



# ACP Repository

The ACP Repository is an open-access resource of blood-derived samples and data from over 3200 subjects for the study of MS and other conditions.

The goals of the ACP Repository are to:

- (1) Provide samples and data to investigators worldwide who are studying the causes, mechanisms, and other aspects of demyelinating disease.
- (2) Accelerate research by allowing scientists to launch studies quickly without a time-consuming sample-collection step.
- (3) Create an open-access, multidisciplinary database of experimental results from Repository-based studies that can reveal new insights about MS and other demyelinating diseases.



Photo credit Amanda Mills

The ACP Repository is a collection of blood-derived biological samples and data from people with MS and other demyelinating diseases, as well as from control subjects.

Through the Repository, we can provide researchers with biosamples and data quickly and at minimal cost so that talented scientists can devote their efforts to their novel research instead of the laborious process of sample collection. The Repository is an open-access resource, meaning that samples and data are available to all researchers regardless of institution or location. Our primary condition for using the biospecimens is that new results from these research studies must be returned to the Repository Database for the future benefit of all researchers.

## Repository Details

- Over 3,200 subjects were enrolled in the repository at 10 MS clinics located across the United States.
- Subjects' diagnoses include:
  - Multiple sclerosis
  - Clinically isolated syndrome
  - Transverse myelitis
  - Neuromyelitis optica
  - Acute disseminated encephalomyelitis
  - Optic neuritis
  - Controls who have no history of demyelinating disease are also enrolled.

### Enrolling sites:

Barrow Neurological Institute  
Beth Israel Deaconess Medical Center  
Johns Hopkins School of Medicine  
Ohio State University Medical Center  
Shepherd Center Inc.  
Stanford University  
Tisch MS Research Center of New York  
University of Colorado  
University of Massachusetts Medical School  
University of Texas Southwestern Medical Center

- Samples include aliquots of DNA, RNA (Paxgene tubes), serum, plasma, and cryopreserved PBMCs.
- Accompanying each sample are approximately 40 pages of subject-reported information including clinical, medical, and epidemiological data, and neurologist documentation of the results of diagnostic and monitoring tests.
- Samples are processed on site and at a central facility, and stored in liquid nitrogen and –80°C mechanical freezers.

## Requesting Samples and Data

Scientists request samples and data by filling out a proposal form and sending it to the Accelerated Cure Project. Proposals are reviewed internally and by an Oversight Committee for scientific validity, alignment with repository goals, and other characteristics. Scientists whose proposals are approved receive samples and data upon execution of a materials transfer agreement. Sample and data recipients agree to return their data sets to the Accelerated Cure Project, after a grace period for publishing and securing IP rights if desired, so that this data can be combined and analyzed with previous findings, potentially leading to new understanding of MS and the other demyelinating diseases.

## Impact of the ACP Repository

To date, over 80 requests for samples and data have been approved. Through our data return policy, more than 30 studies have submitted data sets to our results database, encompassing nearly 700 million data points all together. These data sets contain the results of genetic/genomic analyses (GWAS and candidate gene), gene expression studies including microarray analyses, proteomic screens, viral/bacterial detection studies, and more. All data sets are available to share with the scientific community on an open-access basis.

### Organizations using ACP Repository samples and data in their research (partial list):

Biogen Idec  
Harvard School of Public Health  
Johns Hopkins University  
International MS Genetics Consortium  
Mayo Clinic  
Pfizer  
SomaLogic  
Stanford University  
University of California, San Francisco  
University of New South Wales

**Researchers who are interested in obtaining samples and/or data from the ACP Repository are invited to contact the Accelerated Cure Project. Please contact:**

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Accelerated Cure Project for MS  
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Waltham, MA 02451  
[hollie@acceleratedcure.org](mailto:hollie@acceleratedcure.org)

**For more information about the Accelerated Cure Project, please visit [www.acceleratedcure.org](http://www.acceleratedcure.org).**