

# “Change conventional wisdom...”

## Bio-economy Career Profile

**Position:** Bio-Strategy Consultant

**Name:** Andrew Hessel

**Company:** Alberta Ingenuity Fund (AIF)

**Salary Range:** \$120,000 and up per year

## What I do:

I promote synthetic technology in Alberta and beyond. AIF is a \$1 billion fund that supports and encourages development in the areas of science, technology, and engineering. I focus my efforts in digital biology, founded on machines that print and assemble DNA code. The new technology allows software-based DNA manipulation to write new genetic programs easily for a broad range of applications.

I work at three different levels for AIF in promoting the new technologies and by creating greater awareness of their applications. First, I develop outreach programs designed for students from high school to post-grad. Second, I work with universities to create courses and degree programs in digital genetic engineering. Finally, I work to raise awareness about the technology to science- funding and industry groups about the changing dynamics and economics of genetic engineering.

## What education and skills do candidates need for this position?

My educational background includes a Bachelor of Cellular, Molecular and Microbial Biology, a Masters in Bacterial Genomics, and years of networking with leading scientists and engineers.



You definitely require a strong scientific foundation combined with a broader understanding. Strong computer skills and experience using software tools are also required, as digital information and communication are key to modern life science. Social networking is becoming more important, as people working in digital biology need to

collaborate and share data with others from around the world. An understanding of business and the use of intellectual property are crucial assets, since commercialization of technology is necessary for development and sustainable research funding.

It's essential to have a clear vision and the ability to communicate it effectively. You need to challenge convention and be willing to be disruptive at times. Many industries and their corporations have an institutional inertia that sometimes does not allow them to look beyond their organizations or rapidly commit to change. As a bio-strategy consultant, you need to always be looking for ways to improve what is already out there, and to re-evaluate and be willing to change conventional wisdom. A certain type of stubbornness is needed.

Don't be afraid to break out of your comfort zone and look in some very different directions, whether it's an MBA, finance, or public speaking.

## What are the best parts of your job?

The best thing about my job is that I connect with brilliant and empowered people from around the world, who look toward the future for the betterment of all. I work with people from academia, business, politics, and finance, who are interested in making fundamental change to existing systems and improving them.