Dr. Bill Andrews’ Track Record

At Codon Corporation:

1.      Human Growth Hormone (HGH) – Genentech’s HGH caused immune reactions in Dwarf children that were treated with it. Genentech contracted Codon Corporation, where Bill worked at the time, to solve the problem and Codon put Bill in charge. Bill determined that Genentech’s problem was that the HGH that they were producing had an extra amino acid (a Formyl-Methionine) on the front end of it, and it was this amino acid that was causing the immune reactions. So, Bill created a signal sequence suitable for E. coli on the front end of HGH designed to have the signal cleaved off during secretion into the periplasmic space resulting in the secreted product being authentic HGH without the Formyl-Methionine. This HGH did not cause immune responses and Genentech then marketed this version of HGH.

2.      Tissue Plasminogen Activator (tPA) – Again, Codon was contracted by Genentech and again Bill was put in charge (after Genentech and another large team at Codon failed to pull it off).  Bill cloned the tPA gene and made 100’s of genetic modifications in tPA to improve solubility, stability, and activity. Bill did the mutagenesis directly in the mammalian expression plasmid, using a protocol that he invented and patented, so that the 100’s of gene variants could be assayed directly. Every ambulance now carries tPA to quickly treat heart attack victims. tPA breaks up blood clots.

3.      Osteo Inductive Factor (OIF) – Codon was contracted by Collagen Corporation, and again, Codon put Bill in charge. Bill discovered the OIF gene and created expression vectors to express it. OIF’s name later got changed by Collagen Corp to BMPxxx. It induced bone growth. It became Collagen’s lead treatment for Osteoporosis.

4.      Erythropoietin (EPO) – Codon was contracted by McDonnell Douglas and Amgen. And Bill was put in charge. Bill cloned the EPO gene, expressed it, and McDonnell Douglas sent it up on the space shuttle to purify it using their “Electrophoresis Operations in Space” (EOS) program. It worked perfectly. Unfortunately, two shuttles later was the Challenger Disaster and Amgen did not continue with McDonnell Douglas after that. But Amgen did market EPO and that is the drug that Lance Armstrong used to cheat. EPO stimulates the production of red blood cells.

Men’s Journal did an article on Bill several years later identifying Bill as the key person responsible for inventing the two top illegal sports enhancing drugs (HGH and EPO) that have ever been invented. Of course, Bill’s only intentions were to make baby dwarfs grow tall and anemic people to have more energy. The sports enhancing qualities of the two products were a complete surprise to Bill, Genentech, Amgen, and Codon.

At a celebration at Codon, to celebrate Bill’s 10-year anniversary with the company, the president announced on stage that Bill had single handedly saved the company three times. Codon Corporation was soon afterwards acquired by Schering AG in Berlin largely due to the successes that Bill created, and Codon subsequently changed its name to Berlex Biosciences as a result of the acquisition.

At Berlex Biosciences:

5.      BetaSeron – In collaboration with Chiron Corporation, Bill developed an improved way to express BetaSeron in E. coli. Before then the system that Chiron was working with produced so little BetaSeron that Chiron had to have a lottery for MS patients to get access to it. BetaSeron was the first drug ever invented for treating Multiple Sclerosis.

At Geron Corporation:

6.      Telomerase – Geron recruited Bill because they had been unsuccessful at discovering telomerase even though they had already contracted with several outside teams as well as an internal team to get the job done. And as a result, Geron was running out of funding. Geron was well aware of Bill’s passion to cure aging and Bill claimed that he would have telomerase discovered in 3 months. So, Geron put Bill as the head of the research team at Geron to discover telomerase. Bill’s team discovered telomerase 3 months and 17 days later. And, it was actually Bill, himself, that made the discovery. Prior to that, the only thing known about telomerase was the RNA component from the pond scum organism called Tetrahymena discovered 10 years earlier. But it was so unlike the human RNA component that no one else was able to use the Tetrahymena RNA to discover the human RNA component. So, Bill’s team started from ground zero. Bill and his team discovered both the human RNA and human Protein components, expressed both components, and showed that they could reverse aging in human cells. Bill’s team also produced the anti-sense of the RNA component and showed that it would kill every cancer cell tested by causing the cancer cells to essentially die of accelerated aging.

Bill was later selected as **National Inventor of the Year** in the U.S. for his cancer research at Codon, Berlex, and Geron.

7.      Imetelstat – While still working at Geron Corporation, Bill invented an anti-sense oligo that he called GRN163 to inhibit telomerase activity in cancer cells. Bill showed that GRN163 would kill every cancer cell and have zero effect on non-cancer cells. When Geron started clinical studies of GRN163, they changed its name to Imetelstat. Imetelstat recently received FDA approval for treating cancer and the drugs name was again changed to Rytelo.

Because the investors in Geron expected a quicker Return on Investment (ROI) if Geron pursued just cancer research instead of anti-aging research, Geron asked all the scientists to quit working on aging (even though the word Geron is short for “Gerontology”) and focus solely on cancer researcch. So, with Geron’s blessing, Bill founded Sierra Sciences to pursue the aging research. Over the next 6-8 years Bill raised $33 million from 50+ investors.

At Sierra Sciences:

8.         Telomerase Inducers and Telomerase Delivery - Bill and his team made multiple discoveries regarding telomeres and telomerase, despite investors constantly redirecting Bill and his team on detours to pursue quick ROI projects. Because of all of the successes that Bill and his team had on the quick ROI projects the investors suddenly decided that it would be a GREAT time to sell the company, along with all of Bill’s intellectual property, for a profit. Fortunately, one or the investors, who was more interested in a cure for aging than just making profits, orchestrated a take-over leaving Bill with 100% ownership and control of Sierra Sciences.

After re-gaining control of Sierra Sciences, Bill finally was able to pursue robotic drug screening, medicinal chemistry, and gene therapy using the remaining $3 million in the bank. As a result, his team screened 200,000 random chemicals, 300,000 chemicals that his team designed, and 10,000 natural products, to discover multiple pharmaceuticals and nutraceuticals that induce expression of telomerase. Bill and his team also developed a very powerful gene therapy to deliver telomerase to human cells.

The most potent pharmaceutical, called C0314818 (the 314,818th chemical that Bill and his team tested), is now marketed by companies OneTruth818 and Defytime who pay Sierra Sciences royalties from their profits. Bill’s team also discovered several nutraceuticals that induce production of telomerase. These were originally marketed by Isagenix and Vasayo, who paid Sierra Sciences royalties from their profits. But recently, the nutraceutical products were taken over by Touchstone Essentials where Bill serves as a scientific advisor. The top telomerase gene therapy that Bill and his team invented is the gene therapy that Elizabeth Parrish treated herself with in 2015 that made headline news. The Gene Therapy was then acquired by Libella Gene Therapeutics. Bill now serves as President of Libella and is seeking funding to conduct clinical studies.

C0314818 has a potency that is about 16% of what is needed to reverse aging. Sierra Sciences expects to find a chemical or nutraceutical that induces enough telomerase to reverse aging within 1-3 years with the appropriate funding that Sierra Sciences is presently seeking.

9. Multiple Product Opportunities – Bill and his team at Sierra Sciences have invented, designed, assembled, and/or discovered multiple product opportunities for Go-To-Market partners, in the course of doing its research. These include diagnostics and treatments for aging and cancer, for humans and their pets. Since Bill discovered the protocol for producing HGH and the protocol was never patented (because it was considered an Orphan Drug at the time), that protocol is also available for any Go-To-Market partner that is interested.

These opportunities have been reviewed in the Sierra Holdings Business Plan. The Sierra Holdings Business Plan is the funding instrument that Sierra Sciences is presently using to fund its research, as an alternative to traditional investors.