



Steph Dieleman

P. L. A. M. Vos et al., *Theriogenology* 84 (2015) 321–322

Associate Professor Steph J. Dieleman was born in 1944 and grew up in Twisk, a village located at the northwest of the Netherlands. After finishing secondary school he started his academic career at Utrecht University as a student of the Chemistry Faculty and passed his majors in organic chemistry and biochemistry. During his study he proved his first scientific potency by receiving a prestigious prize for his research project performed in the Shell/AKZO Company. In June 1969 he passed his final doctoral exams and started his working career at the TNO Chemical Institute, Utrecht. For a period of two years, he focused on a project about biochemical aspects of the resistance against specific fungi infections in apples.

In November 1971 he accepted a position and hence a new challenge at Utrecht University at the Faculty of Veterinary Medicine, Department Obstetrics, Gynaecology, and AI. This career switch was the start of his research focus on the hormonal processes around parturition, and

Dieleman's first challenge was to develop the Radio Immuno Assay (RIA) technology for hormonal (steroid) analysis and to set up an endocrine laboratory for reproductive studies. In 1973 he became the head of this endocrine biochemistry laboratory. During those days he went to Edinburgh, Scotland, for a sabbatical to learn more about RIA, and indeed he developed the first oestradiol RIA in Utrecht using an antiserum that he received as a present during this visit. In 1975 he started his PhD project on the endocrinology of the bovine oestrous cycle, finally resulting in the acceptance of his PhD thesis titled "Steroids of preovulatory bovine follicles relative to the peak of luteinizing hormone," which was successfully defended at Utrecht University in 1984. This study showed that concurrently with changes in the micromorphology of the follicular wall, the steroidal microenvironment of the maturing bovine oocyte switches from predominantly oestrogenic at oestrus to one in which progesterone is the major steroid present shortly before ovulation. Through this milestone Dieleman created a solid scientific basis for the introduction and further development of embryo technologies and hence a better understanding of the endocrinology during the normal oestrus cycle and the follicular development during superovulation in cattle. In this respect, the testing of the first monoclonal antibody in PMSG superstimulated animals, called "anti-PMSG," was performed for the company Intervet, the Netherlands.

Especially, his interest for follicular development in relation to (final) oocyte maturation has to be mentioned. An impressive number of (EU) projects and in vivo experiments have been performed, mainly in cattle, to gain a better understanding on the communication between the oocyte and its microenvironment. To this end many laboratory tools have been developed and validated to support and prove the proposed experimental hypothesis: from hormonal analysis, staining techniques, in vitro production of blastocysts to genomics and proteomics. Steph Dieleman performed research in the context of reproductive physiology, hence he stimulated in vivo research being the bridge between fundamental and the application in the field. To reach this goal, the multidisciplinary approach was an absolute prerequisite for him; he always strongly believed in his own original scientific concepts, ideas, and hypotheses, although those were always open for discussion and critical comments.

In the field of reproductive physiology, technology, and embryo production, the national and international research achievements of Dieleman have been impressive: a very productive, worldwide-acknowledged, multifaceted research program in species such as cows, pigs, horses, elephants, dogs, dolphins, and ostriches. Through his work in collaboration with many outstanding and acknowledged research colleagues and international groups, he has contributed to more than 300 book contributions, abstracts, and full papers in regular and top scientific journals, including 38 refereed papers in *Theriogenology*.

The supervision and professional guidance of dozens of postdocs, PhDs, and research students was an important achievement of Dieleman. Dieleman liked this work, as a perfectionist and hard worker; he was therefore very stimulating for all his students and colleagues who have spent time at his laboratory. They have experienced the laboratory of Steph Dieleman to be a pleasant and stimulating environment for performing excellent research, with lots of fun and good team work in a warm atmosphere.

During his scientific career, Dieleman received much recognition for his contributions and achievements. Over the years, he was awarded academic honors, and he was invited as keynote speaker and session chair at many international scientific conferences and meetings. He has been a member of the Board of Governors and secretary-treasurer and president of the International Embryo Transfer Society (IETS). In the IETS he was recognized for his financial expertise (“the master of finance”). For his active membership and contributions, the AETE society awarded him with the Pioneer Award at the annual meeting of the AETE in Sardinia in 2007. Moreover, Steph Dieleman was an expert in organizing scientific meeting programs, and as a result he organized an impressive list of recognized scientific meetings worldwide and in the Netherlands. For example, he chaired the IETS meeting in Maastricht (2000), which was also organized by him. Furthermore, he was president of the International Congress on Animal Reproduction (ICAR) and organized the ICAR conference in The Hague (1992). He also organized the European Embryo Transfer Society (AETE) meeting (2002) and the International Conference on Pig Reproduction (ICPR) (2004), both organized in the ancient monastery Rolduc.

Finally, at the end of his impressive career, Dieleman organized the International Conference on Farm Animal Reproduction (ICFAR), again in Rolduc, the Netherlands (June 2007), which was his final international recognition to his scientific colleagues and friends that were gathered together from all over the world to contribute to this special and memorable scientific meeting. To this end he was special editor of the proceedings that appeared as a special issue in *Theriogenology* [1], containing 34 excellent contributions covering several main topics in the field of theriogenology. This special issue not only was a concise update of the state of the art in research “from egg to embryo,” but also exemplified the broad and multidisciplinary approach Steph Dieleman added during his scientific career to this exciting field.

For more than 30 years Steph Dieleman performed interdisciplinary, clinically orientated research and education in the field of reproduction. He was a true and driven scientist who exposed a serious attitude, but he also very much enjoyed the Burgundy lifestyle, which he continued after his retirement. One of the last photographs that was taken of him, at his 70th birthday, is characteristic and gives an honored remembrance of our friend and colleague Steph Dieleman. He is enjoying his glass of wine with his closest friends during a boat trip in his favorite waterside landscape at Loosdrecht. Steph Dieleman passed away February 15, 2015. We will remember Dieleman as a warm person, an excellent scientist, and a dear colleague and friend.

Reference

[1] S. J. Dieleman (guest editor). Proceedings of the International Conference on Farm Animal Reproduction. Kerkrade, Limburg, the Netherlands, May 27–31, 2007. *Theriogenology* 2006, 68 (Suppl. 1), pp. S1–S228.