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FOR IMMEDIATE RELEASE

23 student teams aim to change the world via A.H. Nickless Innovation Award projects

Students from districts in Bay City, Frankenmuth, Freeland, Midland, Saginaw participating in 11th annual STEM competition; in April, three teams will win a share of up to \$77,500 in school STEM education grants, student scholarships

UNIVERSITY CENTER, MICH., January 16, 2024 – The 23 teams participating in the 2023-24 [A.H. Nickless Innovation Award](#) are hard at work on their respective projects, with project reports due in late March and a day of live project presentations scheduled for Saturday, April 20, at Saginaw Valley State University.

Presented by the Nickless Family Charitable Foundation, the A.H. Nickless Innovation Award is an annual competition for high school students ages 13 to 18 in Bay, Midland, Saginaw and Tuscola counties. Its goal is to inspire passion for STEM subjects and challenge students to work in teams to think innovatively and develop solutions to problems affecting the world. Topics typically include – but are not limited to – issues related to alternative energy, healthcare, science, technology or life sciences.

The 23 team projects from the eight participating schools are as follows:

Bullock Creek High School, Midland (Bullock Creek School District), four teams:

- Easy-to-make, cooling, portable air conditioner that also can store drinks
- Extremely loud alarm clock that also lights up, opens up the blinds/curtains and vibrates the pillow
- Underground shelters that will help with overpopulation and homelessness by giving more variety in sheltering options
- Pill bottle that will dispense a prescribed dosage; it will lock after dispensing and unlock at a programmed time

Herbert Henry Dow High School, Midland (Midland Public Schools), four teams:

- More accessible/affordable diagnostic saliva tests to detect certain diseases, such as breast cancer, heart disease and diabetes
- Personalized healthcare wearables to help manage chronic stress and inflammation
- Consumer-friendly muscle-fatigue-monitoring device using surface electromyography
- Sustainable, energy-efficient fan using piezoelectric effect and code



Frankenmuth High School (Frankenmuth School District), one team:

- Device that measures hormone levels by using estrogen and progesterone to balance out one's levels

Freeland High School (Freeland Community School District), one team:

- Alternative, organic, environmentally favorable deicer to replace current road salt technology for thoroughfares and commercial and domestic parking lots/driveways

John Glenn High School, Bay City (Bangor Township Schools), one team:

- Kits for chemotherapy patients, including an IV- and port-accessible sweatshirt, a light blocker, and non-slip socks

Midland High School (Midland Public Schools), two teams:

- Software that monitors calls for potential scam activity; if anything is detected, user is alerted of potential scam
- Safety mechanism that will warn pedestrians about cars that potentially could run red lights

Nouvel Catholic Central High School, Saginaw (Catholic Diocese of Saginaw), six teams:

- GPS tracking device that gives precise location of a firefighter so they can be found faster to reduce serious injuries
- Engine that filters oil twice and cleans it, significantly increasing engine life and oil life
- Car windshield protector, similar to a phone screen protector, to shield against debris while driving
- Advanced athletic training tape that collects data related to the body moving in incorrect ways
- Storage container for event decorations/supplies; intended to be sent/delivered several times so consumers are not constantly buying and discarding items
- At-home monitoring device to track fetal movement in pregnant women, potentially decreasing the number of fetal deaths

Saginaw Arts and Sciences Academy (Saginaw Public School District), four teams:

- Mind-controlled prosthetic that solves many of the issues with current prosthetics
- Literacy tool that helps students understand that similar letters have different sounds and helps them learn pronunciation
- Solar-powered drone that provides harvest analytics plus crop health data using AI and combats diseases with targeted eco-friendly chemicals
- Reducing PPE's carbon footprint by harvesting dandelion latex to create rubber to remedy effects of the pandemic on the environment

During Phase One of the competition in September and October, each team identified a problem and submitted a two-page proposal for a project to address it. Each team that advanced to Phase Two received a \$1,000 grant with which to conduct its research and develop a viable solution.



Now, teams must submit their Phase Two project reports by 4 p.m. EDT on March 29 and then will deliver 10-minute presentations on their projects before a panel of judges during a daylong public event on April 20 in [Alan W. Ott Auditorium in SVSU's Gilbertson Hall](#). Admission is free and open to the public. The exact start time for the event will be announced closer to April 20; watch the Newsroom page at [ahninnovationaward.com](#) for details.

At the conclusion of the April 20 event, up to \$42,500 in scholarships for students on the winning teams and \$35,000 in STEM education grants for the winning teams' schools will be awarded:

- **First place** will receive up to five **\$5,000 scholarships** for student team members and a **\$20,000 grant** for the school.
- **Second place** will receive up to five **\$2,500 scholarships** for student team members and a **\$10,000 grant** for the school.
- **Third place** will receive up to five **\$1,000 scholarships** for student team members and a **\$5,000 grant** for the school.

Fostering student innovation for more than a decade

The 2023-24 competition marks the 11th year of the A.H. Nickless Innovation Award. Since the first competition in 2013-14, more than \$640,000 has been awarded to participants and their schools, including \$329,000 in student scholarships and \$315,000 in STEM education grants, respectively. In all, nearly 500 students developed and presented a total of more than 150 team projects in Phase Two of the competition during the competition's first 10 years. While there was not a competition in 2020-21 due to the COVID-19 pandemic, the Nickless Family Charitable Foundation distributed \$16,500 in scholarships to 11 past participants who were unable to compete during their senior year due to the cancellation.

About the A.H. Nickless Innovation Award

The A.H. Nickless Innovation Award was created by the Nickless Family Charitable Foundation to honor the memory of the late Arthur H. Nickless, a local innovator and owner of Wolverine Telephone Company. With a goal of inspiring passion for science, technology, engineering and math (STEM), the competition is open to high school students in Bay, Midland, Saginaw and Tuscola counties and awards up to \$77,500 per year in scholarships to students and STEM grants to schools. A total of more than \$640,000 has been awarded since the first competition in 2013-14. For more information, visit [ahninnovationaward.com](#).