Contents
Funding Opportunities and Agency Updates ................................................................. 1
  Funding Opportunity: ED Invites Applicants for FY 2022 Education, Innovation, and Research (EIR) Grants ... 1
  Funding Opportunity: NSF Releases Solicitation for Regional Innovation Engines ......................... 3
  Funding Opportunity: ARPA-E Releases Solicitation to Develop New Advanced Battery Technologies for Electric Vehicles ................................................................. 6
  Funding Opportunity: NFWF Releases Multi-Agency America the Beautiful Challenge Solicitation .......... 7

While the Senate was the only chamber in Washington this week, the city was shaken by news with national consequences. Politico obtained a leaked draft opinion written by Supreme Court Justice Samuel Alito that would reverse precedent established through the 1973 Roe vs. Wade decision protecting a woman’s right to an abortion. Congressional committees are also continuing their work on the twelve fiscal year (FY) 2023 appropriations bills and both chambers are still focused on conferencing their versions of competitiveness legislation in upcoming weeks. All of these issues, in addition to sending aid to Ukraine, will complicate the congressional calendar for the foreseeable future, with less than 30 legislative days in the House and 50 in the Senate before the August recess.

The University of Minnesota Washington Update provides intelligence and analysis on recent federal activities. Faculty visiting Washington, D.C. are encouraged to contact Sarah Neimeyer, Director of Government Relations, at neimeyer@umn.edu. Contact Christina Laridaen, Lewis-Burke Associates LLC, at christina@lewis-burke.com with any questions or comments related to the Update’s content.

Funding Opportunities and Agency Updates
Funding Opportunity: ED Invites Applicants for FY 2022 Education, Innovation, and Research (EIR) Grants
The Office of Elementary and Secondary Education (OESE) within the Department of Education (ED) issued a notice inviting applications (NIA) for the Education Innovation and Research (EIR) program’s FY 2022 competitions. The EIR program supports efforts to create, implement, and evaluate innovative, evidence-based solutions to academic challenges facing high-need students. The EIR program has three tracks: Early-Phase, Mid-Phase, and Expansion. Each track requires a different level of prior evidence of effectiveness and level of scale. During the implementation of an EIR project, grantees are encouraged to develop evidence of effectiveness and new strategies to improve student achievement and attainment. Applicants and grantees are also asked to develop organizational plans on how the project would continue through implementation after federal funding ends.

The EIR Program received a large 20 percent boost in funding in the fiscal year (FY) 2022 budget and the Department has indicated strong interest in continuing growth in the program. For this competition, ED estimates having approximately $160 million to split amongst the three phases. Each phase has an estimated period of performance of 60 months. Higher education institutions may apply as part of a consortium led by a state education agency (SEA), local education agency (LEA), the Bureau of Indian Education (BIE), or as a non-profit organization recognized under 34 CFR 75.71.

Further details regarding each of the competition phases and their specific requirements and priorities can be found below.

**Early-Phase Grants**

Early-phase grants provide funding for the development, implementation, and feasibility testing of a program that, with previous research as the foundation, can improve student achievement and attainment. Continuous improvements to project design and implementation are expected and encouraged. This competition includes four absolute priorities, which applicants are required to address, and two competitive preference priorities:

- **Absolute Priority 1**: Demonstrates a Rationale
- **Absolute Priority 2**: Field-Initiated Innovations—General
- **Absolute Priority 3**: Field-Initiated Innovations—Promoting Equity in Student Access to Educational Resources and Opportunities: STEM
- **Absolute Priority 4**: Field-Initiated Innovations—Meeting Student Social, Emotional, and Academic Needs
  - **Competitive Preference Priority 1**: Promoting Equity in Student Access to Educational Resources and Opportunities.
  - **Competitive Preference Priority 2**: Addressing the Impact of COVID-19 on Students, Educators, and Faculty.

OESE expects to grant 11-20 awards in this competition with an average size award of $4 million. Notice of intent to apply is due by **May 27, 2022** and applications are due no later than **July 21, 2022**. Further information for the early-phase grants competition can be found [here](https://oese.ed.gov/offices/office-of-discretionary-grants-support-services/innovation-early-learning/education-innovation-and-research-eir/fy-2022-competition/).

**Mid-Phase Grants**

Mid-phase grants provide funding for the evaluation and implementation of a program that has previously been implemented under an early-phase grant or another effort with similar criteria. Similar to early-phase grants, this competition includes four absolute priorities, which applicants are required to address, and two competitive preference priorities:

- **Absolute Priority 1**: Demonstrates a Rationale
- **Absolute Priority 2**: Field-Initiated Innovations—General
- **Absolute Priority 3**: Field-Initiated Innovations—Promoting Equity in Student Access to Educational Resources and Opportunities: STEM
- **Absolute Priority 4**: Field-Initiated Innovations—Meeting Student Social, Emotional, and Academic Needs
  - **Competitive Preference Priority 1**: Promoting Equity in Student Access to Educational Resources and Opportunities.
  - **Competitive Preference Priority 2**: Addressing the Impact of COVID-19 on Students, Educators, and Faculty.
OESE expects to grant between five to 12 awards with the average funding awarded as $8 million. Notice of intent to apply is due by **May 27, 2022** and applications are due no later than **June 21, 2022**. Further information on the mid-phase grants competition can be found [here](#).

**Expansion Grants**

Expansion grants provide funding for evaluation and implementation after being found to produce significant impacts through under the mid-phase grant program. These projects are encouraged to be implemented at the national level, helping specifically underserved and high-need students. This competition includes two absolute priorities, which applicants are required to address, and two competitive preference priorities:

- **Absolute Priority 1:** Strong Evidence
- **Absolute Priority 2:** Field-Initiated Innovations—General
  - **Competitive Preference Priority 1:** Promoting Equity in Student Access to Educational Resources and Opportunities.
  - **Competitive Preference Priority 2:** Addressing the Impact of COVID-19 on Students, Educators, and Faculty.

OESE expects to grant one to five awards with each awardee receiving an average funding amount of $15 million. Notice of intent to apply is due by **May 27, 2022** and applications are due no later than **June 21, 2022**. Further information on the expansion grants competition can be found [here](#).

[back to the top]

**Funding Opportunity: NSF Releases Solicitation for Regional Innovation Engines**

The National Science Foundation (NSF) released the long-awaited Broad Agency Announcement (BAA) for its signature **Regional Innovation Engines** (NSF Engines) program of the new Technology, Innovation, and Partnerships (TIP) Directorate. With maximum funding at $160 million over 10 years, the Engines will be NSF’s largest centers to date. NSF hopes that these will transform innovation ecosystems in regions without strong existing ecosystems to drive use-inspired research on critical emerging technologies and address societal and economic challenges; catalyze technology commercialization, new start-ups, capital influx, and industry growth; and foster broad and diverse workforce development.

NSF Engines will follow a new program model, which is reflected in many aspects of the BAA. This new model includes the release of a BAA instead of a traditional NSF solicitation; broad eligibility for non-academic institutions to both partner and lead proposals; requirements to raise funding and resources over the lifetime of the award with the expectation of eventual full self-sustainability; expectation of a full time CEO to lead each Engine; the diverse core functions of the Engine encompassing research, translation, entrepreneurship, and workforce development; major partnership requirements encompassing many regional entities and stakeholders; the robust budget and ability to use it on infrastructure and other nontraditional research costs; and the high level of post-award oversight with regular reviews that can result in loss of funding if metrics are not met.

NSF expects Engines to progress along five phases from “development to mature” and the BAA describes funding for two types of awards – $1 million per **Type-1** award for Engines in the development phase to prepare for a Type-2 award; and up to $160 million per **Type-2** award for Engines ready for Phase 2. Type-2 awards are expected to carry Engines ten years through remaining phases: nascent, emergent, growth, and
mature. Receiving a Type-1 award is NOT required to apply for Type-2 awards and NSF encourages teams ready to pursue a Type-2 award to do so directly.

Proposers will identify the topic areas for their Engine, which must:

- Tackle relevant national, societal, or economic issues;
- Facilitate the advancement of emerging technologies;
- Accelerate revolutionary Research & Development (R&D) while making “tangible progress” and creating startups or small businesses;
- Drive innovation in areas of need, capability, or application relevant to the local regional economy; and
- Leverage other existing large-scale efforts in the region.

Engines are not required to address the entire range of its chosen topic area but must have a definitive scope and goals. The BAA states “proposing teams should consider topic areas that are well-defined, yet ambitious, cannot be achieved by a small group of stakeholders acting alone, and uniquely require the mix of cross-sector collaboration, agility, and significant seed funding offered by the NSF Engine Model.” Along with striving to achieve the goals of its given topic area, all Engines must also seek to achieve the following goals:

1. Develop and maintain a network of partners;
2. Drive innovation informed by national or societal challenges, or the needs of stakeholders;
3. Create startups and small businesses, or broaden the capabilities of existing businesses in the region;
4. Cultivate the regional workforce;
5. Promote diversity, equity, inclusion, and accessibility (DEIA);
6. Create an Engine that is self-sustainable beyond the NSF award period; and
7. Prioritize inclusive economic growth that fosters “communities of wealth” within the region.

A primary goal of NSF Engines is to create synergy across a wide breadth of partners to develop thriving, diverse, and sustainable innovation ecosystems that deliver tangible economic growth in the Engine’s region. Engines should create a “culture of innovation” by mitigating broad societal or economic challenges, forming intentional, lasting partnerships, developing the workforce of the future, creating meaningful DEIA plans, and establishing an evaluation framework with measurable checkpoints. Engines will be expected to serve three core functions:

- **User-Inspired R&D**: Engines should consider the needs of regional partners and stakeholders when generating new ideas and projects;
- **Translation of Innovations to Practice**: Engines should drive tangible, translational outcomes such as products or services that can inform the development of new policies or regulations; and
- **Workforce Development to Grow and Sustain Regional Innovation**: Engines should cultivate a diverse, highly-skilled workforce through education, training, retention, and workforce development programs that bolster the innovation ecosystem.

Funding for NSF Engines will prioritize national regions without well-established innovation hubs and promote comprehensive, well-rounded solutions that create a culture of DEIA. NSF encourages partnership between these regions and those with more mature ecosystems to create mentorship and other opportunities that promote an exchange of expertise from the mature ecosystem to the less mature region to facilitate economic growth. Regions are not strictly defined in the BAA but can range in scale from a metropolitan area to an area spanning multiple states.
Eligibility: U.S. based non-profits, non-academic organizations, for-profits, and institutions of higher education (IHEs) are eligible to apply. Non-profit and non-academic organizations, for-profit organizations, and IHEs are also eligible to receive subawards under this BAA, along with federally funded research and development centers (FFRDCs), national laboratories, and state, local, and tribal governments. An organization can only submit one proposal as a lead organization under this BAA. Project directors must be senior members of the lead organization’s leadership and will serve as the full-time CEO of the Engine.

Award Information: Under this BAA, NSF anticipates releasing Type-1 and Type-2 awards. Type-1 awards serve as foundational grants to establish a successful Type-2 proposal and eventually launch a full-scale NSF Engine. NSF anticipates funding up to 50 Type-1 awards with a maximum budget of $1 million per award over a 24-month period. Type-1 awardees are required to independently reapply for Type-2 awards, however receiving a Type-1 award is not necessary to apply for a Type-2 award.

Type-2 awards may be granted to regions or promising teams that will be ready to launch a full-scale NSF Engine by the expected award date. Contingent on FY 2023 appropriations, NSF anticipates funding five Type-2 awards at a $160 million each, for up to 10 years. The initial two years of support for Type-2 awards will sustain a “ramp-up” period, in which an engine can be funded at $7.5 million per year over both years. Further funding will depend on the Engine’s performance. Funding can reach up to $15 million per year in years three through five and up to $20 million per year in years six through ten. Any Engine funded beyond the first year will be subject to an annual assessment of performance, which will inform further funding. In addition, NSF will conduct reviews to assess each Engine’s tangible accomplishments and future goals, which will involve program directors and a site visit team. The final evaluation plan will be negotiated with awardees within six months of the award date.

Deadlines: Proposers are required to submit Concept Outlines prior to applying. Concept Outlines are due by June 30, 2022. Concept Outlines will be reviewed internally by NSF program directors and approved to proceed to proposal. Information on approved concept outlines will be publicly posted to foster teaming and partnerships among potential interested collaborators. For those approved, Letters of Intent (LOIs) will be required for both types of awards. LOIs for Type-1 proposals are due by August 31, 2022, and full proposals are due by September 29, 2022. Type-2 LOIs and full proposals will be due in FY 2023, dates have yet to be announced. For further information, NSF will host several events for potential proposers to provide insight into the program’s objectives. NSF will host an introductory webinar at 1:00 PM ET on May 17, to discuss the NSF Engine program model, goals, and phases of development.

Sources and Additional Information:

- The full BAA can be found at https://sam.gov/opp/67236a938b4f49c5a582e6c57921e3bc/view.
**Funding Opportunity: ARPA-E Releases Solicitation to Develop New Advanced Battery Technologies for Electric Vehicles**

The Department of Energy (DOE) Advanced Research Projects Agency – Energy (ARPA-E) released a $45 million funding opportunity for new technologies to improve domestic development of advanced batteries for electric vehicles (EVs). The Electric Vehicles for American Low-Carbon Living (EVs4ALL) program seeks to increase domestic EV adoption by improving the affordability, convenience, reliability, and safety of EV batteries. Ultimately, this research will support batteries with increased charging rate, improved low temperature performance loss, better power retainment, production costs below $75/kWh, and implementation of new and existing test protocols to verify safety of new battery chemistries and cell designs. Concept papers are due **June 16**.

In addition to the ARPA-E funding call, which is focused on innovative technologies, DOE also released more than $3 billion in funding from the bipartisan infrastructure bill to increase domestic battery manufacturing, processing, and recycling. The first funding solicitation provides $3.1 billion for [Battery Materials Processing and Battery Manufacturing](#) to advance commercial-scale and demonstration projects for the production and separation of battery materials, components, and cells. Projects will range from $50 million to $100 million. The second solicitation gives $60 million in funding for Electric Drive Vehicle Battery Recycling and Second Life Applications with a focus on advanced materials separation and scale-up of lithium-ion battery recycling, and demonstration projects for second-life applications of EV batteries. Both funding calls encourage research universities to partner with industry.

ARPA-E recognizes there are different market needs based on EV range, and includes two development tracks (Categories 1 and 2) defined primarily by cell-level energy density, charge rate, low temperature performance losses and cycle life targets, and a third parallel and complementary track (Category 3) focused on safety. Applicants are not permitted to submit proposals that simultaneously target a combination of Category 3 and Category 1 or 2. Specific topics of interest include:

- “Cell chemistries that can be packaged in pouch, prismatic or cylindrical formats and that have a nominal (Open Circuit) voltage ranging from 2.0 V to 5.5 V,
- Anode materials based on alkali or alkaline earth metals,
- Oxide-based anodes,
- Three-dimensional anode architectures,
- Coatings on separators, cathodes and/or anodes that usefully transform the interfaces between these individual elements,
- No/low cobalt and no/low nickel-content cathodes,
- Practical cell designs that mitigate/manage all determinant variables so that the target metrics can be achieved, and
- Innovative cell/battery designs and materials that can achieve the key metrics.”

ARPA-E’s goals are to help achieve 80 percent adoption of electrically powered cars and improved utilization of “noncritical” battery materials to address supply chain risk and drive down cost resulting in increased energy independence. For additional background, ARPA-E held a [workshop](#) in October 2021 on high energy, fast charging batteries for EV applications that helped shape this funding opportunity.

**Due Dates:** Concept papers are required and must be submitted by **June 16 at 9:30 AM ET**. If invited, the deadline for full applications is **TBD**.
Funding and Awards: ARPA-E has $45 million available to fund between 10 and 12 projects. Awards may range between $1 and $6 million over three years.

Eligibility: U.S. educational institutions, for-profit entities, and nonprofits are eligible to apply for funding.

Sources and Additional Information:
- Additional information on the funding opportunity is available at https://arpa-e-foa.energy.gov/FileContent.aspx?FileID=f402d267-0a70-4d8e-91d0-ef1fdb30e7bb.

Funding Opportunity: NFWF Releases Multi-Agency America the Beautiful Challenge Solicitation

The National Fish and Wildlife Foundation (NFWF), in partnership with the Department of the Interior (DOI), the Department of Defense (DOD), and the Forest Service and the Natural Resources Conservation Service (NRCS) at the U.S. Department of Agriculture (USDA), has released a request for proposals (RFP) for the new America the Beautiful Challenge (ATBC). ATBC is a public-private competitive grant program which aims to support locally led ecosystem restoration projects consistent with the America the Beautiful Initiative, which seeks to conserve 30 percent of U.S. lands and waters by 2030. The program will seek projects focused on at least one of five core areas of need: “(1) conserving and restoring rivers, coasts, wetlands, and watersheds; (2) conserving and restoring forests, grasslands, and other important ecosystems that serve as carbon sinks; (3) connecting and reconnecting wildlife corridors, large landscapes, watersheds, and seascapes; (4) improving ecosystem and community resilience to coastal flooding, drought, and other climate-related threats; and (5) expanding access to the outdoors, particularly in underserved communities.” The RFP encourages projects which are informed by Indigenous Tribal Knowledge, increase interagency collaboration, and address more than one of the eight priorities for the America the Beautiful program identified in the full solicitation and initially outlined in the Conserving and Restoring America the Beautiful Report.

The ATBC includes four distinct grant categories:

- **Category 1: States, Territories, and Tribal Implementation Grants.** These awards are dedicated to implementation of projects, lasting no more than four years, which address priorities on public, Tribal, or private lands. Partnerships with non-governmental organizations are encouraged. Grants under this category are contingent upon awards by DOI.

- **Category 2: Planning, Collaboration and Engagement for States, Territories, and Tribes.** These awards will be dedicated to projects no longer than one year that provide technical assistance to enhance local capacity to execute future on-the-ground conservation activities. Projects should involve multiple partners and be at a significant scale. Grants under this category are contingent upon awards by DOI.

- **Category 3: Grants to Buffer and Benefit Public Lands.** These grants will be provided to two-to-four-year projects that result in conservation activities which benefit National Forests and DOD facilities. DOD-funded projects must be near or ecologically relevant to a DOD installation or range. DOD funds will prioritize Sentinel Landscapes or areas that advance the military mission. Forest Service funds will support projects concerning invasive species detection, prevention, and treatments which benefit Forest Service lands, and collaborative water quality projects on federal and Tribal lands.
- **Category 4: Private Forests, Rangeland and Farmland Grants.** These projects will support outreach and engagement with private landowners to advance voluntary conservation efforts on working lands. Grants under this category are contingent upon awards by NRCS.

**Deadline:** Full proposals are due on **July 21, 2022 at 11:59 PM ET**. There will also be an informational webinar for applicants on **May 19, 2022 from 2:00 – 4:00 PM ET**.

**Award Information and Cost Sharing:** ATBC has total program funding of $85 million in this RFP cycle. Awards under category 1 will range from $1 million to $5 million. Grants under category 2 will range from $200,000 to $1 million. Grants under category 3 will range from $250,000 to $1.5 million. Grants under category 4 will range between $200,000 to $500,000. Details on cost-sharing vary by the sponsoring partner agency and are outlined in the full RFP.

**Eligibility:** State government agencies, U.S. territories, Tribal governments and organizations are eligible for all four grant categories. Educational institutions, 501(c) non-profit organizations, and local governments are only eligible to apply for category 3, Grants to Buffer and Benefit Public Lands, and category 4, Private Forests and Farmland.

**Sources and additional information:**