Growing Skin and Blood Vessels in Flagstaff

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Flagstaff Business News

A Sedona-based scientist is moving into a Flagstaff facility this month to continue work in wound healing and tissue regeneration. Burt Ensley's company, Protein Genomics, Inc., is leasing a space at NACET, the Northern Arizona Center for Emerging Technologies.

Dr. Ensley says the idea for growing skin and blood vessels originated 25 years ago. "There are fibers in your skin that make up the way your skin holds structure," said Ensley. "Your body synthesizes proteins and weaves them together." Genetic engineering of this process is one of Ensley's key interests because the biopolymers can be used in tissue and organ rejuvenation or repair.

Elastatropin, which is similar to human tropoelastin that gives skin its stretchiness and strength, was created from scratch by Ensley. Today, the product is made using DNA technology in plants, yeast and bacteria. Then it is extracted and used in various products.

But unlike many small biotechnology companies, Ensley already has been generating revenue from consumer use of Elastatropin. It is a key ingredient in DermaLastyl-B, an anti-aging skin care product. Ensley and a business partner brought the creams to market five years ago and have had success, with some annual revenues easily topping the million dollar mark.

But frugality and a smart business plan is only part of what attracted Rob Kellar to join Protein Genomics Inc. in 2008. The Ph.D. scientist and adjunct faculty member at Northern Arizona University says he liked Ensley's technology. He appreciates the process of developing human proteins through recombinant DNA techniques, as opposed to using embryonic or cadaver tissues.

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While many biotechnology and drug companies operate at a loss, Protein Genomics Inc. has been buoyed by the skin care line. "We have an incredible luxury of not racing against the clock," said Ensley. The company is able to divert revenues to pay for tests and studies required by the FDA.

Dr. Kellar is Vice President for Research and Development at Protein Genomics Inc. He says the wound healing work they will be doing is much more than repairing skin. Kellar says regenerative medicine encompasses growing new blood vessels, replacing gaping wounds and helping the body's healing response in many disease processes.

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Moving into NACET is a significant step for Protein Genomics Inc., which has operated virtually until now. The new facility will serve several functions, including a more formal laboratory and office setup. In the future, Burt Ensley says they will consider moving into an approximately 6,000 square foot facility where they could continue their science, research and changing the world of wound healing and regenerative medicine. **FBN**