OBITUARY

Charles Buys (1942–2014)

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Professor Charles Buys, Emeritus Professor of Human Genetics at the University of Groningen, sadly passed away on 2 April 2014, more than 3 years after having been diagnosed with a malignant brain tumor.

Charles was born in Bergen op Zoom, The Netherlands, in 1942. He grew up as the eldest son in a music-loving family and was an accomplished violinist. He studied Biology at the University of Utrecht, The Netherlands. Charles obtained his BSc in 1965 and his MSc in biochemistry in 1969. He subsequently moved to the University of Groningen and was appointed Assistant Professor of Biology at the school of education and pursued a PhD under professor

Max Gruber, obtaining his doctorate on the topic of 'Uptake and Degradation of Circulating Proteins by the Liver' in 1976. That year marked his decisive step into the field of human genetics when he moved to the Department of Human Genetics, where he was appointed Assistant Professor of Cytogenetics and, subsequently, Associate Professor of Molecular Cytogenetics. In 1987 he was appointed Full Professor of Human Genetics and head of the department, which later on became the Department of Genetics of the University Medical Center Groningen. During his professional career Charles developed into an exceptionally active, internationally oriented, researcher, teacher and mentor in the field of human and medical genetics.

He was a member and often chair of many genetics and genomics professional and governmental committees, in the Netherlands, Europe and worldwide. He was president of the European Society of Human Genetics (ESHG) in 1989–1990. Until that time the society meetings were small, with less than 100 participants. However, they grew towards the end of the eighties, and the 1989 meeting, hosted and scientifically organized by Charles in Groningen, The Netherlands, had ~300 participants. In those days the meetings were still organized by the host department, in 1989 the Groningen Department of Medical Genetics. The meetings did not cover all aspects of human genetics but rather had a theme. In 1989 this was the 'International Symposium on Genetics in Cancer and Development', a research topic dear to Charles' own heart. Clearly, over the years things changed: nowadays, with 10 times more attendees, an ESHG meeting with a single theme would be unthinkable. As first Chairman of the ESHG Scientific Program Committee, from 1995 to 1998, Charles has actively contributed to this transition. Subsequently, as the Chair of the SPC of the 2001 International Conference of Human Genetics in Vienna, he was instrumental in strengthening the scientific and professional ties with other continental human genetics organizations in North and South America and Australia.

Charles had as one of his main research interests tumor suppressor (TS) genes, in particular those involved in small-cell lung cancers (SCLC) and renal cell cancers (RCC). The search for these genes started with the finding that the TS genes for SCLC should be on chromosome 3, refined to 3p21, as almost all SCLCs proved to have a deletion in that chromosomal region,¹ a finding that proved also to be the case for RCCs.² After finding these chromosomal deletions a large number of PhD students worked for over 20 years on the identification of these TS genes. Although a large number of candidate genes were found or proposed, 'THE TS gene' for these cancer types is still unknown.

Charles not only focused on TS genes (for instance, Buys³), as shown by his work on multiple endocrine neoplasia type 2 (MEN2).

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His group was among the first to show that oncogenes can also cause inherited cancer syndromes. They identified RET as the cause for MEN2B.⁴ His work and the work of others in the cancer genetics field led to the founding of the Workshop on Cytogenetics and Molecular Genetics of Human Solid Tumors. Charles was one of the founding fathers of this workshop, a workshop that still is being organized (the last one was in 2012).

Besides cancer genetics he had a keen interest in inherited diseases (for instance, on spinal muscular atrophy) and he was involved in the optimization of mutation detection techniques such as 2D-DGGE and regular DGGE (see for instance Wu *et al*⁵).

Charles supervised dozens of PhD students and co-authored hundreds of scientific papers. He contributed widely to the field of (cancer) genetics and science in general. Besides his committee work, and his ESHG presidency, he was also president of the NAV, the Dutch Society of Human Genetics (1988–93), which he also led through a blossoming period of molecular discoveries and strengthening collaboration, and he served also on the editorial board of EJHG. Charles was knighted in the Order of the Netherlands Lion in 2006 for his exceptional academic achievements, and he retired in 2007.

Charles' realm of interest was large, including much more than science. He loved good food and wines and was a passionate chef; he loved to travel, together with his wife Anneke, and was a keen observer

of the differences within and between societies. He was not a neutral observer. We would therefore like to quote from a chapter Charles wrote in the book (in Dutch) on genetics, *Between Hype and Hope* (2007): 'Knowledge of the huge genetic variation should encourage us to be more tolerant towards others, towards all who are different from us.'

Charles was like us and was different. With his death we lose not only a good scientist, but also a mentor and a friend.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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- 4 Hofstra RMW, Landsvater RM, Ceccherini I *et al*: A mutation in the RET proto-oncogene associated with multiple endocrine neoplasia type 2B and sporadic medullary thyroid carcinoma. *Nature* 1994; **367**: 375–376.
- 5 Wu Y, Hofstra RMW, Scheffer H *et al*: Comprehensive and accurate mutation scanning of the CFTR gene by two-dimensional DNA electrophoresis. *Hum Mutat* 1996; **8**: 160–167.