

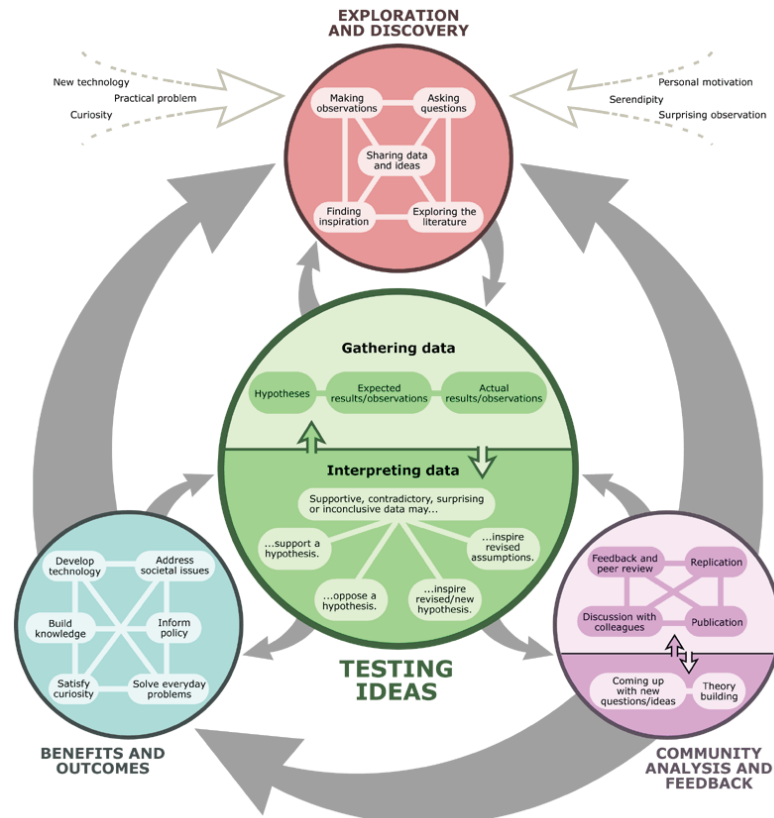
WSSF Quarter Note

The Science Process!

The science process is anything but linear. What path are you following?

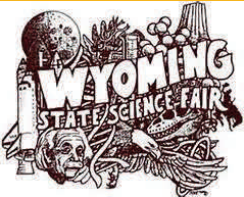
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On Facebook?

“Friend” us on Facebook at Wyoming Science—Fair



Have questions?

Visit our website at <http://www.uwyo.edu/sciencefair/> for more detailed information

The process for doing science is often presented as an over simplified series of steps known as the scientific method. In reality, however, the process is less well defined. The exact path one takes in doing science often circles back on itself as ideas are developed and used to generate, test and develop more ideas. Regardless of the path you actually take, the process always begins with exploration and discovery and a bit of inspiration derived from personal motivation, curiosity, or recognition of a problem to be solved. It centers around the testing of ideas using data (green circle), and results in benefits and outcomes or ideas for more exploration and discovery. Learn more about the science process by visiting http://undsci.berkeley.edu/article/howscienceworks_02.

"I'm not some whiz kid that was born with a beaker in my hand. I found support from people who helped me advance my research ." Brittany Wenger— Intel ISEF Alumni from FL

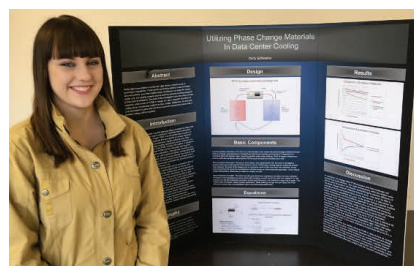
Incredible award opportunity for *12th grade students* at the Wyoming State Science Fair!

Win automatic entry into the Wyoming Research Scholars Program and continue your science research career as a University of Wyoming Undergraduate!

As a Wyoming Research Scholar you can:

- * Be paired with a UW faculty mentor to participate in cutting-edge research
- * Become an expert in science writing, presentations, and outreach
- * Receive a stipend for student salary (at \$10/hour), research support, and travel

For more information about WRSP visit <http://www.uwyo.edu/wrsp/index.html>



Darbi Schlenker, winner of the 2016 WRSP Award at the Wyoming State Science Fair, is now a Chemistry major at the University of Wyoming!

To be eligible:

- * *Conduct exceptional research in a core science (biology, botany, ecology, chemistry, mathematics, or physics/astronomy).*
- * *Compete at the 2017 Wyoming State Science Fair (March 5-7, 2017).*
- * *Prepare a short essay about what impact the award would have on your educational and career goals. Send essays to wystatefair@gmail.com.*
- * *Plan to attend the University of Wyoming in the 2017 Fall semester.*

If you're not part of the solution, you're part of the precipitate. ~Henry J. Tillman

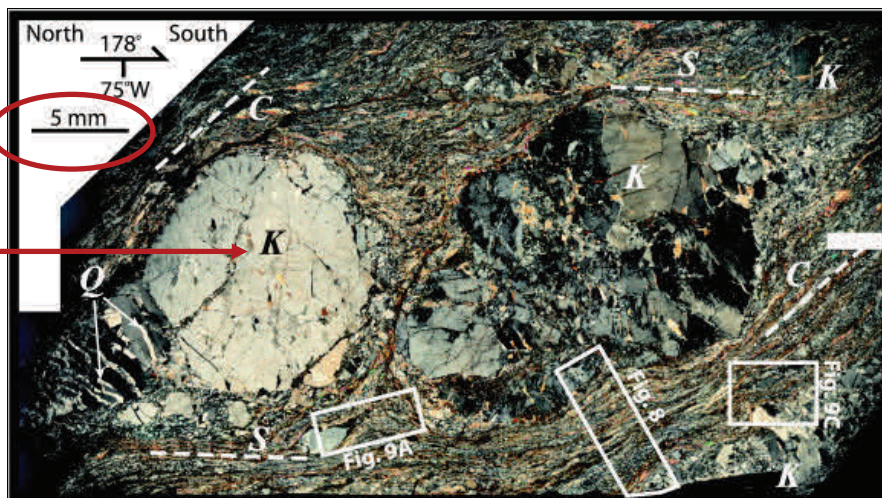
Making Stellar Poster Figures— Tips for Photographs

Photographs are common on science fair posters. Check out this diagram for a few tips to make your photographs “worth a thousand words”.

Always include a scale!

Image elements are neatly labeled. Label explanations are included in the figure captions.

Images have captions to provide short explanations.



Always cite figures that you did not create. If you made a figure(s), always include a statement on your board that says “all other figures created by student researcher”.

Fig. 5. Photomicrograph of deformed porphyritic granite. Relic phenocrysts of K-feldspar (K), now porphyroclasts, are intensely fractured and where locally extended, fractures are filled with quartz (Q), especially in the lower northern margin. These are engulfed in a mylonitic matrix in which S–C fabrics (S and C dashed lines, respectively) are well developed. Thin section strikes 178, and dips toward the viewer at 75°. Boxes indicate the location of SEM images in succeeding figures. Figure from Wintsch & Yeh, 2013.

Wanted: Volunteers for 2017 Wyoming State Science Fair

Do you have an interest in Science, Math, or Engineering? Did you participate in your local Science Fair as a child? If you answered yes to either question, then this is the job for YOU!

The Wyoming State Science Fair is looking for volunteers to help with general logistics during the event. The Science Fair is here, on the University of Wyoming campus, and is March 5th-7th, 2017. We will need help with a variety of tasks and making sure the event runs smoothly. We would greatly appreciate your support! Please contact **Emma Griffin** (egriffi8@uwyo.edu) for more information. Come support our future scientists!



Need Supplies? We have free gently used notebooks and poster boards. Available while they last. E-mail wystatefair@gmail.com to request yours today.

Looking for some help or advice?

- * If you have a great idea and a research plan but need extra help, give us a call. We'll try to pair you with a UW mentor.

From the Coordinator's Desk

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Logo Contest—Thanks to those who submitted!

Help select the winners!

Winning designs will be featured on the Wyoming State Science Fair 2017 T-shirt, and for buttons worn by contestants at WSSSF and traded at the International Science & Engineering Fair; Winners will be recognized at the WSSSF 2017.

Vote for your favorite 2 designs by 'liking' them on the Wyoming Science-Fair Facebook album (<https://www.facebook.com/media/set/?set=a.1797887633759989.1073741838.100006163095186&type=1&l=ac1f499985>).

We've tried several different websites over the years, but have finally settled on using the one hosted by the University of Wyoming — we are part of the University of Wyoming after all. This website is already ADA compliant and is viewable on all types of devices. If you visit the website, you can already find past newsletters, the detailed project category listing, paperwork guidelines, regional fair information, past award winners (including pictures), and paperwork & SRC/IRB tips. Emma, our graduate student, is hard at work creating some training presentations too — stay tuned for those videos or interactive PowerPoints! Visit the website at uwyo.edu/sciencefair. Please let us know what other information you would also like to see on the website.

It has been a busy Fall semester with school workshops and conference booths/presentations. So far, I've seen students at Lander Middle School, Pioneer Park Elementary, and Powell Middle School. I've also seen many teachers at the Roadmap to STEM Conference, Wyoming Math & Science Teachers Conference, and the American Indiana Science & Engineering Society National Conference.

Featured Scientist – Calvin Strom

This month we are featuring a Scientist from the University of Wyoming! Calvin Strom is the Assistant Director of the Wyoming Reclamation & Restoration Center and a Research Scientist. That means that Mr. Strom works with local Oil and Gas Companies to determine the best management practices to restore soil properties, native vegetation and wildlife habitat in the area, after extracting natural resources. He conducts research on various projects (i.e. Sagebrush reestablishment) and writes journal articles about his work to be shared with the community; Just like you! When you conduct research for your Science Fair Project, you are using the same basic methods and procedures that a professional Scientist, like Mr. Strom does!



Calvin Strom - Assistant Director, Wyoming Reclamation & Restoration Center; Research Scientist College of Agriculture and Natural Resources

Wyoming State Science Fair paperwork

deadlines are earlier in 2017 than in 2016.

- * (5 business days after regional fair and before Feb. 7, 2017) — ISEF Paperwork and WSSSF Registration Due
- * Feb. 20, 2017 — Notification of Student Acceptance to Compete in the Wyoming State Science Fair
- * March 5-7, 2017 — Wyoming State Science Fair