



**SSR Research Award** (*Supported by the Society for the Study of Reproduction*). The SSR Research Award recognizes an active, regular member of the Society for outstanding research published during the previous six years. Criteria for the Award include the significance of problems under investigation, the breadth and depth of the analyses performed, and the level of originality manifested in the publications of this work. The recipient of the 2011 SSR Research Award is Dr. Francesco (Franco) DeMayo, Ph.D.

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The recipient of the 2011 SSR Research Award is Francesco (Franco) DeMayo, Ph.D. Dr. DeMayo is Gordon Cane Professor of Molecular and Cellular Biology and Co-Director of the newly established Center for Reproductive Medicine at Baylor College of Medicine (BCM), Houston, Texas. He received his B.S. from Cornell University (Ithaca, New York), and M.S. and Ph.D. from Michigan State University (East Lansing, Michigan). He did his postdoctoral training in reproductive and molecular biology under Dr. David Bullock in the Department of Cell Biology at BCM in 1983. Dr. DeMayo has risen through the ranks to become full professor at BCM. He serves as director of the Genetically Engineered Mouse Core and is Director of the Specialized Cooperative Centers Program in Reproduction and Infertility Research (SCCPIR) at BCM. He is currently chairperson of the Endometrial Research Focus Group for the SCCPIR consortium. Dr. DeMayo served as a regular member of the National Institutes of Health (NIH) study sections Human Embryology and Development 1 (HED-1) and Integrated Cellular Endocrinology and Metabolism (ICER). He served as ICER Chairperson in his last year of service. He has dedicated time and effort as coordinator for the Frontiers in Reproduction course at the Marine Biological Laboratory in Woods Hole, Massachusetts. Dr. DeMayo also serves as ad hoc reviewer for numerous NIH Special Emphasis Panels, the Veterans Administration, and Department of Defense. He is Associate Editor for the journal *Molecular Endocrinology* and reviewing editor for *Biology of Reproduction*, the official journal of the Society for the Study of Reproduction. Dr. DeMayo is a member of the SSR Program Committee and often chairs symposia at the Society's annual meetings.

Dr. DeMayo's research career is dedicated to investigating the endocrine regulation of uterine function. This work was initiated by using genetically engineered mice to investigate the regulation of uteroglobin by ovarian steroid hormones. Dr. DeMayo and his colleagues have utilized mouse models in combination with DNA array technology to identify genetic pathways in the uterus that are regulated by progesterone, progesterone receptors, and coactivators. Dr. DeMayo, in collaboration with Dr. John Lydon at BCM, generated PRCre mice to conditionally delete uterine genes. Using these mice, Dr. DeMayo showed that Indian hedgehog, a progesterone-regulated gene, is critical to uterine receptivity for implantation. Since then, he has used this mouse model to investigate the molecular regulation of uterine gland development and differentiation, uterine receptivity, and the ability of the uterus to support post-implantation embryo development. He has also generated other mouse models to investigate endometrial cancer in mice. These models and observations by Dr. DeMayo have allowed other investigators to begin to unravel the molecular network regulating uterine function. The success of this approach has opened the field of endometrial biology to a functional genetic approach. The

mouse models generated by Dr. DeMayo and his colleagues have led to the establishment of numerous collaborative projects for advancing the field of uterine biology and female fertility.

(Submitted by Dr. S.K. Dey.)