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As we wrap up this fiscal year, I am reminded of my wonderful team, the West Texas community, and innovative entrepreneurs that have made an impact on the Texas Tech Innovation Hub. It is with great joy that I present the Innovation Hub’s (the Hub) 2022 Annual Report. The success outlined in these pages show the collective progress of excellence in entrepreneurial programs, innovative research, and economic development in West Texas.

This year the Hub faced a big change. Kimberly Gramm, the former Associate Vice President of Innovation and Entrepreneurship, has pursued a new opportunity. It is with the greatest level of appreciation that I acknowledge her contributions to the Hub. With this change, I am excited to take on the role as the Hub’s Managing Director.

In the pages that follow, I hope you’ll be inspired by the many success stories and captivating metrics that we share. These are just a glimpse at our dedication to making an impact through innovative ideas and venture creation. This year, our startups generated $8.8M in capital raised through investments bringing our cumulative total to $82.8M since 2017.

We engaged over 15K students, faculty, and West Texas community members through our incubator, programs, and events. Thank you to our partners (page 33) who have supported our startup community for the past five years.

Our local innovators and entrepreneurs are continuing to make an impact with the support of our Innovation Ecosystem (page 4), our Faculty Ambassadors (page 13), and our ITU Mentors (page 14). Our mentors have dedicated approximately 6,000 hours of service this year alone, and have been vital to fostering our startups to success.

2022 marked the start of a new chapter for the Innovation Hub. With new programs such as Lunch & Learn (page 10) and the Social Innovation Challenge (page 22) being introduced, we are excited to propel our entrepreneurs to new heights.

Finally, I want to thank you for taking the time to reflect on 2022 with us. My team and I are incredibly grateful for being a part of so many startup stories, and we look forward to what’s to come!

Yours truly,

Taysha Williams
Managing Director, Texas Tech Innovation Hub

WELCOME
2021–2022

OUR TEAM

DAVID DORSETT

NATHAN STYLES

KATHRYN DANKESREITER

GANGA BASKAR

COMMERCIALIZATION PROGRAM DIRECTOR

“I love coming to work every day and seeing the tenants and members who work tirelessly to launch businesses.”

KEVIN FEHR

BUSINESS MANAGER

“I’m thankful for the support of all the people at the Hub. I love coming to work every day and helping our members launch businesses.”

MARTIN TUBELI

INNOVATION MANAGER

“Being a part of such a diverse, creative environment is my favorite thing about coming to work each morning. The fact that I get to find and create new ways to engage with our community is awesome!”

MANAGING & ENGAGEMENT COORDINATOR

“Putting a diverse team of thinkers together is truly remarkable and a great thing to be a part of.”

DIRECTOR OF RESEARCH FACILITIES

 Scotch Whisky Distillery 3
“The best innovation comes from inclusive work environments that foster diverse ideas, nurture people with diverse talent and backgrounds, and create strong relationships with diverse communities.”

- MARK PARKER,
  Executive Chairman of Nike, Inc.

The Texas Tech Innovation Ecosystem ignites the entrepreneurial spirit, creates a lasting public impact through commercialization of intellectual property, facilitates industry collaborations, and empowers a resource-rich environment for startup companies and small businesses, thereby contributing to the economic and social impact of West Texas, the State, and the Nation.

A huge thank you to DR. JOSEPH HEPPELT, Vice President for Research and Innovation, for his leadership in cultivating our entrepreneurial community and championing innovators at Texas Tech.
OUR HOME

THE BUILDING
44,135 SQ. FT. of space dedicated to startup growth and to enable creative collisions. As a startup incubator, the facility is home to young ventures from a variety of industries.

- Rentable Office & Lab Space
- Conference Rooms
- Rapid Prototyping Lab
- Event Space

THE PROGRAMS
100% FREE programs and events sponsored by our partners to enable innovators to launch successful ventures and spur economic growth in West Texas.

- Workshops & Luncheons
- Startup Funding
- Pitch Competitions
- Incubator & Accelerator

THE STARTUP COMMUNITY
INNOVATIVE students, faculty, staff, mentors, and entrepreneurs make up our robust startup community.

- Innovation Hub Memberships
- Texas Tech Alumni Network
- Entrepreneurial Socials
- Industry Mentors
- Faculty Ambassadors
- Student Organizations

RANKED
12 IN THE COUNTRY IN ENTREPRENEURSHIP
by the Princeton Review

35 PATENTS, TRADEMARKS, & COPYRIGHTS IN 2022

146 TOTAL PATENTS, TRADEMARKS, & COPYRIGHTS TO DATE

$95,000 AVERAGE STARTUP EMPLOYEE SALARY

32 TENANTS & MEMBERS IN 2022

181 TENANTS & ACCELERATOR EMPLOYEES IN 2022

6 TEXAS TECH ACCELERATOR COMPANIES FORMED IN 2022

56 TTU Mentors

367 events in 2022

1,291 events in 2022
**OUR IMPACT**

**LOOK HOW WE’VE GROWN**

- **$8.8 MILLION**
  - Annual Startup Investment in 2022

- **$62.8 MILLION**
  - Cumulative Startup Investment since 2017

**AREAS OF IMPACT**

- **15,954**
  - Students, Faculty, & Community Members Engaged in 2022

- **82,406**
  - Students, Faculty, & Community Members Engaged Cumulative since 2017

- **$3.1M**
  - Annual

- **$26.6M**
  - Cumulative since 2017

- **$492K**
  - Federal and Internal Grants Awarded to the Innovation Hub in 2022

- **$4.1M**
  - Federal and Internal Grants Awarded to the Innovation Hub since 2017

**ECONOMIC DEVELOPMENT**

- Creating value not only for entrepreneurs who launch startup companies but also spurring job creation, forming networks, and promoting community engagement to serve West Texas and the world.

The Drivers of Commercialization and Innovation highlighted below are just a few of the many industries we support through venture creation.
MAKING CONNECTIONS

Through Programs, Startup Funding, & Mentorship

IDEA COMPETITION

A 60-second video competition where participants explain their big idea and vie for public votes. The top-voted video wins $2,000.

FACULTY STARTUP

$2,500 grants awarded to Texas Tech faculty to embed commercialization into their syllabus creating a culture of innovation and entrepreneurship in the classroom.

LAUNCH

This pitch competition is centered around the Business Model Canvas and is Texas Tech’s very own Shark Tank™. The first-place team takes home $10,000.

HUB CAMP

Business plan workshop offered multiple times a year.

LUNCH & LEARN

A monthly seminar that covers a variety of topics from developing competitive startup funding applications to learning about intellectual property.

ALLISON CHILDRESS, PhD, KPMG, CSRO, a CEO of 3 Saloon Med Docs

RED RAIDERS STARTUP

3-day weekend program focused on idea generation, team formation, customer discovery, and pitching.

NSF I-CORPS

This program enables innovative researchers and entrepreneurs to identify a product-market fit for new technologies through customer discovery.

PROTOTYPE FUND

Awards $55,000 to technology startups to design and build prototypes for market testing.

MENTORS

Mentors are the cornerstone of the Innovation Hub. Their industry expertise aids in the launch of new ventures.

ACCELERATOR PROGRAM

The Accelerator Program fosters unique, diverse startups that create commercial or social impact through a year-long program where they receive $25,000, a team of industry mentors, and access to the Hub’s resources.

PRESIDENTS’ INNOVATIVE STARTUP AWARD

The Offices of the Presidents of Texas Tech University and Texas Tech Health Sciences Center award a total of $100,000 to startups as seed funding.
THE ENTREPRENEUR’S JOURNEY AND GIVING BACK: SARAH KIANI, CEO OF BUCLID

An innovator: A teacher. A South Asian. A Muslim. Dr. Sarah Kiani has many labels but one role she recently added was “entrepreneur.”

Born in Pakistan, Dr. Kiani came to the United States to complete her residency before migrating to Midland to be with her husband while completing her residency at the Texas Tech University Health Sciences Center.

AN INNOVATOR
Kiani began to see accessibility issues in medical education. “I thought, if computer programs can be clever enough to converge the world into my mobile phone, certainly there had to be a way to improve medical education processes and systems.”

Together with her co-founders, Dr. Haasian Khalid and John Cudic, Kiani developed the software as a service company, Buclid.

“Phil Sizer pointed me in the direction of the TTU Accelerator Program.” The program focuses on launching startups that will make an impact.

In April 2021, Buclid was announced as a part of the Texas Tech Accelerator Program’s fifth cohort.

A TEACHER
Last summer, Dr. Kiani began sharing her experiences of the TTU Accelerator Program with students. As a FACulty Ambassador, she was awarded $2,500 to develop a Strategic Career Development course using the Business Model Canvas (BMC) for graduate and undergraduate medical students.

She has also represented TTUHSC at national conferences to share how the BMC can be used for recruiting and retaining the best candidates.

Dr. Kiani is excited to stay engaged with the TTU Innovation Hub to support the development of future innovators and collaborators in West Texas!

2021-2022 AMBASSADORS

The ambassadors, each a Texas Tech University or Texas Tech Health Sciences Center faculty member, have been awarded the $2,500 Faculty C-StartUp Grant by the Innovation Hub. The Faculty C-StartUp grant is designed to support Texas Tech faculty interested in creating a culture of innovation and entrepreneurship in their classrooms.

In the 2021-2022 academic year, these new faculty ambassadors engaged 475 students in commercialization best practices in the most diverse ways. Some of the courses taught this year included Social Entrepreneurship, Career Development and Entrepreneurship, Retail Buying and Control, Digital Health Promotion, and Data Driven Agriculture Research. All students had the opportunity to experience hands-on learning through participation in the Hub’s programs.

After the faculty are awarded, they join the prestigious group of Faculty Ambassadors. To date, we have 35 ambassadors that continue to champion the Hub and provide students with learning opportunities in innovation and commercialization.
MENTOR OF THE YEAR: STEPHEN HIGH SHARES HIS SUCCESS

"Don't be afraid to be bold." That's what I.TTU Mentor Steve High would tell his younger self.

FROM MARCHING BAND TO INVESTMENTS
High says everything he's done professionally has been about exploiting software and hardware to accomplish work as efficiently as possible. His first job was writing software for his high school band director. The software figured out the mathematics of where marching band students stood on the field and how to calculate their movements based on tempo.

"I played trombone, but I just wasn't that good. My band director gave me the opportunity and encouragement to develop into whatever I was going to be. He's probably the reason I stayed in high school and got through it."

In 1990 High graduated from the University of Texas with a degree in management information systems. He started working with chemical companies on the Texas coast. After that, he began consulting and became a serial entrepreneur and investor.

HUSTLE, CURIOSITY, & COURAGE
Curiosity continues to drive High's hustle. "I want to know as much as I can about as many subjects as I can," he says. "A lot of people told me I was making a mistake by going into so many different areas." However, his variety of interests led to a great deal of success in his career.

Courage, confidence, and boldness are among the traits High fosters in the entrepreneurs he mentors at the Innovation Hub.

MENTOR OF THE YEAR
"I feel like I have to give back," High shares, "I think the obligation of mentoring is to try to spread knowledge and open doors for people."

This year, High was named the Mentor of the Year for his commitment to West Texas startups participating in the Texas Tech Accelerator Program.

STARTUPS ON THE RISE
High points to the growing Innovation Ecosystem and the Innovation Hub's programs for startups as economic advantages for West Texas.

"Our region doesn't have to be the only one on the receiving end of technology created elsewhere. We can create and support innovations here. The wealth and the job creation can start here and potentially stay here."
TEXAS TECH ACCELERATOR PROGRAM

WHAT IS THE TEXAS TECH ACCELERATOR?
The Texas Tech Accelerator Program fosters a unique, diverse environment that supports entrepreneurs launching innovative startups. Our ecosystem of TTU Mentors and resources give Accelerator teams the tools to build and sustain successful ventures. Each team receives $25,000, a team of mentors, and access to Innovation Hub resources.

2021–2022
WE LAUNCH WEST TEXAS STARTUPS.

$150,000
Total funding awarded to Cohort 5 throughout the program: The allotted grants ($25,000) each enabled company creation, office space rental, equipment purchase, and market development.

AGRICULTURE
Ogallala Greens

HEALTHCARE
CIPDAR, Buckli, and Surgic

EDUCATION
Pebble Plan and StayCle

STAYCITETechnohub

CULTURALLY INFORMED PAIN DIAGNOSIS AND RELIEF (CIPDAR) is a novel medical diagnostic technology that provides pain assessment and management to linguistically and culturally diverse patients.

Shin Ye Kim (CEO), Hannah You (CMO & CFO), and Nguyen Nguyen (COO)

PEBBLE PLAN protects the relationship between entrepreneurs and the entities that finance their ventures by developing realistic expectations.

Tracy Shea (CEO)

SURGIC is an end-to-end platform for professional academic collaboration.

Bioprinter Oksin (CEO) and Iryna Konovalova (CTO)

OGALLALA GREENS is a modern hydroponic technology to produce the tastiest produce in Texas.

Gary Roof (CEO)

BUCLID is creating a digital service for longitudinal assessment of clinical medical education.

Sarah Kanis (CEO), Hassan Khalid, and John Coburn (CTO)

S asia

TEXAS TECH ACCELERATOR PROGRAM

CULTURALLY INFORMED PAIN DIAGNOSIS AND RELIEF (CIPDAR) is a novel medical diagnostic technology that provides pain assessment and management to linguistically and culturally diverse patients.

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PEBBLE PLAN protects the relationship between entrepreneurs and the entities that finance their ventures by developing realistic expectations.

Tracy Shea (CEO)

SURGIC is the next major step in medical education technology for future surgeons and academic institutions.

Travis Rezza (CEO), Paul Egan (CTO), Kyle Finn (COO), Christopher Ackerman (CMO), and Ahlam Sadiq (CFO)
“OUR GOAL IS TO IMPROVE THE LIVES OF PATIENTS... WE'RE GRATEFUL TO HAVE A STRONG NETWORK OF ADVISORS AND SUPPORTERS WHO ARE EMPOWERING US TO DO JUST THAT.”

KOSHLJA SACHDEVI, Founder & Director of Operations of HPR Innovation, Inc.

Both medical students, Krishan and his younger sister, Koshilia, learned at an early age the impact of accessible medical care on their community.

When asked what spurred him to attend medical school, Krishan attributes growing up in a health professional shortage area (HPSA). His goal of becoming a physician began when he saw how limited access to care impacted his South Texas community.

Krishan and Koshilia completed their undergraduate degrees at the University of Texas at Austin before parting ways for medical school. Five years ago, the siblings experienced something that hit close to home. “We (Krishan and Koshilia) witnessed our cousin suffer from recurring Seated Acquired Pressure Ulcers.”

A pressure ulcer is a lesion caused by constant pressure on the skin for long periods of time. Every year, 2.5 million people develop pressure ulcers. (AHRQ.gov)

“With each ulcer came months of hospitalization, multiple procedures, and exhausting physical therapy regimens.” This leads to approximately 60,000 deaths each year.

This pushed the two medical students to act and create a preventative solution to pressure ulcers.

THE OVERLOOKED PATIENT

In the United States alone, there are 2.7 million paraplegics and tetraplegics the siblings aim to help. These individuals often lack the sensory function to detect discomfort and alleviate it by shifting their weight. Because of this, these patients’ comfort is often overlooked.

Their first technology alleviates discomfort. The HPR Sense is an adjustable, minimally intrusive wheelchair cushion that positions users to prevent pressure ulcers. It’s not just a fancy seat cushion though.

The siblings’ patented technology communicates directly with its users, their caregivers, and their doctors through the HPR Sense mobile app.

SAVING OTHERS IS WORTH THE HUSTLE

Last fall, Krishan met with a TTUHSC faculty that pointed him to the Innovation Hub. The team was encouraged to apply to the 2021 Prototype Fund, which offers startups funding to develop a minimum viable product (MVP). The $7,800 awarded to

HPR Innovation, Inc. was dedicated to producing 10 beta prototypes.

From there, Krishan and his sister applied to the Fall 2021 iLaunch Competition. Their story and technology inspired community members, ITTU mentors, and the Hub staff. The sibling duo was awarded first place and received $10,000.

In April 2022, the siblings were awarded a place in the sixth cohort of the Texas Tech Accelerator Program and $25,000 to support their venture.
WHERE ARE THEY NOW

EVERY DAY I'M HUSTLIN’

FEATURING RAPHAEL AINKINSPE

Raphael Ainksipe, Senior Vice President of Marketing and Strategy at HST Pathways, has a heart for innovation.

His passion led him to create compelling products for Google and to scale well-known brands including Expedia, Marvel Entertainment, and Southwest Airlines.

Raphael kickstarted his innovative spirit at the Innovation Hub in 2017. His venture, ResiMakers, launched through the TTU Accelerator program’s first cohort.

From his experience developing his own business, Raphael is a well-rounded consultant dedicated to helping startups, Fortune 500 companies, and entrepreneurs from all backgrounds.

Today, Raphael is launching his third startup and continuing to mentor aspiring entrepreneurs.

STILL BENDING TRADITION

FEATURING AYODELE AGBE

Ayodele (Ayo) Agbe’s startup, Xiango, bands tradition with her bendable hanger. After being a passion for innovation, Ayo noticed a problem in her own closet.

With size scalability, there was a problem that no one could solve; she began exploring ways to capitalize off of the opportunity. “This whole journey started and was inspired by a personal pain point,” says Ayo.

Hanging entered the Texas Tech Accelerator Program and became a part of the second cohort. Today, Xiango continues to build industry partnerships and sell hangers directly to her consumers through xiangoshop.com.

Ayo motivates others through her podcast: Styles by Science CEOs. The podcast reaches a global audience to inspire sustainability in the fashion industry.

Ayo gives back to the Innovation Hub by being a mentor and guest speaker at the annual Red Raider Startup weekend event.

BREWING UP A DREAM

FEATURING SHAWN PHILLIPS & CHRIS TROUTMAN

The team joined the Innovation Hub family in 2020 as a member of the fourth Texas Tech Accelerator cohort. They refined their innovative techniques and launched Good Line Beer Co.

Before that, Chris Troutman and Shawn Phillips homedrew in Austin, TX. With encouragement from their families, Shawn and Chris moved to Lubbock where they saw a need for a local brewery. Located off of Boston Ave., the brewery opened in August 2022.

As graduates of the Accelerator program, Good Line proudly hosted the Innovation Hub’s Entrepreneurial Social in early October. New and old faces appeared that evening to enjoy local brews.

“We want to be a place for everyone,” Shawn said. “We really want to act as a community gathering spot for this neighborhood.”
SOCIAL INNOVATION CHALLENGE

The Texas Tech Innovation Hub partnered with local organizations to launch the first Social Innovation Challenge in Spring 2022.

The Social Innovation Challenge is designed to support social impact startups by offering a place in the year-long Texas Tech Accelerator Program and $25,000 in funding.

“The Social Innovation Challenge was designed to support trailblazers who use their passion to find innovative solutions to society’s most complex problems,” said Taysha Williams.

SPECIAL THANKS

A note of appreciation goes to the advisory committee that spent countless hours creating the new track of the Texas Tech Accelerator Program. After six months cultivating this program, the committee served as judges and now mentors for the awarded startup venture, GEO.

This program wouldn’t be possible without the support of Dr. Nick Bergfeld, Dr. Birgit Green, Glenda Mathis, Devin McCain, Sam Summer, Tams Swoboda, Stephen Warren, and Chad Wheeler.

WHAT IS GEO?

At the Guidance, Entrepreneurship, and Outreach Center (GEO) we empower incarcerated/formerly incarcerated men and women by offering rigorous entrepreneurial workshops inside and outside of jail.

We prepare our participants to be successful upon their re-entry into the free world by empowering them. GEO isn’t a handout; it is an opportunity to get a hand up if you are committed to excellence, innovation, and creating a positive legacy.

WHO ARE YOU?

GEO was founded by two formerly incarcerated individuals that were able to utilize their business acumen, innovative spirits, and newfound support groups to forge a path of success, not only for themselves but other men and women with similar backgrounds.

HOW ARE YOU MAKING AN IMPACT?

Focusing on character building, entrepreneurship, life skills, family reunification and accountability, GEO offers an innovative and community-driven approach to helping former inmates successfully re-enter society through educational programs.

SOCIAL INNOVATION COMES TO THE HUB: Q&A WITH GEO

HOW HAS THE INNOVATION HUB HELPED YOU?

The funding from the Social Innovation Challenge will help me scale GEO’s operations and revamp our programming in the Lubbock County Detention Center. We are now able to strengthen our workforce development for those re-entering society.

HOW ARE YOU HELPING OUR LOCAL LUBBOCK COMMUNITY?

Empowerment, accountability, and opportunities to utilize newly acquired skillsets and a new knowledge base lead to personal mastery for these individuals and collective healing for our local community.
A NEW WAY TO ENGAGE WITH BUSINESSES: BLUEVERSE Launches App!

They say “knowledge is power” and that couldn’t be more true in a world that relies on big data generated by over 4.7 billion people using social media. Businesses pull user analytics, invest in customer discovery, measure themselves as competitors, and so much more based on data from digital media. But what does the user get in return?

Enter BlueVerse. BlueVerse is an exclusive, invite only network of verified people. By keeping their network clean of bots, BlueVerse connects their members with top businesses in their area. BlueVerse Members can receive exclusive rewards from local partnerships. The most engaged and active members will have the opportunity to receive daily cash rewards!

Business partners get clean, verified data, while members receive a new platform to interact with businesses while being rewarded for their engagement and being in control of the information that they share.

This team appeared at the Texas Tech Innovation Hub last spring and hasn’t left since. BlueVerse, led by co-founders Mason Still, Alec Hernandez, Taylor Bristow, and Drew Pickens, may have entered to win a spot in the Texas Tech Accelerator Program last year, but that’s not where their story begins.

IN THE BEGINNING THERE WAS MAN AND THE INTERNET

The undergraduate students began their entrepreneurial journey within their fraternity, Pi Kappa Psi. As leaders of their chapter, they gained experience managing a large budget and forming professional relationships.

Alec Hernandez, the Chief Operating Officer of BlueVerse, said, “All of us had an entrepreneurial spirit and we wanted to come together to form some type of business in Lubbock before we graduated.”

The four Ravits College of Business students re-engineered how social media apps interact with their consumers and developed an innovative CRM for businesses and users.

THE NEXT BIG THING IN BIG DATA

“We have two sides of our platform users and businesses,” explains Hernandez. “For our users, we are rewarding them for the data and ad revenue they generate. As the app’s success to gain traction and design their beta platform, Alec’s friend forwarded him an email about the Texas Tech Accelerator Program. When I read about what the program entailed, I knew BlueVerse would be the perfect fit.”

JOIN THE CLUB!

Through the 2021 Texas Tech Accelerator Competition, BlueVerse competed with eleven other startups and won their place in the sixth cohort of the TTU Accelerator Program. Their innovative solution to one of today’s complex problems ultimately won them their place in the cohort.

However, they’re not just a part of the Accelerator Program; they’re also the Innovation Hub’s newest tenants! It’s a whole new world for these entrepreneurs and they’re just getting started.

“START SOMETHING THAT YOU ARE GENUINELY EXCITED TO BE WORKING ON.

YOU NEED TO HAVE THAT PASSION THAT COMES FROM CHASING SOMETHING YOU’RE TRULY EXCITED TO BRING INTO THE WORLD.”

ALEC HERNANDEZ,
Chief Operating Officer of BlueVerse
NSF I–CORPS

Texas Tech launched the National Science Foundation (NSF) Innovation (I-Corps™) regional programming in 2017 as a partner institution of the Southwest Node I-Corps (SWICorps) and became an NSF I-Corps Site in 2018. Since launching, the program has continued to grow and expand — reaching more researchers and startups within the TTU and West Texas community and helping them prepare for launching their companies by participating in the National I-Corps Teams program.

The course uses the Lean LaunchPad methodology to systematically test key assumptions about technology-based innovation ideas and the customer problems it might be able to solve better than current alternatives. The researchers participate as a team of three - technical lead (TL), entrepreneurial lead (EL) and industry mentor (IM).

Through I-Corps, NSF addresses four urgent national needs: training an entrepreneurial workforce, translating technologies, enabling economic impact, and nurturing an innovation ecosystem.

REGIONAL NSF I-CORPS

The regional program is offered twice a year as a three-week training program. While in the program, teams conduct 25 interviews to define their technology’s space within the marketplace.

NATIONAL NSF I-CORPS

High-performing teams are recommended to the national I-Corps program which provides an immersive 7-week training and a grant award of $50,000 for conducting 100 customer interviews.

2022 NATIONAL NSF I-CORPS TEAMS

3 CULINARY MED DOCS is a virtual culinary medicine software program for patients with chronic diseases.

Dr. Shannon Galvez (TL), Dr. Aldiin Chidress (EL), Dr. Michelle Alcon (EL), & Dr. Michael Ryan (IM)

BETTER BLEEDING CONTROL is a training device for healthcare professionals that simulates a hemorrhagic emergency.

Dr. Britta Baneheidi (TL), Julie Cough (EL), & Dr. Toby Brook (IM)

PHISBASH is a platform to automatically measure users susceptibility to social engineering attacks.

Dr. Abid Bavishi (TL), Dr. Keith James (TL), Sajed Gopal (EL), & Anthony Pletley (IM)

Comeback Award

SMART BIKE is a smart Internet of Things (IoT) bicycle safety system.

Dr. Bahram Azarpira (TL), Andrew Boggs (EL), & Dr. Abid Bavishi (IM)

SMART BREATHING WINDOW is a technologically advanced window that ensures a healthy indoor air quality.

Dr. Wei Li (TL), Shadi Shimali (EL), & Iqra Alhawas (IM)

SMARTHATE SOLUTIONS is an autonomous intravenous (IV) pole that reduces the risk of patient falls in hospitals.

Dr. Dheeraj Patel (TL), Dr. James Yang (TL), Syedehroshan Hashemi (EL), & Dr. Ron Bamber (IM)

SURGIC is a laparoscopy simulator with mechanical feedback for surgical training.

Dr. Paul Egan (TL), Dr. Catherine Ronaghan (TL), Troy Rasna (EL), Chris Ardisman (EL), & Dr. Phil Zamer (IM)

26
3 CULINARYMED DOCS IS COOKING UP AN INNOVATIVE APPROACH TO MEDICAL CARE

What do you get when you mix two clinical dietitians and a culinary expert? You get three entrepreneurs making an impact one meal at a time.

Dr. Allison Childress, Dr. Shannon Galy and Dr. Michelle Alcom are teaming up to develop an app “equipped with machine learning that will customize recipes, meal plans and nutrition education for each person to help them manage their chronic disease nutritionally.” 3 CulinaryMed Docs utilizes culinary medicine, a discipline that helps people manage disease by combining food preparation with the science of medicine, and delivers it directly to the patient.

COOKING UP SOMETHING NEW

After visiting the Office of Research Commercialization and evaluating the high commercial potential of 3 CulinaryMed Docs, their team was referred to the Innovation Hub.

“I am a clinician, not a businessperson, but the people and resources at the Hub have enabled me to get a solid foundation built our business,” states Dr. Childress.

The team applied to NSF I-Corps and iLaunch to kick-start and gain customer insight. Through the Hub’s programs and mentorship, Childress explains that their team and idea have been able to “pivot” to meet the industry’s needs.

Armed with the experience from customer discovery and the award from the Prototype Fund, 3 CulinaryMed Docs marches forward to develop their app and produce their educational videos. “We completed over 150 customer discovery interviews during the Regional and National I-Corps Program. Using the data collected from our customer discovery we partnered with local app developers and we now have a clickable prototype,” Childress says. “They allow us to complete beta-testing by the end of 2022.”

STIRRING UP THE INDUSTRY

Culinary medicine has a limited scope of use in and out of the education system. Physicians and medical students are usually given a “crash course” on the subject and in practice it’s difficult to educate patients on culinary medicine within the clinical environment.

3 CulinaryMed Docs changes that by making an app that’s easily accessible to millions of potential patients. The interface customizes meal plans and recipes according to the user’s health condition. Once the details are entered, patients receive meal instructions and educational videos to give them the nutritional value they need.

ENTREPRENEURSHIP’S KEY INGREDIENTS

In November 2021, Allison’s three children watched then cheered when 3 CulinaryMed Docs received the People’s Choice Award. “I have to admit that the day of the Launch Competition was one of the best days of my life,” Childress says. “I have always modeled to my kids that they can do anything, at any time and at any age. This was solid proof that it is possible.”

ANYONE CAN BE AN ENTREPRENEUR. BUT TO BE A SUCCESSFUL ENTREPRENEUR YOU NEED SUPPORT, GUIDANCE, AND YOU NEED TO BE COACHABLE.

ALLISON CHILDRESS,
Ph.D., RD, CDE, LG, A
CEO of 3 CulinaryMed Docs
COMMUNITY ENGAGEMENT

1 MILLION CUPS

Created by the Kauffman Foundation, 1 Million Cups is a community of entrepreneurs hosted at the Innovation Hub. Once a month entrepreneurs come together to educate and inspire each other through their stories.

DISCOVERIES TO IMPACT

The annual Discoveries to Impact (DTI) is a week-long conference that brings together Red Raiders to showcase research, engagement, innovation and startups. In 2022, winners took home a combined $253,000 to support scholarly activities and venture creation.

LUBBOCK ANGEL NETWORK

The Lubbock Angel Network (LAN) provides angel funding and support capital for innovative startups. Partners work closely with the Hub for access to deal flow. The Hub provides meeting space and supports LAN’s fundraising efforts.

LEGACY U

As a part of the Texas Tech Alumni Association’s Legacy U Program, the Innovation Hub hosted children and their grandparents and taught them basic entrepreneurial concepts like ideation, customer discovery, and pitching. The children worked together to develop a pitch for a panel of “sharks” (judges).

ENTREPRENEUR SOCIALS

The Hub hosts networking socials at fun, local businesses. Connections are formed between students, mentors, and industry leaders to create a culture of innovation and entrepreneurship in West Texas.

BEST OF THE BEST IN WEST TEXAS SHOWCASED AT 2022 DISCOVERIES TO IMPACT CONFERENCE

After two years as a virtual event, Texas Tech University’s 2022 Discoveries to Impact Conference (DTI) was back with a bang.

The annual conference featured participants showcasing research, engagement, innovation and startups through competitions, presentations, keynote speakers and panel discussions. Students, faculty and the West Texas community joined in celebrating the cross-department conference winners who took home a total of $253,000 to support their innovations and startups. And for the first time in three years, DTI was held in-person with an outstanding turnout of 1,075 attendees.

INNOVATION BUILDS COMMUNITY

As a part of the week-long event, the Innovation Hub brought together members of the Lubbock community, Texas Tech leadership, and innovators to hear from Marcus Bullock.

Marcus Bullock, Founder and CEO of Fliksho, shared his journey of perseverance through his dynamic keynote address. Bullock spoke to his experience in prison and how he continues to pay a lifetime forward by connecting prisoners to their loved ones through postcards. The entrepreneur then joined the Innovation Hub in awarding the People’s Choice Award for the Social Innovation Challenge to the Innovative Guidance, Entrepreneurship & Outreach Center.

READY. SET. LAUNCH!

That Friday, 16 business and social impact startup teams gathered at the Innovation Hub to compete in the final round of the Texas Tech Accelerator Competition and first ever Social Innovation Challenge.

With the support of the Innovation Hub’s mentors and volunteers who helped score business plans, the sixth annual Texas Tech Accelerator Competition awarded nine startups a combined total of $225,000. The nine teams accepted into the year-long Texas Tech Accelerator Program have access to funding support, $25,000 grants, co-working space and mentors. The awardees were announced at the DTI closing party on Friday evening.

“Researchers, students, faculty, and community members come together to celebrate being changemakers and innovators,” Taysha Williams shares. “Every spring this event showcases the best of the best in West Texas.”
ACKNOWLEDGEMENTS

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Center for Transformative Undergraduate Experiences
Center for Integration of STEM Education and Research
Office of Outreach and Engagement
Office of Research Commercialization

Small Business Development Center
Texas Tech Alumni Association
Texas Tech Collegiate Entrepreneurial Organization
Texas Tech University Health Sciences Center
Rawls College of Business Administration
“THERE ARE NO DREAMS TOO LARGE, NO INNOVATION UNIMAGINABLE, AND NO FRONTIERS BEYOND OUR REACH.”

JOHN B. HARRISON
Former United States Secretary of Energy