




President's Message



Greetings for February! It's a month of celebrations, many with scientific connections.

Happy Ground Hog Day on February 2nd! As the earth's orbit takes us between solstice & equinox, we carry on ancient European traditions of weather divination and observation of animals leaving their dens. Will the rodent *Marmota monax* notice his shadow is getting shorter?

Happy Lunar New Year! The new moon on the 8th ushers in the Chinese year of the monkey as the year of the sheep ends.

Happy Valentine's Day! 
The 14th day is not of scientific relevance, but chocolate and pheromones are research topics.

Happy Leap Day! It's again time to add a 29th day to February in the Gregorian calendar. We're just trying to keep the equinox date close to March 21.

Enjoy!

Jutta Siefert Dudley
President RAS

Students Receive Research Grants from RAS

The Undergraduate Student Grants Committee (Helen Haller, Karen Wolf, Jutta Dudley, Bill Hallahan) has completed its review of the 2015-2016 Student Research Grant proposals. This year, we received nine proposals and awarded partial or full funding to seven projects.

1. Brandyn Balch from SUNY Geneseo was awarded \$250 for his proposal, "Potential impacts of hemlock woolly adelgid induced tree mortality on hemlock ravine lotic ecosystems."
2. Kimberly Anderson, from SUNY Oswego was awarded \$300 for proposal, "Correlating MHC IIB diversity to susceptibility to Bd and ranavirus in Green Frogs."
3. Rebecca Gerling from SUNY Brockport was awarded \$400 for her proposal, "The influence of the cellular environment on the stability and structure of Z-form RNA."
4. Calvin Carrington from RIT received an award of \$50 for the best proposal and \$500 in funding for his proposal, "Effects of native and invasive fruits on plasma metabolites in captive migratory songbirds."
5. Colette Piasecki-Masters and Danielle Bucior from Ithaca College received an award of \$250 for their proposal, "Plant uptake of heavy metals from bombing sites on the island of Vieques, Puerto Rico."
6. Keri Geiser from Hobart & William Smith Colleges received an award of \$500 for her proposal, "Reconstructing past primary productivity of four New York Finger Lakes using multiple proxies."
7. Kathleen Lesko from Niagara University received an award of \$300 for her proposal, "Measuring the degradation of cadmium sulfide yellow and chrome yellow pigments after varnish application."

William Hallahan, Ph.D.
Chair, Student Grants Committee

A Snowless Winterfest

Gray sky, near freezing temperatures, and no snow greeted the participants at the Monroe County sponsored Winterfest in mid-January. Despite the lack of snow, there were plenty of things for visitors to do and see at Mendon Ponds Park event. Our Astronomy, Fossil and Mineral Section volunteers played a part in the program and visitors stopping in the Cobblestone House got to interact with them and learn from our displays.

Joel Schmid, Vicki Rotolo, and Don Chamberlain spent the day interacting with the visitors to the astronomy exhibits. Mike Maven and Dee Sharpless stopped by to help out as well. We showed slides and provided pictures, charts, and other information that visitors could take home. Overcast skies made solar observing impossible so instead, kids observed “Pluto” out the back window using a small refractor and were invited to peek down the tube of a reflector.



Vicki Rotolo shares her science enthusiasm with a young family.



Don Chamberlain shows a youngster that Pluto is in the back yard.



Why am I upside down?

Fossils and minerals from New York dominated the displays shown by John Handley, Dan Krisher, Paul Dudley, and Stephen Busschaert. George Wonder and Jutta Dudley assisted them. Families enjoyed learning about life from the Devonian seas and what rocks they might find in a nearby quarry or on trips to the Adirondacks. Take away fossils were a hit with the youngsters as was watching how mica peels off in thin paper like sheets.



A young enthusiast shyly asks Dan Krisher "Can I have that fossil?"



Paul Dudley shows a fascinated youngster that mica really does peel off in paper-thin sheets.

Jutta Dudley

Events for February, 2016

For updates to events, check the Academy website, <http://www.rasny.org>, and Section websites.

Tues 2 FOSSIL SECTION MEETING

7:30 p.m. Brighton Town Hall. Downstairs meeting room. The meeting will feature a talk by section member Mike Grenier. Mike spent four days at the Society of Vertebrate Paleontology in Dallas in October attending over eighty presentations on cutting-edge and largely not-yet-published advances in bird, pterosaur, and dinosaur research. He will present an interesting selection of these, including the development of flight in Mesozoic birds and that of swimming in penguins, new species of dinosaurs and birds recently found, climate and ecology evidence, Tyrannosaur evolution, swimming Spinosours, the color of dinosaur eggs, controversies that led to shouting matches, and much more. For more information contact Dan Krisher at 293-9033.

Fri 5 ASTRONOMY SECTION MEETING

7:30 p.m.–10:00 p.m RIT, Gosnell Hall, Room A300. ASRAS General Members Meeting. Professor Brian Koberlein (RIT) will speak about Observatories of Chile. For more information, contact Joel Schmid at (585) 533-2097.

Tues 16 MINERAL SECTION MEETING

7:00 – 9:30 p.m. Brighton Town Hall, downstairs community meeting room. Paul Cassarino, FGA co-owner and lead gemologist at The Gem Lab will discuss lead-glass filled rubies and laboratory-grown diamonds. Lead glass filling can make otherwise unusable corundum rough attractive and salable. However, the durability of the treatment leaves a lot to be desired. Laboratory-grown diamonds have been used for industrial purposes for decades, but their yellow color created little demand in the jewelry market. In recent years, colorless and near colorless laboratory-grown diamonds are meeting the demand of "millennials" looking not so much for a lower price, but for a diamond whose source is known with absolute certainty and whose production has a much smaller effect on the world's environment. Visitors are welcome. For more information contact Stephen Buschaert at mineralvp@rasny.org or 351-7633.

Wed 17 LIFE SCIENCES HERBARIUM WORKSHOP

1:00– 4:00 p.m.: Life Sciences section will hold a workshop at the RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). We will be working with interesting plants from the

Rochester region and around the world! No experience is needed! Since our Herbarium curator, Elizabeth Pixley, will be out of town this month. Please contact Larry Hirsch at 429-6199 or lph710@yahoo.com, if you are planning to come. At RMSC go to the front desk and ask a staff person to call ext. 368, phone in the Herbarium.

Wed 17 RAS BOARD MEETING

7:00 p.m. Brighton Town Hall, Stage Conference Room.

ONGOING EVENT

ASRAS will operate the telescope, or one on the sidewalk, at Strasenburgh Planetarium on mostly clear Saturday nights. Contact Jim Seidewand at (585) 703-9876.



Let it Snow!

Rochester Academy of Science
P.O. Box 92642
Rochester, NY 14692-0642
 Return Service Requested

NON-PROFIT ORG.
 U.S. POSTAGE
PAID
 ROCHESTER, N.Y.
 PERMIT NO. 220

«RASCat» «Sections» «YearPaid»

«FirstName» «LastName»

«CO»

«Street»

«City», «State» «Zip»-«Zip4»

February, 2016 - Vol. 70, #2, Page 4

CHANGING ADDRESS?

Temporary or Permanent?

Notify whallah3@naz.edu.

A returned newsletter costs us 59¢

Please help stop this waste.

ABOUT THE ACADEMY - The Rochester Academy Of Science, Inc. is an organization that has been promoting interest in the natural sciences since 1881, with special focus on the western New York state region. Membership is open to anyone with an interest in science. Dues are minimal for the Academy and are listed in the membership application. Each Section also sets dues to cover Section-related publications and mailings.

For applications and/or more information, contact Jutta Dudley, 140 Railroad Mills Road, Pittsford, NY 14534; by telephone (585) 385-2368; or by e-mail <pres@rasny.org>.

The **Academy** Internet website is <http://www.rasny.org>

Or see us on Facebook at

<https://www.facebook.com/RochesterAcademyOfScience>

This “**BULLETIN**” is produced monthly, *except July and September*, by the **Astronomy Section, Rochester Academy of Science**. Submissions are due by the 10th of the month, and may be emailed to editor@rasny.org

ROCHESTER ACADEMY OF SCIENCE OFFICERS

Phone

| | | (585) home | work |
|--------------------|------------------------|-----------------|----------|
| Jutta Dudley | President | 385-2368 | |
| Jeff Gutterman | Vice President | 392-8299 | 789-1364 |
| Helen D. Haller | Secretary | 387-9570 | |
| William Hallahan | Treasurer | 624-1628 | 389-2552 |
| Open | Membership | | |
| Stan Spector | Past President | 461-1272 | |
| Karen Wolf | Anthropology | 670-9709 | 273-4500 |
| Joel Schmid | Astronomy | (cell) 533-2097 | |
| Lawrence Hirsch | Life Sciences | 429-6199 | |
| Dan Krisher | Fossil | 293-9033 | |
| Stephen Busschaert | Mineral | 351-7633 | |
| Elizabeth Pixley | Herbarium | 334-0977 | |
| Jutta Dudley | Publications | 385-2368 | |
| Bob Crumrine | <i>Bulletin</i> Editor | (cell) 813-4157 | |
| William Hallahan | Student Grants | 624-1628 | 389-2552 |
| Paul Dudley | Website Coordinator | 385-2368 | |
| Reginald Smith | Director '16 | 244-4979 | |
| Michael Grenier | Director '16 | 671-8738 | |
| Frank Bov | Director '15 | 385-1518 | 422-9910 |
| Douglas Kostyk | Director '17 | 943-3419 | |
| Lee Tutt | Director '17 | 872-3033 | |
| Chris Collins | Director '16 | | 385-8496 |

The Academy Postal address is P.O. Box 92642, Rochester, NY 14692