

#### **Chair's Corner**

**By Debra Feakes** 



Even though many of the events and activities that we considered normal just a few short months ago have changed in a world that is currently being altered by the Coronavirus, some things remain true. We are pleased to share this edition of The Accelerator, the newsletter published quarterly by the Indiana Section of the American Chemical Society. I am grateful

for the continuity provided by the Executive Committee and the members of the Indiana Local Section.

The ACS National Meeting, scheduled for March 22 – 26, 2020 was cancelled, but many committees still met to continue their work. The national committee that both Partha Basu and I are a member of, the Committee on Chemists with Disabilities, met in a virtual format on March 21, 2020. The Central Regional Meeting (CERM) that was scheduled for May 27 – 29, 2020 has been postponed until November 2020. Locally, many events were cancelled including Passport to Hi-Tech, the Earth Day events at the Children's Museum and the Corteva Garden, and STEM Day at Victory Field...but not all events were canceled. The 32<sup>nd</sup> Annual Hoosier Science and Engineering Fair (March) and the Think Like a Molecule poster session (April) were both reconfigured into a virtual format and were a resounding success. Additionally, the Executive Committee began meeting in a virtual format at our April meeting and will continue to do so through the remainder of the pandemic. If you would like to join us at the meetings and share in our continued efforts, please let me know and I would be happy to send you the connection details (contact below).

On behalf of our members, we continue to serve the Indiana Local Section and the American Chemical Society. If you have any suggestions for meetings that we can host in a virtual format, please do not hesitate to reach out to me (feakesd@uindy.edu). We look forward to meeting you, whether in a virtual format or face to face when we are able, and to spreading our passion for chemistry to the community.





Check out our website http://www.acsindiana.org/acs

## 2020 Executive Committee

Chair	Debra Feakes
Past Chair	Tamiko Porter
Chair-Elect	Abdallah Diagne
Treasurer	Arvind Jaganathan
Secretary	Christine Skaggs
Councilors	Rob Sammelson, Robert Pribush, Beth Lorsbach, Brian Mathes
Alternate Councilors	Tom Xiao, Erin Dotlich, Mark Pobanz, Linda Osborn
At Large Member	Carmin Burrell, Larry Serynek and Lisa Spurlock-Brouwer

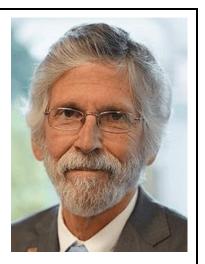
# 2020 Committee Chairs

2023 NMLT Strategic Planning	John Rohanna
Assistant Newsletter	Andrea Moberly
Awards Chair	Open position
Celebrate Science Indiana	Julie Austin
Chemistry + Humanities	Anne Wilson
Chemistry Olympiad	Jianping Huang
Education and Olympiad Chair	Robert Pribush – looking for successor in training
Election Chair	Matt Gardlik
Grants Chair	Ann Cutler
Think Like a Molecule Poster Session	Meghan McLeod
K-12 Outreach Chair	Erica Posthuma-Adams
Kids & Chemistry Chair	Brian Mathes
Membership Affairs Chair	Jordan Knotts
National Chemistry Week Co-Chair	Melissa Lee, Dan Klosowski
Newsletter – Editor and Design	Julie Austin
Project SEED Chair	Elmer Sanders, Josh Taylor
Public Relations Chair	Norman Sesi
Science Day at Ball State	Ryan Jeske
Social Media Co-Chair	Erica Posthuma-Adams and Larry Sernyk
Honorary Trustees	Anne Hunt, Dawn Brooks, Sibel Selcuk
Webmaster	Abraham Hentz
Women Chemists Chair	Carmin Burrell
Younger Chemists Committee Chair	Tejas Shaw

As Debra stated above, the world as we know it has been altered by Covid-19. That potentially leaves some of our colleagues wondering what will happen in their industry and with their career. The ACS has some wonderful services that allow us to keep up to date, not only with Covid-19, but also with our professional network. The following was sent out on April 21<sup>st</sup> from our 2020 ACS President:

Dear ACS Members,

During these unprecedented times, we are more grateful than ever to have such a strong community of members committed to the field of chemistry, and we want you to know that we are here to support you. That's why, effective today, April 21, 2020, and for the duration of the crisis, we are offering renewing members a one-year waiver on your unpaid national dues if you've suffered hardships due to the COVID-19 pandemic.



If you have become unemployed, furloughed, have your hours or wages reduced, or are facing illness or family care responsibilities, please contact Member Services at <u>service@acs.org</u> or via phone at 1-800-333-9511 (1-614-447-3776 for members outside the U.S. and Canada).

Thank you and please continue to practice good hygiene recommendations such as proper hand washing and physical distancing. Please stay safe!

Luis Echegoyen, Ph.D.

2020 ACS President

Copied with permission from ACS Matters

For ACS efforts and resources on Covid-19; please see the following link:

https://www.acs.org/content/acs/en/covid-19.html

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# **COVID-19 claims the life of beloved chemistry professor**

# **Dennis Peters of Indiana University dies from complications of COVID-19**

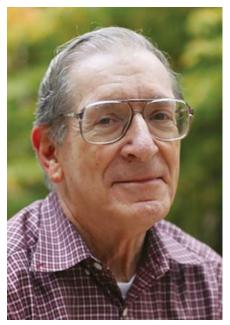
#### by <u>Linda Wang</u>

#### April 20, 2020 (reprinted with permission from C&EN News) Credit: Indiana University

Dennis Peters Dennis G. Peters, 82, a beloved chemistry professor at Indiana University, died on April 13 from complications related to COVID-19. He was just days away from celebrating his 83rd birthday. Peters contracted COVID-19 while he was hospitalized for an injury that occurred during spring break. Peters was Herman T. Briscoe Professor of Chemistry at Indiana University, and was teaching until his injury occurred.

William F. Carroll Jr., an adjunct professor at Indiana University and a past president of the American Chemical Society, says he was heartbroken to hear the news of Peters's passing. Peters was Carroll's research adviser in graduate school.

"What do you say about a man who taught intro chemistry for 57 years, essentially 113 consecutive semesters and more than 15,000



students," Carroll says. "What do you say about a guy who wrote or co-wrote 5 textbooks that were successful in selling well over 140,000 copies who then used most of the money from the sales of the books to fund things in the laboratory? If we needed a piece of equipment and we didn't have a grant for it, Dennis would reach into his own pocket."

Carroll says Peters instilled in him a sense of independence and perseverance. "Dennis Peters let me fail, and I needed that," Carroll says of his graduate school experience. "But he always encouraged me to try again."

Peters earned a BS in chemistry from California Institute of Technology in 1958 and a PhD in analytical chemistry from Harvard University in 1962. He joined the Indiana University faculty in 1962. He was an ACS member for 63 years.

"Dennis Peters was the most trusted and revered member of the Indiana University chemistry department and, without doubt, its most accomplished and highly regarded classroom lecturer," says Gary M. Hieftje, Distinguished Professor Emeritus at Indiana University. "He was also the glue that maintained cohesiveness among the faculty involved in analytical chemistry and was in large part responsible for the department to achieve international prominence in that field."

Peters was also known for his larger than life presence, despite his small stature. "He leapt up from chairs in the graduate chemistry advising office and wowed children and adults alike with flashes of colors and bright fires during Magic of Chemistry programs, clad in a colorful lab coat decorated with chemical illustrations, mathematical formulas and equations," wrote Joey Bowling in a recent article about Peters in the Indiana Daily Student newspaper.

Carroll says in addition to his passion for teaching, Peters was "a rabid Indiana University basketball fan. He had season tickets for 50 years." Peters is survived by his nephew, Ruben Portugues and niece, Iliana Portugues.

# Andrea Moberly: Making Masks for Indy's Medical Professionals and First Responders

Our local section's Accelerator assistant editor, Andrea Moberly, has had a productive time in quarantine. Working with Sew and Serve (<u>www.sewandserve.com</u>), and with some assistance from her familyr, she has been using her spare time to make an assortment of 100% cotton masks for central Indiana's medical professionals and first responders who are in need of basic protection supplies.



This grassroots movement has grown to 5,884 members who have collectively made over 78, 000 masks which have been distributed through 42 drop off locations to 521 facilities throughout central Indiana! They were recently recognized and thanked by Governor Holcomb for their efforts.



The Sew and Serve website gives tutorials on how to make standard, filter pocket, N95 covers, and 3-minute masks as well as scrub hats and surgical caps. Each is made with tightly woven 100% cotton and is washable.

If you would like to contribute to the efforts of Sew and Serve, please consider donating via the website.



Thank you, Andrea, for helping to protect our frontline workers in the fight against Covid-19!

#### **RESCHEDULED: Beyond Boundaries - Indiana Academies Symposium**

The IU Symposium, Beyond Boundaries, which was to take place in early April has been tentatively rescheduled for Friday and Saturday, April 9th-10<sup>th</sup>, 2021 at the Indiana Convention Center.

### **ACS Meetings Go Digital via SciMeetings**

With the cancellation of the 2020 Spring Meeting, the ACS introduced a new digital program for sharing the research that was to be presented. On April 27<sup>th</sup>, the ACS launched the official platform with a one-day event on both Twitter and Instagram where posters and presentations were shared and the scientific community engaged in discussions. For more information, follow the ACS: @AmerChemSociety and #ACSSciMeet on Twitter and Instagram



For other updates, the Central Regional Meeting (May 27, Columbus, OH) will be rescheduled while the Middle Atlantic Regional Meeting (June 12, New York, NY) and Northwest Regional Meeting (June 28, Bellingham, WA) have been cancelled.

The 24<sup>th</sup> Annual Green Chemistry and Engineering Conference will be offered online for free to members June 16-18.

For additional national and regional ACS meetings, please continue to check the posted schedule: https://www.acs.org/content/acs/en/meetings/events-calendar.html

ACS is also expanding their free webinar series <u>https://www.acs.org/content/acs/en/acs-webinars.html?sc=200421\_memcomm\_news\_acsmters\_webinars\_od</u>



#### You Be the Chemist Challenge

by Larry Sernyk

The 2020 Indianapolis Regional <u>You Be The Chemist Challenge</u> was held on Saturday, March 7 at Heritage Research Group – The Center in Intech Park on the north-west side of Indianapolis. This year, the You Be The Chemist Challenge had a totally new format with the students competing as teams of 4 students/team (students competed individually in past years) and 4 rounds of 10 short answer open ended questions/round (multiple choice questions in past years). This year, 10 teams of grade 5-8 students from 10 Indianapolis area schools/clubs participated:



School/Club	School/Club Coordinator
Carmel Chemistry Club	Krishna Madduri
Chapel Hill 7th and 8th Grade Center	Vicki Jarrett
Creekside Middle School	Cheryl Ruetz
Eman School	Tabby McLain
Fishback Creek Public Academy	Ashley DeVince
Lebanon Middle School	Michele Shultz
Lynhurst 7th and 8th Grade Center	Ashley Pepelea
New Palestine Junior High	Mary Jones
Sycamore School	David Schuth
Zionsville Middle School	Derek Grimm

All teams participated in all 4 rounds and cumulative scores over the 4 rounds were used to identify the top 3 teams. All participants received a Certificate of Excellence and a bag of giveaways from the <u>Chemical Educational Foundation</u> and the top three teams based on cumulative scores received placement medals, certificates and STEM prizes:

Placement	School/Club	Team Members
Champion	Creekside Middle School	Shravan Chengalva
		Ghajan Kalainesan
		Bhargava Mortha
		Siddhesh Songirkar
2 <sup>nd</sup> Place	Carmel Chemistry Club	Angelina Tan
		Ethan Wu
		Maanav Rajesh
		Rohan Bhosale
3 <sup>rd</sup> Place	Sycamore School	Akshay Guttikonda
		Alex Lu
		Hanna Warren
		Ria Tandra





To recognize our GREAT educators, there was also a drawing for Happy Atom sets for 3 educators who had teams participate in one of the three Indiana You Be The Chemist Regional Challenges (Indianapolis, Evansville, St Joseph County). The winners were:

School	Educator Name	<b>Regional Challenge</b>
Ashley DeVince	Fishback Creed Public Academy	Indianapolis
Vicki Jarrett	Chapel Hill 7th and 8th Grade Center	Indianapolis
John Mosier	Queen of Peace Catholic School	St Joseph County

Thanks so much to our sponsors: <u>Corteva Agriscience</u>, <u>Heritage Research Group</u> and <u>Superior</u>! And thanks to our GREAT volunteers who made the challenge a great success: Dylan Engels, Marcia Gillette, Kurt Graper, Kurt Hettinga, Mary Pat Knadler, Patricia Maldonado, Linda Osborn and Chris Stowers. To see more photos from the challenge, check out the following Dropbox: <u>https://www.dropbox.com/sh/6t9cjszsp3zvxy3/AAAwjZGjJwB92XexZ1gk8RFLa?dl=0</u>

#### **ACS Science Coaches**

Applications are open through September 1; if you're accepted, you will be notified by October 1. Find out more by registering for a free, informative webinar about the Science Coaches program, to be held on Wednesday, May 6, at 7:00 PM ET, or by visiting the Science Coaches webpage today!

#### **Hoosier Science and Engineering Fair Goes Virtual**

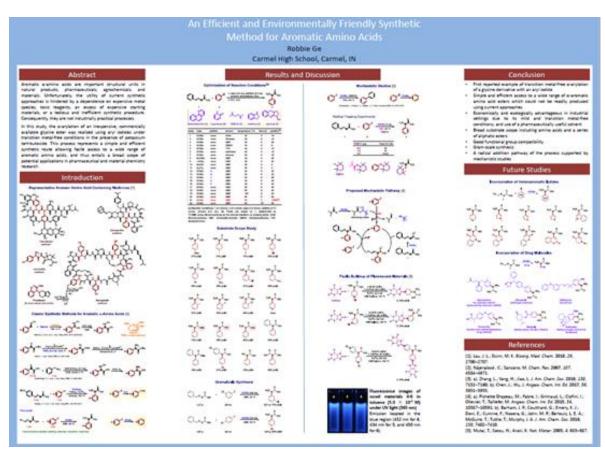
By Linda Osborn

On March 9<sup>th</sup>, the decision was made. The Hoosier Science and Engineering Fair (HSEF) would be held virtually instead of in person due to the COVID-19 pandemic. After much hard work by the organizers and many dedicated volunteers, the senior division fair (grades 9-12) was held on March 28, and the junior division fair (grades 4-8) was delayed to the following week on April 4<sup>th</sup>.

Virtual science fairs that allow students to transmit their submissions electronically or create a website to display their projects are not new and have sprung up around the world. It was new, however, to the

Science Education Foundation of Indiana! Fortunately, we had people like Andy Harris, IUPUI Computer & Information Science Lecturer, that spearheaded the virtual responsibilities, and others that rose to the occasion. All grade level and special awards chairs and co-chairs did an amazing job adjusting to this new format, as did all the students, who had to upload 5-7 paged PowerPoints, a pdf of their poster, all required forms, and a 5-minute video (optional).

Many of the judges found advantage to this format, which allowed more time to study each of the projects that they scored. Getting the presentations ahead along with videos made judging better. The Zoom cloud-based video conferencing platform made it possible to carry out interviews with some of the students and caucusing for the judges. Many judges volunteered for both weeks, to cover the senior and junior divisions. Thanks to all ACS members who volunteered for this activity! We appreciate you and your continued commitment to ensuring that STEM leadership is well-represented by the Indiana community! ACS awards were presented to three top senior division students for the "best use of chemistry". Special congratulations to Robbie Ge, who won 1<sup>st</sup> place for his research "An Efficient and Environmentally Friendly Synthetic Method for Aromatic Amino Acids". Second place went to Mufei Li, for research on "Using eggshells and turkey bones as catalysts to produce biodiesel through transesterification" and third place was awarded to Victoria Leeder, for her work on "Vitamin Enhanced Agglutination".



First Place ACS Award – "Best use of Chemistry" by Robbie Ge

Overall, awards totaling over \$14,000 in cash and prizes were given out over the two divisions. There were also numerous special awards given out by different organizations including ACS. All student participants of this year's HSEF received a medallion and certificate. Congratulations to all the students.

Several students expressed appreciation that we held a state science fair this year considering the circumstances. In person science fairs provide great opportunities for students to share their research with professionals in the field. They also provide the opportunity for students to network and form friendships with other students with similar interests in STEM and meet inspirational mentors. Unfortunately, this year the students did not have that opportunity. Next year, if we can physically meet, we hope to incorporate some of the advantages of the electronic submissions with a face-to-face experience on March 27, 2021. While Indiana regional science fair winners were able to compete in the HSEF virtually, the International Science and Engineering Fair (ISEF) planned for May in California was canceled because of the coronavirus pandemic. The top 4 students in each grade level of the senior division of HSEF were still registered for ISEF and will be recognized as ISEF finalists and receive an ISEF medal and certificate. The Science Education Foundation of Indiana is considering doing something special to recognize the winning students later this year.



**By Bob Pribush** 

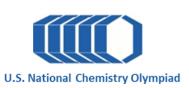
Due to the COVID-19 pandemic 2020 has been a challenging year for the Chemistry Olympiad. Chemistry Olympiad is an international program in which the United States has chosen to participate. Sites and dates are first determined by an international committee with the United States National Chemistry Olympiad (USNCO) Committee setting national test sites and dates accordingly. The Indiana Section USNCO Committee then establishes its testing sites and dates to conform to national dates. Tests are administered according to national USNCO rules.

Holding the health of students and USNCO volunteers in the highest priority, we asked teachers who had registered students for the local section exam for their opinion of how to proceed. Teachers were given three options. They unanimously opted to cancel the local section exam on March 28, selecting students to take the national exam, originally scheduled for April 25, by teacher nomination. The Indiana Section was allocated 11 student national exam slots. National rules mandate that no high school may have more than two students taking the national exam. The exception is any high school that had students in the top 20 and attending the USNCO training camp the previous year. The Indiana Section had three top 20 students in 2019, bring the total number of Indiana Section nation examinees

to 14.For different reasons two high schools were unable to narrow their list of recommendation to their maximum of two and asked the Indiana Section USNCO for help doing so. On April 10 it was announced that the International and National Chemistry Olympiad exams were to be given online. The deadline to give the local section exam was extended, but we had already cancelled ours. However, we volunteered to trial test giving our local section exam on April 11, administering the exam only to students from those two schools asking our help to decide their top two students in order to complete the teacher nomination process.

Below is the list of students who qualified to take the national USNCO on-line exam that we will still administer locally. Part I of the exam will be at 3:00 pm Eastern on Sunday, April 26, 2020. The top 150 students on Part I of the Exam will take Part II at 3:00 pm Eastern on Sunday, May 3, 2020.

Robbie Ge	Carmel High School
Jack Liu	Carmel High School
Yannik Singh*	Carmel High School
Iris Yan*	Carmel High School
Anthony Tam	Fishers High School
Nikhil Datar	Hamilton Southeastern High School
Shlok Kulkarni	Hamilton Southeastern High School
Jenny Cai*	Park Tutor School
Jeremy Tian	Park Tutor School
Vanessa Xiao	Park Tutor School
Salik Ahmad	Plainfield High
Vishnu lyer	University High
Jason Fu	Zionsville Community High School
James Lao	Zionsville Community High School



\*Students who attended the USNCO camp in 2019 and automatically qualify for the 2020 USNCO national exam

#### **Working During Quarantine**

When we decided to publish this issue, I suggested doing a questionnaire to find out what people are doing during quarantine: Are you working from home? What do you like about working from home? What are your biggest challenges/changes working from home? How has your workplace been changed during this time? What are your biggest challenges/changes? What are some bright spots in your day? What are you most grateful for right now?

Here are some of the messages from your local section executive committee and chairs:

**Erin Dotlich**: I am a 'hybrid worker' meaning I have scheduled times to work on-site and days I have to stay at home. Managers are doing 'rotations'.

I"ve enjoyed being home with my dogs and not spending 2 hours getting dressed, packing up and commuting to work."

What are your biggest challenges/changes working from home? The biggest challenges have been ergonomics of a home office and balancing the work at home and ELearning with my son.

At Lilly, we have to wear a mask if we are onsite and we have implemented multiple restrictions (eat at desk, cannot go outside of your 'space/area' unless required, meetings are virtual). We are working more in 'shifts' to reduce contact. In manufacturing since we are working so many hours trying to keep the process running and keeping people from coming in, they are giving us pretty much all the free food we want. We are all excited about our role in the COVID epidemic. The parking is fantastic!!!

Right now, the biggest challenge we face is ensuring we keep a reliable supply of medicine, with quality first and safety always, to the patients using the fewest amount of on-site personnel resources possible.

Some bright spots to keep us going are that my boss and I share daily cat pictures. We are using video conferencing at work and sharing our daily 'look' (leggings, sweatpants, etc.). And I'm not being asked to do so many weekend activities and finally have time to focus on being 'home'.

During these times I'm grateful for gainful employment, reliable co-workers, working for a company supporting the COVID pandemic in multiple ways. As I see so many people growing frustrated, panicking, dealing with this in their own way, I am grateful that my family and I are thriving by working on what we can control and not worrying about what we can't. We are doing everything we can to contribute to the greater good of our community and staying so busy we don't have time to worry or get frustrated!

**Ryan Jeske**: My wife and I are both working from home. It has its challenges, but we are used to doing it one day a week, so its not a huge change. Sometimes our internet doesn't appreciate 2 web conferences at the same time. The biggest challenge is trying to help students learn chemistry, it is very difficult and inefficient to do so over WebEx. Many of my students have gotten lost/distracted by the change in location and format of class and may fall too far behind to catch up before the end of the semester. I'm not sure how to reach them. Also, writing organic chemistry exams on Canvas/Internet is really difficult.

A bright spot is the playlist my wife and I made of us reading children's books with a science topic for our niece and nephew to view, and now we've shared them with the public on my you tube channel.

#### https://www.youtube.com/playlist?list=PL5a7lbe\_wLP\_G\_pjM9yTi7YRmOiQbqy\_R

I'm grateful we both still have a job, and can do them remotely, and that nobody I know has gotten sick, yet. I'm grateful to spend more time with my dog, and less time in the car commuting to Muncie.

**Brian Mathes**: I am indeed working from home, but I consolidate all my lab work into one day a week. I have been going to the lab in the evenings and staying until the late night to get my work done to help reduce contact. It has been kind of interesting and kind of scary to hear all the interesting noises a lab makes when you are the only occupant!

I am lucky to have a great job that is a balance of data interpretation and wet chemistry. I have enjoyed working from home as it does give me my daily commute time back to me to stay with family. The greatest part is seeing my 5-year old son more...the worst part is when I have to say no to Lego or bike riding time to get my job done. It is a good problem to have.

The bright spots in my day are still being able to influence my projects in a positive direction, even from my office (and when I say office, it is really the converted "Sweetpea Lounge" which is a bar area my wife and I converted from an unused office in the house last year, who knew!). Having lunch with my family is also a favorite. We are most grateful for our health and financial well-being. Lots of folks around the world will be hurting from this virus and we are aware how lucky we are.

Andrea Moberly: I am working from home. I like the flexibility in my schedule. If my kids need my help for a few minutes, I can pause what I'm doing and attend to them. I also like being able to step out for a walk around the block or a quick trip to the park to take advantage of the nice weather! But, It is hard for my children to understand that both mom and dad are busy with other things!

The beautiful weather and nature coming to life in Spring has been wonderful to be able to watch every day!

I'm grateful for a flexible job and the health of myself and my family!

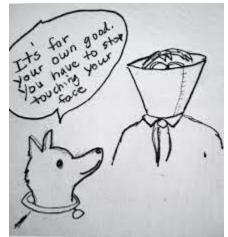
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#### Tidbits of Humor (authors unknown unless stated)

It was a quiet Monday morning in September 2053, when John awoke with the need to go to the bathroom. To John, this wasn't just and ordinary day! Today was the day he would open the last package of toilet paper his parents bought in the year 2020.

My husband purchased a world map...gave me a dart and said, "Throw this and wherever it lands, I'm taking you for a holiday when this pandemic is over." Turns out, we're spending 2 weeks behind the refrigerator.





Just broke the news to the suitcase that our holiday has been cancelled, she's devastated 😥



Coronavirus has turned us all into dogs. We roam the house all day looking for food. We're told "no' if we get too close to strangers. And we get really excited about card rides.

### Get set for the return of parents as hairdressers...



NEIL DIAMOND: hands CDC: yes, wash them for at least 20 seconds NEIL DIAMOND: touching hands CDC: no, please don't touch hands NEIL DIAMOND: reaching out CDC: avoiding that too NEIL DIAMOND: touching me CDC: oh hell NEIL DIAMOND: TOUCHING YOU



SO YOU'RE STAYING INSIDE, PRACTICING SOCIAL DISTANCING AND CLEANING YOURSELF?



CONGRATULATIONS MY FRIEND, YOU'VE BECOME A HOUSE CAT.

Newsletter Editor and Design Julie Holland Austin <u>ACSaccelerator@gmail.com</u>

Assistant Editor Andrea Moberly andrea.moberly@hrglab.com

The Indiana Section of the ACS publishes the Accelerator at least three times a year. The Section is not responsible for statements or opinions printed in this publication. The Editor is responsible for all unsigned and staff articles.

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