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I am the Head of the Division of Obstetrics and Gynecology of Hadassah-Hebrew University Medical Centers, Jerusalem. I joined the staff of the Department of Obstetrics and Gynecology of Hadassah, Mt. Scopus in 1981 as a young resident, following my service in the IDF, where I served as a physician. I have devoted my entire career to Hadassah, other than post-doc fellowships at UCSF (1992-1993) and the University of Western Ontario and the University of Toronto (1987-1988). I established and ran the Unit for Obstetric and Gynecological Ultrasound from its beginnings, becoming the Unit Head in 1992. I founded the Obstetrics and Gynecology Research Laboratory, recently renamed The Magda and Richard Hoffman Center for Placenta Research, in 1994 with new immigrant scientists.

I have been an active member of the Faculty of Medicine of the Hebrew University and Hadassah, obtaining the rank of professor in 1994 and full professor in 2000. I continue to instruct medical students at various points in their studies in obstetrics and gynecology, embryology, and prenatal diagnosis.

I have published some 300 articles in leading peer-reviewed journals, including Lancet, Science, Nature Medicine, JCI, Human Reproduction, Ultrasound in Obstetrics and Gynecology, American Journal of Obstetrics and Gynecology, Prenatal Diagnosis, Fetal Diagnosis and Therapy, PLOS-One, Placenta, and Molecular Human Reproduction, and others.

I am a founding member of the Israel Society of Ultrasound in Obstetrics and Gynecology, and served as president 1999-2002. The society works tirelessly to establish standards for our specialty in Israel, and contributes widely to the advancement of women's imaging internationally. I am an active instructor in the School of Ultrasound run by the Society, and a frequently invited guest lecturer at events around the world, for the International Society of Ultrasound in Obstetrics and Gynecology.

In 2009 I founded, with colleagues from basic research, the Israel Society for Placenta Research, and served as its first president until 2014. Our society works to provide a forum for Israeli physicians and scientists to present their work and learn from each other, to advance this fascinating field.

In the clinical sphere in recent years my work focuses primarily on 3D/4D ultrasound of the fetal cardiovascular system, including the publication of a textbook, *Fetal Cardiology*, in 2003, and its second revised and expanded edition in 2008. The third edition is presently in preparation, with publication planned for the end of the year. This exciting project draws on the talents of leading experts in their fields from around the world.

In the past several years we have published several articles on 3D/4DUS of the fetus, with particular focus on 3D/4D fetal echocardiography and functional evaluation of the fetal heart, 3D/4D neurosonography, and 3D/4D in other organ systems. In addition, our team has been investigating 3DUS of the female pelvic floor, including the changes observed during parturition and in the context of pelvic floor dysfunction later in life, and the added value of 3DUS in the perioperative work-up of these patients.

In the basic research sphere, the work of our Center for Placenta Research focuses on placental cell function and gene expression in the development of the placenta. In particular we investigated the molecular mechanism of trophoblast invasion in embryo implantation and placental development. Our work explores the implications of gene expression on the development of pathologies of pregnancy, such as preeclampsia, or pathological implantation of the placenta, such as placenta accreta. In collaborative efforts we continue to explore the role of NK cells at the maternal-fetal interface and their role as builders in implantation and placental and fetal development. More recently we have been engaged in studies of the molecular mechanisms involved in the expression of placenta-derived circulating anti-angiogenic factors in the serum of pregnant women and their role in the development of preeclampsia.