Save the date for next year’s Conference!
February 9-11, 2020
Wyndham – Indianapolis West
Theme: All IN: Sharing the Vision for Indiana Science Education

SHARE-A-THON Opportunities
Come join groups of Elementary, Middle STEM and Pre-service teachers in the Share-A-Thons. These sessions provide great networking venues and the chance to share ideas, lesson plans, lab activities, and resources that work for you in your classroom. Presentations are simple! Just bring your own ideas - you do NOT have to submit a proposal! Just come to the designated room and share your great ideas!

Keynote Speaker - Okhee Lee

Okhee Lee is a professor in the Steinhardt School of Culture, Education, and Human Development at New York University. Her research areas include science education, language and culture, and teacher education. She is currently leading collaborative research between New York University and Stanford University to develop instructional materials aligned with the Next Generation Science Standards (NGSS) in order to support science learning and language development of elementary students including English learners. She was a member of the NGSS writing team and served as leader for the NGSS Diversity and Equity Team. She was also a member of the Steering Committee for the Understanding Language Initiative at Stanford University. She was a 2009 Fellow of the American Educational Research Association (AERA), received the Distinguished Career Contribution Award from the AERA Scholars of Color in Education in 2003, and was awarded a 1993-95 National Academy of Education Spencer Postdoctoral Fellowship.

HASTI Mission Statement: The purpose of HASTI is the advancement, stimulation, extension, improvement, and coordination of science education in all fields of science at all educational levels. HASTI founders, 1969

Important Dates

February 9-11, 2020 – 49th annual HASTI Conference at the Wyndham – Indianapolis West

Keynote Speaker - Okhee Lee

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The HOOSIER SCIENCE TEACHER - HASTI's online journal

To read the current edition, click here https://scholarworks.iu.edu/journals/index.php/thst/index

To submit an article for consideration, https://scholarworks.iu.edu/journals/index.php/thst/about/submissions

To become a reviewer, send an email THST@hasti.org

Reviewers are needed for any level, any discipline! Please let the editor know if you are interested!

HASTI/NSTA Joint membership

HASTI in partnership with NSTA now offers a joint membership. When signing up for a new or renewal NSTA membership you will have the option to sign up for a new or renewal HASTI membership. Each one will be discounted for a combined regular membership of $84, a savings of $15. Look for additional information on the HASTI website. HASTI will still offer the HASTI only membership as well.

Visit https://hasti.wildapricot.org/join/ for more information.

Follow us on Social Media!

Pinterest @HASTISCI

Instagram @HASTISCI

Facebook- search HASTI

Twitter @HASTISCI

Be sure to include #HASTISCI in all your fun science related posts
Want to be more involved with HASTI?

The HASTI Strategic Goals guide the work of the standing and special committees. In order to improve HASTI volunteers are needed to fill positions in various committees.

Sign up for a committee and help HASTI make an impact on science educators in Indiana. Meetings will be held both face-to-face and through Zoom.

You will be contacted by the chair or a member of the HASTI Board who serves on the committee.

Click here to see the full list and sign up for your committee of choice
https://hasti.wildapricot.org/event-3392718

Committees and Descriptions

**Publications:**

Chair: Tracy Streider

It shall be the duties of the Publication Committee to advise and assist the editors of the association publications in keeping the membership, science educators and public informed as to the activities of the association and the progress of science education.

**Conference:**

Chair: Danae' Wirth

It shall be the duty of the Conference Committee to initiate and implement well-coordinated programs in line with the purposes of the organization. The Immediate Past President shall serve as chairman of the Conference Committee.

**Membership:**

Chair: Shannon Hudson

It shall be the duty of the Membership Committee to promote, expand and stabilize the membership of the association. There shall be one member of the Membership Committee appointed from each of the Association Districts.
Professional Development:

Chair: Kristen Poindexter

It shall be the duty of the Professional Development committee to determine and provide ongoing professional development for the improvement of science education.

Website/Social Media:

Chair: Kristen Poindexter

It shall be the duty of the website/social media committee to improve sharing of information and networking opportunities for teachers of science.

Awards:

Chair: Robert Yost

It shall be the duty of the Awards Committee to identify new awards, screen applicants and make recommendations to the Board of Directors.

Nominations and Elections:

Chair: TBD

It shall be the duty of the Nominations and Elections committee to prepare a slate of officers of at least two nominees for each office and board position, excluding the office of president, to be filled, by the Vic-President.

Indiana 6-Year Stem Initiative

Indiana has released its 6-Year Stem Initiative. Follow this link to read in its entirety to know what the plan means for you:
https://www.doe.in.gov/wf-stem/indiana-stem-education-science-technology-engineering-and-mathematics
HASTI Awards
The Hoosier Association of Science Teachers, Inc. honors Indiana educators each year through several innovation education awards. We invite nominations for these awards. Open the links below to view the criteria.

The Edward L. Frazier Distinguished Service Award

Cheryl Cowan Memorial Award for Innovative Elementary Science Teaching

Charlotte M. Boener Memorial Award for Innovative Middle School Science Teaching

Clyde Motts Award for Innovative High School Science Teaching

Innovative College Science Teaching Award

The Gene Stratton-Porter Environmental Science Award

Presidential Award for Excellence in Science Teaching
Your HASTI Leadership

Directors
District 1 - Matt Benus
District 2 - Tracy Strieder
District 3 - David Butler
District 4 - Kevin Leineweber
District 5 - Stacy Hootman
District 6 – Kathy Daniels
District 7 - Kim Terry
District 8 - Katherine Lane
District 9 - John Harkness
At-Large I - open
At-Large II - James Hollenbeck
Elementary - Dawn Bick
Middle School – Suzanne Cunningham
High School - Lori White
College - Robert Yost
NSTA District X - Danae Wirth

Executive Board
President - Shannon Hudson
Vice President – Kristen Poindexter
Secretary – Georgia Everett
Treasurer - Greg McCurdy
Past President - Danae Wirth
Executive Director - Carolyn Hayes

Affiliate Organization Representatives
AAPT - Craig Williams
IACT - open
IABT - Kim Terry
SEFI - Robert Yost
I-STEM – Jennifer Hicks
EEAI-
HASTI HAPPENINGS

Need PGPs, continuing education points, or just want a great conference to attend but don’t know where to look? Skim through these next pages. Chances are you will find just what you are looking for! If you have something you would like to include in these pages, please send them to Shannon Hudson, shudson@cville.k12.in.us
Are you a HASTI member living in the state of Indiana? The At-Large 1 position is open. This can be filled by any HASTI member living anywhere in the state 😊

Interested? Email Shannon Hudson, shudson@cville.k12.in.us
Celebrate Science!

Indiana State Fairgrounds
Elements Financial
Blue Ribbon Pavilion
9:30 am - 5:00 pm
FREE ADMISSION!
Parking $8
Over 70 exhibits with hands on fun for everyone!
Hands On Activities
Tons of Giveaways
Special Sessions

For K-12 Students:
Hours of Fun
Doing Science
Interact with students and faculty from Indiana Colleges and Universities

For Parents:
Educational entertainment for the entire family

For Teachers:
100+ ideas for activities
PGP points for attendance

October 5, 2019
Celebrate Science Indiana
Imagine. Discover. Explore.

Indiana’s Premier Science Festival Brings Science to You!
Free, fun, family event for Indiana with an interactive focus on Science, Technology, Engineering and Math (STEM).

www.celebratescienceindiana.org
Celebrate Science! 2019 Exhibitors

We are very excited to have the following Exhibitors at Celebrate Science Indiana 2019 on Saturday, October 5th from 9:30 AM to 5:00 PM at the Indiana State Fairgrounds in the Elements Blue Ribbon Pavilion. Click the links below to learn more about each exhibitor.

- American Chemical Society - Indiana Local Section
- Antarctica Session 1 - Personal Encounters with the White Continent - 11:30 AM - 12:30 PM
- Antarctica Session 2 - Penguins of Antarctica, The Falkland Islands, and South Georgia Island and Dynamic Soaring Used by the Seabirds of the Southern Ocean - 2:30 - 3:00 PM
- Beckman Coulter
- Butler University Department of Biological Sciences
- Butler University Department of Chemistry and Biochemistry
- Children's Museum of Indianapolis
- Chip Ganassi Racing
- Computer Game Development Session 1 - Intro to Computer Science and Game Development - 10:00 - 11:00 AM
- Computer Game Development Session 2 - Building a 3D Game - 1:00 - 2:00 PM
- Conner Prairie
- Corteva Agriscience
- Covance
- Culver Academies
- Donate Life Indiana (Indiana Donor Network)
- FedEx
- Girl Scouts of Central Indiana
- HASTI
- Health & Science Innovations
- Heritage Research Group
- Herron High School and Riverside High School
- Indiana Academy of Science
- Indiana Astronomical Society
- Indiana State Department of Health Labs
- Indiana DNR Division of Entomology & Plant Pathology
- Indiana Network of Genetic Counselors
- Indiana State Museum and Historic Sites
- Indiana University School of Medicine - Department of Anatomy, Cell Biology & Physiology
- Indiana University - Department of Biology
- Indianapolis Museum of Art at Newfields
- Indianapolis Public Library
- International Space Station US National Lab
- Irving Materials, Inc.
- IUPUI Biology
- IUPUI Chem Club
- IUPUI Computer Science
- IUPUI Forensics "Painting with Maggots"
- Kasey Program (The)
- Marian University
- MISO
- MOLE @ IUPUI
- Monosol
- Monument Chemical
- MUCOM Cardiology Club
- National Weather Service
- NOBCChE
- Purdue University Climate Change Research Center
- Thermo Fisher Scientific
- University of Indianapolis
- You Be The Chemist
Call for Proposals
Science Teacher Resource Book

Working title: Homemade Science:
Constructing Science Teaching Resources from Everyday Materials

Editor: Tom J. McConnell, Ph.D.
Associate Professor of Science Education
Department of Biology
Ball State University

Rationale:

In July 2018 a young head teacher from Malawi asked me at the World Conference on Transformational Education how to teach science in his school when the school has absolutely no scientific equipment. The school serves a population of 300 students, but has only two rooms, with only a chalkboard and some tables. The Malawi national curriculum expects students to take much the same coursework in the sciences as students in the US, but this school has no lab facilities, resources or budget to purchase equipment.

The only thing I could offer was a few ideas about how to build science equipment from household items and recycled materials. One example was a water sampling device for stream monitoring I made from scrap lumber, a few bolts, a coffee can, two rubber bands and some duct tape. Another was the turbidity tube I created from a fluorescent bulb package, a cork, the bottom of a Styrofoam cup, epoxy and a black marker.

These types of “homemade science” materials are not uncommon in schools in the US where teachers need to improvise. But in a school like my friend’s in Malawi, teachers need to see similar ideas in order to create their entire school science lab.

Since then, I have stayed in touch with the school in Malawi. My goal is to send them a collection of resources like the ideas listed above. Other schools in similar locations would also benefit from this resource, the book will be widely shared, including at the 2020 World Conference on Transformative Education.

The proposed book will be a collection of “homemade science” equipment, lab activities, and materials for the classroom that can be shared, FREE OF CHARGE, with schools anywhere in the world that have a similar need.

And I invite you to help by contributing your ideas to the project! The collection will be compiled by a team of science educators who will serve as peer-editors. With help from some illustrators and editors, we will produce a published electronic resource book. The file will be in PDF format for ease of sharing, and the book will be published by Airway Publishing, with an official record in the Library of Congress and an ISBN number.
Educator Empowerment Workshops 2019-2020

Join us at Moore Road Farm to gain knowledge about STEM content, including the Scientific Process, the Solar System, Chemistry with Kids, and Mathematics Processes. Each night a topic will be highlighted, STEM Professionals will share about their work experiences, lessons, activities, and connected literature will be shared, and connections will be made to Science and Math Standards, STEM careers, and employability skills. PGPs and CYC points will be offered.

**November 7, 2019** - The Solar System - Field trip to Holcomb Observatory at Butler University
**February 27, 2020** - Chemistry with Kids - at Moore Road Farm
**April 16, 2020** - Mathematics Processes - At Moore Road Farm

5:00pm-6:30pm at Moore Road Farm unless otherwise indicated - $15 per participant per evening - adult only events.

The STEM Connection Professional Development is aimed at providing more empowerment opportunities for educators, parents, and youth workers through newsletters, training sessions, and content-rich workshops and events. The Educator Empowerment Workshops are meant to help formal and informal educators strengthen their understanding and comfort level with specific STEM content. Advanced registration required. The STEM Connection's Educator Empowerment Newsletters provides more information about the topics presented at the Educator Empowerment Workshops. Each quarterly newsletter contains STEM content, literature connections, and resources connected to a common theme.

To register for a workshop and sign up for the newsletter visit

https://thestemconnection.org/stem-professional-development/open-workshops/

TheSTEMconnection.org

Moore Road Farm • 8407 Moore Road • Indianapolis, IN 46278
Become a STEM Teacher through UIndy Teach (STEM)

Contact:
Deb Sachs, Coordinator, Teach (STEM)
dsachs@uindy.edu
317-788-2052
http://uindy.edu/education/teaching-fellowship

Are you or is someone you know thinking about becoming a STEM teacher. Check out the University of Indianapolis Teach (STEM)³ program at <http://uindy.edu/education/teaching-fellowship/>. Thanks to a National Science Foundation Robert Noyce grant, $30,000 stipends are available to qualified candidates for this initial teacher preparation, one-year clinical residency, Master of Arts in Teaching program. In return, candidates agree to teach for at least two years in a high need local education agency. During those two years they also receive university provided mentoring to help them become an outstanding STEM teacher. Spread the word to help fill the STEM teacher pipeline

**********************************************************************************************************************

Need FREE great outdoor and ecology lesson plans?
Visit http://www.ilovemyland.org/
AP-TIP IN Regional Teacher Collaborative (RTC) Meetings

During the 2019-20 school year, AP-TIP IN is sponsoring Regional Teacher Collaborative (RTC) meetings for any AP math, science and English teachers in the northern, central, and southern parts of Indiana. These meetings are FREE for teachers who wish to attend and are held at high schools around the state. The RTC meetings provide a venue for teachers to work on topics, strategies, and share best practices in their content areas.

Meetings are held after school, 4:30 p.m. to 7:00 p.m. (local time), and include food and beverages during the latter part of the meeting. We request teachers register to plan for materials and food. Even if you arrive late or need to leave early, you are welcome and encouraged to attend. Registration can be found in the LEFT MENU at: jei.nd.edu/aptipin

Teachers who attend any RTC meetings are provided a PGP Certificate after each event they attend, with PGPs based on the sign in sheets (1 hour = 1 PGP).

Content Areas Impacted:
The AP-TIP IN Teacher Regional Network Meetings will support teachers in the following AP courses:
• **Math:** Calculus AB and Calculus BC, Statistics
• **Science:** Biology, Chemistry, Environmental Science, Physics 1
• **English:** Language, Literature
• **Computer Science:** Computer Science A and Computer Science Principles will coordinate meeting when possible. Zoom webinar meetings may also be utilized.

October through December Meeting Dates and Locations:

**NORTHWEST**
- Oct. 1, 2019 – Merrillville HS; Merrillville
- Nov. 12, 2019 – Gavit HS; Hammond

**CENTRAL WEST**
- Nov. 6, 2019 – Fishers HS; Fishers

**SOUTHWEST**
- Nov. 7, 2019 – Castle HS; Newburgh
- Nov. 19, 2019 – White River Valley HS; Switz City

**NORTHEAST**
- Nov. 7, 2019 – Jimtown HS; Elkhart
- Nov. TBD, 2019 – Wayne HS; Fort Wayne

**CENTRAL EAST**
- Oct. 2, 2019 – Marion HS; Marion
- Nov. 13, 2019 – Whiteland HS; Whiteland

**SOUTHEAST**
- Oct. 1, 2019 – Scottsburg HS; Scottsburg
- Nov. 14, 2019 – Jeffersonville HS; Jeffersonville

Questions or comments?
Contact AP-TIP IN Program Director Karen Morris: morris.3@nd.edu or 574-631-6945
# Great Resources from National Geographic!

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![Image of Ignite: The Spirit of Exploration](image_url)
STUDENT EXPERIENCES

GeoChallenge Registration Now Live
It’s here! The National Geographic GeoChallenge is back. Challenge your students in grades 4-8 to develop creative solutions to today’s urgent environmental problems through this free, project-based, multi-leveled competition. Combining science, geography, and communication skills, GeoChallenge teams generate solutions to critical issues, just like National Geographic Explorers.

STUDENT EXPERIENCES

Bring Explorers to Your Classroom
This month, join Explorer Classroom for a September focused on ocean plastics through National Geographic's Planet or Plastic initiative! Connect your classroom with exciting explorers in live video chats, and check out the educator guide for resources on ocean plastics. Planning ahead to October? Next month's theme is extreme environments!

NAT GEO EDUCATOR SPOTLIGHT
Meet Amy Kennedy, who led her sixth-grade students in evaluating map projections based on accuracy and bias. Students wrote letters to the government explaining which map projection they think should be used in schools.

Where to Find Us

9/30 | Iowa Council for the Social Studies Conference (Altoona, IA)  
9/30 | IMLEA Annual State Conference (Indianapolis, IN)  
10/10 | South Dakota Afterschool Network Conference (Spearfish, SD)  
10/10 - 11 | Georgia Council for the Social Studies (Athens, GA)  
10/10 - 13 | Kansas Gifted, Talented, & Creative Conference (Manhattan, KS)
OUR PHILOSOPHY

GLOBAL GOALS ACTION PROGRESSION

Our vision is for students to form a habit of taking action on global issues that are locally-focused and based in scientific understanding.

Smithsonian Science for Global Goals combines key pieces of science and social studies education practices. The result is a progression that takes students from understanding their own identity and the identity of their community, to questioning and investigating, to engaging in critical reasoning and systemic thinking. Students then take their newfound scientific knowledge to engage in social action.

Critical Reasoning and Systemic Understanding are the keystones. Armed with their new scientific understanding, this is where students examine their own values and perspectives, and reflect on how their perspective changes as they learn more about the world around them.

Smithsonian Science for Global Goals helps students develop sustainable mindsets and become scientifically literate citizens.

AVAILABLE NOW

MOSQUITO!

How can we ensure health for all from mosquito-borne diseases? In a module framework that starts with Defining the Problem and works toward Creating an Action Plan, students have the opportunity to research local habitats, work with community partners, collect mosquito eggs, model local disease transmission vectors, and take local action.

Access the module now at: www.ssec.si.edu/mosquito
Shutterbugs: Wiggle and Stomp
Kindergarten | Physical Science

Shutterbugs teaches students how to describe movement and motion while visiting rare animals at the Smithsonian National Zoological Park.

Showbiz Safari
Grades 1-3 | Life Science

Showbiz Safari is an educational life science game that will help teach your student about the diversity of plants and animals in different habitats.

Morphy
Grades 3-5 | Life Science

Morphy is a life science game that teaches students that animals have external structures that function to support survival and behavior.

Expedition: Insects
Grades 3-5 | Life Science

Readers travel around the world to visit six different types of insects in their natural habitats. The young explorers will learn about the variation of traits among insects.

Habitats
Grades 3-5 | Life Science

Habitats is a life science game that will help teach students where many animals live by matching each animal to their correct habitat.

Visit us online!
ScienceEducation.si.edu
The Smithsonian Science for Global Goals project provides new freely available online community research guides for youth ages 8-17 developed by the Smithsonian Science Education Center in collaboration with the InterAcademy Partnership. These research guides use the United Nations Sustainable Development Goals (SDGs) as a framework to focus on sustainable actions that are student-defined and implemented.

WHAT IS OUR APPROACH?

The Smithsonian Science for Global Goals brings together inquiry-based science education and civic engagement. Students ages 8-17 engage firsthand with issues of critical importance, such as climate change, the health of the world's oceans, and clean energy, while examining each issue from multiple perspectives: social, ethical, economic, and environmental. Educating youth about complex socio-scientific issues will help to inoculate young people and their teachers and parents against societal and health problems that can adversely affect their lives.

TOPICS

- Mosquito! How can we ensure health for all from mosquito-borne diseases? (Available now)
- Nutrition! How do we ensure good diets for all?
- Water! How do we balance fair water use for all?
- Energy! How do we balance access to energy and environmental concerns?
- Weather and People! How do we balance economics and preparation?
- Biotechnology and Humans! How do we balance technology, actions, and ethics?
- Pandemic! How do we prepare for a pandemic?
- Development and the Oceans! How do we balance today's needs with tomorrow's goals?
- Agriculture! How do we balance production, economics, and the environment?
- Sustainable Cities! How can we create healthier, happier cities?
- And more! Visit: www.ssec.si.edu/global-goals

WHAT WILL STUDENTS LEARN?

- Critical reasoning
- Systemic understanding of complex issues
- Science literacy & sustainable mindsets
- How to approach complex issues through multiple perspectives (social, ethical, economic, and environmental)
- How to use their findings to find common ground, build consensus, and plan and carry out local actions for Global Goals.

CONTACT US:

Andre Radloff
Curriculum Developer
Tel: (202) 633-2976
Email: RadloffA@si.edu
www.ssec.si.edu/global-goals

PARTNERS

developed by Smithsonian Science Education Center in collaboration with IAP
Aquatlon: The Freshwater Access Game
grade 5 | Earth Science

In Aquatlon, students will learn how a range of factors play a role in freshwater management, and will apply their scientific and engineering understanding of freshwater management to these real-world scenarios.

BumperDucks
Middle School | Physical Science

BumperDucks is an educational physical science game that will help teach players about what happens when two objects collide and how mass impacts the acceleration of an object.

Disaster Detector
Middle School | Earth Science

Disaster Detective teaches players how to analyze and interpret data on natural hazards to forecast future catastrophic events and how to implement tools to mitigate the effects of those disasters.

Weather Lab
Middle School | Earth Science

Weather Lab is a tool to help visualize how North America's weather is formed. This lab is designed to model the complex interactions between air masses and ocean currents, but like all models it represents probable outcomes.

Explore Smithsonian
Middle School | Various

Join us for a behind-the-scenes look at the science and research of the Smithsonian Institution. Each video in this series is designed for use in the classroom by highlighting a driving question and following Smithsonian scientists as they go about the process of science.

Smithsonian
Science Education Center

ScienceEducation.si.edu

The mission of the Smithsonian Science Education Center (SSEC), formerly the National Science Resources Center, is to transform and improve the learning and teaching of science for K-12 students. The SSEC is nationally and internationally recognized for the quality of its programs and its impact on K-12 science education.
HANDS-ON LEARNING THROUGH EMERGING TECHNOLOGIES

Smithsonian Science for Makerspaces is a series of free engineering design challenges for students to engage with emerging technologies through hands-on learning. Inspired by Smithsonian Science for the Classroom, these activities bridge formal science education and the makerspace movement by helping educators and teachers engage with digital and physical technologies within the context of science, technology, engineering, arts and math (STEAM) by asking them to make something new.

WHAT IS OUR APPROACH?

Observe It!
Using Smithsonian connections, students explore a science based phenomenon and develop a context of how to approach and interact with it.

Make It!
Teachers and students are given a step by step process to prepare for the makerspace challenge.

Design It!
Students iterate an initial approach to solving the challenge utilizing their creativity and understanding.

Test It!
Students record their results and recommend improvements to their system to achieve a better design.

EMERGING TECHNOLOGIES AND SKILLS

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<td>3D Printer</td>
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<td>Coding Tools</td>
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<td>Laser Cutter</td>
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<td>Green Screen Recording</td>
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CONTACT US:
Brian Mandell, PhD
Director, Curriculum & Communications
Tel: (202) 633-2968
Email: MandellB@si.edu

PROJECT GOALS

- Students become the engineer by designing, testing and refining a prototype that solves a problem.
- Students connect to a scientific phenomenon through a hands on approach.
- Students use executive function skills to plan out and complete projects.
- Support teachers with lesson plans and step by step instructions to bring makerspace activities into the science classroom.
- Activities for both the low-tech and high-tech classrooms.

PARTNERS

Johnson & Johnson

ssec.si.edu/makerspaces
Donate Life Indiana

Contact:
Andi Amburgey, M.A. Ed
External Education Specialist
Indiana Donor Network
P 317.222.3473 | C 765.914.3403

The youth education team at Donate Life Indiana would like to promote our free program that we offer to middle and high school teachers across Indiana to promote organ and tissue donation and help save more lives. We have found that our curriculum aligns very well with health and science instruction, but it also is just truly important for our team to raise awareness at this critical age because teenagers will be asked about their donation decision as they travel to the BMV for state ID’s, learner’s permits and driver's licenses.

Save Lives….in the Classroom. As part of Indiana’s mandatory curriculum, we recognize the difficulty in teaching a hard topic such as organ donation and transplantation. That is why our youth education team welcomes an opportunity to come share information with Indiana middle, high schools and colleges on this lifesaving topic. Please share the information with educators in your school, friend and family network. Educators can CLICK HERE to book a free guest speaker and/or preview some of our resources. You may also click directly on our website below www.donatelifeindiana.org/teachers.

Donate Life Indiana’s partner Indiana Donor Network will be offering their annual Summit to learn more about the benefits of organ and tissue donation and transplantation. The Summit will offer a variety of keynote speakers and breakout sessions that dig deeper into advanced research surrounding this lifesaving topic. It is an excellent opportunity for science teachers to earn PGP points and learn alongside professionals. The Summit will be September 23, 2019 at the Embassy Suites Noblesville, IN. Please register and choose your breakouts using this site. https://indianadonornetwork.org/amplify/registration/
LOOKING FOR AN IMPACTFUL PRESENTATION?

Help us reach students in a positive way by raising awareness on organ donation and transplantation.

Visit our website and book us today: DonateLifeIndiana.org/teachers
The Shape of Science

Save time
Hit the standards
Engage students

Teaching Aids / Classroom Models on Demand

Ex.: HS-LS3-3: Distribution of traits in a population

← Generate statistical distribution of trait values
Determine selective force on different values of a trait →

Source of 3D printer files for teaching aids, models, and interactive STEM projects. Tell us what you need, and we will make it for a few dollars.

Save Time
• The online community is searchable by NGSS standard or topic
• The solutions most up-voted by your peers are shown first
• Rapidly find lesson plans, one-page outlines, or just the teaching aid

Hit the standards
• Standards that are addressed with the models are given explicitly
• One-page outline gives cross-cutting concepts and STEM practices
• Fit to standards are validated by your peers in the online community

Engage students
• 3D printing is the future—students in any class gain Tech. skills
• Immediate gratification as model appears before students
• Models form basis of interactive activities and demonstrations

Tell us what you need!
www.shapeofscience.com
jeff@shapeofscience.com

Please send ideas for models and/or demonstrations that you could use in your classroom to Jeff Holland at jeff@shapeofscience.com!
Conservation Tales
Books about wildlife conservation for you
By Tom J. McConnell
Art Director, Barbara Giorgio-Boc

Now Available!
See the eStore page for information about pricing and orders!
Click on a book to view more information.

ART EXHIBITION
January 31 – May 31, 2013
Dr. Tom J. McConnell
Department of Biology
Barbara Giorgio-Boccher

Community Activities
March 23, 2013
conservationtales.com

Diversity is an important element of the Conservation Tales.
Come meet all our characters as they learn about wildlife and conservation!

https://www.conservationtales.com/
American College of Cardiology’s Young Scholars Program

Contact
Gwen Goldfarb
Executive Director, Indiana Chapter of the ACC
317-456-2223  P  404-303-9950  M  404-643-6814
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Opportunity for Your Students
Spread the word to your students! Indiana high school students are invited to apply for the American College of Cardiology’s Young Scholars Program. The American College of Cardiology (ACC), is a medical professional organization composed of more than 52,000 cardiovascular professionals dedicated to transforming cardiovascular care and improving heart health. The American College of Cardiology’s Young Scholars Program will provide education about cardiovascular disease, careers in medicine and research to a select group of high school and college students.

Important Links
For your reference, please find the link for the corresponding fliers for the program here. Additionally, a link to the application is available here.

Details about the Program
The Young Scholars Program commences at the ACC’s national meeting in Chicago in March of 2020. Following the national meetings, our students will be paired with a faculty mentor. In addition to regularly scheduled mentor-student meetings, mentors will also provide opportunities for student shadowing, as well as opportunities to work in clinical or translational research or work on a quality improvement project. Student in our program will also be provided with a scientific curriculum of bi-weekly/monthly webinars. Webinars are a mixture of career based educational talks as well as scientific talks, providing an overview of the anatomy and pathology of cardiovascular disease and the basics of scientific research. Over the year there will be additional programs for our students arranged by our ACC State Chapters including invitations to attend some of our Chapter meetings, including the Indiana Chapter-ACC.

One of the ACC’s strategic aims is to attract individuals historically underrepresented in cardiology – specifically, African Americans, Hispanics, Native Americans and women, to consider careers in cardiology. As part of these efforts, The American College of Cardiology’s Young Scholar’s Program was created.

If you have questions, please email Stephan Lefebvre at slefebvre@acc.org.
Project Dragonfly

Contact
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http://EarthExpeditions.MiamiOH.edu

Now accepting applications for 2020
Miami University’s Project Dragonfly is accepting applications for 2020 Earth Expeditions
graduate courses that offer extraordinary experiences in 16 countries throughout the world.
http://EarthExpeditions.MiamiOH.edu

Earth Expeditions can build toward the Global Field Program (GFP), a master's degree that
combines summer field courses worldwide with web learning communities so that students can
complete the GFP master's part-time from anywhere in the United States or abroad.
http://GFP.MiamiOH.edu

Project Dragonfly also offers the Advanced Inquiry Program (AIP) master’s degree that
combines web instruction from Miami University with experiential learning and field study through
several AIP Master Institutions in the U.S. Applications for Miami's 2020 cohorts are being accepted
now with place-based experiences provided at zoos and botanical gardens in Chicago, Cincinnati,
Cleveland, Denver, New York, San Diego, Seattle, and St. Louis. New for 2020: residents of the
Jacksonville, Florida area can study and earn the AIP master’s through Jacksonville Zoo and

Graduate tuition for all programs is greatly reduced because of support from Miami University.

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IDOE and the Indiana Academy of Sciences

Contact
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IDOE is working with the Indiana Academy of Sciences on a cool collaborative project between math
and science teachers and university professors. Please see the write up below. Would you consider
sending this information to your respective organizations? I think it pairs SO nicely with the idea of a
joint conference next year. It seems we might even be able to have sessions that spin off of this at the
conference. Anything you can do to promote will be great, as we are planning the first meeting for the
end of October.

Indiana Academy of Science STEM Partnership
IDOE has entered into an exciting STEM partnership with the Indiana Academy of Science (IAS)
designed to connect high school science and math educators to IAS members. The goal of the
partnership is to build a collaborative network focused on shared research, shared resources, and
enhanced instructional practices leading to improved student achievement.

We want to identify 50 teachers, preferably a science and math teacher from the same high school,
and match them with an Indiana scientist. There will be four meetings per year (October 29, 2019,
December 3, 2019, February 4, 2020, and March 21, 2020) led by IAS members and facilitated by
IDOE representatives. Interested teachers can register here.
The Oak Ridge Institute for Science and Education (ORISE), a non-profit providing STEM-related curriculum, offers lesson plans for K-12 educators. These resources are provided at no cost. We would like to provide the Harnessed Atom Curriculum Classroom Kit to educators. This is a curriculum developed by the U.S. Department of Energy’s Office of Nuclear Energy.

The Harnessed Atom Curriculum Classroom includes a teacher edition, 30 student books, a poster, videos, interactive games, and two CDs including editable PowerPoint presentations for each lesson. It covers electric power production beginning with atomic structure and includes non-biased information on nuclear power production, as well as information on renewable energies. It is divided into 10 lessons that can be used as a whole or as individual pieces. You can find additional information on the curriculum at https://orise.orau.gov/stem/k-12/curriculum-for-the-classroom.html or www.energy.gov/ne/services/harnessed-atom.

We’d love to share this kit with educators in your organization. To receive The Harnessed Atom Curriculum Classroom Kit at no cost, teachers can go to our website at https://orausurvey.orau.org/n/TheHarnessedAtomKit.aspx to provide us with their shipping address. Please note that a phone number is required for the carrier (FedEx).

Do you have a newsletter or other communication method in which you’d consider sharing this opportunity? If you need additional information, please reach out to me.