International Genomics of Alzheimer’s Project (IGAP)

At a Glance

- Status: Active Consortium
- Year Launched: 2011
- Initiating Organization: European Alzheimer Disease Initiative, Alzheimer's Disease Genetics Consortium, Genetic and Environmental Risk in Alzheimer's Disease, and Cohorts for Heart and Aging Research in Genomic Epidemiology
- Initiator Type: Nonprofit foundation
- Location: International

Abstract

The aim of the International Genomics of Alzheimer’s Project (IGAP) consortium is to discover and map the genes that contribute to Alzheimer’s disease (AD). The effort spans several consortia focused on AD and includes universities from Europe and the U.S. The goal is to create a shared resource database that includes genetic data for the more than 40,000 individuals with AD.

Mission

IGAP’s primary goal is to completely understand the role that inheritance plays in AD. To achieve this goal, IGAP will work to identify all the genes that contribute to the risk of developing this disease. IGAP investigators will have access to combined genetic data from a large number of AD subjects and
compare them to genetic data from an equally large number of elderly people who do not have AD. In
the initial phase of the work, more than 20,000 people with AD and about 20,000 healthy elderly
subjects will be compared. As the study progresses, 10,000 additional people with AD and the same
number of healthy elderly subjects will be added to the study. The subjects for these studies come from
different AD research project locations across Europe, the U.K., the U.S., and Canada.

Consortium History

IGAP was started in 2011 by four of the largest AD research consortia — the Alzheimer’s Disease
Genetics Consortium (ADGC), the Cohorts for Heart and Aging Research in Genomic Epidemiology
(CHARGE), the European Alzheimer Disease Initiative (EADI), and the Genetic and Environmental
Research in Alzheimer Disease (GERAD) consortium.

Financing

IGAP’s formation is supported by the Alzheimer’s Association and the Fondation Plan Alzheimer.
Association support for IGAP is funded by Jim Prugh and Diane Fatheree and the Makray Family
Foundation.

Patent Engagement

Several patient organizations are part of the governance boards of the individual consortia that are part
of IGAP.

In 2013, after scanning the deoxyribonucleic acid (DNA) of more than 74,000 patients and controls
from 15 countries, IGAP reported 11 new regions of the genome involved in late-onset AD. IGAP
published its results in Nature Genetics on Oct. 27, in a paper titled “Meta-analysis of 74,046
individuals identifies 11 new susceptibility loci for Alzheimer’s disease.”

Other website
http://www.wikigenes.org/e/art/e/258.html

Other website
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3944635/
Data Sharing

Data is available from IGAP’s 2014 publication in Translational Psychiatry at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3944635/

Currently there is no public access to the raw individual-level genetic data because of privacy considerations. Researchers working with U.S. cohorts deposit data in the database of genotypes and phenotypes (dbGaP), where it is available to all researchers who can show the ability to secure the data.

Points of Contact

Philippe Amouyel, M.D., Ph.D.
UMR744 Inserm-Lille2-IPL
Institut Pasteur de Lille
1 rue Calmette
59019 Lille cedex
phone: +33 6 86 43 23 34
email: philippe.amouyel@pasteur-lille.fr

Gerard D. Schellenberg, Ph.D.
Dept. of Pathology and Laboratory Medicine
Univ. of Pennsylvania School of Medicine
Room 609B Stellar-Chance Laboratories
422 Curie Boulevard
Philadelphia, PA 19104-6100
phone: 215-746-4580
fax: 215-898-9969
email: gerardsc@mail.med.upenn.edu

Sudha Seshadri, M.D.
Department of Neurology
Boston University School of Medicine
72 East Concord Street, B602
Boston, MA 02118
phone: 617-414-1337
fax: 617-638-8086
email: suseshad@bu.edu

Julie Williams
Professor of Neuropsychological Genetics
Cardiff University
Department of Psychological Medicine
GF41 Henry Wellcome Building
Heath Park, Cardiff CF14 4XN
phone: 029-2068 7075
fax: 029-2068 7068
email: williamsj@cardiff.ac.uk

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