UC Noyce Initiative

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2024
UC Noyce Symposium

Agenda & Schedule

Tuesday, Oct. 29, 2024

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Additional Information

Symposium Location

Sue Gross Auditorium, Susan & Henry Samueli College of Health Sciences
856 Health Sciences Quad
Irvine, CA 92697-3950.

On-Campus Parking

Health Sciences Parking Structure
Parking permits will be provided.
Please follow the signage to obtain a permit for your vehicle.

Welcome Letter from the UC Irvine VC for Research

On behalf of the UC Noyce Initiative's executive committee, I welcome each one of you to this year's multicampus symposium at UC Irvine.

First, I'd like to extend a special acknowledgment to the Robert Noyce trustees joining us today – Michael Groom and Timothy Hopkins. We are deeply grateful for your presence, and we look forward to sharing our programs and insights with you.

I would also like to express our sincere gratitude to the many researchers across the five campuses who are working on exciting projects funded by the UC Noyce Initiative. Your creativity, expertise, collaboration and innovation are at the heart of this initiative. The work you are doing is not only advancing scientific knowledge but also shaping the future of digital transformation for the public good.

As members of the UC Noyce Initiative, we appreciate our collective responsibility to honor the extraordinary legacy of Robert Noyce and his wife, Ann Bowers, whose foresight and philanthropic passion laid the foundation for the UC Noyce Initiative. Their belief in the transformative power of research and education at world-class research universities, such as the five UC campuses in this collaboration, is reflected in this initiative, which aims to change the world.

When reflecting on the legacy of Robert Noyce, we see that his pioneering research and entrepreneurship were fueled by curiosity and creativity. In that same spirit, we have embarked on this five-campus collaboration to address the challenges and opportunities of the digital age.

The University of California is the finest public research university in the world, and we are thrilled to gather here today as a collective of scholars, researchers and leaders. The combined strength of our five campuses empowers the UC Noyce Initiative to push boundaries, innovate and create meaningful impact across disciplines.

At UC Irvine, interdisciplinary collaboration is a core value. Our faculty and researchers constantly seek opportunities to bridge fields and campuses, enhancing their work with the breadth and depth that only a collaborative university system can offer. This symposium reflects that spirit of collaboration as we come together not only to discuss current research but also to forge new partnerships and envision future breakthroughs.

This symposium would not be possible without the tireless efforts of our UC Irvine organizing committee. I want to particularly thank the new executive director of the UC Noyce Initiative, Bryan Kerner, who has already made an impressive impact since stepping into this role in May. I also extend our thanks to the members of our dedicated development team. Their hard work has championed this initiative since its inception.

Pramod Khargonekar, Ph.D.
UC Noyce Initiative Executive Committee Chair
Vice Chancellor for Research, UC Irvine
Distinguished Professor, Electrical Engineering and Computer Science, The Henry Samueli School of Engineering

Introduction from the Executive Director, UC Noyce Initiative

As the executive director of the UC Noyce Initiative, I am honored and excited to welcome you to this year's symposium. This event showcases the incredible potential of our multicampus collaboration.

First, I'd like to express my deep gratitude to the co-founder of Intel, Robert Noyce, and his wife, Ann Bowers, whose foresight and philanthropic vision led to the creation of this groundbreaking multicampus consortium. Their commitment to innovation and education continues to inspire us all. I would also like to extend a special thanks to the Noyce trustees, Michael Groom and Timothy Hopkins, for carrying forward Robert and Ann's vision and bringing it to life through their ongoing support and leadership.

I extend my deep appreciation to the researchers across our five UC campuses who are leading pioneering work funded by the initiative. These collaborations represent the true strength of the UC system, where each campus is a world-class institution, but together we form one of the most powerful research consortiums in the world.

This initiative is driven by a shared vision – to harness the power of digital transformation for the public good. With your collective expertise, we are not only advancing scientific discovery but also planting the seeds for research that will have a lasting global impact.

I'm motivated by the potential that lies ahead, knowing that the work we support today will shape the world tomorrow. Thank you for your dedication and contributions. I look forward to the many innovations that will emerge from our collaboration.

Let's continue to drive this initiative forward, together.

Bryan Kerner
Executive Director, UC Noyce Initiative

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Recognition of Robert N. Noyce, Ph.D., and Ann S. Bowers

"Innovation is everything. When you're on the forefront, you can see what the next innovation needs to be."

— **Robert N. Noyce**
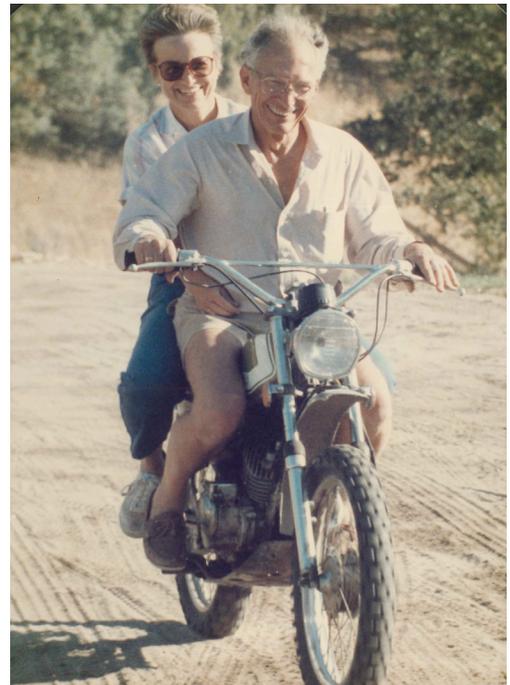
Noyce and Gordon Moore, 1970

Schedule

The symposium will be held in the Sue Gross Auditorium, Susan & Henry Samueli College of Health Sciences.

The check-in, poster session, breakfast and networking lunch will take place on the first-floor patio. The cocktail reception will be on the second-floor patio.

Symposium (9 a.m.–5:30 p.m.)

9–10:30 a.m.	Check-In, Poster Session and Breakfast
10:30–10:40 a.m.	Welcome: Pramod Khargonekar, Vice Chancellor for Research, UC Irvine
10:40–11:50 a.m.	Quantum Computing: Lightning Talks and Panel Discussion
11:50 a.m.–Noon	Noon Break/Transition to Lunch
Noon–1:15 p.m.	Networking Lunch
1:15–1:30 p.m.	Break/Transition to Auditorium
1:30–3 p.m.	Computational Health (Women's Brain Health & Precision Medicine): Lightning Talks and Panel Discussion
3–4:20 p.m.	Cybersecurity, AI and Policy: Lightning Talks and Panel Discussion
4:20–4:25 p.m.	Closing Remarks
4:25–5:30 p.m.	Cocktail Reception

UC Noyce Initiative | Leadership

Bryan Kerner

Executive Director, UC Noyce Initiative

Katherine Yelick, UC Berkeley

Vice Chancellor for Research

Simon Atkinson, UC Davis

Vice Chancellor for Research

UC Noyce Initiative | Leadership

Pramod Khargonekar, UC Irvine

Vice Chancellor for Research

Harold Collard, UC San Francisco

Vice Chancellor for Research

Joseph Incandela, UC Santa Barbara

Vice Chancellor for Research

UC Noyce Initiative | Development Team

Kaja Sehrt
UC Berkeley

Chief Development Officer

Janet Berry
UC Davis

Executive Director of Development, Student Support

Roland Ho
UC Irvine

Associate Vice Chancellor, Strategic Philanthropy

Jason Solle
UC San Francisco

Executive Director, Principle Gifts

Chris Pizzinat
UC Santa Barbara

Executive Director of Development, Central Development and Interim Department Lead

Lynn Hawks
UC Santa Barbara

Senior Assistant Dean

Panelists and Speakers | Profiles and Research Links

Quantum Computing

Hartmut Häffner, UC Berkeley
Professor, Department of Physics

https://physics.berkeley.edu/people/faculty/hartmut-haeffner

Ania Jayich, UC Santa Barbara
Professor, Physics Department; Associate Director,
Materials Research Lab

https://www.cnsi.ucsb.edu/people/faculty/ania-bleszynski-jayich

Shimon Kolkowitz, UC Berkeley
Associate Professor and Herst Chair in Physics

https://physics.berkeley.edu/people/shimon-kolkowitz

Marina Radulaski, UC Davis
Associate Professor, Electrical and Computer Engineering

https://rlab.engineering.ucdavis.edu

Panelists and Speakers | Profiles and Research Links

Quantum Computing, continued

Javier Sanchez-Yamagishi, UC Irvine
Assistant Professor, Physics & Astronomy

https://eqi.uci.edu/javier-sanchez-yamagishi/

David Weld, UC Santa Barbara
Professor, Physics

https://www.physics.ucsb.edu/people/david-weld

Computational Health (Women's Brain Health & Precision Medicine)

Kaitlin Casaletto, UC San Francisco
Associate Professor, Neurology
UCSF Weill Institute for Neurosciences

https://memory.ucsf.edu/people/kaitlin-casaletto-phd

Chen-Nee Chuah, UC Davis
Professor, Department of Electrical and Computer Engineering

https://ece.ucdavis.edu/directory/chen-nee-chuah

Panelists and Speakers | Profiles and Research Links

Computational Health (Women's Brain Health & Precision Medicine), continued

Brittany Dugger, UC Davis
Associate Professor, Department of Pathology and Laboratory Medicine
Co-Leader, UC Davis Alzheimer's Disease Research Center Neuropathology Core

https://health.ucdavis.edu/pathology/our_team/faculty/duggerB.html

Anu Manchikanti Gómez, UC Berkeley
Associate Professor, School of Social Welfare and director of the Sexual Health and Reproductive Equity (SHARE) Program.

https://vcresearch.berkeley.edu/faculty/anu-manchikanti-gomez

Joshua Grill, UC Irvine
Professor, Psychiatry & Human Behavior, School of Medicine
Professor, Neurobiology and Behavior, Charlie Dunlop School of Biological Sciences

https://medschool.uci.edu/about/faculty/jgrill

J. Russell Huie, UC San Francisco
Assistant Professional Researcher, Brain and Spinal Injury Center at Zuckerberg San Francisco General Hospital

https://fergusonlab.ucsf.edu/people/j-russell-huie

Panelists and Speakers | Profiles and Research Links

Computational Health (Women's Brain Health & Precision Medicine), continued

Emily Jacobs, UC Santa Barbara
Associate Professor, Psychological & Brain Sciences
Director, Ann S. Bowers Women's Brain Health Initiative

https://psych.ucsb.edu/people/faculty/emily-jacobs

Kaylo T. Littlejohn, UC Berkeley
Ph.D. student, Department of Electrical Engineering and Computer Sciences

https://www.kaylolittlejohn.com/

Janine Lupo, UC San Francisco
Associate Professor, Department of Radiology and Biomedical Imaging

https://radiology.ucsf.edu/research/labs/lupo

Nina Miolane, UC Santa Barbara
Assistant Professor, Department of Electrical and Computer Engineering
Co-Director, AI Core, Ann S. Bowers Women's Brain Health Initiative

https://www.ece.ucsb.edu/people/faculty/nina-miolane

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Panelists and Speakers | Profiles and Research Links

Computational Health (Women's Brain Health & Precision Medicine), continued

Craig Stark, UC Irvine

Professor, Neurobiology and Behavior, Charlie Dunlop School of Biological Sciences

https://www.faculty.uci.edu/profile/?facultyId=5504

Cybersecurity, AI and Policy

Hao Chen, UC Davis

Associate Professor, Department of Statistics

https://anson.ucdavis.edu/~haochen/

Miguel Eckstein, UC Santa Barbara

Distinguished Professor, Department of Psychological and Brain Sciences

https://psych.ucsb.edu/people/faculty/miguel-eckstein

Shafi Goldwasser, UC Berkeley

Professor, Electrical Engineering and Computer Sciences

https://simons.berkeley.edu/people/shafi-goldwasser

Panelists and Speakers | Profiles and Research Links

Cybersecurity, AI and Policy, continued

Athina Markopoulou, UC Irvine
Professor, Electrical Engineering and Computer Science
Professor (Joint Appointment), Donald Bren School of Information and Computer Sciences

https://engineering.uci.edu/users/athina-markopoulou

Sanjit Seshia, UC Berkeley
Professor, Electrical Engineering and Computer Sciences

https://www2.eecs.berkeley.edu/Faculty/Homepages/seshia.html

Zubair Shafiq, UC Davis
Associate Professor

https://www.cs.ucdavis.edu/~zubair/

Gene Tsudik, UC Irvine
Distinguished Professor, Department of Computer Science

https://ics.uci.edu/people/gene-tsudik/

Keynote Speaker | Leslie M. Thompson

Leslie M. Thompson, UC Irvine

> Donald Bren and Chancellor's Professor, Psychiatry & Human Behavior, School of Medicine

> Donald Bren and Chancellor's Professor, Neurobiology and Behavior, Charlie Dunlop School of Biological Sciences

> Professor, Biological Chemistry, School of Medicine

Presentation: Computational & Precision Health

Leslie M. Thompson, Ph.D., has studied Huntington's disease (HD) for most of her scientific career and was a member of the international consortium that identified the causative gene for HD in 1993. She also co-identified the mutation causing achondroplasia, the most common genetic form of short-limbed dwarfism. Since that time, the Thompson laboratory has been actively engaged in investigating the fundamental molecular and cellular events that underlie how the mutant HD gene causes neurodegeneration, with the goal of developing new treatments.

The laboratory also focuses on understanding mechanisms that underlie amyotrophic lateral sclerosis and more recently X-linked dystonia-parkinsonism. The research benefits from the integrated use of patient stem cells and mouse models of disease together with the studies of RNA biology, protein quality control and network-based bioinformatics.

Thompson is founding co-editor-in-chief of the *Journal of Huntington's Disease* and the principal investigator of the OMICS core of the Answer ALS program, a precision medicine approach to understand sporadic ALS in more than 1,000 ALS subjects. Thompson is also the associate director of research for the UCI Institute for Precision Health.

Trustees, Robert N. Noyce Trust

Michael Groom, Noyce Trustee
Groom and Cave, LLP

Michael Groom is a graduate of Santa Clara University School of Law, where he received his Juris Doctor degree in 1970. He studied and received his undergraduate degree from the University of California, Santa Barbara in 1967. Upon admission to the State Bar of California in 1971, Groom joined the law firm of Miller, Morton, Caillat & Nevis, LLP as an associate and became a partner in 1976. He left Miller Morton in 1988 to found Groom & Cave, LLP.

Groom has focused his practice on providing legal advice to high-net-worth individuals and public and private businesses on commercial transactions of all kinds, including the purchase and sale of businesses and real estate transactions.

Beginning in 1980, Groom began representing wealthy individuals and companies in connection with the purchase, sale, financing, management, ownership and operation of new and pre-owned business aircraft. Since that time, Groom has become very well known among those involved in business aviation and has assisted clients in connection with hundreds of aviation-related transactions by providing legal and tax advice on the structuring of such transactions for the benefit of clients.

Trustees, Robert N. Noyce Trust
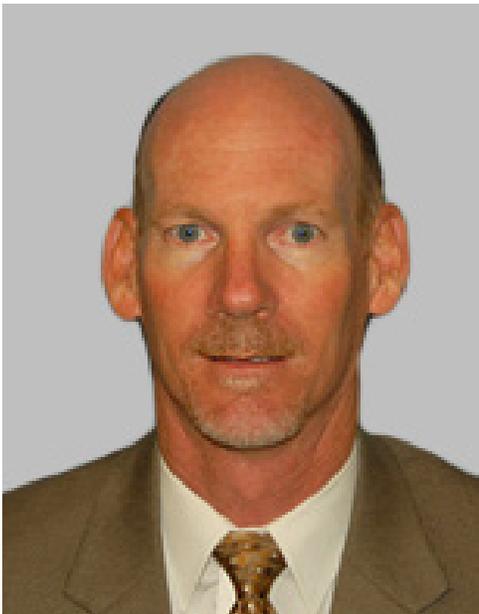
Timothy Hopkins, Noyce Trustee
Groom and Cave, LLP

Timothy Hopkins graduated from the University of California, Santa Barbara in 1982 with a B.A. in political science and received his law degree from Santa Clara University, in Santa Clara, California, in 1986. Hopkins joined the firm of Hopkins & Carley in San Jose, California, in 1990 and was a partner in the litigation and commercial transactions department from 1993 until 1997. Hopkins joined the firm of Groom & Cave, LLP in 1997 and has focused his practice on tax and business planning for individuals.

In addition, Hopkins' practice is focused on providing advice to individuals and companies in connection with the purchase, sale, leasing, financing, tax structure, ownership and management of aircraft. His practice includes the representation of owners' purchasing fractional interests in aircraft as well as whole aircraft. Hopkins has worked extensively with all of the companies offering fractional ownership programs and has concluded in excess of 100 transactions for clients purchasing fractional interests in aircraft.

Additional Attendees

Mahyar Abbasian	Ph.D. Student, Computer Science	UC Irvine
Pierre Baldi	Professor, Computer Science	UC Irvine
Karen Bales	Professor, Psychology	UC Davis
Catarina Belem	Ph.D. Student, Computer Science	UC Irvine
Peter Burke	Professor, Electrical Engineering and Computer Science	UC Irvine
Liz Chrastil	Associate Professor, Biological Sciences	UC Irvine
Nikil Dutt	Professor, CS, EECS & Cognitive Sciences	UC Irvine
William Evans	Distinguished Professor, Chemistry	UC Irvine
Margaret Galvez	Ph.D. Student, Computer Science	UC Irvine
Soheil Ghiasi	Professor, Electrical and Computer Engineering	UC Davis
Scott Grafton	Distinguished Professor, Psychological & Brain Sciences	UC Santa Barbara
Matthew Harding	Professor, Economics and Statistics	UC Irvine
Yifeng He	Ph.D. Student, Computer Science	UC Davis
Brian Hervey	Vice Chancellor, University Advancement and Alumni Relations	UC Irvine
Andrew Jayich	Associate Professor, Department of Physics	UC Santa Barbara
Elahe Khatibi	Ph.D. Student, Computer Science	UC Irvine
Isaac Kim	Assistant Professor, Computer Science	UC Davis
Jung-Ah Lee	Professor, School of Nursing	UC Irvine
Hamza Liaqat	Ph.D. Student, School of Nursing	UC Irvine
Audrey Lu	Ph.D. Student, School of Nursing	UC Irvine
Jocelyn Ludlow	Associate Clinical Professor, School of Nursing	UC Irvine
Bill Maurer	Dean, School of Social Sciences	UC Irvine
Melika Momenzadeh	Ph.D. Student, Electrical and Electronics Engineering	UC Irvine
Adeline Nyamathi	Professor, School of Nursing	UC Irvine
Marios Papaefthymiou	Dean, Information and Computer Science	UC Irvine
Amir Rahmani	Professor, Nursing and Computer Science	UC Irvine

Additional Attendees

Christopher Rashidian	Doctoral Candidate at Purdue University	UC Irvine
Mahkameh Rasouli	Ph.D Student, Nursing	UC Irvine
Alex Rubin	Ph.D. Student, Physcis	UC Davis
Kenji Sagae	Chair, Department of Linguistics	UC Davis
Preethi Seshadri	Ph.D. Student, Computer Science	UC Irvine
Sanjit Seshia	Professor, Electrical Engineering and Computer Sciences	UC Berkeley
Maxim Shcherbakov	Assistant Professor, Electrical Engineering and Computer Science	UC Irvine
Yasser Shoukry	Associate Professor, Electrical Engineering and Computer Science	UC Irvine
Ziyu Wang	Ph.D. Student, Computer Science	UC Irvine
Clare Yu	Professor, Physics & Astronomy	UC Irvine

Associated Noyce Initiative Team Members

Cynthia Chandrasena, UC Irvine
Executive Assistant and Project Coordinator to Associate Vice Chancellor, Strategic Philanthropy

Allison Chilcott, UC Davis
Executive Director of Development, Office of Research

Gretchen Kiser, UC San Francisco
Executive Director, Research Development Office

Tyler Martz, UC Berkeley
Program Director, Office of the Vice Chancellor for Research

Maria Napoli, UC Santa Barbara
Director of Strategic Initiatives

Sky Zhang, UC Irvine
Program Management Officer

Thank you for attending the

2024
UC Noyce Symposium

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"Go off and do something wonderful."

— Robert N. Noyce

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