#### Rochester Academy of Science™

# BULLETIN

"An organization of people interested in the Natural Sciences"



June 2025; Vol. 79, #5

#### President's Message

#### **Annual Meeting**

Our Annual Meeting was held on April 22 and I thank all of you who gave a vote of confidence in your Board of Directors and Academy Officers. With 270 members as of March 31st, we needed a quorum of 27. We had 37 ballots cast and the slate of nominees was elected. Your Board of Directors and the Officers of the Academy—as usual—with their terms are displayed on the last page of this Bulletin. Your Board members are hard-working and effective, so I am very pleased that you agree. I look forward to an exciting 2025 in continuing to deliver the important programs of the Academy.

The 26th Annual ADK Outdoor Expo is featured on our calendar on page 2 for Saturday, June 14 in Mendon Ponds Park, Pittsford. Several of our sections will be set up with displays and help is needed to talk with interested adults and kids and with potential members on behalf of the Rochester Academy of Science. You can both assist at our tables and see everything there is at the Expo. Contact your section leader if you can help. Our Astronomy, Fossil, and Mineral Sections will show and give away educational materials and specimens. You can help even if not

Presented by the Genesee Valley Chapter of the Adirondack Mountain Club and Monroe County Parks, the Outdoor Expo is a celebration of the great outdoors. They will have many workshops and demos.

a member of these sections. You'll

sit in the shade.

Besides the RAS, there will be at least 54 other organizations with displays. Try out a kayak or canoe on the 100-Acre Pond, go for a short hike on the park's beautiful trails, visit the Mendon Ponds Park Nature Center, explore camping, backpacking, bicycling and bike repair, crafts, the Petting zoo, live music by the Golden Link Folk Singing Society, and many others. Food and ice cream available from Dave's Sidewalk Café and Molly V's. For the full schedule of events, see:

https://adk-gvc.org/play/outdoorexpo-before/



Follow the path to the pond & you will find us under some pop-ups.

This event is free, open to the public, and fun for the entire family. *Get Outside... It's for Everyone!* 

### 2025 Scientific Paper Session Announced

We sent the First Call for Abstracts to department chairs throughout the Upstate NY region and to all members for our annual Fall Paper Session. It will be held at SUNY Geneseo on Saturday, November 1, 2025. RAS members are encouraged to attend and will have benefits.

The purpose of this event is to provide an opportunity for local college and university science students and faculty to gather and share their research interests and research results. This will be our **51st Annual Session**, which is quite a track record. For more information on the RAS paper session and to register go to rasny.org/paper-session.

We need members as volunteers to help organize the Paper Session and to help run it on November 1st.

Classified Advertisement

**▼** Volunteer Opportunity **▼** 

### RAS Scientific Paper Session Coordinators

Rochester Academy of Science, Rochester, NY.

Part-time volunteer **Registrar** to receive registration emails from attendees from mid-September through October and transfer data to registration spread sheet. Expected number of registrants is 300. Registrar sends spreadsheet to committee weekly. This job can be shared.

Part-time volunteer **Abstract Publisher** to receive abstracts from Registrar and assemble them into a book of abstracts to be published digitally. Format will be provided. Send note of interest to mgrenier@frontiernet.net.



Michael Grenier, RAS President (at St. George, Utah)

### Events for June 2025

# June 3 Tues: Joint Fossil and Mineral Section Picnic and Meeting

6:00 p.m. Farash Center, 8355 County Road 14, Ionia, NY, Wolk Education Building. Attendees are asked to bring a dish to pass as well as a beverage. After the picnic, David Bishop will present his Astronomy Year in Review lecture. If attending, contact Dan Krisher at (585) 698.3147 or <a href="mailto:DLKFossil@gmail.com">DLKFossil@gmail.com</a> no later than Monday, June 2.

# June 4 Wed: ASRAS Board of Directors Meeting

7:00 pm - 9:00 pm. Members welcome to attend. Contact Tony Golumbeck for details.

# June 6 Fri: Astronomy Monthly Meeting

7:30 pm - 9:30 pm In-person at the Farash Center. Come early to socialize and set up telescopes, weather permitting. Kevin Righter of UR will speak about OSIRIS-Rex sample from Bennu. Contact Tony Golumbeck at <a href="mailto:President@rochesterastronomy.org">President@rochesterastronomy.org</a> for details.

#### June 8 Sun: Astronomy Open House

12:00 pm – 3:00 pm. Farash Center. Come and see our facility's layout when it's light out, and see some of the equipment we have for members' use. Contact Tony Golumbeck at <a href="mailto:President@rochesterastronomy.org">President@rochesterastronomy.org</a> for details.

#### June 11 Wed: Herbarium

12:00 p.m. - 3:00 p.m. The 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 continuing to organize plant specimens in preparation for digitizing the collection. If you plan to attend, please send an RSVP to rasherbarium@gmail.com. At RMSC go to the front desk to meet other participants. For more information, contact herbarium curators, Tim Tatakis and Steven Daniel, by emailing rasherbarium@gmail.com.

#### June 14 Sat: ADK Outdoor Expo Outreach Event

9:30 a.m. – 3:30 p.m. Mendon Ponds Beach Area (Canfield Woods). RAS will be represented by Astronomy, Fossil & Mineral Sections. Volunteers needed at the RAS booth! Questions? Contact your section leaders.

#### June 18 Wed: RAS Board Meeting

7:00 p.m. -9:00 p.m. Farash Center, Ionia. Zoom option available. For details, contact Michael Grenier at <a href="mailto:mgrenier@frontiernet.net">mgrenier@frontiernet.net</a>.

# June 20 Fri: Astronomy Public Observing

details.

7:30 p.m. – 11:00 p.m. Join us for Public Observing at the Marian and Max Farash Center for Observational Astronomy. All welcome. Members come to help visitors look at deep sky objects through our telescopes. Contact Tony Golumbeck at <a href="mailto:President@rochesterastronomy.org">President@rochesterastronomy.org</a> for

### June 21 Sat: Astronomy Member Observing

7:30 p.m. – 11:00 p.m. Farash Center. Contact Tony Golumbeck at <a href="mailto:President@rochesterastronomy.org">President@rochesterastronomy.org</a> for details.

#### June 25 Wed: Astronomy Forum

7:30 pm – 9:00 pm. Presenter: Jim Porter

Topic: TBD

All are welcome to attend. Contact Craig Kaplan at <a href="mailto:ckaplan951@gmail.com">ckaplan951@gmail.com</a> for zoom link.

#### June 28 Sat: Fossil Section Field Trip

Little Beard's Creek: This is a large shale exposure of Windom Member of the Moscow Formation in a stream near Geneseo. For details, see the latest RAS FossiLetter or contact Dan Krisher at (585) 698.3147 or <a href="mailto:DLKFossil@gmail.com">DLKFossil@gmail.com</a>.

#### STRASENBURGH OBSERVATORY:

ASRAS will operate the telescope at the Strasenburgh Planetarium on mostly clear Saturday nights, dusk until 10:30. For more information, contact: Jim Seidewand at (585) 703-9876.

# Citizen Science in St. George, UT By Michael Grenier

I was at the St. George Dinosaur Discovery Center (SGDDC) in Utah the first week in April to participate in a volunteer science project of astonishing proportions.

The Discovery Center is a unique Museum. In 2000, Sheldon Johnson was leveling a hill on his farm when he scraped up some rock containing footprints. Paleontologists confirmed that they were dinosaur prints from the earliest Jurassic. There are few fossil sites in North America from this time. The more they excavated, the more they found. The city bought the site from the farmer and with local donations erected a museum building over the track site, opened to the public in 2005. The site has over 6,000 tracks from several species, plus swim traces and other behavior traces. The tracksite has been determined to be the shoreline of a large lake (called Lake Dixie) existing 200 million years ago.

The situation was that the City of St. George needed a new electrical substation to service the growing community on the south side of the city. Since they owned the land across the road to the northwest of the museum, they decided to put it there. Bulldozers and power shovels ripping through the overburden soon struck a fossil layer. The small staff at the museum was watching closely and begged to investigate, which the city readily granted. They found that the fossils were tracks, fish, dinosaur remains, and other creatures that lived in the lake. The tracksite was certainly a lakeshore and this was the nearshore shallow lake bottom. The city granted the museum staff eight weeks to recover whatever they could during March and April.

They needed all the assistance they could get and broadcast for help throughout February—no experience required. Almost every experienced



Top, the St. George Dinosaur Discovery Center museum. Above left, a portion of the tracksite in position under the roof of the Dinosaur Discovery Center. Above right, Google Maps aerial photo of SGDDC and dig site on north side of road. Below left, semionotid fish excavated from site. Below right, part of the volunteer team on Thursday, April 3.





paleontologist and geologist in the region responded and many of us from further away, including one who came from England. Hundreds and hundreds of people from St. George and from all over Utah and nearby states saw the newspaper and TV articles and showed up to help. They were organized into teams with training and supervision by those with experience.

By the end of the project on April 30th, over 1,000 people had pitched in—some for a day and some for weeks. Hundreds of other people visited the site during the dig. Thousands of fossils were recovered including over 70 fossil fish, dinosaur

bones, 20 to 30 dinosaur teeth of various sorts and other fossils. The fish included some coelocanths, gar, and many semionotid fish—related to gar but extinct since the early Jurassic. Doubtless, the dinosaurs were in the lake eating fish.

The best news was that on May 3rd, the city announced that the planned location of the new electrical substation would be moved to preserve the fossil site.

For more on the SGDDC, see <a href="https://utahdinosaurs.org/">https://utahdinosaurs.org/</a> and <a href="https://www.youtube.com/watch?v=vOyQ8">www.youtube.com/watch?v=vOyQ8</a> <a href="jsFz0w">jsFz0w</a>. Of interest, the local Fox news reporting mentioned the Rochester Academy of Science.

# By-Laws Changes Proposed at 2025 Annual Meeting

New York State Law has changed significantly since the last update of our By-Laws and we are required to make changes to bring ourselves into compliance with the Law. There are scores of changes to be made, but we are going to start with three simple, high priority ones regarding meetings, covered in Chapter 10 of the By-Laws.

The By-Laws and Constitution of the Academy can be found on our web site at <a href="https://rasny.org/about-us">https://rasny.org/about-us</a>.

These proposed changes were read to the attendees at the Annual Meeting on April 22, 2025, as required by our By-Laws. *CHAPTER XII. General Provisions.* 2. All proposed amendments to these Bylaws must be read at an Academy meeting and laid on the table until they are voted on at the next annual election. These proposed changes will be voted on at our 2026 Annual Meeting.

First, the Chapter 10 section on notifications does not meet NYS Law. It currently reads: 1. At least 38 but not more than 08 days prior to the date thereof, a notice shall be sent to every Active Member stating the time and place at which a regular meeting is to be held. The Annual Meeting shall be held at the first public meeting of the Academy each calendar year.

The second sentence is fine, but the first needs to be replaced. We propose to correct and add to the

first sentence with no change to the second sentence. The notification periods are taken directly from New York State Law, with some editing.

The first sentence will be changed such that the paragraph read: 1. At least ten days but not more than fifty days before the date of the meeting, a notice shall be sent to every Active Member by first class mail or by electronic mail stating the time and place at which a regular meeting is to be held. If mailed by any other class of mail, it shall be given not less than thirty nor more than sixty days before such date. The Annual Meeting shall be held at the first public meeting of the Academy each calendar year.

Second, we propose to add the following new section. This is taken directly from New York State Law, with some editing. This allows us to hold electronic meetings by Zoom or other such means. 4. Any meeting of members may be held partially or solely by means of electronic communication. The electronic service and/or platform by which the meeting is held shall be the place of the meeting if a meeting is held solely by means of electronic communication. Meeting leaders will verify that each person participating electronically is a member or a proxy of a member. Each member participating electronically will be given reasonable opportunity to participate in the meeting, including an opportunity to propose, object to, and vote upon a specific action to be

taken by the members, and to see, read or hear the proceedings of the meeting substantially concurrently with those proceedings. Meeting leaders will record and maintain a record of any votes or other actions taken by electronic communication at the meeting.

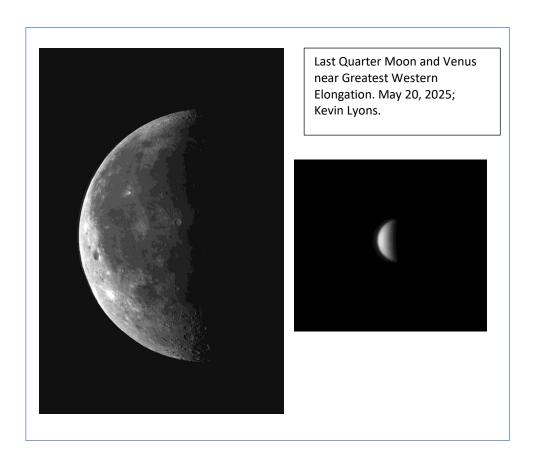
Third, our By-Laws have nothing about meeting quorums. NYS Law requires quorums. We propose to add the following new section. This is taken directly from New York State Law, with some editing.

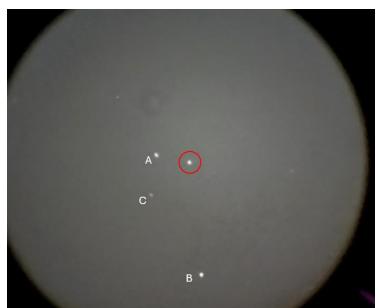
5. A Quorum at any meeting of members will be the lesser of either the number of members entitled to cast a) one hundred votes (including proxies) or b) the votes of one-tenth of the total number of members.

What does this mean? This means that if we have over 1000 members then only 100 members have to be represented in person or by proxy. If we have less than 1000 members as is currently the case, only 10% of them need to be represented for it to be a legal meeting. At the end of 2024, we had 391 Active Members. To have a quorum and legally conduct business, 40 of them would have to have been at a meeting or represented by proxy.

These three proposed changes will be on the ballot you will be sent for the 2026 Annual Meeting along with the election of officers and directors.

#### **RAS Member Images**





Quasar 3C-273 (circled in red) by David Hasenauer, iPhone in night mode through the eyepiece of the 60 inch Hale telescope at Mt. Wilson.



M106. Patrick Cosgrove; April, 2025.

# Rochester Research in Review.

(These are Hot Links which when clicked lead to the press release on the Science Daily and other science websites.)

A downside of taurine: It drives leukemia growth. University of Rochester; May 14, 2025.

Why are urban children more prone to allergies? University of Rochester; May 14. 2025.

Experimental quantum communications network. University of Rochester and RIT; May 6, 2025.

<u>Temporary anxiety impacts learning.</u> <u>University of Rochester; April 22, 2025.</u>

<u>Text-to-video AI blossoms with new</u> <u>metamorphic video capabilities.</u> University of Rochester; May 5, 2025. Stars or numbers? How rating formats change consumer behavior. Cornell University; May 19, 2025.

Cover crops may not be solution for both crop yield, carbon sequestration. Cornell University; May 19, 2025.

Tiny gas bubbles reveal secrets of Hawaiian volcanoes. Cornell University; May 14, 2025.

Sunlight-powered system mimics plants to power carbon capture. Cornell University; May 12, 2025.

Molecular double agent: Protein 'Eato' plays surprising role in protecting the brain. Cornell University; May 1, 2025.

Evolution of pugs and Persians converges on cuteness. Cornell University; April 28, 2025.



M57 Ring Nebula. James Bossert; May 1, 2025.



M94 Mosaic Bruney Baron, April, 2025

#### **ABOUT THE ACADEMY**

The Rochester Academy of Science<sup>™</sup>, 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 online. Each Section also sets dues to cover Section-related publications and mailings. We are recognized as a 501(c)3 organization.

For information, contact President Michael Grenier at (585) 671-8738 or by email <a href="mailto:paleo@frontier.com">paleo@frontier.com</a>.

The Academy Internet website is <a href="http://www.rasny.org">http://www.rasny.org</a> or see us on Facebook at <a href="https://www.facebook.com/Rochester-Academy-of-Science-792700687474549">https://www.facebook.com/Rochester-Academy-of-Science-792700687474549</a>.

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