Welcome Message

Greetings NETL RWFI stakeholders,

In this month's E-note funding spotlight, you will see an opportunity to support activities around entrepreneurship in high schools, from the Appalachian Regional Commission with a deadline of September 6, 2019, as well as a quickly approaching deadline for the Department of Labor's Workforce Opportunities for Rural Communities of July 15th.

As always, feel free to reach out to us at NETL.RWFI@netl.doe.gov if you have any suggestions for information to present in future E-notes.

– Sincerely, The NETL Regional Workforce Initiative Team

Workforce Funding Announcements

Appalachian Regional Commission (ARC) Seeks Proposals to Develop High School Summer Entrepreneurship Training Program

Appalachian Regional Commission, Deadline September 6, 2019

ARC is currently seeking proposals from eligible organizations to develop and produce a high school entrepreneurship summer program. The program, a new ARC initiative, will provide comprehensive entrepreneurial training and supportive services to selected high school students who will be seniors during the 2020–2021 academic year. Read the Request for Proposals.

Workforce Opportunity for Rural Communities: A Grant Initiative for the Appalachian and Delta Regions

Department of Labor, Deadline, July 15, 2019

Employment and Training Administration/U.S. Department of Labor, in partnership with the Appalachian Regional Commission and the Delta Regional Authority, announce the available funds for demonstration grant projects supporting alignment of workforce development with existing strategies and plans for economic development and diversification in rural communities from the following areas hard hit by economic transition and recovering slowly: (1) The Appalachian region, as defined in 40 U.S.C. 14102(a)(1), and (2) The Lower Mississippi Delta (Delta) region, as defined in 7 U.S.C. 2009aa(2).

These grants will enable eligible applicants within the Appalachian and Delta regions to expand the impact of existing workforce development initiatives, as well as provide valuable career, training, and support services to eligible individuals in counties and parishes and/or areas currently underserved by other resources. These grants support workforce development activities that prepare dislocated workers, new entrants to the workforce, and incumbent workers for good jobs in high-demand occupations aligned with a regional or community economic development strategy.

Women in Apprenticeship and Nontraditional Occupations Technical Assistance Grant Program

Department of Labor, Deadline, July 8, 2019

This program is intended to provide technical assistance (TA) to employers and labor unions to encourage employment of women in apprenticeable occupations and nontraditional occupations (A/NOTO), specifically by developing (establishing, expanding, and/or enhancing) pre-apprenticeship, apprenticeship, or other nontraditional skills training programs designed to prepare women for careers in A/NOTO; providing ongoing orientations or other resources for employers, unions, and workers on creating a successful environment for women in A/NOTO; and/or setting up support groups, facilitating networks, and/or providing supportive services for women in A/NOTO to improve their retention. Applicants may propose to provide technical assistance to support women's participation and success in the full range of industries in which women are historically underrepresented or where women are disproportionately concentrated in the lower-wage occupations. Such industries include but are not limited to advanced manufacturing, construction, energy, health care, information technology, finance, and transportation

CyberCorps Scholarship for Service

National Science Foundation, Deadline, July 31, 2019

The goals of the CyberCorps: Scholarship for Service (SFS) program are aligned with the U.S. National Cyber Strategy to develop a superior cybersecurity workforce. The SFS program welcomes proposals to establish or to continue scholarship programs in cybersecurity. All scholarship recipients must work after graduation for a federal, state, local, or tribal Government organization in a position related to cybersecurity for a period equal to the length of the scholarship.

Funding opportunities in this area are provided via the Secure and Trustworthy Cyberspace — Education Designation and other programs.
**Apprenticeships: Closing the Skills Gap**

Department of Labor, **Deadline, September 24, 2019**

This Announcement solicits applications for the Apprenticeships: Closing the Skills Gap grant program. The purpose of this program is to promote apprenticeships as a significant workforce solution in filling current middle- and high-skilled job vacancies and closing the skills gap between employer workforce needs and the skills of the current workforce. In June 2017, the President issued Executive Order 13801 on Expanding Apprenticeship in America, which lays out an expansive vision for apprenticeship that would increase the number of apprentices in the nation to an unprecedented level across all industries. The overarching goals of this grant program are threefold: (1) to accelerate the expansion of apprenticeships to new industry sectors and occupations, such as cybersecurity and those involving artificial intelligence; (2) to promote the large-scale expansion of apprenticeships across the nation to a range of employers, including small- and medium-sized employers; and (3) to increase apprenticeship opportunities for all Americans.

**FY19 Office of Naval Research (ONR) Navy and Marine Corps STEM Education and Workforce Program**

Office of Naval Research, **Deadline, September 27, 2019**

All responsible sources from academia and non-profit organizations may submit white papers under this FOA. Federally Funded Research & Development Centers (FFRDCs), including DOE National Laboratories, are not eligible to receive awards under this FOA. However, teaming arrangements between FFRDCs and eligible principal applicants are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC. Navy laboratories, military universities, and warfare centers as well as other Department of Defense and civilian agency laboratories are also not eligible to receive awards under this FOA and must not submit either white papers or applications in response to this FOA. If any such organization is interested in the program described herein, the organization may contact ONR STEM Program Office, onr_stem@navy.mil, to discuss potential projects. The subject line of the email shall read “N00014-19-S-F003 Potential Project Inquiry.” As with FFRDCs, these types of Federal organizations may team with eligible applicants that are submitting white papers under this FOA. University Affiliated Research Centers (UARC) are eligible to submit white papers under this FOA unless precluded from doing so by their Department of Defense UARC contract. Cost sharing is not expected and will not be used as a factor during the merit review of any application hereunder. However, the Government may consider voluntary cost sharing if proposed.

**Improving Undergraduate STEM Education: Education and Human Resources (IUSE: HR)**

National Science Foundation, **Deadline, September 30, 2019**

The STEM fields hold much promise as sectors of the economy where we can expect to see continuous vigorous growth in the coming decades. STEM job creation is expected to outpace non-STEM job creation significantly, according to the Commerce Department, reflecting the importance of STEM knowledge to the U.S. economy. The National Science Foundation (NSF) plays a leadership role in development and implementation of efforts to enhance and improve STEM education in the United States. Through the NSF Improving Undergraduate STEM Education (IUSE) initiative, the agency continues to make a substantial commitment to the highest caliber undergraduate STEM education through a Foundation-wide framework of investments. The IUSE: EHR program is a core NSF undergraduate STEM education program that seeks to improve the effectiveness of undergraduate STEM education for both majors and non-majors. The program is open to application from all institutions of higher education and associated organizations. NSF places high value on educating students to be leaders and innovators in emerging and rapidly changing STEM fields as well as educating a scientifically literate populace. In pursuit of this goal, IUSE: EHR supports projects that have the potential to improve student learning in STEM through development of new curricular materials and methods of instruction, and development of new assessment tools to measure student learning.

**NETL News**

**NETL Technical Forum Spotlights Research of DOE’s Consortium for Integrating Energy Systems in Engineering and Science Education (CIESESE) Program**

Six college students and two professors, who participated in a mentored training program at NETL sponsored by DOE and designed to encourage pursuit of careers in energy industries, presented the results of their summer research projects during a technical forum held this week in Morgantown, West Virginia. The individuals were participants in (CIESESE) — a program that supports DOE’s goal of building a continuing cadre of professionals, particularly from the Hispanic community, who are ready to take on the challenges of new energy systems — the infrastructure, technologies, and procedures used to generate, store, and distribute energy.

**Texas Tech Petroleum Engineers Visit NETL to Learn about Lab’s Permian Basin Research**

A team of petroleum engineering researchers from Texas Tech University visited NETL in Morgantown, West Virginia, to discuss potential collaborative efforts focused on technologies associated with
recovery of oil and gas from the Permian Basin and carbon dioxide (CO₂) capture, storage and use in enhanced oil recovery. The Permian Basin, an 86,000 square mile sedimentary basin located in western Texas and southeastern New Mexico, has produced oil for more than 80 years, and it is still one of the largest petroleum-producing basins in the U.S. oil reserves in the Permian Basin are estimated at 4.2 billion barrels and it contains an estimated 22% of U.S. oil reserves. The region has the biggest potential for additional oil production in the country, containing 29% of estimated future oil reserve growth.

**NETL Participates in Prestigious Conference on Computer-Aided Design**

NETL is sharing its computer-aided design expertise this week at one of the world’s premier international conferences — 2019 Foundations of Computer-Aided Process Design, an event devoted to promoting stronger industrial-academic collaboration in process and product design. NETL has a long history of developing innovative computer-aided design capabilities. NETL received an R&D 100 Award for its Advanced Process Engineering Co-Simulator and the Carbon Capture Simulation Initiative’s Toolset. Most recently, NETL’s Institute for the Design of Advanced Energy Systems (IDAES) is pushing the frontiers of modeling and optimization for the development and design of innovative advanced energy. David Miller, NETL’s senior fellow for process systems engineering, leads IDAES and is a featured speaker during the five-day event.

**Upcoming Workforce Conferences, Meetings, and Summits**

**An Appalachian Regional Commission Summit Hosted by the State of North Carolina**

Asheville, North Carolina, September 4–6, 2019

The 2019 Appalachia Strong summit will include strategic workshops, site visits, panel discussions, and other ideas to continue Appalachia’s prosperity, progress, and growth.

**2019 National Historically Black Colleges and Universities (HBCU) Week Conference**


The annual National HBCU Week Conference is planned under the direction of the White House Initiative on HBCUs and with input from the Chairman of the President’s Board of Advisors on HBCUs and other supporters. It provides a forum to exchange information and share innovations among and between institutions. This year’s event will bolster HBCUs as they connect to federal and other opportunities that enhance the shared prosperity — as well as the overall competitiveness — of the United States of America.

**Reports and Resources**

**Empower the human+ worker**

Accenture Workforce Reports

The digital transformation is underway in all aspects of business, and the workforce is no exception. Technology in the workplace affects workers on every level. Today’s employees can leverage the latest technologies to reinvent existing roles and find new, innovative ways to adapt and thrive in the post-digital era. Innovative technologies are making workers human+: each person brings a constantly growing set of technological capabilities to the job alongside their own individual knowledge, experience, and skillset.

**DOE STEM Rising**

NETL Shares Work With K–12 Students at FIRST LEGO League Event

More than 1,000 K–12 students and their parents learned about NETL’s work to develop innovative technology solutions through hands-on educational exhibits at a recent international First LEGO League competition in Fairmont, West Virginia. FIRST LEGO League is a global robotics competition program that helps children expand their knowledge, develop beneficial learning habits, and build their confidence as they tackle research, problem-solving, coding, and
engineering challenges. Fairmont State University welcomed more than 1,000 participants from 11 countries and 15 U.S. states to its campus July 12–14, 2019, for the Mountain State Invitational competition, co-organized by NASA’s Independent Verification & Validation facility.

Los Alamos National Laboratory (LANL) Summer Science Camp Empowers New Mexican Young Women

The third LANL Summer Physics Camp for Young Women took place in Pojoaque, New Mexico, June 10–21, 2019, giving the 22 participants from Northern New Mexico communities a grounding in STEM disciplines, introducing them to role models, and showcasing the wide range of STEM opportunities available at the Laboratory.

Idaho National Laboratory (INL) Brings Engineering to Rural North Idaho Schools

The state of Idaho is vast and often rural, making the prospect of statewide outreach an occasionally daunting one. This didn’t stop INL’s K–12 STEM outreach team from conducting three full days of outreach almost 600 miles from home. On the contrary, working with underrepresented students — which includes not only first-generation students, female students, and students of color, but also those who live in rural and remote locations — is a major cornerstone of INL’s STEM outreach goals.