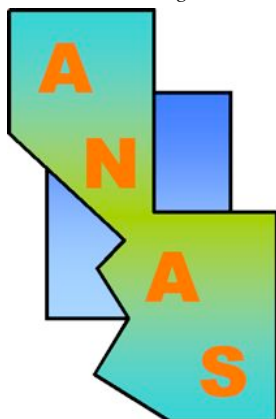


Science News



Page Banner: Chairs adorned with Frida Kahlo's self-portraits at Rancho de la Osa guest ranch in Sasabe, AZ. Photo at left: Permanent Secretary Pedro Chavez and President Pamela Marshall at the 58th Annual Meeting.



President's Corner

Pamela Marshall, ANAS President

This newsletter marks another excellent year for the Academy. About a dozen people became new members of the academy at the annual meeting. Of special note are the last two volumes of the journal, which contain a very important historical document, the field notes of Herbert Brown. In addition to being an excellent field biologist, Mr. Brown also was the first curator of the Arizona State Museum at the University of Arizona. I encourage you to read the

journal and share it with your colleagues. Also please consider submitting a paper there.

Archives of the Hydrology and Annual Meeting Proceedings are now online at the University of Arizona and are fully searchable. I encourage you to read those as well.

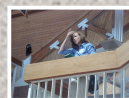
Please be aware that we have Grants-in-Aid for students, an outstanding teaching award, as well as a scholarship opportunity. I look forward to seeing everyone in April 2015 at the meeting in the Valley of the Sun!—Pamela Marshall

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Editor, T. G. Manno, Ph.D., tmanno@cfsd16.org



Students solve a problem during the Chem Lab event of the Arizona Science Olympiad. In addition to being the tournament sponsor, ANAS contributes \$1100 to club accounts of participating schools. Next year's state tournament will be March 7, 2015 at Glendale Community College.



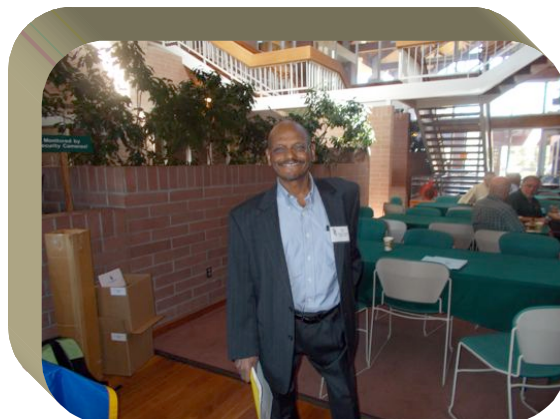
Treasurer Karen Conzelman and President Pamela Marshall review the number of 58th Meeting attendees



Past Presidents Aregai Tecle and Shafiu Jibrin take a break as the meeting runs smoothly



ANAS board meeting on April 11, 2014



Current Northern Arizona Director Aregai Tecle checks arrangements for the Business Meeting

ARIZONA-NEVADA MUSEUMS SPECIAL EXHIBITS

Las Vegas Natural History Museum

Las Vegas, NV

<http://www.lvnhm.org/>

“Dinosaur Mummy CSI: Cretaceous Science Investigation”

“Engelstad Family Prehistoric Life Gallery”

Arizona Museum of Natural History

Mesa, AZ

<http://www.azmnh.org/Home.aspx>

“What Is It?”

“Cretaceous Seas”

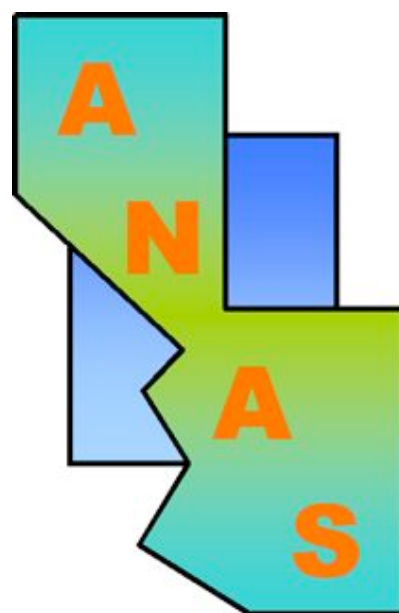
“Rulers of the Prehistoric Skies”

Arizona State Museum

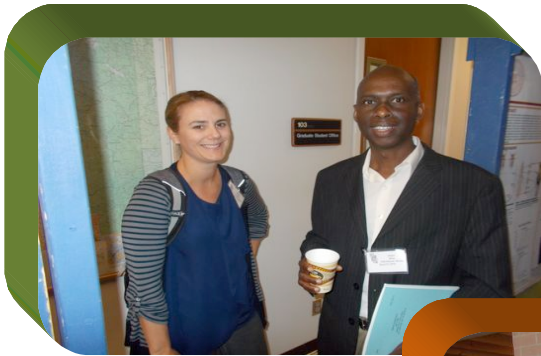
Tucson, AZ

<http://www.statemuseum.arizona.edu/>

“From Above: Images of a Storied Land, Curated by Archaeology SW”



April 12, 2014: Arizona-Nevada Academy of Science 58th Annual Meeting



Left: Past President Shafiu Jibrin with ASU West professor Jennifer Broatch.
Center: Journal Editor Bob McCord talks with colleagues before the poster session.

Right: Peter Jurutka and his student Christopher Dussik, winner of a best student poster award.

The 58th Annual Meeting of the Arizona-Nevada Academy of Science was held in Flagstaff, AZ on April 12th. Attendees contributed presentations and posters representing a variety of scientific disciplines, including hydrology, geology, biology, and mathematics.

Highlights

Best Student Posters:

Christopher M. Dussik et al. (Arizona State University), *Identification of differentially expressed genes as biomarkers for diagnosis of irritable bowel syndrome*

Jesus Contreras Rodriguez et al. (Arizona State University), *Elucidation of changes in metabolism and gene expression in response to localized tissue damage in D. melanogaster*

Best Student Papers:

Ian Dai and Aregai Tecle (Northern Arizona University), *Hydrological modeling efforts of Cheylon Canyon, Arizona*

Jason Klotz (Northern Arizona University), *Effects of climate change on land use and land cover on the San Pedro River, Arizona*

Ellis Scholarship Award Winner:

Taylor Schwartz (plans to attend University of Nevada at Reno to study civil or biomedical engineering)



58th ANNUAL MEETING HIGHLIGHTS (CONT'D)



Co-authors of a best student poster (from L to R) Ty Leek, Matthew Birch, and Jesus Contreras Rodriguez



Aregai Tecle discusses business at the board meeting on April 11



Pamela Marshall conducts the annual ANAS business meeting from "on high"



ANAS members enjoy a barbeque lunch at the 58th Annual Meeting

New President-Elect

Theo Manno was voted President-Elect during the 58th Annual Meeting. Manno's interests are in the behavioral ecology of ground squirrels, and his book on prairie dog behavior is forthcoming from Univ. of Utah Press in fall 2014. Shown (r) with Proceedings Editor Florence Slater (l), Manno discusses the Keim lecture (page 5) as it pertains to plague in Northern Arizona's prairie dogs.



Guest Speaker at the 58th Annual Meeting

The luncheon speaker at the 58th Annual Meeting was Dr. Paul Keim, Center Director at Northern Arizona University and a Division Director at The Translational Genomics Research Institute (TGen). Keim's talk was entitled "Plague and its Expansion around the Globe."



Dr. Keim holds the Cowden Endowed Chair in Microbiology and is a Regents Professor of Biological Sciences at NAU. He is a guest scientist at Los Alamos National Laboratory and a Board Member at PathoGene, LLC. He has published over 300 scientific and policy papers and given over 250 invited speeches while raising over \$60 million in research grants during 25 years at NAU.

Dr. Keim has served on numerous federal advisory committees on biodefense, genomics, and dual use research. He has testified before Congress three times, and was the 2012 Arizona Bio Industry Association Biomedical Research of the Year. Keim is one of the founders of microbial forensics and his work was instrumental to the federal investigation and identification of the anthrax-letter attacks perpetrator. He continues to serve as a scientific advisor for the FBI.

NEXT ANAS MEETING!!

The 59th Annual Meeting of ANAS will take place on April 11, 2015.

Festivities will take place at a location TBA in the Phoenix area.

This is a great opportunity for members and their students to network and present research. We hope you'll make every effort to attend!

Posting: ANAS Officers Needed

- 1. Webmaster**
- 2. Southern Arizona Director**

CHECK IT OUT!

ANAS is now on Facebook



Check it out on the ANAS webpage, or at:
<http://www.facebook.com/pages/Arizona-Nevada-Academy-of-Science/163999350323773>

Meeting information, more photos from the Annual Meeting, ASU's new top 10 species, and more!!

Proceedings of the 2014 Annual Meeting are online
http://arizona.openrepository.com/arizona/bitstream/10150/316166/1/proceedings_2014.pdf

RECENT CHANGES: ANAS BOARD MEMBERS

President-Elect—Theodore G. Manno
 Membership Secretary—Angela Schwendiman
 Recording Secretary—Robert Bowker
 Central Arizona Director—Jennifer F. Hackney
 Director at Large—Brian Wainscott

The ANAS membership dues support science education in Arizona and Nevada through awards, grants, and scholarships for outstanding K-12 science teachers, and for high school, undergraduate, and graduate students.

Membership Dues:

Individual: \$35.00	Fellows: \$35.00
Family: \$45.00	Student: \$15.00
Sustaining: \$150.00	Patron: \$100.00
Life: \$700.00	

WHY NOT BECOME A MEMBER OF ANAS?

ANAS members receive: **JANAS**, the Journal of the Arizona-Nevada Academy of Science; reduced page charges for publishing manuscripts in JANAS; and discounted registration fees for the annual meetings.

Please see our membership brochure at <https://aznvas.org/2joinanas.html> for more information.



"If we knew what it was we were doing, it would not be called research, would it?"
 —Albert Einstein

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Arizona-Nevada Academy of Science
<https://www.aznvas.org/>

Invitation for submissions to ANAS newsletter

ANAS members are encouraged to submit materials for publication in the newsletter, including but not limited to the following: articles for a 'Where are they now?' column, ANAS announcements, digital photographs, "shout-outs," and special event notifications.

Note from the editor

Please feel free to send comments or questions about the ANAS newsletter!—Theo Manno (tmanno@cfsd16.org)

Thanks to Pedro Chavez, Karen Conzelman, Theo Manno, Pamela Marshall, and Florence Slater for the pictures and other materials appearing in this issue.