



**Carl G. Hartman Award** (*sponsored by a grant from Cook Medical*). This award is the most prestigious award conferred by the Society for the Study of Reproduction. Each year, this award recognizes an exemplary research career in reproductive biology. The 2009 recipient of the Carl G. Hartman Award is Dr. Terry Nett.

---

The recipient of the 2009 Carl G. Hartman Award is Dr. Terry Nett of Colorado State University. Dr. Nett has been an exceptional scientist, educator and leader at numerous levels in the academic and scientific communities for more than 30 years.

He began his scientific career in 1968 as a Ph.D. student at Washington State University where he studied estrogen levels in pregnant and postpartum mares. He then obtained NIH funding for postdoctoral training at Colorado State University in the newly initiated Reproductive Endocrinology Program. It soon became obvious that Dr. Nett was an unusually bright, dedicated, hard-working young scientist, and he was offered a tenure track Assistant Professorship in 1974. He rapidly became one of the senior leaders of the ongoing research and educational programs of what had become the Animal Reproduction and Biotechnology Laboratory. Dr. Nett focused his early research efforts in the area of neuroendocrinology and developed the first radioimmunoassay for GnRH. He played the key role in a broad array of studies ranging from the effects of PGF<sub>2α</sub> on luteal blood flow to development of new, more sensitive methods to quantify hormone receptors. The standard curve method for quantification of receptors for LH, FSH, GnRH, PGE<sub>2</sub> and PGF<sub>2α</sub> has made it possible to determine numbers of receptors in very small quantities of tissues such as the thecal and granulosa layers of individual follicles. He also made numerous major contributions to the research programs of his long-term collaborators Drs. Heywood Sawyer and Gordon Niswender.

Dr. Nett's very broad interests and active research program lead to two additional long-term collaborations with Drs. John Nilson and Colin Clay of Case Western Reserve University and with Dr. Mike Glode at the University of Colorado School of Medicine. The collaboration with Drs. Nilson and Clay (now at Colorado State University) lead to development of many of the tools needed to understand the molecular regulation of gonadotropin secretion by GnRH and steroid hormones and led to 15 important publications. The most recent, exciting aspect of this research in Dr. Nett's laboratory is the finding that inhibition of LH secretion following treatment of ewes with estradiol is due to a plasma membrane estrogen receptor while the major surge of LH, which occurs 12 hrs post-treatment, is due to the classic genomic actions of this steroid. Dr. Nett's group has also cloned a membrane receptor (7 transmembrane domains) for progesterone

that is found in a number of reproductive tissues including the corpus luteum. The presence of membrane receptors for steroid hormones is changing how we view many aspects of the control of reproductive processes. The collaboration with Dr. Glode has led to development of a hormo-contraceptive which has great potential for controlling reproduction in either sex of many species of unwanted populations such as dogs and cats, elk, deer, opossums, elephants, etc. It has currently been demonstrated to be useful for elk, dogs and cats. It also has the potential to be useful for treatment of breast and prostate cancers. Dr. Nett holds six patents related to his research in this area.

Dr. Nett has also continued his early interest in equine reproduction. He has 47 peer reviewed publications in this area, many of which are key contributions to our understanding the reproductive processes in both stallions and mares. He and one of his Ph.D. students, Dr. Patty Olson, also made several key contributions to studies of canine reproduction.

Dr. Nett has authored or coauthored over 200 publications in peer reviewed journals, has contributed 34 book chapters, and he and his students have made over 175 presentations at scientific meetings. His publications have been cited over 6900 times. Clearly, Dr. Nett is an exceptional scientist held in high regard by his peers. This is documented by the fact that he received the Young Scientist Award (Western Section) and the Animal and Physiology Award from the American Society of Animal Science and was elected to the Japanese Society for the Promotion of Science as a Fellow in 2001. He also performed numerous site visits for NIH, served as an ad hoc reviewer for the Contraceptive Development Branch for over a decade and on the Reproductive Endocrinology Study Section. Dr. Nett has also been an active reviewer of grants for the USDA Biotechnology Grant Review Committee and served twice on the Animal Reproductive Efficiency Grant Review Committee.

Another major contribution made by Dr. Nett is mentoring students. He has advised 12 Ph.D. students and 14 postdoctoral fellows who have had successful careers, including several professors, and a patent attorney. These individuals continue to make important discoveries and provide leadership and service to reproductive biology. Two currently serve as grant administrators in the federal government and two are department heads.

Finally, Dr. Nett has provided exceptional service to reproductive biology in general, and the Society for the Study of Reproduction specifically. Besides his extensive service reviewing grant applications, he has reviewed manuscripts for numerous scientific journals and served on the editorial boards for *Endocrinology*, *Journal of Animal Science*, *Animal Reproductive Sciences*, and *Biology of Reproduction*. He also has provided reagents for radioimmunoassay to hundreds of laboratories around the world.

For the Society for the Study of Reproduction he has served on the Board of Directors, and as President Elect, President, Past President and Associate Editor of *Biology of Reproduction*. He has chaired our Awards, Nominating, and Program committees and served on the Future Meetings and Local Arrangement committees. For his dedicated service to our society he received the Distinguished Service Award in 2001.

In summary, Dr. Nett is an exceptional scientist who has made numerous and varied major contributions to our understanding of reproductive biology. He has been recognized as a leader and provided outstanding service to the field of reproductive biology, particularly to SSR.