Division of Biological Infrastructure 2018 Webinar

•What is changing?

- •Why is it changing?
- •What are some of the details?
- Questions



What is Changing?

Take Home Message

Starting August 2018 all proposals submitted to the Research Resource cluster in the Division of Biological Infrastructure (DBI) should be directed to either the

Infrastructure Innovation for Biological Research (IIBR, NSF 18-595)

http://www.nsf.gov/pubs/2018/nsf18595/nsf18595.htm

or the

Infrastructure Capacity for Biology (ICB, NSF 18-594)

https://www.nsf.gov/pubs/2018/nsf18594/nsf18594.htm

Solicitation, neither of which has a deadline.



What is **NOT** Changing?

- The following programs will continue to have their own solicitations:
 - <u>ADBC</u> (Advancing Digitization of Biodiversity Collections)
 - <u>**REU</u></u> (Research Experiences for Undergraduate Students)
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 - PRFB (Postdoctoral Research Fellowships Program)
 - <u>RCN-UBE</u> (Research Coordination Networks for Undergraduate Biology Education -iUSE)
 - CAREER, Conference and Workshops, EAGERS, RAPIDS, RAISES, RCNs, Supplements to existing awards



What is Changing?

- The following programs will **no longer** have their own distinct solicitations:
 - <u>ABI</u> (Advances in Biological Informatics)
 - <u>IDBR</u> (Instrumentation Development for the Biological Research)
 - **<u>FSML</u>** (Field Stations and Marine Labs)
 - <u>CSBR</u> (Collections for Biological Research)



Two New Solicitations

- Proposals previously submitted to ABI, IDBR, FSML, or CSBR should now be submitted to one of two new solicitations:
 - Infrastructure Innovation for Biological Research (IIBR – NSF 18-595)
 - Infrastructure Capacity for Biology (ICB – NSF 18-594)



Alignment of Previous Programs with New Solicitations

- Infrastructure Innovation for Biological Research (<u>IIBR</u>):
 - ABI (Innovation Track)
 - IDBR (Type A Track)
 - Multidisciplinary (New)
- Infrastructure Capacity for Biology (<u>ICB</u>):
 - ABI (Development Track)
 - IDBR (Type B Track)
 - FSML
 - CSBR



Limits on number of proposals per P.I. or co-P.I. within a fiscal year (Oct.-Sept.)

- The number of proposals per P.I. or co-P.I. that can be submitted to IIBR or ICB are:
 - Two per the IIBR solicitation of which one must be to the Rules of Life Track or
 - One to each of the new DBI solicitations, (IIBR or ICB) or
 - Two per the ICB solicitation, but only one per program within the ICB solicitation
- There is no limit on Senior Personnel or subawards etc.



Why is this Changing?

- Rationale for DBI Program Reorganization
 - Better alignment of review criteria with the lifecycle stages of projects
 - Allows review of projects with mixtures of resource types (*e.g.* Instrumentation and Informatics; Research Collections and Field Stations)



Why is this Changing?

- Rationale for no deadlines
 - Flexible submission times allow PIs to submit when proposals are ready, leading to higher quality proposals
 - To better accommodate co-Review of proposals, including Rules of Life proposals



IIBR - Solicitation

Supports new and innovative research in biological informatics, instrumentation, and multidisciplinary approaches that combine them, to support fundamental biological research.

Successful proposals are expected to:

- Identify a particular biological research community that will be impacted by the proposed work.
- Defend the high-risk, high-payoff nature of the innovation and how it substantially advances the science of the target research community
- Show that the targeted research community carries out basic research that is supported by the Directorate for Biological Sciences at NSF.
- Addresses all review criteria in appropriate detail.



IIBR – Programmatic Areas

- Innovation in Biological Informatics
- Innovation in Instrumentation
- Multidisciplinary Innovation that merges aspects of biological informatics, computer science and/or instrumentation/sensor development



IIBR – Review Criteria

- The <u>need</u> of the specific community of NSF BIO funded research that will benefit from this work, <u>how</u> that community was identified, and the <u>evidence</u> for both of these factors;
- A clear demonstration of how this research represents an advance over currently available resources; and
- The quality of the <u>management plan</u> for the project, providing clear milestones for assessing progress, problems, adjustments, and outcomes.



ICB - Solicitation

Development or implementation of robust infrastructure that serves a significant segment of the BIO funded research community.

Successful proposals are expected to:

- Deliver a shared resource or service that responds to well defined requirements.
- Exhibit very few risks to success.



ICB – Program Areas

Proposals may be submitted in response to one (or more) of the following program descriptions:

- Cyber-Infrastructure for Biological Research (CIBR)
- Improvements to Field Stations and Marine Labs (FSML)
- Collections in Support of Biological Research (CSBR)
- Instrument Capacity for Biological Research (ICBR)



ICB – Review Criteria

- <u>Needs assessment</u> and demonstration of transformative impacts
- Size, diversity, and significance of the target <u>user community</u>
- Quality of design, workplan, evaluation
- Likelihood of <u>success</u> and control over <u>risk</u>
- Compliance with appropriate <u>community</u> <u>standards</u>
- Institutional commitment and plans for sustainability

Rules of Life Track (IIBR Only)

Rules of Life (RoL) track proposals must integrate research activities across multiple levels of biological organization, and thereby span funding programs beyond a single division in the BIO (MCB, IOS, DEB, DBI) directorate. It is expected that RoL proposals will bring together diverse teams of scientists to create novel framings and solutions for conceptual problems in biology. Proposals submitted to this track will be evaluated by co-review or joint review across two or more of these BIO divisions. *Proposals should be submitted to a program in one of* these divisions, and also must identify one or more programs in other BIO Divisions for co-review. Proposal titles should start with the designation "RoL:".



Rules of Life Track (IIBR Only)

RoL track proposed activities must also:

- Engage or enable innovative approaches to fundamental questions in biology;
- Promise results or approaches that are generalizable beyond particular study systems;
- Seek to discover, enable and/or test foundational principles (rules, theory) that explain or predict the emergence of complex phenomena in biology; and
- Apply integrative approaches that span levels of biological organization beyond the funding programs within a single BIO division.



QUESTIONS?

- This Webinar should be posted as presented by Oct. 5, 2018 for on-demand viewing at a later time
 - Recorded Webinar URL
 https://www.nsf.gov/events/event_summ.jsp?cntn_id=296706&org=DBI
 - Link to FAQ URL <u>https://www.nsf.gov/pubs/2018/nsf18106/nsf18106.jsp</u>
- Email questions to any DBI Program Director in the Research Resources Cluster:
 - see DBI website for addresses: https://www.nsf.gov/staff/staff_list.jsp?orgId=323&subDiv=y&org=DBI&from_org=DBI
- Concerns can also be directed to:
 - DBI Division Director Dr. Muriel Poston <u>mposton@nsf.gov</u>

