## News release March 26, 2015



Jackson High School STEM club students win at regional competitions
In its third year the science research and engineering club is gaining momentum



Members of JHS Science Research and Engineering Club (I-r): Dhruvik Parikh, Jackie Nguyen, Afomia Seleshi, Madison Ransom, Harshu Musunuri, Hunter Saunders, Francesca Bennett, Alexandra Souter, Nikita Sharma, Indira Rayala

Once again, the Henry M. Jackson Science Research and Engineering Club make their mark participating in the <u>Central Sound Regional Science and Engineering Fair</u> and <u>Junior Science and Humanities Symposium</u>.

Almost every member in the club earned an award for their project at the fair. In addition, Harshu Musunuri, Dhruvik Parikh and Indira Rayala earned recognition at the *Junior Science and Humanities Symposium* at Seattle Pacific University. All three were top-five finishers in the poster presentation category with Musunuri garnering top prize. As a result, Musunuri has been invited to compete at the national symposium in Washington, D.C. in April.

"I am extremely pleased with the dedication and hard work our students have put into their projects," said <u>Carole Tanner</u>, JHS science research teacher.

"Many would not have been as successful without the support of their families from mentoring them in space science to helping them purchase an artificial limb. The awards they have received are a direct reflection of their science abilities and work ethic," noted Tanner. "This is the third year of the Research and Engineering Club at Jackson and with every cycle we seem to be gaining more and more momentum," said <a href="Andy Sevald">Andy Sevald</a>, Science Research and Engineering Club advisor.

"Connection with the outside scientific and technical communities is just outstanding. Through this process students engage in very high level thinking in order to solve personallyrelevant real-world issues," continued Sevald.

"Now that they have been given this initial experience, I can easily see our students continue to hone their practice in the years ahead. It is learning at its most effective and meaningful level. It is, at its core, the essence of a quality STEM education. I cannot wait to see this curriculum spread to all the schools in Everett Public Schools," Sevald concluded.

For more information:

Mary Waggoner,
Director of Communications,
425-385-4040

Andrew Sevald,
Science Research and Engineering
Club advisor,
425-385-7000

Carole Tanner,
Science research teacher,
425-385-7000

- Harshu Musunuri Second place Electrical and Mechanical Engineering, Materials and Bioengineering category for her project: Application of Tetrahedrite and Magnesium Silicide in a Novel Thermoelectric Unicouple to Generate Electricity in Industrial Waste Heat Situations.
- Madison Ransom Second place Environmental Sciences and Management category, and the Arizona State University Walton Sustainability Award for her project: Applying the Process of Bipolar Electrodialysis for the safe disposal of Acid Whey, the Byproduct of Greek Yogurt Production.
- Heejoon Ahn and Lessane Ketema Second Place in the Behavior Sciences Category for their project: Emotional Responses to Movie Clips Paired with Differing Music.
- Indira Rayala Third place in the Medicine and Health category for her project: Presence of Quorum Sensing Inhibitors in Ayurvedic Medicine.
- Dhruvik Parikh Third place in the Energy and Transportation category for his project: Microbial Lipid Accumulation Using Grape Pomace Hydrolysates as a Novel Feedstock for Biodiesel Synthesis.
- Macy Matheeson Honorable Mention in the Biochemistry, Cell and Molecular Biology, and Microbiology category for her project: Evolutionary Trends in Lake Washington Stickleback Fish.
- Francesca Bennett and Nikita Sharma Honorable Mention in the Energy and Transportation category for their project: Development of an Orbital Debris Collection Device Aimed at the Reduction and Recycling of Fragments in Space.
- Yuepon Fan-Hernandez Honorable Mention in the Electrical and Mechanical Engineering, Materials and Bioengineering category and Central Sound Science Fair Inspiring Excellence Award and The Office of Naval Research Naval Services Award for his project: Investigating Nafion Tubes for the Purpose of Cheap, Low Energy Desalination of Water.
- Hunter Saunders Central Sound Science Fair Inspiring Excellence Award for his project: Designing an Interchangeable Pylon and Foot on a Transtibial Prosthesis with a Quick Connect Fitting below the Socket Region.
- Dane Smith Central Sound Science Fair Inspiring Excellence Award for his project: Design of an Improved Insulin System by Applying Insulin, Glucagon, GLP-1 Agonist Exenatide, A Sprinkler Needle, and a Glucose Sensor for the Prevention of Hypoglycemia.