



# Rhode Island's Knowledge Economy

## *Health and Life Sciences*



According to the Milken Institute, an independent think tank, Rhode Island's health and life science sector is going to triple by 2014. The analysts attribute Rhode Island's success to three key factors: location, resources and talent.

Providence and Rhode Island are home to a diverse and collaborative peer cluster of life science institutions and companies that create a hub of cutting-edge research, undergraduate and graduate education, modern workforce development and economic growth in RI's biotechnology, health and life sciences sectors.

Today, more than 37,000 people are employed in the state's health care and life sciences sector, spread across nearly 1,400 businesses.

Fast Facts:

- *Rhode Island has 37,000 jobs in the health and life sciences sector spread across nearly 1,400 businesses including major hospitals and health care facilities.*

Institutional collaboration:

*Center for Biotechnology and Life Sciences at the University of Rhode Island  
Brown Medical School*

## *Health and Life Sciences Success Stories*



Originally founded in 1980 as AMGen (Applied Molecular Genetics), Amgen pioneered the development of novel and innovative products based on advances in recombinant DNA and molecular biology. Now, Amgen is a leading human therapeutics company in the biotechnology industry.

A Fortune 500 company, Amgen's business has expanded to serve patients around the world in supportive cancer care and the treatment of anemia, rheumatoid arthritis and other autoimmune diseases such as psoriatic arthritis and ankylosing spondylitis. Amgen continues to sustain a culture rooted in biotechnology entrepreneurialism and innovation. As a science-based and patient-focused organization, Amgen will follow the science wherever it may lead, to best treat serious illness. The company's success depends on superior scientific innovation, integrity and continuous improvement in all aspects of its business through the application of the scientific method.

Not only has Amgen focused on advancing science to dramatically improve people's lives, the company has also earned a well-deserved reputation for being a model corporate citizen by conducting itself in the highest ethical manner. Amgen strives to serve patients by transforming the promise of science and biotechnology into therapies that have the power to restore health or even save lives. In everything Amgen does, it aims to fulfill that mission.



Neurotech USA, a privately-held biotech company located in Lincoln, has developed a pharmacological product to treat various chronic retinal diseases. The company's main product, NT-501, applies the company's Encapsulated Cell Technology (ECT) which allows for a consistent flow of state-of-the-art retinal medication to the back of the eye.

The company has already completed a successful Phase I trial of NT-501 with the National Eye Institute (NEI) in Bethesda, Maryland. NEI tested the safety and tolerability of NT-501 on 10 patients with late-stage retinitis pigmentosa (RP) for a six-month period.

Not only was the product considered tolerable and safe by these patients, but some patients actually experienced improvement in their visual acuity score. "Of the seven patients in the study with visual acuity that was able to be evaluated, three had some improvement in their vision," says Danse. "This was very encouraging because the deterioration of the patients' vision was so far advanced."

The next state of Neurotech USA's clinical development will evaluate the safety and efficacy of the implant on patients with late RP, early RP and dry AMD.