

**FACULTY
SUCCESS
SEMINARS**



**University
of Idaho**

*Please keep your microphone
muted until the Q&A session*

NSF EPSCOR RII TRACK-2: TIPS FOR WRITING A COMPETITIVE PROPOSAL

**RESEARCH AND FACULTY DEVELOPMENT
FACULTY SUCCESS SEMINAR SERIES**

Carly Cummings, PhD, CPRA

Director, Office of Research and Faculty Development

Expert Guest: Marty Ytreberg, PhD

Professor of Physics and PI of current Track-2 award

Please note that this session is being recorded

HOUSEKEEPING ITEMS



I This seminar is being recorded

- Please stay muted until the Q&A portion at the end of the seminar
- Type questions into the chat box and these will be addressed during the Q&A portion

OFFICE OF RESEARCH AND FACULTY DEVELOPMENT



I We provide proposal development assistance across the spectrum *



I Meet goals in the UI strategic plan – grow research and creative efforts across all disciplines

I Reach out to discuss ideas with us and request service – uidaho.edu/orfd





*Not including budget preparation

All services are optional and are granted on a first come, first served basis

OBJECTIVES



IN THIS SESSION, WE WILL DISCUSS:

-  Program basics
-  Limited submission process & timeline
-  Program Officer's tips for competitive proposals
-  Hear from the expert – Dr. Marty Ytreberg

EPSCoR: Established Program to Stimulate Competitive Research

- **Assist NSF's Mission:** “to strengthen research and education in science and engineering throughout the United States and to **avoid undue concentration of such research and education.**
- **EPSCoR goals:**
 - Catalyze the development of research capabilities and the creation of new knowledge that **expands jurisdictions' contributions** to scientific discovery, innovation, learning, and knowledge-based prosperity;
 - Establish sustainable Science, Technology, Engineering, and Mathematics (STEM) education, training, and professional development pathways that **advance jurisdiction-identified research areas and workforce development;**

NSF EPSCOR



I EPSCoR: Established Program to Stimulate Competitive Research

- EPSCoR goals (cont'd):
 - Broaden direct participation of diverse individuals, institutions, and organizations in the project's science and engineering research and education initiatives;
 - Effect sustainable engagement of project participants and partners, the jurisdiction, the national research community, and the general public through data-sharing, communication, outreach, and dissemination; and
 - Impact research, education, and economic development beyond the project at academic, government, and private sector levels.

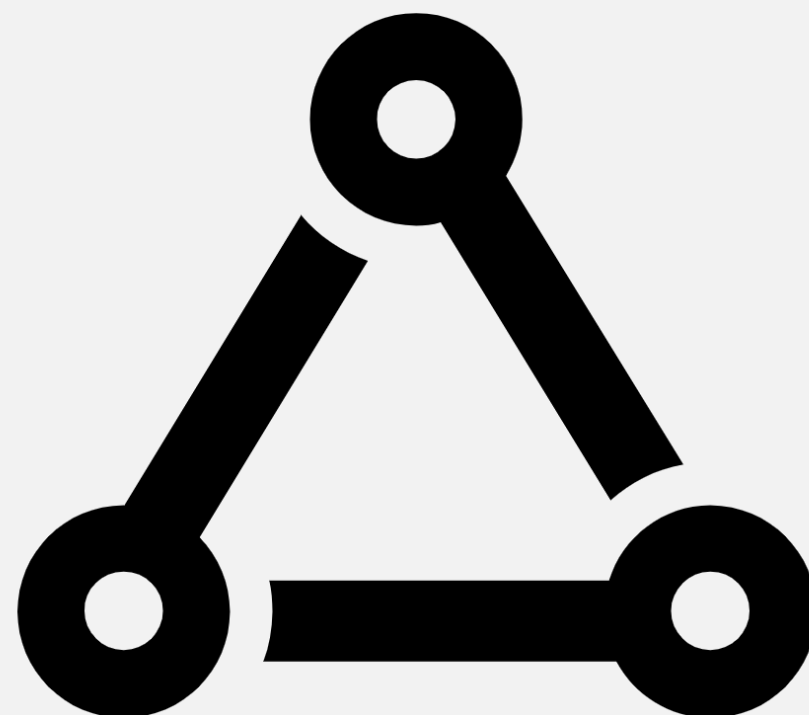
I EPSCoR Research Infrastructure Improvement (RII) Program

NSF EPSCOR RII TRACK-2 FOCUSED EPSCOR COLLABORATIONS (FEC) PROGRAM



I EPSCoR RII Eligible jurisdictions:

- Alabama, Alaska, Arkansas, Delaware, Guam, Hawaii, [Idaho](#), Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, Vermont, US Virgin Islands, West Virginia, and Wyoming
- PI and represented jurisdictions **must** include Co-PIs ([at least 2](#) jurisdictions)



NSF EPSCOR RII TRACK-2 FOCUSED EPSCOR COLLABORATIONS (FEC) PROGRAM



I FEC

- Single **scientific focus** consistent with NSF priorities ([NSF 10 Big Ideas](#))
- Change every 2 yrs.
 - FY 21 – 22: To be announced...
 - FY19 - 20: Harnessing the Data Revolution (HDR) to solve problems of national importance
 - FY17 – 18: Understanding the relationship between genome and phenome

NSF'S 10 BIG IDEAS



*Topic for
FY21 – 22?
New solicitation
to be released
soon!*

Since 2017, NSF has been building a foundation for the Big Ideas through pioneering research and pilot activities. In 2019, NSF will invest \$30 million in each Big Idea and continue to identify and support emerging opportunities for U.S. leadership in Big Ideas that serve the Nation's future.

Future of Work

Growing Convergence
Research

Harnessing the Data
Revolution

Mid-scale Research
Infrastructure

Navigating the New Arctic

NSF 2026

NSF INCLUDES

Quantum Leap

Understanding the Rules of Life

Windows on the Universe

NSF EPSCOR RII TRACK-2 FEC PROGRAM



I FOCUS

- The **primary driver** for RII Track-2 FEC investments is the **need to build investigator-driven, inter-jurisdictional research collaborations that have the potential to be nationally and internationally competitive.**
- RII Track-2 FEC proposals are **unique** in their **integration** of researchers into collaborative teams, and **must** develop a diverse, well-prepared, STEM-enabled workforce necessary to sustain research competitiveness.
- The recruitment and/or development of **diverse early-career faculty** are critical in achieving this goal and **must** be an integral component of the proposed project.

NSF EPSCOR RII TRACK-2 FEC PROGRAM



I FOCUS (cont'd)

- Over the long term, RII Track-2 FEC investments are expected to result in **sustained improvements in research competitiveness**.
 - Non-EPSCoR and international collaborations may be included, but no EPSCoR funds should be directed to these organizations.
- **Central to the success** of the proposal is the clear demonstration that **the collaboration is well-positioned to produce outcomes that cannot be obtained through the efforts of a team in a single jurisdiction** working alone.
 - The proposal **must** clearly identify the roles and contributions of each partner in the project, the anticipated increases in research capacity and competitiveness, the projected workforce development and educational plan and outcomes, and the benefits to the jurisdictions, nation, and society.

NSF EPSCOR RII TRACK-2 FEC PROGRAM



NOTE: We are awaiting the release of the FY21 solicitation

I Funding & Duration: \$5M - \$7.5M for projects up to 4 years

- Based on the **number of eligible jurisdictions** participating in the project
 - If **two** RII-eligible EPSCoR jurisdictions collaborate: **up to \$1 million per year** for up to four years.
 - If **three or more** RII-eligible EPSCoR jurisdictions collaborate on a proposal: **up to \$1.5 million per year** for up to four years.
 - 5 awards are expected

I Annual Deadlines (*anticipated*):

- Letter of Intent (required): December 20
- Full Proposal Deadline: January 24

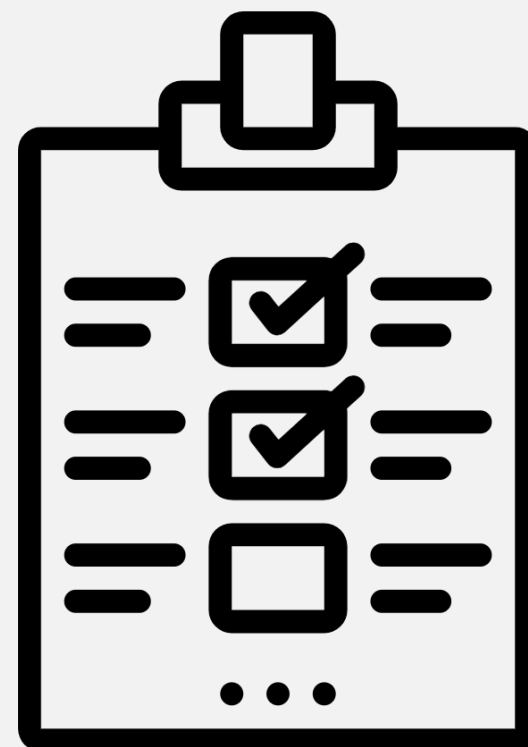
NSF EPSCOR RII TRACK-2 FEC PROGRAM



NOTE: We are awaiting the release of the FY21 solicitation

I Limit on Number of Proposals per Organization: 1

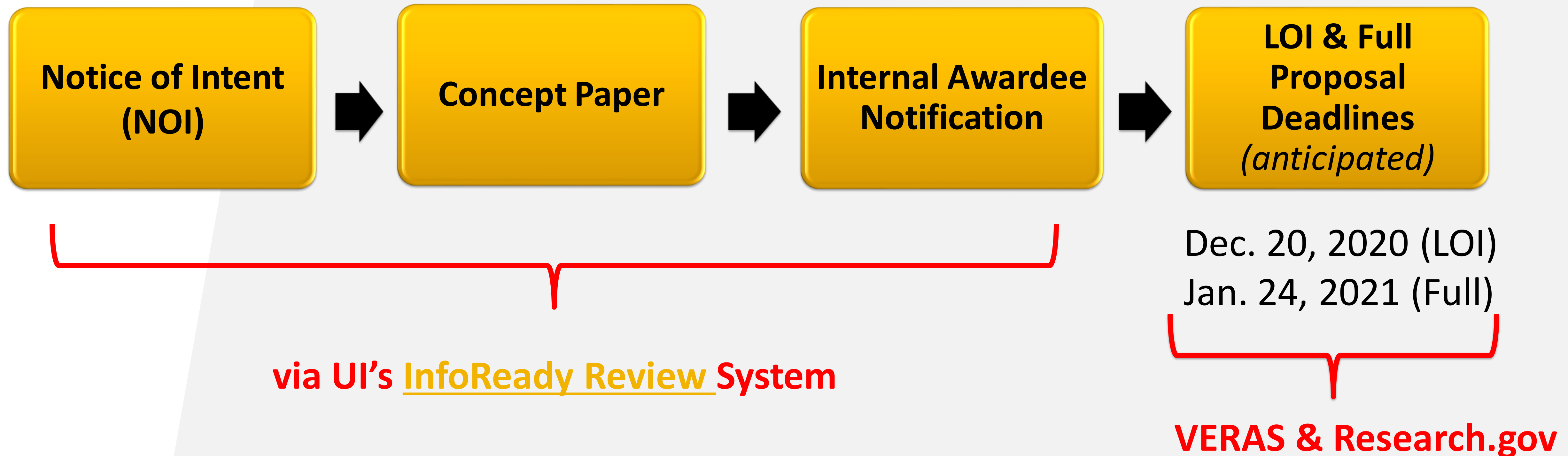
- Only **one** RII Track-2 FEC proposal may be submitted in response to this solicitation by an organization in a **RII-eligible jurisdiction**
- RFD uses internal review process to determine which proposal will be submitted



EPSCOR RII TRACK-2 FEC - LIMITED SUBMISSION PROCESS



DATES TO BE ANNOUNCED*, BUT PROCESS IS OUTLINED HERE:



**Stay tuned for the weekly LS Newsletter for dates. All deadlines are at 5:00 pm Pacific Time.*

TRACK-2 PROJECT DESCRIPTION (20 pg.)



I Expected outline:

- Status and Overview (2 pg. max.)
 - Motivation and how addresses research focus area
- Results from Relevant Prior Support (2 pg. max.)
 - In addition to standard 'prior support' information, this section should summarize the coordination and synergy among EPSCoR and other NSF investments in the jurisdiction
- Research, Collaboration, and Workforce Development (18 pg. max)
 - Primary element that will be judged during the merit review process for intellectual merit and broader impacts according to NSF merit review procedures

TRACK-2 PROJECT DESCRIPTION (20 pg. max)

I Expected outline (cont'd):

- Inter-jurisdictional Collaborations and Partnerships
 - **Must** clearly present the **rationale for the composition of the teams**, a description of the **leadership structure**, and the **context** for establishing the collaboration
 - The research **expertise** of the PIs and co-PIs **must** be explained in the context of the proposed research activities
- Workforce Development
 - **Must** include STEM workforce development activities that are **integrated** with the research and education components of the project and contribute to the preparation of a **diverse, new cadre** of skilled researchers, innovators, and educators
 - **Must** include explicit efforts for the recruitment and/or development of **diverse early-career faculty** in the project's research activities

TRACK-2 PROJECT DESCRIPTION (20 pg. max)

I Expected outline (cont'd):

- Evaluation and Assessment Plan (2 pg. max.)
 - Develop this with an **expert evaluator** – integral part of the project design
 - Formative and summative evaluation and assessment plan, including goals, **metrics**, and milestones
 - Strength of collaboration and workforce development
 - Collaborative proposals and publications, progression of early-career faculty, tracking of trainees, etc.
- Sustainability Plan (2 pg. max.)
 - **Must** provide **realistic, annual metrics** for submissions of proposals to specific NSF programs by the project team in the focus area topic, new faculty hires, etc.

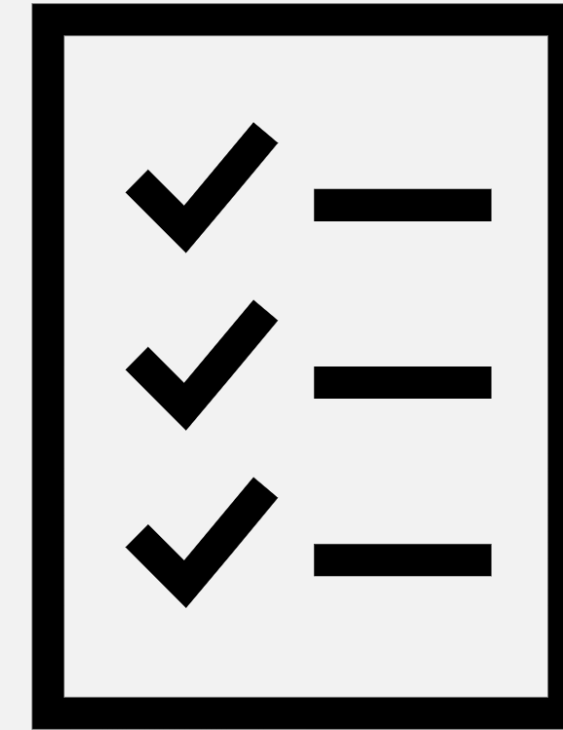
REVIEW CRITERIA

I Intellectual Merit

I Broader Impacts

I Solicitation-Specific Review Criteria

- The responsiveness to the identified programmatic focus area
- Research Capacity
- Inter-jurisdictional Collaboration
- Workforce Development
- Jurisdictional Impacts
- Integration of Project Elements



PO'S TIPS FOR COMPETITIVE PROPOSALS



I Alignment with focus area

- Clear boundaries
- NSF Big 10 ideas

I Researcher-driven program

- Organic collaboration

I Early career faculty development is critical

- Diversity
- Mentoring

I Respond to solicitation-specific review criteria

I Contact Program Officer:

- JD Swanson, jswanson@nsf.gov, 703-292-2898

TIPS FOR COMPETITIVE PROPOSALS



- I** Use new Program Solicitation (*any day now!*)
- I** Familiarize yourself with [NSF's 10 Big Ideas](#)
- I** Request copies of funded EPSCoR RII Track-2 FEC proposals from PIs ([NSF Awards Advanced Search](#))
 - Title must begin with “RII Track-2 FEC:”
 - Two current UI awardees
- I** Contact Program Officer
- I** RFD can assist you!
 - Email: ored-rfdteam@uidaho.edu
 - Url: <https://www.uidaho.edu/research/about/orfd>

REQUEST RFD SERVICES

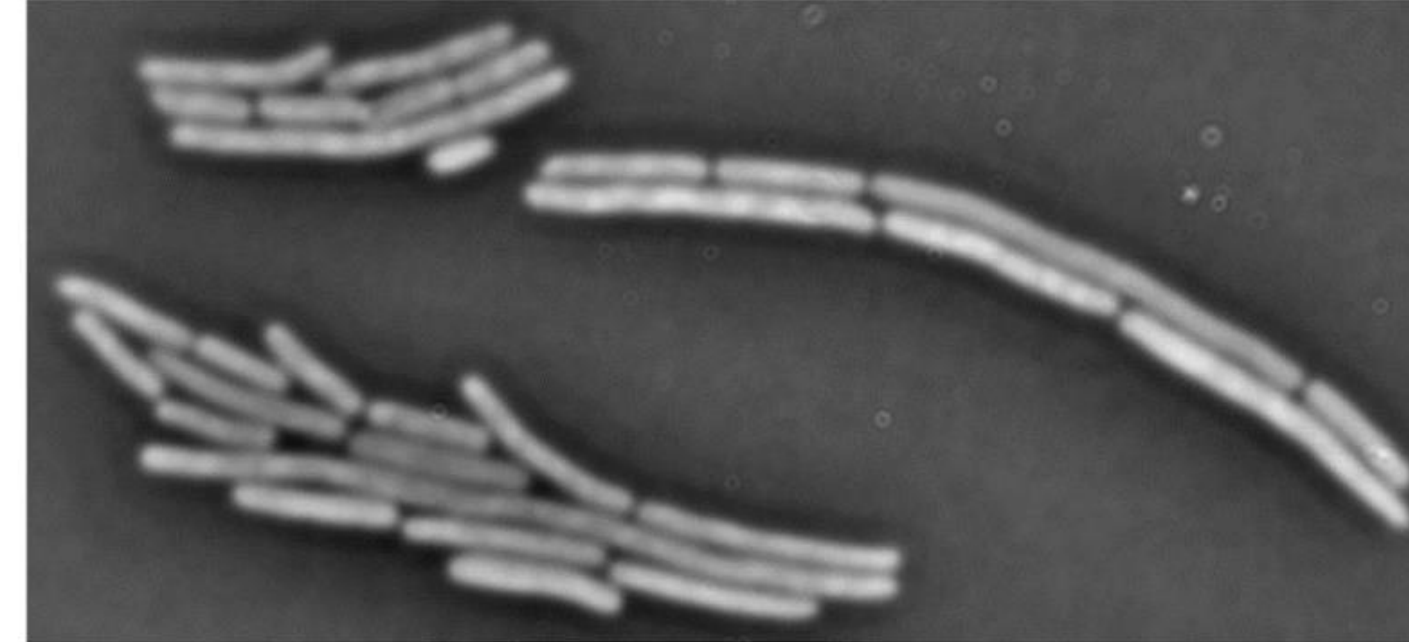
OUR TRACK-2 PROJECT

RII TRACK-2 FEC: USING BIOPHYSICAL PROTEIN MODELS TO MAP GENETIC VARIATION TO PHENOTYPES

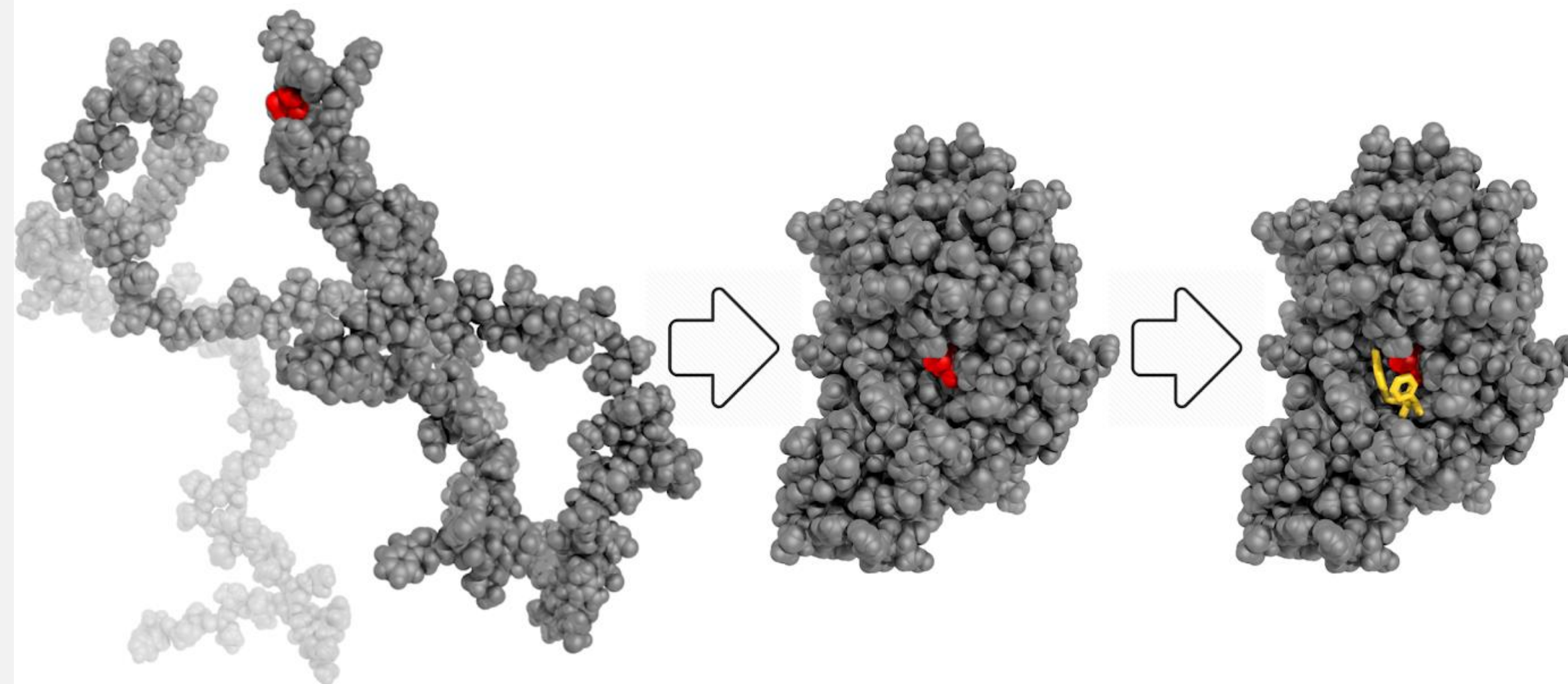
I \$6M

I Currently in 4th and final year

I Theme: “genome to phenome”



How do changes in protein folding & binding modify organism phenotypes?



How do changes in sequence modify protein folding & binding?

...AFIRKSDEL...

...AFIRLSDEL...

Genome to phenome

OUR TRACK-2 PROJECT

THREE JURISDICTIONS (EPSCOR STATES)

- I Doing good science by building teams of **interjurisdictional**, **interdisciplinary** researchers
- I Strive for **synergy**, i.e., the team is greater than the “sum of its parts”
- I Over 50 participants, including 17 faculty



BUILDING A TRACK-2

MY “RECIPE”

- I Get a small core group of people together who you enjoy and have scientific overlap
- I Develop a rough idea of what you want to do and identify collaborators from other EPSCoR states
 - Think about the diversity of the team from the start (under-represented groups, faculty rank, gender)
- I Have a brainstorming session about the science with the larger group with a goal of developing a central scientific question/gap
- I Do not overlook the importance of: (1) enjoying the people who are part of the project, (2) the scientific question/gap (intellectual merit), (3) integrating the broader impacts into the science

BUILDING A TRACK-2

OTHER TIPS

- I Consider how you will communicate with the team (we use Slack, much better for a large group than email)
- I Consider creating a diversity and inclusion action plan from the very beginning
- I Consider desired outcomes (aside from what NSF wants) and how you will assess them
 - How will you measure broader impact success?
 - How will you tell whether your participants (especially students and postdocs) are getting value from the project?
- I Consider submitting through a UI Research Institute
 - Reporting support
 - Budget management

Q&A





Thank you for attending!

See you next time!

FACULTY SUCCESS SEMINARS



FALL 2020

- Sept. 9** NSF Research Traineeship (NRT) Program: Tips for Writing a Competitive Proposal
- Sept. 23** NSF CAREER All Year: Getting Ready to Apply
- Sept. 30** NSF EPSCoR RII Track-2: Tips for Writing a Competitive Proposal
- Oct. 7** Find Funding Opportunities: Introduction to Pivot
- Oct. 21** NSF CAREER All Year: Getting Started on Your Proposal
- Nov. 4** UPDATE: Mountain West Clinical and Translational Research-Infrastructure Network (MW CTR-IN) Funding Opportunities
- Nov. 18** Myth-busting Department of Defense Funding Opportunities
- Dec. 2** M. J. Murdock Trust's Commercialization Initiation Program: Tips for Writing a Competitive Proposal

SPRING 2021

- Jan. 13** Find Funding Opportunities: Introduction to Pivot
- Jan. 27** Funding Research and Scholarly Work in the Humanities
- Feb. 3** Idaho is an EPSCoR State - What This Means for Supporting Your Research
- Feb. 17** How to Develop and Deliver an Effective Pitch
- Mar. 3** Assessing Your Grant Readiness
- Mar. 24** Early Career Faculty Research - Grant Programs
- Apr. 7** USDA NIFA AFRI: Tips for Getting Started with Your Next Proposal
- Apr. 14** Developing Data Management Plans - Best Practices and Resources
- Apr. 28** Equipment Grant Programs: An Overview

ZOOM ID

uidaho.zoom.us/j/95865360877



scan this to zoom with us



WE GUIDE THE DEVELOPMENT OF COMPETITIVE EXTERNAL GRANT PROPOSALS

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