

The Center for Biotechnology is an NIH-designated Research, Evaluation and Commercialization Hub (REACH), one of just three in the country. It represents a partnership between the bioscience industry, Stony Brook University, Cold Spring Harbor Laboratory, the Feinstein Institute for Biomedical Research, and Brookhaven National Laboratory (collectively the Long Island Bioscience Hub) to commercialize biomedical innovations, foster company formation, and accelerate bioscience industry growth.



Recent Highlights of Company Formation



Commercializing TRAVERSE novel drug candidates **BIOSCIENCES** for the treatment of inflammatory diseases

and related conditions affecting humans and companion animals. Raised \$2M in 2016.

Marvel Genomics

Using high throughput, cost-effective method of identifying de novo and inherited copy number variants in Autism Spectrum Disorders and other diseases. SBIR/ STTR fuding pending.



Expanding the commercial distribution and research use of short hairpin RNA (shNA), a versatile biomedical

research and drug discovery tool invented at Cold Spring Harbor Laboratory.



Developing Chimeric Antigen Receptor (CAR) engineered cells that target multiple types of cancer with very poor prognoses

and clear unmet medical need.

MicroRid Technologies

Developing small-molecule antifungal drugs. SBIR/STTR fuding pending.



Developing a cancer therapeutic for HER2positive breast cancer. Raised \$2M in 2016.

PRESIGHT TECHNOLOGIES INC.

Commercializing a novel needle guide that optimizes needle placement during fluoroscopic procedures. Product now available for purchase, sales underway.



Developing therapeutic treatments for neurological rare diseases such as Charcot-Marie-Tooth

Disease, Rett Syndrome, and Fragile X syndrome. SBIR/STTR fuding pending.



Developing diagnostic biomarkers to guide the most effective therapeutic approach for cancer treatment.

Sales of research producs ongoing.

ZHANGEN TECHNOLOGIES

Developing a small-molecue therapeutic treatment for Myelodysplastic syndromes (MDS).

INNOVATION HIGHLIGHTS

Antiviral Therapeutic with Zika, HIV applications

- Proposed new therapeutic is a broad spectrum antiviral for the treatment of HIV, Zika, Ebola, and other viruses in similar classes.
- Early tests indicate lower side effects and less chance of developing resistance.

Breast Cancer Therapy

- More than 50,000 women in the United States are diagnosed with Triple Negative Breast Cancer (TNBC) each year.
- TNBC is an agressive and difficult-to-cure type of cancer.
- New therapy targets cancer stem cells resulting in improved outcomes for women with TNBC.

Glioblastoma Therapy

- Glioblastoma is one of the most deadly cancers, median survival rate of 15 months.
- Proposed recombinant poliovirus treatment could significantly increase overall survival rates.

Colon Cancer Therapeutic

- Colorectal cancer is the third leading cause of cancer mortality in both men and women in the U.S. with more than 50,000 deaths every year
- Proposed drug would suppresses colon cancer cell proliferation, reverse chemoresistance.

Novel Tuberculosis (TB) Therapy

- TB is estimated to infect 30% of the world's population.
- A significant risk factor for TB is service in the United States Armed Services.
- New drug would also treat drug-resistant TB patients.

Brain Tumor Surgery Device

- Conventional radiation therapy for brain tumors may produce severe cognitive deficits, particularly in children.
- New apparatus uses old X-ray technology for safer, more cost effective surgery.
- Licensing discussion in progress.

Non-Invasive Therapy to treat Osteoarthritis (OA)

- 28 million Americans have Osteoarthritis.
- Treatment for arthritis costs approximately \$128 billion per year to the U.S. economy.
- New ultrasound device would provide a safe, non-invasive, low-cost treatment.

Immunotherapy Antifungal

- New therapeutic stimulates immune system to attack systemic fungal infections.
- · Potential for less toxic effects and increased protection against formation of resistance

Bioinformatics of the Immune System

- Profiling the human immune system with machine learning algorithms and bioinformatics software
- Allows monitoring of treatment of immunodeficiency, lymphoma, and allergic response