



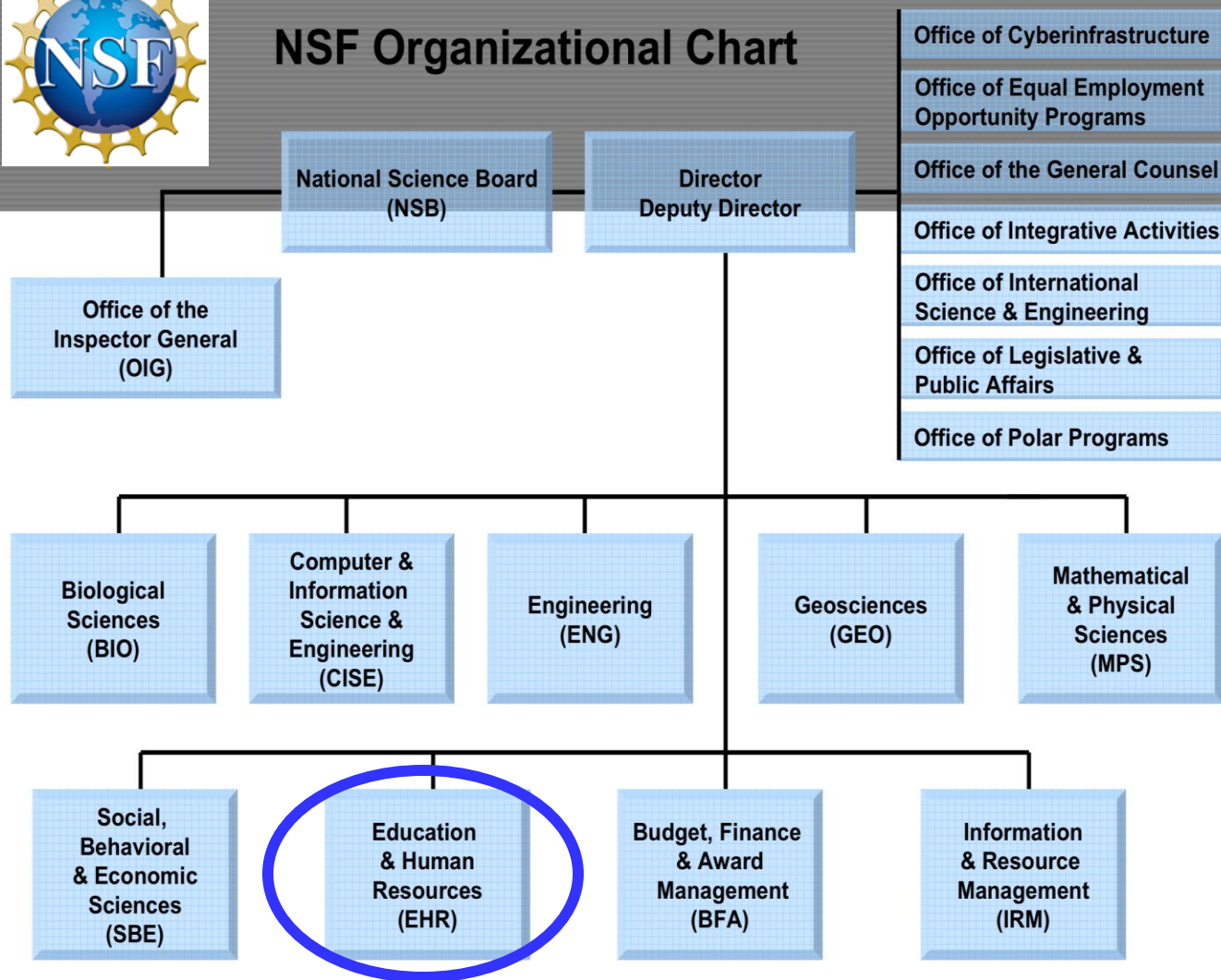
NSF HBCU-UP Outreach Workshop, Session 2

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NSF Organizational Chart



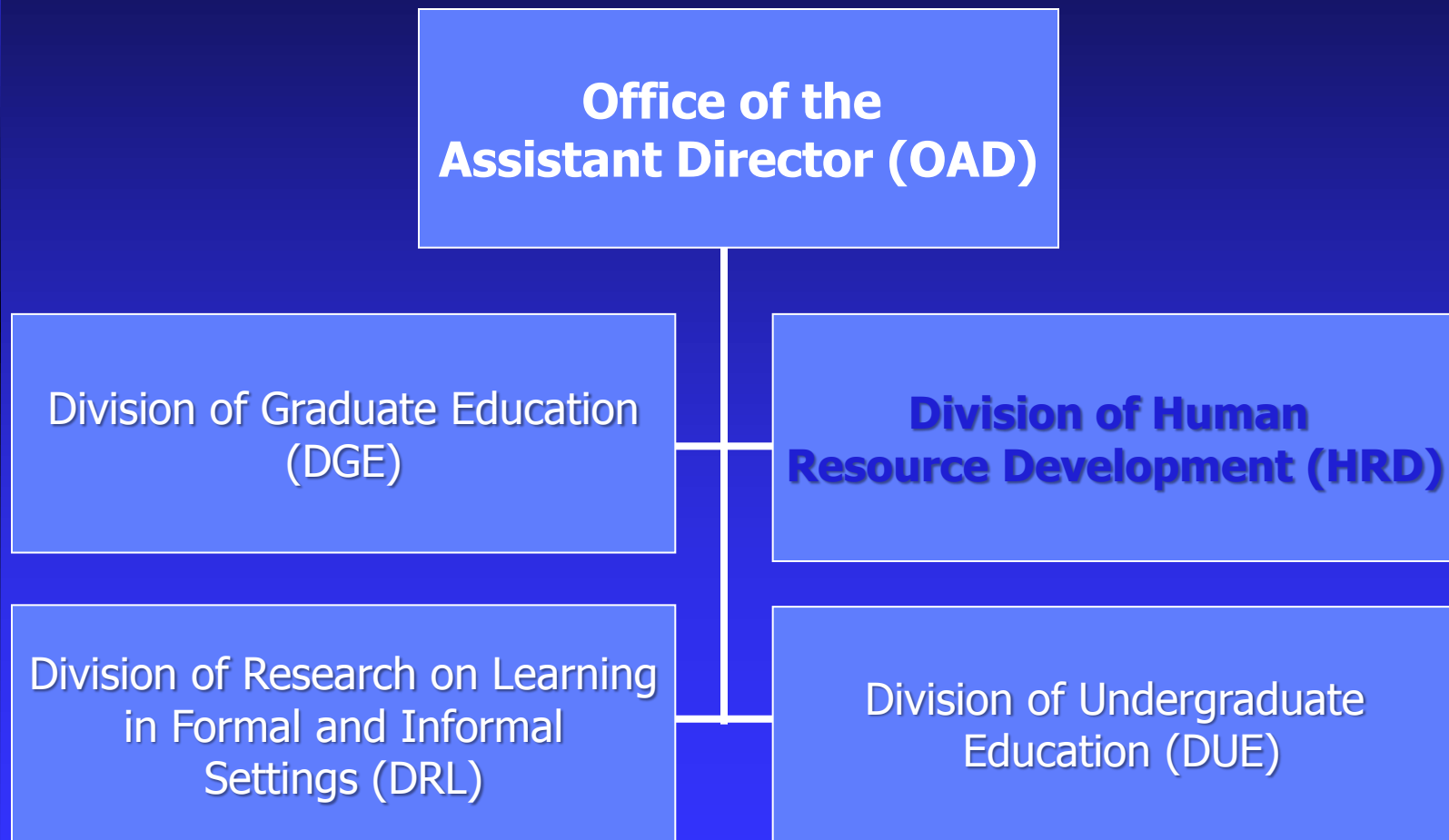


Directorate for Education and Human Resources (EHR)

Mission: To enable *excellence in U.S. STEM education* at all levels and in all settings in order to support the development of *a diverse and well-prepared workforce* of scientists, technicians, engineers, mathematicians, and educators.



EHR Organizational Structure





Division of Human Resource Development (HRD)

Mission: To grow the innovative and competitive U.S. STEM workforce that is vital for sustaining and advancing the Nation's prosperity by supporting the **broader participation and success** of individuals currently **underrepresented in STEM** and the institutions that serve them.



HRD Programs

- ❑ Historically Black Colleges and Universities- Undergraduate Program (**HBCU-UP**)
- ❑ Louis Stokes Alliances for Minority Participation (**LSAMP**)
- ❑ Tribal Colleges and Universities Program (**TCUP**)
- ❑ Centers of Research Excellence in Science and Technology (**CREST**)
- ❑ Alliances for Graduate Education and the Professoriate (**AGEP**)
- ❑ Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (**ADVANCE**)
- ❑ Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring (**PAESMEM**)



Louis Stokes Alliances for Minority Participation (LSAMP)

Goal: To significantly increase the numbers of students (historically under-represented in STEM) who successfully complete high quality Baccalaureate Degree Programs in STEM

Types of Awards:

- Alliances (including Bridge to the Baccalaureate)
- Bridge to the Doctorate (BD)
- Broadening Participation in STEM Education Research (BPR)



LSAMP Award Type: Alliances

- Alliances can have partner institutions drawn from among 4-year institutions, community colleges, school systems, Federal/state/local government agencies, major national laboratories and centers, industry, private foundations, and professional STEM organizations, as necessary to achieve the proposed LSAMP goals and objectives.
- Multi-institutional and multi-disciplinary partnerships supporting sustained and **comprehensive approaches to broadening participation at the baccalaureate level.**
- **B2B Alliances:** Partnerships between 2-year and community colleges to prepare students to transition to 4-year institutions



LSAMP Award Type: Bridge to the Doctorate

- Senior Alliances are eligible to submit a proposal to host a BD activity at one of its alliance institutions
- Provides direct student support for LSAMP baccalaureate degree recipients for the first two years of a STEM graduate program.
- BD participants are expected to transition through doctoral studies and into the professoriate and/or STEM workforce.



LSAMP Award Type: BPR

- Included as a track in HBCU-UP, LSAMP, AGEP, CREST, TCUP
- Support research projects that seek to create and study new theory-driven models and innovations related to the participation and success of underrepresented groups in STEM undergraduate education



Potential Questions for BPR Studies

The LSAMP Program is interested in building knowledge in areas related to the following questions:

1. What are the underlying issues affecting the differential participation and graduation rates in STEM undergraduate education of students historically underrepresented in STEM?
2. What replicable models of successful alliance strategies can be developed, described and adopted by other alliances and other institutions that serve students from underrepresented populations?
3. What are effective methods of increasing the capacity of alliance institutions to produce more STEM graduates who are highly qualified for the STEM workforce or graduate school?
4. How does the engagement of discipline-specific undergraduate research affect retention in STEM of students from underrepresented populations?
5. What motivates choice of, or retention in, STEM careers for populations historically underrepresented in STEM disciplines?



Award and Eligibility Information

AWARD

- Standard or continuing grants
- Estimate making 60 awards
- Funding amount is \$20,000,000 (Subject to availability of funds)
 - ◆ Alliances: Up to \$1 M/year, max 5 years
 - ◆ B2B: Up to \$500,000/year, max 3 years
 - ◆ BPR: Up to \$350,000 for 3 years

ELIGIBILITY

- Limit on number of proposals per Organization:
 - ◆ Alliances, B2B, BD: 1
 - ◆ BPR: No Limit
- Limit on number of proposals per PI:
 - ◆ Alliances, B2B, BD: 1
 - ◆ BPR: No Limit



EHR Core Research

- Introduced in 2013 to support *fundamental research to generate foundational knowledge* in the following focal areas:
 - ◆ STEM learning and STEM learning environments
 - ◆ STEM professional workforce development
 - ◆ Broadening participation in STEM
- From the onset, encouraging integration across the focal areas and collaboration among researchers in related disciplines, including social and behavioral sciences.



Research Proposals

- Fall within one or more focal research areas.
- Test theory that informs core scientific questions about STEM education, learning, participation and workforce development.
- Fundamental research involving the collection of new data, and/or secondary analyses of extant state, national, international or other databases.
- Research to develop innovative research methods, metrics and conceptual models to measure existing and emerging phenomena.



Capacity Building Proposals

- Aligned with ECR program goals.
- Synthesis Proposals:
 - ◆ Synthesis or meta-analysis of existing data on topic of critical importance.
 - ◆ May include knowledge diffusion efforts.
- Workshop and Conference Proposals:
 - ◆ Conceptual framework, draft agenda, participant list, & outcomes or products.
 - ◆ Describe how products serve fundamental research goals of ECR program.



ECR Research Proposal Types

■ ECR Fundamental Research Proposals

- ❖ Level 1: \$500,000; 3 yrs.
- ❖ Level 2: \$1,500,000; 3 yrs.
- ❖ Level 3: \$2,500,000; 5 yrs.

■ ECR Capacity Building Proposals

- ❖ *Synthesis*: \$300,000; 2 yrs.
- ❖ Conference/Workshop: \$25,000-\$100,000



Award and Eligibility Information

- Standard or continuing grants
- Estimate making 64 awards
- Funding amount is \$61,500,000
(pending availability of funds)
- No PI limit
- No limit of number of proposals per organization
- No limit on number of proposals per PI



NSF Merit Review Criteria

- **Intellectual Merit** – the potential to advance knowledge.
- **Broader Impacts** – the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

Both criteria, **Intellectual Merit** and **Broader Impacts**, will be given full consideration during the review and decision-making processes. Proposers must fully address **both** criteria.



Five Review Elements

The following elements should be considered in the review for BOTH criteria:

1. What is the potential for the proposed activity to:
 - ◆ **Advance knowledge** and understanding within its own field or across different fields (Intellectual Merit); and
 - ◆ **Benefit society** or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or **potentially transformative** concepts?
3. Is the **plan** for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to **assess** success?
4. How **well qualified** is the individual, team, or institution to conduct the proposed activities?
5. Are there **adequate resources** available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?



Tips for Success

- Start EARLY (at LEAST 6 months prior to deadline)
- Get acquainted with FastLane (www.fastlane.nsf.gov)
- **READ** the Program Solicitation
 - ❖ Know the program's specific guidelines and follow them!
- **Contact** a program officer to discuss your idea
 - ❖ May provide useful information and help you refine your idea
 - ❖ May also prevent you from applying to the wrong program
- “Attend” webinars offered by programs
- Sign up for NSF Updates
(<https://service.govdelivery.com/accounts/USNSF/subscriber/new>)
- Become an NSF **reviewer** (And then become an NSF rotator ☺)



Useful Resources

- ❑ NSF: www.nsf.gov
- ❑ FastLane: www.fastlane.nsf.gov
- ❑ Funding Opportunities: www.nsf.gov/funding/browse_all_funding.jsp
- ❑ Award Information: www.nsf.gov/awardsearch
- ❑ Broader Impacts: www.nsf.gov/pubs/gpg/broaderimpacts.pdf
- ❑ Data Management Plan: www.nsf.gov/bfa/dias/policy/dmp.jsp

- ❖ **NSF Grant Proposal Guide (GPG)** (*current NSF 14-1, but after 12/26/14: NSF 15-1*)
- ❖ *Common Guidelines for Education Research and Development* (NSF 13-126)
- ❖ *FAQs on the Common Guidelines* (NSF 13-127)



For More Information...

- On particular EHR Divisional Programs, go to the EHR website and choose a division.
<http://www.nsf.gov/dir/index.jsp?org=EHR>
- On how to contact me (Tasha R. Inniss):
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