

**U.S. ARMY, NAVY, AND AIR FORCE SPONSORED 48TH NATIONAL JUNIOR SCIENCE & HUMANITIES SYMPOSIUM  
April 28 – May 2, 2010 (tentative program)**

*Recognizing the need for highly trained scientists and engineers, the U.S. Army, Navy, and Air Force sponsor programs to benefit science and engineering education from the pre-college level to undergraduate and graduate levels. Among the most prominent pre-college programs is the National Junior Science and Humanities Symposia (JSHS) Program. Since its inception in 1958, the primary aims of JSHS are to promote research and experimentation at the secondary school level and to recognize students for original research achievements.*

*The National JSHS will bring together over 360 participants, including 240 high school students, their teachers, university faculty, and other guests. All attending students have conducted original research in the sciences, engineering, or mathematics and progressed through paper competitions held at 48 nationwide JSHS regional symposia. Attending student delegates, teachers, and chaperones will have the opportunity to interact with scientists and engineers representing military and Federal research and development laboratories.*

*The U.S. Army Research Laboratory, Adelphi, Maryland, will host the 48<sup>th</sup> National JSHS. The National JSHS Program is sponsored by U.S. Army Research Laboratory's Army Research Office, Research Triangle Park, NC; Office of Naval Research, Arlington, VA; and the Air Force Research Laboratory's Air Force Office of Scientific Research. JSHS is administered by the Academy of Applied Science, Concord, NH, in cooperation with higher education.*

Wednesday, April 28, 2010				
Time	Event/Location/Speaker			
11:00 am – 7:00 pm	<b>Participant arrivals and registration – Marriott Bethesda North</b>			
	6:30 pm – Dinner, Ballrooms			
7:30 pm	<b>General Session I – Ballrooms</b> Presiding: <b>Michael Caccuitto</b> , Chief, Technology Integration and Outreach, Army Research Office (USARL/ARO) Welcome: <b>John Miller</b> , Director, U.S. Army Research Laboratory Keynote: <b>H. Chad Lane</b> , Ph.D., Institute for Creative Technologies, University of Southern California			
	<b>Orientation for students and chaperones</b>			
Thursday, April 29, 2010				
	7:00 am – Breakfast, Ballrooms			
	<b>8:00am - Board buses for departure to multiple R&amp;D sites</b> <b>(Staggered load times and departure points TBA)</b>			
Max. #	Tour	Board/depart	Arrive tour	End tour
90	Army Research Lab, Aberdeen Proving Ground	8:00/8:15 am	10:30 am	2:00 pm
30	Edgewood Chemical Biological Center	8:00/8:15 am	10:30 am	2:00 pm
45	Army Research Lab, Adelphi, Maryland	8:30/8:45 am	9:30 am	12:00 n
45	Walter Reed Army Institute of Research	8:45 am/9:00 am	9:30 am	12:00 n
45	Army Medical Research Institute of Infectious Diseases	8:30 am	9:30 am	12:00 n
45	Johns Hopkins, Applied Physics Laboratory	8:45 am/9:00 am	9:30 am	12:00 n
45	Naval Research Laboratory	8:00/8:15 am	9:30 am	2:00 pm
45	[AM] Naval Warfare Surface Center, Carderock / [PM] National Institutes of Health	8:00 am/	9:30 am/ 1:00 pm	11:30 am/ 3:30 pm
10:30 am	<b>Committee meeting – JSHS Regional Directors Executive Council (Oakley Room)</b>			
3:30/4:00 pm	<b>All tours conclude and participants return to Marriott</b>			
4:30 pm	<b>Career roundtables – Ballrooms</b> STEM researchers will host roundtables and present specific technical topics			
6:00 pm	<b>Dinner and General Session II – Ballrooms</b> Presiding: <b>Dr. Randy Zachery</b> , Director of Information Sciences Directorate, USARL/ARO Keynote: <b>Dominic Sisti</b> , Department of Philosophy, Michigan State University, and Research Associate, Center for Bioethics at the University of Pennsylvania.			
Friday, April 30, 2010				
	7:00 am – Breakfast, Ballrooms			
7:45 am	Orientation for judges and moderators			
9:00 am – 4:00 pm	<b>Student Research Paper Presentations</b> <b>Competitive paper presentations presented by 96 student finalists, over two days, from each of 48 regional symposia</b> (Student speakers schedule posted after April 14)			
	Environmental sciences – Session 1	Medicine & health/behavioral – Session 4		
	Life sciences – Session 2	Medicine & health – Session 5		
	Life sciences – Session 3			

Friday, April 30, 2010 (Cont'd)	
<b>12:00 noon – Lunch, Ballrooms</b>	
10:00 am – 12:00 pm	<b>Poster sessions</b> – Non-competitive poster presentations by 48 student finalists (Invited 3 <sup>rd</sup> place or poster presenter from each of the 48 regional symposia) Judging, Awards TBD
Noon	<b>Lunch and General Session III – Ballrooms</b> <b>Keynote: Mary Miller</b> , Director for Technology, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology
1:30 pm	<b>Student Research Paper Presentations continue</b>
6:30 pm	<b>Dinner and General Session IV – Ballrooms</b> <b>Presiding: Dr. Sheldon Apsell</b> , Chairman of the Board, Academy of Applied Science <b>Keynote: Dr. Mario Livio</b> , Senior Astrophysicist and Head of the Office of Public Outreach, Space Telescope Science Institute
8:30 pm	<b>JSHS Regional Directors Meeting - Amphitheater</b>
Saturday, May 1, 2010	
<b>7:00 am – Breakfast, Ballrooms</b>	
7:45 am	Orientation for judges and moderators
9:00 am – 4:00 pm	<b>Student Research Paper Presentations</b> <b>Competitive paper presentations presented by 96 student finalists, over two days, from each of 48 regional symposia</b> (Student speakers schedule posted after April 14) Engineering – Session 6 Mathematics and computer science – Session 7 Physical sciences, including earth and space – Session 8 Run-off session, Life science and Medicine & health/Behavioral – Session 9
10:00 am	<b>Seminar – Amphitheater: “Against the Odds: Making a Difference in Global Health”</b> <b>Jiwon Kim and Erika Mills, National Institutes of Health</b>
<b>12:00 noon – Lunch, Ballrooms</b>	
1:30 pm	<b>Student Research Paper Presentations continue</b>
7:00 pm	<b>General Session IV – Banquet and Awards Ceremony, Ballrooms</b> <b>Presiding: Dr. David Skatrud</b> , Director, USARL/ARO <b>Remarks:</b> <b>Dr. Michael Kuliasha</b> , Chief Technologist, Air Force Research Laboratory <b>Dr. Kam Ng</b> , Deputy Director of Research, Office of Naval Research <b>Major General Nickolas G. Justice</b> , U.S. Army Research, Development & Engineering Command <b>Awards presentation and photography</b>
9:30 pm	<b>Midnight dance for students</b>
9:30 pm	<b>Reception for adult leaders, teachers and guests</b>
Sunday, May 2, 2010	
AM	<b>Board buses for departure – Symposium concludes</b>