

# ANNUAL REPORT



## **WEARE**

Unapologetically feminist scientists
Committed to intersectionality
Grassroots, not grasstops
Focused on solutions to inequities in science
Transdisciplinary

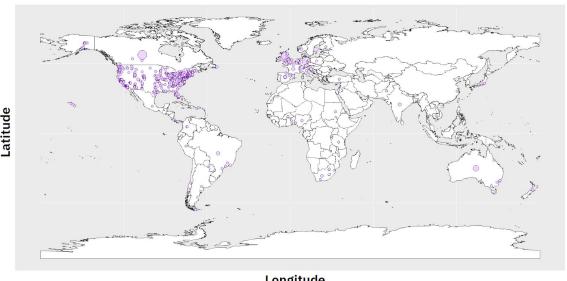
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## **A Year in Review**

In 2019, 500 Women Scientists worked to sustain the momentum we built as a grassroots, predominantly volunteer-run organization. Our international presence grew to 388 Pods (local chapters); 52 Pods were launched across the United States and 94 internationally.

This past year we conducted a survey of this global membership to understand who our members are and how we can best ensure that we are achieving our goals. Our 1,309 respondents came from all over the world and from many different backgrounds, representing 40 different countries on every inhabited continent.

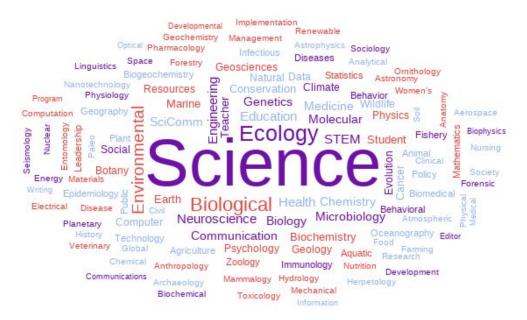


Longitude

We asked surveyed members where they live. Members responded from 6 continents, 41 countries, and 50 US states or territories, as depicted in the map above. Results based on 1248 responses.

The majority of respondents, 80%, are from North America. Much of the remainder was located in Europe (13%), while Australia/New Zealand and South America each made up a further 2%. 15% identify as members of the LGBTQIA+ community, including almost 3% who identified as non-binary, genderqueer, and/or agender. While most members are 'early career', have a doctorate, and are in their twenties to thirties, we found a normal distribution of age, education, and career stage that represented students to retirees.

This survey identified important gaps: less than 3% of our membership identified as Black or African American, reflecting both inequities within STEMM and our own ineffective outreach and inclusion. Less than 2% identified indigenous origins (people of US/Canada First Nations, Metis, Maori, native Alaskan, and Pacific Islander backgrounds were represented). Over 80% of respondents identified as having white/Caucasian ancestry. 95% identified as women. Of our US respondents, only 8% were from under-represented racial minorities in the sciences. We are using this information to reflect on how we can realize our promise of being a truly inclusive and diverse organization.



We asked over one thousand 500 Women Scientists members to describe their professions. This word cloud depicts the top hundred and twenty words they used to represent their work.

Survey respondents tended to be engaged, with 56% reporting a home Pod. They identified the opportunity to join a community of peers, do outreach, volunteer, engage with advocacy, and receive and offer mentorship as key reasons for joining. However, only 10% participated in their Pod all or most of the time, citing barriers such as lack of awareness of Pods and events, isolation due to recent moves and remote work areas, or deeper concerns about the agendas and goals of their local leadership. The need for a local leadership that is diverse, responsive, and sets a clear and constructive agenda was highlighted. Support from the 500 Women Scientists organization could better enable remote Pod membership and be more inclusive of members beyond the US and Europe. Flexible participation opportunities that fit into busy schedules were requested by many members.

Overall, respondents were engaged in broader 500 Women Scientists initiatives: 60% have signed our pledge and 66% read our emails all or most of the time. The Request a Woman in STEMM platform is being used by 35% of respondents, with many non-member respondents remarking they just became aware of the database and will sign up. Platform members have been contacted by journalists, local advocacy groups, high school students, podcasters, and potential collaborators. 500 Women Scientists initiatives also sparked 12% participation, more than half of which was driven by interest in the climate strike initiative. However, only 9% of our respondents participated in suggested #TakeActionTuesday actions. We feel fortunate to have a supportive, engaged base: 55% have recommended 500 Women Scientists membership to peers, and 15% have supported us or our initiatives with donations.

We will continue to live up to this support with close attention to survey feedback. We go into 2020 aware of our gaps and growth areas, particularly issues of diversity and representation.

## **Our Team**

**CO-FOUNDERS:** Kelly Ramirez and Jane Zelikova

#### **2019 LEADERSHIP TEAM**

Evi Abada Chinmayi Balusu Francesca Bernardi Stefanie Bodison Wendy Bohon Ana Carvalho Susan Cheng Marina Corradini Tanya Dapkey Lauren Edwards Gretchen Goldman Adrienne Hollis Myndi Holbrook Charlotte Levy Alison Marklein Liz McCullagh Alicia Pérez-Porro **Emily Pinckney** Juniper Simonis Rukmani Vijayaraghavan Anila Yadavalli Maryam Zaringhalam

#### **ADVISORY BOARD**

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Christine O'Connell
Laverne Melon
Alan Townsend
Joshua Wolfe
Mulumebet Worku

#### **STAFF**

Gabriela Fernández-Cuervo Anne Marshall Natalie Nevárez Amy Panikowski Kate Nowak



500 Women Scientists Leadership team at our meeting in Seattle in June 2019.

## **Progress on New & Continuing Initiatives**

#### **FELLOWSHIP FOR THE FUTURE**

In December 2018, we launched our first fundraising campaign for the <u>Fellowship for the Future</u> — a two year leadership program to help redress historical and current inequities in how diversity work is valued in STEM by **honoring**, **centering**, and **paying women scientists of color** for the work they do to build more inclusive and equitable communities. Since then, we've raised the \$80,000 we needed to fund professional development, community building around navigating science as women of color, and project expenses for our first cohort. We opened applications in the summer of 2019 and selected four **Fellows for the Future** from a pool of **100+** applicants. Their personal statements and project descriptions were then reviewed by a panel of women scientists of color.





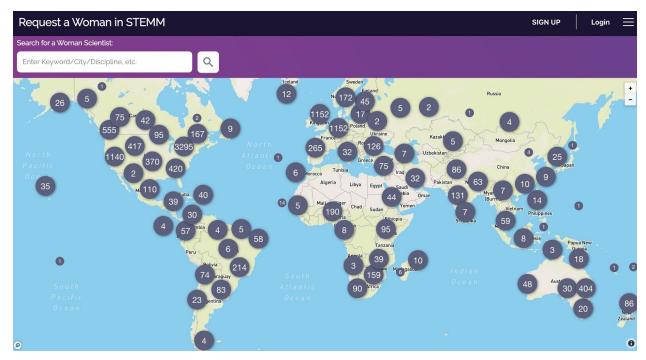
The inaugural cohort of fellows at the Fellowship for the Future Summit in January 2020.

Our four fellows — Rose Bear Don't Walk, Jasmine Drake, Seanna Leath, and Kelly Montgomery — will be leading projects that **build scientific inclusion with local stakeholders** in a community responsive way. They will be promoting traditional plant teachings for Salish communities; bringing a forensic science camp to middle-school girls in Houston, TX; building a science and social community for K-5 Black girls in Charlottesville, VA; and creating graphic novels about a diversity of women scientists and sharing them with schools and libraries across the U.S. We are excited to help expand the impact of these projects and are beyond grateful to everyone who has donated resources and volunteered time throughout so we could actualize this Fellowship! We have just launched a fundraising campaign for our second cohort and look forward to being able to support the next cohort of fellows in 2021.

#### **REQUEST A WOMAN IN STEMM**

In January 2018, we launched the <u>Request a Woman in STEMM</u> (Science, Technology, Engineering, Mathematics, and Medicine) platform to elevate and amplify the expertise of women in STEMM fields. Tired of constantly seeing the same faces, mostly white men,

representing science in the public sphere, the platform was developed to provide opportunities for members of the media, scientific colleagues, conference organizers, educators, and others to find and include more women and underrepresented identities. In the past two years, the platform has grown globally to include more than 13,000 individuals from over 140 countries and territories. The new and improved platform features more information about platform participants, individualized profiles, improved searchability, ability to save profiles, and many other updated features. 500 Women Scientists hired <a href="Concolor Research">Concolor Research</a> to assess the platform's reach and impact. With generous support from the Simons Foundation Science Sandbox and Lyda Hill Philanthropies, we worked with the development team <a href="Critigen">Critigen</a> to update and revamp the platform, making it more accessible.



New and improved interface for the Request a Woman in STEMM platform.

#### **SCI MOM JOURNEYS**

In 2019, the <u>SciMom Journeys</u> Team publicly debuted its agenda and scope by developing a suite of hard-hitting policy positions and public commentary on key areas affecting mothers and aspiring mothers in STEMM fields.

A <u>series of opinion pieces</u> in *Scientific American* allowed us to introduce the challenges associated with motherhood in STEMM fields and articulate our vision for a better, more inclusive world for new parents. The pieces focused on: (1) <u>infertility challenges</u> and their impact on women's career trajectories; (2) the trauma and <u>stigma of miscarriage</u>; (3) <u>lactation support</u> challenges and needs for women in STEMM; (4) <u>parental leave</u> and how STEMM fields should better accommodate new parents; and (5) <u>work-family justice</u>, urging STEMM fields to provide better work-life balance for new moms.

We also developed a set of two-pager policy position documents advocating for: (1) <u>infertility treatment support</u> by scientific institutions; (2) support of <u>improved parental leave policies</u> at scientific institutions and endorsing the FAMILY Act of 2019, proposed by Congress; (3) <u>lactation support</u> for scientific institutions and conferences, as well as accompanying <u>detailed recommendations</u> for how to design accessible lactation spaces. The policy positions will be useful for advocating our positions at large, as well as allowing individual Pods and members to advocate for better policies at the state or institutional level.

#### **INCLUSIVE SCIENTIFIC MEETINGS**

Scientific meetings are a crucial opportunity for scientists to exchange ideas, foster new collaborations, and advance their careers. Nevertheless, not all scientists have positive experiences at meetings, experiencing exclusion, discrimination, or outright harassment and assault. In May 2018, 500 Women Scientists partnered with the Aspen Global Change Institute (AGCI) and the Earth Science Women's Network (ESWN) to identify barriers to diversity, equity, and inclusion at scientific meetings. In 2019, we published concrete recommendations for how to incorporate inclusion and equity practices into scientific meetings, from the ground up. These recommendations will be updated over time to incorporate feedback from meeting organizers who focus on equity and inclusion and share their successes and failures.

#### **WIKIPEDIA EDIT-A-THONS**

Wikipedia is the fifth most highly trafficked website in the world, but less than one-fifth of English-language biographies are about women. To ensure the achievements of women in STEMM are reflected on Wikipedia's pages, we have continued our campaign of Wikipedia Edit-a-thons to increase representation of women in STEMM online. We have developed online resources to guide our Pods in leading their own Wikipedia Edit-a-thons. In 2019, Pods edited nearly 200 articles, which have been viewed over half a million times. We are continuing this work into 2020, beginning first with a global campaign of Edit-a-thons to celebrate International Women's Day.





(Left) 500 Women Scientists NYC Pod editing Wikipedia at Caveat NYC. (Right) The Boulder Pod's Wikipedia Edit-a-thon in March 2019.

#### **PODS & COMMUNITY ENGAGEMENT**

Our Pods continue to grow and make changes in their local communities. In 2019, 146 Pods were started all over the world bringing our total Pods to 388. Our Pods are what truly make 500 Women Scientists a grassroots organization, as they advocate for science and for women's place in science in their local communities.

Pods have hosted local Wikipedia Edit-a-thons, science communication events, networking and mentoring meetings, as well as attending science festivals, writing blogs and op-eds, and engaging their local policy makers to advocate for changes. Over 120 activities were logged by Pods for 2019, but we estimate this number to be closer to 400 global outreach and in-pod activities. Highlights from the Pods include:

- Every January, the **St. Louis, MO** Pod hosts an annual "Beer with a Woman Scientist" event that focuses on introducing science topics in a social setting. Their goal is to address gender inequality in STEMM fields through education and population, and they encourage young girls to become interested in STEM, so that they will select STEMM majors and move into STEMM careers.
- The **San Francisco Bay** and **Northern California** Pods joined forces and have created a Medium page called <u>500 Poppies</u> where they highlight women in science.
- The **Panama** Pod began in June of 2019. Already, they have created Recursos en español for Pods, held three meetings, and were featured in their local magazine, "Ellas."
- In September 2019, Pods around the world participated in our <u>Global Climate Strike Initiative</u> as a show of solidarity with and support for the Youth Climate Strike Movement. Pods hosted climate teach-ins and storytelling events and joined local marches taking place in their communities.

"There can be no empowerment or equality unless all individuals, regardless of race, ethnicity, nationality, sexual orientation, gender identity, and other defining characteristics, are included both in doing the work and being part of the focus of the work." — St. Louis Pod Leaders

In 2019, we took steps to ensure inter-Pod collaboration. The <u>Pod Mentoring program</u> aims to provide efficient feedback and support to new pods, and ultimately build up a movement of strong leaders working at the intersection of feminism and science to better foster the values outlined in the 500 Women Scientists Pledge. So far six Pods have signed up to be mentors, and 16 Pods have signed up to be mentees. Our International Team has translated Pod resources into French, German, Spanish, Portuguese, Greek, Turkish, Farsi, and Hindi.





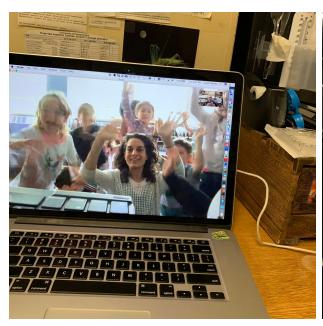
(Left) Participants in the St. Louis Pod's Women of Color Resume Writing Workshop hosted in April 2019. (Right) Bonn Pod hosting a climate teach-in in September 2019 for our Global Climate Strike Initiative.

Pod coordinators from around the world also communicate regularly through a shared Slack channel, which has allowed us to orchestrate Pod-wide campaigns. Regional Pod meet-ups have occured in-person and virtually to organize and engage in advocacy training. The California Pods and New England Pods met virtually to coordinate efforts. Some Pods in the Mid-Atlantic Region of the United States (Ithaca, Buffalo, NY, DC, and Philadelphia) were awarded a grant from the Union of Concerned Scientists to hold a workshop. The award allowed them to meet in Philadelphia in March to discuss current policies and brainstorm to create one pagers that advocate for improved legislation for women in STEM.

We also communicate with our Pods through our Quarterly Pods Newsletters; in 2019 our newsletters were released in <u>January</u>, <u>April</u>, <u>July</u>, and <u>October</u>. These newsletters are written by Pod Members for Pod Members, providing Pods with the opportunity to share their work and inspire other Pods around the world. Our newsletter team hails from Cambodia, Panama, Europe, Brazil, Tunisia, and all over the United States—from Maine to Alaska.

## **Partnerships**

<u>Partnerships</u> have been instrumental in helping us reach a broader audience and amplify the work of other mission-aligned organizations. In 2019, we partnered with the Society for the Advancement of Chicanos/Hispanics & Native American in Science (SACNAS), the Rubin Museum in NYC for their Brainwave2020 series, Elpha (an online community for women in technology), Skype a Scientist, and the Northern Colorado chapter of Expanding Your Horizons.





(Left) Students on the other side of a Skype a Scientist session with entomologist and 500 Women Scientists Leadership member Tanya Dapkey. (Right) Advisory Board member and ecologist Rachel Gallery speaking about 500 Women Scientists at the SACNAS Annual Meeting in November 2019.

Our partnership with SACNAS enabled our advisory board member Rachel Gallery to give a presentation on 500 Women Scientists at their annual meeting, expanding our reach to nearly 4,000 conference attendees and allowing us to recruit new membership. In 2020, we plan to continue working together on webinars and social media campaigns geared towards increasing representation for scientists from underrepresented minority groups. Our partnership with Skype a Scientist has allowed members in our Request a Woman in STEMM database to make themselves available as visiting scientists to Skype into classrooms around the world, providing them more opportunities to share their expertise and challenge stereotypes for the next generation.

### **Press**

Our press coverage and social media reach has grown tremendously since our 2016 launch. In 2019, we used our platform to write a series of evidence-based opinion pieces as part of our <u>Sci Mom Journeys</u> campaign. The series called for reproductive justice and more equitable conditions for parents in STEMM fields. We also leveraged the policy and environmental expertise of our membership to voice our support for the <u>Green New Deal</u> and a greater vision of environmental and economic justice, while continuing to author pieces pushing institutions to join the conversation around diversity and inclusion.

We also published a <u>peer-reviewed paper</u> in *PLOS Biology* outlining the underlying motivations, initial successes, and future plans for our Request a Woman in STEMM resource. The paper garnered a great deal of media attention, with coverage in outlets like <u>Science</u>, <u>STAT News</u>, <u>Good Morning America</u>, and <u>Nature News</u>.

"Now anytime somebody tells us they couldn't find someone or there just aren't enough women in STEM fields, we can point them to [the database] and say, 'Well, actually, this is the tip of the iceberg." — STAT News, April 23, 2019

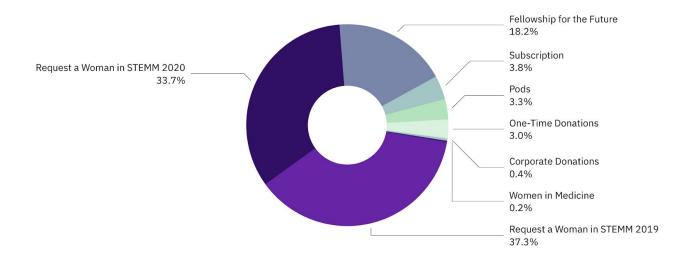
Our Pods have also authored a number of op-eds related to their local communities. The Bozeman Pod held a science policy workshop in 2018 and summarized their lessons learned from putting the event together in a tutorial for the Union of Concerned Scientists, published in January 2019. In response to Georgia's proposed "fetal heartbeat rule," members of the Atlanta Pod published op-eds in AJC.com and Scientific American about the underlying science of abortion and advocated for a woman's right to choose. The Seattle Pod published articles on Medium focusing on the controversy surrounding #MeTooSTEM's leadership, the need to recognize the use of anti-science rhetoric in policy discussions, and their support for or rejection of local ballot measures.

"We have to stop hurting people and turning away from their wounding... We need a movement and leadership styles that are responsive to and safe for trauma survivors. We have to stand in solidarity with one another." — 500 Women Scientists Seattle Pod, May 30, 2019

# **Financial Standing**

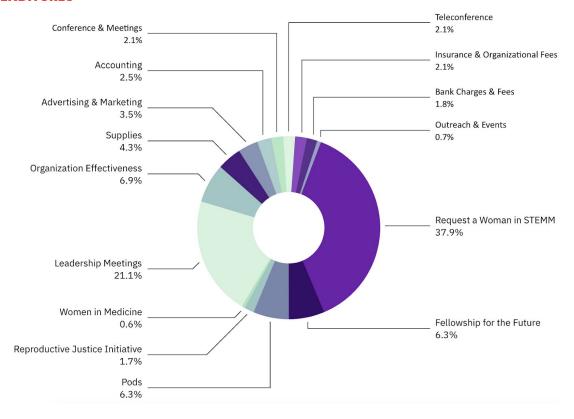
Our accomplishments would not have been possible without the support of over 700 donors. We receive \$1,500 from recurring monthly donations from 208 subscribers. Over the last three years, we have received \$69,000 from one-time donations. We were also awarded funding to rebuild our Request a Woman in STEMM database from Science Sandbox, an initiative of the Simons Foundation, and If/Then, an initiative of the Lyda Hill Philanthropies. Since December 2018, we have also strategically fundraised to launch our Fellowship for the Future, raising \$83,118 to support our first cohort. Thank you to our donors and funders! We are committed to transparency and have detailed how we put your donations to work.

#### **FUNDING SOURCES**



| FUNDING SOURCES IN 2019               |               |  |
|---------------------------------------|---------------|--|
| Grants: Request a Woman in STEMM 2019 | \$150,406.00  |  |
| Grants: Request a Woman in STEMM 2020 | \$135,731.00  |  |
| Fellowship for the Future             | \$73,513.00   |  |
| Subscription                          | \$15,406.82   |  |
| Pods                                  | \$13,164.63   |  |
| One-time Donations                    | \$12,193.11   |  |
| Corporate Donations                   | \$1,498.89    |  |
| 500 Women in Medicine                 | \$1,000.00    |  |
| Total Fundraising Income              | \$ 355,521.39 |  |

#### **EXPENDITURES**



|        | EXPENSES IN 2019                |             |
|--------|---------------------------------|-------------|
| PROGR  | Request a Woman in STEMM        | \$32,850.00 |
|        | Fellowship for the Future       | \$5,470.15  |
|        | Pods                            | \$5,440.39  |
| A<br>M | Reproductive Justice Initiative | \$1,500.00  |
| S      | Women in Medicine               | \$482.64    |
| ORG    | Leadership Meetings             | \$18,277.00 |
|        | Organization Effectiveness      | \$6,000.00  |
|        | Supplies                        | \$3,708 .00 |
| AN     | Advertising & Marketing         | \$3,070 .00 |
| Z      | Accounting                      | \$2,185.00  |
| A<br>T | Conference & Meetings           | \$1,845 .00 |
| T-0    | Teleconference                  | \$1,800.00  |
| N<br>A | Insurance & Organizational Fees | \$1,797 .00 |
| L      | Bank Charges & Fees             | \$1,599 .00 |
|        | Outreach & Events               | \$596.70    |
|        | Total 2019 Expenses             | \$86,621.00 |

## What We Are Planning for 2020

In 2020, we will be working to sustain the momentum that we have built up over the years to ensure the success of our current programs and projects. Efforts include:

- Continuing to provide Pod leaders with tools and resources that allow them to respond to opportunities and concerns in their local institutions and communities;
- Supporting our first cohort of Fellows for the Future as they work to execute their projects over the next two years;
- Promoting and increasing outreach around the Request a Woman in STEMM resource to grow the platform and ensure representation of women from a diversity of backgrounds and geographic locations.

In addition, we will continue fundraising efforts to:

- Ensure we can support a new cohort of Fellows for the Future for 2022 2024;
- Partner with Wikipedia Education to "train the trainers" on how to improve and create pages for women in science on the encyclopedia;
- Provide start-up grants to local Pods to equip them with all the tools and resources needed to sustain and grow their group;
- Create professional development opportunities to improve the science communication and outreach skills for women in the Request a Woman in STEMM database seeking training.

Our fundraising efforts will also be used to support new initiatives, summarized below, that build off the momentum we have created over our three years.

#### REPRODUCTIVE JUSTICE INITIATIVE

In 2020, we will be launching our Reproductive Justice Initiative! Reproductive Justice is defined as the "human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities" (SisterSong Women of Color Reproductive Justice Collective). As a community, we will explore the RJ framework and learn how it intersects with the LGBTQIA+ community, the environment, and in particular, our science. This information will be disbursed across 4 interactive 90-minute webinars that will go live one Saturday a month, from February through May. The webinars will be facilitated by Jalessah Jackson, M.S., an Educational Equity & Anti-Oppression Consultant and Instructor of Interdisciplinary Studies at Kennesaw State University. In accordance with our mission "to serve society by making science open, inclusive, and accessible," we aim to provide tools for incorporating the Reproductive Justice framework into our scientific communities and our daily lives.

#### **2020 ELECTION INITIATIVE**

In the leadup to the 2020 Presidential elections, 500 Women Scientists is working with Pods and national organizations to plug into voter registration efforts on campus and in our workplaces. These non-partisan activities will help us improve voter turnout and engage with our communities on issues that advance science, justice and equity. Right now, only 46.4% of undergraduate STEMM majors vote <a href="compared">compared</a> to 53.5% of education majors. We can help close this gap and boost voter turnout among our peers through in-person canvassing and peer-to-peer digital organizing.

#### LIFT UP OTHERS (AWARDS PORTAL)

An <u>academic award or prize</u> can have a significant impact on self-confidence and work wonders for resumés. It is one of the notoriety requirements in Wikipedia and one that is used to remove pages created for women scientists because many women have not received prestigious awards. To reduce the large gender gap in awards, we plan on creating a database of awards, honors and fellowships to encourage the nomination of more women, people of colour and LGBTQ+ scientists for prestigious awards.

As always, this is your organization. We cannot wait to see what 2020 has in store for us!

- Your 500 Women Scientists Leadership Team