with meeting the BWF award's specific aims. Award recipients may not hold concurrent BWF career development awards.

The support allocated for research is under the control of the awardee and may be used flexibly for items such as equipment, consumable supplies, travel to scientific meetings, and salaries for laboratory personnel working with the awardee. Prior approval by BWF is required when, within an award year, purchases of equipment exceed \$20,000 or travel costs exceed \$8,000. The PATH award may not be used to pay student tuition.

Burroughs Wellcome Fund allows for an institutional allowance of up to 10% of the total award to support the cost of fringe benefits, such as health insurance premiums, vacation, or retirement for the named investigator. When the cost of fringe benefits exceeds the institutional allowance, the institution is expected to cover these costs as an indication of support for the named investigator. Any portion of the institutional allowance which is not used to support the named investigator's benefits will be added to the named investigator's research allowance.

During the award period, unused research funds may be carried over to the succeeding year. Unused funds greater than \$500 held by institutions when awards expire or are terminated must be returned to BWF. Awardees may receive no-cost extensions per approval by the program officer.

Awards may be transferred only with written approval of BWF. Requests must be received at least three months prior to any move explaining why a transfer is requested. Awardees who change institutions may take with them any equipment or supplies purchased under the award, as well as the balance of any unused award funds. Awards, supplies and equipment cannot be transferred to government institutions, for-profits, and some non-profits.

Awardees who want to take a sabbatical year in order to acquire new research skills must submit to BWF a written request that includes appropriate justification.

Scientific publications or presentations that result from these awards must acknowledge the awardee's receipt of a Burroughs Wellcome Fund Investigator in the Pathogenesis of Infectious Disease Award. Copies of journal articles and other publications related to work supported by this award should be sent to BWF along with the annual progress report.

Awardees must adhere to all federal, state or provincial, and local regulations regarding the participation of human subjects, use of animals, radioactive or hazardous materials, and recombinant DNA in their research projects. BWF expects the appropriate federal, state, and local guidelines with regard to scientific misconduct are in place and enforced at all institutions with which BWF awardees are affiliated.

Awardees should share scientific findings in a timely manner via the standard means of scientific communication, including publications and/or presentations in scientific forums. Awardees should follow their institutions' patent, copyright, and intellectual property policies regarding discoveries that result from research conducted under these awards. BWF will not retain any rights to published results or patents that result from the research.

INSTRUCTIONS ON HOW TO PREPARE AND SUBMIT A COMPLETE PROPOSAL

Application Process

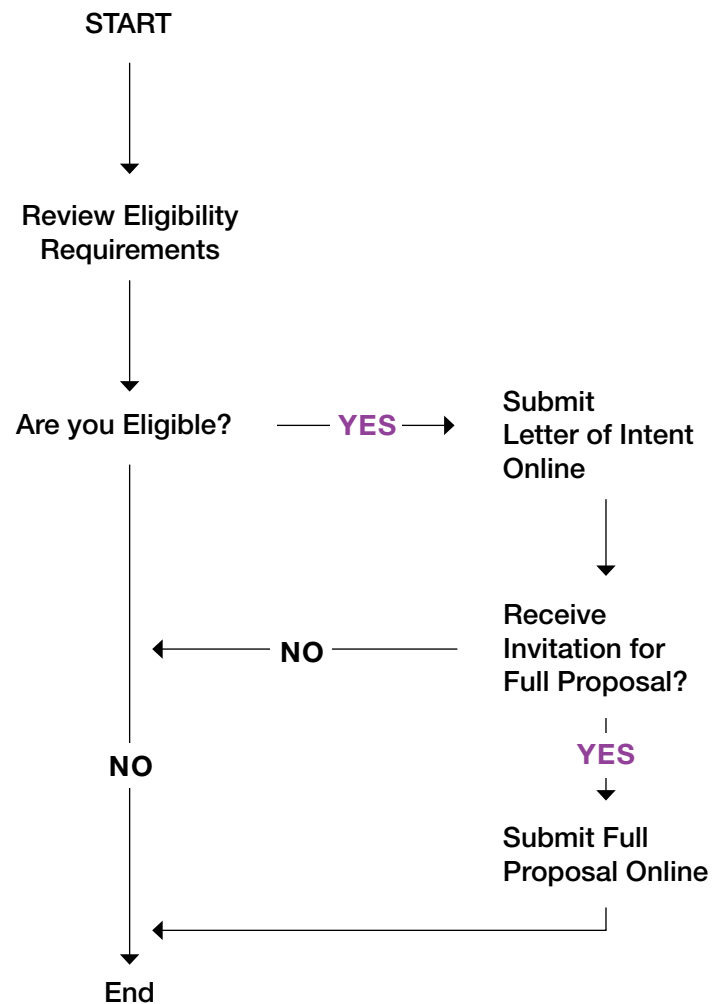
Applying for this award is a two-stage process:

- 1. Letter of Intent (LOI).** Interested candidates who meet the eligibility criteria may submit one online LOI through BWF's online grant management system by **July 17, 2023 3:00pm Eastern Time**. Though the LOI is short, it should be well thought out and prepared with care: only a fraction of those submitting LOIs will be invited to submit a full proposal.
- 2. Full proposals.** Submission of full proposals will be by invitation only after review of LOIs. By October 6, 2023, those who make it to the next round will be invited to submit a full research proposal. Instructions on how to prepare a full research proposal (elements listed below) will be provided by email with the invitation to participate. Full proposals will be due **November 15, 2023 by 3:00 pm Eastern Time**.

All communications, including the invitation to submit a full proposal and declinations, will be made through email.

BWF does not provide critiques of LOIs or of full proposals.

Application Process Workflow



Letter of Intent Elements and Checklist

A complete LOI consists of data entry fields completed in the online application plus several PDF attachments. The detailed components of the complete LOI are shown below.

Online LOI Fields

- Proposal Information
- Applicant Information
- Applicant Demographics
- Institution Information
- Five Critical Questions
 1. What is your proposed research question?
(50 words)
 2. Why is the work you propose interesting and important? How will it change our understanding of how disease unfolds?
(200 words)
 3. How will you do it? What is your approach?
(200 words)
 4. What about your outlook / background / training gives you great insight into this problem?
(100 words)
 5. How is this work innovative and different than that supported by your other external funding?
(100 words)
- Signature of Institution's Signing Official

PDF Attachments:

A. Candidate's CV (5-page limit)

The publications section of your CV should, in order, list your educational details in chronological order; then your research publications, with your name in bold type, in chronological order divided into Graduate School, Postdoctoral Fellowship, and Faculty categories; then a list of your reviews, book chapters, and other publications, also in chronological order. The CV should otherwise be typical, listing your education details and funding history.

B. US IRS Letter of Determination

Upload your institution's US IRS Letter of Determination showing non-profit status.

Note:

LOIs will not be accepted after 3:00 pm Eastern Time on July 17, 2023. The online application system shuts down automatically at the deadline and the SUBMIT button will no longer be available.

- Plan to submit your application well in advance of the grant deadline to allow adequate time to troubleshoot any issues.
- Out of fairness to all applicants, late submissions will not be accepted. No exceptions or extensions will be granted.
- After the deadline, applicants with incomplete proposals and those not adhering to instructions will be disqualified without prior notice.
- Only proposals submitted through BWF online application website will be accepted.

How to Submit an Online Full Proposal Application

An email will be sent to the invited candidate with a link to the full proposal application.

Full Proposal Elements and Checklist

A complete full proposal consists of data entry fields submitted through the online application plus several required PDF attachments. The detailed components of the complete full proposal are shown below.

Online full proposal elements

- Applicant Information
- Applicant Demographics
- Institution Information
- Proposal Information
- Budget and Budget Justification
- Publication Information
- Signature of Institution's Signing Official

Proposal Attachments:

Please upload the following required documents.

[Download Forms and Templates](#)

A. Institutional Letter of Support

The Institutional Letter of Support should be written on behalf of the applicant's institution by the chair, dean, division director, or other senior official who can best communicate the institution's commitment to the applicant and the applicant's fit within the institution's plans and ambitions. **This statement of the institution's investment in and commitment to the applicant's scientific, academic, and personal development is a critical part of a successful application for this career development award.** Letters that lack detail, specificity, or clear enthusiasm for the applicant and his or her career can undermine an otherwise competitive proposal.

- The letter should describe the focus and direction of the institution's research programs that are relevant to the proposed work and discuss how the applicant's research fits into the organization. The letter should also describe all program and institutional support that will be provided for the candidate, including such things as salary support, mentoring for career development, and protection of 75 percent of the grantee's time for research.
- The letter must contain a signature and a signature block and be on institutional letterhead.
- The letter should be forwarded to the applicant for inclusion in the online application.

B. CV of Applicant

The publications section of your CV should, in order, list your educational details in chronological order; then your research publications, with your name in bold type, in chronological order divided into Graduate School, Postdoctoral Fellowship, and Faculty categories; then a list of your reviews, book chapters, and other publications, also in chronological order. The CV should otherwise be typical, listing your education details and funding history.

C. Importance (template provided)

Using the Importance Form provided, describe how the aims presented here depart from or move beyond currently funded work or, if the first substantial Federal grant has not yet been reached, beyond current proposals.

D. Research Plan

(5-page limit) In no more than five pages (including figures, tables, graphs, and images), describe the Research Plan. It should be a complete, cohesive, and coherent scientific document that is easy to read. In the order listed below, the plan should describe:

- Specific aims.
- Background and significance.
- Experimental methods and procedures.

- Long-term objectives. If the applicant has received or applied to other sources for extended support to cover research in the area of this proposal, explain in detail how the research to be supported by BWF's award will differ from or enhance the research supported by the other sources.
- Use standard 11- or 12-point font for the text, and no smaller than a 9 to 10-point font for figures, legends, and tables. This requirement will be strictly enforced. Text must be single-spaced, with one-half inch or larger margins on all sides. Number the pages of the research plan. Do not include a table of contents or appendices. A bibliography is a separate required attachment and is not considered part of the five-page limit.

E. Bibliography

Provide a list of literature references directly relevant to the research plan. The bibliography is not included in the five-page limit for the research plan.

F. Facilities and Resources (template provided)

Using the Facilities and Resources Form provided, describe the laboratory space, equipment, and other resources for research and training that will be available to the investigator.

G. Reprints

Provide one to three publications or manuscripts submitted for publication that demonstrate the applicant's capabilities and relevant research accomplishments.

- Manuscripts in preparation may not be included, but preprints are allowed. At least one reprint is required and up to three are allowed.

H. US IRS Letter of Determination

Upload your institution's US IRS letter of determination showing non-profit status.

I. Confidential Letters of Recommendation

Three confidential Letters of Recommendation from individuals who are familiar with the applicant's qualifications are required.

- At least one letter should come from someone involved in training the applicant.
- One letter must be from a recommender not connected to the applicant's institution or its affiliates.
- Letters of Recommendation should be on letterhead and include a signature block.
- Recommendations must not be viewed by the applicant.
- Each recommender must individually upload their Recommendation Letter in advance of the application deadline for the application to be submitted.
- It is the responsibility of the applicant to ensure that the recommenders have submitted their letters on time. An application cannot be submitted without all three recommendation letters uploaded by the recommenders by the application deadline.
- Letters of collaboration will not be accepted.
- The letter must be converted to PDF and uploaded to your online application by each recommender.

Applicant instructions to obtain confidential Letters of Recommendation:

- 1.** From within the application, access the Request Recommendation Letter Section to send an email to the recommender. Enter the email address of the individual, confirm the email, and click the “+” button. A pop-up screen will appear. Verify the information and click the “Send Email” button.
- 2.** The email to the recommender will contain a link that the individual must use to upload the letter to the proposal. Letters are confidential and cannot be viewed by the candidate.
- 3.** Once the letter has been uploaded by the recommender, the letter will be listed in the Attached Documents section in the list of uploaded documents.
- 4.** Letters are confidential and should not be viewed by the applicant. You will only be able to see that the letter has or has not been uploaded to your application.

Note: Letters sent separately or after the application due date will not be accepted.

Recommender instructions to submit confidential letter:

- Complete your letter offline using any standard word processing software. Please include the letter on official university letterhead, including a signature block.
- Convert the document to a PDF file. Save the letter as a .pdf on your system.
- Return to the applicant’s email request and click on the web link which will take you to a page where you can upload the recommendation letter.
- Click the “Upload” button.
- Click the “Save” button.
- Once your letter has been uploaded, the applicant will be able to see whether or not your letter has been submitted, but cannot view the content of the letter.
- An application **CANNOT BE SUBMITTED** until the applicant’s three letters of recommendation have been uploaded and attached to the application by the grant deadline, November 15, 2023, 3:00 pm (EST).

Submission Process

Once the application is complete, proceed with the following steps:

- Click “Validate” on the sidebar to see if any errors are identified. All information must be provided prior to application submission.
- If there are no missing items in the application, click on the SUBMIT link on the sidebar. Click the blue SUBMIT button. The application is NOT submitted until you complete this step.
- Full Proposal submissions must occur prior to November 15, 2023 at 3:00 pm (EST). The submit button will disappear after that time. Applicants should receive a confirmation email once your application is submitted. If you do not receive this email, please reach out to BWF.

Note:

Full proposals will not be accepted after 3:00 pm EST on November 15, 2023. The online application system shuts down automatically at the deadline and the “SUBMIT” button will no longer be available. Recommenders should upload their letters well in advance of the deadline to allow ample time to troubleshoot any issues. Applicants, too, should plan to submit applications well in advance of the grant deadline to allow adequate time to troubleshoot any issues. NO EXCEPTIONS OR EXTENSIONS WILL BE GRANTED.

After the deadline, applicants with incomplete proposals and those not adhering to instructions will be disqualified.

Only full proposals submitted through BWF’s online application system will be accepted.

Questions?

Please review our online [Frequently Asked Questions](#) first. Questions should be directed in advance to BWF program staff by contacting:

Victoria McGovern, Ph.D., Senior Program Officer
vmcgovern@bwfund.org, 919-991-5112

Darcy Lewandowski, Program Associate
dlewandowski@bwfund.org, 919-991-5132