

JUNE 2009

THE BUSINESS MAGAZINE OF PHARMA
VOLUME 29, NUMBER 6

Pharmaceutical Executive



» CAROLLEE BARLOW

**Chief Scientific Officer,
BrainCells, Inc.**

If Carrollee Barlow has her way, the next new class of antidepressants will be branded BCI for BrainCells, Inc., the hot young San Diego biopharma riding the wave of neurogenesis. (See Luca Santarelli, previous page.)

Barlow, 45, spearheads BCI's drug discovery, using the neural-stem-cell platform technology she invented with BCI cofounder Fred "Rusty" Gage. Barlow first teamed up with Gage in 1998 at the Salk Institute. "Rusty's the one who's completely famous in neuroscience," she says modestly. In fact, Gage is a likely Nobel shoe-in for his codiscovery in the late '90s that the adult human brain can regenerate itself. But it's Barlow's transgenomics genius that has helped unlock that revolutionary insight's therapeutic power by creating the requisite research models.

Prior to BCI, Barlow spent two years at Merck, leading the drug giant's initiative to establish a neurodegenerative franchise—from labwork to licensing. "I had fantastic people on my team, and I learned an enormous amount about how to coordinate a major effort," she recalls. That was perfect

preparation for her job at BCI, where she was Gage's first hire in 2004 and charged with finding and minding not only the neuron-producing stem cells but a new team of world-class PhDs and MDs.

Not a problem. "I've been very lucky in my career to be around a lot of people who had a hunger in their belly to do something greater and more innovative," Barlow says. Her own hunger for drug discovery derives partly from her residency in internal medicine at New York Hospital before AIDS was largely treatable. Now, after almost five years of screening over 1,000 compounds at BCI, she and her team already have three drugs in clinical trials, including a lead candidate in Phase III for depression.

"None of the drugs have overlapping mechanisms—they're all unique," she says. "But what they all do is promote neurogenesis." The Phase III antidepressant works without touching serotonin levels, indicating that it may be free of Prozac-type side effects, including the big-time loss of libido.

Meantime, studies increasingly support the hope that drugs with neurogenic benefits could lead to profound advances in treating all manner of CNS conditions—a category with global sales in the \$100 billion range, as BCI's Website is quick to crow about.

Money isn't the prime mover, however. "We may not succeed in the clinic, though I believe we will," she says. "But being willing to accept that even if our lead compound doesn't work, our success is in answering this incredibly important question correctly, that's why we're willing to do it."



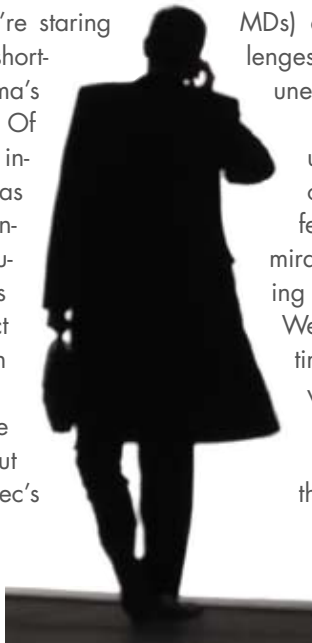
What will the drug industry look like in 20 years? Can we get there? How?

These questions keep pharma folks up at night, especially those at the top, where 20th century strategies and short-term solutions no longer fit the bill. Reasons for panic are plenty, whether you're staring down a small biotech's ever-shortening runway or a big pharma's fast-approaching patent cliff. Of course, it's hard times in every industry these days, but none has anywhere near the inherent contradictions and high risks, regulations, technologies, and costs pressing down on every aspect of its business. True innovation in this maze is a near miracle.

But that's what it will take—true innovation, not the buzzword, but the real thing—and Pharm Exec's

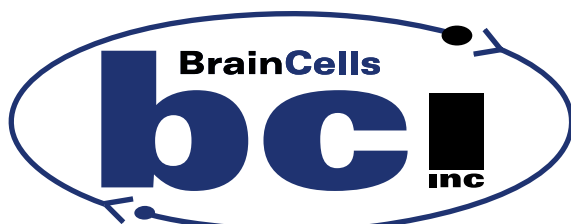
2009 27 Emerging Leaders know it and are striving for it. That may be why slightly more than a third hail from biotech. And nine of our honorees have already made such strides so fast that it seemed only fair to single them out. Four are MD/PhDs leading high risk/reward R&D efforts, while the other five (two are MDs) are meeting huge business challenges with a scientist's openness to the unexpected.

All of our Emerging Leaders are under age 45, and their first decade or two in pharma has left them with few illusions about the many near-miracles that will be required for enduring success. Yet they remain confident. We hope their clear-eyed, sometimes sharp-tongued assessment of what must (and must not) be done to create a pharma for the 21st century will prove inspiring—and then give you a good night's sleep.



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