Cornelia van Duijn

Biographical Sketch

Cornelia van Duijn received a MSc degree from the Agricultural University Wageningen (1987) and a PhD degree from the Erasmus University (1992). Since 1992, she is head of the genetic-epidemiology section of the Department of Epidemiology . In 1997, Dr van Duijn received a Pioneer grant award of the Netherlands Organisation for Scientific research (NWO) for her work on the genetic-epidemiology of Alzheimer's disease. She is the program director of the NIHES international teaching programme in Genetic-Epidemiology (MSc, DSc, PhD). This is a collaborative programme with the Harvard University (Prof.dr D. Pauls) and Cambridge University (Prof.dr D Clayton). Prof. Van Duijn is part of the Center for Medical Systems Biology (CMSB) of the Genetics Focus Group in the Netherlands.

Research Interests

The focus of research of Dr van Duijn is on Alzheimer's disease and related disorders including Parkinson's disease, Creutzfeldt-Jakob disease, frontal lobe dementia and Down syndrome. Further, she studies the genetic-epidemiology of, osteoarthritis, diabetes, hypertension, and strokes. These studies involve genomic searches in family-based studies and in genetically isolated populations as well as candidate gene studies in the Rotterdam Study. With regard to population-based research, Dr van Duijn's prime interest is in gene-gene and gene-environment interaction. The development of approaches to study gene-interactions is one of the focuses in her methodologic work.

Selected Publications

Ramdas WD, Amin N, van Koolwijk LM, Janssens AC, Demirkan A, de Jong PT, Aulchenko YS, Wolfs RC, Hofman A, Rivadeneira F, Uitterlinden AG, Oostra BA, Lemij HG, Klaver CC, Vingerling JR, Jansonius NM, van Duijn CM. Genetic architecture of open angle glaucoma and related determinants. **J Med Genet.** 2010 Nov 7.

Struchalin MV, Dehghan A, Witteman JC, van Duijn C, Aulchenko YS.Variance heterogeneity analysis for detection of potentially interacting genetic loci: method and its limitations. **BMC Genet**. 2010;11:92.

Lango Allen H, Estrada K, Lettre G, Berndt SI, Weedon MN, Rivadeneira F, Willer CJ, et al Hundreds of variants clustered in genomic loci and biological pathways affect human height. **Nature.** 2010;467(7317):832-8.

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Duijn CM van, Broeckhoven C van. Alzheimer's disease and the family effect. **Nature Genet** 1994;8:115.

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Cecile Janssens

Brief CV

Cecile Janssens is associate professor at the department of Epidemiology of the Erasmus University Medical Center in Rotterdam, the Netherlands. Cecile Janssens has an MA in psychology, an MSc in epidemiology and obtained her PhD in 2003. She works in clinical and public health genomics, with a primary focus on assessing the predictive value and potential utility of genomic profiling in the prevention and treatment of complex diseases. Her interests include the evaluation of the validity, utility and public health impact of genetic testing, lay perceptions of genetics and genomics, ethical, legal and societal issues, and genetic epidemiology. Cecile Janssens is awarded a Young Investigators fellowship by the Erasmus University Medical Center and a personal Innovative Research Grant by the Dutch Research Council.

Cecile chairs the Dutch Association for Community Genetics and Public Health Genomics and participates in several (inter)national networks, including the Center for Medical Systems Biology (CMSB), the European Special Populations Research Network (Eurospan), the European Network of Genomic and Genetic Epidemiology (ENGAGE), the societal issues committee of the International Genetic Epidemiology Society (IGES). She is a member of the editorial board of Medical Decision Making, Public Health Genomics and the new Journal of Community Genetics. Starting from 2008, she coordinates a master of science programme in clinical and public health genomics in the Netherlands Institute for Health Sciences (Nihes).

Research

Her research concerns the translation of genomics research to applications in clinical practice and public health. The focus of her work is on the prediction of complex diseases by genomic profiling and on the evaluation of the usefulness of genetic testing, and includes a series of modeling studies that investigate the role of various aspects of genes and disorders (e,g., genotype frequency, heritability, disease prevalence) on the predictive value of genomic profiling, as well as analyses of empirical genetic epidemiological studies, including several association studies on metabolic disease and depression. In addition to studies on the genetic prediction of complex diseases, she is also interested and working on psychological, behavioral and ethical aspects of genetic testing, which is relevant for the implementation of genetic tests in the future.

Selected publications

ACJW Janssens, CM van Duijn. Genome-based prediction of common diseases: methodological considerations for future research. **Genome Med** 2009:1:20.

ACJW Janssens, AM González-Zuloeta Ladd, S López-Léon, JPA Ioannidis, MJ Khoury, BA Oostra, CM van Duijn. Value of meta-analyses on gene-disease association in the era of large-scale consortia and biobank studies. **Genet Med** 2009.

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ACJW Janssens, LA Bradley, M Gwinn, BA Oostra, CM van Duijn, MJ Khoury. A critical appraisal of the scientific basis of commercial genomic profiles used to assess health risks and personalize health interventions. **Am J Hum Genet** 2008;82:593-9.

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M van Hoek, A Dehgan, JCM Witteman, CM van Duijn, BA Oostra, EJG Sijbrands, ACJW Janssens. Prediction of type 2 diabetes in a population-based study based on nine replicated genetic variants from genome-wide association studies. **Diabetes** 2008;57:3122-8.

DDG Despriet, CCW Klaver, CM van Duijn, ACJW Janssens. Predictive Value of Multiple Genetic Testing for Age-related Macular Degeneration [Editorial]. **Arch Ophthalmol** 2007;125:1270-1.

ACJW Janssens, Q Yang, R Moonesinghe, EW Steyerberg, CM van Duijn, MJ Khoury. The impact of genotype frequencies on the clinical validity of genomic profiling for predicting common chronic diseases. **Genet Med** 2007;9:528-35.

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