

## Public Health Genomics European Network: Report from the 2nd Network Meeting in Rome

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Dear Sirs,

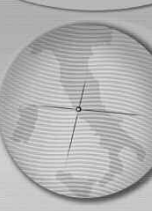
The *Public Health Genomics European Network (PHGEN)* is a mapping exercise for the responsible and effective integration of genome-based knowledge and technologies into public policy and health services for the benefit of population health. In 2005, the European Commission called for a “networking exercise...to lead to an inventory report on genetic determinants relevant for public health” [1], this led to the funding of a PHGEN three year project (EC project 2005313). This project started in early 2006 with a kick-off meeting in Bielefeld / Germany. The project work is comprised of, according to the public health trias, three one year periods of assessment, policy development and assurance. At the end of the assessment phase a network meeting was held in Rome from January, 31<sup>st</sup> to February 2<sup>nd</sup> 2007 with over 90 network members and network observers in attendance. The participants represented different organisations throughout the European Union with expertise in areas such as human genetics and other medical disciplines, epidemiology, public health, law, ethics, political and social sciences. The aim of the meeting was to wrap up the last year’s assessment period and to herald the policy development phase. The assessment period of PHGEN was characterised by several activities:

- Contact and cooperation with other European and internationally funded networks and projects on public health genomics or related issues (e.g. EuroGenetest, EUnetHTA, Orphanet, IPTS, PHOEBE, GRaPHInt, P<sup>3</sup>G)
- Identification of key experts in public health genomics in the European members states, applicant countries and EFTA/EEA countries from different disciplines (e.g. human genetics and other medical disciplines, public health, law, philosophy, epidemiology, political and social sciences)
- Building up national task forces on public health genomics in the above mentioned countries
- Establishing and work in three working groups: public health genomics definitions, genetic exceptionalism and public health genomics issues and priorities
- Participation in the development process on OECD and European Council documents on genetic testing
- Dissemination of results in journals, on websites and in conferences.

Throughout the meeting, all of these activities were presented by the respective representatives and discussed intensively. Special attention should be paid to the working groups and their preliminary results and to the concept of national task forces:

The secretariat of PHGEN has compiled for the working group a glossary of definitions for the common terms used in public health genomics, with the aim of supporting multidisciplinary communication. A short version of this glossary is already published in the thematic issue on Public Health Genomics of the Italian Journal of Public Health (IJPH 2006, Vol. 3, No. 3-4) and will soon be available in a more comprehensive and revised version on the PHGEN website ([www.phgen.eu](http://www.phgen.eu)). The working group on genetic exceptionalism drafted a paper which discusses the status of genetic information and also examines the concept of genetic information, the concepts of gene testing and genetic testing and lays out conclusions that are relevant to the future work of PHGEN. Finally, the preliminary paper of the working group on issues and priorities was presented and discussed. In this paper the issues of integrating genome-based knowledge and technologies into public health were gathered according to an international accepted framework (The Enterprise of Public Health Genomics) [2].

The concept of national task forces was introduced by representatives of seven, already established, task forces in Turkey, Italy, Belgium, Portugal, Spain, Germany and the Netherlands. This approach is identified as a supporting instrument by: making the topic of public health genomics public in the different countries;



contacting experts from different fields within the countries and by providing a dimension for the European Union, which reflects what happened at the national levels, to give European advice.

In the run up to the meeting the PHGEN secretariat named six working groups for the policy development phase

- 1.legal aspects (a cross sectional working group),
- 2.ethical benchmarks (a cross sectional working group),
- 3.policy development for education and training,
- 4.policy development for genome-based knowledge in health services,
- 5.policy development for public health assessment and
- 6.policy development for Public Policy and Stakeholder Involvement.

The participants of the meeting were introduced to the new working groups by the respective working group leaders, who presented, for each working group, five bullet points which opened the discussion and supported the process of constituting the working groups. During the second phase of PHGEN these working groups will work on papers to each topic.

In addition to the work on organisational issues and the content of PHGEN, two thematic lectures were held. During the first day Silvio De Flora gave a lecture about genome-based approaches to epidemiology and prevention of chronic degenerative diseases. He described the findings of the *Department of Health Sciences* at the *University of Genoa*, where they studied, for example, the interplay between *H. pylori* and host gene polymorphisms, the local and systematic effects of light in mice and the molecular epidemiology of arteriosclerosis. Additionally, he presented their impressive results on the impact of oxidative stress and certain gene polymorphisms on cancer chemoprevention by giving N-Acetyl-Cysteine (NAC).

Muin Khoury from the *National Office of Public Health Genomics of the Centres for Disease Control and Prevention (CDC)* in Atlanta closed the meeting with a thematic lecture on "Why public health is needed in the era of genomic medicine". He described the areas which can be supported through population based research, which is necessary in order for translational and clinical sciences to get genomic discoveries to application (deliveries). Furthermore, Khoury gave examples of how genetic tests and family history are applicable on different levels of health prevention. With reference to his presentation, genetic tests are in the current state relevant for secondary prevention (newborn screening) and tertiary prevention (pharmacogenomics), whereas a family history approach can be used for primary, secondary and tertiary prevention.

After two and a half days full of lively discussions and interesting presentations the meeting was closed. The next network meeting of the Public Health Genomics European Network will take place in Cambridge in January 2008.

## References

- 1) Community action in the field of public health (2003-2008). Work plan 2005. Available from [http://ec.europa.eu/health/ph\\_programme/howtoapply/proposal\\_docs/workplan2005\\_en.pdf](http://ec.europa.eu/health/ph_programme/howtoapply/proposal_docs/workplan2005_en.pdf) [Accessed May 2, 2007].
- 2) Burke W, Khoury MJ, Stewart A, Zimmern R. The path from genome-based research to population health: Development of an international public health genomic network. *Genetics in Medicine* 2006;8(7):451-8.