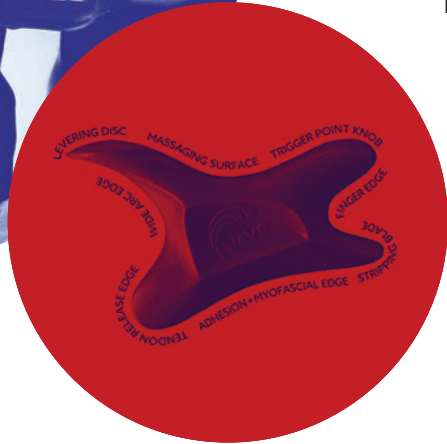


WHITEBOARDSM
2BOARDROOM

WE CREATE
INNOVATIONS

2019 REPORT



INNOVATIONS GROW *HERE.*

W2B has become a clearinghouse for regional commercialization, linking technologies to executive talent and other resources to advance the technologies beyond the research lab.

As a part of the UMKC Innovation Center, W2B was started with a National Science Foundation Partnership for Innovation grant in September 2009.

It has always been exciting to work with innovative university and hospital scientists and community entrepreneurs to advance their technologies for the benefit of the public. This past year, we have had the opportunity to work with new technologies that are not only innovative, but that also have an opportunity to address the social good.

PIPELINE OF *INNOVATIONS*

At any given time, W2B is working with a number of innovations in the region to help advance them to the marketplace. Looking at the network described to the right, you can see the significant pipeline of technologies for licensing.

NETWORK

academic and research organizations, corporations and hospitals, ready to accelerate regional innovation

22

REGIONAL
PARTNERS

500

INNOVATIONS
OVER EACH YEAR

1,243

ENTREPRENEURS & COMPANIES*

We had another successful cohort of faculty scientists and university administrators participating in our U.S. Association for Small Business and Entrepreneurship technology commercialization course offered to members of the KU Medical Center Frontiers program. Participants in that course are pursuing several startup opportunities that include an Alzheimer’s prevention program, smoking cessation app, fitness app, novel rehab technology, robotic non-invasive brain mapping and clinical competency app.

The W2B webinars continue to be a significant means of showcasing technologies to those who can help move the innovations forward. This coming year, we will look for even more ways to get these breakthrough technologies in front of the right audiences. Additionally, we are expanding our efforts to identify skilled mentors who can help the innovators and startups we work with be successful.

Finally, I want to take this opportunity to thank our partner institutions and their technology transfer personnel who are key to our success in matching their innovative technologies to those who can commercialize them.

————— **JIM BAXENDALE, Director
of Whiteboard2Boardroom**



WHITEBOARD2BOARDROOM PROVIDES CRITICAL ACCESS TO INNOVATIONS BEING DEVELOPED AT OUR BI-STATE UNIVERSITIES, HOSPITALS AND CORPORATIONS. THE PROGRAM’S TECHNOLOGY SNAPSHOT WEBINAR SERIES SERVES AS A UNIQUE PLATFORM TO LEARN MORE ABOUT THESE INNOVATIONS IN A TIMELY MANNER.

————— **PATRICK J. PIPER
Anticipate Ventures, LLC**

MATCH

current innovation projects in need of mentors, CEOs, prototyping resources, capital, strategic partners, business assistance, etc.

21

MEDICAL DEVICE

6

DRUG DEVELOPMENT

1

ANIMAL HEALTH

5

AGRICULTURE

9

ENGINEERING

33

SOFTWARE

ADVANCE

projects toward commercialization

39

NEW STARTUPS*

154

NEW JOBS*

35.4 MM

FOLLOW-ON FUNDING*

*Cumulative numbers from data collected from January 2012 to June 30, 2019.

MAKING CONNECTIONS TO *ADVANCE INNOVATIONS.*

KEY PARTNERSHIPS PROVIDE THE EXECUTIVE TALENT THAT NEW TECHNOLOGIES NEED FOR ADVANCEMENT

Mentors and executive talent are critical to moving innovations along the commercialization pipeline. Whiteboard2Boardroom is tapping into regional alumni and mentoring programs to find these critical resources, and didn't have to look beyond its own campus to find a robust collaboration.

The partnership with the mentor program at the UMKC Regnier Institute for Entrepreneurship and Innovation allows mentors to review technologies and startup opportunities emerging from W2B partner organizations.



“Some of our Regnier Mentors have deep experience in product and business scaling,” said Phillip Gonsler, assistant director of the Regnier mentors. “They draw on their experience to help W2B innovations identify market opportunities and move to the next step in product development. The result is faster, more effective commercialization.”

W2B PROGRAM SUPPORTS ENTREPRENEURIAL EDUCATION

Continuing to educate university researchers about the commercialization process has been a cornerstone of W2B. This year W2B partnered with the U.S. Association for Small Business and Entrepreneurship, the UMKC School of Law and the UMKC Bloch School Regnier Institute to deliver a technology entrepreneurship course as part of Frontiers. This network of scientists from across Kansas and the region work on research that transforms laboratory discoveries into treatments and cures.

“Researchers today need a deep armamentarium of tools to disseminate their discoveries into clinical practice, with the ultimate goal of improving human health,” said Dr. John A. Spertus, clinical director of Biomedical and Health Informatics at Saint Luke’s Hospital and Daniel J. Lauer/Missouri Endowed Chair in Metabolic and Vascular Disease Research. “The entrepreneurship training provided by the USASBE partnership with W2B provided important insights to our trainees in novel strategies to extend and support their work.”



RESEARCHERS TODAY NEED A DEEP ARMAMENTARIUM OF TOOLS TO DISSEMINATE THEIR DISCOVERIES INTO CLINICAL PRACTICE, WITH THE ULTIMATE GOAL OF IMPROVING HUMAN HEALTH.

DR. JOHN SPERTUS

KANSAS CITY STARTUP DEVELOPS PRODUCTS TO HELP CHILDREN WITH AUTISM

Autism is on the rise. While we don't know why, we do know this: Most children are diagnosed late.

"Most children with ASD are diagnosed between the ages of 4 and 6 years old," says Bob Etzel, co-founder, with Meggan Griggs, of Nascent Stage Research and Development (NSR&D), "We can do better to diagnose children with ASD sooner and deliver therapies earlier, so that these kids can reach their fullest potential."

And that's the mission of NSR&D—to leverage autism research and develop technologies to radically improve the lives of people with autism.

With connections from Whiteboard2Boardroom, Etzel and Griggs launched the company in 2017 with iSocial,

a socialization curriculum based on autism research from the University of Missouri and the Thompson Center for Autism and Neurodevelopmental Disorders.

"We match entrepreneurs like Bob and Meggan with innovations coming out of area universities, research institutions and hospitals, so that they can help take them to the global market," says Jim Baxendale, director of W2B.

Today, NSR&D has a core team of 32 researchers and technologists who have developed products that can detect autism, help children develop social skills and give them more independence.

"Every parent dreams for their child to be secure, happy and independent," says Griggs. "With the help of Whiteboard2Boardroom, we're that much closer to developing technologies and products that can put that dream in reach of every child."

It started as a simple vision—team university autism researchers with software developers and experts in clinical applications, video games and social media apps. Today, NSR&D comprises four LLCs:

PANDA

Today doctors rely on an inaccurate parental questionnaire to identify autism. Pupillary Light Reflex (PLR) provides a simple biomarker for pediatricians to screen for the risk of developmental disorders, including Autism Spectrum Disorder, in children as young as 12 months of age.

ROUTINE SUCCESS

People with autism need frequent prompts and aids to guide them through their daily routine. Routine Success is an Apple Series 3+ watch for children with ASD that provides real-time routine reminders, just-in-time coaching, stress alerts, geo-fencing and a two-way, real-time link for caregivers.

iSOCIAL

About 80% of people with autism will be unemployed because they lack the social skills to get and keep a job. iSocial improves socialization in a virtual reality gaming platform.

iSOCIAL ADVENTURES

iSocial Adventures provides a library of web-based interventions for parents, including VLE, animations, and real-time communication.

PROJECTS IN THE PIPELINE.



As a professor at Rockhurst University, Risa Stein has worked with Whiteboard2Boardroom for more than three years to

instill a culture of innovation, showcasing entrepreneurs through panels and workshops. Stein took that a step further to bring her own innovation to life.

“I had all these innovative ideas, but did not know how to convert them into a business,” Stein says. “W2B was tremendously helpful in my understanding innovation from a business side.”

With the help of W2B, Stein used a business model canvas activity to flesh out her concept for GenuineU. There are people currently suffering with mental health and life challenges and people who have worked through or successfully manage their struggles. GenuineU

removes the barriers and provides a safe, minimally-invasive platform to connect these two groups, thereby addressing a prevalent and pressing social need.

“Jim [Baxendale] was instrumental in connecting me with the right organizations and people I needed to speak with to not only start GenuineU but to develop a better understanding of business for me as well as my students.”

“ ”

W2B WAS TREMENDOUSLY HELPFUL IN MY UNDERSTANDING INNOVATION FROM A BUSINESS SIDE.

— RISA STEIN

PROJECTS FROM THE PIPELINE.

Here are a sampling of startups launched with the help and assistance of Whiteboard2Boardroom:

17°73° INNOVATION COMPANY — develops solar solutions to facilitate the expansion of electronic device usage in support of economic development and communication.

APPLIED LEARNING SOLUTIONS — is working on iSocial, a virtual learning environment software for children with Autism Spectrum Disorder (ASD) using a virtual world environment for learning social skills.

AWARE VEHICLES — has multiple applications focused on autonomous, unmanned vehicles.

DYNAMO HEALTH — a telemedicine solution to help patients with PAD (peripheral artery disease) manage their disease



Amy Garcia, with the Kansas University Medical Center was able to put her Clinical Competency Application into

motion by attending the second USASBE Kansas City Region

Bio-Med and Health Care Technology Entrepreneurship Certification Program cohort that Jim Baxendale facilitated. “Attending that cohort, in which Jim Baxendale infused practical content with real life entrepreneurial experiences, helped me plan for success,” says Garcia. “I was able to move from idea stage to market.”

The Clinical Competency application will be the first to align competencies with standards and robust reporting tools. Jim and W2B continued to work with Amy personally on her business model and brought in dedicated technology experts to meet with her and her team.

“Having those connections that W2B provided me enabled me to make a mid-course correction in my journey to becoming an active business.”



Medical devices require a certain kind of expertise to take them to market. Dr. John Rosen of Children’s Mercy Hospital looked to W2B to

find a CEO for his medical device to evaluate colon motility.

Dr. Rosen’s innovation is a less invasive technique for monitoring colon activity for the purpose of evaluating acute or chronic medical conditions and bowel dysfunction.

“I was not sure what I was looking for when I reached out to W2B and Jim [Baxendale],” Dr. Rosen said.

W2B connected Dr. Rosen to several experts in manufacturing, regulatory pathways and gastroenterology who are helping further develop the project concept and market. The goal: position the product for a CEO.

“Speaking with Jim, I got a good idea what W2B does to help the technologies along,” Dr. Rosen said.

“The connections were more on the advisory level, but those connections have been invaluable in moving my medical device technology forward.”

GENUINE U ——— is an online platform facilitating connections between two groups of individuals regarding mental health

LARIAT GENOMICS ——— designs drug compounds for treating HIV.

LAZSER DOWN ——— offers digitally displayed real-time down and distance feedback on the football field.

MOBILITY DESIGNED ——— crafts innovative mobility devices for disabled users.

NASCENT STAGE RESEARCH ——— helps children with autism develop better social skills

nVISION AG ——— uses remote sensing to diagnose nitrogen deficiency in crops and determine appropriate levels of fertilization.

SEEKEDGAR ——— uses cloud technology to search companies’ filings to regulatory agencies.

SENSORY A.I ——— is a vehicle sensor network that auto-collects road data for better pattern recognition and resource allocation.

U2D ——— is a portable neutron radiation detection system.

ZOLOZ (formerly EyeVerify) ——— developed Eyeprint ID, a highly accurate biometric technology for smart devices that delivers a password-free mobile experience with convenient, secure, private authentication.

ZORILLA ——— predicts problematic interactions of a drug in the early stages of its development.

PARTNER LIST

W2B works because of a strong relationship with research institutions, corporations, CEO-level talent and business development resources. Today, W2B has 22 institutional partners across the region, including:

- + Blue Valley High School Center for Advanced Professional Studies Overland Park, Kan.
- + Bunker Kansas City, Mo.
- + Children's Mercy Hospital Kansas City, Mo.
- + Honeywell FM & T Kansas City, Mo.
- + Innovation Stockyard St. Joseph, Mo.
- + Jordan Valley Innovation Center, Springfield, Mo.
- + Kansas City University of Medicine and Biosciences, Kansas City, Mo.
- + Kansas State University Manhattan, Kan.
- + Missouri University of Science & Technology Rolla, Mo.
- + MRI Global Kansas City, Mo.
- + Pittsburg State University Pittsburg, Kan.
- + Rockhurst University Kansas City, Mo.
- + Saint Louis University St. Louis, Mo.
- + St. Luke's Mid America Heart Institute Kansas City, Mo.
- + University of Kansas Lawrence, Kan.
- + University of Kansas Institute for Advancing Medical Innovation Kansas City, Kan.
- + University of Kansas Medical Center Kansas City, Kan.
- + University of Missouri-Columbia Columbia, Mo.
- + University of Missouri-Kansas City Kansas City, Mo.
- + University of Missouri-St. Louis St. Louis, Mo.
- + Wichita State University Wichita, Kan.
- + William Jewell College Liberty, Mo.

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KANSAS STATE UNIVERSITY



University of Missouri



WSU | VENTURES



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BRINGING TECHNOLOGY TO MARKET

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