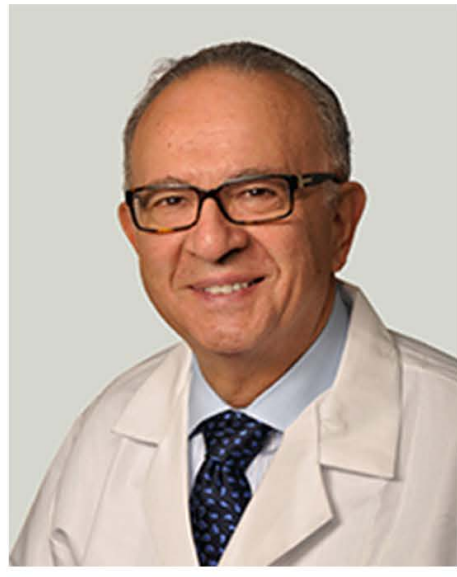


Department of Obstetrics and Gynecology Faculty Researchers



Jacques Abramowicz, MD, Professor — is a maternal-fetal medicine specialist who focuses on the bioeffects and safety of ultrasound, specifically in obstetrics, as well as ultrasound characterization of ovarian tumors. He is also involved in ultrasound quality assurance. Together with Dr. Barua (Rush University), Dr. Abramowicz uses ultrasound to characterize early ovarian cancer in a unique ovarian cancer model: the egg-laying chicken, which is the only animal that develops spontaneous ovarian cancer similar in histology, metastatic spread, and serum antigens to human cancer. He and Dr. Barua have also described the use of ultrasound contrast agents targeted to antigens or factors expressed by the tumor.



Ayman Al-Hendy, MD, PhD, Professor — is a gynecologist and minimally invasive surgeon who focuses on the pathogenesis of gynecologic conditions such as uterine fibroids, endometriosis, and infertility. He uses methods of basic, translational, clinical, and community research to develop novel, non-surgical treatment options for patients. Recently, Dr. Al-Hendy isolated and characterized surface marker-specific stem cells from human and rat fibroid lesions, as well as adjacent at-risk myometrium and normal myometrium. He is utilizing these valuable tools to understand the role of developmental epigenetic reprogramming and early-life adverse environmental exposures in adult-onset uterine fibroids, especially in women of color. Dr. Al-Hendy's team is also developing innovative stem-cell based therapeutics to treat challenging female disorders such as premature ovarian insufficiency, polycystic ovary syndrome, and preeclampsia.



Julie Chor, MD, MPH, Associate Professor — is a gynecologist who specializes in family planning and adolescent and young adult gynecologic care. Dr. Chor's research focuses on understanding barriers that people face to obtaining preventive reproductive healthcare, including family planning care. Her current work focuses on individuals' experiences with pelvic examinations and trauma-responsive care. In the past, she has studied the impact of doulas (nonmedical labor coaches who offer emotional and informational support) on different aspects of pregnancy and developed a lay health worker intervention to link individuals to preventive reproductive healthcare.



Shilpa Iyer, MD, MPH, Assistant Professor — is a gynecologist and female pelvic medicine and reconstructive surgery specialist. Dr. Iyer's research focuses on treatment for overactive bladder, understanding overactive bladder physiology, and patient access to care to treatment for incontinence and prolapse. Her current work focuses on understanding patient's perceptions of treatment and barriers and facilitators to accessing incontinence treatment and subspecialty care. Dr. Iyer is also working on community-based partnerships and behavioral peer programs for urinary and fecal incontinence.



Hilary Kenny, PhD, Research Associate Professor — is co-director of the Ovarian Cancer Research Program. She primarily focuses on the role of the tumor microenvironment in early ovarian cancer metastasis. To examine the molecular mechanisms involved in this process, she developed a 3D organotypic culture system that reconstructs the peritoneal cavity lining *in vitro*. This system was adapted for quantitative high throughput screening and was recently customized to identify compounds that inhibit a rare chemoresistant ovarian cancer stem cell population. This model system also therapeutically synergizes with commonly used chemotherapy agents.



Ernst Lengyel, MD, PhD, Professor — is a gynecologic oncologist and leads the ovarian cancer research lab in the Department of Obstetrics and Gynecology. His research group utilizes molecular biology techniques, animal models, and patient datasets to understand the important steps in ovarian cancer progression and metastasis. This knowledge is then used to understand the interaction of cancer cells within the tumor microenvironment and to develop novel therapies for ovarian cancer patients. He has established a clinicopathologic ovarian cancer database that prospectively collects tissue and serum samples and follows all ovarian cancer patients treated at the University of Chicago.



Stacy Lindau, MD, MA, Professor — in partnership with the communities she serves, Dr. Lindau studies determinants of and interventions to address modifiable problems affecting the health of women and marginalized populations across the life course. Dr. Lindau directs the Program in Integrative Sexual Medicine, including the Bionic Breast Project and Womanlab, and the South Side Health and Vitality Studies, including CommunityRx, MAPSCorps, and Feed1st.



Kunle Odunsi, MD, PhD, Professor — is a gynecologic oncologist with expertise in immunotherapy and vaccine therapy for ovarian cancer. Dr. Odunsi leads research focused on understanding the mechanisms of immune recognition and tolerance in ovarian cancer and translating these findings to clinical immunotherapy trials. He pioneered the development of antigen-specific vaccine therapy and advanced adoptive T-cell immunotherapies to prolong remission rates in women with ovarian cancer. His ongoing research seeks to improve current immunotherapy regimens.



Sarosh Rana, MD, MPH, Professor — is a maternal-fetal medicine specialist whose research focuses on the pathogenesis of preeclampsia, a common hypertensive disorder of pregnancy. She is particularly interested in elucidating the role of angiogenic biomarkers in the prediction of adverse maternal and fetal outcomes and understanding mechanisms of cardiac dysfunction in women with preeclampsia. Dr. Rana conducts national and international translational studies.



Iris Romero, MD, MS, Professor — is a general obstetrician-gynecologist whose research focus is cancer prevention. One of her approaches is to identify anti-cancer effects of medications that are widely used for non-cancer indications. For example, her group has done extensive work on repurposing metformin as a cancer therapeutic. A second focus of her work is identifying and treating high-risk groups through hereditary cancer genetics.