

# Accelerated Cure Project for MS

January  
2018



*Accelerating research towards a  
cure for multiple sclerosis*

## Driving MS Research Forward with BC Platforms

The ACP Repository was developed to be a readily available source of biospecimens and associated patient-reported and clinical information for the research community. Working with a network of 10 leading neurology clinics throughout the US, samples and data were collected from over 3,200 participants, with and without demyelinating disease. To date, Repository samples and data have been used by investigators in over 100 studies in Multiple Sclerosis, Transverse Myelitis, Neuromyelitis Optica, and Clinically Isolated Syndrome. These studies have been conducted on a wide variety of topics, including genetics, identifying biomarkers to improve diagnosis, immune system responses, and disease risk. Other studies have focused on the explanation of how treatments under development actually work within the body.

Researchers who use samples from the ACP Repository must agree to return their research results back to ACP for sharing with other researchers and for inclusion in the Repository database. The diverse collection of genomic and other research data generated by scientists using ACP Repository samples can be analyzed in its entirety, enabling the ACP Repository to be a rich “open source” resource that can be mined by researchers. To date, the challenge in realizing this vision for the ACP Repository has been finding a data management system that can be used to store and curate all of these diverse data sets in an easily accessible and searchable manner.



[BC Platforms](#) is a world leader in providing genomic data management and analysis solutions for large-scale collaborative research projects, whose expertise is in integrating clinical phenotype<sup>1</sup> data (such as data collected for the ACP Repository) with genetic data. Founded in 1997, BC Platforms has operations around the world with its headquarters in Switzerland, research and development operations in Finland, and sales and marketing offices in London, Boston, and Vancouver. Their HIPAA compliant data management platform offers flexible data integration, data security, and scalability. With it, clinicians and researchers are able to easily combine and use datasets, perform analyses, and share their results in a secure manner. BC Platforms has also established a global network, [BCRQUEST.COM](#), which combines the datasets of biobanks around the world. This facilitates collaboration and makes it easy to determine sample/data availability across biobanks.

The Accelerated Cure Project will be using BC Platforms' data management system and [BCRQUEST.COM](#) to manage and grow its Repository. This represents a major step toward realizing the vision for the ACP Repository, and will further facilitate collaboration between ACP and researchers. All collected and returned data will be integrated into one easily accessible data management system, which will allow the analysis of combined returned research data along with the information collected from Repository participants and the information provided by clinicians. This information will further assist researchers in understanding what factors may cause or influence multiple sclerosis and other demyelinating disorders.

The research results flowing into the database are anticipated to increase dramatically as ACP initiates new projects. These include the planned sequencing of the full exome of all of the patient DNA samples. Exome sequencing of all of the ACP Repository DNA samples will result in a massive amount of data. The BC Platforms system is ready, willing, and able to handle the anticipated large quantity of data. The BC Platforms data management system will also allow ACP to streamline the process of selecting samples based on investigators' specific research requirements. Being able to service more requests for Repository samples means more studies can be done -- accelerating the research needed for better treatments, diagnoses, and cures.



When asked about the collaboration between ACP and BC Platforms, Robert McBurney, CEO of the Accelerated Cure Project, said “MS affects at least 2.3 million people worldwide. BC Platforms’ technology provides an efficient way to manage the growth of our data repository, increases its visibility to the research community, and offers a simple way for researchers to collaborate and test hypotheses, especially those involving genetic data. As a result of this relationship with BC Platforms, ACP can have an even bigger impact in driving research that will improve the health, healthcare and quality of life of people affected by MS.”

<sup>1</sup> The observable physical characteristics of an individual resulting from the interaction of its genotype with the environment.