



**FOR IMMEDIATE RELEASE**

## **Two International Scientific Projects Based in Europe and Canada Synergize Research to Address Connections between Genetics and Diseases**

*International science consortia GEN2PHEN and the Public Population Project in Genomics (P<sup>3</sup>G) have signed an agreement to coordinate the participation of 45 genetics-based research institutions from 25 countries. European-based GEN2PHEN and Montreal-based international consortium P<sup>3</sup>G will be working together to harmonize the electronic gathering and use of data showing how gene sequences contribute to inter-individual differences in diseases, drug responses, and other characteristics.*

Many major gene mutations are known to cause “rare” hereditary disorders and the role of numerous normal genetic variations in contributing risk of “common” disorders is steadily becoming clear. Such research is proceeding at an ever faster pace due to rapid advances in various technologies. Consequently, an unprecedented torrent of critically important data and analysis is becoming available. Presently, there is a need for a universal system capable of processing the deluge of data to make it easily accessible to researchers and doctors committed to identifying treatments and cures, while balancing the importance of maintaining the integrity of data and samples, as well as legal, ethical and social issues.

The agreement between P<sup>3</sup>G and GEN2PHEN is intended to provide the general framework for collaboration between the Partners on areas of common interest, such as;

- development and dissemination of standards for storage and use and management of genotype-phenotype information
- development and role of tools to identify researchers automatically when accessing online databases
- tools and infrastructures for genotype-phenotype data sharing and utilisation
- joint approaches to data-basing and data analysis
- systems to foster scientific activities outside academia; such as the generation and release of data, resource development, contributions to web 2.0 knowledge environments
- social, legal, and ethical dimensions of the above areas of common interest

The two projects will be engaged in identifying potential synergies and initiatives, ways to promote joint scientific, educational and dissemination activities, and resource sharing. In this way, GEN2PHEN and P<sup>3</sup>G will assist each other in performing their respective activities in a more effective manner with the intention of benefitting the international scientific community and others.

### **More about P<sup>3</sup>G**

The Public Population Project in Genomics (P<sup>3</sup>G) is a not-for-profit international consortium dedicated to fostering collaboration between population genomics researchers. P<sup>3</sup>G achieves this mission through the development of free and accessible research tools, resources and methods that help optimize and harmonize the design of biobank infrastructures and research projects. P<sup>3</sup>G has built a global network of biobanks and experts representing the broad range of knowledge required to develop this field. Working with this community of experts, P<sup>3</sup>G strives to optimize the design of biobanks and facilitate the harmonization of research materials, methods and studies by developing innovative approaches and tools capable of meeting the challenges of complex, cutting-edge genomic, epidemiological and environmental research. Understanding that sharing information leads to scientific progress, P<sup>3</sup>G makes this knowledge freely available to the international scientific community through the P<sup>3</sup>G

Observatory website. With membership from over 40 countries – and growing – P<sup>3</sup>G benefits from a critical mass of experts and biobank leaders dedicated to shaping and improving all aspects in the field of population genomics. P<sup>3</sup>G is chaired by Professor Bartha Maria Knoppers. Dr. Paul Burton is P<sup>3</sup>G's Chief Scientific Officer and Isabel Fortier is Research Director. P<sup>3</sup>G is funded by Genome Canada and Genome Québec.

For more information about P<sup>3</sup>G, please visit [www.p3g.org](http://www.p3g.org) or email [secretariat@p3g.org](mailto:secretariat@p3g.org)

### More about GEN2PHEN

The GEN2PHEN Consortium aims to unify human and model organism genetic variation databases towards increasingly holistic views into Genotype-to-Phenotype (G2P) data, and to link this system into other biomedical knowledge sources via genome browser functionality. The project is coordinated by Professor Anthony J. Brookes from the University of Leicester, and performed by a consortium of 20 leading scientific institutions. The project benefits from a 12 million Euro grant awarded by the European Commission under by the 7th Framework Programme for Research and Technological Development.

GEN2PHEN aims to establish the technological building-blocks needed for the evolution of today's diverse G2P databases into a future seamless G2P biomedical knowledge environment. The project will then utilise these elements to construct an operational first-version of that knowledge environment. GEN2PHEN activities will significantly improve the database infrastructure available within Europe for the collation, storage, and analysis of human and model-organism G2P data. This will be achieved by developing various cutting-edge solutions and deploying them in conjunction with proven concepts, in a manner that will transform the current elementary G2P database reality into a powerfully networked hierarchy of bioinformatics GRID-linked databases, tools and standards. As part of this, GEN2PHEN has launched a major genotype-phenotype internet portal (the GEN2PHEN Knowledge Centre) to provide a 'virtual centre of excellence' for G2P field that will provide general information on field developments, specific information on the GEN2PHEN project, and full and immediate access to all the project deliverables/outputs that the G2P community might wish to access.

For more information about GEN2PHEN please visit [www.gen2phen.org](http://www.gen2phen.org) or contact:

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### NOTES TO EDITORS:

List of participating institutions:

#### GEN2PHEN

- University of Leicester (UK)
- EMBL-European Bioinformatics Institute (UK)
- Fundació IMIM (Spain)
- Leiden University Medical Center (Netherlands)
- Institut National de la Santé et de la Recherche Médicale, (France)
- Karolinska Institute (Sweden)
- Foundation for Research and Technology – Hellas (Greece)
- Commissariat à l'Énergie Atomique (France)
- Erasmus University Medical Center (Netherlands)
- Institute for Molecular Medicine Finland, University of Helsinki (Finland)
- University of Aveiro – IEETA (Portugal)
- University of Western Cape (South Africa)
- Council of Scientific and Industrial Research. Inst. of Genomics and Integrative Biology (India)
- Swiss Institute of Bioinformatics (Switzerland)
- University of Manchester (UK)
- BioBase GmbH (Germany)
- deCODE genetics ehf (Iceland)
- **PhenoSystems SA (Belgium)**
- Biocomputing Platforms Ltd Oy (Finland)
- University of Patras (Greece)

#### P<sup>3</sup>G Charter Members

- Avon Longitudinal Study of Parents and Children (UK)
- Biobank Popgen (Germany)
- CARTaGENE (Canada)
- Centre for Integrated Genomic Medical Research Manchester, (UK)
- Danubian Biobank Foundation (Central Europe)
- Estonian Genome Project of University of Tartu (Estonia)
- Generation Scotland (UK)
- GenomeEUtwin (Helsinki)
- INMEGEN (Mexico)
- INSERM (France)
- Institute of Genomics and Integrative Biology (India)
- King Abdullah International Medical Research Center (Saudi Arabia)
- KORA-Gen (Germany)
- LifeGene, (Sweden)
- LifeLines Cohort (Netherlands)
- National Cancer Institute (NIH) (USA)
- National DNA Bank (Spain)
- National Heart, Lung and Blood Institute (NIH) (USA)
- Norwegian Institute of Public Health (Norway)
- NUGene (USA)
- Ontario Cancer Consortium (Canada)
- Singapore Tissue Network (Singapore)
- String of Pearls Initiative (Netherlands)
- Taiwan Biobank Institute of Biomedical Sciences, Academia Sinica (Taiwan)
- UK Biobank (UK)
- Western Australia Genome Health Project (Australia)