

# EXHIBIT 22

## OBITUARY

### James M. Parry (1940–2010)

Jim sadly passed away in June 2010 after several years of battling cancer. He fought his illness with enormous courage and dignity, he never complained about it and he lived life to the full throughout it.

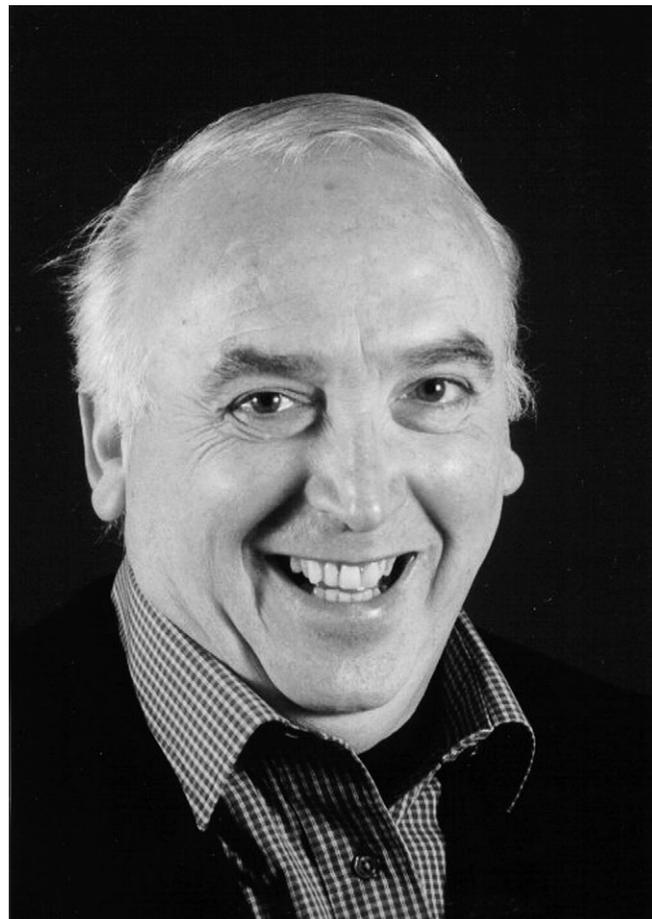
Jim was at the forefront of studies in genetic toxicology and he was the founding father of much of this discipline within the UK, having supervised the doctoral theses of >70 researchers. Many of his former students have gone on to hold senior positions within UK and European industries requiring such expertise, and his mentorship and care have undoubtedly facilitated their success.

Jim began his academic studies at Queen Mary College London, studying Botany. He then undertook his PhD studies in Genetics at Liverpool University, where his interests in DNA repair were established. With Brian Cox, Jim isolated and identified a spectrum of yeast mutants that were radiation sensitive. These strains enabled the identification of many yeast and human genes with roles in genome stability. In essence, they underpinned much of the field of DNA repair and the yeast *Saccharomyces cerevisiae* became the model organism for many researchers interested in genome stability.

However, the highlight of his time at Liverpool had to be meeting Liz, his future wife. Jim and Liz formed a loving partnership for life, sharing work and social interests and working as a team.

After his PhD studies Jim, with Liz, moved to Oxford University to take up a postdoctoral position with Brian Cox. Then in 1966, he was appointed to a lectureship in Genetics at the newly formed Genetics Department at Swansea University. It was there that Jim went on to establish his own group and laboratory, and where he remained for the next 40 years, being promoted to senior lecturer, reader and then professor, eventually chairing the genetics undergraduate degree course.

Jim was an excellent teacher as well as a researcher. His enthusiasm stimulated an interest in Genetics in many students, and many of us have him to thank for this. Jim's research became increasingly focussed on genetic toxicology, and it evolved from studies employing yeast as a model organism to those also using cultured mammalian cells. He investigated the mechanisms to maintain genome stability, with an emphasis on how environmental chemicals might cause birth defects and cancer. His laboratory had a keen interest in aneuploidy as well as both chromosomal and point mutations. He and Liz co-ordinated several European Union projects including that on 'Protecting the European population from aneugenic chemicals' and they participated in those on 'Neurotoxicity of mercury compounds', 'The analysis of oxidative damage' and 'State of the art methods for detecting chemical carcinogens'. More recently, Jim developed an interest in investigating the potential thresholds of toxicological activity and he was setting up databases on 'Aneugenic chemicals', 'Toxic chemicals in foodstuffs' and 'Mammalian mutagens'.



During his career, Jim published >300 papers and reviews. In addition to these, he was involved in editing and contributing to many books in the field of Genetic Toxicology, most notably 'Comparative Genetic Toxicology' (editors J. M. Parry and C. F. Arlett, 1984); the 'UKEMS Recommended Procedures' publication series and his latest contribution, 'Principles and Methods of Genetic Toxicology' (in press). This last book was written to accompany the United Kingdom Environmental Mutagen Society (UKEMS) sponsored Masters degree course in Genetic Toxicology. This course was the result of Jim combining his research and teaching skills; it was first established successfully at Swansea University in 2005 and it then transferred to the University of Surrey following Jim's retirement from full-time academia at Swansea.

From 1974 to 1977, Jim was President of UKEMS, vice-president of the European Environmental Mutagen Society (EEMS) from 1993 to 1995 and its President from 1995 to 1997. He was the founding editor of the journal 'Mutagenesis' and the 'European Journal of Molecular Genetics and

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*Toxicology*', and he was an editorial board member of *'Mutation Research'*.

Jim also worked extensively and with the highest degree of commitment for the UK and Welsh governments. He served as Chairman of the Department of Health (DoH) Advisory Committee on the Mutagenicity of Chemicals in Food, Consumer Products and the Environment from 1991 to 2001, he was a member of the DoH Advisory Committee on the Carcinogenicity of Chemicals in Food, Consumer Products and the Environment from 1991 to 2001, of the DoH Working Group on Diet and Cancer of the Committee on Medical Aspects of Food and Nutrition Policy for the report 'Nutritional Aspects of the Development of Cancer' (1998), of the Medical and Toxicology Panel of the UK Advisory Committee on Pesticides (ACP) from 1996 to 2010, of the ACP itself from 2008 and of the Growth Hormone Working Group for the Veterinary Products Committee for 2003–05. In Wales, he served on the Advisory Committee for the Food Standards Agency from 2001–07 and on its Objective 1 Research Funding Committee from 2004 to 2006. He made many visits to Brussels to assist the European Union with numerous projects; here, his motives were undoubtedly helped by his love of Belgian chocolates!

Jim's contributions to genetic toxicology were acknowledged in a number of ways. He was awarded a DSc by Liverpool University and he was invited to present numerous plenary lectures at prestigious international conferences over many years. In 2002, he was awarded the Dow Foundation Sphere Award for his contributions to developing methods for analysing the quality of the environment, and in 2003, he received the Frits Sobels Award from EEMS for his contributions to providing an understanding of the mechanisms by which environmental chemicals modify the genome.

Jim will be missed enormously by many of us, for his friendship, his help and his mentorship. He was a devoted husband, father and granddad, and his family were always the most important part of his life. Jim will no doubt be missed most of all by Liz, with whom he shared work and a family life, and by their daughter Jane, their son Matt and their children.

**Ray Waters**

Department of Medical Genetics, Haematology & Pathology,  
Cardiff University School of Medicine,  
Cancer Genetics Building, Cardiff University, Cardiff CF14 4XN, UK  
watersr1@cf.ac.uk

**Micheline Kirsch-Volders**

Laboratory of Cell Genetics, Vrije Universiteit,  
Brussel, Pleinlaan 2, B-1050 Brussels, Belgium