

SRI Alumni Association

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Message from Don Nielson



In these times of funding turmoil, we all wonder about tomorrow—and part of that means wondering how SRI is doing. Unfortunately, I don't have much insight to help us out. I understand the funding cuts from the current administration are hitting research in the

soft sciences, whereas DARPA (where SRI's Pat Lincoln now holds forth) has had a budget increase. But a look at SRI's website reveals the traditional wide range of projects that has helped stabilize its revenue. And there is at least one symbolic indicator: SRI is planning the celebration of its 80th year! The celebration will come later this year and will involve the Computer History Museum. In the comings and goings of Silicon Valley, that is indeed notable. As to SRI's income stream, one SRI official I spoke with mentioned SRI's increasing reliance on the Institute's intellectual properties as its federally supported contract potential suffers under the current volatility.

But this old timer needs to convey one impression. I chose to visit the Menlo campus about a week ago. I arrived a little before 8 am and found exactly one person in Bldg A, and she was at the front desk. I needed to gain entrance to the basement of Bldg B and found I could not. You see, no one was on site to give me authorization; most of the staff were working from home, and the phones do not operate as they used to. As someone who lived SRI at its bustling best, it was a haunting morning, to say the least. I found that most of the staff in both the Princeton and WDC offices are also predominantly working from home. What to me was a depressing experience, I came to realize was simply another symptom of "long COVID" that needs a cure! Of course, all this must be seen in light of the awaiting demolition and the beginning of reconstruction of the campus—now approved.

One important aspect of the Alumni Association's relationship to SRI is our responsibility to gather, organize, and maintain all of SRI's historical material, including pre-digital imagery. Some devoted volunteers have been at this for more than a decade. Some months ago, as part of its vacating the site, SRI chose to give all of this material to the Computer History Museum. SRI is one of just three organizations whose archives the Museum has opted to accept. While that implies safety, scanning, and future accessibility, until that happens, access will be awkward

and our History Corner may take a hit. Scott Seaton, who has wonderfully stepped in to help this process, mentions this change in this issue. In the next issue I'll give you more detail on our past archiving efforts and how we see the new arrangement unfolding at the Museum.

Now to the rest of this issue. You will find some of SRI's current involvements, including our contribution to International Women's Day, followed by an eclectic range of work, from autism to the aurora borealis! Again, please take a moment to visit SRI.com to find a dazzling array of work not unlike SRI's tradition reveals. Patti Price has given us a well-documented account of SRI's relationship over time with Xerox's Palo Alto Research Center (PARC), now organizationally integrated with the Institute and, significantly, a possible new physical home for SRI.

Among the obituaries is one of Jack Goldberg's passing. I was privileged to know Jack and his wife, Shula, and I can say without reservation that he was one of the finest colleagues I've known at SRI. Note the recognition of one of our Association's best friends, the Credit Union, and lastly, fetch your calendar for the upcoming Spring Fling. It was well attended last year, and everyone had a good time. Hope to see you there!

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SRI NEWS



An Ambitious NIH Effort to Improve Autism Care

According to [the latest CDC data](#), the prevalence of autism spectrum disorder (ASD) in

today's eight-year-olds is about one in 31. But despite its prevalence, many families trying to support children diagnosed with ASD continue to face complexity and uncertainty.

Part of the challenge is that autism spectrum disorder itself is extremely broad. Combine that with numerous treatment modalities and a patchwork of national, state, and provider-specific approaches, and it becomes extremely difficult to reach a general consensus about what is working and why.

SRI's work on the Autism Data Science Initiative aims to advance our understanding of what positive autism care outcomes look like and how they can be achieved.

To address the information vacuum surrounding autism, the National Institutes of Health (NIH) is funding the [Autism Data Science Initiative](#) (ADSI), a new \$50 million program that will explore and learn from the

vast amount of autism-related data that exists within government and healthcare systems.

Co-leading an ADSI project housed at the Oregon Health & Science University (OHSU), SRI will play a key role in turning massive datasets into clear findings that can impact the way we provide services to individuals with autism. The project aims to create a data-driven framework that can predict, based on objective factors like insurance status, location, service use, and co-existing conditions, the likelihood of optimal and suboptimal outcomes for toddlers and children with autism. Ultimately, this Autism Quality Index (AQI) will guide future research and help states and healthcare systems improve concrete outcomes across the autism spectrum.

Margaret Gillis, a principal researcher with [SRI Education](#) and principal investigator on the project, emphasizes the importance of finding and using the right data. In addition to predicting outcomes, there's another side of the project that's equally important: working directly with the autism community to improve understanding of what counts as an optimal outcome.

“One of the cool things about this opportunity is the recognition that you need to have people with autism

involved in these projects,” Gillis adds. “At SRI Education, we really believe that it's important that the people who are most affected by your work have a hand in designing and implementing the solutions. So we're excited that this project will also convene individuals with autism and family members to identify the outcomes that are important to the community. And at the end of the project, we're going to be convening these folks to think about policy recommendations and other long-term implications of this research.”

Sources: <https://www.sri.com/press/story/sri-joins-an-ambitious-nih-effort-to-improve-autism-care/>; <https://www.cdc.gov/autism/data-research/index.html>; <https://dpcpsi.nih.gov/autism-data-science-initiative>

International Women's Day 2026



To recognize International Women's Day, SRI shared on its website the stories of four women whose work delivered fundamental advances in computer science.



Jake Feinler photo licensed through [Creative Commons](#)

Elizabeth “Jake” Feinler

Initially trained as a biochemist, Jake Feinler pivoted to the emerging field of information science when she joined SRI in 1960. As SRI's work on computing and networking accelerated, Feinler began managing the nascent Network Information Center (NIC) in Douglas Engelbart's Augmentation Research Lab. The NIC served as the central information hub for the ARPANET and, eventually, the modern Internet. The NIC published and disseminated network documentation to support users and developed an online query system that later led Feinler to refer to the NIC as “kind of the prehistoric Google.”

One of the more significant moments for Feinler came in the mid-1980s, when the NIC developed the top-level domains — .com, .org, .net, etc. — that we continue to use today. The NIC was also charged with assigning the initial domain names to early adopters. Feinler's group registered the first commercial domain name — symbolics.com — to a computer manufacturing company on March 15, 1985.

For her pioneering work, Feinler was elected to the Internet Hall of Fame in 2012.



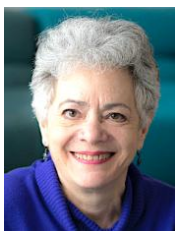
Helen Chan Wolf

SRI played a central role in launching the AI revolution. One of the forces behind that early work was Helen Chan Wolf, an AI pioneer who fundamentally advanced autonomous robotics.

Even before joining SRI, Wolf had established a reputation as a bold and forward-thinking scientist. In its feature on “The Secret History of Facial Recognition,” *Wired* chronicles some of Wolf’s important pre-SRI work on facial recognition.

Wolf joined SRI at a critical juncture. In 1966, the year she moved to SRI from Panoramic, SRI launched its Artificial Intelligence Center, one of the world’s first labs dedicated to AI technology. Wolf played key roles in developing Shakey (the first robot to navigate and reason with AI) and establishing the field of automated facial recognition.

Wolf was responsible for developing many of the subsystems involved in the Shakey project. A significant part of her work focused on the computer vision systems: both code for the sensors for acquiring images and algorithms for interpreting those images to identify objects. Later in her career at SRI, Wolf continued to pursue research on vision and AI, contributing new approaches to emerging problems such as linear delineation and algorithmic curve partitioning.



Barbara Grosz

Barbara Grosz is recognized as a major figure in maturing two vastly influential computing disciplines: natural language (NL) processing and multi-agent systems.

Before moving on to a distinguished career at Harvard, Grosz spent more than a decade at SRI in the 1970s and 1980s. One of the most important outcomes of her work at SRI was the first computational model of dialog. She also helped develop Dialogic, a core NL processing system that played an important role in multiple SRI research programs in the early 1980s. Working with collaborators from Stanford University and Xerox PARC, Grosz led SRI to co-found the Center for the Study of Language and Information, which supported decades of groundbreaking collaborative research in the cognitive sciences.

Later, at Harvard, Grosz served as the dean of the Radcliffe Institute for Advanced Study, chaired the 2005 Harvard Task Force on Women in Science, and co-founded a new effort to infuse ethical reasoning into computer science curriculum. She was the first woman president of the Association for the Advancement of Artificial Intelligence and received both the 2015 IJCAI Award for Research Excellence and the 2017 Association

for Computational Linguistics Lifetime Achievement Award. Grosz is currently the Higgins Professor of Natural Sciences, Emerita, at Harvard’s John A. Paulson School of Engineering and Applied Sciences.



Martha E. Pollack

Long before Martha E. Pollack served as the president of Cornell University or sat on the board of IBM, she built a career as a forward-thinking researcher at SRI.

Pollack joined SRI’s AI Center in 1985, after working closely with Barbara Grosz as she earned her PhD at the University of Pennsylvania.

At SRI, Pollack published widely, enhancing SRI’s reputation for inventive thinking as the AI Center became a deeply influential hotbed for research in areas like NL processing and planning in agentic systems. Pollack investigated emerging issues like resource-bounded agents, resource-bounded practical reasoning, semantic and pragmatic interpretation, theories of intention, and agent architectures, to better understand and model machine intelligence. In 1991, her work at SRI earned her the IJCAI Computers and Thought Award, a premier award for early-career researchers working in the field of AI.

Pollack has also played a critical leadership role in cultivating the broader AI research community. She served as the president of the Association for the Advancement of Artificial Intelligence, worked as editor-in-chief of the *Journal of Artificial Intelligence Research*, and is a fellow of the Association for the Advancement of Artificial Intelligence. As AI matured from a promising academic research topic into a century-defining commercial technology, Pollack has been one of the guiding hands shaping the world we live in today.

You can read more about Grosz and Pollack in the [December 2025 issue](#) of the SRI Alumni newsletter.

Source: <https://www.sri.com/press/story/sri-celebrates-international-womens-day-2026/>

Mission to Study the Northern Lights

By providing data from the SRI-operated Poker Flat Incoherent Scatter Radar, SRI scientists are helping NASA better understand the electrical currents in ionospheric plasma.

The aurora borealis is more than just a visual spectacle. The northern lights phenomenon (and its counterpart at the South Pole) is amplified by geomagnetic storms, which

can disrupt high-frequency radio, satellite communications, and even power grids.

For decades, NASA has been steadily advancing our understanding of space weather and its implications for life on earth. In February 2026, an SRI-supported NASA mission named GNEISS sent two rockets into the upper atmosphere to collect new data about the electrical currents that cause polar skies to glow. “It’s essentially like doing a CT scan of the plasma beneath the aurora,” explained Kristina Lynch, principal investigator for GNEISS and a professor at Dartmouth College, in the NASA press release announcing [the February 10 launch](#).



To support the launch, SRI provided critical contextual data from the Poker Flat Incoherent Scatter Radar (PFISR), near Fairbanks, Alaska. Designed, constructed, and operated by SRI, this radar array — created as part of SRI’s larger work on the [Advanced Modular Incoherent Scatter Radar \(AMISR\)](#) supported by the U.S. National Science Foundation — provided measurements of the geophysical region around the rocket flight paths both before and after the launch. By combining the AMISR measurements of fast plasma velocities during the aurora with in-situ measurements from the rockets themselves, scientists will gain a new perspective on geomagnetic storm-time dynamics.

“SRI’s AMISR program has a long history of supporting NASA sounding rocket missions, and we can’t wait to see how data from this mission will elevate our understanding of the physics behind these complex electromagnetic events,”

says Asti Bhatt, a research engineer at SRI and the principal investigator for SRI’s PFISR work. In addition to supporting NASA missions, SRI’s AMISR technology is a critical component of [LeoLabs](#), an SRI spinout that provides persistent orbital intelligence to ensure the safety of government and commercial space missions.



Asti Bhatt

Learn more about how SRI has contributed to [the safety and success of space missions](#) since the dawn of the Space Age.

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Source: <https://www.sri.com/press/story/nasa-gneiss/>

1 SRIFCU Ranked #1 in the Nation

~ Share the Gift of Membership ~

In 2025, the SRI Federal Credit Union (srifcu.org) was ranked the #1 credit union in the nation among all 4,460 credit unions in the United States. The ranking is based on the “Return to the Member” (ROM) metric developed by Callahan & Associates, which evaluates how well credit unions serve their members across 18 key metrics in three core areas:

- **Return to Savers:** The value members receive through savings rates and dividends, including dividends paid, share balance growth, and the number of share accounts per member.
- **Return to Borrowers:** The benefits members receive through competitive loan rates and low fees, including loan yield, loan growth, and loans originated per member.
- **Member Participation:** How actively members use credit union products and services, including auto loan penetration, credit card usage, and overall member growth.

At SRIFCU, your financial well-being comes first. As a member-owned cooperative, profits are returned to members through better rates, lower fees, and personalized service. We invite you to **share the gift of membership** and the cooperative spirit that has defined our community since 1957. Whether it’s a fellow SRI alumnus, a colleague, a friend, or a family member such as a child, grandchild, or young professional just starting out, introducing them to SRIFCU can help them begin their financial journey on the right foot, supported by trusted guidance and a credit union built to serve its members. **When you refer friends or family, new members receive \$50 when they open a Savings & Checking Account with direct deposit, and referring members earn \$50 for each qualified new member, up to \$500 per year.**

Spring Fling

RSVP NOW



SAVE THE DATE:
Thursday, May 28, 2026
SRI I-Building

Lunch
Trivia Game
(based on SRI History and Alumni Newsletters)
~ Prizes ~

RSVP by May 14, 2026:
free for members and \$15 for a guest

Reservations after May 14:
\$10 for members, \$20 for guests
At the door, only cash is accepted

In order to speed up the registration process for our alumni activities and to facilitate planning (e.g., having enough food and seating), we are encouraging participants to sign up by the posted deadline. To reward people who register in advance (by May 14), we are offering lower prices for members and their guests. If a guest was formerly an SRI/PARC/SARNOFF employee and joins the association, lunch for them is also **free if they RSVP by the deadline.**

Reach out to former colleagues you would like to catch up with and ask them to come!

Bring your amusing SRI memories as a warm-up for the Trivia Contest!

Let us know candidates you'd like to see in a "Where Are They Now?" column!

RESERVATIONS: srialumn.org/events/

OR: email to steering@srialumni.org

Welcome, New Members!



David Ager

Kate Borelli

Craig Cowen

Michael Corr

Tom Garvey

Christian Greuel

Charles Hart

John McCarty

Rod Morimoto

Kevin O'Brien

Christine Peterson

Rachel Stahl

Dag Spicer

Claire Starry

Louise Yarnall

We look forward to your participation in the Alumni Association and hope to see you at our next group event.

Special 9-Month CD

4.08% APYE*

Grow Your Savings



*APYE = Annual Percentage Yield Earned. Rates good through end of April 2026. Rates applied to "New Money" CDs. "New Money" is defined as funds not currently on deposit with SRIFCU.



SRI Federal Credit Union

International Journal: Greenland

by Patti Price

Although the Sondrestrom Research Facility is now closed and not collecting new data since May 2018, Greenland has been in the news lately, and we thought you might be interested in what used to go on there.

Just north of the Arctic Circle and 100 km inland from the west coast of Greenland was a research facility operated by SRI under the auspices of the [National Science Foundation](#) and dedicated to studying the polar upper atmosphere. The Sondrestrom Research Facility was in operation from 1983 through 2018, and its data continues to be in high demand by scientific communities.

Publications arising from that data include:

- “Observations of wintertime arctic mesosphere cooling associated with stratosphere baroclinic zones,” J. P. Thayer and J. M. Livingston, *Geophysical Research Letters*, 18 September 2008 <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008GL034955>
- “Seasonal oscillations of middle atmosphere temperature observed by Rayleigh lidars and their comparisons with TIMED/SABER observations” Xiankang Dou *et al.*, *Journal of Geophysical Research: Atmospheres*, 17 October 2009. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008JD011654>
- “Radar, lidar, and optical observations in the polar summer mesosphere shortly after a space shuttle launch,” M. C. Kelley *et al.*, *Journal of Geophysical Research: Space Physics*, 7 May 2010. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2009JA014938>
- “Gravity wave activity in the Arctic stratosphere and mesosphere during the 2007–2008 and 2008–2009 stratospheric sudden warming events,” Brentha Thurairajah *et al.*, *Journal of Geophysical Research: Atmospheres*, 2 Dec 2010. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2010JD014125>
- “The Chatanika and Sondrestrom radars – A brief history,” M.A. McCready and C.J. Heinselman, *Hist. Geo Space. Sci.*, 4, 1–6, <https://doi.org/10.5194/hgss-4-1-2013>, 2013. (Craig Heinselman was featured in our “Where Are They Now?” section in the [August 2025](#) newsletter. He also authored the [December 2021](#) “History Corner,” and several other staff experiences noted in the [December 2020](#) and [April 2021](#) editions of the newsletter carried many of Craig's photos of the various radar sites in Alaska and Greenland that he worked on while he was at SRI.)

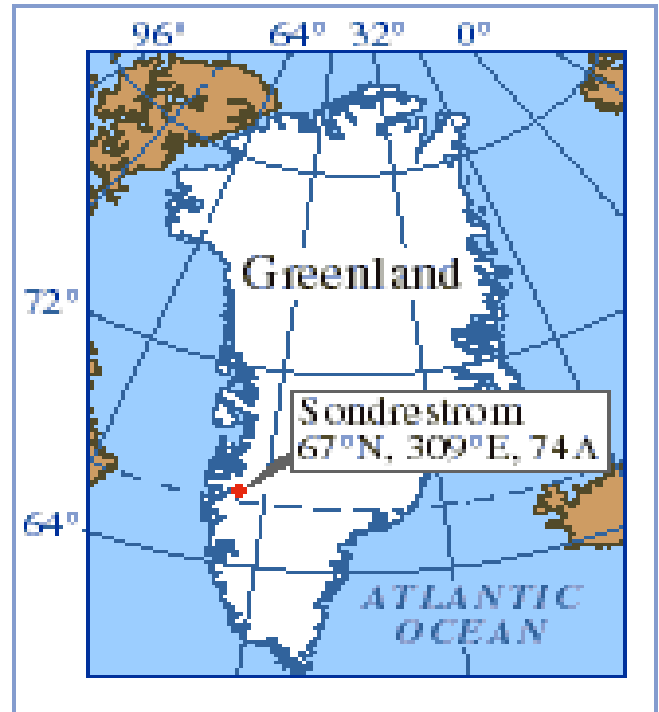
In addition, [Asti Bhatt](#) is the author or co-author of several papers using the Sondrestrom data:

<https://www.sri.com/people/asti-n-bhatt/>.

A summary of SRI's Arctic research appeared on SRI's 17 September 2015 blog: <https://www.sri.com/press/blog-archive/sri-research-at-the-ends-of-the-earth/>

All historical data from the Sondrestrom Research Facility is available and being maintained by the AMISR facility. Please contact the AMISR team amisr.com/amisr/requests for assistance in accessing and interpreting data.

Source: <https://isr.sri.com/about.html>



HISTORY CORNER

ARC to PARC (and back?)

By Patti Price¹

In the late 1950s through 1970s, Doug Engelbart assembled and led an amazingly talented team of innovators at SRI in his Augmentation Research Center (ARC). Much of that team left for Xerox's Palo Alto Research Center (PARC) in the 1970s, and now, decades later, PARC has become a part of SRI. What factors led to these events?

I had not heard of the “Mother of All Demos” ([MOAD](#)) until I arrived at SRI in 1988 and happened to meet Doug Engelbart, who was using the SRI I-Building dining room as a fundraiser for his Bootstrapping Project. The bootstrapping ideas being expounded seemed pretty abstract to me, so I was fascinated when I watched the video of the 1968 [MOAD](#)². Those demonstrations were both concrete and astounding, especially for the time.

Like many others, I had known that Doug had invented something very concrete: the computer mouse. But connecting Doug only to the mouse is a lot like connecting the 1960s moonshot only to the popular astronaut drink, Tang. The [MOAD](#) video makes this pretty clear. Much of what comprised modern computer interfaces in 1988 was already in that demo 20 years earlier, including the mouse, but also display editing, linking, hypermedia, multiple windows, and much more³. To put this in perspective, punched cards for input were common until the mid-1980s⁴. The “user interface” was a counter where the user handed a stack of cards to an attendant and came back the next day to get the cards back and see any program output or error messages.

Inception to Peak of ARC

Doug often mentioned the profound influence on him of Vannevar Bush's 1945 article, “As We May Think”⁵. This article, still very worth reading, opens with a vision of the future: “Consider a future device ... in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate

supplement to his memory.” Bush hoped to transform an information explosion into a knowledge explosion.

Bush's ideas concerning human knowledge and improvement were still resonating when Doug married, and that big decision made him decide it was time to “get serious,” and he did get serious! He soon enrolled at U.C. Berkeley, got his PhD in EE in 1955, and landed at SRI in September 1957. He was quickly promoted and began getting SRI investment and serious government funding⁶.

In 1962, Doug wrote to ask permission to cite Bush's work⁷ extensively and in the letter also outlined his own ambitious goal: “to increase significantly the effectiveness of human problem solvers.” He wanted to help humans increase their ability to cope with complexity and urgency. In 1963, he began to receive funds for his own research laboratory at SRI, called the Augmented Human Intellect Research Center (AHIRC) and later shortened to the Augmentation Research Center (ARC)⁸. This center quickly grew to include more than 40 people and flourished for more than a decade⁹. During that time, Doug submitted an unsolicited proposal to NASA, and Bob Taylor, then a project manager at NASA, found it interesting enough to fund¹⁰. The 1964 proposal was: “Computer-Aided Human Control of Computer Display” (essentially, the mouse)¹¹.



Photo of ARC 1968 workstation, from Don Nielson

Shortly after funding this work on the mouse, in 1965, Taylor was hired at the Advanced Research Projects Agency (ARPA¹²), where he decided networking computers should be important in the same way that

¹ I thank Paul McJones for inspiration, assistance, and comments regarding this article. Gene McDaniel was also helpful.

² <https://dougengelbart.org/content/view/209/>

³ A Heritage of Innovation (2004), Donald Nielson, p. 2-22, and <https://www.dougengelbart.org/content/view/88/45/>

⁴ https://en.wikipedia.org/wiki/Punched_card

⁵ <https://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>

⁶ Nielson, op. cit., p. 2-14

⁷ https://web.stanford.edu/class/history34q/readings/Engelbart/Engelbart_LettertoBush.html

⁸ <https://archive.computerhistory.org/resources/access/text/finding-aids/102706170-SRI/102706170-SRI.pdf>

⁹ Nielson op. cit., p. 2-16

¹⁰ Ibid.

¹¹ https://archive.computerhistory.org/resources/text/Oral_History/Taylor_Robert/102702015.05.01.acc.pdf

¹² Nielson op. cit. p. 2-23

networking people is important¹³. Taylor funded some ARC projects and encouraged Doug to show off his work at the Fall Joint Computer Conference in San Francisco in 1968, culminating in the [MOAD](#). When Taylor later outlined the ARPA vision of shared network resources, according to Doug, everyone except Doug took a giant step back. Doug, however, was excited and began thinking about the infrastructure needed for the venture that would become ARPANET. His team applied for and won the contract to run the Network Information Center, or NIC¹⁴. ARPANET was launched in late 1969¹⁵, a year after what was perhaps the ARC pinnacle (the [MOAD](#)).

The efforts of Doug and his extraordinary team made a huge impact on the world. “It is fair to say that ... it was SRI who created the modern world. ... the modern networked and computer driven office began at SRI, and without these, none of our work today would be possible.”¹⁶ However, by about 1971, many key members of ARC began to leave for Xerox PARC¹⁷.

ARC to PARC Migration

In 1970, a year after the launch of the NIC, Taylor founded the Computer Science Laboratory (CSL) of Xerox PARC¹⁸. Taylor guided the lab as associate manager from 1970 to 1977, and as manager from 1977 to 1983¹⁹. Taylor was, of course, very aware of Doug and his team, since he had funded him through both NASA and ARPA. Some have described him as raiding ARC for PARC²⁰.

Key Transitions from ARC to PARC

Name	Year	Notes
Bill English	1971	First member of ARC; co-creator of the mouse; later led the Office Systems Research Group at PARC ²¹
Jeff Rulifson	1973	ARC’s lead programmer; joined PARC to work on personal computing and the creation of local networks ^{22, 23}

¹³https://archive.computerhistory.org/resources/text/Oral_History/Taylor_Robert/102702015.05.01.acc.pdf, p. 12

¹⁴Nielson *op. cit.* p. 2-23

¹⁵<https://www.darpa.mil/news/features/arpnet>

¹⁶Bradford Morgan White. 7 Sep 2025, <https://www.abortretry.fail/p/sri-and-arc>

¹⁷*Op.cit.*, Nielson 2004, p. 2-25.

¹⁸<https://computerhistory.org/profile/robert-w-taylor/#:~:text=As%20a%20NASA%20program%20manager,the%20creation%20of%20the%20Internet>

¹⁹[https://en.wikipedia.org/wiki/Robert_Taylor_\(computer_scientist\)](https://en.wikipedia.org/wiki/Robert_Taylor_(computer_scientist))

²⁰<https://www.latimes.com/business/story/2020-07-31/bill-english-dies-at-91>

Name	Year	Notes
Bill Duvall	~1974	Wrote software for first Arpanet message at ARC; joined PARC as SRI funding faded
Smokey Wallace	1974	Programmer at ARC, manager at PARC ²⁴
Charles Irby	1975	Senior ARC contributor; transitioned after years of internal tension over direction & priorities; oversaw user interface R&D for the Xerox Star ²⁵
Jim White	1977	Worked on messaging in ARC; managed communications software development at PARC ²⁶
Bill Paxton ²⁷	1977	Left as soon as he finished PhD, worked on bitmap displays and user interfaces at PARC
Roger Bates ²⁸	~1978	Hardware designer at ARC, then PARC

Why did they leave?

The success of the [MOAD](#) made Doug and his team more known to the world than before, which perhaps made them more juicy targets to entice. However, it seems that turnover in Doug’s lab was always rather high²⁹. The staff who left ARC to join PARC were not kidnapped. They were individuals with varying motivations for departure. Their reasons seem to cluster around the following:

1. **User Interface Goal:** Doug was obsessed with **Augmentation**—using computers to increase human capability and empowerment, even if the tools required significant training to master. The team moving to PARC was leaning more toward **Ease of Use**—making computers intuitive and easy, which Doug considered a lower priority. As Doug put it: It takes more time to learn to pilot a jet plane than a tricycle, but you can also move a much larger load and do it more quickly.

²¹<https://computerhistory.org/profile/bill-english/>

²²<https://oac.cdlib.org/findaid/ark:/13030/c8tq660z/>

²³https://en.wikipedia.org/wiki/Jeff_Rulifson

²⁴<https://www.linkedin.com/in/smokeywallace/details/experience/>

²⁵<https://archive.computerhistory.org/resources/access/text/2017/08/102774122-05-01-acc.pdf>

²⁶<https://historyofcomputercommunications.info/interviews/James-White/>

²⁷<https://www.kitp.ucsb.edu/paxton>

²⁸<https://historyofcomputercommunications.info/interviews/James-White/>

²⁹*Op.cit.*, Nielson 2004, Appendix G-2

2. **Vision:** Doug envisioned a **network of collaborations** building ever more powerful tools among teams. The individuals moving to PARC had a different view of networking, culminating in the Ethernet (developed by others at PARC). The PARC team members who had been at ARC were also very interested in developing a **personal computer**.
3. **Commercialization:** Doug was on a never-ending quest for **knowledge and empowerment**, while many on his team, especially those who moved to PARC, were interested in the engineering needed for **commercializing** existing technology rather than continually inventing more powerful tools.
4. **Funding:** Xerox offered **financial stability** that was becoming difficult to secure from government and internal funding at SRI³⁰.

- The SRI system was heavily “moded.” The interpretation of user actions depended on the current mode and thus depended on what was just done. In a moded system, the meanings of the keys and sequence of keys could vary depending on the mode, which makes using the system much more complex³⁵. In a modeless system, the user indicates the target (e.g., by pointing at some text on the display), then indicates what should be done to it. The same commands can be used in any context with the same results.
- Unlike the ARC focus on empowering competent scientists, PARC began user testing on non-programmers.³⁶

PARC Success and Acquisition

Of the above motivations, the first two (easy to use interface, personal computers) seem to have been realized by the team moving to PARC, but the last two (commercialization of the technology and long-term funding) proved more difficult.

User Interface Ease of Use

The PARC team made significant improvements in the ease of use of the human machine interface.

- ARC envisioned the use of a keyboard in the middle with a mouse on one side and a chord-keyboard³¹ on the other. The PARC team investigated the chord-keyboard but dropped it since it took so much time to become proficient with it³².
- The new graphical user interface with a bit-mapped screen made for better, clearer graphics and fonts.
- PARC developed the “desktop” metaphor with a set of icons to represent office activities, such as documents in nestable file folders, printing, trash can, in and out baskets for messages, etc. PARC’s Alto is one of the first instances of a “what you see is what you get” (WYSIWYG) text editors³³.
- Bill English, who had done much of the engineering for the original mouse, in 1972 at PARC re-engineered the clunky 2-wheel device to a single ball capable of smoother operation³⁴.

Personal Computers

The PARC team from ARC participated in the development of at least two impactful personal computer workstations:

- In 1973, the PARC team debuted the Alto³⁷, an experimental development system to explore new user interface ideas. An Office Products Division (OPD) was founded to commercialize office technology, and an Alto even appeared in the White House during the Carter administration³⁸.
- In 1981, the Xerox Star was introduced through a division created to commercialize PARC technology through OPD³⁹. The Xerox Star 8010 Information System was the first commercial computer with a graphical user interface (GUI). The computer included the culmination of the research conducted at PARC on bitmapped displays, windows, folders, icons, Ethernet networking, file and print servers, and the mouse⁴⁰.

Commercial Success

Commercialization progressed further than it had at SRI but was not a resounding success. The Alto had a significant influence on the development of future computer systems, but only around 2,000 were produced. It was a development prototype rather than a “consumer” machine⁴¹.

The subsequent Star, the commercialization of the developmental Alto, was also not considered a commercial

³⁰ Funding challenges at the time of the great migration are well documented in *Op. Cit.*, Nielson 2004, p. 2-25, and Appendix G-2.

³¹ https://en.wikipedia.org/wiki/Chorded_keyboard

³² If the keyboard had not already become widespread for typing, it might have been dropped for the same reasons.

³³ https://en.wikipedia.org/wiki/Xerox_Alto

³⁴ <https://www.sri.com/75-years-of-innovation/75-years-of-innovation-the-computer-mouse/>

³⁵ <https://spectrum.ieee.org/xerox-parc>

³⁶ <https://spectrum.ieee.org/xerox-parc>

³⁷ https://en.wikipedia.org/wiki/Xerox_Alto

³⁸ <https://fedtechmagazine.com/article/2017/05/hp-3000-made-history-first-computer-white-house>

³⁹ <https://www.britannica.com/technology/graphical-user-interface#ref665413>

⁴⁰ <https://interface-experience.org/objects/xerox-star-8010-information-system/>

⁴¹ https://en.wikipedia.org/wiki/Xerox_Alto

success; only about 25-30,000 devices were built⁴². The Star 8010 was not intended for home or small business use. It was expensive: the software with one workstation, one multifunction server, and a laser printer sold for \$75,000 in 1981 (about \$270,000 in 2026), with each additional workstation another \$16,000 (about \$58,000 in 2026)^{43, 44}. Each office setup would require the software plus a minimum of 2 -3 workstations. In addition to being expensive, systems were viewed as slow: Saving a large file could take minutes. The hardware was not really used even within Xerox, except at PARC. Eventually Xerox reorganized the software to allow 3rd party and custom applications and later dropped the hardware. By then, Apple had already come out with the Lisa and the Macintosh aimed at the consumer market and at a much lower price point.

After contributing many stunning advances to the computing world, Xerox focused on its core business of copy machines and printers. Although they were not a commercial success, the Alto and Star workstations are significant in that they brought the GUI, mouse, file systems, highly scalable networks, and integrated workflow technologies to market first, thereby proving the viability of these technologies⁴⁵.

Long-Term Stable Funding

In the 1970s, Xerox PARC no doubt seemed enticingly safe, with plenty of funding from corporate sources, and no need for the constant proposal writing needed at SRI. However, starting around 1980, PARC researchers began leaving to join other computer industry companies, many of whom were already developing software and hardware influenced by those researchers' ideas⁴⁶. Eventually funding would become more difficult and, after three decades as a division of Xerox, PARC was transformed in 2002 into an independent, wholly owned subsidiary company⁴⁷ dedicated to advances in science and business⁴⁸ so that PARC researchers would "continue developing pioneering technologies while Xerox focuses on core print, digital and IT services to support clients' hybrid workplace needs."⁴⁹

The separation of PARC from corporate Xerox brought increasing pressure to bring in funding from the government and from other corporations. This funding became increasingly difficult to find, and campus costs affecting overhead rates were an important factor. In April 2023, Xerox donated PARC and its assets to SRI International⁵⁰, where so many ideas and people had come from when Xerox PARC began⁵¹. About 100 PARC researchers became SRI employees. On January 18, 2024, SRI announced the research group from PARC would become its Future Concepts Division⁵².

Lessons

Have we learned anything from this creation, evolution, and movement of technology and people? There are, perhaps, a few things:

1. The impact of audacity
2. Differences between climates for inventions and climates for development and commercialization
3. The power of bootstrapping

Audacity. At both ARC and PARC, the world has seen magnificent things come out of teams with absolutely audacious goals. Doug Engelbart's 1962 project proposed to augment human intellect to provide "more-rapid comprehension, better comprehension, the possibility of gaining a useful degree of comprehension in a situation that previously was too complex, speedier solutions, better solutions, and the possibility of finding solutions to problems that before seemed insoluble."⁵³ Imagine the power of more audacity and bigger goals!

Research vs. Development. Without a doubt, Doug had audacious ambitions. However, he seemed to have difficulty completing, or letting someone else complete, leadership and administrative tasks⁵⁴. Both ARC and PARC have had a history of difficulty "herding the cats." Probably, Doug would not have had as much impact without his talented team. But such a talented team cannot be expected to support someone else's audacious dreams forever.

⁴² <https://www.pcmag.com/encyclopedia/term/xerox-star>, <https://interface-experience.org/objects/xerox-star-8010-information-system/>

⁴³ https://en.wikipedia.org/wiki/Xerox_Star

⁴⁴ <https://interface-experience.org/objects/xerox-star-8010-information-system/>

⁴⁵ PARC has made much of Alto documents publicly available at <https://xeroxalto.computerhistory.org>

⁴⁶ <https://web.stanford.edu/dept/SUL/sites/mac/parc.html>

⁴⁷ [https://en.wikipedia.org/wiki/PARC_\(company\)](https://en.wikipedia.org/wiki/PARC_(company))

⁴⁸ <https://dailytechnewsshow.com/2024/06/20/about-xerox-parc/>

⁴⁹ <https://www.news.xerox.com/news/xerox-announces-donation-of-palo-alto-research-center-parc-to-sri-international>

⁵⁰ <https://www.sri.com/press/press-release/the-palo-alto-research-center-parc-will-join-sri-international/>

⁵¹ <https://dailytechnewsshow.com/2024/06/20/about-xerox-parc/>

⁵² <https://www.sri.com/press/story/sri-announces-its-newest-division-the-future-concepts-division-and-a-renewed-focus-for-the-parc-campus-that-draws-on-its-heritage/>

⁵³ October 1962, Engelbart, Augmenting Human Intellect: A Conceptual Framework for the Air Force Office of Scientific Research (SRI Summary Report AFOSR-3223 from SRI Project 3578), www.lri.fr/~mbl/ENS/FundHCI/2018/papers/Englebart-Augmenting62.pdf

⁵⁴ Nielson, *op. cit.*, Appendix G-2

Although some of the ARC team left for PARC with visions of commercialization, PARC, also a research center, experienced some difficulty in commercialization. The culture needed to innovate and think years or decades ahead is very different from the culture required to develop, productize, and market a technology. Both SRI and Xerox were most successful when spinoffs were created (e.g., Siri and Nuance for SRI; Adobe and 3Com for Xerox). SRI's policy of sharing some of the revenue from intellectual property (IP) with inventors was critical for me as a lab director in keeping those with longer-term ambitions from wandering off to higher-risk, higher-payoff positions in non-research facilities. The inventors of a new technology probably overestimate its value relative to all the additional work needed to transition it cost-effectively to widespread use. Commercialization teams probably underestimate the cultural requirements and incentives needed for audacious innovation.

Bootstrapping. Doug was dedicated to what he termed bootstrapping. The idea is that a team should develop their tools, use those tools, and make improvements on them to further still more improvements. This may seem to slow things down at first, since there are at least two results to be assessed: the technology itself and the empowerment it gives the team using it. As [Jack Goldberg](#)⁵⁵ wrote about Doug in the [August 2013 issue](#) of this newsletter, “He wanted to help people engage a problem rather than hand it over to a machine.”⁵⁶ The team (and not just the technology) needed to be “bootstrapped” by the new technology to higher levels of power. Using your own technology is crucial and very powerful, but bootstrapping demands that both the technology and the team become increasingly powerful.

Even as we see a circle (or spiral) in the movement of ideas and people between SRI's ARC and Xerox's PARC,

we can also see a sort of spiral in the stunning advancement of AI capabilities, which have also shown explosion and power in bootstrapping⁵⁷, although Doug would no doubt disapprove if AI power does not also help improve humans. He might not see how creating cat videos and pornography more easily can help us with the increasing complexity and urgency of our world or help “to increase significantly the effectiveness of human problem solvers.”



Photo of Xerox Alto workstation, from Wikimedia, public domain

⁵⁵ See the [Jack Goldberg obituary](#) in this newsletter

⁵⁶ <https://alumni.sri.com/newsletters/2013/AlumNews-Aug-2013.pdf>

⁵⁷ <https://shumer.dev/something-big-is-happening>

XEROX FORUM: April 30, 2026 | Join Wall Street Journal technology columnist Christopher Mims and SRI senior education researcher Susan Patrick as they explore how AI is changing the way we work and accelerating a new revolution in education.

[CLICK HERE TO REGISTER](#)

Preserving SRI's Legacy

By Scott Seaton

Your Alumni Association has been hard at work preserving and sharing SRI's world-changing innovations! Don Nielson has been the warrior at the forefront of this effort for more than two decades. His accomplishments are many, beginning with the compilation of history and stories that he expertly crafted into the ultimate SRI reference, *A Heritage of Innovation: SRI's First Half Century*, published in 2005. His contributions didn't stop there; he and others continued to collect and store important documents, photos, and artifacts to add to the depth and breadth of SRI's revolutionary R&D from the last century and 26 years into the current one. This effort has contributed to many of the 10 SRI-relevant exhibits on display at the Computer History Museum (CHM) in Mountain View, California, and to the planning of future displays.

SRI's plans for campus redevelopment at the Menlo Park site have put time pressure on finding a permanent, safe, catalogued, accessible, environmentally controlled space to store its many treasures. SRI management and CHM worked out a mutually beneficial deal to provide all of these needs quickly in return for SRI's donation of the

materials. Over the course of the last several months, working with the Alumni Association, many thousands of pages of documents and a few artifacts have been transferred. We are now in the process of transferring four pallet loads of photos, negatives, and reference files.

This has been a large undertaking so far, but now the real work begins: scanning and photographing this material to make it available to researchers and to the museum. In the near term, Alumni Association members will have an opportunity to aid this effort by working with CHM staff (unboxing, sorting, etc.) at their Fremont archive facility or helping out with fundraising to help pay for it. Let Scott Seaton know if you're interested in volunteering (s.seaton.sf@gmail.com).

The unique "secret sauce" that the Alumni Association can add here is providing access to our members to browse the collection once it is online. We are the people who can fill in the story of "who, what, why, and how" for many of these documents and for the (mostly untitled) photos that capture some of the world-changing events and projects that happened at SRI.

Stay tuned for more news in future editions of the newsletter!



Remote Measurements Laboratory Reunion

April 18, 2026

Organizer: Ric Steinberger, ricst@mailbox.org, M (650) 302-4322

Date/Time: April 18, 1 - 4 p.m., Saturday

Place: Maddux Park, Redwood City (Maddux Dr. and Kensington Rd.)

Ric is planning to bring some soft drinks and light snacks. Guests are welcome. Tell Ric if you have contact details for other staff from that era or if you have any issues signing up: icloud.com/invites/024OwHzAO7YUtOUUUWd8kMSvw

IN MEMORIAM



Renée Lee Cameto

Renée Cameto died on September 25, 2025, at age 78, from a heart defect that was to be repaired at the California Pacific Medical Center in San Francisco. Complications occurred during the surgery, and in spite of the surgical team's best efforts, she did not regain consciousness.

Renée was a vibrant and independent spirit, deeply loved as a friend, mother, daughter, sister, and grandmother. She was also a devoted dog lover and a proud third-generation Oaklander.

After receiving her PhD from UC Berkeley, Renée joined SRI with a background in direct service to youth with disabilities. She was hired as a principal investigator in the Education Division to work on the original National Longitudinal Transition Study (NLTS). Her commitment to her research was deeply personal, rooted in helping everyone see that people with disabilities are, first and foremost, people: friends, learners, and members of their communities living full lives.

Professionally, Renée was endlessly curious and unafraid of a challenge. When asked to design and conduct a face-to-face assessment measuring academics, self-concept, behavior, social skills, and student voice—valid for all students under IDEA (Individuals with Disabilities Education Act)—Renée and her team had no idea if it was even possible because it involved eight thousand assessments, in all 50 states, each 45 minutes long, on time and within budget. Somehow, the team pulled it off—and then did it six more times. Renée conceptualized the design, managed the people and logistics, and produced something that has not been replicated since.

Renée became a national leader in alternate assessment and evidence-centered design, leading major studies and innovating state alternate assessment systems as well as psychological and transition assessments. All of this work broke new ground and pointed educators toward a better future.

Renée was a generous mentor and fierce advocate who promoted and created opportunities for countless researchers over the years. Many professionals in the education field owe part of their success to Renee's guidance and steadfast belief in them.

Renée never forgot to make the work joyful. Whether under a tight proposal deadline or in the midst of data

collection chaos, Renée brought laughter and camaraderie that made even the toughest stretches memorable.

Finally, Renée was a bit of a rebel. She'd stand her ground when something needed challenging—whether it was a questionable policy or the right to leave her dogs in the car a block from the office.

The SRI community will miss Renée the colleague, Renée the researcher, Renée the rebel—and most of all, Renée the friend.

Sources: Jose Blackorby, Chris Padilla, Adam & Andrea Alpine

Steven Cheung

Steven Cheung, former cybersecurity researcher, died on October 3, 2025, from a heart seizure.

Steven started working at SRI International in 2000 and commuted every day via Caltrain. As a cybersecurity researcher in SRI's Computer Science Laboratory, he worked on detecting, analyzing, and mitigating attacks from within — and between — computers.

As examples, Steven:

- Researched protecting the Internet service that translates hostnames, like `www.google.com`, into underlying and "actual" network addresses.
- Helped create a system to dynamically evaluate and characterize attacks from remote computers.
- Worked on protecting SCADA (Supervisory Control and Data Acquisition) systems. These use software and hardware to monitor and control industrial systems over long distances. They collect real-time data from sensors and remotely control equipment — critical and sensitive functions for utilities, oil and gas, and manufacturing industries.
- Contributed to development and dissemination of anti-censorship/pro-democracy technology.
- Evaluated vulnerabilities in cell phone technology.

Steven was always positive when facing new research problems and challenges and was always learning and looking for new business opportunities. He also wrote quite a few papers. He was friendly and easy to work with — and would sometimes drop by colleagues' offices to chat or (post-pandemic) call them up on Zoom.

Steven is survived by both his parents; his sister, Annie; Annie's husband, Henry; and their two sons.

Sources: Martin Fong; Steven Cheung's family



Jacob Goldberg

Jacob (Jack) Goldberg died on January 22, 2026, at the age of 99 at his home in Palo Alto, California. Born June 4, 1926, in San Francisco, Jack was the second of three children of Laurence and Bertha Goldberg. Laurence had been an apprentice sign-painter in

Vienna, Austria, when he learned of the 1906 San Francisco Earthquake, and came to the United States for the opportunity to help rebuild the city.

Jack attended Lowell High School in San Francisco, where he participated on the debate team. As a teenager he was deeply impacted by the Holocaust and the goal of establishing the State of Israel, so he joined a Zionist youth group called Hashomer Hatzair, making many lifelong friends there, including his future wife, Shulamit Calic.

Jack served in the US Navy toward the end of WW2, and there he became interested in electronics and radar. He decided to major in Electrical Engineering and got his BSEE at UC Berkeley and MSEE at Stanford.

Jack joined SRI in January 1951 and was a member of the original generation of “whiz kids” who transformed computing from a laboratory curiosity into the backbone of modern society. His career was defined by a rare ability to solve the immediate engineering crises of his day while simultaneously envisioning the theoretical frameworks of the future.

Jack’s first major contribution was as a lead logic designer for the ERMA (Electronic Recording Machine Accounting) project. At a time when Bank of America faced a mountain of paper checks that threatened to stall the banking system, Jack was responsible for the machine’s “brain” – the complex logical organization of circuitry that allowed for automated accounting. His work was instrumental in bridging the gap between SRI’s research prototype and the production models later built by General Electric. It was a pivotal moment in history; Jack’s designs helped prove that computers could be trusted with the world’s money, effectively launching the era of electronic banking.

Jack moved his family to Israel from 1957-1959 to work on logic design for the WEIZAC computer at the Weizmann Institute, before returning to SRI.

Following the success of ERMA, Jack sought to solve an even deeper problem: the inherent fragility of hardware. As the founder and long-time director of SRI’s Computer

Science Laboratory, he spearheaded the development of SIFT (Software Implemented Fault Tolerance) for NASA.

The SIFT project was revolutionary in its pragmatism. Rather than attempting to build a “perfect” computer, Jack’s team designed a system that accepted hardware failure as inevitable. By using a sophisticated “voting” logic among multiple processors, SIFT ensured that a system could remain operational even if components failed. This concept of Byzantine fault tolerance became a cornerstone of high-stakes computing. Today, the DNA of SIFT is found everywhere, from fly-by-wire aircraft to the decentralized consensus protocols of blockchain technology. Our modern ability to achieve digital agreement in an untrusted environment owes a direct debt to the frameworks Jack established decades ago.

At SRI, Jack was regarded as a “scientist’s leader.” He managed the Computer Science Laboratory not through top-down mandates, but through a commitment to intellectual honesty and a dry, understated wit. He was known for his “quiet force” – a leadership style that prioritized the merit of an idea over the rank of the person proposing it. This culture of rigorous inquiry allowed his lab to remain at the forefront of the field for over 20 years.

In his later years, Jack remained a dedicated steward of the industry’s history. He worked closely with the Computer History Museum to ensure that the technical milestones of the 1950s were accurately documented and preserved. Jack Goldberg did not just build machines; he built the logic that allows us to trust the modern world. Awarded SRI’s Weldon B. “Hoot” Gibson Achievement Award in 1982 and The Jean-Claude Laprie Award for Dependable Computing in 2014, he was also a Fellow of the IEEE and was inducted into the SRI Hall of Fame in 2003. He will be remembered by the SRI community as a man of profound technical insight and unwavering professional integrity.

Jack developed an interest in oil painting, and many of his paintings hang in the homes of friends and family. He loved classical music and Yiddish music, and enjoyed playing the harmonica and violin.

Jack is survived by his wife, Shulamit; sons Ari and Loren; daughter Dena; and grandson Jake. He lost his son Michael in 2017.

A Bulletin Board memorial is at the link below (feel free to add your recollections)

<https://www.kudoboard.com/boards/Ag3y76vM>

Sources: Ari Goldberg; <https://increment.com/teams/ermas-whiz-kids/>



Stephen Wayne Noble

Stephen (Steve) Noble died on December 20, 2025, at his home in Napa, California.

Stephen was born in San Francisco on October 7, 1952, to Theodore M. Noble, Jr., and Joan E. Noble (King). In January 1976, he graduated from San Francisco State University, where he had participated in Air Force ROTC. He was commissioned as a Second Lieutenant in the United States Air Force.

On April 30, 1977, Stephen married Catherine P. Noble (Heckert) in San Francisco. Together they built a life centered on family and faith.

Stephen served for 12 years on active duty as a Missile Launch Officer and Air Weapons Director, with assignments that took him from San Francisco to Great Falls, Montana; Neubreucke, Germany; Panama City, Florida; and back to the San Francisco Bay Area. He concluded his active-duty service in 1987 and transitioned to the private sector.

Stephen began his distinguished civilian career in security at SRI, where he developed security practices and programs. His military background and federal level clearances allowed him to excel in this field. Over the course of his career, he spent 5 years at SRI, 9 years at NASA Ames Research Center, and 2 years at Lockheed Martin.

Stephen returned to SRI for the final 20 years of his professional life. Throughout this time, he continued his service in the Air Force Reserves based at Moffett Field in Santa Clara County, retiring with the rank of Major.

Stephen enjoyed playing the guitar, listening to '60s and '70s rock music, and immersing himself in science fiction. He followed politics closely and was a devoted Green Bay Packers fan. Above all, he was a beloved husband, father, brother, grandfather, uncle, and friend. He will be remembered for his kindness, quiet strength, and sense of humor, and he will be deeply missed by all who knew and loved him.

Stephen is survived by his wife, Catherine; his four children, Bill Winger, Jennifer Winger, Ted Noble, and Stephanie Noble; his sister, Susan Moore; his uncle, Robert King; and six grandchildren.

Source: <https://www.duggans-serra.com/obituaries/Stephen-Wayne-Noble?obId=46816650>



William Hamilton Paxton

William (Bill) Paxton died July 23, 2025.

Bill's academic background was in Computer Science. While in graduate school at Stanford, [Bill worked with Doug Engelbart at SRI](#). In 1968, he participated in what was later dubbed "The Mother of All Demos," during which researcher Engelbart previewed many features that would become staples of personal computing, including e-mail, hypertext, word processing, video conferencing, the computer mouse, and more.

In 1972, ARPA program manager and former SRI researcher Cordell Green ([see Green's obituary from the December 2025 newsletter](#)) began a program of research in speech understanding, and SRI's AI Lab was chosen to participate. Bill conducted much of the technical work on the project during its early years (with Ann Robinson). He designed several speech-understanding systems and developed a new parsing system called a "best-first parser." His 1977 Ph.D. dissertation at Stanford, "A Framework for Speech Understanding," grew out of his work at SRI.

The ARPA Speech Understanding project continued for 5 years until 1977, after which Bill left SRI for the Xerox Palo Alto Research Center (PARC), where researchers were creating new technologies like Ethernet, networked personal computers, bitmap displays, graphical user-interfaces, and laser printers. Two of Bill's colleagues at PARC, Chuck Geschke and John Warnock, eventually left to form Adobe Systems. Bill joined them in 1983. There he built the Type 1 font algorithms for PDF and helped build the original PostScript. He later became one of the Adobe recipients of the Association for Computing Machinery (ACM) Software System Award (1989) for PostScript's design and implementation.

Bill retired in 1990 to Steamboat Springs, Colorado. After a decade in Colorado, Paxton and his wife, Kathlyn, moved to Santa Barbara, where he continued feeding his insatiable curiosity by taking courses at UC Santa Barbara. When he sat in on UCSB's Kavli Institute for Theoretical Physics (KITP) Stellar Structure and Evolution course, led by KITP Director Lars Bildsten and otherwise known as "Stars with Lars," he soon caught the astrophysicist's attention and became an unofficial scholar.

At KITP, Bill first helped create the stellar evolution program EZ, and then MESA, an open-source set of modules for software experiments in stellar astrophysics.

In 2021, Bill was awarded the Beatrice M. Tinsley Prize for developing the MESA software

In Bill's bio on the KITP website, Bill said, "Since a physicist can do "astro-physics", I imagine a computer scientist can do "astro-computing," or perhaps it could be called "computational-astro-physics" That seems to be a good description of what I'm up to these days, and I'm having a great time!"

Bill's colleague at KITP, Josiah Schwab, wrote this in his blog: "Bill liked writing software. Bill was good at writing software. Bill was fast at writing software. A big part of working with Bill was simply keeping up with Bill! Someone would tell Bill something hadn't been done (or sometimes couldn't be done) and he'd take that as a challenge and then go off and do it. I will consider myself fortunate to maintain a fraction of Bill's curiosity and drive. There is a time for everything, a time to summon and a time to say goodbye."

Sources: *The SRI Artificial Intelligence Center: A Brief History, January 1984, Technical Note 317*; <https://www.kitp.ucsb.edu/paxton>;

In 1986, while in her freshman year at UCSB, Carolyn met her future husband, Courtenay Westgaard. They married in 1994 at Stanford Memorial Church. Settling in Palo Alto, they welcomed daughters Alexandra in 1999 and Quinn in 2001. Carolyn loved her children more than anything and championed all of their endeavors.

Carolyn brought her background in psychology to a career in human resources. Wearing many different hats, she worked in startups and at Sun Microsystems before joining SRI in 2003. She retired in March 2025 after 22 years at SRI. The friendships she created while working were what Carolyn said she valued most.

In her free time, she found joy in gardening, baking, travel, reconnecting with old friends, and spending time at her beloved family cabin at Fallen Leaf Lake. She also took up dog sitting and DIY home projects after retiring.

To her friends and family, she was a caring and confident problem solver, always eager to help and never expecting anything in return. She had a way with words and an

https://en.wikipedia.org/wiki/The_Mother_of_All_Demos;
[https://en.wikipedia.org/wiki/Bill_Paxton_\(computer_scientist\)#:~:text=Contents,the%20physics%20of%20stellar%20evolution.](https://en.wikipedia.org/wiki/Bill_Paxton_(computer_scientist)#:~:text=Contents,the%20physics%20of%20stellar%20evolution.)



Carolyn Green Westgaard

Carolyn Green Westgaard died at age 57 on Saturday, January 31, 2026, after being struck by a car while walking in her neighborhood the day before.

Carolyn was born at Stanford Hospital on April 6, 1968, to Barbara Land Green and Kenneth Allen Green and grew up in Sunnyvale. After graduating from Homestead High School, she attended U.C. Santa Barbara, where she graduated with a B.A. in Psychology. She then attended San Francisco State University, where she earned an M.S in Industrial Organizational Psychology in 1992.

abundance of patience with others. She brightened every room with a smile on her face and the sound of her laugh.

Committed to family and community, she dedicated many years serving on her children's Girl Scouts leadership groups and volunteering for the local animal shelter. She was also deeply passionate about the outdoors and environmental sustainability, practicing water conservation and reducing waste in her home.

Carolyn was a beloved sister, wife, mother of two daughters, colleague, and caring friend to many. After her death, her organs saved the lives of three individuals. To honor Carolyn, please consider organ and blood donation if you are eligible.

Carolyn is survived by her husband, Courtenay; daughters Alexandra Westgaard-Daly and Quinn Westgaard; sister, Sarah Green; and brother, Bill Green.

Sources: https://issuu.com/brandonheinrichs/docs/daily_post_2-5-26<https://obituaries.paloaltoonline.com/obituaries/memorials/carolyn-green-westgaard?o=9353>;

As a warm-up for the Trivia contest at the 2026 Spring Fling, we will solicit your amusing memories of SRI! So, start collecting those memories now!!

Also, you can help us out with the newsletter by:

- **Offering to write an article for the newsletter**
- **Nominating someone for the Hall of Fame**
- **Suggesting someone for a "Where are They Now?" article**
- **Sending us obituaries of SRI employees or letting us know when a former colleague has died.**

steering@srialumni.org