



The Gottwald Family

A Celebration of Impact



This book is dedicated to the profound generosity and visionary leadership of
F. Dewey Gottwald, Sr., H'63, Floyd D. Gottwald, Jr., GB'51, H'83,
and the Gottwald family.

2025



Generations of *GIVING*

Visionaries, advocates, leaders, champions. These are just a few of the words that can be used to describe F. Dewey Gottwald, Sr., H'63, and his son, Floyd D. Gottwald, Jr., GB'51, H'83, who devoted themselves wholeheartedly for many decades to the advancement of the sciences and business education at the University of Richmond.

Richmond native Dewey Gottwald developed a passion for science while studying chemistry at Richmond Professional Institute (now Virginia Commonwealth University). He later worked as a clerk at Albemarle Paper Company and rose up the ranks to become president, eventually becoming a business icon after overseeing the company's historic acquisition and billion-dollar expansion of

Ethyl Corporation in the 1960s. He retired as chairman of Ethyl in 1968 but remained active in the business in various roles.

Dewey maintained a strong sense of civic duty and responsibility, shown by his appointment to the UR Board of Trustees in 1960. In 1963, the University awarded him an honorary Doctor of Commercial Science degree in recognition of his outstanding service and generosity. He became a Trustee *Emeritus* in 1970 and served until his death in 1982.

A chemistry graduate of Virginia Military Institute, Floyd Gottwald obtained a master's degree in business administration from UR in 1951. He leveraged his skills in science and business working as a



F. Dewey Gottwald, Sr., H'63



Floyd D. Gottwald, Jr., GB'51, H'83

chemist at Albemarle before gradually advancing to the role of president. He became executive vice president of Ethyl after the acquisition, later serving as vice chairman of the board and then chief executive officer. Like his father, Floyd served as a UR trustee for many years and was also awarded an honorary Doctor of Commercial Science degree. He then served as a Trustee *Emeritus* until his death in 2022.

Dewey and Floyd's longtime dedication and generosity to UR inspired close friends and family to engage over the years, including two of Floyd's sons, Spider alumni Dr. William M. Gottwald, GB'86, and former trustee John D. Gottwald, GB'84, as well as his brother, Bruce Gottwald, Sr. The depth of their giving is visible on campus through the Gottwald Center for the Sciences in addition to their multiple named scholarship, fellowship, and faculty support funds. Their impact has been felt in other unique ways: for example, a thoughtful gift in 1992 allowed UR to host a presidential debate on campus featuring George H. W. Bush, Bill Clinton, and Ross Perot.

Whether it's a biology student studying for an exam in the Gottwald Atrium, a business student preparing to study abroad, or a chemistry professor conducting groundbreaking research, the Gottwald legacy is woven through the countless lives they have touched. As a heartfelt demonstration of gratitude, this book documents some of the amazing impact the family's generosity has had on the Spider community.



A Message from University President *Dr. Kevin F. Hallock*

When I joined the University of Richmond community in 2021, I quickly became aware of the Gottwald family's invaluable contributions to the life and culture of the University. As President, I've developed a profound appreciation for the family's transformative impact — not only through the building on campus bearing the Gottwald name but also through the incredible opportunities the Gottwalds have made possible for Richmond's students, staff, and faculty.

Guided by a natural love for the sciences and a keen awareness of the field's economic significance, Dewey Gottwald was a visionary partner in helping the University develop the infrastructure to offer a rigorous science education. Floyd and Libby Gottwald and the Herndon Foundation generously built upon Dewey's legacy by bolstering our campus facilities and interdisciplinary programs to keep pace with a rapidly changing world. Every dollar from the family and foundation given to support student scholarships, faculty chairs, and academic programming has further empowered the University to provide an unparalleled undergraduate experience, unlocking our students' potential to flourish and pursue meaningful careers.

The University obviously would not be where it is today without this legacy of leadership, service, and selfless generosity. As steadfast champions, the Gottwalds have helped us advance our mission and pursue our strategic priorities of academic excellence, access and affordability, and experiential learning.

I am tremendously grateful and hope that others will be inspired by their example for generations to come.

Sincerely,



Kevin F. Hallock

President

Distinguished University Professor of Economics







GOTTWALD CENTER FOR THE SCIENCES

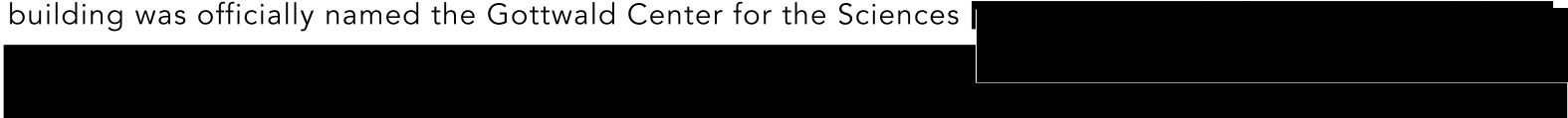
The Gottwald family's incredible vision, leadership, and generosity have been vital in establishing and maintaining a dedicated home for the sciences on Richmond's campus. As a result, ambitious, curious students have a premier space to learn, experiment, research, and collaborate as they prepare for meaningful careers.

A Science *Evolution*

Prior to the establishment of the Gottwald Center for the Sciences, the departments of chemistry, physics, and biology existed in three separate buildings on UR's campus. In the 1970s, University leadership began planning to build a new science building and sent a committee to visit nearly 40 undergraduate science facilities at other institutions.

Their selected design was inspired by the science center at Knox College in Galesburg, Illinois. A three-storied building would house all three departments under one roof with each department occupying its own section, spreading vertically to all floors and surrounding one combined library. The design aimed to support the interdisciplinary nature of science because of the proximity of the departments horizontally.

Ground was broken on the new science center in 1976, and the space was dedicated in 1978. A year later, the building was officially named the Gottwald Center for the Sciences



"The integration of the natural sciences into one comprehensive facility was a major turning point for the institution as a whole," said Dr. Richard Morrill, who served as UR president from 1988 to 1998. "We already had a good reputation for our science education, but it soon became one of the defining features of our undergraduate education."

In the early 2000s, UR undertook the Scientific Discovery initiative to focus on re-prioritizing and bolstering its science program with a greater focus on faculty and student-led research. "That could not have been done without updating the science center," said Dr. Andy Newcomb, former dean of the School of Arts & Sciences. "We were lagging behind other liberal arts institutions that had already redone their science facilities, so we knew that was our next step."





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*The renovation transformed
the sciences at Richmond...it
was an amazing time to be
involved.*
-Dr. John Gupton
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The background image shows a campus scene during autumn. In the foreground, a person is blurred, walking away from the camera. To the right, two students are sitting on blue plastic chairs, looking towards the right. The scene is filled with trees having yellow and orange leaves, and a body of water is visible in the lower left.

In 2002, UR leadership approved a multi-million-dollar expansion and renovation that would add more than 28,000 square feet to the Gottwald Center along with updated technology, new laboratory space, and state-of-the-art scientific instrumentation tools to support expanded teaching and research efforts into the physical and natural sciences. This led to the establishment of the biochemistry and molecular biology (BMB) program. Offered jointly between the departments of biology and chemistry, BMB is now one of the most popular science majors at UR.

“The renovation transformed the sciences at Richmond,” said Dr. John Gupton, who served as chemistry department chair from 2001 to 2006. “Expanding the curriculum and adding new faculty and staff allowed us to offer a greater selection of courses and still maintain small class sizes. We also made undergraduate research a requirement to ensure students were getting hands-on experience. It was an amazing time to be involved.”

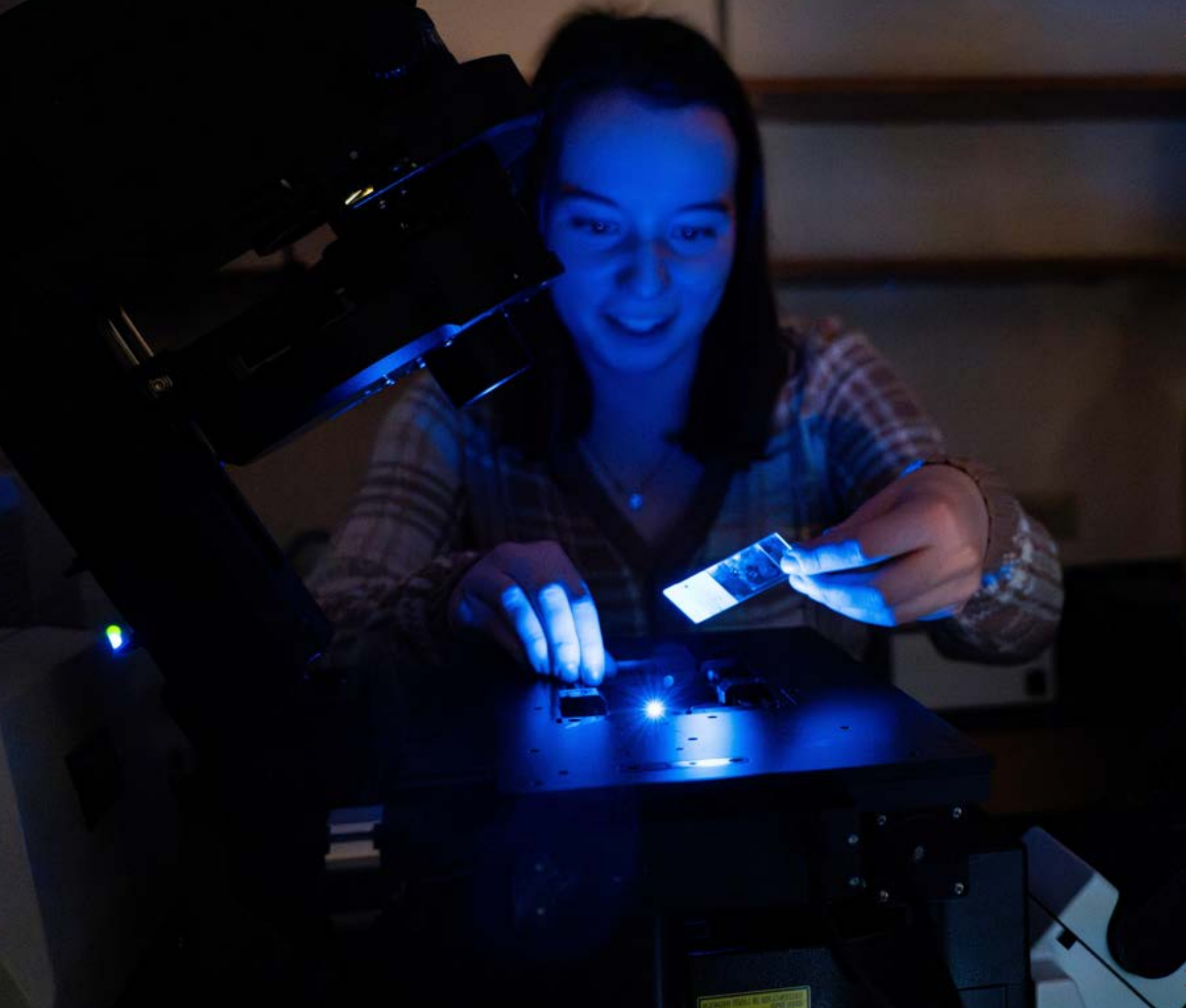
The updated center was completed and dedicated in 2005 and 2006, respectively. Renovations cost \$37 million total, supported by [REDACTED] In recognition of this generosity, the Gottwald Atrium was named in memory of Dewey Gottwald.

Today, the Gottwald Center is home to 22 teaching labs and 50 student-faculty research labs including facilities for chemistry, biochemistry, biology, physics, and neuroscience. It also contains a nuclear magnetic resonance center, mass spectroscopy center, and a biological imaging center. The centralized atrium and reading room, which replaced the original library, provide areas for faculty and students to study and collaborate.





Hollwald Center
for the Performing Arts



Biological *Imaging Lab*

The Biological Imaging Lab consists of two microscopy suites: the Electron Microscopy Suite, which is home to two advanced microscopes and modern preparation tools, and the Light Microscopy Suite, which contains six epifluorescent microscopes.

Both facilities allow student and faculty researchers to capture images of the highest quality. Students are encouraged to work in the suites to gain first-hand experience with microscopy techniques that are not often available at the undergraduate level.

Dr. Omar Quintero-Carmona, associate professor of biology, said the microscope labs are central to his teaching. "We are equipped to offer students foundational skills in microscopy and imaging as well as any school in the nation," he said. "Students leave UR well prepared to contribute to more complex scientific exploration."

More than 30 of Quintero-Carmona's research students have gone on to complete advanced imaging projects at renowned universities in the U.S. and abroad through the UR Summer Fellowships program. In addition, he and his students have published several research articles and technique articles based on their experience using the microscopy equipment.



Imaging Lab

Technology Highlights

Scanning Electron Microscope

Allows detailed imaging of various specimen types and sizes, such as spun fibers, cells, plant parts, soil, and tiny organisms like nematodes.

Transmission Electron Microscope

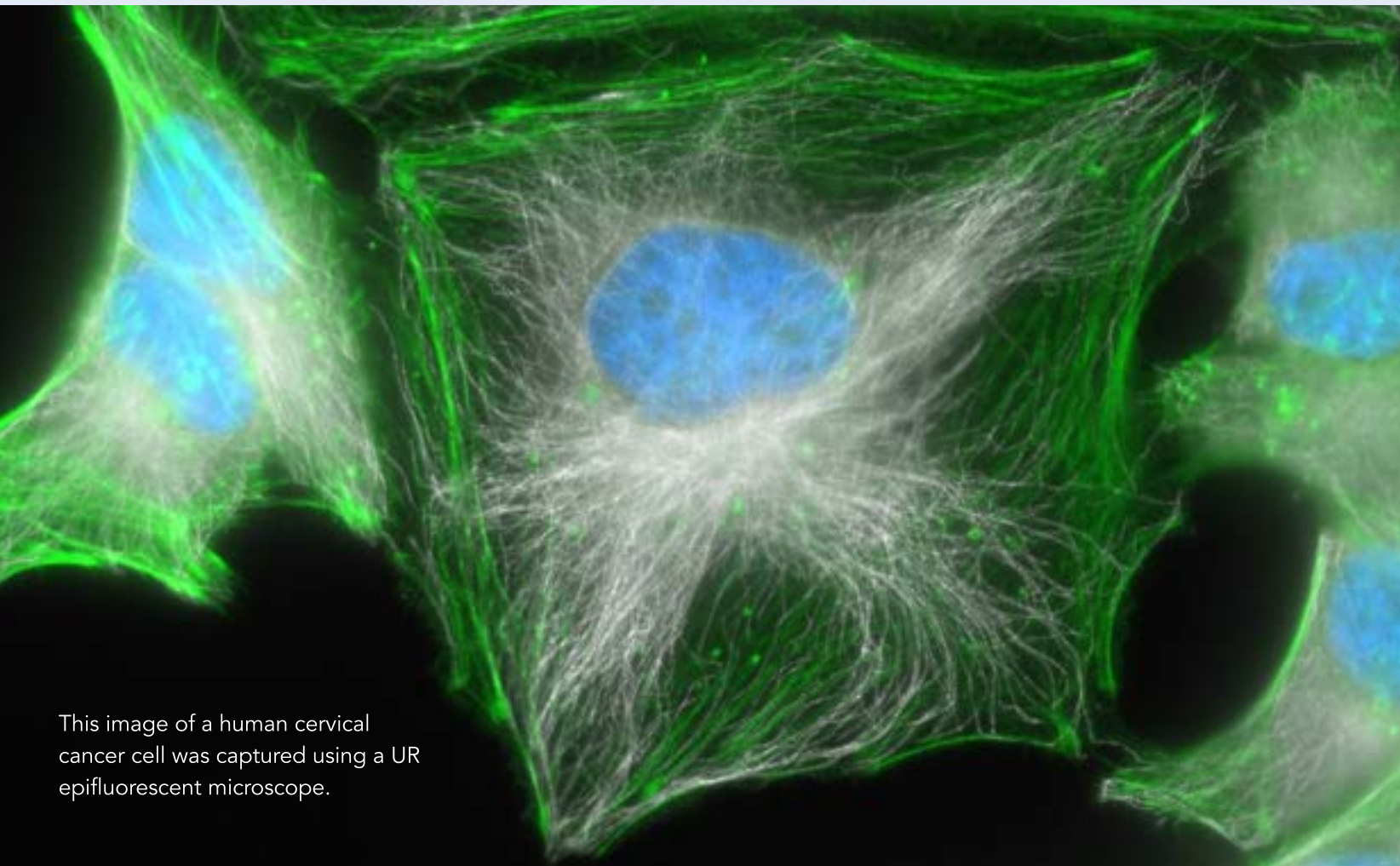
Offers high-resolution, high-contrast imaging to reveal minute structures, such as the physical details of viruses.

Laser-scanning Confocal Microscope

Creates 3D images of fluorescent samples, enabling users to view structures like the nervous system of a live worm, without causing harm to the worm!

Wide-field Microscope

Supports brightfield and fluorescent imaging of both live and fixed cells, zebrafish, yeast, insect eyes, and more.



This image of a human cervical cancer cell was captured using a UR epifluorescent microscope.









Martha Carpenter *Observatory*

Located on the roof of the Gottwald Center, the Martha Carpenter Observatory is home to a Celestron Schmidt-Cassegrain 14-inch reflecting telescope that is used by UR students, faculty, staff, and the greater Richmond community.

The telescope serves as a vital accessory for student viewings and research. Students in the introductory astronomy class and the UR Astronomy Club have regular evening visits to the observatory. Upper-level physics students sometimes use the telescope for independent projects; recent examples include tracking the orbits of Jupiter's moons to determine the planet's mass and testing a spectrometer for use in analyzing starlight.

In addition, the Department of Physics occasionally hosts stargazing nights for the public as well as sessions for community groups such as the Boy Scouts of America.

"Some of the best things to see with the telescope are the rings of Saturn, the mountains and craters of the moon, and the moons of Jupiter," said Dr. Ted Bunn, professor of physics and E. Claiborne Robins Distinguished Chair in the Liberal Arts. "Other highlights include galaxies that are millions of light years from Earth, remnants of supernova explosions, and stellar nurseries where new stars are being born."



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The University's unique connection with the Gottwald family is one of the defining relationships we've had throughout the history of this institution. The Gottwalds' commitment to the sciences has contributed to our high profile of excellence focused on advanced scientific inquiry, faculty research, and student collaboration and engagement. They have had a distinct impact in making UR an outstanding educational institution that will continue to thrive moving forward.

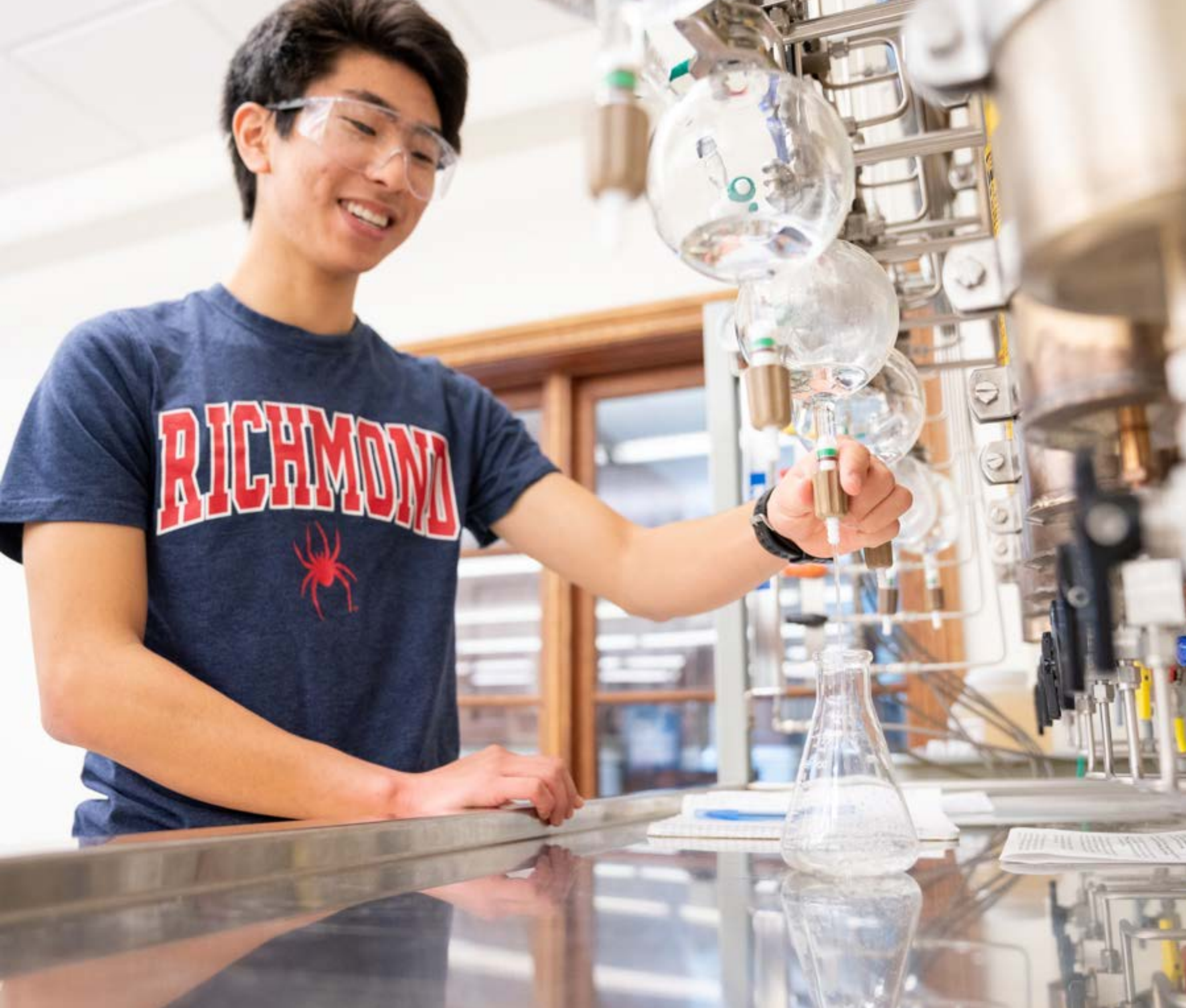
- Dr. Richard Morrill, H'96

Chancellor

Distinguished University Professor
of Ethics and Democratic Values

University President, 1988-98

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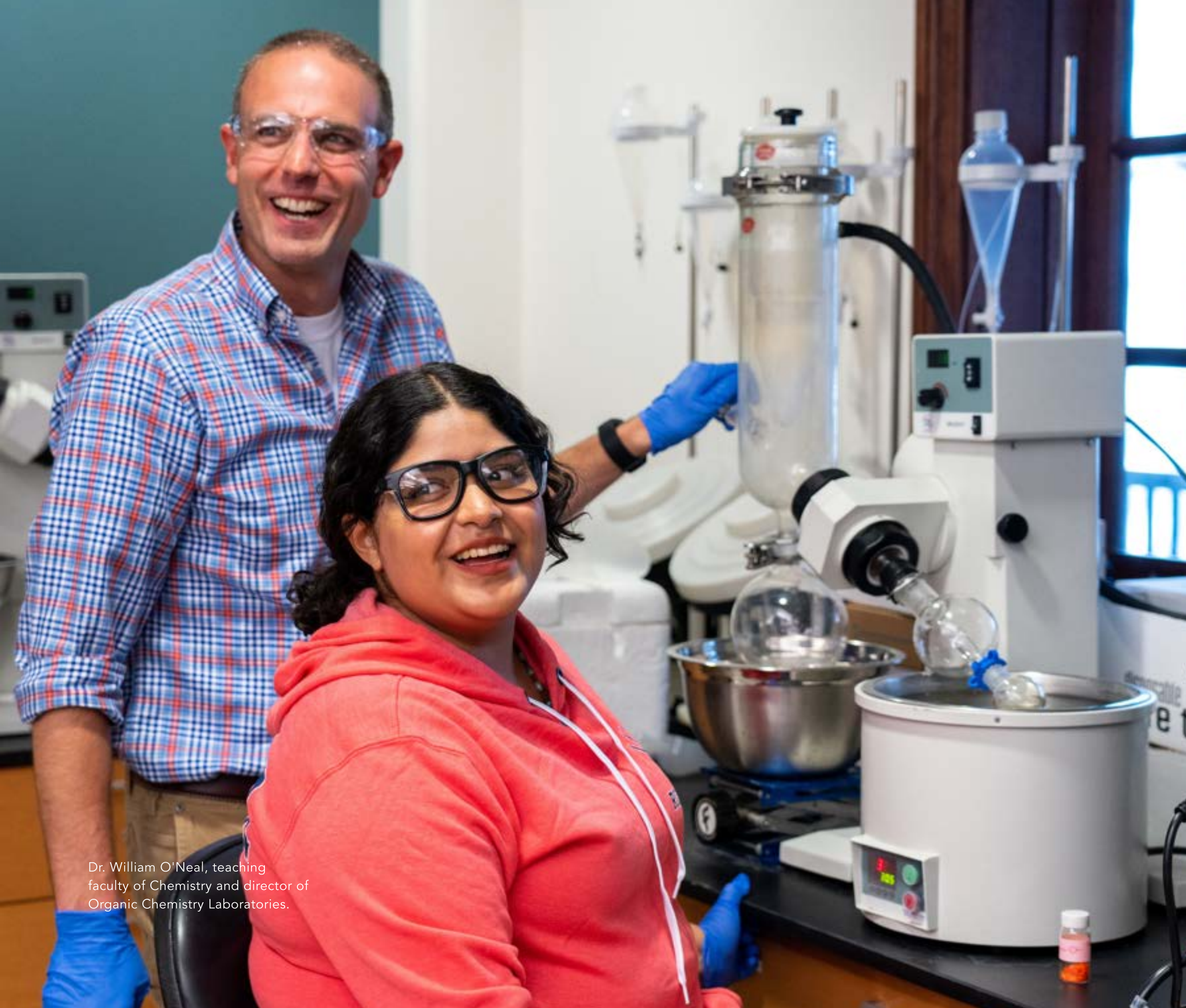


Nuclear Magnetic *Resonance Spectrometer*

A **nuclear magnetic resonance (NMR) spectrometer** is an instrument used by chemists to deliver critical information about the chemical structure of a compound. By placing a sample within a strong magnetic field, chemists can learn important information based on the nuclear spins of individual atoms comprising a molecule. These nuclear spins are affected by their surrounding chemical environment, which allows the chemist to identify specific chemical structures that could confirm the products of a chemical reaction and/or examine both intermolecular and intramolecular interactions.

"At UR, we are fortunate to have two powerful NMR instruments and an instrument director who oversees their maintenance and trains students on proper use," said Dr. Michael Leopold, the Floyd D. and Elisabeth S. Gottwald Chair in Chemistry. "Our students become the primary users of these instruments, whereas at many other institutions, the samples are run by staff technicians. Having experience using an NMR is invaluable to the education of our students as we prepare them for promising careers in the sciences."





Dr. William O'Neal, teaching
faculty of Chemistry and director of
Organic Chemistry Laboratories.

Animal *Research*

The Gottwald Center houses a multi-room R1 vivarium facility dedicated to the ethical use of animals in scientific research. Students are often invited into the space to collaborate with faculty on unique research projects.

Dr. Kelly Lambert, professor of behavioral neuroscience and the MacEldin Trawick Professor in Psychology, and her students and colleagues have received international attention for teaching rats to drive as part of an ongoing study in neuroplasticity, or how the brain changes over time. In 2019, the team challenged two groups of rats to drive small handmade robotic cars, referred to as “rodent-operated vehicles.” Rats housed in a complex, enriched environment learned the driving task, but rats housed in standard laboratory cages struggled to learn.

The published research explores how rats performing complex tasks, like driving, can further inform treatment for mental health conditions in humans such as anxiety and depression. The project was featured in Netflix’s 2022 documentary *The Hidden Lives of Pets* and the Canadian Broadcasting Corporation’s 2023 documentary, *Rat City*.

Currently, Lambert and her students are collaborating with Dr. Jonathan Richardson, assistant professor of biology, to investigate brain differences between traditional lab rats and their wild counterparts. A group of students presented research comparing the two at the 2024 International Congress of Neuroethology in Berlin. Lambert also references the project in her next book, *Wild Brains*, scheduled to publish soon.

“Students are not just reading about how rats learn and how their brains change – they’re taking part in hands-on training and daily care for the animals,” Lambert said. “As a result, we’re able to conduct innovative research and contribute to key scientific literature.”





Dr. Kelly Lambert and student

Advancing Breakthroughs *in Animal Research*

Within the Gottwald Center, groundbreaking animal research is unlocking new insights into both human and animal health, driving innovations that span from disease treatment to ecological preservation.

Dr. Colleen Carpenter-Swanson is using zebrafish in her research to better understand brain disorders, with the ultimate goal of developing more effective treatments.

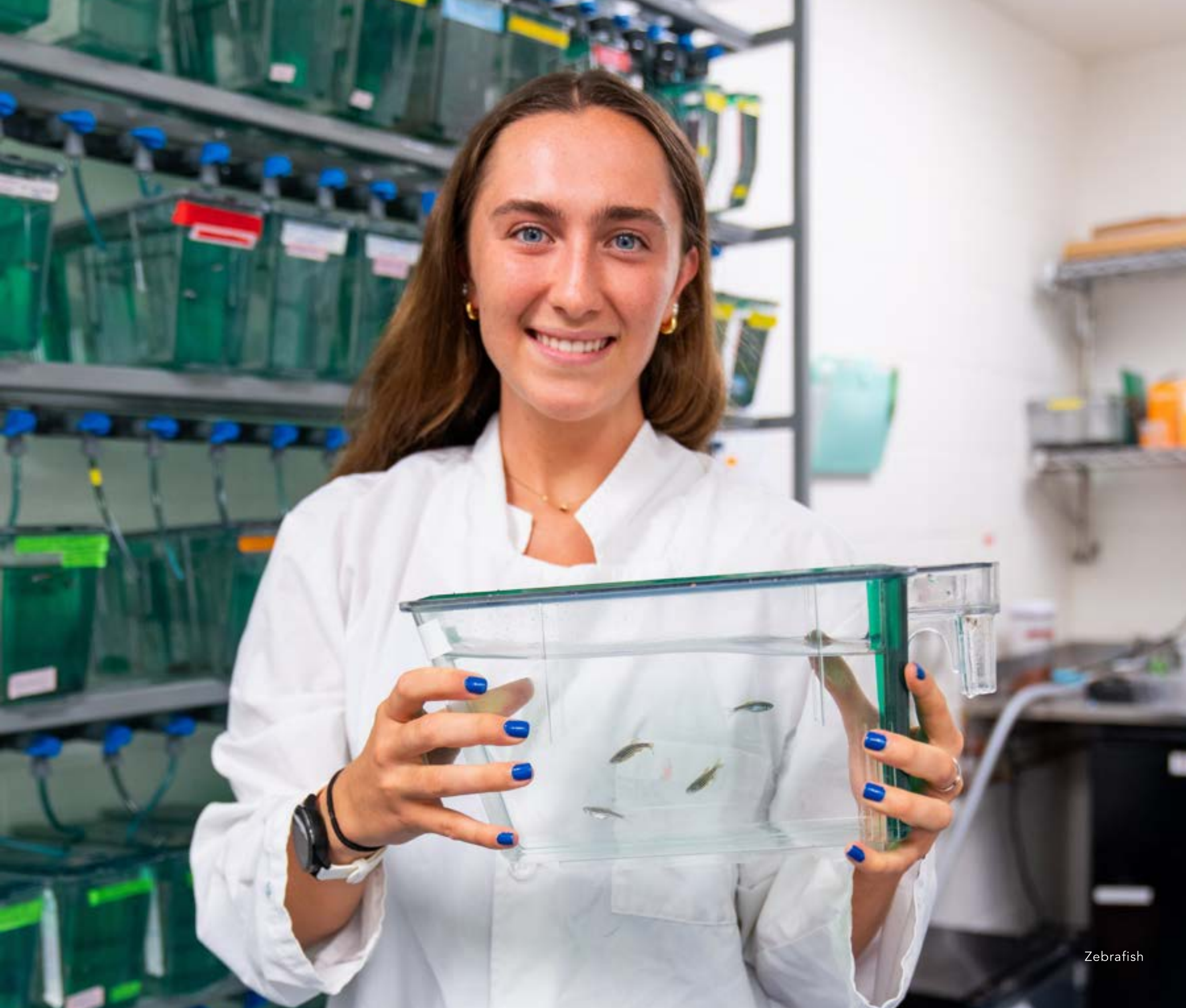
Dr. Isaac Skromne is also exploring the potential of zebrafish, focusing on congenital spinal cord abnormalities and drug delivery for the treatment of osteoporosis.

Dr. Jory Brinkerhoff is delving into the parasitic relationship between mice and ticks. His studies in disease ecology aim to better understand how parasites and their hosts shape ecosystems and affect human health.

Dr. Kristine Grayson is turning her attention to local amphibians and invasive insects. Her research in thermal performance helps guide efforts in conservation and species management.



A spotted salamander







Spongy moth caterpillars



A spongy moth

Greenhouse & *Herbarium*

The Greenhouse and Herbarium maintained by the Department of Biology provide essential support for instruction and research in plant biology.

The Greenhouse consists of two ranges totaling about 2,000 square feet for the year-round cultivation of living plants, with adjacent workspace for plant care and storage of materials. The collection includes a wide array of ferns, orchids, bromeliads, cacti, and other succulents, all grown with the aid of artificial fertilizer and non-toxic pesticides. Specimens are used in the Gottwald Center's teaching laboratories to provide examples of the vast diversity of form and function found in plants. Plants are produced in uniform multiples necessary for experimental manipulations in the labs.

The Herbarium is a museum collection of around 30,000 dry plant specimens preserved for study. Most specimens are vascular plants but the collection also contains fungi, lichens, myxomycetes, bryophytes, and blue-green algae. The majority were collected in central Virginia with some from other East Coast locations as well as Jamaica, Mexico, and China. Biology department faculty are currently in the process of digitizing the specimens by posting images and label data in online databases, making this information available to researchers around the world.





Dr. John Hayden, professor of biology, oversees the Gottwald Center's Greenhouse and Herbarium.



The Gottwald Center's Greenhouse



A sample of *Elephantopus Tomentosus* (commonly known as Elephant's Foot), one of about 30,000 preserved plant specimens stored in the Herbarium.



UNIVERSITY OF RICHMOND HERBARIUM - URV
Virginia Flora

ASTERACEAE

Elephantopus tomentosus L.

VA, POWHATAN CO: About 2 miles west of jct Rt 60
(Anderson Highway) and Rt 522 (Maidens Road) on
unimproved homelot about 400 m north of Rt 60 on unnamed
dirt road. 37.5701, -77.9792

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The University's success will always be based on the quality of its science program. It is central to driving the mission of the entire institution and affects the success of other schools and units. That's where the Gottwald family has had their greatest impact: our entire campus community has become better and stronger because they provided us with the tools to grow and develop our science program into something extraordinary.

- Dr. Andrew Newcomb

*Professor of Psychology, Emeritus
Dean of Arts and Sciences, Emeritus*

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Gottwald *Games*

Hosted annually in the Gottwald Center, the Gottwald Games is a science-themed summer field day that has become a beloved campus tradition. The event was created in 2012 by science faculty members to give students conducting research over the summer a break from being in the lab and the chance to have intellectually stimulating fun.

Each student research group forms a team (often complete with a themed team name, mascot, and/or t-shirt or costume) and competes in a series of eight faculty-facilitated games. The games change each year; past games included an “aromatic ring toss” (throwing rings in the shape of organic molecules at a chemistry ring stand) and “petri dish relay” (an obstacle course completed while carrying a stack of petri dishes in one hand).

The friendly competition builds camaraderie and community among students and faculty. Recently, the games have expanded to include students majoring in psychology, computer science, geography, and other departments on campus.











Dr. Shannon Jones, senior teaching
faculty, department of biology



STUDENT SUPPORT & SCHOLARSHIPS

The University of Richmond is committed to providing access and affordability, ensuring that all students can pursue a world-class education regardless of their financial circumstances. The Gottwald family has long been integral to this initiative, establishing several endowed and current-use scholarships and fellowship funds, offering invaluable resources to deserving Spiders.



All in *the Family*

Through the generosity of the Gottwald family, two pairs of brothers from Richmond have embarked on diverse academic and professional journeys that began at the University of Richmond. Justin and Jacob Airas, along with Nicholas and Ethan McComb, received scholarships and fellowships that are allowing them to pursue their unique passions and make lasting contributions in their fields. From theoretical chemistry to international business, these Spider brothers reflect on the power of opportunity and the impact of the support they received.

Justin Airas, '20 *Jacob Airas, '22*

When he was a first-year Spider, Justin Airas, '20, never imagined he would one day pursue a Ph.D. in theoretical chemistry at the Massachusetts Institute of Technology.

"I really wasn't fond of chemistry in high school," he said. "But UR's incredible professors and undergraduate research opportunities made me fall in love with the subject."

A Richmond native, Airas was a Gupton Fellow during his time at UR. He used the summer funding to research computational chemistry – specifically, he conducted simulations to study the behaviors of protein molecules and their potential for treating certain diseases. His work was published in several academic journals.

"That summer was one of the most enjoyable, academically enriching times I had at UR," he said. "The experience helped me have a better understanding of chemistry beyond the classroom. I truly believe it's why I got accepted to MIT – the research experience helped distinguish my application and made me a stronger candidate."

Airas' doctoral research extends the work he did at UR but focuses on machine-learning methods to improve the speed and accuracy of his simulations. In 2023, he received a competitive National Science Foundation Graduate



Justin, '20 (Center R), Jacob, '22 (Center L), and family attend Jacob's white coat ceremony.

Research fellowship, which provides three years of financial support to aid outstanding graduate students who have demonstrated the potential to be high-achieving scientists and engineers.

"The NSF grant will take me through the rest of my Ph.D., and I should graduate in 2026," he said. "After that, I would like to pursue a postdoctoral fellowship and eventually get a position doing full-time pharmaceutical research."

Airas' brother, Jacob Airas, '22, was also a Gupton Fellow and a recipient of the F. Dewey Gottwald Scholarship for the Sciences. His journey at UR began with his participation in the URISE program for underrepresented students with a passion for STEM, inclusion, and diversity. As a Gupton Fellow, he researched the strength of halogen bonding interactions in helping law enforcement officials detect opioids more quickly and effectively.



"The opportunity to conduct this research was incredibly impactful for me personally and professionally," Jacob said. "Our research was very well supported, and I was fortunate to be in the same lab group as my brother, which was a really special experience."

A graduate of UR's biochemistry and molecular biology program, Jacob completed a post-baccalaureate fellowship at the National Institute of Environmental Health Sciences, investigating how molecular machines involved in ribosome biogenesis are regulated. He is now a medical student at Wayne State University in Detroit.

"I'm thinking my top choice for my medical specialty will be diagnostic radiology," he said. "I'm also interested in looking at family medicine as a second option."

"I'm very proud of my younger brother," Justin Airas said. "We are taking different paths but staying within the sciences, and it all stems from the amazing experiences we had at UR. Our family is very grateful for the opportunities we've been given."



Nicholas McComb, '21

Ethan McComb, '24

Richmond natives and brothers Nicholas, '21, and Ethan McComb, '24, may have differing professional interests, but their UR experiences were both impacted by the Gottwald family's generosity. Nicholas received the Gottwald Scholarship for the Sciences and Ethan received the Gottwald Scholarship for the Robins School of Business.

A biology major and chemistry minor, Nicholas concentrated on neuroscience during his time at UR. He conducted research with behavioral neuroscience professor Dr. Kelly Lambert examining how early life stress impacts human brain development using a novel rodent model that replicated socioeconomic status.

"I was able to focus on my research and maximize my time on campus rather than getting a part-time job because the scholarship helped alleviate my financial burdens," he said.

Now a medical student in the combined M.D.-Ph.D. program at Louisiana State University Health Shreveport, Nicholas said his UR education was vital to preparing him for graduate school and a future career in neurology.

"Having a liberal arts background is very useful in the field of medicine because you have knowledge of so many different subjects," he said. "I also developed skills in problem solving and critical analysis that allow me to learn at a more advanced level."



Ethan, '24 (L) and Nicholas, '21 (R) McComb



A more recent Spider graduate, Ethan majored in business administration with a focus on international business. His scholarship allowed him the flexibility to participate in several high-impact learning experiences, such as studying abroad in Denmark.

“Living in Copenhagen and going to the Copenhagen Business School for a semester was one of the most transformational experiences of my life so far,” he said.

He also completed a business development internship with Highland Support Project, a Richmond-based nonprofit organization that empowers indigenous communities through service, investment, health, and education. “My work supported Guatemalan female artisans who are trying to independently market their products,” he said.

Ethan hopes to use his education to work in strategic business consulting. “My international business studies were very rewarding and enjoyable,” he said. “I look forward to pursuing that as a career, whether it’s in consulting or another field.”





Donald Center
for the Sciences

Generations *of Impact*

Each Gottwald scholarship and fellowship fund honors a deeply held ideal and/or pays tribute to a special person. Over 500 student awards have been provided to date, having an invaluable impact that will continue for generations to come.

Ethyl and Albemarle Science Scholars Program

This current use scholarship fund was created [REDACTED] [REDACTED] received between 1991 to 2003 from the NewMarket and Albemarle Corporations. Awarded to exceptional students majoring in the sciences, the fund led the way in helping UR expand its full-tuition, merit-based financial aid offerings.

Total Awards: 66

Total Amount Awarded: [REDACTED]

C. Raymond Hailey/Tredegar Scholarship

An initial gift of [REDACTED] in 1989 endowed this need and merit-based scholarship. Established in memory of C. Raymond Hailey, B'56, former senior vice president of Ethyl Corporation and mentor to John Gottwald, GB'84, this scholarship provides support to undergraduate students majoring in business.

Total Awards: 312

Total Amount Awarded: [REDACTED]





F. Dewey Gottwald Scholarship *for the Robins School of Business*

In 2012, an initial gift of [REDACTED] established and endowed this need-based scholarship, offering support to students who are from Virginia (with preference for those from the greater Richmond region) and majoring in business.

Total Awards: 14

Total Amount Awarded: [REDACTED]

F. Dewey Gottwald Scholarship *for the Sciences*

In 2012, an initial gift of [REDACTED] established and endowed this need-based scholarship, offering support to students who are from Virginia (with preference for those from the greater Richmond region) and majoring in the sciences.

Total Awards: 14

Total Amount Awarded: [REDACTED]



Floyd D. Gottwald, Sr. Scholarship

This need-based endowed scholarship was created from an initial gift of [REDACTED] in 2019. It provides annual support to students pursuing a major in STEM (science, technology, engineering, and/or mathematics) with preference for those from the greater Richmond region.

Total Awards: 21

Total Amount Awarded: [REDACTED]

Gupton Science Fellows

An initial gift of [REDACTED] in 2019 created the Gupton Science Fellows in honor of Dr. John Gupton, professor of chemistry emeritus, former Floyd D. and Elisabeth S. Gottwald Chair in Chemistry, and former department chair. The Fellows program funds a summer research fellowship for up to 15 students annually.

Total Awards: 101

Total Amount Awarded: [REDACTED]



Women in *STEM*

As Ethyl and Albemarle Science Scholars at the University of Richmond, Dr. Rebecca Pompano, '05, and Jennifer Nock, '99, embarked on unique journeys that would merge science with impactful careers in education and law, both crediting their UR experiences and scholarship support for enabling their groundbreaking contributions in STEM.

Rebecca Pompano, '05



Dr. Rebecca Pompano, '05, fondly remembers working with science faculty to conduct hands-on lab research during her time as a Spider. The experience inspired her career in academia – she is now an associate professor of chemistry and biomedical engineering at the University of Virginia and works with students daily in her own lab.

“I like knowing that I’m helping train the next generation of scientists,” she said. “I enjoy watching my students grow and mature as they learn to ask insightful questions, conduct rigorous studies, and communicate results effectively.”

A chemistry major, Pompano received a full-tuition scholarship to attend UR by being accepted into the Ethyl and Albemarle Science Scholars Program. “I wouldn’t have been able to attend UR if I didn’t have a full scholarship, so it was an enormous gift to receive that,” she said.

As part of the program, she had the opportunity to conduct research all four years on campus. In doing so, she developed close relationships with her faculty advisors.

“I wasn’t very confident at the time,” she said. “Having that support network of professors who were invested in my success helped me realize that I could achieve anything.”

Pompano went on to obtain a Ph.D. in chemistry from the University of Chicago; her research focused on building microdevices to study protein interactions that lead to blood clotting. She then completed a postdoctoral fellowship in UChicago’s surgery department examining the development of peptide-based nanoparticles for non-inflammatory vaccines.

This combination of analytical chemistry and immunology research became the basis for her lab work at UVA, which centers on developing cutting-edge biomedical tools to unravel the complexity of the human immune response.

“I aim to train interdisciplinary scientists who are chemists but can also be bio engineers or immunologists,” she said. “Currently, we’re





SAVE
OUR
SEAS

Keep
our
earth
green

working on developing an artificial lymph node to predict responses to vaccines and immunosuppressants. We want to create these tools and get this technology out in the world so we can help researchers develop drugs and vaccines for people in need.”

Pompano’s work has been funded by multiple National Institutes of Health awards. She received a Moore Inventor Fellowship from the Gordon and Betty Moore Foundation and the inaugural UVA Shannon Center Mid-Career Fellowship. She co-chaired and co-founded the inaugural 2022 Gordon Research Conference for Immunoengineering and co-chaired the 2023 meeting for Microscale Separations and Bioanalysis. In addition, she is active in building inclusive environments for STEM research and education. “We’re working to break down barriers that keep certain groups from having an equal chance at a quality STEM education,” she said. “Diversity and inclusion are important because we need all voices and ideas to solve society’s problems.”



Jennifer Nock, '99

Jennifer Nock, '99, has a unique perspective on the practical applications of science in the modern world. She leveraged her UR chemistry education to pursue a career in law and is now an award-winning patent attorney and litigator for pharmaceutical products.

“My passion for chemistry has always been linked to an interest in the pharmaceutical industry,” she said. “I primarily work in representing generic pharmaceutical companies in litigations to try to get lower-cost generic products on the market. I also work on the innovation side, helping companies patent and protect their inventions.”

An Illinois native, Nock was able to attend UR thanks to the generous support of the Ethyl and Albemarle Science Scholars Program. “I had a fantastic experience getting to know my professors and developing personal relationships,” she said. “They were phenomenal mentors and encouraged me to attend graduate school.”

After graduating from UR, Nock obtained an A.M. in chemistry from Harvard University. While there she conducted lab research using chemistry to design self-healing and self-assembling systems for the U.S. military, funded by a grant from the Defense Advanced Research Projects Agency. She also worked in Harvard’s Office of Technology Development, helping inventors get their products patented through licensing agreements or starting a company.



“That’s what sparked my interest in patent law and inspired me to attend law school,” she said. “It was a key experience getting to do that level of research at Harvard.”

Nock went on to achieve a J.D. with honors from the George Washington University Law School. Today, she lives in Richmond and works for intellectual property and technology law firm Rothwell Figg in Washington, D.C. She has worked on a variety of high-profile cases, such as representing Synthon Pharmaceuticals in successfully invalidating patents claiming a dosing regimen for the injectable multiple sclerosis drug Copaxone.

“We challenged a set of patents that directed giving twice as much of the drug half as often,” she said. “It was a big deal for consumers to not have to inject themselves as frequently, so being able to provide that kind of improvement was important.”

A shareholder at Rothwell Figg, Nock looks forward to growing their client base and continuing to work on new and interesting cases.

“I love the challenge of this work,” she said. “I’m essentially working in chemistry and biotechnology daily. I’m very thankful for the support of the Gottwald family and the amazing UR faculty for getting me to where I am today.”



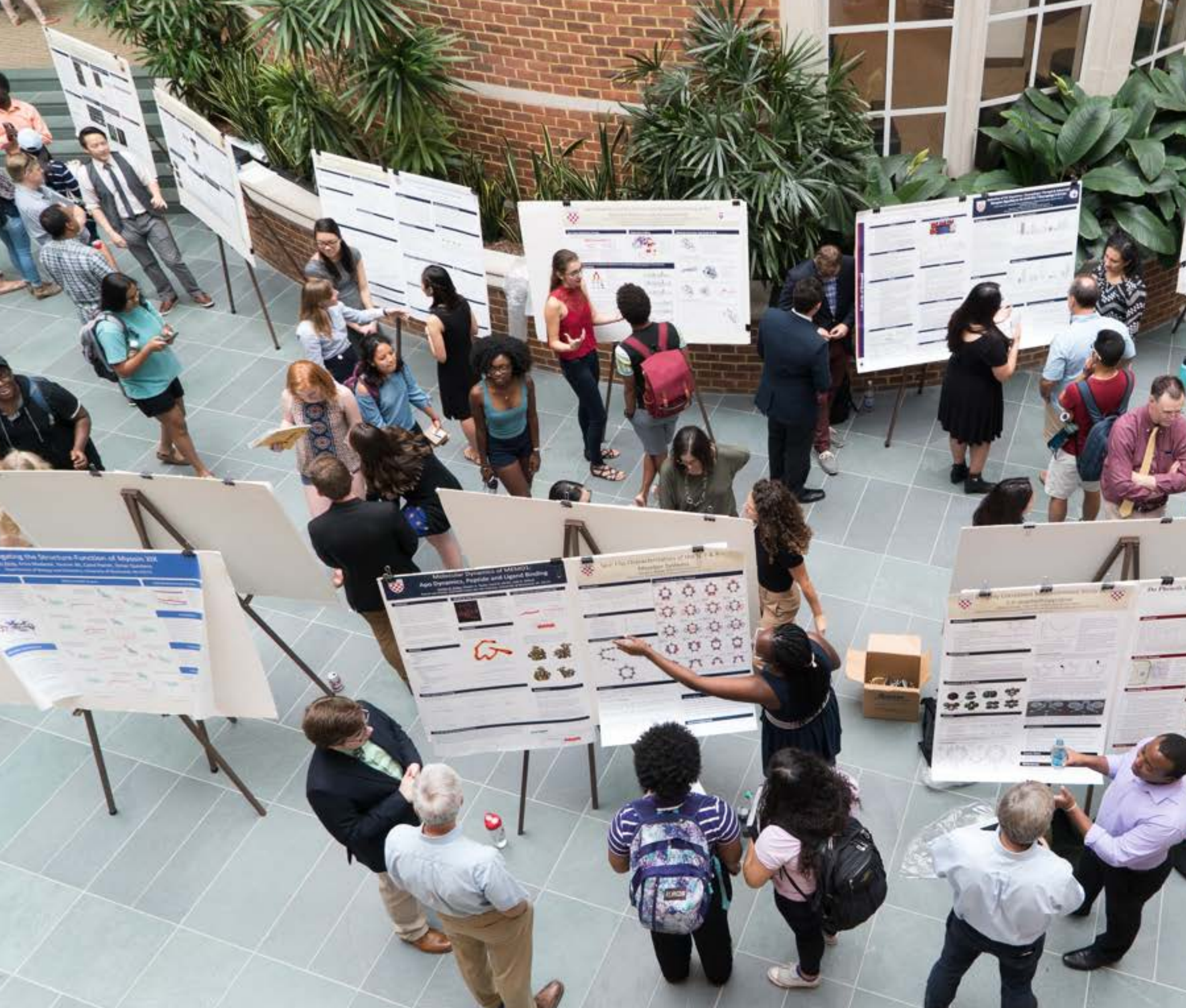
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The tremendous impact of the Gottwald family's generosity, leadership, and service to UR is immeasurable. Their contributions have directly advanced the sciences and other campus programs for the benefit of our students, faculty, and staff, and the future of the institution itself. Personally, I am very proud to have connected with Floyd and Helga during my presidency and as members of the Virginia Museum of Fine Arts board. We could not be more grateful for their support of our Spider community.

- Dr. Ronald Crutcher
University Professor
University President, 2015-21

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FACULTY SUPPORT

The Gottwald family has played a key role in attracting and retaining renowned science faculty at UR through their generous support of the Floyd D. and Elisabeth S. Gottwald Chair in Chemistry. Past and current chair holders have made pivotal impacts through hands-on teaching, mentorship, and advanced research collaborations.



Fueling ***GROUNDBREAKING RESEARCH***

The Floyd D. and Elisabeth S. Gottwald Chair in Chemistry, established in 1992 by Floyd and Elisabeth "Libby" Gottwald [REDACTED] empowers UR faculty to lead groundbreaking research, enrich student mentorship, and advance science education. Considered one of the highest honors a faculty member can receive, this endowed chair honors faculty contributions while providing critical resources for research and development, enhancing their ability to mentor future chemists and innovators. The lasting impact of the Gottwald family's commitment is exemplified by past and present chair holders, Drs. John Gupton, Carol Parish, and Michael Leopold, whose work has transformed UR's Department of Chemistry and inspired countless students.

Dr. John Gupton, III

Professor of Chemistry, Emeritus

Floyd D. and Elisabeth S. Gottwald Chair in Chemistry, 2001-2019

Chair, Department of Chemistry, 2001-2006



Dr. John Gupton still remembers what former UR president Dr. William Cooper said to him during his first interview on campus in 1998. "He said, 'John, you can't be a great university without great science, and we're going to have great science here,'" Gupton recalled.

An experienced organic chemist who had previously chaired the chemistry department at the University of North Carolina Asheville, Gupton took this directive seriously as a professor and chair of UR's chemistry department.

He helped lead the Scientific Discovery initiative, a multi-faceted campus improvement project in the early 2000s that aimed to revitalize and bolster the University's science program. This included a \$[REDACTED] renovation and expansion of the Gottwald Center for the Sciences [REDACTED]

"I would go to Floyd Gottwald's home with Dean [Andrew] Newcomb and we would show him the blueprints for the project," Gupton said. "Floyd would give very insightful comments and was very involved from start to finish."

Gupton became further acquainted with the Gottwalds after being awarded the Gottwald Chair in Chemistry in 2001.

"As I got to know the family, I learned that their generosity extends in amazing ways throughout the Richmond area," he said. "They aren't driven by recognition – they just want to do good deeds. Knowing that, it felt like a medal of honor being the Gottwald Chair, and it inspired me to take our teaching and research efforts to a much higher level."

Gupton served as chair until his retirement from UR in 2019. During that time, he worked with student research groups and partnered with Virginia Commonwealth University and the University of Texas Health Science Center at San Antonio on



developing new organic reactions that can be used to generate new bioactive compounds in agriculture and medicine. One of the compounds they developed has activity as an anti-tumor agent.

"I've dedicated my career to looking for new molecular building blocks to generate analogs of bioactive naturally occurring molecules, which could possess better biological profiles than the original natural substance and thereby could become potential medicinal agents," he said.

In addition to support from the Gottwald Chair, Gupton received funding for his research from the National Institutes of Health's National Cancer Institute, the American Chemical Society's Petroleum Research Fund, the National Science Foundation, and others. He has mentored and trained more than 150 undergraduate students and published more than 100 scholarly articles, most of which included student co-authors.

"The chair position allowed me to focus on teaching and research so I could give students the best of both worlds during their time as undergraduates," Gupton said. "Now, many of them have gone on to successful careers in chemistry, medicine, dentistry, and more. I'm honored that I could have a part in helping them pursue their desired career paths."



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The Gottwald family's generous support has been pivotal for maintaining our record of excellence in science education at UR. Their transformative investments and ongoing support of esteemed science faculty have had an extraordinary impact on hundreds of students each year. The School of Arts & Sciences deeply values its long-term relationship with the family and remains grateful for their commitment to offering an exceptional science education at our institution.

- Dr. Jennifer Cavanaugh
Dean, School of Arts & Sciences

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Dr. Carol Parish

Professor of Chemistry

Floyd D. and Elisabeth S. Gottwald Chair in Chemistry, 2009-2012 and 2019-present

Dr. Carol Parish came to UR to teach chemistry in 2005, when she relocated from another university seeking better opportunities for undergraduate student mentorship and faculty research support. At Richmond, she found both.

A nationally recognized leader in computational and theoretical chemistry, Parish's award-winning research focuses on understanding the molecular behavior of energy-related materials and biomolecules. Being appointed the Gottwald Chair in 2009 and again in 2019 has given her the resources and flexibility to accomplish her research goals while directly involving students in her work.

"The honor of holding the Gottwald Chair is a huge motivating factor," she said. "When the Gottwald family invests in an endeavor like this, you want to make sure that the outcomes are as strong and productive as you can possibly make them."

Each year, Parish and her research students collaborate on diverse projects and publish several peer-reviewed manuscripts. Recent research includes the Bergman cyclization for the synthesis of anti-cancer warhead drugs, the discovery of a new class of drugs for epithelial cancer, and an analysis of oligomeric models for molecular wire candidates.

Under Parish's mentorship, 23 students presented scientific posters at national meetings throughout the 2024-25 academic year. In addition, Parish was invited to give a plenary talk at the Southeastern Regional Meeting of the American Chemical Society in Atlanta. She is organizing a symposium highlighting physical chemistry research at undergraduate institutions at the upcoming American Chemical Society meeting, also in Atlanta.

"We operate under an apprenticeship model," she said. "All of the research I do is with my students. When I attend meetings or



give plenary talks, I often take my students with me. I want them to be fully engaged in the process of being a chemist.”

Parish was awarded \$375,000 from the National Science Foundation to pursue the use of diradicals as molecular magnets. This funding will allow her to continue hiring post-baccalaureate fellows and support undergraduate student researchers.

While research outcomes are important, for Parish, the most rewarding part of her career is witnessing the accomplishments of her talented and ambitious Spiders. Many of her former research students have gone on to prestigious graduate programs and notable careers in science, business, and more.

“The biggest impact for me is working with smart people who go off to do great things in the world, whether they are lawyers, chemists, physicians, or art conservators,” she said. “UR is knocking it out of the park in terms of building a STEM pipeline, and I hope the Gottwald family is pleased to know that they’ve made this possible.”



Dr. Michael Leopold

Professor of Chemistry

Floyd D. and Elisabeth S. Gottwald Chair in Chemistry, 2012-present



When he's not spending time with family, you will likely find Dr. Michael Leopold in the lab with his chemistry students. "Even if it's a Saturday afternoon, if I'm not with my wife and kids, the next place I want to be is right here with my students," he said.

Leopold came to UR in 2002 and was awarded the Gottwald Chair in Chemistry in 2012. "To me, having the chair means leading by example," he said. "There are lots of talented faculty here, so I take pride in having this honor. The funding allows me to be creative and timely so I can focus on my students and address relevant scientific problems."

Leopold works with undergraduate research students in the field of materials science, investigating the incorporation of nanomaterials into sensing platforms that have biomedical and environmental applications. Their work has resulted in more than 50 papers published in scientific journals, featuring more than 120 student co-authors.

Recent research, which was supported by the National Science Foundation, involved exploring halogen bonding interactions as a component of sensors for disease indicators as well as detecting the presence of explosives, environmental pollutants, and synthetic narcotics.

"I love the concept that researchers are explorers, going beyond where the textbook ends," he said. "We're discovering things that no one has seen or done before, and my students are discovering what they're capable of in the process."

One of Leopold's favorite projects was working with students to develop a sensor that can immediately determine uric acid levels in patients. The idea was inspired by personal experience: while pregnant with their second child, his wife was diagnosed at risk for preeclampsia. Because they had to wait for lab results on her uric acid levels, it took hospital staff hours to determine that she needed an emergency cesarean section.

"We created a sensor that can be used right there in the hospital room to continuously read out results," Leopold said. "There are a huge number of C-sections that happen needlessly; this type of prediction tool can help reduce that number."

In 2022, Leopold received the Outstanding Mentorship Award from the Chemistry Division of the Council on Undergraduate Research. He was also named an Outstanding Faculty Award recipient by the State Council of Higher Education, which recognizes superior accomplishments in teaching, research, and public service.

This fall, Leopold was awarded a \$70,000 Undergraduate Research Grant from the American Chemical Society. He and his students will use the grant over the next three years to study how certain sulfur-containing molecules found in heavy crude oil interact with tiny pores inside materials like gold and glass. This research has major implications for the petroleum industry and provides a valuable research opportunity for students.

"It's all about the students – they are the secret sauce," he said. "They're involved every step of the way in my work, so they're as important to the science as I am."

While on sabbatical during the 2024-25 school year, Leopold continued to mentor students in the lab while conducting independent research. "The Gottwald Chair remains the greatest honor of my career," he said. "It is a constant motivating force to continue scientific exploration and achievement with UR students leading the charge."



On behalf of the entire Spider community, we are
deeply grateful to the Gottwald family.



