



## Fact Sheet, August 2009

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### CHALLENGE

Breast cancer affects 1 in 9 North American women in their lifetime. Current drug development techniques take ten or more years and hundreds of millions of dollars to produce new medicines. Biological knowledge isn't being translated to treatments fast enough.

### OVERVIEW

Pink Army is creating a new drug development pipeline able to produce advanced therapeutics customized for individual women with breast cancer in record time at low cost. A cooperative business model speeds innovation through open sharing innovation and eliminates the need for venture funding. Pink Army was incorporated in March 2009 in Edmonton, Alberta, Canada. It operates as a virtual company, with R&D operations coordinated through its website.

### TECHNOLOGY

The core technology is synthetic biology, a platform for high-speed genetic engineering. An open source therapeutic design engine is coupled with automated DNA synthesis and personal-scale manufacturing processes to make person-specific bio-medicines. The first therapeutic Pink Army will develop will be a cancer-specific virus. Other therapies are also possible, including RNAi constructs, aptamers, cancer vaccines, small proteins, viruses, bacteria, or other engineered cells.

Each synthetic therapeutic will be rigorously tested, openly reviewed, submitted to the FDA for approval, and used only in the person for which was designed, resulting in a single person (n=1) clinical trial. Personalized treatments are expected to be specific, safe, and available for use clinically much faster than those made with traditional development techniques -- a revolution in personalized medicine.

### COOPERATIVE MODEL

Pink Army is the world's first cooperative biotechnology, allowing it to focus on results, not returns. It is member-owned and democratically run with socially-minded community ideals. Anyone can become a member of the cooperative for \$20 CDN.

### TEAM

Founder and managing director Andrew Hessel has broad experience in academic science, the biotechnology industry, synthetic biology, and laboratory operations. He will focus on promoting the cooperative and connecting the enterprise to global leaders in research, development, and engineering.

The nine member board of directors also includes John Carlson and Jayson Tymko (founding directors) and others that bring a powerful network of business, technology, health, community, and law experience to the cooperative. The cooperative's open structure allows academic and corporate expertise to easily connect and work with the enterprise.

### PROJECTIONS

The initial phase of operations is meant to increase public, academic, regulatory, and industry awareness of the cooperative, raise operating capital through membership share sales, install leadership in key development areas, organize and engage the cooperative community, and establish working relationships with key partners and stakeholders.

The creation of Pink Army's development pipeline and the design, manufacture, testing, and clinical use of its inaugural therapeutic is expected to take 24-36 months and require funds of about \$1 - 2 million CDN. Subsequent development times and costs should fall significantly, facilitating expansion of the pipeline and its outputs.