

BIOINFORMATICS EDITION

# CIO

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### Company:

Celbridge Science

### Key Person:

Patrick R. Hogan  
CEO

### Description:

Celbridge Science helps organization harness their data analytics capability by combining AI and machine learning technology with organizational change

### Website:

celbridgescience.com

## Top 10 Bioinformatics Solution Providers - 2019

**B**ioinformatics has become a powerful component in the field of science, and its induction to the global industry has marked a turning point in many areas, such as healthcare, gene technology, and medicine.

With various applications in the areas of biotechnology, pharmaceuticals, and medicine, among many others, bioinformatics solutions provide scientists with the instruments needed to analyze and handle large amounts of information. As the sector becomes more data-driven, bioinformatics will facilitate the analysis and interpretation of biological data from heterogeneous sources. Bioinformatics solutions will also assist businesses to automate their biological data integration, creation of algorithms, and bioinformatics pipeline analysis.

In this scenario, it is important for the companies to know the nature of the current bioinformatics industry, its key players, as well as the various business opportunities in the market. Many solution providers operating within the bioinformatics industry provide robust software packages to analyze and interpret biological data, while some provide instrumentation and supplies for various biological analysis and researches.

With the growing number of solution providers in the bioinformatics domain, companies often find it challenging to select the best provider that suits their requirements. To help companies in this endeavor, a distinguished selection panel, comprising CEOs, CIOs, CTOs, industry analysts and the editorial board of CIO Applications has selected top ten bioinformatics solution providers that exhibit competence in delivering best-in-class solutions.

We present to you CIO Applications' "Top 10 Bioinformatics Solution Providers- 2019."

# Celbridge Science

## Enhancing Informatics by Harnessing Data Analytics

**D**rug discovery and development is a complex, high risk, time-consuming, yet potentially rewarding process. The development of a new drug requires technological expertise, human resources, and huge capital investment. A strict adherence to regulations on testing and manufacturing standards is mandatory before a new drug can be brought to market for use on the general population. In fact, the product will sometimes fail to reach the market and all that work is laid away. All these factors coalesce and add to the increased cost of research and development. However, research shows that innovative organizations can optimize their chances of success for clinical candidates through effective use of data repositories. Therefore, efficient data storage and analysis of datasets holds the key to accelerating the drug development processes.

By addressing these critical issues and bringing new analytic capabilities to research Celbridge Science has designed an analytical toolset to support and continuously evolve alongside the drug development process. It allows enterprises to get a clear strategy of how to use data and analytics to compete and helps them master the deployment of the right technology architecture and capabilities.

In an interview with CIO Applications, Patrick R. Hogan, CEO of Celbridge Science, shares his insights into the firm's aptness in offering an industry-standard tool to the market for accelerating drug development process.

### Can you give us an overview of Celbridge Science?

Celbridge Science is a pioneer in delivering analytics to facilitate the scientific process. As a leader in the In silico research arena Celbridge provides solutions that are specifically designed to accelerate the drug discovery effort of its clients, in particular in the area

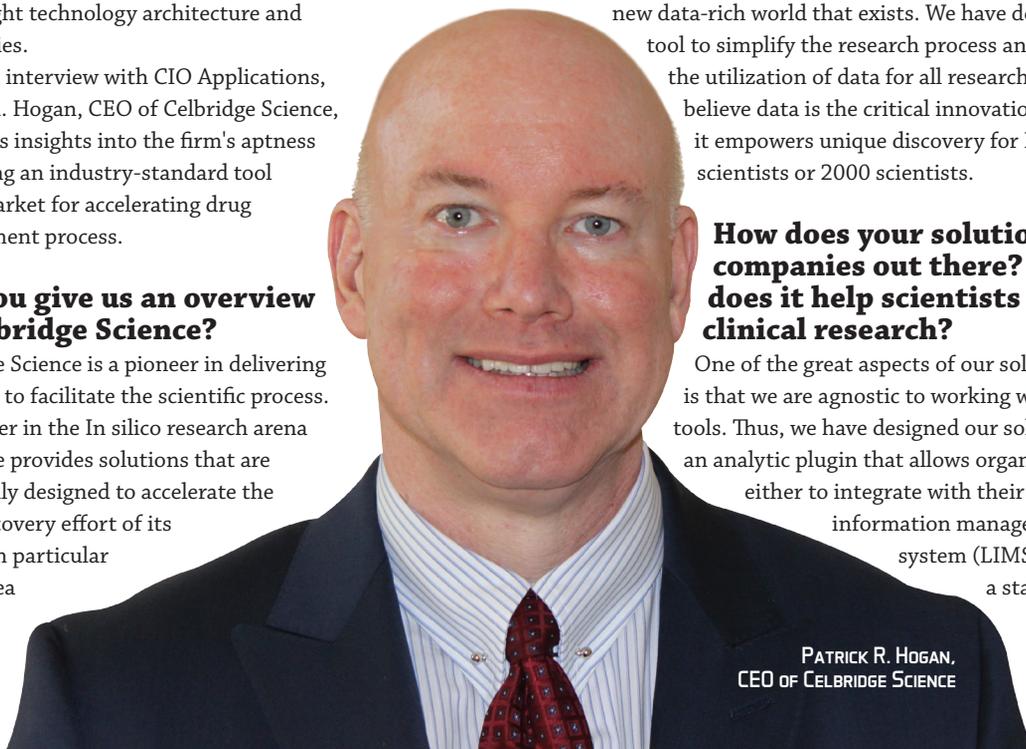
of genomics. By creating a perturbation in the way experimentation is done, we ensure that our clients can transform dramatically the scientific process and allow them to be agile in their pursuit of insight.

### Is Your Company Adapting Fast Enough to Thrive in an Increasingly crowded genomics Industry?

In today's data-rich scientific environment, biology is evolving into the new physics. The inspirations behind successful research in biology and medicine depends upon increasing the mathematical/analytic competencies of the scientist and the computation power of their enterprise. The advantage of scientific firms utilizing AI & Big Data is the acceleration of discovery and the ability to innovate quickly. Celbridge Science takes an AI and machine-learning-based approach to provide clients with a kind of coalescence of data and science, which is a business necessity in the rapidly changing bioinformatics and genomics world. Most importantly, we assist our clients in this transition by increasing their focus on analytics. We help scientists to broaden their skillset so that they can take advantage of the new data-rich world that exists. We have designed our tool to simplify the research process and accelerate the utilization of data for all researchers. We believe data is the critical innovation equalizer, it empowers unique discovery for Labs with 2 scientists or 2000 scientists.

### How does your solution help companies out there? How does it help scientists in their clinical research?

One of the great aspects of our solution set is that we are agnostic to working with other tools. Thus, we have designed our solution as an analytic plugin that allows organizations either to integrate with their laboratory information management system (LIMS) or to be a standalone



PATRICK R. HOGAN,  
CEO OF CELBRIDGE SCIENCE

analytic engine. Technology & analytics has become an integral part of the entire scientific process. The Celbridge Science solution helps significantly organizations who are looking forward to conducting their experimentation in a new way and completely transform themselves to use the technology of the 21st century. This kind of transformation helps companies to reduce their experimentation costs and allows scientists to increase their speed of discovery. Furthermore, our tool is integrated with many electronic lab notebooks, which allows for a rapid distilment of information that's being developed and then best of all for this insight to be quickly published. This eliminates many cycles of the trial and error process. Our goal is always to disseminate the research more effectively in a connected environment.

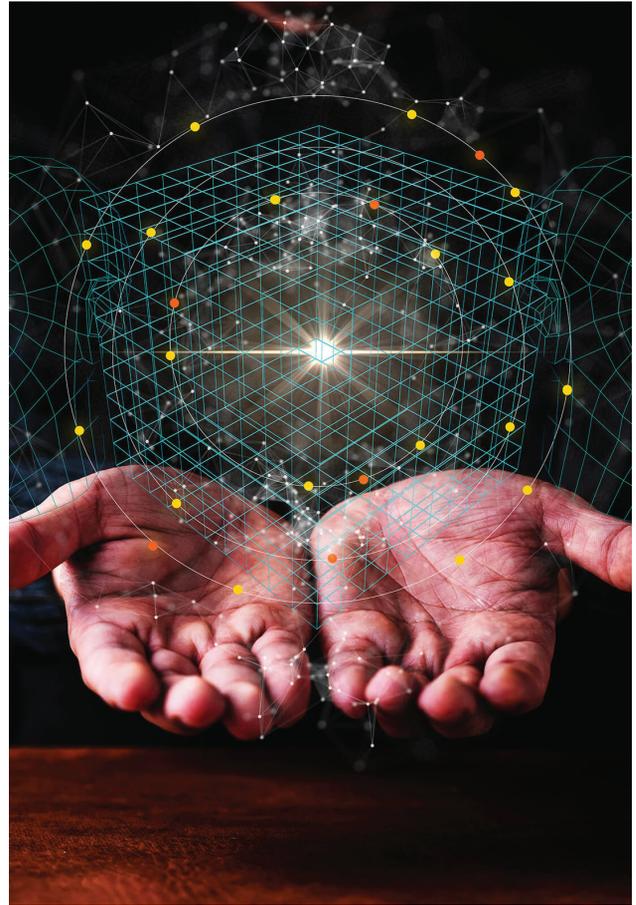
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### **Could you please cite a case study on how you have enabled clients to overcome hurdles and attain desired outcomes?**

A large scientific research company was interested in maximizing their assets of scientists and staff who were steeped in the historical research process. The main challenge the company was facing was how to provide an analytic solution set that could be quickly used by the scientists and then could be leveraged to accelerate a quicker pace of scientific discovery despite an environment of hostility to process change. In this unique setting, we came in and introduced our data tool, analytic training while simultaneously executing a deep change management effort to integrate analytic automation into the organization's scientific process. This analytic process transformation has assisted them in achieving tremendous ROI and best of all created an environment of frictionless research.

### **What are the factors that differentiate Celbridge Science in the market place?**

Given the complexities around drug discovery, scientists face many challenges executing innovative research. Our Data Tools, In Silico Analytic capabilities & Change Management competencies give us a massive business advantage to



deliver transformative capabilities to our clients. These capabilities allow the scientists to conduct their research in an environment supported by powerful analytics and data, ensuring that their new discoveries can be brought to light quicker and more efficiently. Being an innovator of the scientific process, we help research organizations achieve their mission by transforming their people, process and technology.

### **Where do you see Celbridge Science in the near future?**

Celbridge Science not only helps organizations in accelerating their scientific process but also to maximize their business capabilities. We will continue to help organizations by acting as a catalyst of change for data competency. Along with this, we are looking to meet expansion opportunities globally to grow our business in both Europe and the Far East. Celbridge Science's future success hinges upon our ability to continue leveraging Artificial Intelligence to derive meaningful results to enable science to achieve breakthroughs in next-generation therapeutics. **CA**