Caltech | Funding Memo

Title: Career Awards at the Scientific Interface - LOI

Funding Agency: Burroughs Wellcome Fund

External Deadline(s):

09/01/2022 01:00 PM PDT (LOI)
01/06/2023 01:00 PM PST (Full Proposal)

Cognizant Office: Office of Sponsored Research/Office of Foundation Relations

Description:

Recognizing the vital role cross-trained scientists will play in furthering biomedical science, the Burroughs Wellcome Fund developed the Career Awards at the Scientific Interface (CASI). These grants are intended to foster the early career development of researchers who are dedicated to pursuing a career in academic research. The specific target group are researchers who have transitioned from graduate work in the physical/mathematical/computational sciences or engineering into postdoctoral work in the biological sciences.

Frequency: Typically annual

Total Award: $500,000

- BWF's Career Awards at the Scientific Interface provide $500,000 over five years to bridge advanced postdoctoral training and the first three years of faculty service.
    - Postdoc/Fellowship Portion: $70,000 per year (1 or 2 years).
        - Provides maximum salary support of $55,000 in year one and $60,000 in year two.
        - Awardee salary may be supplemented from other sources.
        - BWF expects that support must meet or exceed the NIH pay scale appropriate to the trainee's level of experience.
    - Faculty Portion: $120,000 per year (3 years), or $500,000 minus the portion used during the postdoctoral year(s).
        - Up to 20 percent of the annual amount may be applied towards the named investigator's salary, including fringe benefits. BWF does not set or cap the salary level of its awardees, nor does it require a minimum amount of the award be used for salary.
- Support allocated for research is under the control of the award recipient and may be used flexibly for such items as equipment, consumable supplies, travel to scientific meetings, and laboratory personnel working with the award recipient.
    - Prior approval by BWF is required when, within an award year, purchases of equipment exceed $20,000 or travel costs exceed $8,000.
    - 10% of the total award may be used to support the PI's fringe benefits.

Indirect Costs: Not Allowed

- **Caltech's minimum overhead rate is based on the award's annual gross funding. Please refer to the FY22 Annual Rate Memo for applicable minimum overhead requirements. Applicants must work within their division to account for the required overhead via an approved MORA form.**

Duration: 5 years

- Includes support for up to two years of advanced postdoctoral training and the first three years of faculty service.
- Award state date is July 1, 2023.

Discipline(s): Biology and Biological Engineering; Chemistry and Chemical Engineering; Engineering and Applied Science; Physics, Mathematics, and Astronomy

Eligibility: Postdoc

- Candidates must hold a Ph.D. degree in one of the fields of mathematics, physics, chemistry, computer science, statistics, or engineering (this includes related areas of physical, mathematical, computational, theoretical, and engineering science).
    - Exceptions will be made only if the applicant can demonstrate significant expertise in one of these areas, evidenced by publications, undergraduate major, or master's degree.
- Candidates whose Ph.D. is in biochemistry/biophysics/biology/cell biology/etc. may be eligible if significant accomplishment or competence in one of the areas of mathematics, physics, chemistry, computer science, statistics, or engineering can be shown (i.e. papers published, advanced coursework, or undergraduate major), and if the proposal draws on that background. Work must be interdisciplinary and make use of non-biological approaches.
- Candidates who hold an M.D. are eligible to apply if they hold both an M.D. and a Ph.D. and the Ph.D. is in one of their fields of mathematics, physics, chemistry, computer science, statistics, or engineering.
- Candidates must have completed at least 12 months, but not more than 60 months of postdoctoral research by the date of the full invited application deadline.
    - If part of the candidate's postdoctoral work was not in a science research field, and the scientific work experience does not exceed 60 months, he/she may be eligible, but must gain approval from a BWF program officer.
    - Candidates who are not titled "postdoctoral" fellows may be eligible, see RFP.
- Candidates cannot hold nor have accepted, either in writing or verbally, a faculty appointment as a tenure-track assistant professor at the time of application (both the pre-proposal and full application).
- Candidates must be committed to a full-time career in research as an independent investigator at a North American degree-granting institution.
- Candidates must have at least one first-author publication, including papers on which "first authorship" is shared.
    - Candidates who have submitted a first-author manuscript from graduate or undergraduate studies, but it has not yet been published, may apply if the manuscript is accepted for publication or in press.
- Candidate's primary postdoctoral mentor must hold an appointment at the same accredited, degree-granting institution in the U.S. or Canada. Two postdoc mentors are permitted; one must be designated as the primary mentor who will sign off on the pre-

proposal application form. Mentors or institutions may not be changed after submitting a pre-proposal
- 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 must not hold nor have accepted a K99 award from the NIH.
- Candidates with a K01 award from the NIH may apply for this award as long as they meet all the remaining criteria, however, if granted a CASI award, the NIH will need to fund the postdoc portion and the BWF will only fund the faculty portion of the award.
- Candidates may not submit more than one pre-proposal.
- Award recipients must devote at least 75% of their time to research-related activities.
- Please review full eligibility guidelines in the RFP.
- Candidates must complete an eligibility quiz in order to access the online application portal.

Research Areas of Interest:

- Candidates are expected to draw from their training in a scientific field other than biology to propose innovative approaches to answer important questions in the biological sciences.
    - Examples of approaches include, but are not limited to, physical measurement of biological phenomena, computer simulation of complex processes in physiological systems, mathematical modeling of self-organizing behavior, building probabilistic tools for medical diagnosis, developing novel imaging tools or biosensors, developing or applying nanotechnology to manipulate cellular systems, predicting cellular responses to topological clues and mechanical forces, and developing a new conceptual understanding of the complexity of living organisms.
    - Proposals that include deep or machine learning applications of artificial intelligence are particularly encouraged.
    - Special consideration will also be given to proposals that investigate the connection between climate change and human health.

Post-Award Obligations:

- Annual reporting is required.

Recent Caltech Recipients:

- Zibo Chen (2020)
- Kirsten Frieda (2018)
- Walter Gonzalez (2018)
- Octavio Mondragón-Palomino (2017)
- Ahmet Coskun (2016)
- Lacramioara Bintu (2015)

Guidelines & Other Information:

Overview: http://www.bwfund.org/funding-opportunities/interfaces-in-science/career-awards-at-the-scientific-interface/

RFP: https://www.bwfund.org/wp-content/uploads/2020/10/BWF-CASI-RFP-2023.pdf

FAQ: https://www.bwfund.org/funding-opportunities/interfaces-in-science/career-awards-at-the-scientific-interface/frequently-asked-questions/

Past Recipients: https://www.bwfund.org/funding-opportunities/interfaces-in-science/career-awards-at-the-scientific-interface/grant-recipients/

Advisory Committee: https://www.bwfund.org/funding-opportunities/interfaces-in-science/career-awards-at-the-scientific-interface/advisory-committee/

Please notify the Foundation Relations team if you anticipate making a submission or if you have any questions regarding this opportunity. We are here to help ensure that Caltech's proposals are competitive. We can assist with proposal development and advise you on the routing of your paperwork. Interested researchers should work with their division grant manager to prepare the budget, the MORA form, and the Division Approval Form (DAF). Submissions and awards for this grant program will be processed through the Office of Sponsored Research.

Opportunity ID: 1186