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FOR IMMEDIATE RELEASE

Treasure Valley students earn top honors at Idaho Science & Engineering Fairs

BOISE, Idaho (April 6, 2021) — Boise High School sophomore Wendy Suo earned Best of Fair at the 2021 Western Idaho Science and Engineering Fair. Her project was among 110 entries that 150 students statewide presented at the fifth annual Idaho Science & Engineering Fairs, which the Idaho STEM Action Center staged virtually throughout March.

Suo's project, "Efficient Music Genre Classification with Deep Convolutional Neural Networks," also earned WISEF's Best in Category in Engineering, Mathematics, and Physical Sciences, a Category Gold award, and the Bearden Award for Women in Computer Science. The latter award, which also includes a \$750 cash prize, is funded by longtime Idaho resident Elizabeth "Betsy" Bearden for the female or team of females whose research exemplifies high standards of innovation in creating solutions with computer science.

Besides naming three regional Best of Fair winners like Suo, the STEM Action Center awarded three at-large Best of Fair recipients, two of which were WISEF entrants: Emmett High School senior Jessica Douglas and Idaho Virtual Academy sophomore Seth Tuma.

Douglas and her project, "Bye Bye Bacteria," also earned Best in Category in Biological, Earth, and Environmental Sciences, a Category Gold award, and a special award from the Society for In Vitro Biology.

Tuma's project, "Motorized Fish Ladder," also earned a Category Gold Award and special awards from the Office of Naval Research, Ricoh, U.S. Agency for International Development, and U.S. Air Force. It also captured the Lewis Engineering Award from Pocatello-based Lewis Corporation that includes a cash award of \$250 plus a certificate for the most outstanding project that demonstrates engineering-based skills. Tuma, a Bonners Ferry resident, entered WISEF because Idaho Virtual Academy is based in Boise.

On top of earning serious bragging rights, the Best in Fair winners will represent Idaho at the Regeneron International Science and Engineering Fair in May.

Emmett High School senior Talen Thomas earned WISEF's other Best of Category award in Behavioral and Social Sciences for his entry, "Bell's Theorem in the Classroom." He also earned a special award from the American Psychological Association.

Judges honored three more WISEF projects with Category Gold awards: "Cultural Impact on the Bouba-Kiki Effect," a Behavioral and Social Sciences entry by Emmett High School junior Noe Anderson; "Shedding Light on Crime: The Dim Blue Glow of Luminol," an Engineering, Mathematics, and Physical Sciences entry by Emmett High School senior Kate Rooks; and "Analyzing Boise River Data Collected by a Unmanned Aircraft System to Promote Environmental Stewardship," a Biological, Earth, and Environmental Sciences entry by Timberline High School junior Jimin Ryu.

The STEM Action Center also presented 14 WISEF projects with Category Silver awards and an additional 20 special awards from the American Meteorological Society, ASM Materials Education Foundation, Association for Women Geoscientists, United States Environmental Protection Agency, Mu Alpha Theta, National Aeronautics and Space Administration, National Oceanic and Atmospheric Administration, Office of Naval Research, U.S. Metric Association, Stockholm International Water Institute, and Yale Science & Engineering Association.

Emmett High School earned the Top School award for the third consecutive year. The award is calculated based on total projects and total category awards, including Silver, Gold, Best in Category, and Best in Fair.

Emmett High School biology teacher Robin Wilson was named WISEF's top-performing educator. Her students earned two of WISEF's three Best in Category awards, four of the seven Category Golds, and all 14 of the Category Silvers.

A group of experts throughout Idaho from an array of STEM-related fields served as judges.

WISEF is one of three regional science fairs the STEM Action Center stages statewide each spring. Although held virtually this year due to the COVID-19 pandemic, Boise State University typically hosts the Western Idaho Science and Engineering Fair. The Coeur d'Alene Resort and Idaho State University usually host the Northern Idaho and Eastern Idaho Science and Engineering Fairs, respectively.

Students in ninth through 12th grades throughout Idaho are eligible to submit entries.

According to STEM Action Center interim executive director Dr. Kaitlin Maguire, competitions like these are important to the state's future, offering students opportunities to engage in original research projects aligned with their interests and meet and learn with other motivated students in their area.

"The quality of the research that Idaho students present each year never ceases to amaze me," Dr. Maguire said. "Although our science fairs were virtual this year, the awards still have the same merit. And the experience students gained by participating — by thinking critically about real-world problems, seeking solutions, and explaining their findings succinctly — will prove invaluable when they enter the workforce."

In addition to facilitating critical and creative thinking, problem solving, innovation, and collaboration, she said 19 of Idaho's 20 hot jobs through 2026 require STEM skills and that STEM jobs pay more than twice as much as non-STEM jobs.

The STEM Action Center presented the 2021 Idaho Science and Engineering Fairs in partnership with the NASA Idaho Space Grant Consortium, Battelle Energy Alliance, Micron, Society for Science, Cradlepoint, POWER Foundation, Applied Materials, Idaho Central Credit Union, Lewis Corporation, and Nutrien.

Visit the Idaho STEM Action Center's YouTube channel at youtube.com/c/IdahoSTEMActionCenter to watch the awards ceremony.

About the Idaho STEM Action Center

The Idaho STEM Action Center was created in 2015 because Idaho citizens are not entering the STEM pipeline fast enough to meet current and future Idaho workforce needs. Its goals are to increase equitable access to STEM opportunities, align education and workforce needs, and amplify awareness of STEM throughout Idaho. The organization is working with industry, government, educators, and students to develop new resources and support high-quality professional-development opportunities to foster a STEM-educated workforce that ensures Idaho's continued economic prosperity.

Visit <u>STEM.idaho.gov</u> for more information, and visit <u>https://STEM.idaho.gov/supportus/foundation</u> to make a tax-deductible donation to the Idaho STEM Action Center Foundation, a 501(c)(3) nonprofit organization, to enhance the investment the state has made in Idaho's STEM community. Contributions provide greater access to STEM camps for children, student competitions, and many other life-shaping programs.