

Zooming in on GSA's Past Year

FY21 Annual Program Report

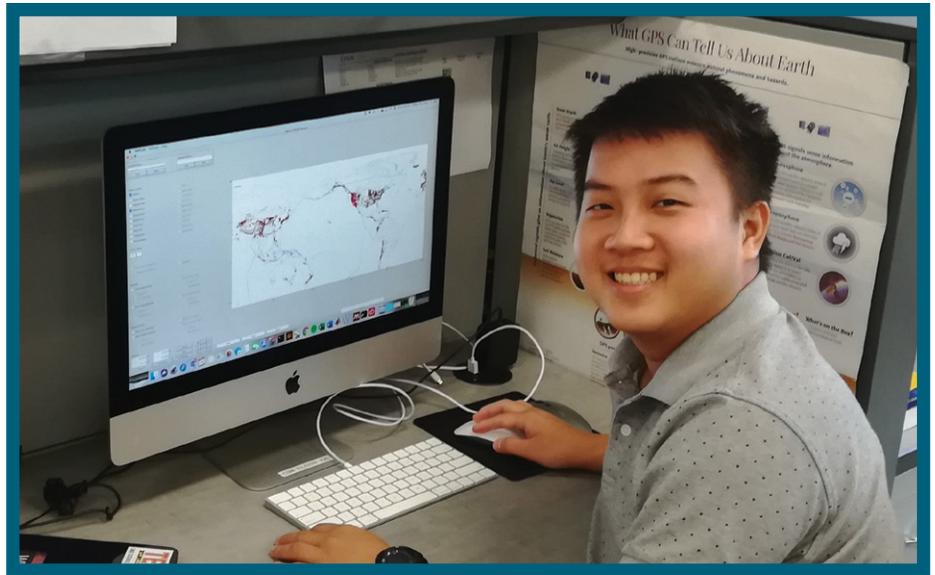
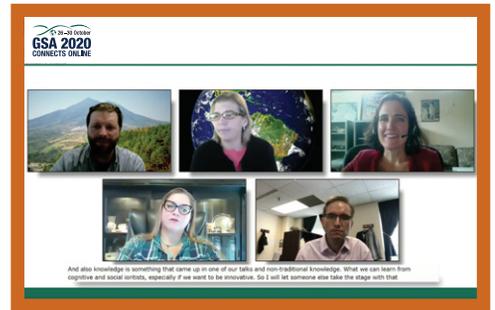


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We are pleased to submit this report of GSA's fiscal year 2021 program activities, accomplishments, challenges, and innovations. Our mission is to provide the best service possible for you and your profession.

GSA's financial statements will be included in the report pdf on GSA's website when the FY21 audit is complete.

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Opposite, clockwise from top: Quentin Burgess, a J. David Lowell Field Camp Scholarship awardee attended the University of Nevada, Reno's, virtual field camp; a Pardee Symposia session from GSA 2020 Connects Online; Chong Jeng Hann, a graduate student research grant recipient; Wes Ward and Dawn Wright in conversation during GSA's Bromery Awardees Series webinar; the Zeiss grant recipient, Tshering Lama Sherpa; Jazmin Helzer, a Geoscientists-in-the-Parks participant in the field; the 2020 Randolph W. "Bill" and Cecile T. Bromery Award recipient, Martha Gilmore.

Our Mission

To advance geoscience research and discovery, service to society, stewardship of Earth, and the geosciences profession.

Our Vision

To be the premier geological society supporting the global community in scientific discovery, communication, and application of geoscience knowledge.

Our Values

Collaboration
Scholarship
Accountability
Stewardship
Integrity
Respect
Relevance
Inclusion

Stay Connected to GSA

  Follow GSA @geosociety on **Twitter** and **Instagram**.

 **Facebook**—Join GSA fans worldwide at www.facebook.com/GSA.1888.

 **YouTube**—Learn more about GSA and careers in the geosciences at www.youtube.com/user/geosociety.

 **LinkedIn**—Network and stay connected to your professional peers at <https://www.linkedin.com/groups/1298547/>.

A Year of Renewal, Exploration, and Affirming Values

The members of the Geological Society of America (GSA) have had a long and challenging year. I hope you came through it well. This year we faced a twin set of pandemics. The first was COVID-19 and the second was an acute awareness of and reflection on systematic racism in our country. Both were met by the membership, leadership, and the professional staff of GSA, with members, leaders, and staff emerging stronger and more vital than before. We had numerous opportunities to make the organization stronger, and I hope that these will be felt for a long time.

THE IMPACT OF COVID-19

The workings of GSA had to change almost completely owing to the dangers of the COVID-19 pandemic. We canceled Section Meetings, changed the annual meeting, which was to have been held in Montréal, to an online format, and continued to modify our spring 2021 Section Meetings as dictated by local and national conditions. Did the lack of in-person meetings kill off meetings? No. Although somewhat smaller, GSA Connects Online 2020 went well. There were a few growing and adjustment pains, of course, but overall, the experience was good for our members and students and increased the presence of international participants. The technical challenges were there, but no worse than a projectionist dropping a carousel of slides or a speaker talking much longer than allowed.

The other enormous impact was on GSA operations. The headquarters building in Boulder was mainly empty, and staff worked remotely. This was a trend that was already starting with some folks but greatly accelerated. The staff adjusted well and without incident, and business mainly ran as expected. But a lot of GSA is done by volunteer committee chairs and members, continuing an ongoing trend, and this work moved to 100% online. The adjustment was amazing, and all the work of the Society got done. Helping with this was the training most folks got from their work environments on working online and remotely.

Although it was a somewhat confusing year for meetings, our scholarly publications shined brightly for our members. Submissions were up this year across the board, and the profile of our journals gained significantly (as measured in independently compiled impact factors). As a big supporter of geologic mapping, I was delighted to see a submission and publication process using *Geosphere* appear for membership.

REDOUBLING OUR EFFORTS ON DIVERSITY, EQUITY, AND INCLUSION

GSA has been involved in diversity, equity, and inclusion (DEI) efforts for almost 40 years. Last spring's events, starting with the murder of George Floyd, made us rethink and amplify our efforts. Executive Director Vicki McConnell and I organized the annual leadership retreat in August to focus on DEI. We engaged a professional facilitator, Nita Mosby Tyler of The Equity Project, to lead a group of 35 geoscientists through a workshop. Out of this effort, we established new goals and evaluated our existing processes.

There were several action items defined at the workshop, and we have nearly completed all of them. First, we had a working group of the GSA Council, the voice of membership in our leadership, define goals and definitions for our efforts. This group came up with several recommendations the rest of GSA leadership embraced. This included embedding DEI in GSA's governance structure and operations; institutionalizing culture change and responsibility for action, beginning with GSA leaders; enhancing orientation, training, and expectations for GSA elected and appointed leaders, including the GSA Executive Committee and Council, Section and Division leaders, and editors; increasing funding for diversity staff, programs, and service-leadership, including funding a full-time diversity officer; redoubling our efforts to make meetings and publications diverse and inclusive; charging the Annual Program Committee and other applicable committees with promoting diversity among conveners and presenters when organizing panels, keynotes, and other invitational sessions; forming a standing GSA DEI advisory group to help advise GSA staff, Council, committees, leaders, and other groups; and cultivating diversity among future GSA leaders. GSA unanimously adopted these recommendations during its spring council meeting.

Second, we formed an ad hoc committee to evaluate the awarding of fellowships by GSA. The group did not find any disparities between our membership profile and the awarding of fellowships with any basis on race or background. Still, it did recommend changes to ensure that future Fellows are likewise fairly chosen. Again, this was adopted unanimously at the Council meeting.

Last, we are looking at how GSA awards its medals of distinction and recruits leadership at all levels. This is being done by another ad hoc committee, which reported its results over the summer, to be discussed and implemented at the Council meeting this fall.

HELPING MOVE INTO THE ONLINE WORLD

GSA firmly moved to the online world last year with its meetings. As president, I had hoped to foster moving more of the Society's publication activities online and to promote GSA to the stature of defining standards for data reporting and data products related to the earth sciences. I tried to challenge the Divisions to take intellectual ownership of publication standards for their domains. Unfortunately, this effort fell short. The other events last year took precedence in keeping our meeting afloat and our organization moving toward fairness and fostering DEI. I will try to take up this effort by working with GSA leadership in the future.

There was stormy weather this year, but the GSA flotilla of members, leaders, and staff navigated the heavy seas and treacherous shoals with alacrity and aplomb. We took the required steps to create a new and better course to follow over the next few years.



Doug Walker,
GSA President
July 2020–June 2021

Dear friends, colleagues, and all GSA members:

I think that President Walker has summarized our conflicts, challenges, and successes of the past year very well in his letter. I will add some context to some of our actions. Please take a moment to read through the entire report for more detail on our programs and our work this past year, from geoscience policy to publications.

Certainly, one of the primary aspects of our actions was in response to listening, really listening, to our members and the geoscience community about equity and accessibility of our science. You can find GSA's commitment statements to diversity, equity, and inclusion (DEI) in our diversity webpage (<https://www.geosociety.org/diversity.aspx>) as well as multiple resources and references for your use. We are making a sincere and genuine effort to increase DEI in positive and productive ways both internally at GSA and throughout the geoscience community. Here are two examples: GSA staff assembled a pod participating in the Unlearning Racism in Geoscience (URGE) program to develop recommendations for me that would bolster justice, equity, diversity and inclusion (JEDI) into the workplace culture for staff and examined how staff at professional societies can help counteract the effects of racism. GSA is a co-principal investigator on a National Science Foundation research coordination network project: Geosciences Associated Societies Committed to Embracing and Normalizing Diversity Research Coordination Network (Geosciences ASCEND RCN). This will be an action-based network dedicated to advancing and accelerating cultural change in the geosciences to achieve broad inclusion of diverse identities. This is a four-year project, and we are just beginning. We are working with many of GSA's

Associated Societies to initiate changes across the geosciences.

We continue to focus on implementing the Decadal Strategic Plan adopted in 2019. Covid-19 response slowed down some of our task implementation and forced us to re-prioritize other tasks. Fortunately, the plan is flexible enough to accommodate those changes. Two areas that had already been on our task list but required us to "pivot" in response to the pandemics were (1) increasing our professional development offerings via webinars, and (2) exploring options for more virtual meetings venues. While we didn't expect to have to drop everything to make those changes, we did, and have been very successful. We have learned and adjusted. These activities are integral to our Center for Professional Excellence as we work to provide you, the GSA members, the information, tools, and skills to thrive in your career.

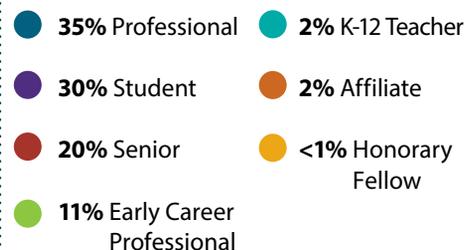
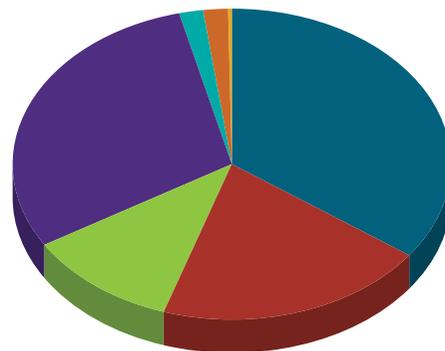
Each year I end my letter with a thank you to the amazing GSA staff and I certainly want to extend kudos again this year. As with all of you, GSA staff has had to deal with adjusting to new work environments, pandemic uncertainties including illness and losses, and family crises, but they never lost sight of the mission of GSA to serve the geosciences and the geoscientists. Please join me in applauding each one of them for their hard work, innovation, and fortitude.



Vicki S. McConnell,
GSA Executive Director

Membership Demographics

Membership as of 31 Dec. 2020 = 20,075



GSA members represent more than 27 scientific specialties and interests and have the option to belong to one or more of GSA's 22 scientific Divisions, six regional Sections, and GSA International.

Did you know?

- Lifetime Membership is now an option—Support GSA and receive membership benefits for life.
- Individuals in non-high-income countries/territories qualify for reduced membership dues.
- The GSA/GSA Foundation Membership Assistance Program and Fund enables those who cannot afford the cost of membership—or who experience difficulty in transferring funds from their country to the USA—to become members.
- GSA members can receive 15%* off dues if they renew their 2022 membership before 1 November.

* applies to those in high-income country/territories

Communication

PRESS RELEASES

Supporting its strategic aspiration to link geoscience to society, GSA engages in media relations activities to enlarge the footprint of member research and publications. GSA issued 58 press releases in FY21, highlighting peer-reviewed research published in the Society's top-rated, geoscience journals, presenting new findings from GSA meetings, and providing Society news. These are distributed to an extensive list of science journalists and posted on the American Association for the Advancement of Science (AAAS) online science news service, EurekAlert!. In addition, GSA encourages and assists public information officers at universities and government agencies to write their own releases about their GSA-published research or presenting authors and then augments distribution of those releases for wider reach. GSA invites journalists to attend annual and Section Meetings with complimentary registration and hosted an online newsroom at the GSA 2020 Connects Online meeting. Go to www.geosociety.org, click on the "News" tab, and select "GSA in the News" to read some of the latest coverage.

SCIENCE COMMUNICATION FELLOWSHIP



Rebecca Dzombak served as GSA's 2020–2021 Science Communication Fellow. Accomplishments from her term include crafting press releases on a variety of topics from microplastics and PFAS chemicals to planetary science and the origins of life. Rebecca helped advance GSA's diversity and equity goals by compiling a GSA Anti-Racism Resource Guide (<https://www.geosociety.org/GSA/About/Diversity/GSA/About/reading.aspx>) for members and by contributing numerous blogs on the Society's guest blog *Speaking*

MEMBER BENEFITS INCLUDE:

- Communicate and collaborate with fellow members in GSA's online member community and discussion forum.

of Geoscience highlighting the work of underrepresented members of our community. She also worked closely with several GSA graduate student research grant recipients, helping them translate their research for non-technical audiences.

SPEAKING OF GEOSCIENCE™

In FY21, GSA posted 23 blogs on this channel, sharing ideas and dissecting issues ranging from geoscience policy to climate change to the state of geoscience education during the COVID-19 pandemic. In FY21, *Speaking of Geoscience* had a readership of more than 1,900 visitors per month, with a total of 31,210 blog views.

"GSA membership provides an opportunity to connect, reconnect, get inspired, and inspire others."

WEBSITE

Fiscal year 2021 brought continued investment in our website and online presence as a key tool to connect with, inform, and empower our members and the general public.

Most noticeably, we redesigned the GSA homepage to better communicate our values and mission, to engage new visitors and potential members more effectively, and to provide accessible calls to action and updated news about the society and your programs. We also modernized our job board and added dynamic search and filter features. Similarly, we simplified and renovated our Scientists in Parks pages—some of our most-visited resources this year.

In line with organizational priorities, we have leveraged our main site as a tool to communicate ongoing diversity, equity, and inclusion efforts and to archive our progress on these important initiatives.

Beyond our main site, we developed a new theme for our scientific Divisions' sites that offers a modern feel and closer ties to GSA's brand.

GSA web traffic is up more than 14% year-over-year. Visit us at <https://www.geosociety.org>.

Top website page views in FY2021

1. GSA Homepage (139k)
2. Geologic Time Scale (138k)

FY21 HIGHLIGHTS:

- 116,995 issues of *GSA Today* sent
- 23 blogs posted on GSA's blog *Speaking of Geoscience*™
- The redesigned website homepage had 139K page views

3. Scientists in Parks (96k)
4. GSA Job Board (66k)
5. Field Experiences Home (43k)

COMMUNICATING THE VALUE OF GSA TO NEW MEMBERS

A new member email campaign was created to welcome and educate those joining the Society. The series includes nine messages about the programs and member benefits at GSA.

EARTH TO ECONOMY: ACCELERATING INNOVATION FOR CLIMATE CHANGE SOLUTIONS AND TRANSLATIONAL RESEARCH

With a grant from the National Science Foundation (NSF), GSA gathered input from the geoscience community to identify bold and creative ideas for translating scientific research to climate change solutions that can be implemented within a two- to three-year timeframe.

GSA used email and multiple social media platforms to inform the public about this opportunity and solicit feedback from its broad membership during the two-week comment period. A web platform was created to submit text and video answers to questions designed to elicit requested information. GSA also conducted targeted outreach to ensure the project received responses from students, early career professionals, groups underrepresented in the geosciences, multiple sub-disciplines and other stakeholders who might not be GSA members. Additionally online brainstorming sessions provided opportunities for in-person interactions and idea development. The final report can be found at <https://www.geosociety.org/climate-solutions>.

Publications

GIVING VOICE TO GSA VALUES

GSA journals and books offer geoscientists across the globe the opportunity to publish peer-reviewed cutting-edge and authoritative science. Actively seeking diversity among editors, authors, reviewers, and topics, GSA publications provide a respectful and inclusive experience as we work together to deliver relevant, collaborative scholarship with a foundation in scientific accountability and Earth stewardship. One hundred and four countries and 120 disciplines and subdisciplines were reflected in the 7,638 pages published by GSA throughout fiscal year 2021.

“I am very grateful for the access to peer reviewed literature and the chance to connect with fellow researchers.”

BUILDING COMMUNITY THROUGH PUBLICATIONS

In March 2021, the GSA member discount on publication and open-access fees was increased, and GSA members receive free access to *Geology* online. Student, early career, and K–12 teacher members also get free access to *GSA Bulletin* online. *Geosphere* is in its fourth year of gold open access, and GSA participates with the gold open access community journal, *Lithosphere*, published with GSA’s colleagues at GeoScienceWorld. A variety of content on relevant subjects was made freely available in the GSA Store

during FY21, including resources on the geology of Canada, pioneering women geologists, and impact topics. Hundreds of previously unavailable or out-of-print publications, such as the complete suite of Decade of North American Geology volumes and maps, are easily discoverable and affordable in the GSA Store.

For the past eight years, GSA science editors have offered a free workshop for students and early career professionals that explains how to prepare and submit research to scholarly journals and the importance of contributing as a reviewer. In October 2020, this workshop was held virtually, making it more accessible and doubling the number of attendees.

Publication policies, such as the ethical guidelines, created to support a fair and open publishing process, are examined and updated annually as needed. A newly formalized name-change policy, implemented this year, states, “GSA supports the right of authors to update the name

FY21 HIGHLIGHTS:

- GSA member discount on publication and open-access fees was increased
- 18 science editors • 144 associate editors & editorial board members • 2,263 reviewers • 3,195 authors

associated with their publications because of life changes including (but not limited to) marriage, divorce, gender transition, religious conversion, or adoption of a new name for personal reasons, and GSA staff will work with individuals to accommodate any such change on request.”

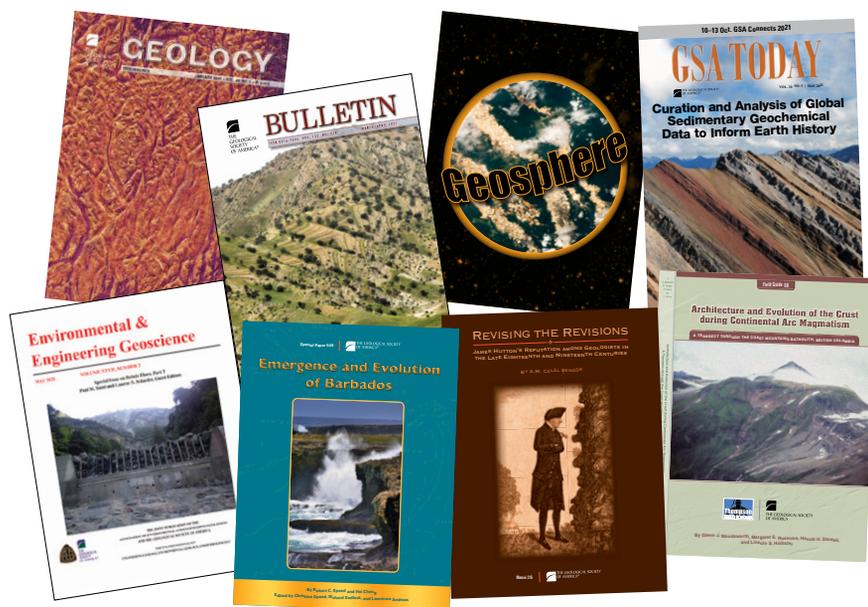
Thank you to everyone who worked with us to uphold GSA values and made FY21 another successful year for publications.

MEMBER BENEFITS INCLUDE:

- All members get free online *Geology*. Student and early career professional members also get free online *GSA Bulletin*.
- Supercharge your research with GSA Millennium Edition of *Geofacets*—

a web-based tool to access thousands of georeferenced maps—included with membership.

- Subscribe to premier publications at member-only rates when you renew your 2022 membership.



Geology

2021 impact factor: 5.399;
five-year: 6.079

GSA Bulletin

2021 impact factor: 4.799;
five-year: 5.197

Geosphere

2021 impact factor: 3.298;
five-year: 3.571

GSA Today

100% open access;
Mails free to GSA members

Environmental and Engineering Geoscience

Published jointly with AEG
2021 impact factor: 0.736;
five-year: 0.758

Special Papers

Three volumes in FY21;
In Web of Science Group
Book Citation Index

Memoirs

One volume in FY21;
In Web of Science Group
Book Citation Index

Field Guides

Two volumes in FY21

Education & Outreach

EXPLORE CAREERS

GeoCareers & Networking

GSA 2020 Connects Online brought students the same programming they have enjoyed while in person, including the Early Career Panel, Networking Event, and the Women in Geology Panel. Additionally, six workshops were offered on cover letters, the Geoscience Workforce Outlook, creating a résumé for industry, an introduction to USAJOBS, creating a curriculum vitae, and creating a résumé for non-traditional employment. These workshops have all been added to GSA's growing webinar library (<https://www.geosociety.org/webinars>) as a resource for students.

Mentoring

GSA continued to offer an array of mentor programs in an online format. Each of the 2021 Section Meetings featured a Roy J. Shlemon Mentor Program in Applied Geoscience, John Mann Mentors in Applied Hydrogeology Program, and a career workshop that covered career planning and exploration along with résumé assistance. GSA 2020 Connects Online paired mentors and mentees for both drop-in mentoring and help with their résumés. Additionally, panels of geoscientists from a wide variety of careers were featured: industry, government, academia, and non-traditional career paths were covered. These panels provide a fantastic resource for students and are included in GSA's webinar library. Finally, throughout the year, GSA members had access to Mentoring365, a virtual three-month mentoring program.

"I really appreciated the mentor sessions. I learned so much and I valued the mentor's advice."

—Caleb DeAbreu

MEMBER BENEFITS INCLUDE:

- Student and early career professional members qualify for reduced membership and reduced Division dues. Student members get one free Division.
- Webinars, mentor programs, research grants, and more!

TRAVEL GRANTS AND SCHOLARSHIPS On To the Future Program (OTF)

Thirty-nine diverse students were selected to participate in 2020; they will join the 2021 OTF cohort at GSA Connects 2021 in Portland, Oregon.

Expanding Representation in the Geosciences Scholarships (ERG)

Six diverse undergraduate students were each provided a US\$1,500 scholarship, a GSA student membership, and full meeting registration for GSA Connects 2021.

Northeast Urban Travel Award

Six non-traditional students attending urban universities in GSA's Northeastern Section were provided financial assistance to attend the online 2021 Northeastern Section Meeting.

J. David Lowell Field Camp Scholarships

In May 2021, 16 undergraduate students were each provided US\$2,000 to attend the field camp of their choice. This year, Brunton gifted each awardee with a Brunton Compro Transit in a personalized leather case.

"Thank you so much for this scholarship! I am very grateful to GSA for the opportunity to go to field camp; thank you for helping me get there!" —Lauren Livers

FIELD AND RESEARCH OPPORTUNITIES

GeoCorps™ America and The National Park Service (NPS) Scientists in Parks (SIP) Program

GSA continued its longstanding partnerships with federal agencies to place students and early career professionals into enriching geoscience and interdisciplinary science projects in public lands. These programs received financial support from the GSA Foundation and Sally and Bob Newcomb.

GSA/ExxonMobil Field Camp Excellence Award

In May 2021, this US\$10,000 award went to James Madison University in recognition of its commitment to safety awareness, diversity, and technical excellence.

FY21 HIGHLIGHTS:

- Six GeoCareers webinars were offered at GSA 2020 Connects Online
- GSA's mentor programs engaged 1,315 mentees and 340 mentors.
- Six diverse undergraduate students were each provided an Expanding Representation in the Geosciences Scholarships (ERG)
- Sixteen J. David Lowell Field Camp Scholarships were awarded to 25% of people from underrepresented groups
- >140,000 hours of service were contributed by 187 GeoCorps & SIP participants at 114 public land sites
- US\$2,351 average graduate student research grant amount
- 14 AGeS2 proposals funded
- The deepest EarthCache™ was developed on Challenger Deep

Graduate Student Research Grants

GSA continued to support graduate-level research by using funds from GSA, the GSA Foundation, and a three-year (2020–2022) award from the National Science Foundation (NSF). The NSF award is aimed at supporting GSA's efforts to increase the level of diversity among the students who apply for and receive grants.

This material is based upon work supported by the National Science Foundation under grant no. 1949901.

AGeS2 (Awards for Geochronology Student Research 2) Program

As one of the AGeS2 partners, GSA played a role in increasing graduate student access

to geochronology data and techniques while also fostering new relationships between labs and other disciplines.

This material is based upon work supported by NSF under EAR-1759200, EAR-1759353, and EAR-1759201 awards to R.M. Flowers (University of Colorado Boulder), J.R. Arrowsmith (Arizona State University), and V. McConnell (GSA).

GSA/ZEISS Research Grant

This US\$10,000 research grant was provided to Tshering Lama Sherpa, a Ph.D. student at the University of Arizona, for a research proposal titled “Elucidating the tectonic history of the western Nepalese Himalaya using in-situ monazite petrochronology.”

The EarthCache™ Program

Some highlights of recent collaborations with Geocaching.com include encouraging the geocaching community to create a series of more than 70 EarthCache sites that teach lessons in

planetary geology; cross-publishing blog posts relating to planetary geology; and developing the deepest EarthCache site on earth, which lies at Challenger Deep within the Marianas Trench.

“As a young scientist, I can look to GSA members for advice and inspiration.”

PROFESSIONAL DEVELOPMENT Webinars

Six career-focused webinars were offered in collaboration with GSA’s scientific Divisions and Associated Societies, covering topics such as hydrogeology, GIS, professional licensure, graduate school, and leadership opportunities. More than 2,800 individuals viewed these webinars.

In early 2021, Dawn Wright, 2015 GSA Bromery Awardee and current chief scientist at the Environmental Systems Research Institute was the featured speaker in the first edition of the “Conversations with GSA’s Bromery

Awardees Series.” This webinar engaged 465 viewers.

Short Courses

GSA 2020 Connects Online and each Section Meeting offered short courses, which are taught by professional geoscientists and enable attendees to learn new topics, build skills, and network.

K–12 Education and Two-Year Colleges

GSA staff worked with member volunteers, GSA’s Education Committee, the National Earth Science Teachers Association (NESTA), and the Next Generation Science Standards–Earth and Space Science (NGSS-ESS) Working Group on offering a GeoTeach workshop for 20 educators at GSA 2020 Connects Online; planning a two-part “Virtual Contexts” workshop and various outreach events for GSA Connects 2021; submitting an educational activity to the 2021 American Geosciences Institute Earth Science Week calendar; and overhauling GSA’s K–12 webpages and online resources.

Student Advisory Council

Fiscal year (FY) 2021 chair Rebecca Taormina (Baylor University) reports that the Student Advisory Council (SAC) was busy working on a number of different initiatives over the past year.

After the annual business meeting (held during GSA 2020 Connects Online), members discussed how to help students find opportunities within GSA. As a result, FY21 SAC chair-elect Yueyi Che (University of California, Berkeley) created a survey on the topic of undergraduate research grants to find out who is taking advantage of the available funds and how students hear about them. Results of the survey were reported to GSA Council at their spring meeting and a follow-up article by Yueyi, FY21 past-chair Alexandra Nagurney (Virginia Tech) and Rebecca Taormina,

is published in this issue of *GSA Today* (p. 52).

Plans to better connect with students were difficult to implement due to COVID-19; however, SAC hosted its first virtual social hour with great success.

In May, members of SAC played a key role in GSA’s participation in NSF’s Earth to Economy: Accelerating Innovation for Climate Change Solutions and Translational Research project by facilitating online brainstorming sessions for students, early career professionals, and On To the Future program participants.

The SAC plans to continue its efforts to connect with and share geoscience opportunities with GSA student members in the coming year, beginning with GSA Connects 2021 in Portland, Oregon, USA.



Meetings

GSA CONNECTS ONLINE

In fiscal year 2021 (FY21), GSA re-branded the annual meeting to GSA 2020 Connects Online and hosted its first 100% online meeting in October 2020. There were more than 6,000 attendees with an increase in international attendees up to 17%. For the first time, four field trips ran 100% online and 17 short courses also were held online before the meeting. More than 50 companies, organizations, and universities exhibited.

Hundreds of volunteers participate yearly in the GSA annual meeting—from local organizing committee members and the Joint Technical Program Committee to the hundreds of session conveners from every geoscience discipline. There is something for everyone at the annual meeting.

“GSA is my primary professional home. It’s where I turn to for data, networking, and information.”

ONLINE SECTION MEETINGS

GSA Section Meetings are unique venues for interdisciplinary science and are an important hub for discussing and presenting current research. They provide an excellent opportunity for both professionals and students to attend and participate in technical sessions, field trips, and short courses close to home.

In 2021, GSA continued with hosting Section Meetings online due to the ongoing pandemic. The Northeastern Section kicked off the spring Section Meetings on

14–15 March and had 515 attendees. Southeastern was next, on 1–2 April, and had 376 attendees. They used a new online platform call Spatial Chat to allow for live networking. North-Central and South-Central held a joint meeting from 18–20 April with 294 attendees and also used Spatial Chat for their networking and business meeting. Finally, Cordilleran ran their meeting from 12–14 May with 391 attendees and, following Southeastern and the Joint Meeting, also used Spatial Chat for networking and as a poster hall for presenters to be available to chat and answer questions. The Rocky Mountain Section decided to postpone their 2021 meeting originally scheduled for Fort Collins, Colorado, moving it to 2023.

GSA PENROSE CONFERENCES AND THOMPSON FIELD FORUMS

GSA Penrose Conferences and Thompson Field Forums are GSA’s premiere small-group meeting and field-trip venues for collaborative research around the world. In FY21, GSA planned to host a Penrose Conference titled “The Geological

FY21 HIGHLIGHTS:

- The first 100% online annual meeting was held in October
- International attendance increased to 17%
- 786 GSA 2020 Connects Online short course participants
- More than 1,500 people attended the online spring Section Meetings

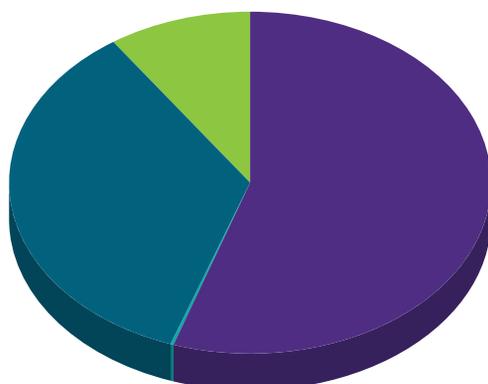
Fingerprints of Slow Earthquakes” on Santa Catalina Island, California. Due to the pandemic, the conveners pushed it back first to the summer of 2021 and then looked at the fall of 2021 but ultimately decided to host the conference 1–5 April 2022. A Thompson Field Forum has been awarded to run in spring/summer of FY22 and another Penrose Conference will also run in the spring/summer of FY22.

MEMBER BENEFITS INCLUDE:

- Members enjoy reduced meeting registration rates.
- Special opportunities for student members, including mentor luncheons and volunteer opportunities to offset the cost of attending GSA meetings.
- One complimentary Section affiliation is included with membership. Choose others when you renew to expand your geographic interests.
- Join one or more scientific Divisions when you renew your membership.

2020 Meeting Attendees

Total = 6,007



- 3,313 Student
- 2,105 Professional
- 577 Early Career Professional
- 12 K-12 Teacher

Renew your
GSA 2022
MEMBERSHIP

by 1 November
to save 15%* off dues

www.geosociety.org/members

* applies to those in high-income country/territories

Thank You FY2021 Sponsors

GSA and the GSA Foundation collaborate in a range of sponsorships supporting the annual meeting and more: Field camp excellence recognition, geoscience students' field camp attendance, diversity programs, and a number of in-kind services and member benefits are all made possible thanks to partners and sponsors. We are pleased to include companies in a more integrated way: Technical sessions, short courses, and field camps are searchable by

four different industry tracks, and applied geoscience sessions are part of the annual meeting. Additionally, representatives from our corporate partners have served on proposal teams, strategic planning task forces, and our careers program committee.

The combined efforts of business and science can make a greater difference than any organization alone. As GSA continues to convey its relevance to the

private sector, we look forward to expanding corporate relationships in a variety of industries. Together, we can foster the growth of current and future leaders in the geoscience community, engaging business and industry as a positive force to advance science, stewardship, and service.

We thank the companies and organizations that join us in the meaningful impacts of partnership.

ORGANIZATIONAL PARTNER



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GeoScienceWorld
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Geofacets



Interior Federal Credit Union



Journal of Geoscience Education



SOAR

Government Affairs and Public Policy

GSA HOSTS FIRST-EVER VIRTUAL GEOSCIENCE CONGRESSIONAL VISITS DAY

GSA provides opportunities for its members to meet with members of Congress and their staff by holding Geoscience Congressional Visits Days (GeoCVDs) and associated training sessions.

Due to the COVID-19 pandemic, the annual GeoCVD was held virtually for the first time. On 15–16 September 2020, more than 85 previous GeoCVD attendees responded to invitations to attend two webinars that provided legislative and budget updates and best practices for virtual meetings. Overall, GSA received positive feedback on its first virtual GeoCVD, with one of the participants reflecting, “I enjoyed getting fellow scientists involved for the first time and was fascinated to get a bit of the behind-the-scenes look at what is going on with some bills.”

GSA PROVIDES NEW RESOURCES TO HELP MEMBERS ENGAGE WITH POLICYMAKERS

GSA and other geoscience societies held a series of webinars to help members effectively engage in policy remotely:

- New Year, New Congress! What You Need to Know about Getting Involved.
- Concise & Memorable: Creating an Effective Policy One-Pager.

GSA also launched a new members-only online toolkit featuring the webinars, short videos, and other resources to help members start their involvement in policy: <https://www.geosociety.org/policy-toolkit>.

GSA LETTERS AND TESTIMONY

GSA submitted testimony requesting increased funding for the U.S. Geological Survey (USGS), National Science Foundation (NSF), and National Aeronautics and Space Administration (NASA) for fiscal year 2022.

Your Society is an active member of coalitions that submit testimony and letters in support of these and other geoscience agencies, including the Coalition for National Science Funding, the Coalition for Aerospace and Science, the USGS Coalition, the Energy Sciences Coalition, and the Task Force on American Innovation, during both the regular appropriations process and response to COVID-19.

GSA submitted letters to policymakers on topics such as

- priorities for the transition team;
- open access of scientific publications;
- climate change research needs; and
- visa and immigration policy.

“Becoming a member of GSA changed my life. From field camp to the halls of the U.S. Capitol, my journey as a professional earth scientist was made possible by the opportunities and the people of GSA.”

GSA SCIENCE POLICY FELLOW



Despite the COVID-19 pandemic, GSA continued its commitment to its science policy fellowship program and welcomed Connor Dacey to begin a one-year term as the “in-house” Fellow in August 2020, working as part of GSA’s Washington, D.C., office. Connor worked remotely throughout the entirety of his fellowship term, but that did not stop him from helping to bring science and scientists into the policy process. Connor helped organize and participate in the first virtual GeoCVD, worked with GSA’s Geology and Public Policy Committee, represented GSA at virtual coalition meetings, attended nearly 30 virtual hearings on relevant geoscience

legislation and programs, and helped develop resources for GSA members to engage in policy.

GSA-USGS CONGRESSIONAL SCIENCE FELLOW



Each year, GSA and the USGS jointly sponsor a geoscientist to spend a year working in the office of a member of Congress

or congressional committee. Charles Gertler began a one-year term in the office of Senator Edward Markey (D-MA) as the GSA-USGS Congressional Science Fellow in September 2020. Gertler earned his Ph.D. at MIT, where his doctoral work focused on the extratropical storm tracks and their response to climate changes. Gertler wrote, “My time on Capitol Hill so far has been spent entirely on Zoom, save one in-person press conference. In all this time, I have nonetheless drawn deeply on the lessons, skills, and ways of thinking I developed while training to become a scientist—understanding uncertainty, project iteration, navigating complexity, and structured analysis, to name a few—to contribute to the policy-making process.”

GSA ADOPTS SEVEN NEW AND UPDATED POSITION STATEMENTS

Over the past year, GSA Council adopted one new position statement: U.S. Flood Risk Management. Minor revisions to the following six position statements were also approved: Public Investment in Earth Science Research; Role of Government in Energy and Mineral Resources Research; Visas for Foreign Scientists and Students; Importance of Teaching Earth Science; Expanding and Improving Geoscience in Higher Education; and Diversity in the Geosciences Community.

FY21 HIGHLIGHTS:

- Geoscience Congressional Visits Days was held virtually for the first time
- An online toolkit was created to help members start their involvement in policy
- Two webinars were held to make policy more accessible remotely
- GSA adopted seven new and updated Position Statements

Geological Society of America Foundation

The mission of the Geological Society of America Foundation (GSF) is to develop and provide funds to support the goals and programs of the Geological Society of America. These funds are distributed according to the needs of the Society and in a manner consistent with the desire of the donors.

The responsibilities of the Foundation are twofold: (1) to support GSA programs, and (2) to preserve the Foundation's assets for the future.

2020–2021 HIGHLIGHTS

In a unique year of challenging, uncertain circumstances across the globe, donors to GSA through the Foundation made an extraordinary showing of support: in FY2021, GSAF received annual campaign contributions of nearly US\$1.5M from individual GSA members and corporations. There were 7,643 separate gifts at all levels, a testament to the dedication of steadfast supporters.

Surprisingly, 1,500 students humbled us with their determination to help in any way possible—an increase of almost 400 students from the prior year. We recognize the awareness in giving back that was demonstrated by this aptly named donor group: Tektonikos—Building the Future.



Invest in Future Geoscientists through Your Estate Plan (8 July 2021)

*This presentation about receiving support for the next generation of geoscientists. How that can be established in your will, or through an ever-growing list of charitable gifts, is a topic that can give back to our students that can say "no more" to the "no more" of the past.

There are many ways to donate to support the Geological Society of America. For Dr. Jack F. Shroder, one important way to ensure a future for aspiring geoscientists is to include GSA in his estate plan. The Foundation gratefully acknowledges the thoughtful and generous donation from Dr. Shroder and family. Through the Parker Legacy Circle, the Parker Legacy Circle is named in honor of Joseph F. Parker (1911–1998) in recognition of his 50-year career in the Pacific Northwest and his work on Grand Lake National Monument.

Dr. Jack F. Shroder has been a member of the Pacific Northwest section and during his time at the University of Washington, he has served in many leadership positions, including that of the Environmental & Engineering Geology Division, Treasurer of the Geosociety of America, and Director of the Pacific Northwest Section. He has also received several GSA awards, including the William H. John Distinguished Lifetime Award and the GSA Public Service Award.



We are deeply appreciative of those who include the Foundation in their estate plans; Legacy Circle gifts are vital to unrestricted funding. More than US\$400,000 in bequests were part of the year's contributions. It is inspiring that we continue hearing from donors making new legacy gift commitments. You may have read testimonials from some of them in our articles and updates divulging why this is such an important personal commitment.

Our spring mini-campaign focused on GSA's Greatest Needs, a vital fund to sustain the very programs that define GSA. We were delighted when a longtime donor offered a matching challenge to help raise more for this important source of funding—and even more surprised to see the friendly challenge raised a notch when a second donor added to the original match

Your dollars and impact doubled!



Your dollars and impact doubled! GSA's policy work is one example of an area that can benefit from the Greatest Needs fund. Science Policy Fellows Ryan Haupt (2019–2020) and Laura Szymanski (2018–2019),

amount. These two donors compelled many of you to give, knowing your dollars would be doubled; US\$74,000 was raised for Greatest Needs. We hope this will inspire others to help us put the power of a matching challenge to work in support of GSA.

While the world was on lockdown, the GSA Foundation sought creative ways to maintain contact and engagement with our donors, particularly in thanks for their continued generosity. We found virtual gatherings to be a welcomed, temporary substitute for our usually in-person visits, and early in FY21 we began a series of virtual chats and events that covered topics including research grants; diversity, equity, and inclusion; field camps; Greatest Needs; and policy.

We held a virtual conversation with the first GSA-Zeiss Research Award

Research Award Recipient (18 March 2021)

Enjoy this conversation between GSA/ZEISS 2020 Research Award recipient Tshering Zangmu Lama Sherpa and GSA Foundation Trustee Dr. John (Jack) F. Shroder, Jr., Special Assistant to the Dean of International Studies and Professor at the University of Nebraska at Omaha.



John (Jack) F. Shroder Jr. and Tshering Zangmu Lama Sherpa.

HOW MEMBERS CAN GET INVOLVED:

- Support students, research, and education through a contribution to the GSA Foundation when you renew your 2022 membership.
- Help others be part of our GSA member community. The Membership Assistance Program and Fund enables those who cannot afford the cost of membership, or who experience difficulty in transferring funds from their country to the USA, to become members. Support and spread the word.

recipient, Tshering Zangmu Lama Sherpa, interviewed by GSA Foundation Trustee Dr. John (Jack) F. Shroder Jr., who has spent much of his life working in the same region as the recipient. Links to these events, as well as extensive Community of Support blog interviews with past GSA Science Policy Fellows, Congressional Science Fellows, and Field Camp Scholarship recipients conducted throughout the year, can be found on GSAF's News & Events tab of the Foundation website (<https://gsa-foundation.org>).



Our Giving Tuesday campaign coincided with year-end giving and included a virtual chat series discussing the changing landscapes of field camps. The director of the country's longest-running field camp, which received the GSA Field Camp Excellence Award years ago, helped bring the dialogue full-circle from early history to current-day issues.

GSAF board vice-chair Jeff Oslund led the initial conversation with GSA past-president George Davis on GSA's commitment to supporting fieldwork. Miriam Barquero-Molina, director of University of

Missouri's geology field program, talked about the importance of in-person fieldwork, and we heard from a fully virtual Indiana University field camp attendee, Michael Hanna-Wilson.

Our donors remain committed to helping students obtain vital field experience, and in addition to the grants carried over from the previous year's J. David Lowell Field Camp Scholarship program (deferred due to COVID-19), we were able to fund another 16 scholarships for GSA student members to attend field camps.

In April, the GSA Foundation Board of Trustees announced the promotion of Debbie Marcinkowski to the newly created



position of executive director of the Foundation. This action combined the leadership position of president with the operational and strategic position of director of development.

The Foundation is pleased to help donors support GSA programs and priorities important to them. Looking forward, GSAF is eager to maintain the increased annual funding level achieved in FY21 and to work with GSA in identifying engaging and effective resource-building strategies. With your help we will shape a strong future for your Society.

We encourage every member to avail themselves of the opportunity to serve GSA and to support the Foundation in our combined efforts to ensure the dynamism and strength of the geosciences. Please visit the Foundation's website (<https://gsa-foundation.org>) for information regarding ways you can make a philanthropic impact for GSA and the geosciences.

Jeffrey Oslund, Chair of the Foundation Board of Trustees

Debra B. Marcinkowski, Executive Director of the GSA Foundation

Thank You GSA Volunteers!

Looking back each year at all the work we have done together and the goals we have accomplished, we are reminded that the "secret ingredient" in the success of our Society is the wealth of dedicated and hardworking members who give generously of their time and talents. From planning meetings, to editing journals, to reviewing grants and awards applications, to serving on committees, running our scientific Divisions, serving students as mentors and campus reps... the list goes on. A huge "thank you" goes out to all of them.

To members who are not currently active but who might like to engage more deeply with GSA, please know that there is a myriad of ways to further your personal goals as well as the aims of the Society through service. We invite you to join a scientific Division, self-nominate for a committee, or let us know how you'd like to get involved. Email gsaservice@geosociety.org with questions.

Renew your
GSA 2022
MEMBERSHIP

by 1 November
to save 15%* off dues

www.geosociety.org/members

* applies to those in high-income country/territories

Diversity, Inclusion, and Ethics

As a premier professional society, GSA has taken concrete steps to improve diversity, inclusion, and ethics within its ranks. Examples include investing in On To the Future, adopting an enforceable code of ethics, prohibiting alcohol at poster sessions, and increasing representation of women and diverse scientists on GSA Council. Despite such actions, there is a persistent lack of diversity in the geosciences, and GSA recognizes the need to do more to change our own institution and lead change in the geoscience profession. This update shares selected accomplishments we have made over the past year in accordance with the goals set forth in our decadal strategic plan, as well as our outlook for the future.

SELECTED ACCOMPLISHMENTS

Training and Awareness

GSA published an anti-racism guide (<https://www.geosociety.org/GSA/About/Diversity/GSA/About/reading.aspx>) to help individuals focus on the steps they may choose to take to begin tackling systemic racism. GSA hosted several implicit bias workshops facilitated by ADVANCEgeo to give members tools to evaluate their behavior and identify ways to knock down systemic barriers relating to the recruitment and selection of leaders, committee members, grantees, and others. GSA also engaged Dr. Nita Mosby Tyler of The Equity Project to facilitate an all-staff development workshop on diversity, equity, and inclusion.

GSA Staff URGE Pod

Several GSA staff members formed a learning group, or pod, as part of the Unlearning Racism in Geoscience (URGE) initiative. The pod has met regularly over the past several months to discuss and assess how to promote a culture of diversity, equity, and inclusion (DEI) at GSA's headquarters and to identify areas where staff can take action to work against the effects of racism and support the participation and retention of Black, Indigenous, and People of Color (BIPOC) in the geosciences. The pod

continues to meet and is working on specific recommendations, which will be presented to GSA's executive director.

NSF Grant to Support Diversity and Inclusion

GSA, in partnership with the University of Arkansas, University of Florida, James Madison University, and the University of Texas at Austin, was awarded a National Science Foundation grant known as the Geosciences Associated Societies Committed to Embracing and Normalizing Diversity Research Coordination Network (Geosciences ASCEND RCN). This will be an action-based network with three primary objectives: (1) to advance and accelerate cultural change in geosciences, (2) to broaden participation of diverse identities in geoscience, and (3) to create a more inclusive discipline in which all people are invited to participate and contribute.

2020 Annual Ethics Report

(<https://www.geosociety.org/documents/gsa/about/ethics/2020-annual-ethics-report.pdf>). GSA published this annual report to provide our members and others in the geoscience community with transparent information about our ethics policies, the types of concerns being raised, and how GSA has resolved them. Charts

in the report highlight information and trends involving the concerns that have been brought to GSA's attention since 2017. The report also discusses the disciplinary action GSA has taken to enforce ethics policy violations, including banning offenders from GSA meetings and terminating the membership and fellowship status of members found to have violated GSA's Code of Ethics for misconduct at their home institutions.

Events Code of Conduct

(<https://www.geosociety.org/GSA/Events/EventConductCode/GSA/Events/Conduct.aspx>). GSA is committed to fostering a respectful, inclusive environment at all GSA events from small gatherings, committee meetings, and field trips to large in-person and online meetings. We recently revamped the events code to improve awareness of the behaviors we encourage and those we will not tolerate.

OUTLOOK

GSA will continue to make justice, equity, diversity, and inclusion (JEDI) a priority in the coming year. GSA Council recently approved a report by an ad hoc committee comprised of GSA staff and members—the GSA Diversity Working Group—to distill the Society's goals for diversity and inclusion and to provide a road map of key tangible actions and success metrics to guide GSA in meeting those goals. Based on that report, Council approved several recommendations that will be operationalized over the next 12 months. One such recommendation includes increased funding for a new full-time diversity officer, who will be charged with developing and implementing a comprehensive JEDI strategy.

FY21 HIGHLIGHTS:

- Several GSA staff participated in the learning pod "Unlearning Racism in Geoscience" (URGE)
- GSA hosted implicit bias workshops and an equity workshop
- GSA was awarded an NSF grant known as the Geosciences Associated Societies Committed to Embracing and Normalizing Diversity Research Coordination Network (Geosciences ASCEND RCN)
- GSA published an Annual Ethics Report
- The Events Code of Conduct was updated

GSA Operations Report (in millions)

Fiscal Year 2021 (“FY21”) ended with a change in net assets before investment of a loss of US\$978 thousand in comparison to FY20 which was a loss of US\$1,049 thousand. Both revenue and expenses were below the FY20 levels with revenues in FY20 at US\$9.5 million compared to FY21 revenues of US\$7.6million and expenses in FY20 of US\$10.5million compared with US\$8.5 million in FY21. Overall, the issue is generating revenues without being able to hold in-person meetings that is sufficient to support the organization. Publications continue to run in the black and keep losses down for the organization. The 2021 GSA Connects meeting will be the first real test for a hybrid meeting.

For FY21, the Society investments made an amazing comeback for the year with net investment revenue of US\$8,382 thousand. The market bounced back during FY21, and GSA was positioned well to take advantage of these gains. Overall net assets increased by US\$7,315 thousand.

GSA continues to be diligent in monitoring market conditions and navigating the new normal for the organization. Leadership considers the impacts of the health and welfare of not only its staff but its members when considering the path for the organization.

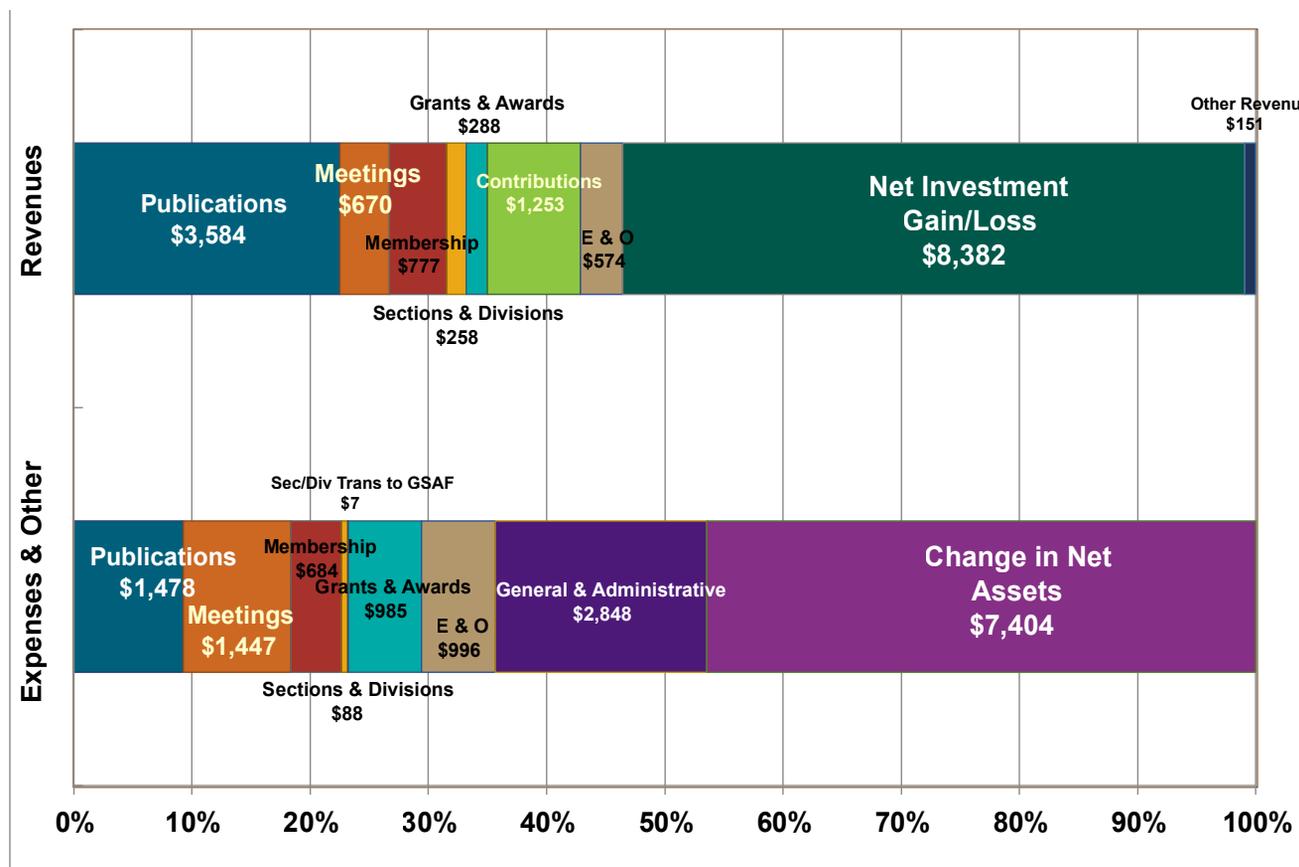
Brock and Company CPAs, P.C., completed the audit of FY21 and issued an unqualified opinion.

A full copy of the combined audit report can be accessed at <https://www.geosociety.org/documents/GSA/about/fiscal/fy21/audit-report-fy21.pdf>

The Treasurer’s report can be accessed at <https://www.geosociety.org/documents/GSA/about/fiscal/fy21/treasurer-report-fy21.pdf>

GSA Audit Report Summary

year ended 30 June 2021 (in thousands)



- Publications
- Sections & Divisions
- Contributions
- General & Administrative
- Meetings
- Sec/Div Trans to GSAF
- E&O
- Other Revenue
- Membership
- Grants & Awards
- Net Investment Gain/Loss
- Change in Net Assets

GSA / GSAF Combined Investment Portfolio Report

During FY21, the total combined investment portfolio in total increased by US\$13,822 thousand (25%). There was US\$846 thousand in draws from investments during FY21. The graph presented is for the combined GSA / GSAF investment portfolio.

GSA and GSAF have a well-diversified combined investment portfolio and a dedicated team of volunteer members to manage these assets. Through FY21, the joint Investment Committee was composed of nine dedicated and knowledgeable voting members. The Committee relies on expertise and guidance provided by an outside consulting firm, Ellwood Associates. The Investment Committee continues to follow an investment strategy of diversification among investment asset classes within strategic allocation targets. The Committee continues to search for members with the interest and aptitude to serve on the

Investment Committee in the future. This service is a key component to the long-term health of the portfolio, and consequently, the mission and longevity of GSA.

The Society's investment portfolio balance is primarily comprised of funds from R.A.F. Penrose (donated in the 1930s) and from Joseph T. Pardee (donated in the 1990s) and accumulated earnings on those funds.

Unrestricted funds are vital to the future of the Society because they can be used where Council designates there is greatest need. In recent years, these funds have supported strategic projects such as Penrose Conferences, government affairs, strategic planning, diversity programs and staffing, international programs, and Capital Campaign initiatives.

As indicated in the chart below, GSA investments have primarily increased or decreased due to overall varying market conditions. The investment balances also

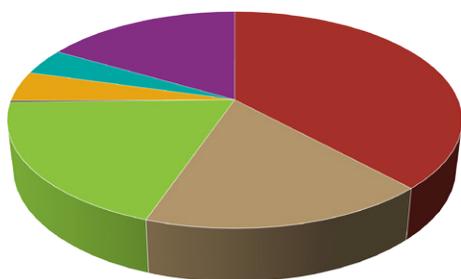
fluctuate from investment earnings, less amounts paid from the Pardee fund for Research Grants and amounts designated from unrestricted funds for strategic spending initiatives approved by GSA Council.

Council approved using Pardee funds for the student Research Grant program beginning in Fiscal Year 2004 and then approved spending unrestricted funds for strategic programs beginning in Fiscal Year 2006. This spending is governed by policy to ensure viability of the portfolio over the long term to ensure the continuing mission of GSA.

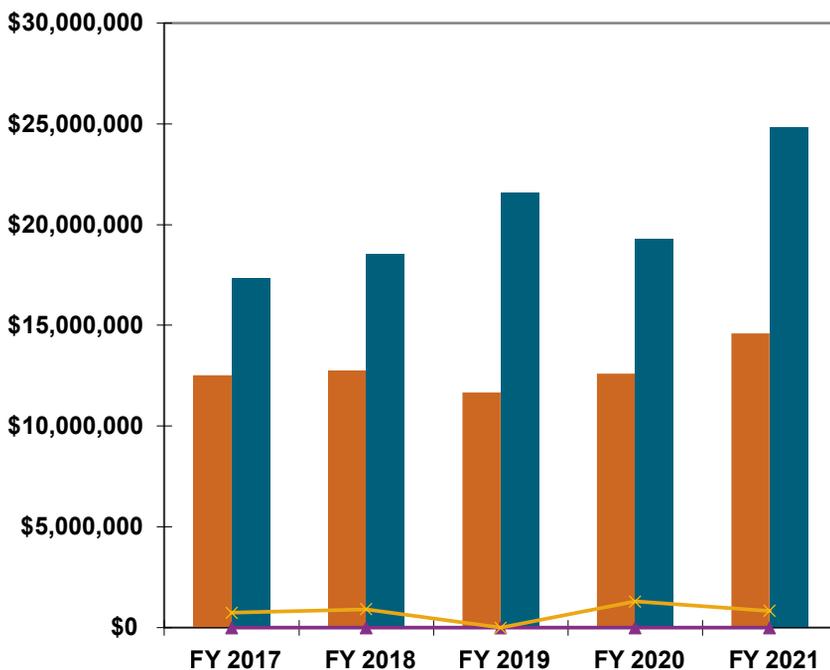
GSA gratefully acknowledges the invaluable contributions of Richard Berg, Treasurer, and Carl P. Fricke, GSA Investment Committee Chair, for service to the Society and preparation of the financial and investment data included in this report.

GSA and GSA Foundation Jointly Managed Combined Investment Portfolio (in thousands)

30 June 2021



- \$26,721 Domestic Equities
- \$12,098 International Equities
- \$13,550 Fixed Income
- \$152 Short Term
- \$3,189 Real Estate
- \$2,800 Hedge Fund
- \$11,689 Other Assets



- GSA Restricted Investments
- GSA Unrestricted Investments
- ▲ Operational Spending from Investments
- ✕ Strategic Spending from Investments

The purple line indicates amounts paid to cover the gap between revenues and operating expenses which has been flat over the time presented. The yellow line shows the fluctuation in strategic spending.

The Investment Committee Chair's report and summary of the portfolio can be accessed at <https://www.geosociety.org/documents/GSA/about/fiscal/fy21/investments-report-fy21.pdf>