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OBITUARY

In memoriam: Leena Peltonen-Palotie (1952–2010)

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On March 11, 2010, Europe lost one of its most eminent researchers in human genetics with the death of Professor Leena Peltonen-Palotie. She died at the age of 57 of bone cancer. Combining basic molecular biology, population genetics and genetic epidemiology with clinical intelligence, Leena Peltonen has played a pivotal role in unravelling the genetic basis of a large number of diseases. Peltonen-Palotie was the recipient of many international wards, including the Antoine Marfan Award, the Anders Jahre Prize, the European van Gysel Prize for Biomedical Research and the Eric K. Fernström Prize. She was a member of the Scientific Council of the European Research Council (ERC), the European Molecular Biology Organization (EMBO) and the US National Academy of Sciences, Institute of Medicine. Leena Peltonen was an associate editor of our Journal since 2006.

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Leena Peltonen-Palotie started her career at the University of Oulu in Finland in 1978 where she received her PhD title. After postdoctoral work in the USA, she returned to the National Public Health Institute in Helsinki. She was a Professor at the National Public Health Institute in 1991–1994 and at the National Public Health Institute and the University of Helsinki in 1995–1998 and again in 2002–2003. In 1998, she moved to the University of California Los Angeles (UCLA) where she initiated a genetic research centre. Nine years later she returned to Europe to head the Human Genetics group at the Wellcome Trust Sanger Institute, UK.

Over the years, Leena Peltonen kept close ties with the Academy of Finland, chairing the Academy of Finland's Research Council for Health in 1995–1997, serving as Academy Professor in 2003–2007 and as Director of the Centre of Excellence in Complex Disease Genetics in 2000–2007. In addition to her work at the Sanger Institute, she was Research Director at the Institute for Molecular Medicine Finland (FIMM). Many of the successes in her early career were based on her research of the Finnish Disease Catalogue. These comprise a group of Mendelian diseases that are relatively prevalent in Finland due to founder effects and genetic isolation but rare outside the country. Many discoveries of recessive and dominant mutations underlying these disorders have been translated into valuable new diagnostic tests and some into screening programs, impacting the lives of and clinical care for carriers of these mutations.

In the last decade of the previous century, the research focus of Leena Peltonen-Palotie moved to common complex diseases. The various research groups she headed identified genetic mutations associated with dyslipidemias, lactose intolerance, multiple sclerosis, schizophrenia, obesity and heart diseases. One of the keys of her success

was that she was able to bridge the fields of genetics and epidemiology. The combination of the robustness of genetic research with the power and expertise of large scale epidemiological research, yielded a power house for gene discovery as well as translational studies into clinical practice and public health. With the vision that the many genetic epidemiological cohorts in Europe were a priceless resource for modern genetic research, she played a pivotal role in harmonizing biobanking in Europe. Starting with uniting Europe's twin registries into the GenomEU twin project, she next assembled the many population-, family- and twin studies in the European Network for Genetic and Genomic Epidemiology (ENGAGE) and finally initiated the European biobanks within the overarching Biobanking and Biomolecular Resources Research Infrastructure (BBMRI). Her efforts extended outside Europe with the founding of the Public Population Project in Genomics (P3G).

The work of Leena Peltonen has been remarkable in many ways. Where others successfully have dedicated their life unravelling the origin of one single disease or pathological process, her work arena concerned the broad topic health and disease and the application of new technological developments to understand the grand plan of life. Leena Peltonen-Palotie had a true passion for genetics as well as the ability and dedication that to stay on top in a field that is characterized by rapid changes in technology and new applications. She was a landmark for many of us working in genetics research in Europe. But never static or dogmatic, rather like other great minds in science and arts, always developing, open to new avenues, ready to make radical changes, shaping the field and setting the agenda. Her talent, dedication, ambitions and successes have made her into one of the few female role models for researchers in Europe. Above all, Leena was a warm personality and extremely pleasant and stimulating company. The premature death of Leena Peltonen-Palotie deprived Europe of a creative visionary leader in genetic research.