

INDIANA JUNIOR ACADEMY OF SCIENCE

Report for 2012

Approximately 77 students and teachers representing seven schools attended the annual fall meeting of the Indiana Junior Academy of Science held at Indiana University Bloomington on November 9, 2012.

Ms. Terra Mauer, IU STARS Scholar gave a keynote address titled "***Aging as Stress Management***" that was very well received by the students and teachers. Five competitions and tours of Chemistry, Kinesiology, and the Mathers Museum filled out the remainder of the day followed by the awards ceremony. A brief description and a list of winners for each are outlined below.

1. The Problem Solving Exam

This exam provides students with a fun and meaningful exercise in scientific knowledge and problem-solving skills. Two students from each school who are selected by their sponsoring teacher take the exam. Plaques are awarded to the top two team winners. Certificates are awarded for 3rd & 4th place.

This year's winners were:

1st Place – Stacie Skwarczan, Marian High School

2nd Place – JP Skycak, Marian High School

3rd Place – Jordan Clements, Noblesville High School

4th Place – Brandon Curry, Northwestern High School

2. The Issues Presentation Competition

This competition encourages students to learn about the political, social, and scientific issues surrounding the selected topic. This year, the topic was "***Since we can already clone dogs, cats, pigs, sheep and camels, should we also clone human beings?***" Each competitor gave a five minute presentation on the topic without the use of visual aids. The students were judged by a panel of peers in the morning session and judged by a panel of undergraduate students from the IU Science Outreach Society. A plaque is awarded to the top student, all finalists receive a certificate.

This year's finalists were:

Brady Tuttle, Marian High School

Joy Coy, Noblesville High School

Caitlin Chestne, North Daviess High School

Rachel Johns, Northwestern High School

This year's Issues winner: Rachel Johns, Northwestern High School

3. Science Olympiad Competition

This year we held one Science Olympiad competition called "Picture This." Three students were allowed to participate. Team members took turns drawing representations of a set of scientific terms and concepts while the other team members guessed the term being drawn.

This year's winners are:

1st Place – Renee Rink, Elizabeth Alexander, Ben Lacy, Marian High School

2nd Place – Sai Nelanuthala, Olivia Murfield, Rebekah Mooar, Noblesville High school

4. The Research Paper Competition

This competition allows students who have carried out an original scientific investigation the opportunity to present their work publicly. Students who wish to compete in this event submit an abstract of their work to the IJAS Director in early October. Twenty-six abstracts were submitted for review and the top twelve finalists were selected by a panel of impartial abstract judges from IU Bloomington and IU Northwest. At the IJAS meeting, the finalists give a 10-minute poster presentation to a panel of judges who evaluate them on originality, research procedures, and presentation skill. The second and third place winners receive a plaque. The first place winner receives a plaque and a \$1,000 scholarship from the Indiana Academy of Science to attend any Indiana College or University.

This year's winners were:

- 1st Place – 93.4 points: Stacie Skwarcan, Marian High School**
- 2nd Place – 91.4 points: Lauren Ward, Northwestern High School
- 3rd Place – 91.0 points: Sharmila Paul, Carmel High School
- 4th Place – 90.7 points: Kirsten Pimley, Noblesville High School
- 5th Place – 90.4 points: John DeBuysser, Marian High School
- 6th Place – 90.2 points: Nathan Chou, Northwestern High School
- 7th Place – 89.4 points: Brandon Wysong, Northwestern High School
- 8th Place – 84.1 points: Jordan Thurman, Northwestern High School
- 9th Place – 83.3 points: Braden Lawyer, North Daviess High School
- 10th Place – 76.3 points: Emily Pham, Noblesville High School
- 11th Place – 67.7 points: Rachel Hoffman, Marian High School
- 12th Place – Withdrawn from competition: Melinda Song, Carmel High School

5. *The Outstanding School Award*

The Outstanding School Award is given to the school with the most participation points. To calculate this score, credit is given for every abstract submitted, more credit for those abstracts accepted for the Research and for Outstanding Junior Scientist competitions, and finally for rank scores for the top presentations. Each school received credit for entering students in the Issues Competition, for having a judge at the Issues presentations, and for entering students in the Problem Solving Exam and Science Olympiad Competition. More credit was given to the winners.

The top three schools and the teachers representing them today are:

- 1st Place – 60 points: Marian High School**
- 2nd Place – 47 points: Northwestern High School
- 3rd Place – 45 points: Noblesville High School

6. *The Outstanding Junior Scientist Competition*

This event recognizes those students who are exemplary in overall scholarship as well as scientific ability and achievement. Each school may nominate two students for this competition. The top ten nominees are then selected to compete at the IJAS meeting, where they are interviewed by a panel of judges. The Outstanding Junior Scientist is selected based upon his/her academic record, involvement in original research and extracurricular scientific activities, and the interview. The second and third place winners receive plaques and the Most Outstanding Junior Scientist receives a plaque and a \$1,000 scholarship from the Indiana Academy of Science to attend any Indiana College or University.

This year's winners were:

- 1st Place – 337.6 points: Stacie Skwarcan, Marian High School**
- 2nd Place – 311.3 points: Brandon Wysong, Northwestern High School
- 3rd Place – 300.1 points: Michael Kokot, Marian High School
- 4th Place – 286.8 points: Sai Nelanuthala, Noblesville High School
- 5th Place – 274.4 points: Jordan Cadle, Paoli Jr-Sr High School
- 6th Place – 270.3 points: Jordan Thurman, Noblesville High School
- 7th Place – 268.3 points: Emily Harshman, Northwestern High School
- 8th Place – 255.4 points: Braden Lawyer, North Daviess High School
- 9th Place – 253.0 points: Vaibhav Vavilala, Carmel High School
- 10th Place – Withdrawn from competition: Melinda Song, Carmel High School