



NSF announces 2018 winners for Generation Nano: Superheroes Inspired by Science

Middle school and high school students will present their winning entries at the 2018 USA Science & Engineering Festival

April 5, 2018

A solar-powered, fast-charging, high-flying hero named Heliora! A sweet nanoparticle solution that defeats the sugar-blasting nemesis Glycosa! A peppy polymer that transforms into a cell-size, chain-welding hero to battle an antibiotic resistant superbug!

The National Science Foundation (NSF), in partnership with the National Nanotechnology Initiative (NNI), recognized these new science-powered superheroes and more by naming them as the first- and second-place winners and honorable mention for the [Generation Nano](#) competition.



High schooler Joy from St. Andrew's Episcopal School in Potomac, Maryland won for "Heliora." Credit: Joy from St. Andrew's Episcopal School

Generation Nano challenges middle and high school students to imagine novel superheroes who use the power of science and technology to solve crimes or tackle societal challenges. Students tell their hero's story in a short comic or video. Experts judge the entries based on the submitter's use of science and technology, creativity and artistic or technical quality.

This is the first year that middle school students were invited to participate in Generation Nano.

High school winners

- **First Place**
Joy from St. Andrew's Episcopal School in Potomac, Maryland for "[Heliora](#)."
- **Second Place**
Anna and Emily from Clarke County High School in Berryville, Virginia for "[Hemea](#)."
- **Honorable Mentions**
Nicole from Jericho High School in Jericho, New York for "[Vilmaris](#)."
Aisha, Saisanjana and Vidhya from East Brunswick High School in East Brunswick, New Jersey for "[Dr. A.](#)"

URL for item (will go live when item posts): <http://bit.ly/GenNano2018winners>

For more information, contact:

Sarah Bates, NSF, (703) 292-7738, sabates@nsf.gov



Middle school winners

- **First Place**

Hannah from Roberto Clemente Middle School in Germantown, Maryland for "[Peppy T. Polymer.](#)"

- **Second Place**

Kathryn from Robert Cook Edwards Middle School in Clemson, South Carolina for "[Doctor DNA.](#)" Julie, who is homeschooled in Nashua, New Hampshire, for "[Estron.](#)"

- **Honorable Mentions**

Michelle and Gina from Roberto Clemente Middle School in Germantown, Maryland for "[Bellator.](#)"

Dhruv and Priya from Takoma Park Middle School in Takoma Park, Maryland for "[HydroPIT.](#)"

Each first-place winner will attend the [2018 USA Science & Engineering Festival in Washington, D.C.](#), April 6-8, 2018. This event is the largest of its kind and the only national science festival. The festival features speeches by inspirational scientists, exhibits from some of the biggest names in STEM, and interactive and informative demonstrations. The winners will each exhibit their superhero and their science-inspired powers at NSF's festival pavilion.

Generation Nano also recognized two teachers this year for playing pivotal roles in mentoring young STEM artists.

- Lauren Cook from St. Andrew's Episcopal School worked with Joy, the high school first-place winner.
- James Dempsey from Roberto Clemente Middle School worked with Hannah, the middle school first-place winner.

A panel of judges with expertise in either nanotechnology or comics evaluated each entry and selected semifinalists and finalists.

The judges

- Corey S. Powell, former news editor of *Discover* magazine and adjunct professor at New York University.
- Eric S. Rollman, CEO of Rollman Entertainment, Emmy winner and former Saban, Fox Family and Marvel exec.
- Grace Ellis, writer best known for co-creating and co-writing "Lumberjanes," a *New York Times* bestseller and Eisner Award-winning comic book about monster-fighting Girl Scouts.

URL for item (will go live when item posts): <http://bit.ly/GenNano2018winners>

For more information, contact:

Sarah Bates, NSF, (703) 292-7738, sabates@nsf.gov



- James Kakalios, the Taylor Distinguished Professor in the School of Physics and Astronomy at the University of Minnesota.
- Jeffrey Vinokur, "The Dancing Scientist," a science educator and hip-hop dancer.
- Jim Olds, the University Professor of Neuroscience and Public Policy at George Mason University and former assistant director for NSF's Directorate for Biological Sciences.
- Keith Dysarz, director of P-12 Practice, which aims to ensure that lessons from classrooms, schools and districts inform The Education Trust advocacy and policy development process.
- Leah Hanes, executive director at Two Bit Circus Foundation.
- Gia Mora, Taryn O'Neill and Tamara Krinsky -- the Scirens, or screen sirens for science.
- Tanji Reed Marshall, senior practice associate for P-12 Literacy, leading The Education Trust's Equity of Motion literacy assignment analysis work.
- Zach Weinersmith, creator of the webcomic "Saturday Morning Breakfast Cereal," as well as the Festival of Bad Ad Hoc Hypotheses, and *The New York Times* bestselling popular science book "Soonish."

Visit the [Generation Nano website](#) for competition details, such as eligibility criteria, entry guidelines, timeline, prizes, and videos and comics from the winners and finalists.

-NSF-

The National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In fiscal year (FY) 2018, its budget is \$7.8 billion. NSF funds reach all 50 states through grants to nearly 2,000 colleges, universities and other institutions. Each year, NSF receives more than 50,000 competitive proposals for funding and makes about 12,000 new funding awards.

URL for item (will go live when item posts): <http://bit.ly/GenNano2018winners>

For more information, contact:

Sarah Bates, NSF, (703) 292-7738, sabates@nsf.gov



National Science Foundation

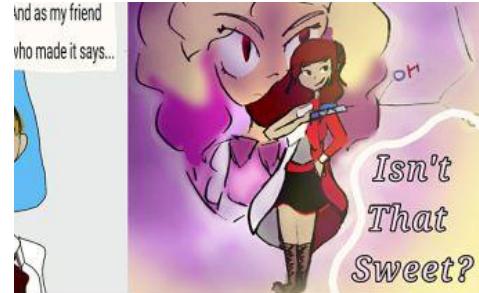
NEWS RELEASE

Additional images

High-resolution images available at item's URL.



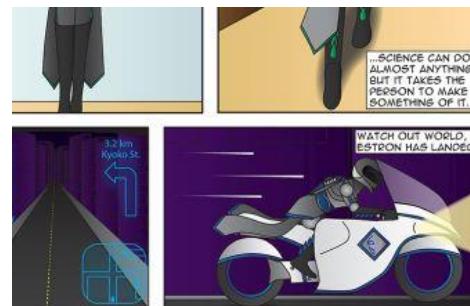
Hannah from Roberto Clemente Middle School in Germantown, Maryland won for "Peppy T. Polymer." Credit: Hannah from Roberto Clemente Middle School in Germantown, Maryland



Anna and Emily from Clarke County High School in Berryville, Virginia won for "Hemea." Credit: Anna and Emily from Clarke County High School in Berryville, Virginia



Kathryn from Robert Cook Edwards Middle School in Clemson, South Carolina won for "Doctor DNA." Credit: Kathryn from Robert Cook Edwards Middle School in Clemson,



Julie, who is homeschooled in Nashua, New Hampshire, won for "Estron." Credit: Julie, who is homeschooled in Nashua, New Hampshire

URL for item (will go live when item posts): <http://bit.ly/GenNano2018winners>

For more information, contact:
Sarah Bates, NSF, (703) 292-7738, sabates@nsf.gov