# **500 WOMEN SCIENTISTS**

# Our journey is still just beginning...

Dear 500 Women Scientists and Supporters,

As we reflect on our journey and on our accomplishments from 2018, we cannot help but be in awe of the incredible network of women scientists and supporters that have come together to serve society by making science open, inclusive, and accessible.



From an open letter to a global grassroots organization, our journey has gone well beyond our initial response to the 2016 US election. What was true in November 2016 still resonates today: scientific institutions must grapple with the long history of inequity, misogyny, racism, and exploitation. We must face that history, learn from it, and fundamentally transform scientific institutions to be truly inclusive and serve the public good.

This year, we continued to lay the foundation for transformation. We created resources like request a woman scientist, eliminating excuses that women with appropriate expertise are nowhere to be found; resources to get out the vote, increasing participation in democracy in our local communities; resources to communicate about our scientific expertise through op-ed campaigns and public events. We got our message out to *The* 

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Atlantic, Popular Science, Earther, Forbes, Inverse, and more. We also connected with our communities by hosting trivia and film nights, science salons, op-eds in local media outlets, science fairs, and testimonies to local councils. With all our activities, we used our voice to call for science to be better, more inclusive, more welcoming, and more reflective of the true diversity of the humans who do science.

"Science is foundational in a progressive society, fuels innovation, and touches the lives of every person on this planet."

It's been a little over 2 years since we wrote the words

"Science is foundational in a progressive society, fuels innovation, and touches the lives of every person on this planet" and we could not be more proud of what we started or more grateful for the supportive community we are building.

To summarize our work, we have put together a short report of the year. We hope this report provides greater insight into how we've spent the past year and what we're most excited about working on in 2019.

As always, this is your organization. We can't wait to see what 2019 has in store for us!

Jane & Kelly



# 500 Women Scientists Annual Report 2018

#### **WE ARE**

Unapologentically feminist scientists
Intersectional
Grassroots, not grasstops
Focused on solutions to inequities in science
Transdisciplinary

#### Our Team

Co-founders: Kelly Ramirez and Jane Zelikova

## 2018 Leadership Team

Chinmayi Balusu

Francesca Bernardi

Wendy Bohon

Joy Buongiorno

Susan Cheng

Tanya Dapkey

Jessica Duffy

Kate Gerull

Caitlyn Hines

Emily Lescak

Dava Keavney

Jewel Lipps

Liz McCullagh

Jessica Metcalf

Lexi Moore Crisp

Rachael Nealer

Matilda Odera

Ruth Schmidt

Juniper Simonis

Neeharika Sinha

#### **Advisory Board**

Asmeret Berhe

Melissa Creary

Nina Dudnik

Meghan Duffy

Rachel Gallery

Aaron Huertas

Shaila Kotadia

Philo Mbong

Beronda Montgomery

Charles Musiba

Clarissa J. Nobile

Christine O'Connell

Alan Townsend

Mulumebet Wokru

Joshua Wolfe

#### A Year Review

2018 was a huge year for 500 Women Scientists! Our international presence grew to 292 Pods, or local chapters, around the world. In 2018, 62 new Pods were started across the US and 143 internationally We have also grown an international following, leveraging the power of social media to bring visibility to women scientists and amplify our collective expertise and experiences. Online, we have more than 25,700 followers on Twitter, > 11,600 on Facebook, and over 1,000 on our newly launched Instagram, bringing us to +7.4 million total impressions on social media in 2018!

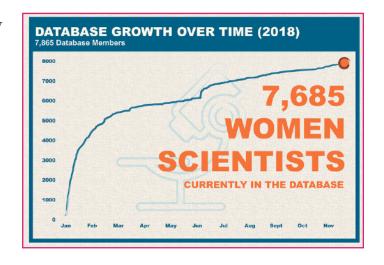
"You can't be what you can't see" - Marian Wright Edelman

In 2018, we made progress towards shifting perceptions of what a scientist looks like - We are what a scientist looks like.

#### **New Initiatives**

To highlight and elevate the contributions of women scientists in the public sphere, we launched the Request a Women Scientist platform in January 2018. The database makes it easy to find a woman expert in any STEM discipline around the world to eliminate any

excuse that women with the relevant expertise do not exist. The resource now hosts nearly eight thousand women in STEM who are ready to share their expertise with the world, increasing the visibility and participation of STEM women in the public. The platform is a frequently used resource for journalists, educators, policy makers, scientists, and anyone needing scientific expertise and dispels the inaccurate perception that science is stale, pale, and male.



"The map-based tool allows anyone from journalists (hello) to conference organizers to high school teachers to find a female scientist by location, expertise, and if they're an underrepresented minority." - Earther, January 18, 2018

The popularity of the platform has grown so much that its functionality cannot keep up and we received a grant from the Science Sandbox (a Simons Foundation initiative) to rebuild the platform to improve functionality and improve the user experience.

"With a resource like this, there is no longer an excuse" to get women experts out in front of the public." - Kate Nowak, Earther, January 18, 2018

In 2018, we also launched our first satellite organization - 500 Women in Medicine. The group, started by five women medical students, strives to increase the representation and visibility of women in academic and clinical medicine.

"Our hope is that through creating community and a platform for women in medicine we can expand the networks and visibility of women in medicine." - Kate Gerull, 500 Women in Medicine leader

Continuing to make the Internet less sexist, we created a resource to guide our Pods to Wikipedia Edit-a-thons in order to increase representation for women in STEM fields by creating biographies that highlighted their work and achievements. Wikipedia is the fifth most trafficked website in the world, but only 17% of English Wikipedia biographies are about women. To ensure the work of women scientists is reflected in Wikipedia's pages, we launched an Edit-a-thon campaign in conjunction with Ada Lovelace Day in October, creating 69 new pages and editing over 400, which have since been viewed over 3.5 million times.





In addition to providing visibility for more women in STEM, our mission is to ensure that women from all backgrounds can thrive in STEM. To help build this future, we launched the Fellowship for the Future to recognize and amplify the leadership of women of color in STEM. Since the launch in early December 2018, we have raised almost \$10,000-- 10% of our initial fundraising goal. We anticipate being able to support the first cohort of fellows in the fall 2020.

### **Partnerships**

Partnerships have been instrumental in helping us reach a broader audience and amplify the work of other great organizations. In 2018, we partnered with Ciencia Puerto Rico, Imagine Science Film Festival, Its Freezing in LA (an online magazine), National Girls Collaborative Project, Inspiring Girls Now in Technology Evolution (IGNITE), National Council for Science and the Environment (NCSE), the Guerilla Science Festival in Washington DC, and Luna Productions to organize 26 screenings of "My Love Affair with the Brain," the story of Marian Diamond, a woman scientist and pioneer in neuroscience.

#### **Press**

Our press coverage and social media reach has grown tremendously. We spoke out against regressive (and not scientifically based) definitions of sex with the group 500 Queer Scientists. We called out the journal Science not once but twice in 2018 - on their "himpathetic" coverage of the sexual harassment case against Professor Ayala at UC Irvine, and on their poor judgement in publishing on op-ed that singled out and criticized a successful woman science communicator for her Instagram presence promoting and celebrating science. We called attention to the NASEM report on sexual harassment and discussed why academia is fundamentally broken when it comes to dealing with harassment in the sciences.

"If we are to be truly committed to rooting out harassment and welcoming people from all backgrounds in STEM, the system needs a complete overhaul. No amount of "diversity" initiatives and studies on understanding why women and girls choose not to stay in STEM fields will make a real difference if we do not remove the rot from academic institutions." - Scientific American, August 9, 2018

Finally, we made it clear that Bill Nye does not speak for us.

"Nye's TV persona has perpetuated the harmful stereotype that scientists are nerdy, combative white men in lab coats—a stereotype that does not comport with our lived experience as women in STEM." - Scientific American, January 30, 2018

## **Community Engagement**

Our pods brought attention to the US administration's policies that harm graduate students, that remove protections for native fish and riparian areas on the Colorado river, that harm wildlife and research along the proposed border wall between the US and Mexico, and that separate families and incarcerate children. They also wrote about the costs of tolerating harassment and bullying in science, the brilliant scientists we lose when they are pushed out because scientific institutions have habitually turned a blind eye to the rampant harassment in academia, allowing serial harassers to go unpunished.

"The pervasiveness of harassment, abuse, and bias has a real cost for both individual scientists and for the overall advancement of science. Tolerating bad behavior means wasted tax dollars, disrupted scientific advancements, and weakened innovation. And those who perpetuate this culture of harassment and bias are not just jerks whose bad behavior can be separated from their otherwise good scholarship, but a real and serious impediment to scientific progress as a whole." - Scientific American, June 12, 2018

Transitioning from a moment to a movement takes systemic change at all levels of society. We channelled our voices into launching campaigns, staying true to our grassroots origins. Pods led the way and leveraged partnerships to create opportunities to communicate and share their expertise with their local communities.

We led a Science Salons for Puerto Rico campaign in the aftermath of Hurricanes Irma and María. 15 US Pods hosted public storytelling events, sharing their work, while raising money to support the efforts of CienciaPR. Over 1,000 people attended the events across the country, raising \$7,500 for our partners, while raising awareness around the situation in Puerto Rico.

In the lead-up to the 2018 US Midterm Elections, we launched the Get Out the Vote campaign, working with Pods to engage with their political candidates and mobilize voters to increase STEM student turnout.

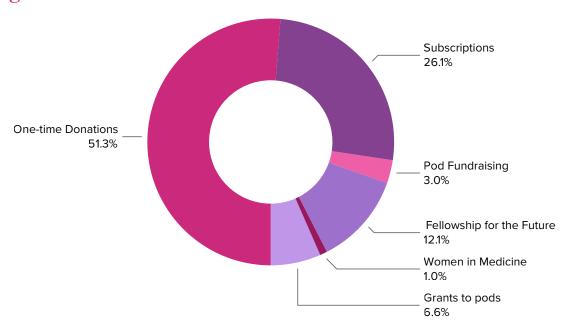
We also launched #MyImmigrationStory to bring attention to our shared immigration roots and reminding the world that we are women, we are immigrants, we are scientists.



# **Financial Standing**

Our accomplishments in 2018 would not have been possible without the amazing support from individual donors. We raised \$47,900 through recurring donations from 172 subscribers that donate an average of \$13/mo each for a total of \$1,304/month. We have received 1,200 one-time donations to date, with an average of \$40/donation. Thank you to all our generous donors - we are committed to financial transparency and below, we detail how we put your donations to work.

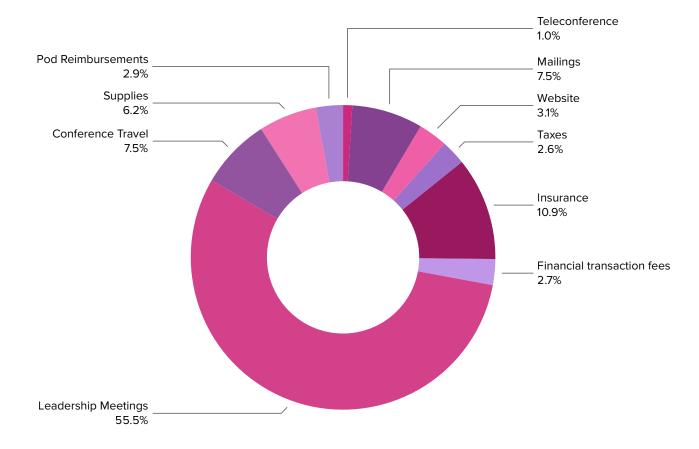
## **Funding Sources**



Fundraising Source	
One-time Donations	\$26,900
Subscriptions	\$13,700
Pod Fundraising	\$1,600
Fellowship for the Future	\$6,330
Women in Medicine	\$500
Grants to pods	\$3,450
Total Fundraising Income	\$52,480

<sup>\* 15%</sup> overhead helps ensure organizational financial sustainability

# Expenditures



Expenses	
Teleconference	\$196.30
Mailings	\$1,530.00
Website	\$627.36
Taxes	\$535.00
Insurance	\$2,223.00
Financial transaction fees	\$557.55
Leadership Meetings	\$11,273.61
Conference Travel	\$1,523.51
Supplies	\$1,253.25
Pod Reimbursements	\$584.50
Total Expenses for 2018	\$20,304

# What we are planning for 2019

In addition to continuing to build our network, supporting Pods, and adding new resources, we plan to launch a number of new initiatives that further our mission of serving society by making science open, inclusive, and accessible.

Rebuild Request a Woman Scientist. Science Sandbox (an initiative of the Simons Foundation) has provided us with \$54,000 in funding to rebuild our Request a Woman Scientist database to improve functionality, migrating the resource to a more robust platform and building a mapping database that can handle the traffic to the site without losing capacity or speed. In addition, we will launch a sister resource through 500 Women in Medicine that will be integrated into the platform to ensure we are serving the needs of the medical communities, as well as broader STEM disciplines.

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Fellowship for the Future. In December 2018, we launched a fundraising campaign to support a new 500 Women Scientists initiative called Fellowship for the Future to recognize the work of women of color leading in STEM. Fundraising efforts will continue through 2019 as we seek to raise \$100,000 to launch our first cohort of fellows in Fall 2020 and ensure support for a second cohort in Fall 2021. Complementing these fundraising efforts, we will begin to build professional development opportunities for the first fellow cohort, as well as continue to build strategic partnerships with organizations that support marginalized communities in STEM to ensure we reach a broad and inclusive group of fellow candidates and that we work towards meeting our intersectionality goals.

Fertility, Pregnancy, and Breastfeeding Project. We at 500 Women Scientists recognize that there are certain challenges and experiences that are common to scientist parents. In 2019, we will launch a new campaign with resources, webinars, and stories to support the community of science parents, especially highlighting the unique challenges for parents who struggle with infertility, are pregnant, or who breastfeed.

Young women in science - outreach and mentorship. There is a common misconception that young girls need to be convinced to become scientists. But we know that couldn't be farther from the truth - young girls love science! What they need are opportunities to interact with potential role models - women who are doing great science and who are also using their activist voice to advocate for a more inclusive and equitable science in the future! In 2019, we will (1) launch '500 Women Scientists lunch clubs' at local primary schools, championed by local pods; and (2) expand the Girls on outdoor Adventure for Leadership and Science (GALS) program from the Tuscon AZ pod that developed it to more pods across the US.

International reach. The mission and vision of 500 Women Scientists transcends borders and cultures and we currently have 165 Pods outside the US. Despite rapid international growth, most of our efforts over the last 2 years have focused within the USA. In 2019 we plan to shift out priorities and work towards creating a stronger network of international pods, focusing on addressing challenging and opportunities unique to each region.

Conference meet-ups. Conferences offer great opportunities to broaden our support networks, connect with like-minded women scientists, meet new collaborators, share insights, ideas, concerns, and discuss how 500 Women scientists can contribute to making meaningful change within our scientific societies. We have hosted meet-ups at the Ecological Society of America, American Geophysical Union, and a few other conferences, with great results - insights from our meet-ups were shared with conference organizers and professional society boards and contributed to concrete changes within those societies. In 2019, we will re-double our efforts to organize meet-ups at more professional conferences - there is no reason for every single scientific conference to not have a 500 Women Scientists meet-up!

**Partnerships.** In 2019, we will expand our partnerships, with support and active participation from pods. For example, in partnership with IGNITE - Inspiring Girls Now in Technology Evolution, the Bay Area pod is organizing STEM-focused workshops and panels at underserved high schools in San Francisco. We are sponsoring the NCSE - National Council for Science and the Environment annual conference in January 2019 and working with NCSE to become a local partner for EnvironMentors - a program that matches high school students with climate scientists around the U.S.

As always, this is your organization. We can't wait to see what 2019 has in store for us!

- Your 500 Women Scientists leadership team -