Nicolaas Duneas

Altis Biologics

“ I saw an opportunity to transform the orthopeic industry and invigorate South Africa biotech. ”

COUNTRY	South Africa
INDUSTRY	Healthcare
EMPLOYEES	4
YEAR SELECTED	2008
PARTNER	Nuno Pires
WEBSITE	www.altisbiologics.com

COMPANY SNAPSHOT

Altis Biologics is taking its place at the forefront of biomedicine and is building a world class company that researches, develops, and markets the highest quality tissue engineering products used in regenerative medicine of bone and other tissues. The company has pioneered a disruptive technology for the orthopedic industry and is well on its way to launching the world's first bone-graft product derived from porcine (pig) tissue. Founded in 2000, the firm has achieved early success in a field dominated by international medical powerhouses and has the potential to invigorate the biotech space in South Africa.

Competing, and succeeding, in a field dominated by large businesses is a testament to Nic's scientific prowess and Nuno's business acumen. Together, the foudners have developed Nic's breakthrough discoveries into both a proprietary technology platform, available for license, and a range of patented products that are in various stages of regulatory approval. In a real way, Altis has the capability to change the way that surgeons repair the human skeleton. And as their company makes inroads into a global market valued at over US$10 billion Nic and Nuno are proving that innovation can come from unlikely places.

Nic sowed the seeds for Altis while pursuing his PhD in Orthopedic Surgery at South Africa's University of the Witwatersrand. Having already attained various degrees (BSc in Chemistry, MSc in Biochemistry, and an MBA) from the same institution, Nic had the ambition and know-how to conduct research on bone regeneration in primates. Naturally occurring in skeletal structures, bone morphogenetic proteins (BMPs) were the talk of orthopedics, and Nic was studying how this family of growth factors signaled bone regeneration. The Ph.D. work culminated in a remarkable discovery: in the body's organic healing process, multiple BMPs worked together synergistically to achieve rapid and more effective bone growth.

Nic's discovery heralded much attention in the international medical community. The interest was driven by genuine market need: millions of people each year suffer pain and disability as a result of osteoporosis, broken bones, and other bone trauma. The most common surgery used to treat these patients, called bone grafting, has traditionally involved the implant of a bone product either harvested from the patient's own hip or derived from human donor bone sourced through a tissue bank. Nic's discovery of synergistic BMPs suggested that these operations could be done more efficiently if the bone graft implant better mimicked the body's natural process of inducing bone growth.

In 2001, Nic perfected a process for extracting high yields of BMP from donor bone. However, while Nic was leading Altis through the patent process, the company had to face a serious reality: taking a single biotech product to market required extremely deep pockets; commercializing a technology with applications for multiple products was simply not a one man job. Enter Nuno Pires – a business developer whose expertise lay in start-ups and raising capital. With degrees in Electrical Engineering and Marketing Management, as well as an MBA, Nuno and Nic shared an entrepreneurial timeline: In 1998, the same year that Nic discovered growth factor synergy, Nuno left his job and launched Helios Oil Refinery, a fully automated edible oil refinery. Nuno found success with Helios, and went on to start a strategic consulting business for high-tech companies. When Nic approached Nuno to create a business strategy around the high yield BMP extraction IP, Nuno agreed.

As partners, Nic and Nuno have achieved several significant milestones with Altis. With its unique niche know-how and incredible scientific discovery, Altis is positioned to be a major player in the Biomedicine market in the coming years.

ENDEAVOR AND ALTIS BIOLOGICS

In 2009, the Entrepreneurs received support from INSEAD MBAs in working on a new business plan. In 2010, the Entrepreneurs were accepted to the Mentor Capital Program. They have also benefited from the global G-Lab program and key introductions.