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FOR IMMEDIATE RELEASE

Gov. Little awards student scientists

BOISE, Idaho (May 30, 2024) — Today, Idaho Gov. Brad Little presented awards to the top three projects from 200-plus proposals designed by Gem State high school students for Idaho STEM Action Center's Idaho Research & Engineering Showcase. These projects focused on improving disease diagnosis and thwarting antibiotic resistance, accelerating the development of new green-energy solutions, and reducing reinjuries as patients recover from ACL tears.

Boise High School senior Zhiyu Li earned first place for her project, "Quantification of Ampicillin through KinExA Technology," which addresses the global challenge of antibiotic resistance by exploring how to detect and quantify the antibiotic ampicillin in solution.

Zayah Cortright and Jalen Lu, a senior and junior at Boise High School and Timberline High School, respectively, took second place for their project, "ML Study of Perovskites as Electrocatalysts in Green Energy." The project examines how machine learning can accelerate research into green-energy storage by eliminating bottlenecks in the discovery process caused by cost limitations imposed by traditional catalysts like platinum.

Kiana Mohammadi and Amulya Tanikella, juniors at Capital High School who formerly attended Treasure Valley Math & Science Center, garnered third place for their project, "Examining Biomechanical Factors in Joints of ACLR Patients." The project identifies locomotion behaviors that can lead to reinjuries as patients recover from ACL tears with the goal of helping them recover faster.

"I'm really honored that my work could be recognized in this way," Li, the first-place winner, said, "and I'm very thankful for this opportunity to learn more about things that I'm interested in and to show that even research on this small of scale can show really detailed stuff about the world that we live in. There are so many undiscovered things that are left to be discovered by our generation."

Students submitting the first-, second-, and third-place projects will receive \$2000, \$1000, and \$500 awards, respectively. A dozen other student researchers featured in the showcase will receive \$250 awards.

Other projects featured in the showcase include:

- "Generating Scenarios in the CARLA Simulator for Testing Avs" Timberline High School (Boise) junior Kathy Nie
- "Vase Life of Dahlias" Hillcrest High School (Ammon) sophomore Caleb Liljenquist
- "Diagnosing and Treating Animals with Cyanobacteria Exposure" Idaho Virtual Academy freshman Kailey Grindol from Cascade
- "How Does Light Intensity Affect Perception of Senses?" Rigby High School sophomores Zayden Kelly, Carter King, and Ridge Turner
- "Scent and Suckers" Hillcrest High School (Ammon) juniors Sara Gardner, Katelyn Hedin, and Stephanie Jones
- "Viability of Municipal Composting in Idaho" Idaho Virtual Academy junior Vincent Schaner from Nampa
- "Battery Life of Phones" Hillcrest High School (Ammon) sophomores Rylan Borgmann and Camden Hailey

State Farm sponsored the effort, which was open to Idaho students in grades 9-12. Projects featured underwent multiple levels of review and adhered to the rigorous standards of the International Rules for Pre-college Science Research published annually by the Society for Science and were judged by three Ph.D. recipients and a professional engineer.

Visit https://events.projectboard.world/IRES for more details about each project.