BIOGRAPHICAL SKETCH Joe Leigh Simpson, M.D. June, 2007

Joe Leigh Simpson, M.D. is newly appointed as Executive Associate Dean for Academic Affairs at Florida International University College of Medicine, Miami, Florida. He is also Professor of Obstetrics and Gynecology and Professor of Human and Molecular Genetics. Prior to that, he was at Baylor College of Medicine, Houston as Professor of Obstetrics and Gynecology, Professor of Molecular and Human Genetics, and from 1994-2006 Ernst W. Bertner Chairman of the Department of Obstetrics and Gynecology.

Dr. Simpson majored in Chemistry from Duke University and received his M.D. from the Duke University Medical School in 1968. Postgraduate training was taken in Pediatrics (Internship), Obstetrics and Gynecology (Residency) and genetics (with James German) at Cornell Medical College – The New York Hospital.

Dr. Simpson is a leading researcher in reproductive genetics. He has written over 15 major books, 650 chapters and peer review articles, and many other publications. He has served on over a dozen Editorial Boards, innumerable grant review panels, and many policy-making bodies. One of several focused areas of interest involves the genetics of gynecologic disorders such as premature ovarian failure and endometriosis. He was the first to define a recurrence risk (5-7%) that indicated the polygenic basis of endometriosis. More recently he has completed a molecular interrogation of candidate genes for premature ovarian failure (POF).

Dr. Simpson has also contributed widely to prenatal genetic diagnosis, preimplantation genetic diagnosis, and public policy implications of the genetic revolution. In 1994 Dr. Simpson and his group isolated fetal nucleated red blood cells from maternal blood by flow cytometry, and were the first to detect fetal trisomy 18 and 21. He was a pivotal investigator in the decade long NICHD study showing good sensitivity for fetal cell recovery. Recent collaborative efforts with engineering colleagues has involved recovering fetal cells in the first trimester by cell capture devices followed by analysis in situ. This method offers the genuine prospect of definitive noninvasive prenatal diagnosis, without need for an invasive procedure like amniocentesis.

Dr. Simpson's leadership positions in national and international organizations are also numerous. He was President of the American Society for Reproductive Medicine 1993-1994 and President of the Society for Gynecologic Investigation 1998-1999. He is current President of the Preimplantation Genetic Diagnosis International Society (PGDIS), and President of the American College of Medical Genetics. He is a member of the National Institute of Child Health and Human Services (NICHD) Board of Scientific Counselors and previously served on the NICHD Advisory Council. He is a long-standing member of the March of Dimes Scientific Advisory Committee. He has been an advisor to the World Health Organization (WHO) and to the International Olympic Commission (IOC). He is a member of the U.S. National Academy of Sciences, Institute of Medicine.