Monday, March 7, 2016

8:00–8:30 am: JSHS REGISTRATION CHECK-IN
Sheraton Hotel, Lower Level

8:30–9:00 am: General Session I
Amos Dean Ballroom A-B

Presentation of Colors
Army ROTC
National Anthem

Announcements, Introduction of Judges:
Dr. Leslie Flynn, Administrator, Belin-Blank Center for Gifted Education, Professor of Science Education, UI College of Education

9:00 am–12:00 pm: Student Session I
Amos Dean Ballroom A-B

Student Research Presentations:
9:00–9:20 am — Megan Ertl (Beckman Catholic High School, Dyersville, IA), "Manufacturing Operations Research Using Time Study Methodology"

9:20–9:40 am — Samantha West (Keokuk High School, Keokuk, IA), "An Examination of Keokuk, Iowa Shoppers’ Attitudes Toward and Knowledge of Genetically Modified Organisms"

9:40–10:00 am — Jaicee Watne (West Central Valley High School, Stuart, IA), "Dirty Water, Healthy Plants"

10:00–10:15 am: Break

10:20–10:40 am — Carl Schneider and Marcus Schneider (Beckman Catholic High School, Dyersville, IA), "Implications of Thieves’ Oil as an Antibacterial Agent"

10:40–11:00 am — Caitlin Walljasper (Central Lee High School, Donnellson, IA), "Age and Body Condition’s Effect on Weaning Cattle"

11:00–11:20 am — Mackenzie Winslow (Van Buren Community High School, Keosauqua, IA), "How Facial Cleansers Affect Escherichia coli and Sebum"

11:20–11:40 am — Rachel Mehmet (Holy Trinity Catholic High School, Fort Madison, IA), "Rhizobia: The Future Natural Fertilizer of Glycine Max"

11:40–11:55 Discussion (in groups) of Student Session I Presentations, Amos Dean Ballroom A-B

11:55–1:10 pm: Student Lunch (on your own)

11:55–1:10 pm: Network Luncheon for Teachers & Research Mentors (sit at reserved tables with judges) Chaperones welcome from 11:55–12:15 for lunch. (Johnson 1-2 Rooms)

1:15–1:35 pm — Mason Burlage (Beckman Catholic High School, Dyersville, IA), "Sclerotinia sclerotiorum as a Factor of Glycine max Phytopathology"

1:35–1:55 pm — Kaylie Wilson (Central Lee High School, Donnellson, IA), "Project: Tobacco Mosaic Virus vs Skim Milk Phase III"

1:55–2:15 pm — Jacqueline Ehrlich (Beckman Catholic High School, Dyersville, IA), "Bacterial Inhibition of Honey and Sorghum"

2:15–2:35 pm — Josh Pieper (Holy Trinity High School, Fort Madison, IA), "Does Lactation Length Affect Sow Productivity"

2:35–2:50 pm — Caitlin Kennedy (Beckman Catholic High School, Dyersville, IA), "Physical Factors Affecting Blood Glucose Levels"

2:50–3:10 pm — Manasa Pagadala (Rivermont Collegiate, Bettendorf, IA), "Improving Switchgrass Biofuel Production: Phase II"

3:10–3:25 pm: Discussion (in groups) of Student Session II Presentations Amos Dean Ballroom A-B

**1:15–2:45 pm: Meet in the Lobby
Student Laboratory Tours/ Presentations – 4B, 5B, 6B, 7B, 8B (tour descriptions on back page)

3:30–4:00 pm: Hotel Room check-in at the JSHS Registration Desk

4:00 pm: Evening Activities and Dinner
(on your own)

*Guest Passes to the UI Recreational Center available at the JSHS Registration Desk.

8:30–10:00 pm: Trivia Contest, Snacks & Socializing (optional)
Amos Dean Ballroom B-C

Adjudication Team:
Dr. Leslie Flynn
Dr. Bruce Hostager
Dr. Lori Uhrig
Dr. Jeff Klahn
Dr. Jeff Long

Guest Student Adjudication Team:
Aparna Ajjarapu (Confirm Attending)
**Student Laboratory Tours**

A Tours – Morning Tour options
10:30 am–12:00 pm
and/or

B Tours – Afternoon Tour options
1:15–2:45 pm

Students will be escorted to the labs. Due to increased demand, not all Iowa Regional ISHS participants are able to participate in lab tours.

1A: IIHR Hydroscience & Engineering (Civil and Environmental Engineering)
“IA Flooding Center”
You will see instruments and models used by the Iowa Flood Center to study the science of floods. You will also see some of IIHR’s hydraulic structure models used to design storm sewer systems.

2A: UI College of Nursing
“Nutrition – Thinking Outside the Box”
Nurses use nutrition counseling to help individuals prevent and treat disease. Dr. Grossman will explain how the quality of food you eat is important to the ability of your cells to function and heal. And describe the trillions of bacteria that live in your gut and how what they eat impacts your health.

3A: UI Department of Physics and Astronomy
“The Molecular Beam Epitaxy Facility”
Suit up and view the molecular beam epitaxy in action. Machines are used for growing semiconductor heterostructures, materials important in lasers, solar cells, and transistors.

4A/B: UI Department of Chemistry
Tools and Applications of An Electrochemical Laboratory
Tour the lab, focusing on electrochemical instruments for analysis of power sources and fundamental electrochemistry.

5B: UI Department of Biology
“The C. elegans model system”
See at first hand the C. elegans model system on the microscope. Learn how this is used to study and chromosome segregation and DNA damage repair.

6B: UI College of Liberal Arts & Sciences, Departments of Computer Science & Psychology
“Hank Virtual Environment Lab”
Tour the Hank Virtual Environments Lab, which includes two simulators that can be configured for bicycle riding or walking.

7B: Operator Performance Lab
“The Operator Performance Lab (OPL): Flight Simulator”
Take a tour through this flight testing organization that has developed an infrastructure aimed at providing low-cost distribution flight simulators and flight test services.

8B: UI Healthcare
“Welcome to Human Anatomy”
Participants will fully engage in an anatomy lesson of the brain and heart. This will include a brief lesson (using a demonstration of Cyber Anatomy) followed by a lab study using models, plastinated specimens and even REAL brains and hearts!

Tuesday, March 8, 2016

8:45–11:15 am: General Session II: Awards Banquet
Amos Dean Ballroom A-B-C

8:45–8:50 am— Welcome

8:50–9:00 am— Admissions Presentation:
Ms. Laura Goddard, Office of Admissions, The University of Iowa

9:00–9:45 am— Brunch Buffet

9:45–10:30 am— Keynote Address:
Dr. James Martin, Associate Professor, Orthopedic, Rehabilitation, Biomedical Engineer, Carver College of Medicine, The University of Iowa

10:30–10:50 am— Awards Presentation:
LTC Zachary Buettner, Professor of Military Science, The University of Iowa

Dr. Leslie Flynn, Professor of Science Education, Administrator, Belin-Blank Center

Closing Remarks:
Dr. Leslie Flynn, Professor of Science Education, Administrator, Belin-Blank Center

NOTE: Photos will be taken of the Student Research Presenters and finalists after the Presentation of Awards.

11:15–12:00 am: Room check-out @ Sheraton Hotel Front Desk

2016 Iowa Regional
Junior Science & Humanities Symposium
March 7 & 8, 2016
Sheraton Hotel
Iowa City, IA