Call for Collaborative Research Proposals in Integrative Organismal System as part of the NSF-BSF Program

As part of the NSF-BSF joint program, the U.S.-Israel Binational Science Foundation (BSF) invites collaborative research proposals in Integrative Organismal System (IOS), in the Biological Sciences Directorate at the U.S. National Science Foundation (NSF).

Synopsis of Program:

The Division of Integrative Organismal Systems (IOS) Core Programs support research aimed at understanding why organisms are structured the way they are and function as they do. Proposals are welcomed in all of the core scientific program areas supported by the Division of Integrative Organismal Systems (IOS) as well as cross-disciplinary programs as specified below. Areas of inquiry include, but are not limited to, developmental biology and the evolution of developmental processes, nervous system development, structure, modification, function, and evolution; biomechanics and functional morphology, physiological processes, symbioses and microbial interactions, interactions of organisms with biotic and abiotic environments, plant and animal genomics, and animal behavior. Proposals should focus on organisms as a fundamental unit of biological organization. Principal Investigators are encouraged to apply systems approaches that will lead to conceptual and theoretical insights and predictions about emergent organismal properties.

Proposals are welcome in:

- Behavioral Systems
- Developmental Systems
- Neural Systems

- Physiological and Structural Systems
- Plant Biotic Interactions
- Plant Genome Research Program
- Organismal Response to Climate Change – This is a new, cross-disciplinary program with an upcoming deadline of December 13 2023 for NSF submissions, and December 19 for BSF submissions.

General:

1. BSF administers the NSF-BSF program on behalf of the Israel Council for Higher Education (CHE). For fiscal year 2022 CHE has budgeted 38.3M NIS for US-Israel collaborative research under this program.

2. The NSF-BSF program is not a "special" program and NSF does not set aside money for potential grants. Rather, NSF-BSF proposals are evaluated together with standard NSF proposals in a review process managed by the regular NSF core programs in the participating disciplines. It is essential that the U.S. PI has a clear understanding of the NSF-BSF framework before embarking on proposal preparation.

3. Applications must be developed and written jointly by a team of Israeli and U.S. scientists that hold academic appointments in their respective countries and are eligible to apply for external funding at organizations such as NSF and BSF.

4. Israeli applicants are advised that they should pay particular attention to the NSF evaluation criteria, http://nsf.gov/bfa/dias/policy/merit_review/, which may include requirements such as broader impacts, data management plan etc. These requirements may either be missing in BSF/ISF applications, or have a greatly different meaning (particularly the term 'broader impacts') and thus require special attention. **Failure to appropriately address these requirements may be detrimental to the proposal and in the worst case may lead to rejection without review**. Discussion of these requirements with the US PI(s) and jointly addressing these is recommended.

5. The NSF accepts applications only from U.S. scientists and submission to the NSF-BSF program should be made only by the U.S. applicant. The proposal is recognized as an NSF-BSF application by adding the prefixed "**NSF-BSF:**" to the proposal title. The role of the Israeli applicant(s) and the nature of the collaboration must be described in the different sections of the proposal, e.g. sections with details of work plan, time line etc. **Furthermore, it should be clearly explained why the contribution of the Israeli PI is critical to the success of the proposed study**.

6. For technical reasons only, the Israeli applicant cannot appear on the cover page of an NSF proposal. However, by using the prefix "NSF-BSF:" in the title and including the Israeli applicant as "Senior Personnel" the NSF system immediately identifies the Israeli applicant as Co-PI on the project. The Israeli applicant will provide a CV, a budget and budget justification and these will be added as supplementary documentation to the proposal.

7. BSF will adhere to the NSF decision regarding the duration of the project.

8. The Integrative Organismal Systems program is accepting research proposals throughout the year.

9. A presentation with tips for Israeli scientists who wish to participate in collaborative proposal submission under the NSF-BSF program can be found here

Eligibility:

1. All inquiries regarding the suitability of the research topic must be made by the U.S. applicant(s) to the relevant program directors at NSF. BSF will not respond to any query regarding topic eligibility.

2. All BSF regulations regarding eligibility of the Israeli applicant(s) and NSF regulations regarding the U.S. applicant(s) will apply to this program.

3. Each Israeli scientist is now permitted to submit up to two NSF-BSF applications each academic year (1 Oct – 30 Sept.). In any case, at any given time an Israeli scientist can only be involved in two proposals/grants simultaneously.

4. An Israeli with an active BSF research grant is allowed to submit an application to any of the NSF-BSF programs.

5. An Israeli with an active NSF-BSF grant in allowed to submit one more NSF-BSF application.

6. It is allowed to submit both to an NSF-BSF program and the regular BSF program, including similar applications. In the event that grants are awarded in both programs, both will be funded, unless, the research applications are mostly similar, or significantly overlap, in which case only the NSF-BSF programs will be funded by BSF.

7. In case of similar NSF-BSF and regular BSF applications, in which the NSF evaluation of the NSF-BSF application was not completed by the time the regular BSF awards are made, the BSF will defer its decision regarding a possible grant to this application, until the NSF-BSF awards are announced.

Evaluation:

1. Proposals will be evaluated by the relevant NSF program, using their criteria and adhering to a Lead Agency Model that underpins several other Israeli binational and multinational research collaborations. BSF watches over compliance by Israeli applicants, but does not evaluate the scientific merit of the applications.

2. NSF uses a conventional peer review system with ad-hoc (external) reviews for full proposals and subsequent evaluation by expert panels. However, unlike the practice in Israel, panel members serve in an advisory capacity, and final decisions lie with the program officers and NSF management. These post-panel officials may introduce additional considerations such as whether the research topic already has support from the U.S. government, whether support from other NSF programs was sought, etc.

3. NSF program officers inform reviewers and panelists of the special nature of the NSF-BSF partnership and ensure that the Israeli applicant(s) are recognized as Co-PIs and are



evaluated alongside their US counterparts. For more detail, please, we refer to the NSF Dear Colleague letter that covers the NSF-BSF program in great detail (https://www.nsf.gov/pubs/2020/nsf20094/nsf20094.jsp).

4. If the collaborative research proposal is recommended for an award, then, pending formal approval, the Israeli applicant(s) will receive a grant from the BSF, while the U.S. applicant(s) will receive a grant from the NSF.

5. The award amount for the Israeli applicant is capped at a maximum of $80,000 per year for experimental programs and up to $55,000 per year for theoretical or computer-based research, **subject to the availability of funds**. If more than a single Israeli group is involved in the research, then the budget may be increased by up to 50%.

6. In case of similar NSF-BSF and regular BSF applications, in which the NSF evaluation was not completed by the time the regular BSF awards are made, we will defer the decision regarding a possible grant for the BSF application, until NSF had made its funding decision regarding the NSF-BSF proposal.

7. Israeli researchers may take part in the NSF evaluation process as panel members and/or external reviewers.

Submission:

The full proposals will be submitted to the program twice.

Step 1. The U.S. applicant will submit the NSF-BSF proposal following the NSF regulations and submission procedures (https://www.nsf.gov/pubs/policydocs/pappg22_1/index.jsp).). **The US applicant's submission to the NSF MUST include the BIOGRAPHY (in NSF format) and BUDGET + BUDGET JUSTIFICATION (in BSF format) of the Israeli applicant under supplementary materials.**

Step 2. The Israeli applicant will submit the identical proposal as a pdf document to the BSF, including all information regarding the U.S. applicant(s), and adhere to relevant BSF regulations regarding proposal submission: see here.

Timetable:

Most of these programs have no deadline and applications are welcomed throughout the year. Israeli PIs must submit their proposal to the BSF within 7 days after the U.S. PIs submit to the NSF.

- For the new program for "Organismal Response to Climate Change" the BSF deadline for submission by the Israeli PI(s) is no later than 5 pm (Israel time) on December 19, 2023 (NSF deadline is December 13, 2023)**.**

Applicants are requested to acquaint themselves with the BSF regulation for this NSF-BSF program before they submit applications. The forms and regulations can be downloaded from the BSF website (https://www.bsf.org.il/funding-opportunities/nsf-bsf-joint-research-grants/the-programs/).

Questions regarding the suitability of the proposed research for this program should be directed by the U.S. applicant(s) to program officer in the relevant programs at the NSF.

Other questions regarding this call for proposals can be discussed with the BSF staff by mail or by phone (972-2-5828239): Dr. Rachel (Heni) Haring (heni@bsf.org.il ext. 205) or Ms. Yael Dressler (yael@bsf.org.il ext. 203). Questions regarding the online application system should be directed to Ms. Orli Rozencwajg (orli@bsf.org.il ext. 206).