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ENTREPRENEURIAL EDGE

Scientists Turn to the Internet and Venture Capitalists for Backing

By JAMES FLANIGAN

Before the coming of the Internet and venture capital, the discoveries of many scientists came to the attention — and the benefit — of the public only after years or decades. But times have changed.

Scientists in university laboratories and medical centers are visible on the Internet, and venture capital is paying attention. The stories of Dr. Carol A. Locke of Omega Natural Science in Waltham, Mass., and formerly of Harvard Medical School, and Roberta Diaz Brinton of the University of Southern California School of Pharmacy, illustrate the new opportunities.

Dr. Locke started her company in 2000, and it focuses on omega-3 fish oil. Ms. Brinton and her staff have been working to find a safe estrogen replacement.

Dr. Locke was a professor of psychiatry for 14 years at Harvard Medical School. She was inspired, she said, by a Harvard study in 1999 that showed the benefits of omega-3 fish oil on mental health.

“Immediately, we got inquiries on the Internet from people who told us they were taking fish oil for mood disorders, autism and Huntington’s disease,” Dr. Locke said in an interview. “They were having difficulty keeping it from going rancid, and the taste made it hard to swallow without gagging.”

A longtime researcher in depression and bipolar illness, she decided to formulate a way to make omega-3 in gel cap form with high levels of eicosapentaenoic acid, or EPA, an active ingredient that the Harvard study showed to have benefits in cases of depression. Even so, many claims for omega-3 have not been proven. Still, Dr. Locke started Omega Natural Science, named the product OmegaBrite and sold it online with marketing efforts directed at physicians.

“We went to psychiatry conventions at first, but then to cardiac and arthritis conventions,” said Dr. Locke, who left Harvard Medical School in 2004 because the business grew and demanded her full attention. Today, she said, Omega Natural Science has 50,000 customers worldwide for boxes of 60 OmegaBrite capsules that sell for $21.99, plus shipping.

“The Internet made the business possible,” Dr. Locke said, because it allows contact with customers around the world and permits a small organization to handle a business that is growing at a compound rate of 64 percent a year.

Omega Natural Science has four employees. “That keeps overhead low,” she said. “I collaborate with a network of vendors. We have the fish oil shipped from South America and have it distilled in Europe. Then

we fly the oil here and test it carefully for our specifications."

The company, however, has reached a turning point. Dr. Locke is reluctant to disclose her private company's annual sales for competitive reasons, but figuring on 50,000 customers for OmegaBrite, sales could be close to $5 million or more if each customer bought several boxes a year.

The overall market for omega-3 supplements in the United States is estimated to be $350 million. Dr. Locke would like to have retail distribution for OmegaBrite through drugstores or specialty stores. Growing larger would require an expansion to 8 to 10 employees, she said.

Ms. Brinton, who has a doctorate in psychobiology and neuropharmacology, has worked for more than 25 years to find ways to combat memory loss and ultimately Alzheimer's disease. She is particularly keen on helping women, who account for 68 percent of the 18 million people worldwide who have been diagnosed with Alzheimer's.

But it is not a simple problem. Ms. Brinton and her staff at the neuroscience laboratory at U.S.C. believe that estrogen therapy for women is crucial to keeping brain cells healthy. A study by the Women's Health Initiative showed that estrogen can be harmful to memory cells, and it has become controversial because of side effects as a possible cause of breast and uterine cancer.

Ms. Brinton believes that her staff has found a safe estrogen replacement therapy by using "select estrogen receptor modulators or phytoserms and neuroserms," she said in an interview. She said the lab was closest to achieving what it believed was a safe therapeutic strategy by using molecules that occurred naturally in the chemistry of the brain — the phytoserms — or a "designer molecule" that she called a neurogen. It would promote the generation of new neurons and regenerate memory circuits in the brains of men as well as women.

Another conclusion of her research, Ms. Brinton said, is that the time of life to give such estrogen replacement therapy is not in older age but in middle age, specifically when women are "perimenopausal" — approaching the change — not postmenopausal. In this way cells are kept healthy and resistant to the "degenerative insults to brain cells" that come with aging, Ms. Brinton said. The scientific work at the neuroscience laboratory is being financed by the National Institutes of Health and the Alzheimer's Drug Discovery Foundation.

The lab's efforts have not concluded, and must go through Food and Drug Administration trials. New financing is needed to take her therapies through the clinical trials, Ms. Brinton said. She estimated that trial costs would approach $1.5 million for each therapy. That is why she is talking to venture capital financiers, with the support of the university's Stevens Institute for Innovation, a three-year effort to find commercial uses for research findings produced at U.S.C.

Paying for clinical trials is not something that venture capital funds, which must earn a high return, do very often. But times are changing; the U.S.C. institute is named for an alumnus, Mark A. Stevens, a venture capitalist at Sequoia Capital in Silicon Valley, who has backed 22 companies in a variety of fields.

"It's important to find the right venture capital backers for sophisticated, long-term research like this," said

Krisztina Holly, the executive director of the institute.

Ms. Brinton, meanwhile, is doing her part by spreading the word in a presentation about her laboratory's findings at the International Conference on Prevention of Dementia, from Saturday to Tuesday in Washington.

People establish their own businesses for many reasons and that was the focus for more than 3,000 members and guests of Indus Entrepreneurs at its annual conference recently in Santa Clara, Calif.

The conference theme was "the new face of entrepreneurship," said Shivbir Grewal, a senior member of the global group of more than 10,000 Indian and Pakistani business managers. The conference topics included "baby boomers, Generation Y, midcareer women, mompreneurs" and others, indicating that people who start companies in the future will be "more diverse by language, age, geography and access to capital than in the past," Mr. Grewal said.

To help such fledgling businesspeople, Indus Entrepreneurs held a seminar on Wednesday on strategies for increasing a young company's revenues, earnings and business value, at the Newport Beach offices of the law firm of Stradling Yocca Carlson & Rauth.

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