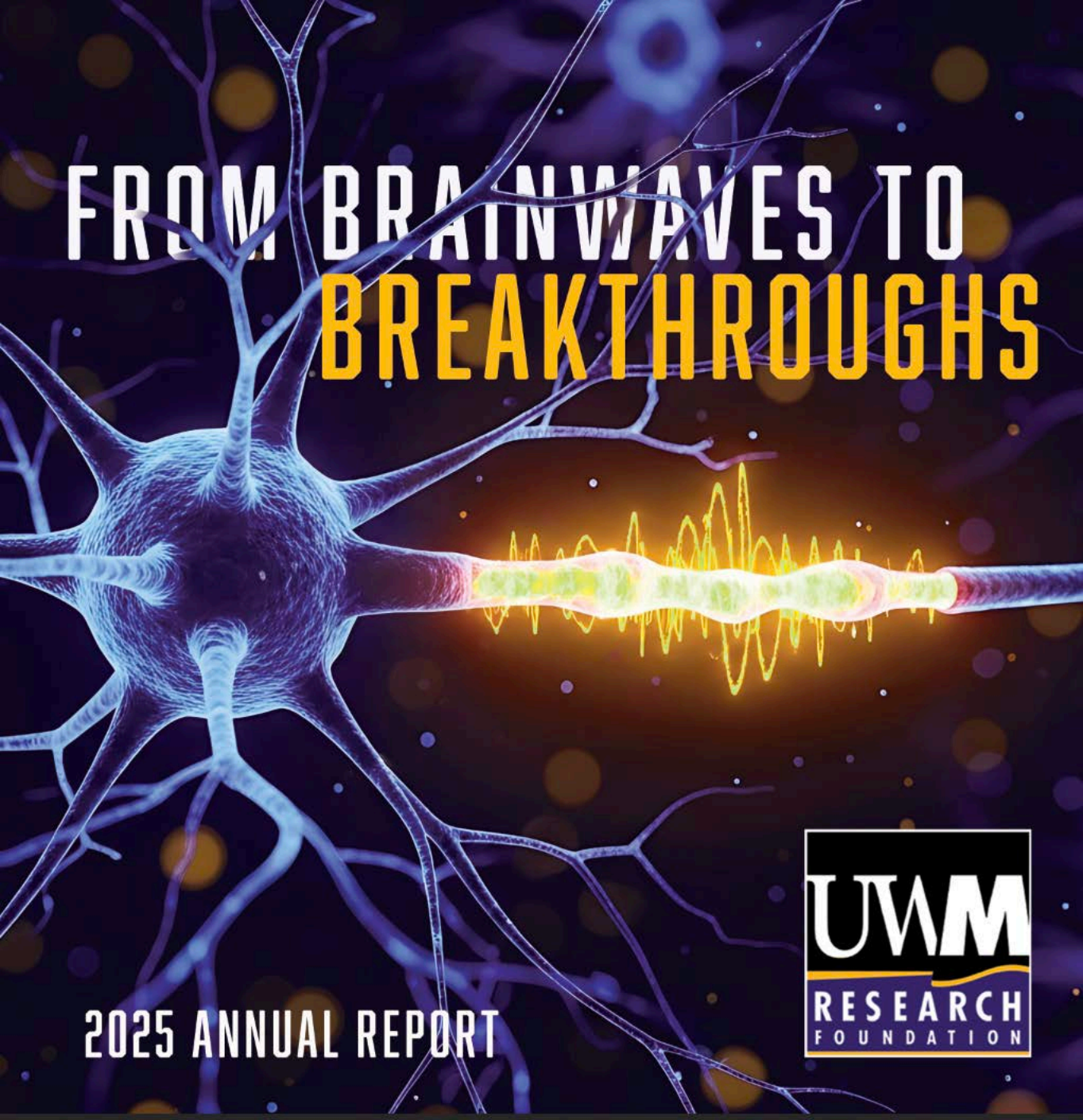


FROM BRAINWAVES TO BREAKTHROUGHS

UWM RESEARCH FOUNDATION

2025 ANNUAL REPORT

ALIGNING VISION: UWMRF AND UWM'S NEXT CHAPTER

As Chair of the UWMRF Board of Directors in 2025, I'm energized by a new chapter of leadership at UWM. We are working closely with the new Chancellor, Vice Provost for Research, and UWM Foundation President to understand their goals and explore how UWMRF can best support their vision.

This collaboration will strengthen research, drive innovation and help faculty, students, and partners thrive. I encourage you to connect with our UWMRF Board of Directors to explore how you can help accelerate these efforts in the year ahead.

Tessa Myers
UWMRF Board Chair

LEADING WITH PURPOSE: RESEARCH, ACCESS, AND COMMUNITY

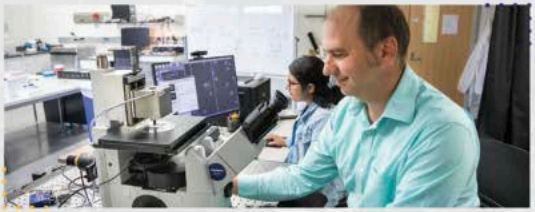
Research is central to UWM's mission, and I'm deeply grateful for the UWM Research Foundation's work to propel these efforts. This year, UWM maintained its R-1 status for the fourth consecutive cycle, marking more than a decade as a top-tier research institution. We continue to produce impactful research while providing broad access to higher education for students from all backgrounds. Our partnerships across the community strengthen both our research and educational missions.

In 2025, UWM was the only Wisconsin university – and one of only 32 nationwide – honored for excellence in research, access and community engagement by the Carnegie Classification of Institutions of Higher Education.

This report highlights some of the remarkable work happening across our campus, much of which would not be possible without the steadfast support of the UWM Research Foundation. Thank you for helping us change the world!

Dr. Thomas Gibson
Chancellor

EMPOWERING INNOVATION THROUGH PARTNERSHIP



The UWMRF fuels innovation at UWM. We forge strategic partnerships, support UWM researchers, and connect groundbreaking ideas with industry to launch startups born from university discoveries. Leveraging our expertise in intellectual property, we guide new technologies from concept to market. Our mission is to expand funding and create opportunities so UWM research can thrive, driving entrepreneurship and making a lasting difference locally and globally.

FUELING INNOVATION: FROM DISCOVERY TO IMPACT

The UWMRF accelerates innovation by turning research into real-world solutions. Through **Catalyst** and **Bridge Grants**, we fund early-stage ideas and help startups reach critical milestones. Programs like **Express Licensing** and **Panther Partnering** make collaboration faster and easier for UWM innovators and industry partners. Together, these initiatives strengthen UWM's innovation ecosystem, transforming discoveries into products that benefit our communities and drive economic growth.

FROM SPARK TO STARTUP:

THE POWER OF CATALYST GRANTS

Thanks to the generosity of the Lynde and Harry Bradley Foundation and Invenergy, UWMRF provided $250,000 to six research teams who were given the chance to test fresh ideas and gather critical data to prove their concepts.

$6.27M
awarded to date

120
projects funded

70/53
patents issued/pending

35
license/option agreements

$49M
follow on investment

21
startups launched

2025 Catalyst Winners

Next-Generation Power Conversion for Energy Storage

Feng Guo, Assistant Professor, Electrical Engineering

The team is developing a more efficient power converter for battery storage, reducing energy loss and supporting cleaner, more reliable renewable power.

Environmental Monitoring and Agrochemical Development

Rebecca Klaper & Eric Ostovich
Professor & Postdoctoral Researcher, Freshwater Sciences

Funding is driving the development of an innovative algae-based test that rapidly and accurately measures how chemicals affect aquatic ecosystems — enabling safer product design and more efficient water pollution monitoring. To bring this breakthrough to market, the team launched their startup, Built-N-Bioassays.

Precision Cancer Diagnostics

Ashwin Narasimhan & Priyatha Premnath
Visiting Assistant Professor & Assistant Professor, Biomedical Engineering

The team is developing a prototype to detect cancer earlier by capturing rare tumor cells from blood, increasing diagnostic accuracy and advancing cancer detection and precision medicine.

2025 CATALYST WINNERS

Decision-Support Algorithm for Nursing Educators

Christopher Peters
Assistant Professor, Nursing

This software tool will help nursing educators fairly evaluate student background checks, reducing legal and ethical risks and supporting workforce development through smarter, consistent decisions.

Targeted Cancer Therapy

Xiaohua Peng & Taufeeque Ali, Professor & Ph.D. Graduate, Chemistry & Biochemistry

A new smart cancer therapy in development uses high doses of vitamin C in combination with a novel compound to target and destroy cancer cells while sparing healthy cells. Catalyst funding supports advanced testing for a safer alternative to chemotherapy, as well as their startup SynXT Therapeutics.

Rehabilitation Robotics for Bed-Ridden Patients

Habib Rahman
Professor, Mechanical Engineering

A new portable, bed-mounted robotic support frame is being developed to help bedridden patients start leg rehabilitation in bed, easing caregiver workload and speeding recovery. Catalyst funding supports testing and refinement, and new patent filings will be licensed through Dr. Rahman's startup RoboHeal Innovations.

FROM STARTUP TO SCALE: THE POWER OF BRIDGE GRANTS

The Bridge Grant program helps UWMRF startups close early funding gaps. With support from WEDC and matching donors Dennis & Sue Webb and Christina & Karl Fiasca, startups have secured grants, attracted investment, and created jobs. The program remains a strong driver of early-stage growth. One-hundred thousand dollars total was awarded in 2025 to four startups below.

$550K distributed

14 startups funded since 2021

$18M in follow-on investments

SynXT Therapeutics is a cancer therapy 30-45 times more potent than current drugs while sparing healthy cells. Activated only in tumors by high-dose vitamin C, it has eliminated breast cancer in models with no toxicity. Researchers are exploring other cancers.

RoboHeal Innovations is developing a robotic arm that helps wheelchair users eat, open doors, and perform daily tasks using eye or chin controls. Funding supports market planning, partnerships, and regulatory progress.

Intelligent Composites is creating ultra-light, self-lubricating aluminum engine parts that improve drone efficiency, cut emissions, reduce oil use, and extend range. Funding supports testing, production contracts, and expansion.

Estrigenix Therapeutics is developing safer treatments for menopause symptoms - hot flashes, memory loss, bone loss - without hormone-therapy risks. Funding supports safety testing, FDA steps, and investor readiness.

STARTUP SPOTLIGHTS
FRESH OFF THE BENCH

PerryMedical

William Perry - Graduate, Engineering

PerryMedical is developing a bariatric lift to help EMTs and caregivers safely move patients weighing up to 1,000 lbs. Prototype testing is underway with plans for future mass production.

Sequidose

Jessica Rotier, Clinical Associate Professor, Nursing
Osvaldo Sepulveda-Villet

SequiDose is developing a new syringe device that delivers multiple IV medications through a single connection, reducing infection risk, improving medication delivery and saving time. The startup is fine tuning their prototype pod and exploring FDA approval.

CEO Daniel Burgin and Dr. Ching Hong Yang of T3 Bioscience

LEADING THE CHARGE

COnovate

COnovate is advancing its patented eCOphite™ a sustainable, high-performance alternative to graphite for batteries. In 2024, the company expanded manufacturing and testing partnerships and secured funding to scale this groundbreaking material.

RoddyMedical

RoddyMedical partnered with Mayo Clinic and hired sales representatives to expand use of its SecureMove-TLC device. A national Vizient contract granted access to most U.S. hospitals and recognized SecureMove-TLC as an innovative technology in their supply chain program.

T3 Bioscience

RejuAgro is an eco-friendly crop treatment that performs as well as antibiotics in fighting diseases like citrus canker and fire blight. With EPA testing complete, the company is preparing for regulatory submission in 2026 and partnering with growers in Florida and Wisconsin to reduce billion-dollar agricultural losses.

INNOVATION UNVEILED: TECHNOLOGIES SHAPING TOMORROW

Next-Gen Compounds for Stress and Heart Health

Alexander (Leggy) Arnold – Professor, Chemistry & Biochemistry

Dr. Arnold's team has created compounds that precisely target stress and blood pressure receptors, offering hope for safer, more effective treatments for mental health and cardiovascular conditions.

Preventing Fires, Powering the Future

Brian Armstrong - Professor, Mechanical Engineer

This compact system detects hidden faults and rising heat inside lithium-ion cells, helping prevent fires and extend battery life in electric vehicles, aircraft, and grid storage, making high-energy systems safer and more reliable.

Microscopy That Sees for Hours

Ionel Popa & Valerica Raicu – Professors, Physics

This novel method keeps microscopes precisely focused for hours, enabling clearer imaging of cells and molecules—critical for breakthroughs in cancer research, drug discovery, and nanotechnology.

EASY BUTTON TOOLS FOR INNOVATIVE PARTNERING

UWMRF EXPRESS LICENSE FOR UWM STARTUPS

The Express License helps UWM innovators launch startups faster and at lower cost with preset, startup-friendly terms that simplify licensing and cut legal delays by avoiding negotiation. Key licensing terms include delayed patent repayment, favorable royalty rates, minimal fees, and simplified shared success rates.

PANTHER PARTNERING

UWMRF's enhanced tiered licensing program gives industry partners greater flexibility, offering options from non-exclusive to fully exclusive rights. With reduced royalties and streamlined agreements, the program is designed to prioritize research collaboration and accelerate innovation.

COMPARISON CHART

Tier	Option & Field	License Fee	Patent Royalty Rate	Copyright Royalty Rate	Sublicensing Rights
The Black & Gold	**Standard** license negotiation	None	Determined by market rates	Determined by market rates	Depends on license type
The Prowl	**Non-exclusive** license to IP in a specific field of use	Pre-paid: 10% of project cost	0.5%	1.5%	None
The Pounce	**Exclusive** license to IP in a specific field of use	Pre-paid: 15% of project cost or $15,000	1.5%	4.5%	None
The Roar	**Exclusive** license to IP in all fields of use	Pre-paid: 15% of project cost or $22,500	2%	5%	None
			*Once cumulative sales reach $20M	*Once cumulative sales reach $20M	

LEAN TEAM BIG RESULTS

"At UWMRF, we're proud to support UWM's mission of making new waves in research. Every concept, from small ripples, to rising tides, to tidal waves of change, has the potential to transform industries. Our team is dedicated to nurturing these ideas as each navigates new waters.

As Milwaukee's R1 research institution, UWM makes waves far beyond campus by connecting faculty and students with local and global companies to drive innovation and provide real-world experience. Startups are at the heart of this work, and we need all hands on deck including entrepreneurs, mentors, and investors to sustain this growth and ensure the next swell of discoveries reach the world."

Jessica Silvaggi, Ph.D., UWMRF President

NEW FACES, FRESH ENERGY: JANE LORENZI JOINS UWMRF

Jane joined UWMRF in June 2025 to strengthen operations, support innovation programs, and enhance communications that advance UWM research. A Marquette alum in international affairs with a strong background in nonprofit administration and strategic communications, she brings valuable experience supporting organizations in Alaska and Wisconsin. Jane is passionate about connecting people and ideas to drive social impact in Milwaukee.

A NEW CHAPTER FOR THE UWM FOUNDATION

We welcome Laura Bray as the new UWM Foundation President. A respected Milwaukee leader with 30+ years in economic development and higher education, Laura brings deep community ties and a strong commitment to UWM's mission, positioning the Foundation for strategic growth and long-term impact.

UWMRF BOARD OF DIRECTORS

Officers

Tessa Myers
Board Chair | Senior Vice President of Intelligent Devices, Rockwell Automation

Mike Maschek
Board Vice Chair | Executive Director, Business Development, Rush University Medical Center

Christina Fiasca
Board Secretary | Vice President of Product Finance, Northwestern Mutual (retired)

Matthew McNeill
Board Treasurer | Chief Innovation Officer, Rite-Hite

Dennis Webb (incoming Secretary)
President & Engineer, Sage Water

Directors

Laura Bray
Ex-Officio Officer | President, UWM Foundation, Inc.

Matt Bednarski (incoming 2026)
Client Service Leader, CDM Smith

Ellen Censky
UWM Foundation Board Liaison | President/CEO, Milwaukee Public Museum

Ann Nattinger
Vice Dean for Research, School of Medicine; Associate Provost for Research; Professor of Medicine, Lady Riders Professor of Breast Cancer Research; Principal Investigator, CHDS, Medical College of Wisconsin

Michael Orgeman
Attorney & Shareholder, Lichtsinn & Haensel, S.C.

Justin Smith
Senior Manager of Innovation & Technology, Direct Supply Innovation & Technology Center

LUBAR ENTREPRENEURSHIP CENTER

65 pop-up workshops

20 hosted courses

4,000 total engagements

900+ customer discovery interviews

Innovation in Motion: The LEC's Year of Impact

The 2024–2025 year at the Lubar Entrepreneurship Center was defined by creativity, collaboration, and impact. With 65 pop-up workshops, 20 hosted courses, and more than 4,000 total engagements, the LEC fostered innovation and connection campuswide. Highlights included three NSF I-Corps and two PhD Bootcamp sessions, producing 900+ customer discovery interviews. From daily programming to the standout Innovations Expo, the year showcased the LEC's role as a hub for ideas, learning, and community.

Entrepreneurship in Action: UWM's Startup Legacy

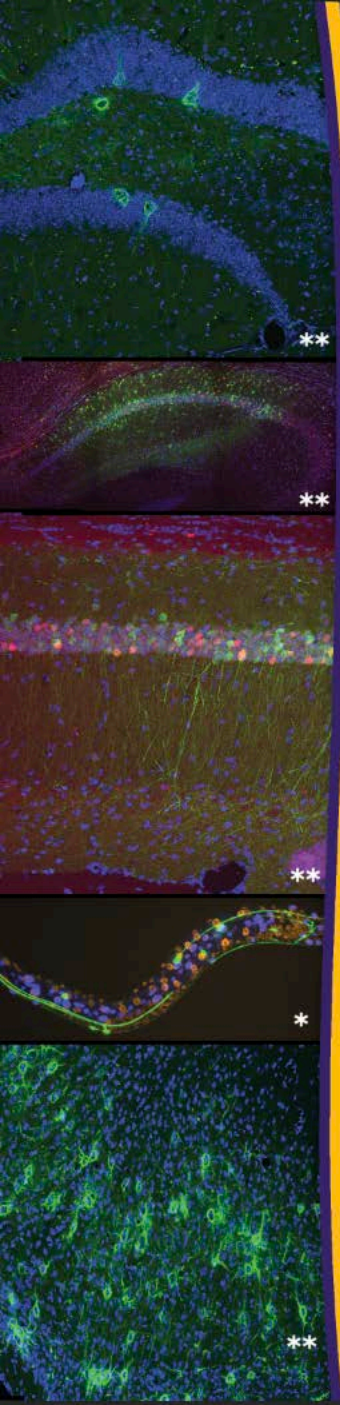
Now in its 14th year, the UW–Milwaukee Startup Challenge empowers students to turn ideas into real-world impact. Since 2012 nearly 400 teams have connected with mentors and built ventures that blend innovation with social good. Last year's projects ranged from fashion startups and a baking-based nonprofit to a mental health initiative and community-focused art and gaming ventures, highlighting UWM's creativity, collaboration, and commitment to entrepreneurship that benefits Milwaukee and beyond.

Brewing Innovation: Tea @ the LEC

Tea @ the LEC started as a simple idea on a Post-It note and has grown into a dynamic workshop series introducing students to entrepreneurship in an accessible, creative way. Led by LEC's Innovation Interns, the program features speakers from diverse industries who help attendees apply entrepreneurial skills and connect across disciplines. With record attendance and strong campus collaborations, Tea @ the LEC continues to expand, fostering innovation and community among UW-Milwaukee's emerging entrepreneurs.

Beyond the Lab: Entrepreneurship for PhD Pathways

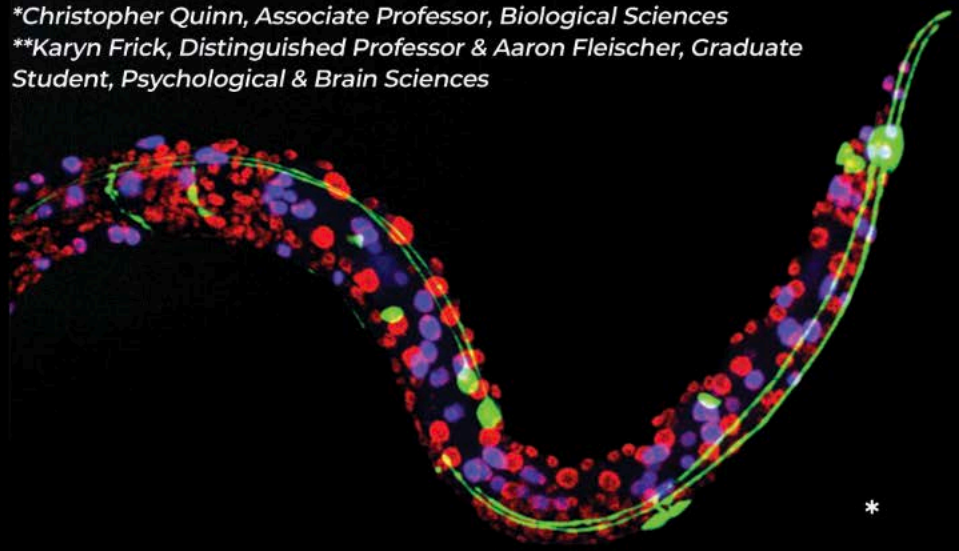
The NSF I-Corps Customer/Career Discovery Bootcamp, created by UW–Milwaukee and Michigan Tech faculty, reimagines graduate career preparation through entrepreneurship and design thinking. In three interactive sessions, students use startup-inspired tools to explore career paths, conduct interviews, and link research to real-world needs. Having served 225+ students, the bootcamp builds confidence, clarity, and community, offering a human-centered model for graduate education.



Driving Impact Together: Thank You to Our Donors

The UWMRF deeply appreciates the generous support of individual donors, board members, philanthropic foundations, and corporate contributors. Your contributions power innovation, forge partnerships, and bring UWM discoveries and startups to life. In 2025, we were especially grateful for the support of the Lynde and Harry Bradley Foundation, Alvin & Marion Birnschein Foundation, Schoenleber Foundation, Marjorie Siebert Aylen Foundation, Invenergy, Dennis & Sue Webb, Chris & Tessa Myers, Karl & Chris Fiasca, and many others.

**Christopher Quinn, Associate Professor, Biological Sciences*
***Karyn Frick, Distinguished Professor & Aaron Fleischer, Graduate Student, Psychological & Brain Sciences*



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