



“It’s been extremely rewarding to take my research out of my lab and into the world.” —BERS

Machine Learning

PROFESSOR MARINA BERS TEAMED WITH STARTUP VET MITCH ROSENBERG FOR A VENTURE THAT SELLS TEACHING ROBOTS FOR KIDS. *by Daniel Bortz*

MARINA BERS, 46, AND MITCH ROSENBERG, 56, WALTHAM, MASS.

THEN

TUFTS PROFESSOR;
VP OF MARKETING
AND PRODUCT

NOW

CO-FOUNDERS OF
KINDERLAB ROBOTICS

WHEN MARINA BERS AND MITCH ROSENBERG met at a 9-year-old’s birthday party in May 2011, they discussed a business idea, fittingly, for children. They arrived with their kids, who went to school together, and Bers buttonholed Rosenberg—who had a background in engineering and marketing—to discuss a prototype she was developing: a robotic toy that teaches problem-solving skills to 4- to 7-year-olds using computer science principles.

Bers, a child study and human development professor at Tufts University, wanted a startup veteran to help build her toy into a viable business. Rosenberg liked the product but wasn’t ready to leave his \$190,000 paycheck. The following year, however, Amazon acquired Rosenberg’s company—a robotics

Photographs by **JARED LEEDS**

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MAKING A MOVE The robots have attachable wheels, sensors, lights, and other modules.

manufacturer—and the payout on his equity stake was enough to let him forgo a salary, for a while at least, and take a risk.

The pair co-founded KinderLab Robotics in 2013, with Rosenberg as CEO and Bers, still at Tufts, as the company's chief scientist. They focused first on finding capital, landing a \$150,000 research and development grant from the National Science Foundation. "We needed to test the viability of certain

features and see how children reacted," says Rosenberg. They bootstrapped another \$100,000—loans from friends and family, plus some personal savings—to build the first kits. Each holds a small robot ("Kibo"), attachable modules (like sensors and wheels), and a set of wooden blocks that map out the toy's actions (TURN LEFT, SPIN). Kids learn to program the toy systematically, Bers says.

After six months testing toys in schools and promoting them at educator trade shows, KinderLab started shipping the kits in November 2014, selling largely to schools. Sales picked up quickly. Revenue hit \$550,000 last year—letting the founders repay those loans—and is projected to be \$750,000 for 2016.

While the firm targets educators, individual consumers have started buying from the company's website and now make up about half of sales. "Parents are purchasing the product and then persuading the school to buy Kibos for their classrooms," Rosenberg says. **M**



STARTUP

STAY FRIENDS WITH YOUR PARTNER

Going into business with your buddies? Use these tactics to keep things copacetic.

MAKE IT LEGIT One rookie mistake is neglecting to create an operating agreement—a key document spelling out who has a say in company business, how profits are split, and what happens if one of you wants out.

DIVIDE DECISION-MAKING When Molly Fienning co-founded children's sunglasses company Babiators with her husband and two married friends in 2010, they split responsibilities. "We each have our own domain," she says. To avoid confusion, a "decision matrix" shows when action can be taken independently, and when everyone needs to weigh in.

TEST YOUR PERSONALITIES "On the surface, you may think you 'get' your friend fully," says Jen Hansard, who launched Simple Green Smoothies with pal Jadah Sellner. "But when it comes to daily business, it's important to really know how they work." Is your BFF a strong-willed leader or a sociable free spirit? Knowing the answer can help you communicate better and settle disputes; diagnose yourself at 16personalities.com. —SARAH MAX

BY THE NUMBERS

\$229

BASE PRICE The kits come in three versions. The cheapest, at \$229, has 10 programming blocks, along with two motors and a set of wheels. The priciest (\$399) has 18 blocks and a few add-ons: light and sound sensors and a rotating platform that lets Kibo move in circles.

Two

FULL-TIME STAFF As co-owners and the only employees, Bers and Rosenberg currently get stipends of \$24,000 and \$30,000, respectively. Independent contractors handle accounting, PR, and manufacturing, and some of Bers's grad students work part-time as researchers.

\$930,000

GOVERNMENT FUNDING KinderLab has gotten three NSF grants since 2013. Money from the first two—\$180,000 in total—went to developing and testing the prototype. A later \$750,000 grant—distributed over two years—is being used to develop a classroom curriculum and new modules, and pay the co-founders while sales are growing.

