





1

03

- 2 05 06 07 3 09 10 11 5 13 14 15 16 17 6
- 19 7

#### In this report

#### Introduction

Foreword by Eric Peterson

#### Organization and People

Growing Together Organizational Chart BioVentures Board

#### Licensing and Innovation

Intellectual Property Portfolio **BioVentures Incubator** Grant Awards and Funding

#### Programs

Arkansas Collaborative for Technological and Innovative Venture Equality (ACTIVE) AR Health Ventures Therapeutic Accelerator (ARHVA) BioVentures Internship Program BioVentures + MIT Hacking Medicine Hackathon Medical Innovation and Entrepreneurship Honors Tack

#### Outreach

Marketing and Communications

#### **Future Outlook**

## Foreword by Eric Peterson



This year has been a testament to the power of collaboration and innovation at BioVentures. From empowering entrepreneurs to advancing groundbreaking technologies, we've taken meaningful strides in transforming ideas into real-world impact. I am incredibly proud of what we've accomplished together and look forward to building on this momentum in the year ahead."

> **Eric Peterson, Ph.D.** Interim President, BioVentures

It is with great pride that I present BioVentures' Annual Report for 2024, reflecting a year of remarkable progress and innovation. This year, we celebrated new milestones in fostering entrepreneurship, expanding educational initiatives, and driving impactful partnerships that continue to solidify BioVentures as a leader in technology transfer and innovation in Arkansas and beyond.

From launching transformative programs like the Arkansas Collaborative for Technological and Innovative Venture Equality (ACTIVE) to achieving full capacity in our incubator for the first time, 2024 has demonstrated the immense potential of collaboration and creativity. These successes underscore our commitment to empowering diverse entrepreneurs, advancing groundbreaking biomedical technologies, and nurturing the next generation of innovators. We have strengthened our financial foundation while growing our intellectual property portfolio and launching initiatives that address critical healthcare challenges. Notably, our partnerships and grant successes, including over \$5.4 million in awarded funding, highlight the dedication of our team and stakeholders to drive meaningful change.

As we look ahead to 2025 and beyond, our vision remains steadfast: to transform ideas into impactful solutions that improve lives and bolster economic growth. I am deeply grateful to our board, team members, partners, and supporters who have been instrumental in this journey.

Thank you for being part of our mission and for your continued support. Together, we are shaping a future where innovation thrives, and healthcare solutions reach those who need them most.

05	Growing Together
06	Organizational Chart
07	<b>BioVentures Board</b>



# **Growing Together**

#### Team incorporations and organizational changes in FY 2024



Thomas Forcum, B.A. Internship Coordinator | Member since January 2024

Thomas Forcum graduated Summa Cum Laude from UALR with a bachelor's degree in chemistry. During his time at UA Little Rock, he served as president of the Student Government Association. There, he worked closely with university leadership to, among other things, improve student experiences and enhance graduate assistant pay. In addition, he contributed to academic excellence as a learning assistant and tutor in the Department of Chemistry and as vice president of the Campus Garden Alliance. Thomas was also the featured speaker at the university's May 2023 commencement ceremonies. Now at UAMS BioVentures, he is dedicated to fostering innovation and supporting entrepreneurial ventures. Thomas hopes to go to the UAMS Medical School to obtain his M.D.



Dmitri Scott. BBA Program Manager, ACTIVE Program Member since January 2024

Dmitri Scott is an ACTIVE program manager dedicated to empowering entrepreneurs and fostering innovation. He collaborates with cohort members and the ACTIVE team to ensure program success, offering tailored support and opportunities for growth. With expertise in event planning, marketing, business consulting, and entrepreneurial education, Scott holds a Bachelor's in Business Administration with a focus on entrepreneurship. His strategic mindset helps guide entrepreneurs through challenges of building and scaling businesses. Passionate about collaboration and resilience, Scott is inspired by the creativity of those he supports, striving to create a resource-rich environment where ideas thrive.



Joe Schaffner, MPA **Communications Coordinator** Member since March 2024

Joe Schaffner coordinates communications and outreach efforts for BioVentures and the Institute for Digital Health and Innovation at the University of Arkansas for Medical Sciences. Joe has two Bachelor of Art degrees and a Master of Public Administration degree from the University of Arkansas at Little Rock. Joe has almost two decades of outreach experience in the public and nonprofit sectors. His efforts have earned local, national and international acclaim, including an international safety award for media at the World Safety Conference in Bangkok, Thailand.





Amy Widner, M.A. Communications Manager Member since April 2024

Amy Widner, M.A., is a native Arkansan with 20 years of experience in journalism, communications and marketing. As a reporter at the Arkansas Democrat-Gazette and Pine Bluff Commercial, she covered communities from Pocahontas to Lake Village. As managing editor, she led The Commercial newsroom and the digital-first transformation for a 12-property statewide media company. Since 2016, she has specialized in communications and marketing for academic medical centers, with clients including UAMS, Vanderbilt University Medical Center, WashU's digital transformation initiative, UT Southwestern, and national professional groups promoting clinical informatics and NIH-designated cancer centers. In addition to her work at BioVentures, she serves UAMS in the Department of Biomedical Informatics and the UAMS Mindfulness Program.



interim president in FY 2024.



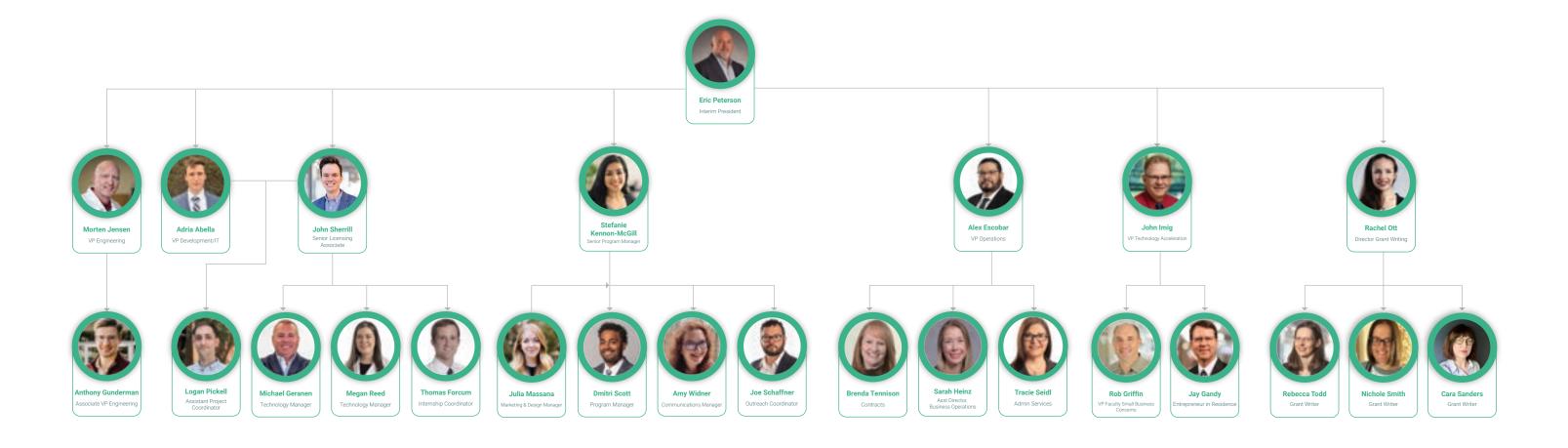
#### Cara Sanders and Nicole Smith Grant Writers

Grant writers Cara Sanders and Nicole Smith were on temporary contract with BioVentures during FY24 and provided valuable assistance to the grant team. We extend a special "thank you" for their contributions, particularly for their work on an R25 application submitted in response to the Notice of Special Interest (NOSI): National Cancer Institute Entrepreneurial Education Programs to Facilitate Commercialization of Cancer Relevant Technologies.



Eric Peterson, Ph.D., is a familiar face at BioVentures. He took on a new role as

# **Organizational Chart**



### **BioVentures Board**



Stephanie Gardner PHARM.D., ED.D.

Provost and Chief Academic Officer of UAMS. Dr. Gardner oversees academics, strategy, and Vision 2029 implementation, fostering excellence across UAMS programs and services.



#### Daniel Voth PH.D.

Vice Chancellor for Research & Innovation of UAMS. Dr. Voth earned his B.S. in Biology from Northwestern Oklahoma State University and a Ph.D. in Microbiology from the University of Oklahoma. He has been continuously funded by the NIH.

#### **Arthur Orduña**

Arthur Orduña leads The Venture Center, co-founded its Arkansas Fund, and drives early-stage ventures at Circumference Group.





#### Amanda George CPA

Amanda George, CPA, is UAMS Vice Chancellor for Finance and CFO, with prior roles including associate vice chancellor for clinical finance and CFO of the integrated clinical enterprise.





Louise Epstein MBA

Executive in Residence at ATI mentors entrepreneurs, supports ventures, and drives economic growth, maintaining its reputation as a leading tech incubator.



#### **Steve Abell**

Steve Abell manages investments and planning at Arkansas Blue Cross, serving in leadership roles since 1996 and retiring as VP of Strategic Innovations in 2021.







#### **Nancy Rusch**

PH.D.

cine.

M.D., MPH

Nancy Rusch, Ph.D., is chair of Pharmacology and Toxicology at UAMS, co-founded PinPoint Testing LLC, and led NIH-funded cardiovascular research for 30 years.

**Michelle Whittier Krause** 

Dr. Krause is CEO of UAMS

Medical Center and Senior

Vice Chancellor for UAMS

Internal Medicine and a

Health. She is a professor of

graduate of the University of

Cincinnati College of Medi



#### Bobby W. Sandage PH.D.

Leads Euclises Pharmaceuticals, manages the Riney Foundation, and is a General Partner in Cultivation Capital Life Sciences Fund II, with 37 years in pharmaceuticals. 

# licensing and innovation

09	Intellectual Property Portfolio
10	BioVentures Incubator
11	Grant Awards and Funding



### Intellectual Property Portfolio

In FY24, BioVentures received 32 invention disclosures, which tracks closely with our historical average. We submitted 15 new provisional patent applications and 6 non-provisional PCT patent applications. Additionally, we secured a total of 16 patents, including 6 U.S. patents and 10 international patents.



Invention Disclosures Provisional Patent Applications

U.S. Patents

International Patents

Non-Provisional PCT

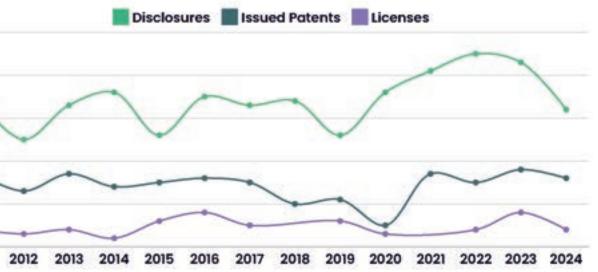
**Patent Applications** 



Disclosures 📕 Issued Patents 📕 Licenses 50 40 30 20 10 0 2011

**Exclusive Licenses** 

Captura Biopharma **PRV** Pharma Harmonic Discovery



#### Copyright Agreement

Arkansas Children's Hospital

#### Options

NK Biosciences

## **BioVentures Incubator**

FY2024 was an exciting year for the BioVentures Incubator. For the first time in BioVentures' history, the incubator reached full capacity. We are pleased to support 10 Arkansas-based biomedical startup companies by providing office and laboratory spaces. We have also started offering virtual memberships, which allows startups to use the facility for a business address without having a physical presence.

#### **BioVentures Incubator activity**

Seven companies continued their leases in FY24. In addition, we are pleased to welcome these new tenants to the incubator facility:

Acetaminophen Toxicity Diagnostics LLC (ATD): ATD is one of the only CLIAand CAP-certified laboratories for acetaminophen adduct testing in the world. Founded by UAMS faculty, ATD has successfully secured federal funding for its work for over a decade and recently transitioned their lab from Arkansas Children's Hospital to the BioVentures Incubator facility.

NephSmart LLC: NephSmart was co-founded by a UAMS faculty member and is funded by the National Institute of Diabetes and Digestive and Kidney Diseases. The company focuses on developing a point-of-care device to predict severe acute kidney injury. We are thrilled to welcome NephSmart to the BioVentures Incubator.



# **Grant Awards and Funding**

BioVentures has been awarded \$5.4 million in funding for FY24

#### **Awarded Grants**

#### **Minority Business Development Agency Capital Readiness Program**

BioVentures and UAMS were awarded a \$3 million grant to support socially and economically disadvantaged (SEDI) health and health technology entrepreneurs in the state of Arkansas over a 4 year period.

#### Office of Minority Health Community Level Innovations for Improving Health Outcomes.

BioVentures and Institute for Digital Health & Innovation collaborators are leading this successful application that secured \$2.4 million for Delta Maternal Outreach and Transformational Health Education Resource (DELTA MOTHER).

#### **In Progress**

BioVentures is teaming with leadership from the UAMS Office of Research and Innovation as well as the Division of Academic Pathways and Workforce Partnerships to prepare a proposal (budget total TBD) responding to the National Science Foundation's (NSF) Growing Research Access for Nationally Transformative Equity and Diversity (GRANTED) program to help statewide institutions build research administration capacity and bolster technology transfer and commercialization efforts.

#### **Pending Applications**

National Cancer Institute Cancer Research Education Grants Program -Courses for Skills Development. This R25 application for Cancer and Developing Entrepreneurial Technologies (CADET) will provide a statewide entrepreneurial education program to guide trainees through the process of commercializing new cancer-related technologies with intellectual property potential.

#### **Unfunded Applications**

- **1. BARDA Accelerator Network 2.0**: BioVentures submitted a RADAR project to accelerate medical countermeasure development addressing biosecurity threats through a network of strategic partners.
- 2. EDA Tech Hubs Applications: Collaborating with the City of Little Rock, BioVentures contributed to AMETHYST, a proposal leveraging healthcare delivery for biotechnology, AI, and data-driven medical technologies.
- 3. Blue and You Foundation: In partnership with Momentum Venture Labs, BioVentures launched TADAH! to address health disparities by introducing Delta youth to digital health and entrepreneurship.
- 4. NSF Innovation Corps Hubs: UAMS partnered with institutions on an EPSCoR-led project to cultivate entrepreneurial leaders transforming regional research into scalable ventures.

### programs

13	Arkansas Collaborative for Tech
	Innovative Venture Equality (ACT
14	AR Health Ventures Accelerator
15	BioVentures Internship Program
16	BioVentures + MIT Hacking Medie
17	Medical Innovation and Entrepre



**1**2

nological and TIVE) (ARHVA)

icine Hackathon eneurship Honors Track

### Arkansas Collaborative for Technological and Innovative Venture Equality (ACTIVE)

#### Supporting Socially and Economically Disadvantaged Entrepreneurs

In November 2023, BioVentures received a notice of award from the Minority Business Development Agency's Capital Readiness Program. We were selected as one of 43 awardees across the country to receive funding dedicated to advancing opportunities for socially and economically disadvantaged (SEDI) entrepreneurs. This funding has enabled us to create and implement the Arkansas Collaborative for Technological and Innovative Venture Equality (ACTIVE) program.

ACTIVE is designed to equip Arkansas-based healthcare and health technology entrepreneurs from SEDI backgrounds with essential resources and support. The program provides comprehensive training, tailored education, and valuable access to professional networks, empowering participants to overcome systemic barriers and advance their ventures.



<u>Click here</u> to meet the members of the 2024 Cohort.

The first ACTIVE cohort, comprising 25 entrepreneurs, began their journey in June 2024. Over the course of this multi-year program, participants will develop critical skills, build connections, and receive guidance to navigate the challenges of the healthcare and health technology sectors. This initiative not only supports individual growth but also aims to foster innovation and equity within the broader Arkansas entrepreneurial ecosystem.

ACTIVE is implemented in partnership with The Venture Center, the University of Arkansas at Pine Bluff, and Philander Smith University. These collaborations strengthen the program's reach and provide participants with diverse perspectives, mentorship opportunities, and a robust support system.

This milestone initiative reflects our dedication to creating pathways for inclusive innovation and supporting the next generation of entrepreneurs shaping the future of healthcare. As we progress through FY25, we look forward to seeing the transformative impact of this program on both our participants and the communities they serve.



"By equipping entrepreneurs with the tools, knowledge, and connections they need, we're helping to level the playing field and drive innovation in healthcare. The impact of these entrepreneurs will extend far beyond their businesses, influencing communities across Arkansas and beyond."

**Stefanie Kennon-McGill** Senior Program Manager



ACTIVE 2024 Cohort





### **AR Health** Ventures Accelerator

**Empowering Researchers to Transform Discoveries into Impactful** Healthcare Solutions

We officially opened applications for the first year of the AR Health Ventures Accelerator (ARHVA) in August of 2023.

This innovative new program, spearheaded by Drs. John Imig and Stefanie Kennon-McGill, is specifically designed to identify promising therapeutic discoveries at UAMS and accelerate their journey toward commercialization. By providing funding, mentorship, and strategic guidance, ARHVA enables researchers to

navigate the critical early stages of development efficiently.

Three outstanding UAMS awardees were selected for the inaugural cohort in December and launched their transformative projects in early 2024. These efforts have already resulted in the formation of a startup company, an R21 grant application, multiple licensing discussions, and significant progress toward addressing unmet healthcare needs.



"ARHVA is transforming UAMS discoveries into real-world solutions, accelerating innovation to improve patient care and creating opportunities for groundbreaking research to reach its full potential."

Dr. John Imig Director of the AR Health Ventures Accelerator and Professor of Pharmaceutical Sciences





Mitchell McGill, Ph.D. > Listen to Podcast Interview



#### **ARHVA Awardees**

Samir Jenkins, Ph.D. > Listen to Podcast Interview

#### Gyan Sahukhal, Ph.D. > Interview Coming Soon

### **BioVentures Internship Program**



identification to commercialization.



"Our interns work on real-world projects, gaining hands-on experience and insights into the biotech industry. With mentorship from BioVentures professionals, they grow both personally and professionally, enhancing their resumes and expanding their networks. We hope this program nurtures the next generation of leaders, bridging academic knowledge and industry expertise."

The BioVentures Internship program marked its second year, hosting four interns in the late spring and summer. The interns immersed themselves in the daily operations of a technology transfer office, experiencing firsthand the journey from invention

> **Thomas Forcum** Internship Coordinator



In April 2024, BioVentui hosted its first-ever hackathon in partnersh with MIT Hacking Medicine.

This event was designed help spur innovation around maternal health issues in Arkansas.

Participants were asked spend three days identifying maternal he problems, coming up w an innovative solution to problem, and then designing a pitch for the solution.

Maternal health experts from across the state participated as mentors

# **BioVentures + MIT Hacking**

ires nip	and judges, providing insights and networking opportunities for the participants.
	The winning team pitched an app designed to
ed to	provide confidential,
า	educational content to
	expectant mothers in a
	safe, welcoming way. This
d to	idea was then turned into
	a startup that was
ealth	selected as one of the first
/ith	ACTIVE cohort businesses.
to a	
neir	
S	

### Medical Innovation and Entrepreneurship Honors Track

The Medical Innovation and Entrepreneurship Honors Track (MIEHT) has received an additional \$5,000 from the Chancellor's Circle Grant Award, bolstering its mission to train UAMS medical students to be future leaders in innovation.

Established in 2023 with \$10,000 in initial funding from the Chancellor's Circle and in-kind support from BioVentures, MIEHT

provides progressively intensive training in innovation and entrepreneurship, complementing each year of med school. The additional funding allows for a second cohort in 2024.

Led by John Sherrill, Ph.D., MPH, senior licensing associate at BioVentures, recruitment for the next cohort begins in December.





"When these students see a problem, they ask, 'why?' and start looking for solutions. That's the kind of spirit we want to support by providing them with the foundational entrepreneurial skills they need to translate their ideas into reality."

> John Sherrill, Ph.D. Senior Licensing Associate

## outreach

18 Marketing & Communications



# Marketing & Communications

Community engagement is a critical pillar of our mission at BioVentures. This section provides insights into our efforts across different channels – social media, newsletters, website, podcast and events – to foster relationships and create impact.

BioVentures Marketing & Communications expanded in 2024 to support our expanding portfolio of grants, educational programs and initiatives. Key efforts included establishing communications for ACTIVE, launching the BioVentures Podcast and revitalizing the email newsletter.

Joe Schaffner and Amy Widner joined BioVentures in early 2024 to assist Julia Massana in the team's expanded responsibilities. Their skills complement each other to encompass writing, editing, strategy, design, podcasting, events, web development, email marketing and technical know-how for data-driven results.

The team established a **marketing plan** for

BioVentures its programs that require recruiting, like ACTIVE, ARHVA and HSIE. They created – or, in some cases revamped – governance documents and process systems, including a BioVentures style guide, production management system, and production calendars.

The ACTIVE program required focused effort throughout the fiscal year. The new program required foundational assets like branding, imagery and a web presence, along with strategy research into audiences, channels, key messages and intervening publics. Massana's efforts in fall '23 ensured the program met its year-one recruiting goal of 25 applicants (28 total applied). The expanded '24 communications team established the events and internal







### 95.3%

Increase YOY LinkedIn Followers

### 61.1%

**Increase** YOY in visits to the website

192

Newsletter Subscribers



**Unique** users on the website communications that welcomed the first cohort and helped define the program's voice.

The BioVentures Podcast debuted in summer 2024 after preparations during much of the spring. Schaffner is the driving force behind the effort, which aims to provide an engaging communication channel for connecting with our target audiences in a popular and accessible format.

The Marketing & Communications team redoubled efforts related to the **BioVentures** email newsletter, increasing it in summer 2024 from a quarterly to a monthly publication. The newsletter launched in May 2023 and had 124 subscribers by the end of FY23. By the end of FY24, the newsletter's audience had grown to 192 subscribers. The average open rate was 60.5%, which surpasses the industry benchmark of 44%. Content related to ARHVA. ACTIVE and **BioVentures' events** attracted the most clicks. The increase to monthly mailings occurred toward the end of the reporting period, so we will be watching next year's data to gain a better indication of the change's impact.

The team has continued to hone the **social media strategy** for BioVentures and its

programs. The LinkedIn page, which launched in December 2022, continued to grow, with **459** followers the end of this fiscal year, representing a **95.3%** year-over-year increase. The click-through rate averaged **12.9%**, which is above the LinkedIn standard of 3-5%. Content related to ACTIVE and ARHVA generated the most impressions.

Meanwhile, the BioVentures **website** is still a vital communication channel. It saw a **61.1%** increase in total visits, amounting to more than **16,200** this FY. It attracted more than **7,300** unique users. Notable peaks in traffic occurred around March and April. Our search engine optimization for the search term "bioventures" continues to be strong, consistently ranking top four throughout the year.

As we look forward to the next fiscal year, our goal is to monitor the data related to our efforts, especially recruiting, so that we can lean into the most effective strategies. We aim to hone our efforts and campaigns so that they inspire actions among our audiences. By doing so, it is our goal to serve the mission of BioVentures and bring value to its flagship initiatives through the most cost-effective means possible.

# future outlook



# 2025 Outlook

As we embark on 2025, BioVentures is poised to build on its foundation of innovation and progress, focusing on new opportunities that will shape the future of healthcare and biotechnology in Arkansas and beyond. Our strategic goals for the year reflect a commitment to expanding our impact, fostering collaboration, and driving growth across all our initiatives.

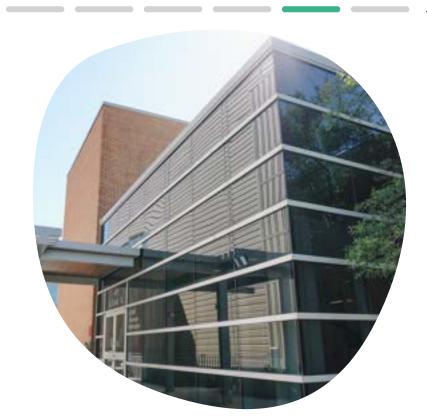
In 2025, BioVentures will enhance educational opportunities for UAMS researchers to foster innovation and entrepreneurship, offering workshops on intellectual property, grant funding, and commercialization strategies, along with intensive entrepreneurship bootcamps providing hands-on training in venture creation and market validation. Additionally, we will integrate entrepreneurship content into UAMS curricula, ensuring students and trainees gain essential skills to translate discoveries into impactful solutions. These initiatives aim to empower UAMS researchers to transform ideas into innovations that improve healthcare and create economic growth.

BioVentures will lead efforts to establish Arkansas as a national leader in biomedical innovation. By deepening partnerships with institutions such as the University of Arkansas, Fayetteville, and community organizations, we aim to build a stronger pipeline of technologies ready for commercialization.

One of our core goals for 2025 is to increase access to the resources and support needed to turn innovative ideas into impactful solutions. This includes growing the ACTIVE program to support more entrepreneurs from socially and economically disadvantaged backgrounds. We will also expand our virtual incubator memberships, allowing early UAMS startups to access critical business resources without requiring a physical presence.

A key focus for 2025 will be streamlining the journey from research discovery to market-ready solutions. Through programs like the AR Health Ventures Accelerator (ARHVA), we will continue to provide targeted funding, mentorship, and strategic guidance to accelerate the development of groundbreaking therapies and technologies.

Together, we will make 2025 a year of bold steps and transformative impact at BioVentures and UAMS.





"2025 holds immense promise as we expand our educational programs, deepen collaborations, and help drive UAMS innovation to create a healthier, more equitable future."

**Eric Peterson, Ph.D.** Interim President, BioVentures

