WHITEBOARD 2BOARDROOM

BRINGING TECHNOLOGY TO MARKET

WE CREA+E INNOVATIONS

2017 ANNUAL REPORT

Clockwise: Max & Liliana Younger, Mobility Designed; Mary Kay O'Connor, Patients Voices; Malcom Townes, Saint Louis University; Audience at Tech Snapshots

INNOVATIONS GROW **HERE**

A classroom program to help children with autism learn social skills and collaboration. Helping veterans thrive. Autonomous, unmanned vehicles. Smart sensors on city vehicles to collect information about roads. A wearable device that helps caregivers track a patient's movements. A portable neutron radiation detection system.

" Whiteboard2Boardroom has been great in connecting companies like ours to universities, hospitals and other leading research institutions throughout the region. Identifying local technologies has been important and Whiteboard2Boardroom has played a key role. "

—P.J. PIPER, Founder and CEO of Anticipate Ventures

These innovations, and so many more, are disrupting their industries, and they were all created and commercialized with the help and connections of Whiteboard2Boardroom (W2B).

Across a huge number of industries, W2B provides a very early look at innovations on their way toward commercialization, helping identify homegrown innovations and match them with entrepreneurs who can take them to market.

During the last five years, the Whiteboard2Boardroom (W2B) program has seen its number of partner institutions expand from 4 to 23, which includes research universities, hospitals and corporations. W2B continues to aggregate technologies available for licensing, attract CEO talent for startup companies, secure strategic partners and identify capital and prototyping resources.

In its efforts to establish a pipeline of innovations, the program has also supported entrepreneurship initiatives at St. Luke's MidAmerica Heart Institute, Rockhurst University, William Jewell College and the University of Missouri–Kansas City. W2B partnered with a number of military veteran support groups to work with transitioning military veterans who have expressed an interest in entrepreneurship or have existing companies needing assistance.

To attract innovators to technology opportunities, W2B established Technology Snapshot events and webinars. In addition, a subscription-based tech alert system has been created to identify the technical interests of regional innovators and companies and match them to technologies in our pipeline.

And finally, the program is now expanding into the St. Louis region with the addition of Saint Louis University as a W2B partner institution. This will add innovations and potential startup CEO talent to our pipeline.

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 below, you can see the significant pipeline of technologies from various technical fields available for licensing.

NETWORK

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

23

regional partners that include corporations, hospitals, academic and research organizations
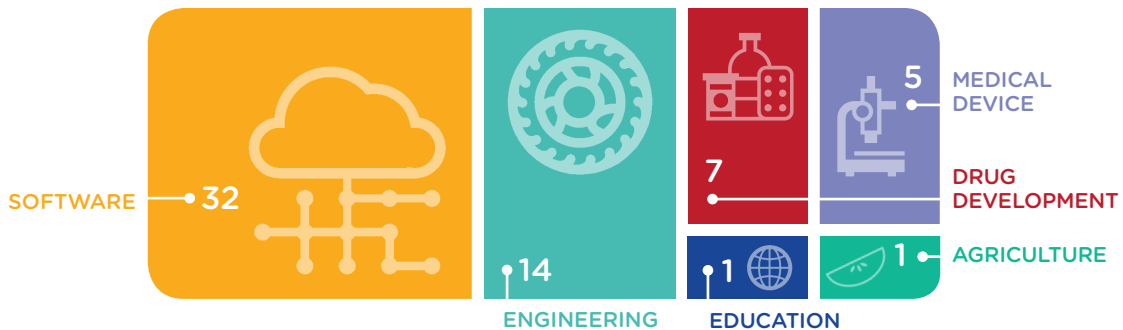
716

entrepreneurs and companies engaged

400+

new innovations available for licensing each year

MATCH

The W2B Project pipeline below involves innovations in need of mentors, CEOs, prototyping resources, capital, strategic partners, business assistance, etc.

SOFTWARE — 32

ENGINEERING 14

EDUCATION 1

7

MEDICAL DEVICE 5

DRUG DEVELOPMENT

AGRICULTURE 1

ADVANCE

projects toward commercialization

35

new startups facilitated

129

new jobs

$26.2M

in **follow-on funding**

Program results measured from 2012 through June 30, 2017.

PARTNERS

ST. LOUIS EXPANSION >
GATEWAY TO THE EAST

The Research Innovation Group (RIG) at Saint Louis University is the latest partner to join Whiteboard2Boardroom (W2B).

Founded in 1818, Saint Louis University (SLU) is one of the nation's oldest and most prestigious Catholic research universities and is recognized for world-class academics and life-changing research. RIG focuses on increasing the impact of university research through licensing, commercialization and other forms of technology transfer, making it a perfect partner for W2B.

"We're excited about partnering with Whiteboard2Boardroom," said Malcolm Townes, business development manager with RIG in the Office of the Vice President for Research at Saint Louis University. "We believe it presents an excellent opportunity to attract potential collaboration partners and help spread the word about SLU's outstanding research assets and innovative technologies that can change lives for the better and improve our society."
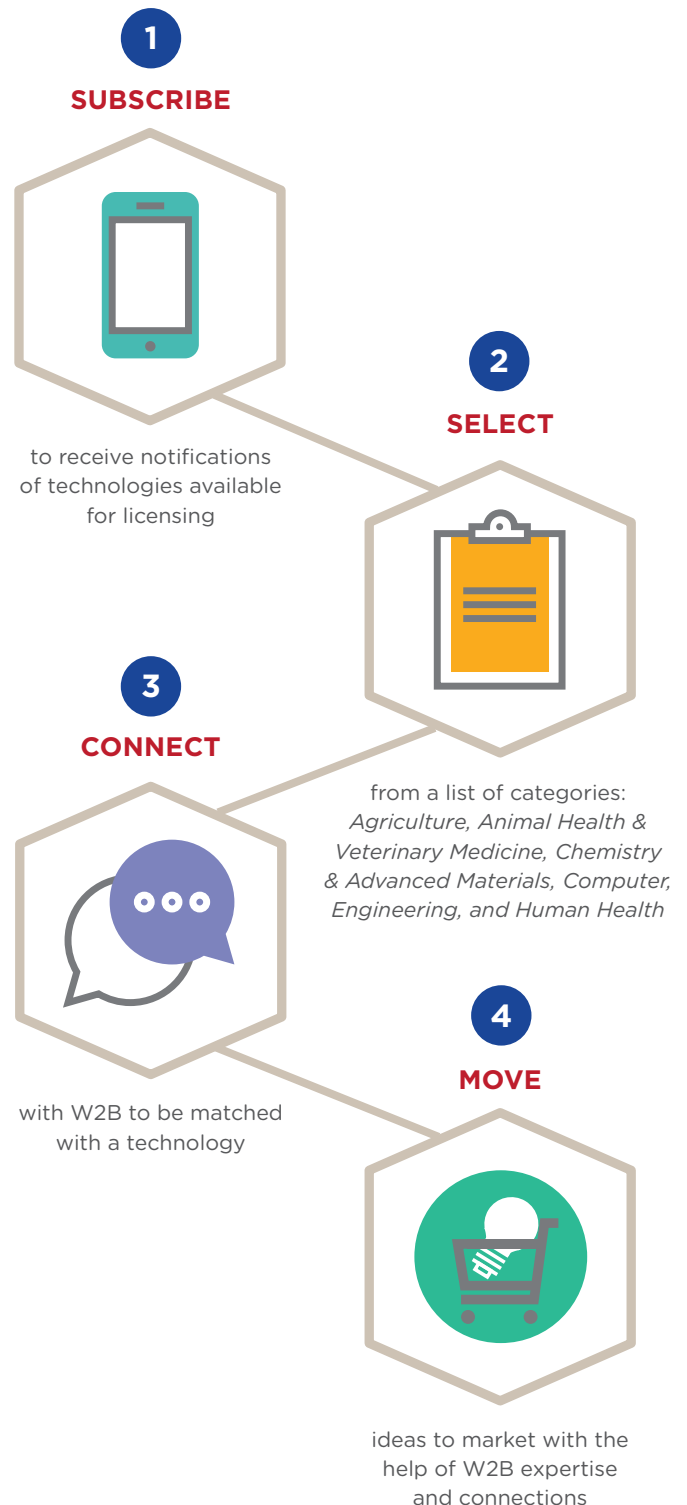
For W2B, the connection with SLU provides another avenue into innovations coming out of the St. Louis metro area, as well as access to startup management talent and other corporate and individual commercialization resources.

> " Whiteboard2Boardroom has done an outstanding job showcasing the amazing technology that is being created in our regional universities. Whether it is an in-person conference or a webinar, the tech presented has been very thorough and informative to help determine where tech can fit into an existing or new company or platform. "
>
> —GREG ELLIOTT, Director of Business Development Data Centers, LightEdge

READY TO MOVE IDEAS TO MARKET?

W2B Tech Alert System is a yearly subscription service that matches technologies with entrepreneurs and established businesses that can move those ideas to market.

1 SUBSCRIBE

to receive notifications of technologies available for licensing

2 SELECT

from a list of categories: *Agriculture, Animal Health & Veterinary Medicine, Chemistry & Advanced Materials, Computer, Engineering, and Human Health*

3 CONNECT

with W2B to be matched with a technology

4 MOVE

ideas to market with the help of W2B expertise and connections

TECH SNAPSHOTS

In entrepreneurship, it's all about solving a problem.

Research institutions are always seeking new ways to present their innovations to the public beyond the usual marketing efforts and technology showcases, all with the goal to attract as many potential technology licensees as possible.

W2B decided to be innovative about presenting innovations, launching the first Tech Snapshots in January 2017.

A dozen innovations from eight universities and research organizations were presented in rapid-fire sequence, just three minutes per presenter. During follow-up networking, attendees asked more in-depth questions of the various presenters.

The results were heartening. Almost 90 percent were satisfied or very satisfied. The rest were neutral. The experiment was repeated in April with 11 new innovations and even better results: 100 percent were satisfied or very satisfied.

This novel way of presenting innovations was adapted to webinars in March and June. Altogether, 27 innovations were presented to almost 150 people. The process has yielded one new startup, and at least two collaborations.

Tech Snapshots attendees
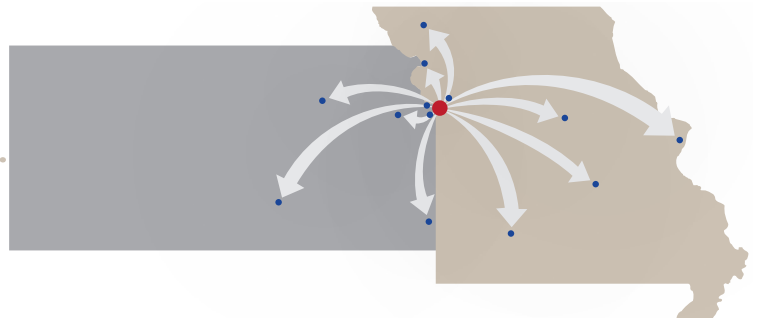
PARTNER LIST

W2B works because of a strong relationship with research institutions, corporations, CEO-level talent and business development resources. Today, W2B has 23 institutional partners across the region including:

Blue Valley High School Center for Advanced Professional Studies Overland Park, Kan.

The Bunker KC 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.

Mercy Research and Development Springfield, Mo.

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, Mo.

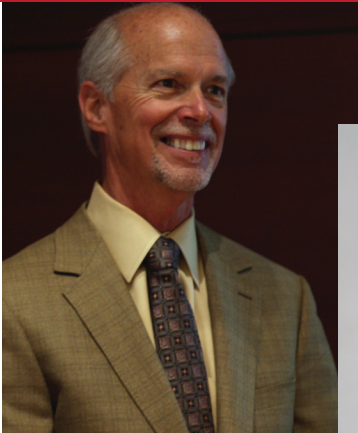**University of Missouri-Kansas City** Kansas City, Mo.

University of Missouri-St. Louis St. Louis, Mo.

Wichita State University Wichita, Kan.

William Jewell College Liberty, Mo.

PROJECTS

Bob Etzel, iSocial

Dr. Janine Stichter, MU

iSocial
University Technology Transfer

With four startups under his belt and a heart to help people, Bob Etzel is proving to be the perfect partner to bring a University of Missouri–Columbia (MU) innovation to market.

Etzel attended Whiteboard2Boardroom's first Tech Snapshots event in January 2017. "Bret Maland (MU senior licensing and business development associate) talked about their program, iSocial. With my background in e-learning and mental health I felt I could really help these people."

iSocial is a classroom program developed by Dr. Janine Stichter, from the University of Missouri's Thompson Center for Autism and Neurodevelopmental Disorders. Her program helps children with autism develop better social skills. Eight research studies over the last seven years have shown that her program provides a significant benefit to many of the children who participate.

"In the United States alone, three and a half million children have autism, and the number of reported cases has doubled since 1990. We want these children to participate better in school and to communicate more effectively with family and friends. We also need to engage their intellect and skills in the workforce someday," Etzel said.

Etzel and his team of talented game and application developers are turning the 31 classroom sessions into a new virtual world for children with autism. Children, parents and teachers can collaborate using avatars in a virtual world that extends beyond the school's walls. The virtual world will also welcome children in difficult to serve areas that are remote or disadvantaged.

In addition to the programming, Etzel and his team are looking at distribution channels and funding, bringing the language of business to a proven, research-based program. The connection between commercialization resources and promising innovations is at the heart of Whiteboard2Boardroom. "This wouldn't have happened without Whiteboard2Boardroom."

Virtual Windows
Commercialization Fast Track

Whiteboard2Boardroom is focused on moving innovations from university, hospital and research organizations into the marketplace. But sometimes the program helps individual entrepreneurs navigate the challenging path to commercialization.

Jerry Eisterhold didn't begin with the intention to develop a technology.

"That was kind of the tail of the dog," he said. The beginning was a project to pay tribute to wounded warriors.

"Bringing what we do to that project, we listened to the community and discovered a host of unmet needs. Then we tried to develop something to respond to that."

They developed a technology that "doses" information, meeting those previously unaddressed gaps, creating a more holistic healing environment that changes with patients' changing needs.

The help from Whiteboard2Boardroom has been important.

"We come from a different world, coming out of doing museums. Product-based business planning is an alien thing. Having a trusted, fairly disinterested broker as part of the conversation was kind of important."

W2B is helping Eisterhold map out the next steps toward deployment, as well as connecting the team to the business and larger civic community. Together, they will frame up the technology for business development.

"To us, the main thing is that we're coming from another world. Whiteboard2Boardroom is guiding us through the morass of the business world."

Jerry Eisterhold and team

Aware Vehicles
University Collaboration

Homegrown teams developing homegrown innovations into successful companies—that's the vision of P.J. Piper for his relationship with Whiteboard2Boardroom. Piper heads up Anticipate Ventures, which incubates innovation with the right resources, network and small business contract or grant funding to complete the critical research, development and demonstration milestones needed to reduce the risks associated with commercializing the technologies.

P.J. Piper, Aware Vehicles

A glimpse of that dream can be found in Aware Vehicles, Inc., a new startup collaborating with the University of Missouri–Kansas City. W2B highlighted the technology that provided the basis for the partnership.

"Aware Vehicles is focusing on autonomous, unmanned vehicles. Dr. ZhiQiang Chen was researching technologies for some of the capabilities I was looking for. We teamed up and started looking at multiple applications for his research," Piper said.

W2B wasn't the first time Piper met Dr. Chen. "Ironically, I had presented to a collection of different professors at UMKC and he [Dr. Chen] said he was looking at advanced sensing, imaging and artificial intelligence, but I didn't get to learn the details. Then I watched the W2B webinar [which featured Dr. Chen's research] and realized the synergies between our technology developments seemed like a great fit and could lead to a powerful combination. The webinar resurfaced an opportunity."

Anticipate Ventures is not limiting its partnerships to one innovation, with additional projects pending in ag, artificial intelligence and life sciences.

"Whiteboard2Boardroom has been great in connecting us to universities, hospitals and other leading research institutions throughout the region. Identifying local technologies has been important and Whiteboard2Boardroom has played a key role."

Sensory AI
Startup Accelerant

Mike Brummett is taking a leave of absence from his studies at Rockhurst University to pursue a different kind of degree: he's hoping for a degree of success with his newly formed company, Sensory AI.

Sensory AI uses smart sensors and artificial intelligence, integrated with city vehicles, to automate road inspections for government.

"I'm bringing affordable, smart city solutions to municipalities that are left out of the conversation about innovation and technology. In the area, that's just about every city that's not Kansas City, Missouri," Brummett said.

Mike Brummett, Sensory AI

Brummett has been working on this project for about two and a half years. Faculty at Rockhurst University introduced him to Jim Baxendale and Whiteboard2Boardroom early on.

"W2B has made a handful of truly valuable introductions for my company, namely to stakeholders in local government. Importantly, too, it has connected me with people who have mentored me through the procurement process, as selling to government is a challenge in both regulation and policy.

"Right now, I have seven total pilot programs and annual contracts with local cities. It's enough that it has become clear we are past the product/market fit stage and now are ready to move at full speed into the growth stage."

ALSO IN THE **PIPELINE**

Here are examples of startup company formations assisted with the help and connections of Whiteboard2Boardroom.

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

ASUUN is a wearable device that helps caregivers track a patient's movements.

CARDIOPTIMUS is a safety device for use in transcatheter aortic valve replacement.

COLUMBIA INFORMATICS is a tongue image analysis app that will automatically analyze the image to interpret the person's health status and provide advice accordingly.

FEEDMELOCL helps farms sell products more easily to local chefs through an app.

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.

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.

U2D is a portable neutron radiation detection system.

URSA MEDICAL TECHNOLOGIES develops therapies for breast cancer.

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.

WHITEBOARD2BOARDROOM is funded by the generous contributions of the following organizations:

BLACK & VEATCH

Honeywell

KANSAS STATE UNIVERSITY

MISSOURI TECHNOLOGY CORPORATION

MRIGlobal

University of Missouri

SAINT LOUIS UNIVERSITY

UMKC Innovation Center

WSU VENTURES

WHITEBOARD 2 BOARDROOM
BRINGING TECHNOLOGY TO MARKET

4747 Troost Avenue | Kansas City, MO 64110
baxendalej@umkc.edu | 816-235-6429

www.whiteboard2boardroom.com