Entrepreneur solves common problem with help of RCBI

For years, Dr. Greg Crews attempted to make a better feed bucket for horses. He found the help he needed to bring his concept to life at the Robert C. Byrd Institute (RCBI). Less than two years later, his buckets are being sold across the country, and he's making plans to expand his product line.

"This would not have been possible without RCBI," he said. "You couldn't ask for greater people to work with, no doubt."

Crews, a Huntington dentist, is a long-time horse owner himself. He was frustrated by buckets that wouldn't stay affixed to the fence and were often left broken on the ground. He was purchasing replacements two or three times a year.

Crews began working with RCBI in March 2016, when he pitched his idea to RCBI staff members. He received early-stage funding assistance from RCBI that allowed him to work with RCBI Engineer Ron Cabacar on designs for his bucket. Together they developed two prototypes that were produced on a Fortus 3D printer at RCBI. Crews took those prototypes to a horse show in Louisville, Ky., and showed them to other horse owners. Their input helped Crews decide which design to put into production.

Skills gap threatens manufacturing, economic growth
There is a desperate need for workers in the skilled trades in the United States. "Right now in the United States, there are three million manufacturing jobs open, unfilled, because of the skills gap, and in three to four years it's going to be six million," said Ed Monser, the president of Emerson which is one of the largest manufacturers in the Miami Valley of Ohio.

The skills gap is a serious problem in the United States and can impact our economic growth. "If we want to expand manufacturing we have to have more people who are technically competent," said Monser. "Have the math skills, the problem-solving skills, the computer skills, and the technical skills to do the welding and electrical work. If we had more of those people we could grow faster."

Read more.
More than 50 skilled individuals graduated in May from the Robert C. Byrd Institute's nationally recognized Machinist Technology/CNC Program and Welding Program. RCBI's 2017 graduates were recognized during May ceremonies in Huntington and Bridgeport.

The technical skills that students learn at RCBI make it possible for them to begin work immediately on completion, earning good wages with benefits, knowing that their careers are building.

By completing either program, students also earn industry recognized certifications from the National Institute for Metalworking Skills (NIMS) and the American Welding Society (AWS). Students also pursue an associate of applied science degree from Mountwest Community & Technical College. More than 90 percent of RCBI machinist graduates secure employment in their chosen occupations.

New classes start in August in Huntington and Bridgeport. Information is available at www.rcbi.org/online/careers or by contacting Tracy Straub at 304.781.1678 or tstraub@rcbi.org.

Bombardier's Moon sees uptick in WV manufacturing
Bombardier Aerospace's John Moon delivered the keynote address at the May graduation ceremony recognizing RCBI's Machinist Technology/CNC students in Bridgeport. Here are highlights from his remarks.

This is an exciting time to be graduating with an education in machining from a nationally certified machine technology program. The coal industry is back on the rise and will stabilize, the oil and gas industry will continue to grow, the power sector will have growth, and the aviation sector will have rapid growth over the next three to five years.

All of these businesses will feed into the need for more manufacturing in West Virginia and other states.

Read more.

June 8 open house to highlight new agricultural initiative
The public is invited to join in celebrating the official opening of Sprouting Farms June 8 from 5 to 8 p.m. at the farm site near Talcott in Summers County. Sprouting Farms is an agricultural resource and education center that is working to strengthen and expand the local food economy of southeastern West Virginia by providing access to farmland and equipment, technical assistance to entrepreneurs and serving as an on-the-job skills training provider.

The 80-acre incubator and training center serves Fayette, Greenbrier, Monroe, Nicholas, Pocahontas, Raleigh and Summers counties. Sprouting Farms is a partnership between the Robert C. Byrd Institute (RCBI) at Marshall University, Downstream Strategies and the New River Gorge Regional Development Authority.

During the open house, attendees can tour the farm, meet the staff, learn about projects already underway, participate in a garden hose cutting and enjoy refreshments and music.

Guests should RSVP here. Directions to the farm are located here. For more information, call 304.445.7200 or email admin@sproutingfarms.org. Sprouting Farms is funded by the Appalachian Regional Commission, Claude Worthington Benedum Foundation and The One Foundation.

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**Summer robotics camps to engage students in STEM**

RCBI promises a summer of discovery for 9- to 15-year-old students interested in robotics. Activities kick off June 26-30 with a camp for both those with robotics experience and first-timers. During the five-day event, campers will learn to build, program and operate LEGO Mindstorms EV3 robots and participate in the World Robot Olympiad the final day.

The camp will run Monday through Thursday from 9 a.m. to 5 p.m. and Friday from 9 a.m. to 3 p.m. at RCBI Huntington. Cost is $125 for each camper and includes lunch and snacks. Students are encouraged to register as small teams. Sign up here.

RCBI Huntington also will host a free two-day Boot Camp August 7-8 from 9 a.m. to 4 p.m. focused on boosting participation in FIRST LEGO League (FLL) robotics and promoting STEM education in southern West Virginia counties. Groups interested in forming teams are encouraged to apply for the free camp by contacting Mike Friel at 304.781.1686 or mfriel@rcbi.org. Read more.
RCBI hosts day of making

Makers of all ages converged on RCBI Huntington May 18 for Explore the Maker Vault, part of a regional effort, Remake Learning Days, that encourages hands-on learning and technology exploration. Participants experimented with clay modeling, soldering, 3D printing and scanning, Raspberry Pi games and electrical circuits.

THE VIDEO FILE

Manufacturing video features WV campers
This Manufacturing Institute video features campers from our popular 3D Printing Camps. The video highlights careers in manufacturing, and we're proud to be part of the effort.

Entrepreneurs pitch ideas at Demo Day
Members of the first class of entrepreneurs in TEN50: West Virginia's Business Accelerator, presented their business ideas to potential investors and members of the public during Demo Day at RCBI Huntington.

3D printer is an all-purpose repair tool
3D printers aren't just for prototyping and industrial printing. Watch this video to learn six cool ways to repair everyday items around the home.

Upcoming events
June 2017
June 8 - Sprouting Farms Open House, Talcott, 5 p.m. - 8 p.m.
June 13 - Patent & Copyright Workshop, Transit Authority Bldg., Bluefield, 1 p.m. - 3 p.m.
June 15 - Raspberry Pi User Group, RCBI Huntington, 5:30 p.m. - 6:30 p.m.
June 19-23 - 3D Printing Camp, RCBI Huntington, 9 a.m. - 2 p.m.
June 20 - Patent & Copyright Workshop, RCBI Bridgeport, 2 p.m. - 3 p.m.
June 26-30 - Robotics Camp, RCBI Huntington, 9 a.m. - 5 p.m.
June 27 - Grants Overview Webinar, online, 2 p.m. - 2:30 p.m. EDT

Call 800.469.7224 or email mfg@rcbi.org for more information.

ABOUT US
Our experts deliver innovative solutions with leading-edge technology to advance manufacturing and entrepreneurship. Learn more at www.rcbi.org.