Next Steps in Your Academic Journey

The First Annual RCSA Fellows Conference May 21-22, 2024



Objectives

- 1. Welcome members of the 2024 RCSA Fellows class and facilitate their interactions with other members of the community.
- 2. Develop an inclusive, safe space where Fellows can share experiences as they build a supportive, cross-disciplinary professional network they can rely on throughout and beyond the multi-year cycle of this initiative.
- 3. Maximize Fellows' preparedness, competitiveness, and agency as they shape their own plans for their upcoming faculty job searches, interviews, and preparations for the postdoc-to-faculty transition.

Diversity, Inclusion and No Harassment

Research Corporation for Science Advancement fosters an inclusive and respectful environment for listening in which the different identities, backgrounds, and perspectives of all participants are valued, and in which everyone is empowered to share ideas as fellow scientists.

RCSA does not tolerate any form of harassment, which could include verbal or physical conduct that has the purpose or effect of substantially interfering with anyone else's participation or performance at this conference, or of creating an intimidating, hostile, or offensive environment; any such harassment may result in dismissal from the conference.

Read RCSA's Code of Conduct



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From the President

Welcome to the first 2024 RCSA Fellows Conference. RCSA believes that to promote groundbreaking science, we must welcome, engage, and nurture the brightest minds from the widest range of backgrounds, institutions, and life experiences. The RCSA Fellows Initiative is our newest effort reflecting this commitment. By increasing faculty diversity in the physical sciences in the United States and Canada through job search preparation and community building, the Initiative will build a bridge between postdoctoral scholars and their future as successful teacher-scholars by demystifying the faculty search process and creating a community to help guide their way. Additionally, RCSA will support and guide participating host departments and institutions in sharing their challenges and best practices in working toward inclusivity.



Applying for faculty positions, interviewing, and transitioning to the professoriate can be extremely stressful. Anxieties can resurface in a rush. Imposter syndrome can take hold. Making decisions can be daunting. The conference program of activities developed by Program Director **Eileen Spain** and Senior Program Directors **Silvia Ronco**, **Richard Wiener**, and **Andrew Feig**, is designed to provide our 2024 Fellows with more confidence for their upcoming faculty search with guidance to sharpen their job search planning and strengthen their application materials.

Over time, the Fellows Initiative hopes to create cohorts of early career physical scientists across the country who can turn to each other, and the RCSA community at large, to discuss challenges and share experiences. We hope this mutual support network will enhance the ability of the RCSA Fellows, promising teacher-scholars, to progress in and fully enjoy their independent academic careers as they advance science.

The development of a thriving community of very busy scientists requires consistent commitment from all. My thanks to all who have given this Initiative and this conference agenda your valuable time, your ideas in supporting its goals, and your enthusiastic participation.

I wish you all an engaging and productive conference.

Daniel Linzer

President

Research Corporation for Science Advancement

From the Program Director

I welcome you to the inaugural 2024 RCSA Fellows Conference. The RCSA Fellows Initiative seeks to advance the scientific enterprise in the U.S. and Canada by building and strengthening a diverse community of faculty in the physical sciences. The Initiative brings to this conference eight outstanding early career physical scientists as 2024 RCSA Fellows. The Fellows have begun a multiyear program that includes preparation for a job search, a mock interview at a host institution, structured feedback and guidance throughout the job search process, and transition to a tenure-track faculty position. In parallel, RCSA aims to partner with participating host departments and institutions as they develop and strengthen their best practices for diversity, equity, and inclusion.



Joining the Fellows are several members of RCSA's community. Teri Odom will open the conference with a keynote address on the journey to the professoriate. Luisa Whittaker-Brooks, Casey Londergan, Jackie Faherty, and Keivan Stassun will serve as conference facilitators. Working from the conference theme, *Next Steps in Your Academic Journey*, Facilitators will engage the Fellows in activities focused on work-life balance, competitive job application materials, and finding mentors. Fellows will network with additional RCSA community members including Cyndi Atherton and Luis Colón, members of the Initiative's Advisory Committee, Amy Landis, member of RCSA's Board of Directors, and host institution representatives. When the conference adjourns, Fellows will leave with work products to support their upcoming academic job searches and a new community to rely on and to share experiences.

I hope all participants find value and community in our conference program and activities.

Eileen Spain

Program Director
Research Corporation for Science Advancement

Conference Agenda

May 21 - 22, 2024

Tuesday, May 21

| 2:00 pm | Registration Opens | Lobby |
|-----------------|---|--------------------------------|
| 2:00 – 3:30 pm | Snacks & Informal Discussions | Sonoran II Foyer |
| 3:30 – 5:45 pm | Welcome & RCSA Initiative Introductions | Sonoran I |
| | Dan Linzer, President, RCSA | |
| | Eileen Spain, Program Director, RCSA | |
| | Keynote Presentation | |
| | Tools on Becoming a Faculty Citizen | |
| | Teri Odom, Northwestern University | |
| 5:45 – 6:00 pm | Group Photo | TBD |
| 6:00 – 6:30 pm | Reception | Sonoran II Foyer & Front Patio |
| 6:30 – 7:30 pm | Dinner | Sonoran II |
| 7:30 – 10:00 pm | Networking | Sonoran II Foyer & Front Patio |

Wednesday, May 22

| 7:00 – 8:00 am | Breakfast | Sonoran II |
|------------------|--|--------------------------------|
| 8:00 – 8:30 am | Facilitators' Panel | Sonoran I |
| | Jackie Faherty, American Museum of Natural History | |
| | Casey Londergan, Haverford College | |
| | Keivan Stassun, Vanderbilt University | |
| | Luisa Whittaker-Brooks, University of Utah | |
| 8:30 – 10:00 am | Session 1 – Reflections for a 5-Year Life Plan | Sonoran I |
| 10:00 – 10:15 am | Morning Break | Sonoran II Foyer & Front Patio |
| 10:15 – 12:00 pm | Session 2A – Maximize Competitiveness | Sonoran I |
| | of Your Job Materials | |
| 12:00 – 1:00 pm | Lunch | Sonoran II |
| | Host Institution Rep. Meeting | Ironwood |
| | (Bring your lunch upstairs) | |
| 1:00 – 2:45 pm | Session 2B – Maximize Competitiveness | Sonoran I |
| | of Your Job Materials | |
| 2:45 – 3:00 pm | Afternoon Break | Sonoran II Foyer & Front Patio |
| 3:00 – 4:30 pm | Session 3 – Mentors for your Academic Journey | Sonoran I |
| 4:30 – 5:45 pm | Early Career Faculty Panel | Sonoran I |
| | Rachel Davidson, University of Delaware | |
| | Liliana Salvador, University of Arizona | |
| | Xin Xu, Arizona State University | |
| | Moderator: Amy Landis, Colorado School of Mines | |
| 5:45 – 6:00 pm | External Advisory Committee Meeting | Ironwood |
| 5:45 – 6:30 pm | Reception | Sonoran II Foyer & Front Patio |
| 6:30 – 7:30 pm | Dinner | Sonoran II |
| 7:30 – 10:00 pm | Networking | Sonoran II Foyer & Front Patio |

Keynote Presentation

Tools on Becoming a Faculty Citizen

Teri Odom

Northwestern University

Abstract:

The journey to the professoriate can be complex, with some roads straight and other paths tortuous. Signposts as well as having fellow travelers and guides are important to reach the destination — which is only the beginning of the next stage. This talk will discuss a holistic approach to becoming a professor and being a citizen faculty member. Although strategies and tactics will be described, an emphasis will be placed on how to find your role and then contribute to your local and the broader academic communities.



RCSA Fellows

Carlos Blanco carlosblanco2718@princeton.edu

Physics, Princeton University

The central concern of my research is the search for physics beyond the Standard Model in general, and in specific the theoretical basis for the detection of dark matter.

Sarah Blunt sarah.blunt.3@gmail.com

CIERA, Northwestern University

I study the youngest exoplanets, in the first few million years of their lives, in order to probe the planet formation process. I also spend time developing open-source software for astronomy.

Michelle Brann michellerbrann@gmail.com

Astrophysics, Harvard University

I conduct laboratory experiments at the Harvard & Smithsonian Center for Astrophysics to understand abundances of organic molecules in interstellar ice analogs during planet formation.

Catherine Denning-Jannace catherine.denningjannace@duke.edu

Chemistry, Duke University

Currently I am interested in understanding and manipulating metallohomeostasis of the opportunistic fungal pathogen Candida albicans with a goal of developing more efficacious antifungal agents.

Philipp Gemmel pmgemmel@umich.edu

Life Sciences Institute, University of Michigan

I am an Organic Chemist and develop biocatalytic reactions inspired by natural product biosynthesis. I want to establish inquiry-focused introductory science courses to increase student retention.

Said Jalife Jacobo sjalifej@central.uh.edu

Chemistry, University of Houston

My reseach lies in the field of computational chemistry, focused on ground and excited-state (anti)aromaticity, organic electronics, reaction mechanisms, and supramolecular chemistry.

William Ndugire wndugire@umass.edu

Chemistry, University of Massachusetts Amherst

I am interested in the development of nanomaterials for use in biomedical applications. I am committed to being a Chemistry educator to students of all backgrounds.

Eugenia Vasileiadou evasileiadou@g.ucla.edu

Chemistry and Biochemistry, University of California, Los Angeles

My research interests focus on the rational synthetic design of functional inorganic (nano)materials.

Educationally, I employ pedagogical processes in designing inclusive curricula in STEM.

Participants

Cyndi Atherton cynthia.atherton@gmail.com

Advisory Committee

Science & Philanthropy Consultant, California Institute of Technology

Originally an atmospheric scientist, I pivoted to overseeing physical science at two private foundations, focusing on astronomy, physics, climate change, and diversity within those fields.

Luis Colon lacolon@buffalo.edu

Advisory Committee

Chemistry, University at Buffalo SUNY

Synthesis, physicochemical characterization and application of new silica-based materials for chemical separations. A significant effort is devoted to advancing diversity in the chemical sciences.

Rachel Davidson rachelda@udel.edu

Host Institution Representative - Panelist

Chemistry and Biochemistry, University of Delaware

We're exploring electrochemical additive manufacturing as a means of directing growth of nano arrays and 3D architectures and study evolution of structure/performance in CO2 reduction electrocatalysts

Jackie Faherty jfaherty@amnh.org

Advisory Committee - Facilitator

Astrophysics, American Museum of Natural History

I work at the boundary of stars and planets as well as giant planets and brown dwarfs. I also work to create a more diverse STEM world then the one I entered through informal education at AMNH.

Jason Gillmore gillmore@hope.edu

Host Institution Representative

Chemistry, Hope College

Organic photochromic dyes and switches, photochemistry, electrochemistry, computations. Undergraduate research. CUREs. Peer-Led Team Learning. Mentoring junior and future faculty.

Amy Landis amylandis@mines.edu

RCSA Board Member - Moderator

Civil & Environmental Engineering, Colorado School of Mines

I have nearly 20 years experience in sustainable plastics, renewable fuels, life cycle assessment, and systems analysis. She has a decade of leadership and administrative experience in DEI.

Casey Londergan clonderg@haverford.edu

Facilitator

Chemistry, Haverford College

Biophysical chemistry and spectroscopy applied to better understanding protein dynamics. Inquiry- and project-based labs and CUREs and physical chemistry curricular reform.

Participants Continued

Teri Odom todom@northwestern.edu

Keynote Speaker

Chemistry, Northwestern University

I am an expert in the design of structured nanoscale materials that exhibit extraordinary size and shapedependent optical and physical properties.

Liliana Salvador lilianasalvador@arizona.edu

Panelist

Animal and Comparative Biomedical Sciences, University of Arizona

I develop computational and mathematical models to understand the ecology and evolution of bacterial zoonotic diseases at the wildlife, livestock, and human interface.

Laura Sanchez Imsanche@ucsc.edu

Host Institution Representative

Chemistry and Biochemistry, University of California, Santa Cruz

My interest is to elucidate the chemistry by which cells and microbes communicate with one another or with their surroundings to coordinate biological functions in complex backgrounds.

Keivan Stassun keivan.stassun@vanderbilt.edu

Advisory Committee - Facilitator

Physics & Astronomy, Vanderbilt University

Led the Cottrell Scholars Collaborative initiative that resulted in the RCSA Fellows program.

Rory Waterman rory.waterman@uvm.edu

Host Institution Representative

Chemistry, University of Vermont

I have a whole lot of fun making molecules, and our kind of science keep students from high school to graduate school engaged and interested. On the side, I help new teachers & chemistry faculty.

Luisa Whittaker-Brooks luisa.whittaker@utah.edu

Facilitator

Chemistry, University of Utah

Understanding spin/charge transport in energy related materials. Transforming the chemistry experience by replacing weed-out courses with deep-root and applied courses early on in students' careers.

Xin Xu xxu@asu.edu

Panelist

The Polytechnic School, Arizona State University

I research solid-state batteries and industrial decarbonization. He's driven to advance energy education for precollege students, igniting their curiosity to shape sustainable energy's future.

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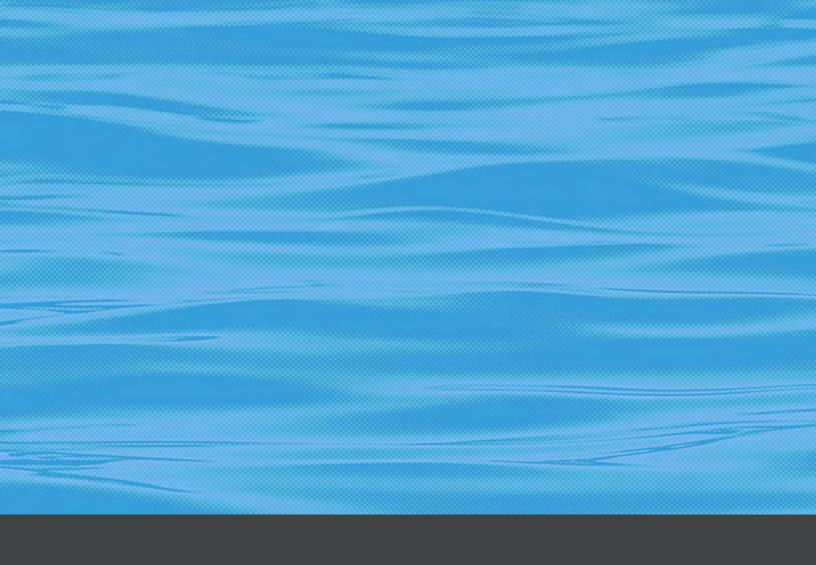
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