

Consortium Connections

Connecting campuses to promote excellence in science and mathematics

September 2023

Founded by the Pew Charitable Trusts in 1988

Vol. 16 No. 2

Mark your calendar for upcoming events (see sections in newsletter for more information)

- Sept. 30, 2023 Application deadline for the Undergraduate Research Symposia (<https://mathsciconsortium.org/>). *Because their term begins later, University of Chicago students have until October 7 to apply*
- Nov. 3-4, 2023 Physical Sciences, Mathematics, and Computer Science Symposium in Chicago
- Nov. 10-11, 2023 Biological Sciences and Psychology Symposium in St. Louis
- July 14-16, 2024 (tentative) Early Career Workshop for Faculty Success

Part-time Position Available

Director, Midstates Consortium for Math and Science

The current Midstates director, Ed Hansen, will complete his four-year term at the end of June 2024. As a result the Midstates Consortium for Math and Science (<https://mathsciconsortium.org>) invites applications for the part-time position of **Director**, starting July 1, 2024. The Midstates director promotes the consortium's mission of improving undergraduate science and mathematics education by providing high-quality and flexible professional development opportunities for students and faculty at the twelve member institutions. The director works with campus representatives to sustain existing programs and develop new ones, and organizes and supervises the program office, which includes a part-time program assistant hired by the director. The director workload averages 12 hours per week annually, with the most significant time commitment happening in the fall, associated with organizing and implementing two undergraduate research symposia. Other responsibilities include proposing and managing the consortium budget, facilitating faculty development workshops, chairing an annual executive meeting of campus representatives, and preparing quarterly newsletters and annual reports.

COMMENTS FROM THE DIRECTOR

Useful but underutilized funding available

This fall is the second year of our return to in-person activities. We managed to keep going through the pandemic and last year our flagship programs, the undergraduate research symposia and the faculty development workshops, bounced back to their pre-pandemic levels. However, two of our established programs have not rebounded even though they offer important and timely resources to our members:

Speakers Series The consortium will pay the expenses for a speaker from one of our member institutions who gives a talk at another of our member institutions. Between the two research universities and ten liberal arts schools there is a large pool of talent to select from. With inflationary pressures putting a strain on seminar budgets this should be a useful and well used program. We are in the process of updating the speakers' directory. In the meanwhile, if you know of someone you would like to invite you can go directly to our speaker request form at <https://www.mathsciconsortium.org/speakers/speaker-request-form/>

Short-Term Consultations The consortium will give small grants (typically several hundred dollars) to support collaborative projects between members of our member institutions. This money can be used for a range

of activities that involve the sharing of expertise, information, instrumentation or facilities among faculty members of the consortium. We are working on creating a list of people interested in collaborations. However for now, if you have a particular collaboration in mind you can go directly to the collaborators request form at <https://www.mathsciconsortium.org/collaborations/collaboration-request-form/>

We are always interested in ways the consortium can help its members improve undergraduate science and mathematics education. If you have projects in mind or suggestions, email me, Ed Hansen, at midstatesdirector@gmail.com.

ACTIVITIES FROM THE SPRING AND SUMMER OF 2023

2023 Mid-Career Workshop



A small, but mighty group of seven faculty participated in the Mid-Career Workshop at Gustavus Adolphus College from June 15-17. The workshop was facilitated by Dr. Pamela Kittelson. Participants traveled from Carthage College, Colorado College, Lawrence University and Macalester College to discuss strategies for revitalizing their professional trajectories. After arriving for dinner, the Biochemistry, Biology, Chemistry, Environmental Science, Physics and Statistics faculty focused on the challenges faced by mid-career teacher-scholars. Participants spent the next day articulating their goals, intentions and pathways for the next 3 to 5 years. After thoughtful cycles of discussion, reflection, writing and feedback, individuals developed a personal plan aimed at achieving their goals for research, service and/or teaching. Later, each person shared their plan for consideration and constructive feedback from the group. Faculty members discussed creative ways to carve out time for one's preferred goals such as maintaining writing

blocks early in the day (the golden hour), finding sacrosanct locations or calendar slots to focus on preferred activities, or renewing and building network partners. Participants reported feeling optimistic, energized and excited about acting on their plans. The next Mid-Career Faculty Workshop will occur in summer 2025.

2023 Early Career Workshop



The 2023 Early Career Workshop was held in person on July 14-16 at Gustavus Adolphus College. The workshop had 13 participants from 6 member schools and was facilitated by Scott Bur and Brandy Russell from Gustavus Adolphus College. Participants used a combination of peer coaching and deep-listening activities to help them develop an individualized strategic action plan to serve as a guide for personal, meaningful and rewarding career development. Participants ranked the experience as very good or excellent with many of them expressing particular appreciation for the chance to reflect on and develop a longer-term strategic action plan. The 2024 Early Career Workshop is tentatively scheduled for July 12-14.

2022-2023 Annual Executive Committee Meeting

The Executive Committee held a hybrid meeting at the Courtyard by Marriot hotel near the Minneapolis-St Paul Airport, Minnesota, on April 29, 2023. Fourteen people attended the meeting in person or virtually, including campus representatives from 11 of our 12 member institutions as well as Midstates Director (Ed Hansen) and Administrative Assistant (Ann Schutt). The following is a summary of key points of the meeting. Full minutes are available on request.

The meeting began with a review of Midstates events from the program year to date. We held in-person undergraduate research symposia in the fall of 2022 for the first time since 2019. The Physical Sciences, Math and Computer Science symposium at Washington University in St. Louis had a total of 88 student presenters and 20 faculty attendees, while the Biological Sciences and Psychology symposium at the University of Chicago had a total of 121 student presenters and 18 faculty attendees. It was noted that these figures were in line with the pre-pandemic attendance for these events. We had one in-person short-term collaboration in 2022, in which Laura Listenberger from St. Olaf College brought in Erin Weber from the Carthage College chemistry department to speak at the workshop “Social Justice in Biochemistry”. The initial redesign of our website was completed and it went public in January; we continue to make refinements.

We then reviewed our budgets for the last few years and noted that despite inflation, we have managed to end the fiscal years with small surpluses. We approved a budget for the 2023-2024 fiscal year which anticipates expenditures of \$158,190 against an estimated income of \$153,400. The projected shortfall of \$3,790 can easily be covered by the carry over funds on hand. The executive committee approved a number of changes for the 2023-2024 program year including :

- A commitment to funding both virtual and in person workshops on topics suggested by members of the consortium for which we will launch a call for proposals
- New \$200 stipends for up to two faculty members from each school who travel to and attend one of the undergraduate research symposia
- At each symposium we will plan opportunities for faculty members to meet each other
- Towards the end of the summer we will begin to approach another school about joining the consortium

2023 JANET ANDERSEN LECTURE AWARD WINNERS

Professor Janet Andersen was a faculty member in the Hope College Mathematics Department and served enthusiastically as the Midstates Consortium Director for five years before her life ended tragically in an automobile accident. To honor Janet Andersen's dedication and commitment to her work with students and faculty in her teaching, research and service to the Consortium, the Janet Andersen Lecture Award was established in 2008. The Midstates Consortium chooses two faculty members from among our member institutions each year who are exceptional mentors for undergraduate research students and are engaged and skilled teachers. The winners present the Janet Andersen Lecture during an undergraduate research symposium during the fall.



If you wish to nominate someone for a Janet Andersen lecture award send a CV and a letter of nomination outlining their qualifications for the award to midstatesdirector@gmail.com.

2023 Biological Sciences and Psychology Janet Andersen Awardee



Dr. Devavani Chatterjea
Professor of Biology
Macalester College

The letter nominating Dr. Chatterjea for the award emphasized her outstanding record in mentoring students and her impact on STEM education within the larger Macalester College community. Her scholarship occurs at the intersection of immunology, neuroscience and public health with a special emphasis on the environmental drivers of chronic pain. She has had an exceptionally prolific research program with over 100 research students mentored at Macalester in the last sixteen years. Her publication and fund raising record is remarkable, and especially impressive is her success at mentoring students from groups historically marginalized in STEM fields. She is known as an inspirational teacher who puts the welfare of her students front and center. Particularly

relevant to the Janet Andersen Award is the broad range of interdisciplinary courses she has developed and taught. Dr. Chatterjea is known for her transformative leadership in promoting diversity, equity and inclusion throughout the STEM program in Macalester and beyond by example and informal discussions, as well as formal workshops and presentations.

2023 Physical Sciences, Mathematics and Computer Science Janet Andersen Awardee



Dr. Amy Dounay
Associate Professor of Chemistry and Biochemistry
Colorado College

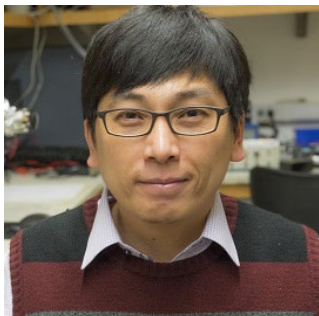
The letter nominating Dr. Dounay for the award emphasized her teaching, research, and service to the larger professional community. According to her nomination letter “in the end one of the main reasons she is skilled and engaged as a teacher is that she really cares”. This compassionate concern appears to characterize all aspects of her work. Before teaching she worked on drug design as a medicinal chemist at a large pharmaceutical company. In her academic research she has focused on the design and synthesis of new medicines for neglected tropical diseases or antibiotic-resistant infections, which many pharmaceutical companies do not find

profitable enough to research. This aspect of her work is particularly attractive to both her undergraduate research students and students in her courses. She is known for implementing innovative initiatives in her courses including research-based laboratory projects focused on drug discovery and green chemistry. It is clear from the nomination letter and her CV that she is an exceptional mentor for undergraduate research students, a large proportion of whom go on to graduate school. Her CV has nearly a full page highlighting her diverse record of leadership and service to the chemistry professional community including her service as the Chair of the Gordon Research Seminar in Medicinal Chemistry.

UPCOMING EVENTS

Undergraduate Research Symposium in the Physical Sciences, Mathematics, and Computer Science, The University of Chicago, November 3-4, 2023

The 2023 Physical Sciences, Mathematics and Computer Science symposium will be held at the University of Chicago with accommodations at the Best Western Hyde Park hotel, located near the University of Chicago campus. The site of the Friday lectures and banquet will be announced closer to the meeting. The Saturday poster presentations and oral sessions will be held in the Gordon Center for Integrated Science and in the lecture rooms of the adjacent Kersten Physics Teaching Center. The Friday program, preceded by a University of Chicago Graduate School Seminar for curious undergraduates, from 1:30 to 4:30, will include the Janet Andersen Lecture by Dr. Amy Dounay, Associate Professor of Chemistry and Biochemistry, Colorado College, and a group dinner followed by a keynote talk from Dr. Cheng Chin of the Physics Department at the University of Chicago. The Saturday program will feature multiple sessions of student podium and poster presentations throughout the day, and lunch on campus. **Application deadline September 30** (Because the University of Chicago starts their term later than our other schools, for their students the deadline for applications is Oct 7), see [application](http://mathsciconsortium.org) at



*Dr. Chin Cheng, University of Chicago Keynote Speaker
Friday Evening*

<http://mathsciconsortium.org>.

Undergraduate Research Symposium in the Biological Sciences and Psychology, Washington University in St. Louis, November 10-11, 2023



*Lobby of the Eric P.
Newman Education Center*

The 2023 Biological Sciences and Psychology meeting will be held at Washington University in St. Louis, with accommodations at the DoubleTree by Hilton. The symposium will take place at the Eric P. Newman Education Center (EPNEC) on the Medical Campus of Washington University. The Friday program will include a banquet dinner and the Janet Andersen Lecture from Dr. Devavani Chatterjea, Professor of Biology, Macalester College, and a keynote speaker from Washington University. The Saturday program will feature poster and oral presentations, and a panel discussion with graduate students about applications to and life at graduate school. **Application deadline September 30** (Because the University of Chicago starts their term later than our other schools, for their students the deadline for applications is Oct 7), see [application](http://mathsciconsortium.org) at

Early Career Faculty Development Workshop to be offered in 2024



Early Career Workshop, 2023

The **Early Career Workshop** is open to early career faculty, post-docs and senior graduate students, and will follow the format of our successful early career workshops from previous years. Peer coaching and deep-listening experiences will help participants structure an individualized strategic action plan that will be a guide for personal, meaningful and rewarding career development. The workshop is tentatively planned for July 12-14, 2024. Check the Midstates [webpage](#) and look for updates from your campus representative for details about the workshop and the application process.

WELCOME TO NEW MIDSTATES FACULTY REPRESENTATIVES

It is the faculty representatives from each member institution who keep the organization running. Among other things, they communicate with their colleagues about Midstates programs, communicate with the Midstates office about the needs and concerns of faculty and students on their campus, organize their school's participation in the URS, including the selection of students and recruitment of chaperones, and serve on the executive committee which makes the decisions and does much of the work of the consortium. We are happy to welcome four new talented representatives to our organization and to thank them for agreeing to serve. We look forward to working with you to promote undergraduate education in the sciences and math in the year to come!

Gustavus Adolphus College



Dr. Pamela Kittelson
Professor in Biology and Environmental Studies
Advisor & Director in Fellowship Office
Professor in Environment Geography and Earth

University of Chicago Biological Sciences and Psychology



Dr. Navneet Bhasin
Senior Lecturer
Biological Sciences
Collegiate Division

Washington University in St. Louis Biological Sciences and Psychology



Anthony Smith
Assistant Dean & Academic Coordinator,
College of Arts & Sciences
PreHealth Advisor

Washington University in St. Louis Physical Sciences, Math and Computer Science



Richard Mabbs
Associate Professor of Chemistry
Director of Undergraduate Studies in Chemistry