

**Annual Report  
2019-2020  
Chemistry Department**

**IA. Peer-Reviewed Faculty Publications**

**Fadi Bou-Abdallah**

1. Milliken, B. T., Melegari, L., **Smith, G. L.**<sup>\*</sup>, Grohn, K., Wolfe, A., Moody, K., Bou-Abdallah, F. <sup>□</sup>, Doyle, R. P. <sup>□</sup> Fenretinide binding to the lysosomal protein saposin D alters ceramide solubilization and hydrolysis. *RSC Medicinal Chemistry*, **2020**. Advance Article. <https://doi.org/10.1039/D0MD00182A>
2. Srivastava, A., **Flint, N.**<sup>#</sup>, **Kreckel, H.**<sup>#</sup>, Gryzik, H., Poli, M., Arosio, P., Bou-Abdallah, F. <sup>□</sup> Thermodynamic and Kinetic Studies of the Nuclear Receptor Coactivator-4 (NCOA4) Interaction with Human Ferritin. *Biochemistry*, **2020**, 59, 29, 2707–2717. <https://doi.org/10.1021/acs.biochem.0c00246>
3. Melman, A. Bou-Abdallah, F. <sup>□</sup> Iron Mineralization and Core Dissociation in Mammalian Homopolymeric H-Ferritin: Current Understanding and Future Perspectives. *Biochim. Biophys. Acta (BBA)* **2020**. Article is now available online at: [https://authors.elsevier.com/sd/article/S0304-4165\(20\)30212-9](https://authors.elsevier.com/sd/article/S0304-4165(20)30212-9)

**Maria Hepel**

1. Hepel, M., **invited paper** to the Special Issue on *Magnetic Nanoparticles*: “Magnetic Nanoparticles for Nanomedicine”. *Magnetochemistry* **6** (2020) [1] 97-113. <https://doi.org/10.3390/magnetochemistry6010003>
2. Kurzatowska K., Sinnott-deVaux R., Hershkowitz J., Hepel M., “Cancer-targeted apoferritin nanocarriers for anthracycline derivatives delivery”, *Nanomedicine* (submitted).
3. \*Running L., Hepel M., “Gold nanostars-enhanced Raman spectroscopic monitoring of nanocarrier-based drug delivery”, *Nanomaterials* (submitted).

\* **SUNY Potsdam Undergraduate Students Co-authors;**

# **SUNY Potsdam Students Alumni**

□ **Corresponding Author**

## **IB. Other Faculty Publications (including WEB news, discussions, reviews, editorials, etc.)**

### **Fadi Bou-Abdallah**

1. Highlight of our research (**Metallomics 2019**; 11: 1635–647) in the SCHOLARSHIP AND PRACTICE OF UNDERGRADUATE RESEARCH (**SPUR**) - The Journal of the Council on Undergraduate Research (**CUR**) - Winter 2019 printed Edition, Volume 3, Number 2, page 73.

### **Martin Walker**

1. “Introduction to the International Chemical Identifier (for Organic Chemistry Undergraduates)”, posted on the InChI Trust website, part of a IUPAC-funded initiative to educate scientists and students about the InChI Chemical identifier.

## **II. Papers Delivered by Faculty and Students at Conferences and Conference Attendance. Faculty Presenter and Students Presenter names underlined**

### **IIA. Professional Meetings**

#### **Fadi Bou-Abdallah**

Due to COVID, all planned travel and physical conference presentations were cancelled. However, we managed to have one of our collaborator present a poster at the Biophysical Annual Society Meeting in San Diego, CA on a joint-work based on a fluorescent probe called “Mag-Fluo4”, with one of my students (Aliaksandra Reutovich\*) as a co-author.

- 1) Milán AF, Giraldo MA, Arango L, Reutovich AA\*, Bou-Abdallah F, Calderón JC. Characterization of the Ca<sup>2+</sup>-Mag-Fluo-4 reaction in vitro and in situ: implications for the calibration of skeletal muscle Ca<sup>2+</sup> transients. 64<sup>th</sup> annual meeting of the Biophysical Society, Feb 15-19, 2020, San Diego, CA.
- 2) Participated in a 3-day 2020 Virtual Cottrell Scholar Conference – Theme: Challenges and Opportunities with Online Education- July 8 - 10, 2020
- 3) Participated in numerous workshop/webinar sponsored by the National Science Foundation (NSF) on proposal writing, and on various grant initiatives and opportunities.

4) Participated in a number of online workshops sponsored by the American Chemical Society, and the National Institute of General Medical Sciences (NIGMS) on “Enhancing Online Laboratory Experiences: Insights from Organic, Inorganic, and Physical Chemistry Courses”, “Teaching Remotely Together: Lessons Learned”, “The Future of the Chemistry Laboratory Course”, “Restarting Research”, **and** “Virtual Teaching and Learning (for current and aspiring educators and mentors)”.

5) Participated in a few online workshops sponsored by SUNY including “Incorporating Accessibility into Course Development”, “Introduction to Accessible Online Learning”, “Creating Captions Using YouTube” and “Online STEM Lab Accessibility”.

### **Maria Hepel**

1. \***Maria Hepel**, “Assessment and mitigation of DNA damage by low-energy X-ray radiation”, **Invited talk** presented at the CAMNAX Symposium on *X-Ray Actuating and Dynamic Radiotherapy*, University of California at Davis, Aug. 19-20, 2019, Davis, CA.

### **David Gingrich**

### **Fathima Nazeer**

American Society of Biochemistry and Molecular Biology annual meeting, San Diego, CA (2020) “Connections between RNAPII degradation, the DNA damage response and mRNA processing” Alex Hofler\*, Morgan Skidders\*, Claire Moore and Fathima Nazeer.

Conference cancelled due to Covid-19 after acceptance of abstract for a poster presentation.

Student Conference, Collegiate Science & Technology Entry Program, Canton, NY (2020) “A DNA damage independent role for a DNA damage response factor?” Yadriel Bracero\* and Fathima Nazeer. *Poster Presentation*

\* indicates mentored SUNY Potsdam undergraduate student

### **Martin A. Walker**

None attended, because of the pandemic, though one poster abstract was accepted: James Burdick; Martin A. Walker; **Aaron R. Charlack**.\* “Copper cycling: Speedy green chemistry revisions to a common high school lab.” This was accepted the 2020 Biennial Conference on Chemical Education (BCCE), but the conference was subsequently cancelled.

**\* SUNY Potsdam undergraduate students**

## **IIB. Presentations at the Learning & Research Fair, SUNY Potsdam**

### **Fadi Bou-Abdallah**

### **David Gingrich**

### **Fathima Nazeer**

“Effects of a transcription blocking drug on mRNA processing factors” Arielle Wolter\* and Fathima Nazeer. *Poster Presentation* (virtual due to Covid-19) (second place in science category)

“A DNA damage independent role for a DNA damage response factor?” Yadriel Bracero\* and Fathima Nazeer. *Poster Presentation* (virtual due to Covid-19)

### **Martin Walker**

1. Aaron R. Charlack, Development of Green High School Chemistry Labs. Took first place in both the Kilmer and the Ram L. Chugh North Country Research & Public Service Award.

## **IIC. Presentations at the ACS Undergraduate and Graduate Chemistry and Biology Symposium (Cancelled due to COVID)**

## **III. Receipt of Grants/Awards and Grants Applied For**

### **Fadi Bou-Abdallah**

NIH R15 research grant (PI) (\$414,047.00) (2019-2022). Grant proposal title: *Effect of ferritin subunit composition on iron core formation, morphology, and iron mobilization: physical characterization and physiological relevance.* **Funded.**

NSF RUI Research Grant (MCB-Molecular Biophysics Program) (PI) (\$387,030.00) (2020-2023). Proposal Title: *RUI: Structural and Functional Investigations of Ferritin Heteropolymers Using a Novel Expression System.* **Funded.**

The Eppley's Foundation for Research **(PI) (\$22,651.00) (2019-2020)**. Proposal Title: *“Gold Nanoparticles for Lead Detection in Drinking Water, to explore the design and effectiveness of a sensor for lead detection in drinking water”*. **Funded.**

Research Corporation for Science Advancement (RCSA) - Cottrell Instrumentation Supplements Award **(\$18,500) (2020-2021)**. Proposal Title: *Acquisition of an AKTA Go Chromatography System to Help Expand and Support Learning and Research at SUNY Potsdam*. **Funded.**

The Henry Dreyfus Teacher-Scholar Award **(PI) (\$60,000.00) – (2016-2021)**. **Funded.**

### **Maria Hepel**

1. National Science Foundation - Proposal “MRI: Acquisition of XPS to Enable Electrochemical and Materials Research and Education in the North Country”, with Professor Podlaha-Murthy, Clarkson University, as the PI - submitted.
2. National Science Foundation – Proposal for Center for Atomic, Molecular and Nanoscale Architectures for X-rays (CAMNAX), with University of California Davis and other participating Universities, 2019 – submitted.

### **David Gingrich**

1. Training Support Program, Promega Corp, towards lab supplies for CHEM 425/426 - Awarded \$941.

### **Other Internal Research Awards**

1. Loughheed Applied Learning grant, SUNY Potsdam. “Replacement of Gel Imaging System” (Partial funding-\$26,072).
  1. Alis Hart, Frederick B. Kilmer Undergraduate Research Apprenticeship, Spring 2020.

### **Patricia Kraske French**

1. Favorite teacher of the Chemistry department award, Fall 2019

### **Fathima Nazeer**

Frederick B Kilmer Student Research Fellowship, SUNY Potsdam (2019). Effect of a transcription blocking drug on RNA processing. Arielle Wolter and Fathima Nazeer (\$400)

Frederick B Kilmer Student Research Fellowship, SUNY Potsdam (2020). Does Rad53 affect 3' end processing. Yadriel Bracero and Fathima Nazeer (\$600)

Drescher Leave Program Award for research project titled “The role of a DNA damage response factor in mRNA maturation” (\$11,133 for cost of replacement salary)

### **Clifford Rossiter**

Lougheed Applied Learning Grant (2019) Acquisition of Real-Time PCR Instrument for Drug Binding and Genomic Studies, **\$28,394.40 Funded**

### **Martin Walker**

1. **SUNY Innovative Instruction & Technology Grant (IITG), \$10,000, not funded.** Co-PI, with Prof. Jeff Good (PI), Prof. Pierpaolo Di Carlo, Prof. Korydon Smith, Prof. Sameer Honwad, all of University at Buffalo: "Making online courses and open educational resources available to communities with sporadic access to the internet." IITG, \$10,000, denied. Currently being reworked as a supplement to an existing NSF grant.

### **Other Internal Research Awards**

1. Aaron Charlack, Frederick B. Kilmer Undergraduate Research Apprenticeship (\$379.30), Spring 2020.

## **IV. New Programs; Courses and/or Laboratories Proposed or Revised**

### **Fadi Bou-Abdallah**

1. Developed a new online introductory Chemistry course LAB for non-Majors (CHEM101 - Chemistry and Human Health-LAB). The course carries the new SUNY Potsdam Pathways Curriculum designation - Thinking Scientifically: Natural World. The course is OSCQR certified and has been taught twice during summer 2020.
2. Updated the content of my online Moodle course (CHEM101 - Chemistry and Human Health), and taught the course three times this year (Winterim 2020, and 2 sessions in Summer 2020). The course is OSCQR certified. OSCQR = Open SUNY Course Quality Review
3. Continue to maintain and update my research webpage with relevant information. (<http://fadibouabdallah.wordpress.com/>)
4. Continue to update the Physical Chemistry Lecture material and Laboratory manual. Each course (Pchem Lec and Pchem Lab) has its own Moodle sites where students can access course materials.

### **Maria Hepel**

1. Developed new course Nanobiotechnology, CHEM-485, including 36 lecture presentations in PowerPoint and instructions for Fall 2020 teaching.

2. Developed on-line experiments for Instrumental Analysis CHEM 415, including Fluorescence, Atomic Absorption, Fourier-Transform Infrared spectroscopy (FTIR), Raman Scattering Spectroscopy, Scanning Electron Microscopy (SEM), and Cyclic Voltammetry techniques.

### **David Gingrich**

1. Several sections of PowerPoint presentations for Biochemistry lecture were revised to incorporate changing concepts/information.
2. Updated Biochemistry 1 lab manual.

### **Patricia Kraske French**

1. General Chemistry Lecture, (Chem 105/6) Academic year 2019-20
  - a. Revised and updated General Chemistry material for both five day a week lecture and traditional lecture. Adaptations included power point revisions, preparing additional practice problems and worksheets.
  - b. Increased number of office hours to 9 per week to accommodate students
  - c. Held class and small group review sessions before each evening exam. Students were accommodated if they couldn't attend the evening exam due to classes, performances, games or living situations. This typically required me to have 2 – 3 additional time slots for each exam during the day.
  - d. For Spring 2020, as of March, both sections of Chem 106 were transitioned to on-line format. Necessary adaptations included power point revisions and recording of lecture videos for asynchronous viewing; development of new recitation worksheets and recorded recitation sections for asynchronous viewing; online help sessions; development of Moodle practice exams and semester & final exams with extended exams times to allow working students the needed flexibility. Worked one on one with students who had inadequate internet capabilities. Held seven office hours per week synchronously via Microsoft TEAMS. Individual (personalized) TEAMS meetings were held when students required them and students were allowed virtually unlimited contact via email and phone.

### **Fathima Nazeer**

General Chemistry I lecture:

- a. Updated material for course, to align course better with Open Educational Resources.
- b. Updated existing material and developed new material for General Chemistry workbooks (part I and part II) which includes in class worksheets as well as additional worksheets for the full course. This is a resource available at cost for students.
- c. Maintained online resources, including Moodle site and online homework system.

General Chemistry lab:

Updated previously developed discussion section to replace a lab module.

WAYS 103 - Women in science: Developed class material and updated this interdisciplinary course to fully align with Potsdam Pathways general education requirements

CHEM 495 – Biochemistry of Cancer: Updated existing class material and developed new material to cover latest technologies and advances in the field.

CHEM 408/409: Developed class material to scaffold learning - starting from interpreting primary research articles, searching for information and then writing and preparing effective presentations on topics.

### **John C. Proetta**

1. CHEM 105/106 – General Chemistry Lab 1 & 2 – Laboratory Coordinator
  - a. Implemented modern data acquisition software to our existing laboratories allowing seamless data processing and analysis. Students can now watch their data processed in real-time, revealing trends and the progression of various reactions.
  - b. Facilitated the purchase of six (6) additional laboratory laptops for data acquisition purposes. Ultimately, this allowed each lab pair to have their own data acquisition station, significantly enhancing student experience.
  - c. Continued to update and modify the existing general chemistry 1 lab manual. Various visual supplements have been included to aide students with orienting themselves with equipment utilized in the lab. Data tables have been reorganized with reference numbers to help with analysis of laboratory data.
  - d. Spring 2020 required the transition to virtual learning with almost no notice. With two weeks of preparation, 4 weeks of face-to-face labs were transposed to a digital format. This was done for 5 sections of CHEM 106, consisting of three teaching faculty and over 80 students. Students were given video supplements of each experimental and asked to record their observations and resulting data. Connections to the key experimental and data derivation were emphasized.
  
2. CHEM 315 – Forensic Science Lab Development – Internship Coordinator
  - a. Worked with SUNY Potsdam intern Makayla Rodriguez, during Spring 2019, Summer 2019, & Fall 2019 to revive our Forensic Science labs. The internship resulted in an extensive inventory of our supply, testing of existing procedures, and development of new experiments utilizing our existing equipment.
  - b. Matter and Energy lab space was utilized and equipped with materials for two sections of forensic science lab to be potentially offered with the lecture.
  
3. Food Science at SUNY Potsdam
  - a. In collaboration with Raymond Bowdish (WISER Center Coordinator) and John VanKennen (Executive Chef, PACES) to implement safe, liable, food science practices using a shared SUNY Potsdam/PACES food space. Using the



- WISER/PACES collaboration as a spring board, introduce a food science course to SUNY Potsdam.
- b. Working to create a new, attractive, non-majors course that would cater to the evolving General Education requirements. Rising popularity in food science ensures that this course offering would appeal to our student population.
  - c. Offered a number of unique lecture/lab modules aiming to teach physical science through a non-alienating, kitchen laboratory.
  - d. Working on a collaboration with Jenica Rogers to integrate this with the Lougheed Center for Applied Learning. Will pilot more lectures and activities that will cultivate student interest and a following.

### **Clifford Rossiter**

### **Martin Walker**

1. WAYS 101, "Science: Fact or Opinion". This innovative approach to the WAYS 101 Critical Thinking seminar uses a laboratory component alongside discussions, so that students can formulate hypotheses then immediately test and evaluate them based on empirical results.
2. Updated OER textbook, assembled and partly written by myself, for organic chemistry.
3. Updated organic chemistry lab manual and workbook and Moodle site.
4. After the March 2020 lockdown, created videos of all remaining experiments, along with fully online student exercises and final exam.
5. Involved in helping a new interdisciplinary "Nanoscience" major & minor gain campus approval.

## **V. Service**

### **VA. Administrative/Committee Assignments**

#### **Fadi Bou-Abdallah**

1. Member of the SUNY Potsdam Arts and Sciences Council (2020-2023)
2. Member of the Research and Creative Endeavors Committee
3. Campus Representative of "The Barry Goldwater Scholarship and Excellence in Education Foundation"
4. Chair of the Goldwater Scholarship Committee.
5. Elected Faculty Senate Chemistry Delegate
6. Member of the Open Access Task Force
7. Member of the Arts & Sciences Curriculum Committee (2020-2021)
8. Member of the Students' Affair Committee (SAC)-2020-2022

9. Member of the Academic Program and Curriculum Committee (APCC)- 2020-2022

**Maria Hepel**

1. Member of the State University of New York Senior Vice Chancellor's Scientific Advisory Panel (SAP).
2. Evaluated SAP proposals for centers of nanotechnology and nanomedicine.
3. Served as a reviewer of proposals submitted to Empire Innovation Program, (EIP), SUNY Albany.

**David Gingrich**

1. College Radiation Safety Officer
2. College Radiation Safety Committee
3. Chemistry Safety Committee (Chair)
4. Search Committee for Director of Environmental Health and Safety EHS)
5. Health Professions Advisory Committee (HPAC)

**Patricia Kraske French**

1. *Teacher Education Advisory council*

**Fathima Nazeer**

1. Member, Health Care Professional Advisory Committee
2. Member, Arts and Science Curriculum Committee

**John Proetta**

1. Member of the Chemistry Safety Committee (CSC)
2. Member of the Campus-Wide Safety Committee
3. Delegate of the United University Professionals (UUP)
4. Campus Health and Safety Representative (UUP)
5. General Chemistry Laboratory Coordinator

**Clifford Rossiter**

1. Ran for Arts & Sciences council, Senate Goals and Planning, Vice Chair Faculty Senate. Elected to none.
2. Chemistry department alternate senator

**Martin Walker**

1. Department Chair

2. Potsdam Pathways Curriculum Committee, member and TS – Natural World Elected Liaison/Convener.
3. Departmental Safety Committee
4. Health Professions Advisory Committee
5. Member of the Open Access Task Force
- 6.

## **VB. College-Related Public Service**

### **Fadi Bou-Abdallah**

1. Participated in the SUNY Potsdam Open House – October 5, 2019
2. Participated in the SUNY Potsdam Major Affair event – October 23, 2019
3. Reviewed a dozen proposals for the Research & Creative Endeavor Program Committee to fund the research of SUNY Potsdam Faculty
4. Offered a High School Science Day “Chemistry Magic Show”, November 23, 2019

### **Maria Hepel**

1. Participated in Open House at SUNY Potsdam.
2. Performed an experiment with electrodeposition of copper for high-school students during the Chemtoberfest Day, October, 2019

### **David Gingrich**

1. Participated in Annual High School Science Lab Day, November 23, 2019.
2. Participated in SUNY Potsdam Open House, Oct 26, 2019.
3. Participated in A Major Affair, October 23, 2019.
4. Faculty advisor for the SUNY Potsdam American Society for Biochemistry and Molecular Biology ASBMB Student Chapter, (SGA Biochemistry Club)
5. Faculty advisor for SGA Pre-Health Club.
6. Academic Coordinator for Men’s Hockey.
7. Participated in Chemtoberfest, October 25, 2019 (safety review).
8. Participated in Associated Colleges Community of Practice Series (Lab Sciences) throughout summer of 2020.

### **Patricia Kraske French**

1. Participated in annual Chemtoberfest, October 2018
2. Prepared and ran a session with the Chemistry Club on the Chemistry of Chocolate including students preparing home-made candies.

### **Fathima Nazeer**

1. Hosted students and conducted mini Chemistry presentation for STEM open house.

### **John Proetta**

1. Event Coordinator for Chemtoberfest! 2019 – October 25<sup>th</sup> 2019, featured an interdisciplinary STEM program for local, school-age students.
2. Serving on the newly-formed committee charged with implementing an open house event focusing on our STEM programs.
3. Hosted and Assisted the inaugural STEM Open House on November 2<sup>nd</sup>, 2019, featuring department presentations and a tour that involved chemical demonstrations.
4. Organized and supervised the Chemical Magic show preparation for High School Science Lab Day on November 23<sup>rd</sup>, 2019.
5. Hosted the North Country Children's Museum for a "Space Camp" on February 20<sup>th</sup>, 2020 that featured Chemistry, Geology, and Biology programming.
6. Served on the planning committee for the 3<sup>rd</sup> annual Northeast Regional Science and Engineering Science Fair to take place on campus March 28<sup>th</sup> 2020.
7. Participated in the 2<sup>nd</sup> Annual Global Women's Breakfast on February 12<sup>th</sup>, 2020
8. Advisor to the SUNY Potsdam Chemistry Club
9. Academic Advisor to Phi Kappa Pi Sorority

### **Clifford Rossiter**

1. Virtual Open House, Materials and STEM

### **Martin Walker**

1. Organized (with Beth Fayette) High School Science Lab Day, November 2019.
2. Assisted with Chemtoberfest, October 2019
3. Participated in "A Major Affair"
4. Organized the Associated Colleges Community of Practice Series (Lab Sciences), regular online meetings held summer 2020.

## **VC. Professional Service**

### **Fadi Bou-Abdallah**

1. Established a new research collaboration with Dr. Joseph Mancias (MD/PhD, a radiation oncologist at the Dana-Farber/Brigham and Women's Cancer Center and Assistant Professor of Radiation Oncology at Harvard Medical School.

2. Reviewed 8 research papers submitted for publication in Nano Letters, RSC Advances, J. Inorg. Biochem., Biochim. Biophys. Acta (BBA) and Inorg. Chem.
3. Reviewed a proposal to update the Encyclopedia of Physical Chemistry Chemical Physics (PCCP) by Taylor & Francis/CRC Press. October 15, 2019.
4. Reviewed a Research Proposal for The Office of The Vice-Rector For Academic Affairs, University of Cyprus: ONISILOS Funding Scheme For Postdoctoral Researchers, Proposal No 94 - *Development Of A Computational Model To Exploit Disease Comorbidity Effects In Alzheimer's Disease Towards Prevention And Early Diagnosis*. 10/28/2019
5. Reviewed a proposal to the American Chemical Society Petroleum Research Fund (ACS PRF); February 10, 2020.
6. Reviewed a few chapters of the 2<sup>nd</sup> edition of a Gen Chem open access Chemistry textbook – (OpenNow Chemistry-2nd Edition-Cengage), and submitted a detailed survey about the book's content, OpenStax and other OER solutions for chemistry courses (April, 2020).
7. Summer research advisor of three undergraduate students: Aliaksandra Reutovich, Gideon Smith, and Kellen Bertrand.
8. Prepared an annual executive report on behalf of the Northern New York Local Section of the American Chemical Society (ACS) (February 2020).
9. Member of the following professional organizations: (a) Editorial Board of Biochimica Biophysica Acta (BBA), (b) Council on Undergraduate Research (CUR), (c) American Chemical Society (ACS)

### **Maria Hepel**

1. Served as a reviewer of 37 papers during 2019-2020 academic year submitted to the following international journals:  
*Analytical Chemistry; Electrochimica Acta; Journal of Photochemistry & Photobiology; Journal of Physical Chemistry; Spectrochimica Acta Part B: Molecular & Biomolecular Spectroscopy; Analytica Chimica Acta; ACS Applied Materials & Interfaces; Biosensors & Bioelectronics; Nanoscale; Analytical & Bioanalytical Chemistry; Biomaterials; Sensors & Actuators.*
2. Reviewed a proposal for Swiss National Science Foundation.
3. Member of the Editorial Boards of:
  - “Polish Journal of Environmental Studies”
  - “Open Electrochemistry Journal”
  - “Journal of Molecular Imaging & Dynamics”
  - “Journal of Nanomedicine & Nanotechnology”

- “Mediterranean Journal of Chemistry”

### **David Gingrich**

### **Fathima Nazeer**

1. Associate Member, American Society for Biochemistry and Molecular Biology
2. Critical review of manuscript “Regulation of the Ysh1 endonuclease of the mRNA cleavage/polyadenylation complex by ubiquitin-mediated degradation” prior to publication in RNA Biology.

### **John C. Proetta**

1. Member of the American Chemical Society, Since 2008
2. Member of the National Association of Scientific Materials Managers, Since 2015

### **Clifford S. Rossiter**

1. Member of the American Chemical Society

### **Martin Walker**

1. Alternate Councilor and Webmaster for the Northern New York section of the American Chemical Society
2. Member of the outreach task force of the Polymer Division, also assisted the chemical data standards task force, for the International Union of Pure & Applied Chemistry (IUPAC).
3. Editorial boards for two journals:
  - Journal of Cheminformatics, now the leading journal in this field.
  - ARKIVOC or “Archive of Organic Chemistry.”
4. Reviewed one paper for *ARKIVOC*.

## **VD. Community Service**

### **Fadi Bou-Abdallah**

1. Chair of the Northern New York Local Section of the American Chemical Society (ACS) (2012-Present).

### **Maria Hepel**

1. Adviser for the Newman Club for 2019-2010.

### **David Gingrich**

1. Sound/Media Technician, Potsdam Church of the Nazarene.

**Patricia Kraske French**

1. Member of New Life Presbyterian Church, Canton, NY.

**Fathima Nazeer**

1. Member, Parent Teacher Association, Potsdam Central School
2. Member, Ex-Muslims of North America

**Clifford S. Rossiter**

1. Member of the American Chemical Society.

**Martin Walker**

1. Worship team guitarist, and organizer of “Coffee House” social evenings (four per year) at New Hope Community Church, Potsdam, NY.

**VE. Other Service not mentioned above.**

**Fadi Bou-Abdallah**

1. Research adviser to 4 undergraduates majoring in Chemistry, Biology and/or Biochemistry during the 2019/2020 academic year and summer 2020. They are: Aliaksandra Reutovich, Gideon Smith, Kellen Bertrand, and Jarisa Escalante.

**Maria Hepel**

1. Continued research collaboration with Professor Katarzyna Kurzatowska from the Polish Academy of Sciences, Olsztyn Poland.
2. Continued research collaboration with Professor Jan Labuda, Technical University, Bratislava, Slovakia.
3. Started a new research collaboration with Dr. Marta Fiolka from Maria Curie-Sklodowska University, Lublin, Poland, in the field of natural anti-cancer drugs.
4. Supervised research projects of 3 undergraduate chemistry majors: Steve Aponte, Jared Morse, and Philip Dorman.
5. Member of the American Chemical Society.
6. Served as an advisor to 10 students in each semester

### **David Gingrich**

1. Safety modules for General Chemistry, Organic Chemistry and Research Students/Teaching Assistants were implemented during the year. All students in these positions are required to study the material and pass the assessment.
2. Continued development of additional expanded safety training modules spread across Chemistry classes to meet American Chemical Society (ACS) safety guidelines.
3. Participated in “3D Printing for the Bioscience Classroom” workshop in Milwaukee WI with partial funding via Facul-TE Award (Center for Creative Instruction) awarded Spring 2019.
4. Attended Winter Workshop hosted by CCI, Jan 22, 2020.

### **Martin A. Walker**

In my role as department chair, I was involved in numerous departmental activities, such as holding departmental meetings, identifying & hiring adjunct faculty, preparing departmental teaching rosters, and planning for changes in the general education program.

Taught general chemistry lecture for the summer 2019 program.

## **VI. Chemistry Seminar Program**

The Chemistry Department Seminar program consists, in part, of invited speakers and student seminars. The visitors from graduate schools are a crucial part of our seminar program and very beneficial to our students. Time is provided for our students to meet with each visitor and to discuss graduate school opportunities. The list of visitors and their seminar topics are listed below along with our student seminars.

### **SEMINAR SPEAKERS FOR FALL 2019**

Professor Song Lin, Department of Chemistry and Chemical Biology, Cornell University  
Amping Up Organic Synthesis with Electricity: An Electrocatalytic Approach to Reaction  
Discovery

Professor Davoud Mozhdeli, Department of Chemistry, Syracuse University  
Harnessing the Power of Post-Translational Modifications for Bioinspired Materials Science

Professor John Swierk, Department of Chemistry, Binghamton University  
How do we actually make bonds? Understanding a photoredox reaction

Professor Jacob Goldberg, Department of Chemistry, Colgate University  
Activatable Probes for Mobile Zinc and New Zinc Neurobiology

Professor Matthew Liptak, Department of Chemistry, University of Vermont



Birth and Death of Metal Tetrapyrroles

**SEMINAR SPEAKERS FOR SPRING 2020**

Dr. Juan Caleron, Department of Physiology and Biochemistry, Faculty of Medicine,  
University of Antioquia, Medellin, Colombia  
From Cell Biology to Translational Research in Muscles and Neurosciences

**STUDENT SEMINARS FOR SPRING 2020**

**VII. 2020 Chemistry Major Graduates – 3 graduates**

B/S: Aaron Charlack

Bianka Hernandez

B/A: Eric McNair

**Biochemistry Major Graduates – 2 graduates**

Alex Hofler

Mecca Wright

**2020 Chemistry Minor Graduates – 13 graduates**

Matthew Blanchard

Brennan Bruschini

Theodore Bruschini

Logan Drake

Katherine Garcia Gil

Anthony Guerriero

Kylee Lashomb

Nicholas Lovera

Judith Par

Jeffrey Tyler Schulz

Ethan Snider

Enibokun Uzamere

Arielle Wolter