

Tribute for Dr. Gillian Bryant-Greenwood

Carol A. Bagnell

Department of Animal Sciences, Program in Endocrinology and Animal Biosciences, Rutgers University, New Brunswick, NJ 08901, USA.

It is my pleasure to recognize Dr. Gillian Bryant Greenwood's more than 40 years of relaxin research that has advanced the field and changed our understanding of the nature of this fascinating family of hormones and their receptors. More than 30 years ago, Gillian and Fred Greenwood hosted one of the first meetings on relaxin, a 1981 USA-Australian relaxin workshop in Honolulu, Hawaii. Gill has been a leader throughout her career, serving the relaxin field on the organizing committee of several international meetings on relaxin and as chair of Relaxin 2008 in Hawaii. She is currently Professor Emeritus in the Department of Cell and Molecular Biology at the University of Hawaii.

Gillian Bryant-Greenwood earned her BS and PhD at Brunel University in London, England. As a graduate student, she was a member of the staff at the Imperial Cancer Center where Fred Greenwood ran the Protein Chemistry section. In 1968 the entire lab made the move across the world to the University of Hawaii where Gillian and Fred made their home and spent their lives working on relaxin. Gill started her scientific career working on prolactin and published a series of papers on radioimmunoassay (RIA) of prolactin. However, as a new Assistant Professor, Gillian was looking for an independent start and a student's paper on relaxin intrigued her. Gill's first publications on relaxin were in the 1970s with studies on the chemistry, structure and RIA of relaxin. In the 1980s her work focused on ^{125}I binding studies and relaxin production by the ovarian follicle, and she began her research on relaxin in human decidua and fetal membranes. In the 1990s she proposed the idea of relaxin as a 'local' hormone and pioneered the concept that the corpus luteum does not have a monopoly on producing relaxin. She proposed that the mammary gland was a source of relaxin and suggested a role for relaxin in the preterm rupture of human fetal membranes. The major focus of Gill's research over the past 20 years has been on human relaxin and the problem of preterm birth and paracrine communication in human decidua and fetal membranes.

Dr. Bryant-Greenwood has published more than 100 peer-reviewed papers on relaxin alone and numerous invited reviews and book chapters. Of particular interest is a highly cited article in *Endocrine Reviews* entitled "Relaxin as a New Hormone" (Bryant-Greenwood, 1982) in which relaxin was proposed as a peptide analog of the prostaglandins and called a 'new' hormone based on local production and autocrine/paracrine actions. More than 10 years later, a second *Endocrine Reviews* article was published entitled "Human Relaxins: Chemistry and Biology" (Bryant-Greenwood &

* Corresponding Author: Rutgers University, Department of Animal Sciences, 84 Lipman Drive, New Brunswick, NJ 08901; Phone: 848-932-6334; Email: bagnell@aesop.rutgers.edu.

Schwabe, 1994) that focused on molecular aspects of human relaxin and raised new questions about structure-function relationships and the evolution of relaxin. Gillian has a remarkable track record in research starting with a NIH Research Career Development Award (1972-1977) that led to continuous funding from the NIH for the next 30 years for her work on relaxin. Over her career Gill has mentored 13 post docs, 16 graduate students and more than 35 minority undergraduate research students. Notably, Gillian has worked with Ms Sandy Yamamoto, Research Technician, on relaxin research at the University of Hawai'i for more than 35 years. Now in retirement, Gillian and Sandy continue to work together in providing research mentoring for clinical fellows in the Department of Obstetrics, Gynecology and Pediatrics at the John A Burns School of Medicine, University of Hawaii.

References

- Bryant-Greenwood G.D. (1982) Relaxin as a new hormone. *Endocrine Reviews* 3:62-89.
Bryant-Greenwood G.D., Schwabe C. (1994) Human relaxins: chemistry and biology. *Endocrine Reviews* 15:5-26.