**Junior Science & Humanities Symposia (JSHS) Program**

**Fostering excellence...**

### JSHS Regional and National Symposia

Endorsed by the National Association of Secondary School Principals (NASSP), JSHS regional and national symposia are held during the academic year and reach over 8,000 high school students and teachers throughout the United States, Puerto Rico, and the Department of Defense Schools of Europe and the Pacific Rim. Each of 48 university-held regional symposia invite the participation of secondary schools within their region. By participating in a regional symposium, students and teachers may:

- Participate in a forum honoring exceptional work in the sciences, engineering, or mathematics, and supporting personal and professional growth.
- Interact with practicing professionals who provide enrichment opportunities and discussions that allow participants to look beyond high school to future post-secondary education and career development in the sciences, engineering, or mathematics.
- Develop higher-order thinking skills and integrated learning across disciplines through the process of scientific inquiry, writing a scientific paper, and delivering a presentation—all skills that will benefit students future post-secondary and graduate pursuits.
- Support and encourage the success of high school teachers in addressing the attainment and mastery of state and national performance and process skill standards in the sciences, mathematics, and language arts by their students.
- Participate in a scientific conference, visit research and development laboratories, and have their abstracts published in symposium proceedings.
- Gain self-confidence through the experience of conducting an independent research investigation and by networking with other participants having similar interests.
- Advance in research paper competition to the National symposium and for significant military-sponsored scholarships and other awards.

### The JSHS Organization

- **48 university-held regional symposia** reaching over 8,000 science-oriented high school students throughout the United States, Puerto Rico, and the Department of Defense Schools of Europe and the Pacific.
- **The National symposium**, bringing together 240 student delegates who advance in research paper competition at each of 48 regional symposia.
- **The London International Youth Science Forum**, an international youth exchange bringing together over 400 participants from 60 nations, and awarded to six 1st place finalists at the National JSHS.
- **U.S. Army, Navy, and Air Force sponsored undergraduate tuition-based scholarships**, awarded to regional and national student finalists to recognize research excellence in the categories of: 1) Medicine and Health/Behavioral Sciences; 2) Life sciences; 3) Environmental sciences/Earth and space; 4) Physical sciences; 5) Mathematics and computer science; and 6) Engineering.
- **The Teacher Awards Program**, a $500 award to each of 48 nationwide high school teachers, honoring their contributions to the measurement of scientific research at the high school level.

### Why participate?

Former JSHS participants confirm that the significance and results of JSHS are greater than scholarship and recognition.

**Elizabeth Vudirectional National JSHS student delegate**
**Michelle Kiou, National JSHS student delegate**
**Rachel Smith, National JSHS student delegate**

**The JSHS allowed me to see what students across the country are interested in studying. The quality of the research being done was enlightening.**

**I would just like to take this opportunity to say that my participation in the JSHS has been absolutely invaluable to me. It has given me a great deal of experience in research and the presentation of research. Thank you so much for the programs.**

**Alexandra Bubbe, PhD Student, Ohio**

**The JSHS has had and continues to have an enormous influence on my desire to conduct scientific research... I am indebted to the JSHS for the enormous opportunities that it afforded me. It has had a profound impact on my academic and life pursuits.**

**Tian Wu, three time National JSHS winner from Northern New Jersey**

**I am honestly say that participating in JSHS had a very significant impact on my career decisions. Since then, I’ve graduated with my master’s in Mechanical Engineering from MIT.**

**Karen Boddhi, National JSHS student delegate and female engineer**

**Thank you for the great experience in high school. It really changed my life.**

**Aashish Prasad, Graduate Student, New Jersey**

The success of JSHS — The Military/University Partnership and Volunteer Mentors

The success of JSHS relies on the generous supplemental contributions by university sponsors of JSHS regional symposia and by the network of dedicated JSHS volunteers and mentors who champion our youth for participation in the military-sponsored JSHS. Every dollar of direct to service funding is matched by JSHS sponsoring universities in the form of direct funding and through the in-kind support by faculty members and administrators who serve as reviewers and judges, lab tour leaders, and speakers.

Volunteering their time and talent to the JSHS are...

- Faculty and administrators who organize and administer each of 48 nationwide regional symposia.
- Thousands of high school teachers who stimulate their students participation in scientific inquiry and in JSHS.
- Thousands of practicing researchers in academic, governmental, industrial, and private sector who mentor and guide students in specific research pursuits.
- Hundreds of academic, government, and private institutions that open their research and development laboratories for symposium tours, and
- The thousands of enthusiastic parents and other family members who encourage and support our young scientists.

### How to participate?

**JSHS** regional symposia invite high school students who have completed an original research investigation in the sciences, engineering, or mathematics to apply to the regional symposium and vie for awards, including the opportunity to advance to the National symposium. All students in grades 9-12 enrolled in a public, private, or home school within the area served by the JSHS regional symposium are eligible. Only U.S. citizens and permanent residents of the U.S. or its territories are eligible to receive the military-sponsored awards.

Student research investigations in experimental, field, observational, or applied research are eligible. While review or library research is a part of the research process, investigations alone are not appropriate for JSHS. The written and oral reports should present the results of original research carried out by the student. Students are encouraged to obtain assistance from teachers, mentors, parents, or other students.
Learn More Today

Regional Directors of the JSHS program invite high schools within their geographic region to nominate students and teachers for participation. Each Regional Symposium has specific application forms and individual deadlines. To request application materials or to find out how to become actively involved in JSHS, contact your regional representative.

U.S. Army, Navy, and Air Force sponsored

What is JSHS?

JSHS promotes original research and experimentation in the sciences, engineering, and mathematics at the high school level and publicly recognizes students for outstanding achievement. By connecting talented students, their teachers, and research professionals at affiliated symposia and by rewarding research excellence, JSHS aims to widen the pool of trained talent prepared to conduct research and development vital to our nation.

Sponsorship and Administration.

JSHS is sponsored jointly by the research offices of the military. Specific sponsoring organizations include:
- U.S. Army Research Laboratory’s Army Research Office, Research Triangle Park, NC;
- Office of Naval Research, Arlington, VA; and

For additional information on the National JSHS program, contact the Academy of Applied Science at 24 Warren St., Concord, NH 03301, telephone 603-228-4730, fax 603-228-4730, and e-mail, cousens@jshs.org or trojano@jshs.org.
Website: http://www.jshs.org.

The Academy of Applied Science, Concord, NH, a non-profit educational organization dedicated to the promotion of invention, innovation and scientific achievement, administers the JSHS Program under grant with the military and in cooperation with nationwide universities and other educational institutions. Contributing universities and educational institutions include:
Adelphi University
Alabama Jr. Academy of Science
Arizona State University
Arkansas Tech University
Georgetown University
Hawaiian Academy of Science
Indiana State University
James Madison University
Louisiana State University
Loyola University at Chicago
Minnesota Academy of Science
Monmouth University-NJ
N.C. Mathematics & Science Education Network
New York Academy of Sciences
Pennsylvania State University
Rutgers University
Seattle Pacific University
Southern Illinois University
University at Albany
University of Alaska, Fairbanks
University of California, Berkeley and Irvine
University of Connecticut, Storrs
University of Florida, Gainesville
University of Georgia, Athens
University of Iowa, Iowa City
University of Louisville
Unic. of Maryland, College Park
University of Mississippi
University of Missouri, St. Louis
University of Nevada, Reno
University of New Hampshire
University of New Mexico
Univ. of North Carolina, Charlotte
Oklahoma State University
University of Puerto Rico
Univ. of South Carolina, Columbia
Univ. of Tennessee, Knoxville
University of Wisconsin
Texas A&M, College Station
University of Toledo
University of Utah, Salt Lake
Univ. of Wisconsin, LaCrosse & Madison
US Dependents Schools, Europe & Pacific
Wayne State University
West Virginia Wesleyan College
Western Oregon University

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