From big pond to big risk

Liquidia gets new CEO

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Neal Fowler quit his job as head of a multibillion-dollar Johnson & Johnson subsidiary based on the big promise of a young Durham nanotechnology company.

For the past 20 years, Fowler worked for large pharmaceutical companies. As president of Centocor, J&J's biotech subsidiary, based in Horsham, Pa., he oversaw about 1,400 employees.

He acknowledged he took a pay cut to join Liquidia Technologies, which employs 35. "Short-term yes," he said. "Long-term, no way. This company is going to do some amazing things."

Liquidia has big plans, and Fowler's arrival -- he started this week -- puts another piece in place. The company has assembled a dream team of executives, directors and investors. Its technology could revolutionize drug delivery, solar energy and consumer electronics, all multibillion-dollar markets. The company has also attracted the interest of deep-pocketed venture capitalists eager to grab a piece of the potential.

Fowler, a 46-year-old Raleigh native, has the credentials to build Liquidia into a home-grown success story. But opportunities exist for the knight in shining armor to stumble and fall off the horse.
"They'll have to make some hard choices," said Dr. Garheng Kong of Intersouth Partners, a Durham venture capital firm that is not an investor in Liquidia.

The bevy of potential products in the pipeline poses the risk of biting off too much too quickly, Kong said. "You want to find your legs before you branch out."

Which path Fowler and his team at Liquidia select in the next months is critical for years to come, he said. Funding for research and development is limited, and investors have little patience for mistakes that require multiple course corrections.

And the Triangle is littered with corporate fairy tales that lost their sparkle.

Turning scientific promises into marketable products is the economic lifeblood of the area. But many companies fizzle for lack of money or leadership.

Fowler said he's aware of the challenges. He plans to spend his first weeks as CEO of Liquidia talking to employees, customers and potential partners. He expects to ask dumb questions and learn about Liquidia's technology from scratch.

Moving ahead, he expects to draw on advisers inside and outside of the company, including industry and academic experts and members of Liquidia's board of directors, such as Dr. Ralph Snyderman, former chancellor for Health Affairs at Duke University.

"This is a new arena where you want a lot of opinions," Fowler said.

As CEO, he then has to act on the advice of others.

"He's got to take the lead," said Steve Nelson, who had been Liquidia's interim CEO since September 2006. Nelson is a partner in venture capital firm the Wakefield Group, part of a team of investors that has given Liquidia $24.5 million in funding.

"He can ultimately take the company any direction he wants," Nelson said.

To support decisions Fowler will make with more medical expertise and access to cash, Liquidia on Tuesday named Dr. Seth Rudnick chairman of the board. Rudnick is an oncologist and adjunct professor of medicine at UNC-CH with extensive experience in drug testing. He is also a partner with Canaan Partners, a Silicon Valley venture capital firm with about $3 billion under management.

Rudnick said Canaan Partners is interested in investing in Liquidia.

The object of everybody's desire is a clear, nonstick material, called Fluorocur. Developed by UNC-CH chemistry professors Joe DeSimone and Ed Samulski and three of their students, Fluorocur is liquid at room temperature and hardens when exposed to ultraviolet light.
What makes Liquidia's technology attractive is its scale.

Fluorocur creeps into crevices so small they can only be seen with the most powerful microscopes. That makes it perfect for molds to manufacture multiple, accurate copies of particles so tiny, a string of 80,000 of them is only as long as a hair is thick.

The molds, which resemble muffin pans, could be used to manufacture cylindrical vessels that sneak chemotherapy drugs into tumor cells or cones that stud solar cells and increase the production of electricity.

Replacing pills, injections and inhalers with a drug delivery method that is possibly safer and more effective could be the most valuable promise. Liquidia is working on a product with a partner whose name it won't disclose. But revolutionizing drug delivery could take more than a decade, because it requires Food and Drug Administration approval.

To generate revenue more quickly, Liquidia is also working on Fluorocur molds to make optical film for television and cell phone displays, which would be thinner and cheaper than current technologies.

"You don't have to go through the FDA with a telephone," Rudnick said.

The first Fluorocur optical film could come to market in late 2009, and Liquidia is expanding to prepare for production.

The company is more than tripling its operations to 22,000 square feet. In the past 18 months, employment has more than doubled to 35, and 10 more could be hired this year.

"We're consciously going after new worlds," Fowler said