The Adolph C. and Mary Sprague

Miller Institute
for Basic Research in Science

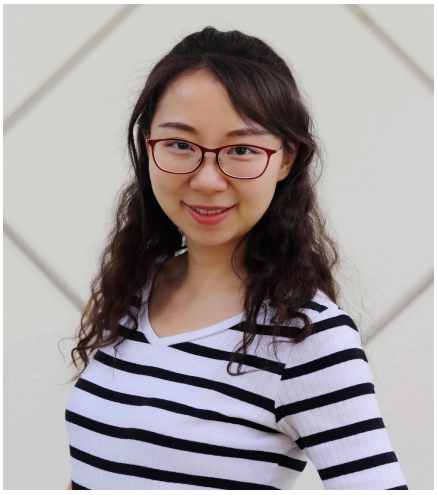
Newsletter
Spring 2024

Shaping How Quantum Bits Talk to Each Other

Miller Fellow Focus: Xueyue (Sherry) Zhang

Have you ever played the telephone game? Several participants form a line, and the first person creates a message to pass down the chain. It seems like a simple task. However, the catch is that participants can only pass the message via their direct neighbors. Often, as the number of participants increases, the original message becomes distorted and the final message can be unrecognizably hilarious.

If the game of passing messages seems too mundane, let's elevate the concept to the realm of quantum information. The basic unit of classical information is a "bit," which takes values of either 0 or 1. Its counterpart in the quantum world is a quantum bit, or qubit, which can assume not just the states |0> and |1>, but also any superposition of the two. This ability to maintain superpositions, as well as to establish entanglement between multiple qubits, vastly extends the amount of information a handful of qubits can represent. As theoretical physicist and Nobel Laureate P.W. Anderson said, "more is different." This intrinsic imbalance between classical and quantum information renders general quantum systems extremely difficult to calculate or simulate. Since quantum mechanics governs the microscopic world, these systems include a wide range of subjects, from interacting electrons in condensed matter systems to chemical and pharmaceutical reactions.



In recent decades, our deeper understanding of quantum systems has ushered us into an era of controlling, probing, and engineering them. Techniques for trapping, laser cooling, and manipulating ultracold atoms, ions, and molecules have been developed for atomic and molecular systems. Additionally, artificial atoms with various energy level structures have been created, with sizes ranging from a few atoms to mesoscopic scales. A prime example of a mesoscopic artificial atom is a superconducting qubit, the core of which is a Josephson junction. Intuitively, the Josephson junction functions as a nonlinear inductor, creating an anharmonic energy landscape where the lowest quantized energy levels form the qubit. The mesoscopic nature of superconducting qubits facilitates their lithographic fabrication on commercial substrates, similar to how integrated circuits are defined. This flexibility in fabrication offers immense design freedom, allowing for quantum information

CONTINUED ON PAGE 6 >

INSIDE THIS EDITION

Call for Nominations

Miller Research Fellowship Nominations
Deadline: September 12, 2024

Miller Research Professorship Applications
Deadline: September 16, 2024

Visiting Miller Professorship Departmental Nominations
Deadline: September 16, 2024

"My three months at Berkeley were very fruitful and productive. The Miller events provided many occasions of interaction with colleagues from other disciplines, often allowing very stimulating conversations. Being part of the Miller community has been a great honor for me."

- Pietro Caputo
Professor
Mathematics and Physics
Roma Tre University
Visiting Miller Professor Fall 2022

Call for Visiting Miller Professor Nominations

Online Nomination Deadline: September 16, 2024

Visiting Miller Research Professorship AY 2025-2026

The Advisory Board of the Miller Institute for Basic Research in Science invites UC Berkeley faculty to submit online departmental nominations for Visiting Miller Research Professorships and the Gabor A. and Judith K. Somorjai Visiting Miller Professorship Award for terms in Fall 2025 or Spring 2026. The purpose of these Visiting Miller Professorships is to bring promising or eminent scientists to the Berkeley campus on a short-term basis for collaborative research interactions. It is required that awardees be in residence at Berkeley during their appointment term. Faculty members or research scientists from around the world are eligible to be considered for sponsorship. Non-US citizens must be eligible for J-1 Scholar visa status in order to be awarded. Faculty members at other UC campuses are eligible to be nominated for this program as well. The Miller Institute, as the sponsor and administrative department, will extend an invitation after advising the department of its selection.

Beginning in June 2024, nominations will be accepted from UC Berkeley faculty for Visiting Professorship candidates for the 2025-2026 academic year. Nominations are judged competitively and are due by September 16, 2024. It is anticipated that between four and ten awards will be made.

For more information, and to access the nomination form online, visit **miller.berkeley.edu/visiting-professorship**.

Call for Miller Professor Applications

Online Application Deadline: September 16, 2024

Miller Research Professorship AY 2025-2026

The Miller Professorship program invites UCB faculty to submit applications for terms in the 2025-2026 academic year. The objective of the Miller Professorship program is to provide opportunities for faculty to pursue new research directions on the Berkeley campus and to participate in the vibrant Miller Institute interdisciplinary scientific community. Appointees are encouraged to follow promising leads that may develop in the course of their research. In order to accommodate a range of faculty members, the Miller Professorship program offers appointees, in consultation with their departmental chair, the option of taking teaching relief or continuing to teach during their Miller Professorship term. Funds will be distributed differently depending upon the choice selected.

The primary evaluation criteria will continue to be research excellence. Proposals to write books are not viewed as competitive. Applicants are also encouraged to describe their interest in participating in in the interdisciplinary Miller Institute community and providing mentorship to the Miller Research Fellows.

Beginning in June 2024, applications will be accepted from UC Berkeley faculty for terms in the 2025-2026 academic year. Applications are judged competitively and are due by September 16, 2024. It is anticipated that between four and ten awards will be made.

For more information, and to access the application online, visit **miller.berkeley.edu/professorship**.

:: **Nomination & Application details**: miller.berkeley.edu

:: **Questions?** millerinstitute@berkeley.edu

Call for Nominations: Miller Research Fellowship

2025-2028 Term

Nomination Deadline: September 12, 2024

The Miller Institute for Basic Research in Science invites department chairs, faculty advisors, professors and research scientists at institutions around the world to submit nominations for Miller Postdoctoral Research Fellowships in the basic sciences. Through this program, the Miller Institute seeks to discover and encourage individuals of outstanding talent, and to provide them with the opportunity to pursue their research on the Berkeley campus. Fellows are selected on the basis of their academic achievement and the promise of their scientific research. Miller Fellows also have a keen curiosity about all science and share an appreciation for an interdisciplinary experience. The Miller Institute is the administrative home department for each Miller Fellow who is hosted by an academic department on the Berkeley campus. All details about the fellowship program are found at: **miller.berkeley.edu/fellowship.**

The Miller Institute also welcomes nominations for the Kathryn A. Day Miller Postdoctoral Fellowship award for the 2025-2028 Fellowship cohort. Named in honor of the Institute's retired Chief Administrative Officer Kathy Day, this award is intended for an early career scientist who, in addition to excelling in their pursuit of basic science research, also engages in outreach in support of science.

Miller Research Fellowships are intended for exceptional early-career scientists of great promise who have recently been awarded, or who are about to be awarded, the doctoral degree. Miller Fellows are expected to begin their Fellowship shortly after being awarded their Ph.D. A short period as a postdoctoral fellow elsewhere does not exclude eligibility, but applicants who have already completed more than two years of postdoctoral experience are not eligible for nomination. **A nominee cannot hold a paid or unpaid position on the Berkeley campus at the time of nomination or throughout the competition and award cycle which may last through the end of February 2025.** Nominees who are non-US citizens must show eligibility for obtaining J-1 Scholar visa status for the duration of the Miller Fellowship. Non-US citizens will be required to prove English language proficiency prior to award. The Miller Institute does not support H-1B visa status. Eligible nominees will be invited by email by the Institute to apply for the Fellowship after the nomination has been reviewed. Direct applications and self-nominations are not accepted. All nominations must be submitted using the online nomination system at: **miller.berkeley.edu/fellowship.**

Nominators will need the following required information to complete the online nomination process:

- Nominee's complete full and legal name (do not use nicknames)
- Nominee's current institution
- Nominee's complete, current and active E-mail address that will be valid through March 2025, and current mailing address with postal code and telephone number
- Nominee's Ph.D. Institution and (expected) Date of Ph.D. (month & year required)
- Letter of recommendation and judgment of nominee's promise by the nominator (saved in PDF format). Letter must be specific to the Miller Fellowship, have a current date, and be on institutional letterhead. The Executive Committee finds it helpful in the recommendation letter to have the candidate compared with others at a similar stage in their development
- Nominator's current active E-mail address, title, and professional mailing address (include zip code/campus mail code)

The Institute provides a stipend of $85,000 with annual increases and an annual research fund of $10,000, for total initial compensation of $95,000. There is provision for travel to Berkeley for incoming Miller Fellows and their immediate families and a maximum allowance of $3,000 for moving personal belongings. Benefits, including medical, dental, vision and life insurance are provided with a modest contribution from the Miller Fellow. All University of California postdocs are represented by the UAW. Fellowships are awarded for three years, generally beginning August 1, 2025 and ending July 31, 2028. Approximately eight to ten Fellowships are awarded each year. Candidates will be notified of the results of the competition starting in mid-December, and a general announcement of the awards will be made in the spring.

We are grateful for your thoughtful participation in this process and the contribution you are making in the careers of distinguished early-career researchers.

:: **Nomination & Application details**: miller.berkeley.edu

:: **Questions?** millerinstitute@berkeley.edu

Miller Research Fellowship Awardees 2024-2027

The Miller Institute is pleased to introduce the 2024-2027 Miller Research Fellows. Each year, the Miller Research Fellowship program seeks to discover individuals of outstanding talent and to bring young scholars of great promise to the Berkeley campus. The Fellows will be working with Berkeley faculty hosts for a three-year term beginning in the 2024-2025 academic year. A full list of all past and present Miller Fellows is available on our website.

Announcing the Kathryn A. Day Miller Postdoctoral Fellow!

This year, the Institute named incoming 2024-2027 Fellow Mark Carrington as the Kathryn A. Day Miller Postdoctoral Fellow! This award was established in 2019 through a major pledge to the Institute by Professor Randy Schekman and Professor Sabeeha Merchant in honor of Kathy's dedicated service to the Institute over a 30-year career as its Chief Administrative Officer. In addition to demonstrating great promise in research, Mark was chosen for his work in outreach and communication in science. We're thrilled to welcome Mark and celebrate Kathy's legacy at the Institute through this special Fellowship award!

Mark Carrington

Kathryn A. Day Award

Ph.D.: University of Cambridge
Undergraduate Institution: Stanford University
Berkeley Dept.: Chemistry
Faculty Host: F. Dean Toste

Over the coming decade, the cost of long-duration grid storage will need to be reduced by 90% to keep stride with Net Zero targets. To this end, organic materials are currently being appraised as leading candidates for electrochemical storage capable of affording both low cost and high functionality with no supply chain constraints. However, redox processes in organic materials are complex and frequently lead to the formation of open-shell species, which, if unregulated, can lead to active material degradation and efficiency losses. Yet in nature, open-shell species and their corresponding assemblies are readily harnessed to control signalling and other complex processes. My work focuses on the development of supramolecular strategies to understand and utilise these species to access new performance capabilities towards practical all-organic grid batteries.

Mohammad Farhat

Ph.D.: Sorbonne University - Paris Observatory
Undergraduate Institution: American University of Beirut, Lebanon
Berkeley Dept.: Astronomy, EPS
Faculty Hosts: Eugene Chiang, Bruce Buffett

I have a broad interest in astrophysical and geophysical dynamics, ranging from the Earth-Moon system to extrasolar planets and disks. So far, my research has primarily focused on the theoretical understanding of processes that alter the orbital and rotational evolution of planetary systems. At Berkeley, I aim to combine state-of-the-art geophysical modeling (pertaining to solid/fluid tides in particular) with planetary orbital dynamics, to address some long-standing questions in planetary formation theory and the observed architecture of planetary systems. In parallel, I am interested in exploring the intricate interplay between the Earth's rotational and geodynamical evolutions over geological timescales, and how they shaped its climatic history, ultimately allowing for the emergence of complex forms of life.

Katherine Fraser

Ph.D.: Harvard University
Undergraduate Institution: Harvard University
Berkeley Dept.: Physics
Faculty Host: Benjamin Safdi

My research focuses on developing tools to search for new subatomic particles. Many different problems in the standard model of particle physics could be resolved by the existence of additional particles, including the nature of dark matter, the inexplicably light mass of the Higgs boson, the large hierarchy in coupling strength between the Higgs boson and different fermion flavors, and several unexplained experimental anomalies. I work on both theoretical and machine learning based tools which could help discover new particles to solve these problems.

Follow us on: Facebook @millerinstituteUCB, X/Twitter @UCB_MillerInst, LinkedIn @millerinstitute

Matthew Kustra

Ph.D.: UCSC
Undergraduate Institution: University of Virginia
Berkeley Dept.: Integrative Biology
Faculty Host: Christopher Martin

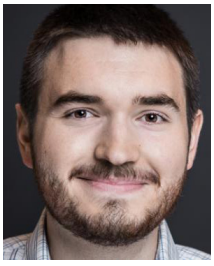
My research integrates fieldwork, behavioral, experimental, and theoretical approaches to understand the processes that create and maintain species variation. During my dissertation, I studied how cryptic female choice - a process where females bias fertilization to specific males - influences the evolution of male behavior and the creation of new species. I also developed mathematical models to understand the ecological-evolutionary dynamics of microbe-host interactions in marine invertebrates. As a Miller Fellow, I will explore how natural and sexual selection interact to rapidly create many new species by developing new theoretical models and testing them with empirical work on Cyprinodon pupfish.

Kate Reidy

Ph.D.: MIT
Undergraduate Institution: Trinity College Dublin, Ireland
Berkeley Dept.: MSE, Physics
Faculty Hosts: Andrew Minor, Michael Crommie

Control of material processes at the level of atoms and electrons is a grand challenge of materials design. At the smallest length scales the placement of even a single atom or defect in the periodic arrangement can alter nanomaterial function. In my PhD at MIT I studied the growth and interfacing nanomaterials, using advanced microscopy techniques for creating and understanding atomically-precise nanostructures. As a Miller Fellow, I aim to add functionality – to understand how individual atoms and atomic-scale defects behave under applied electric or optical fields in nanoscale devices. By using these fields to manipulate atoms and molecules with precision, we can create novel structures with unique properties that can impact energy storage, conversion, and transmission, as well as quantum computing and sensing.

Ryan Unger



Ph.D.: Princeton University
Undergraduate Institution: University of Tennessee
Berkeley Dept.: Mathematics
Faculty Host: Sung-Jin Oh

I am a mathematician working in the field of general relativity, Einstein's theory of gravity. I study "extremal" black holes,which are black holes with absolute zero temperature in the thermodynamic analogy of black hole mechanics. My research centers around the formation and stability of extremal black holes and their involvement in critical phenomena on the black hole formation threshold.

Thuy-Duong (June) Vuong

Ph.D.: Stanford University
Undergraduate Institution: MIT
Berkeley Dept.: EECS
Faculty Host: Alistair Sinclair

I have a broad interest in theoretical computer science. My current focus is on designing fast algorithms for sampling from complex high-dimensional distributions. My work has applications in statistical physics, machine learning, and complexity theory.

Ian Waudby-Smith

Ph.D.: Carnegie Mellon
Undergraduate Institution: University of Waterloo, Canada
Berkeley Dept.: Statistics
Faculty Host: Michael Jordan

I work on various topics in statistics, machine learning, and probability, often with an eye towards anytime-valid sequential inference, nonparametric methods, and causality. I am particularly interested in applications to statistical mechanism design, election auditing, and privacy. I also have a keen interest in strong convergence and invariance principles as well as their applications to uniform statistical inference.

Jonathan Wolf

Ph.D.: Yale University
Undergraduate Institution: Westfälische Wilhelms-Universität (WWU), Germany
Berkeley Dept.: EPS
Faculty Hosts: Weiqiang Zhu, Barbara Romanowicz

Jonathan uses earthquake waves to study the structure and dynamics of Earth's mantle, analyzing waves from distant earthquakes recorded by seismometers across the globe. Jonathan's work on deep Earth dynamics informs science questions such as how Earth has evolved over time to become a habitable planet, how material flows inside Earth, how this flow relates to surface processes such as plate tectonics, and how dynamic processes influence the Earth system as a whole. To explore these science questions, Jonathan will use massive global datasets during his time as a Miller Fellow.

Sarah Zeichner

Ph.D.: Caltech
Undergraduate Institution: University of Chicago
Berkeley Dept.: PMB
Faculty Host: Patrick Shih

My research focuses on studying organic matter across modern and ancient environments, from their lifetime within surface environments today to their formation within interstellar space. As a Miller fellow, I will work to better understand how plant-derived organic matter is degraded and preserved in soil, and how genetic controls on the structure of this organic matter can affect its fate.

> CONTINUED FROM PAGE 1 [Miller Fellow Focus]

to be preserved in these qubits for nearly a millisecond, with fast entanglement operations taking tens of nanoseconds and achieving fidelities exceeding 99.5%. These characteristics have drawn the attention of major companies to initiate industrial efforts in building quantum processors based on superconducting qubits.

However, the telephone game introduced in the beginning hints at a drawback of superconducting qubits: most architectures only allow qubits to communicate with their nearest neighbors on a 2-dimensional plane. This restricted connectivity limits superconducting qubits in several ways. For example, in the implementation of quantum error-correcting codes, nearest-neighbor connectivity does not support efficient encoding of logical qubits using a limited number of physical qubits. When using superconducting circuits as analog quantum simulators, the connectivity restricts the realm of viable Hamiltonians to the ones with only nearest-neighbor coupling, excluding those involving longer-range interactions and the resulting frustration.

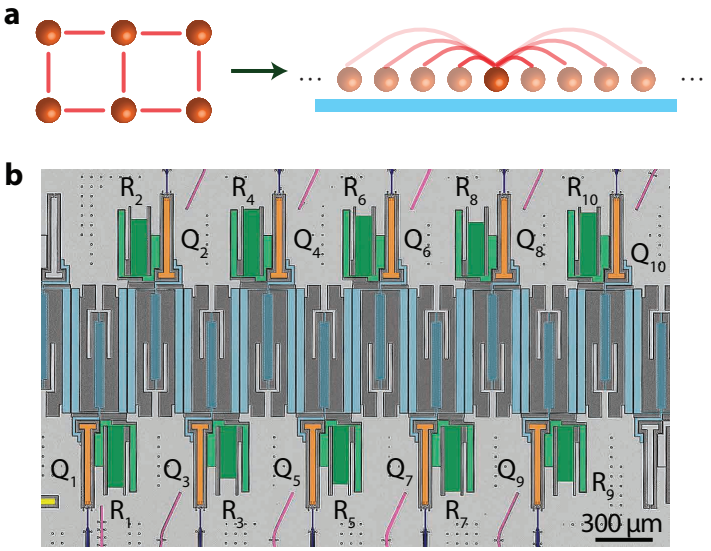


Figure 1: Waveguide-Coupled Superconducting Qubits. **(a)** Introducing tunable superconducting qubit connectivity using a waveguide. **Left:** Traditional superconducting qubit connectivity. **Right:** Waveguide-coupled superconducting qubit connectivity. **(b)** False-colored optical image of a device with 10 qubits coupled to a metamaterial waveguide.

My research focuses on addressing this connectivity challenge. Traditionally, superconducting qubits are connected through near-field direct coupling or by implementing nearest-neighbor couplers (Figure 1a, left). Our approach to introducing longer-range coupling involves incorporating non-local degrees of freedom, such as microwave photons in a waveguide (**Figure 1a, right**).

During my graduate work, I explored how a microwave photonic bus can shape the interactions between superconducting qubits. One scenario uses a simple coplanar waveguide where the qubits directly couple to an open environment. By utilizing collective dissipation in waveguide quantum electrodynamics (QED), we have prevented the rapid decay of the qubits' excited states into the waveguide, thus observing coherent exchange dynamics in completely open environments. Besides coplanar waveguides, we designed metamaterial waveguides with bandgaps that enable the engineering of photon-mediated qubit interactions without sacrificing qubit coherence (**Figure 1b**). Within the bandgap frequency, there are no propagating photonic modes for qubits to decay into. Instead, a photonic envelope localized around a qubit forms a qubit-photon bound state with a spatial extent that can be adjusted via the detuning between the qubit and the band-edge frequency. By overlapping these bound states, we induced photon-mediated interactions with tunable range and strength. Leveraging this tunability, we developed a multi-qubit circuit architecture that allowed us to study many-body dynamics in an extended version of the Bose-Hubbard model with variable hopping ranges. Our platform could be tuned from nearest-neighbor interactions to a system-wide range, where qubits at opposite ends could interact through the microwave photons. This enhanced range of connectivity introduces ergodicity into the hard-core boson model, enabling us to investigate changes in ergodicity through photon statistics.

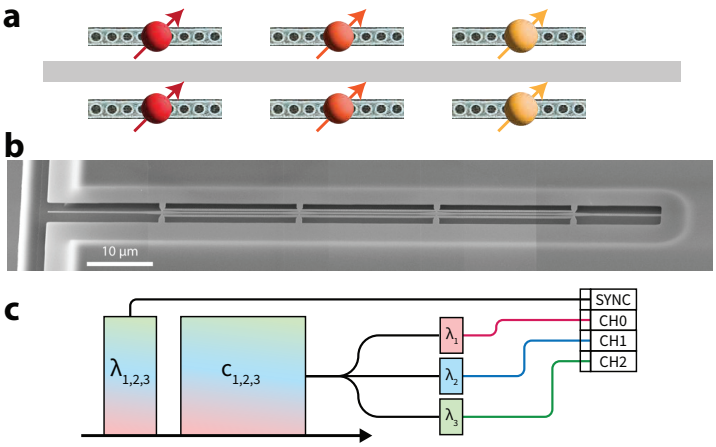


Figure 2: Waveguide-Coupled Photonic Crystal Cavity Array with Embedded Color Centers. **(a)** Schematic and **(b)** SEM image of a silicon photonic waveguide coupled to multiple cavities containing color centers. **(c)** Illustration of wavelength division multiplexing, where multiple quantum emitters are excited using a pulse with multiple tones, and the emission from different color centers can be filtered into separate channels.

As a Miller Fellow, I expanded the scope of connectivity from a single quantum processor to linking quantum modules over long distances. To realize this ambitious objective, we must use optical photons, which can propagate through commercial optical fibers with minimal loss and negligible thermal excitation at room temperature. The qubits, in this case, are color centers that offer optical transitions to interface with flying photons and electron or nuclear spins to store local quantum information while the photon travels. However, the most mature solid-state spin-photon interfaces require significant fabrication development. In my host Dr. Alp Sipahigil's group, we focus on creating an efficient spin-photon interface using color centers in silicon. As an initial step towards linking these color centers with optical photons, we introduced a bus waveguide architecture where multiple photonic crystal cavities are interconnected (**Figures 2a & 2b).**

CONTINUED ON PAGE 7 >

> CONTINUED FROM PAGE 6 [Miller Fellow Focus]

Using emitters in different cavities at distinct wavelengths, we are working towards wavelength division multiplexed single-photon emission (**Figure 2c**), aiming to enhance the capacity of entanglement distribution.

With both platforms addressing connectivity issues at various scales, I am excited to develop novel quantum systems that enable exploration of questions in uncharted areas.

Xueyue (Sherry) Zhang is a first-year Miller Fellow in EECS and Physics, hosted by Dr. Alp Sipahigil. She earned her Ph.D. in Applied Physics from Caltech, working with Dr. Oskar Painter on superconducting qubits in various engineered microwave photonic environments. Prior to Caltech, Dr. Zhang was an undergraduate at Tsinghua University, exploring nonlinear optics and nanophotonics.

Personal website: xueyue-sherry-zhang.github.io
Contact: x.sherry.zhang@berkeley.edu

Recent Publications by Miller Members

Vayu Hill-Maini (Miller Fellow 2020-2023) is a first author of the article "Edible mycelium bioengineered for enhanced nutritional value and sensory appeal using a modular synthetic biology toolkit," published in *Nature Communications 15, 2099 (2024).*

A paper, "Essay: Exploring the Physics of Basic Medical Research" by former Visiting Miller Professor (2023) **Vahid Sandoghdar**, was published in the *Physical Review Letters journa*l.

Former Miller Professor (2004, 2016-2017) **Bin Yu** is a co-author on a MIT Press book entitled "Veridical Data Science: The Practice of Responsible Data Analysis and Decision Making". Veridical Data Science demonstrates how to use the principles of predictability, computability, and stability to create and evaluate trustworthy data-driven results by conducting stress tests at every stage of the data science life cycle.

Chadi M. Saad-Roy (Miller Fellow 2022-2025) is a co-author of the paper, "Markets as drivers of selection for highly virulent poultry pathogens," published in *Nature Communications.*

A new technique developed in the laboratory of **Kathleen Collins** (Miller Professor 2011, Executive Committee 2014-2015) called Precise RNA-mediated INsertion of Transgenes, or PRINT, was described in a publication in the journal *Nature Biotechnology.* PRINT leverages the ability of some retrotransposons to efficiently insert entire genes into the genome without affecting other genome functions.

Miller Fellow Hosts, the Miller Executive Director, and Miller staff enjoyed a Host Appreciation Luncheon at the Faculty Club on 3/15/24. Pictured from upper left clockwise around the table: Shirshendu Ganguly, John Hartwig, Chris Martin, Priya Moorjani, Megan Martik, Chung-Pei Ma, Mike Boots, Michael Hutchings, Patrick Shih and Donata Hubert.

In the News

(see more past & current Miller Institute News: miller.berkeley.edu/news)

Nicole King (MP 2018-2019, Executive Committee 2023-2026) and **Lacey Knowles** (VMP 2009) were elected **2023 Fellows of the American Association for the Advancement of Science (AAAS)** in recognition of their scientifically and socially distinguished achievements.

Augusto Ghiotto (Miller Fellow 2023-2026) was named the recipient of the **2024 Richard L. Greene Dissertation Award in Experimental Condensed Matter or Materials Physics** *"for the discovery of a continuous metal-insulator transition and quantum critical behavior in Moire transition metal dichalcogenides."*

Three former Miller Fellows, **Soonwon Choi** (2018-2021), **Anna Ho** (2020-2022) and **Yang Yang** (2016-2018), are among the **2024 Sloan Research Fellows.**

Lingfu Zhang (Miller Fellow 2022-2025) was named a winner of the **Bernoulli Society New Researcher Award 2024**. The award recognizes the work of outstanding young researchers in the fields of Mathematical Statistics and Probability.

Michel Talagrand (Visiting Miller Professor 1996), a mathematician who developed formulas to make random processes more predictable and helped to solve an iconic model of complex phenomena, won the **2024 Abel Prize,** one of the field's most coveted awards, for his *"contributions to probability theory and functional analysis, with outstanding applications in mathematical physics and statistics."*

Marc Kamionkowski (Visiting Miller Professor 2010) was announced as a **2024 Guggenheim Fellow in Astronomy–Astrophysics.**

The Association of American Publishers (AAP) announced **Nicolas Mathevon** (Visiting Miller Professor 2008, 2024) as the **R.R. Hawkins Award Winner of its annual PROSE Awards,** which recognize best-in-class scholarly publications in Biological & Life Sciences. *"Nicolas Mathevon entrusted to our team this extraordinary work, The Voices of Nature: How and Why Animals Communicate, which opens all of our senses to the ways in which sounds and communication shape culture, community and environment. It's a thrill to amplify its impact with this award."*

Carly Schissel (Miller Fellow 2022-2025) was awarded the **WCC Pfizer Emergent Leader Award** that recognizes up to eight outstanding individuals in the second year and above of their graduate studies or undertaking post-doctoral research.

Next Steps

Michael Celentano
Member of Technical Staff (Resident)
OpenAI

University of California, Berkeley
Miller Institute for Basic Research in Science
468 Donner Lab
Berkeley, CA 94720-5190
miller.berkeley.edu

Miller Institute News - Spring 2024
Please send address corrections to:
miller_adm@berkeley.edu

Annual Spring Dinner 2024

Miller Senior Fellow Susan Marqusee, the distinguished guest speaker at the Annual Spring Dinner, presented a talk titled "Is the protein folding problem really solved?"

Guest Kyan D'Angelo, Miller Fellow Carly Schissel, guest Elena K. Perry, Miller Fellows Shashank Gandhi, James Santangelo, Chadi Saad-Roy, Rohil Prasad, Augusto Ghiotto and Mengshan Ye

Miller Fellow Dimitrios Fraggedakis and former Executive Director Marla Feller

Symposium Chair Michael Manga, guest Elise Kerdoncuff, former Miller Fellow Veronika Sunko and Executive Committee member Nicole King