



## President's Message

It pains me to not invite you to join us at our annual meeting, but the Board of Directors has determined that cancellation is the most prudent and scientific course of action. Due to the current risks of the COVID-19 virus spread and the edict by NY State Governor Andrew Cuomo banning large gatherings, we have decided that it is in our members' best interest to not hold this large public meeting. We are looking at alternatives and will communicate if we reschedule for later in the year. Meanwhile, Section events are also largely cancelled.

Meanwhile, if you have not cast a ballot for your RAS officers, please do so. Except for one, all candidates are incumbent and should be familiar to you. The exception is our nominee to the Board of Directors, Dr. Michael Richmond, whose biography we include in this issue. Ballots and instructions are in last month's Bulletin and on the website.

Keep well and we will see you soon enough!

*Michael Grenier, RAS President*

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**REMEMBER TO VOTE**  
*See page 2 for ballot*



## Notice

**CANCELLED!!!**

***All-Academy Annual Business Meeting formerly scheduled for Thursday, April 2, 2020 is cancelled, As is the Annual Spring Lecture. Further Instructions will be sent.***

### Nominee for RAS Board

To fill an opening in the board of directors, the board search committee has nominated Michael Richmond Ph.D., Professor of Physics and Astronomy at the Rochester Institute of Technology. Professor Michael Richmond, besides teaching physics and astronomy at RIT, runs the RIT Observatory and also acts as liaison between RIT and the WIYN 0.9m telescope at Kitt Peak. He is an alumnus of

Princeton University and did his graduate work at the University of California at Berkeley. He has been a regular speaker for ASRAS for the past ~14 years. Excellent content from his talks as well as from courses he teaches are available at his website <http://spiff.rit.edu/richmond/index.html>. His latest scientific publication, *An Optical Search for Transients Lasting a Few Seconds* (October 2019), is available at <http://spiff.rit.edu/richmond/pub/>.



Dr. Michael Richmond at work. Photo Credit: RIT

## Rochester Academy of Science Treasurer's Report of April 2020

The Rochester Academy of Science has three categories of funds: the general fund, the endowment funds, and the expendable funds. The general fund receives membership dues and monthly interest from the Life Fund (endowment) and the Memorial Fund (endowment). This financial report does not include income and expenses of the individual sections.

### Revenue and Expenses for 2019:

Revenue: Member dues \$3125, Gifts \$137, Interest and dividends \$4452. Total revenue \$7714.

Expenses Summary:

Section & Board Meetings: Room rental	490
Bulletin: printing, mailing, labor	2202
General Office Expenses (PO Box, mail permit & website)	388
Liability Insurance	636
Student Grants	2713
Lectures (honoraria + room rental)	<u>550</u>
Total (excluding transfers)	\$6979

**Endowment Funds:** The endowment funds are not spent but generate interest, which is entered as income into the three Expendable Funds. They are reported to the IRS as restricted assets.

Fund	Balance (12/31/2019)	Interest Supports
Fairchild Fund	\$10741.00	Publications
Life Fund (Life Membership dues)	\$11400.00	General Fund
Jensen Fund	\$8275.00	Student Grants
Speakers Fund	\$6550.00	Lectures
Grace Murray Fund	\$8250.00	Student Grants
Memorial Fund (named memorial gifts)	\$650.00	General Fund
Grants Program Endowment	\$10000.00	Student Grants
Herbarium Endowment	\$2000.00	Herbarium
Babette Coleman Bequest	<u>\$4958.86</u>	Herbarium
Balance of the Endowment Funds	\$62824.86	

**Expendable Funds:** (reported to the IRS as unrestricted assets, each are self-supporting and do not receive funds from membership dues or from the General Fund.)

Publications Fund: used to publish the Proceedings and Academy booklets.

Grants Fund: used to award annual research grants to undergraduate college students.

Lecture Fund: used to pay the expenses and honoraria for invited speakers who give lectures at Academy events (the Fall Scientific Paper Session and the Spring Lecture).

**Assets and Liabilities:** The assets of the Rochester Academy include money held by each of the five sections, as well as the RAS funds in the Pittsford Federal Credit Union (checking, savings) plus investments held by Morgan Stanley/Smith Barney (which pay about 3%; this interest is deposited into the Expendable Funds accounts). The RAS also owns stock in ConocoPhillips and Phillips 66; the dividends received are deposited into the Grants Fund. Finally, RAS has investment money in the UBS Putnam Diversified Income Trust which was a bequest from the Babette Coleman estate. The RAS also owns the Astronomy Section observatory in Ionia, NY. The RAS has no liabilities.

### ROCHESTER ACADEMY OF SCIENCE BALLOT FOR JUNE 2020 – MAY 2021 OFFICERS

OFFICE	NAME	√	WRITE-IN CANDIDATE
<b>President:</b>	<b>Michael Grenier</b>		
<b>Vice President:</b>	<b>Daniel Krisher</b>		
<b>Membership:</b>	<b>Open</b>		
<b>Treasurer:</b>	<b>William Hallahan, Ph.D.</b>		
<b>Secretary:</b>	<b>Helen Downs Haller, Ph.D.</b>		
<b>Member, Board of Directors (2020-2023)</b>	<b>Douglas Kostyk</b>		
<b>Member, Board of Directors (2020-2023)</b>	<b>Karen L. Wolf</b>		
<b>Member, Board of Directors (2020-2021)</b>	<b>Michael Richmond, Ph.D.</b>		

Completed ballots must be mailed by **April 2<sup>nd</sup>** c/o the RAS Secretary: Rochester Academy of Science, PO Box 92642, Rochester NY 14692-0642

# Events for April 2020

Because of National, State and County States of Emergency,  
**ALL Public RAS Events are CANCELLED.**

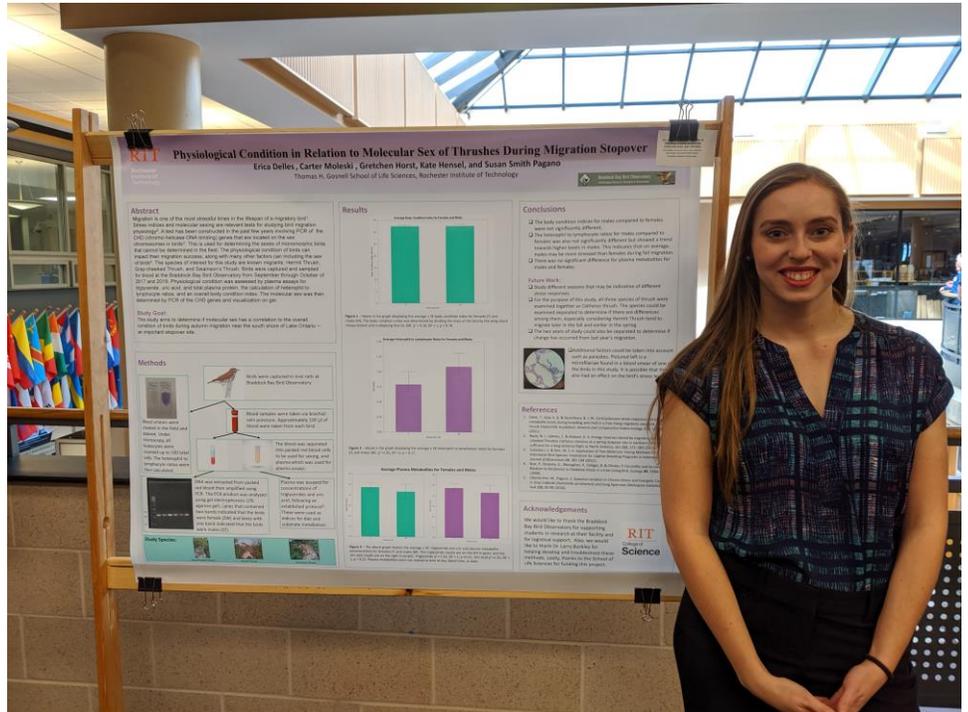
Contact your section's leaders for updates.

## 2019-2020 Undergraduate Student Research Grant First Place Awardee:

Erica Delles, Rochester Institute of Technology.

*Physiological Condition in Relation to Molecular Sex of Thrushes During Migration Stopover.* Sponsor: Susan Smith Pagano, Ph.D.

Annual migrations are a potentially stressful period of the life cycle of migratory birds. A bird's body condition is likely to relate to migration success; therefore, metrics of physiological condition and health may provide important information about the resource requirements of birds during migration. However, many factors can impact physiological condition of birds, including sex. This study aims to compare the overall condition of migrating thrushes during autumn migration near the south shore of Lake Ontario, an important stopover site for birds. The species of interest for this study are known migrants in the area: Hermit Thrush, Gray-cheeked Thrush, and Swainson's Thrush. Birds were captured and sampled for blood at Braddock Bay Bird Observatory from September through October of 2018.



Erica Delles, RIT

Molecular analysis using PCR of the CHD genes located on the W and Z chromosomes in birds was used to determine the sex of these monomorphic birds. Physiological condition was assessed using plasma assays for triglyceride, uric acid, and total plasma protein, the heterophil to lymphocyte ratios in blood smears, and an overall body condition index. Linking health and condition indices to factors such as molecular sex may improve our understanding of resources necessary for thrushes at important stopover sites like the south shore of Lake Ontario.

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Photo of *Falco columbarius*, a Merlin falcon. The first nesting in Rochester in 60+ years was discovered in 2006. Photo Credit: Tim Tatakis, taken in 19th Ward.

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

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**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 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 e-mail [pres@rasny.org](mailto:pres@rasny.org).

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

Or see us on Facebook at

<https://www.facebook.com/Rochester-Academy-of-Science-792700687474549>.

This "BULLETIN" is produced monthly, except July and September, by the Astronomy Section, Rochester Academy of Science. Submissions are due by the 10<sup>th</sup> of the month and may be emailed to:

[editor@rasny.org](mailto:editor@rasny.org).

**The Academy postal address is P.O. Box 92642,  
Rochester NY 14692-0642.**

**ROCHESTER ACADEMY OF SCIENCE CONTACTS**

		(585) home //work
Michael Grenier	President	671-8738
Dan Krisher	VP & Fossil	698-3147 (c)
Jutta Dudley	Past President	385-2368
Helen D. Haller	Secretary	387-9570
William Hallahan	Treasurer	624-1628
Alex Smith	Anthropology	750-3329 (c)
David Bishop	Astronomy	329-8831
Lawrence Hirsch	Life Sciences	429-6199
Stephen Busschaert	Mineral	351-7633 (c)
Elizabeth Pixley	Herbarium	334-0977
Jutta Dudley	Publications	385-2368
Ted Lechman	Bulletin Editor	490-1132 (c)
William Hallahan	Student Grants	624-1628
Paul Dudley	Website	385-2368
Tony Golumbeck	Director '22	(315)789-4374
Jeff Gutterman	Director '22	392-8299//748-2272
Douglas Kostyk	Director '20	943-3419
Karen Wolf	Director '20	670-9709//273-4500
Tim Tatakis	Director '21	292-2332 (w)