**Stanford Cancer Institute**

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| **Faculty** | | **Title** | **Research Focus** |
| **Anesthesiology, Perioperative & Pain Medicine** | | | |
|  | Sean Mackey | Professor | Sex/gender differences for the effect of opioids on baseline brain structure |
| **Bioengineering** | | | |
|  | Russ Altman | Professor | Examination of sex-differential effects in normal tissue and drug response expression data  *PI 2018 WHSDM seed grant:* Developing a robust baseline gene expression dataset for menstrual cycle variability in blood |
|  | Jennifer Cochran | Professor | Engineered a protein that interferes with breast and ovarian cancer signaling |
|  | Stephen Quake | Professor | Non-invasive diagnosis of fetal aneuploidy in maternal blood; Single cell RNA-seq to examine changes in the human endometrium throughout the menstrual cycle |
| **Biomedical Data Sciences** | | | |
|  | Wing Wong | Professor | *Co-I 2017 WHSDM seed grant:* Leveraging aneuploidy to examine sex chromosome effects in neurodevelopment |
| **Cardiothoracic Surgery** | | | |
|  | Leah Backhus | Associate Professor | Exploration of hormonal status and hormone replacement therapy on the development and outcomes of lung cancer in women |
| **Chemical & Systems Biology** | | | |
|  | Daria Mochly-Rosen | Professor | Reducing reactive aldehyde levels to treat endometriosis-associated pain |
|  | Mary Teruel | Assistant Professor | Molecular mechanisms underlying insulin resistance, diabetes, and obesity |
| **Comparative Medicine** | | | |
|  | Thomas L. Cherpes | Assistant Professor | Immune mechanisms of the female reproductive tract, basic & translational in mice and humans; Hormonal contraception and increased HIV susceptibility; Type 2 immune defense against Chlamydia trachomatis |
| **Dermatology** | | | |
|  | Howard Chang | Professor | *Co-I 2017 WHSDM seed grant:* Investigating sex differences in human plasmacytoid dendritic cell function and regulation |
|  | Kevin Wang | Assistant Professor | Sex differences in melanoma survival  *PI 2015 WHSDM seed grant:* Integrated proteomic and transcriptomic analysis of X and Y sperm |
|  | Jean Tang | Professor | Melanoma in women  *Co-I 2014 WHSDM seed grant:* Effect of cell sex on smooth muscle cells and fibroblasts derived from human embryonic stem cells |
|  | Susan Swetter | Professor | Sex differences in melanoma incidence, survival, and prevention |
| **Developmental Biology** | | | |
|  | Kyle Loh | Assistant Professor | *Co-I 2019 WHSDM seed grant:* Uncovering potential sex differences in male and female human primordial germ cells |
| **Genetics** | | | |
|  | Ami Bhatt | Assistant Professor | Microbiome and disease |
|  | Anne Brunet | Professor | Aging in males and females |
|  | Carlos Bustamante | Professor | Y chromosome evolution; Population genetics |
|  | William Greenleaf | Associate Professor | *Co-I 2018 WHSDM seed grant:* Molecular mechanisms that control sexual differentiation of the mammalian brain |
|  | Billy Li | Associate Professor | RNA editing sex specific |
|  | Mike Snyder | Professor | Male & female metabolomic, methyome, proteome, genome  *Co-I 2018 WHSDM seed grant:* Modeling endothelial dysfunction in preeclampsia using patient-specific iPSCs; *Co-I 2014 seed grant:* Sex differences in adipocyte responses to experimentally-induced weight gain |
|  | Hua Tang | Professor | *Co-I 2014 WHSDM seed grant:* Elucidating the APOE-by-gender interaction in Alzheimer’s disease |
| **Health Research and Policy** | | | |
|  | Mark Cullen | Professor | Sex differences and health outcomes |
|  | Mark Hlatky | Professor | Women's cardiovascular health  *Co-I 2018 WHSDM seed grant:* Plasma proteomic and metabolomic biomarkers associated with breastfeeding and maternal cardiovascular health: a pilot study; *Co-I 2017 seed grant:* The impact of eye disease and visual function on women’s health: defining a Women’s Health Initiative (WHI) population for study |
|  | Allison Kurian | Assistant Professor | Women at high risk for developing breast and gynecologic cancers |
| **Medicine** | | | |
|  | Douglas W. Blayney | Professor | Treatment of breast cancer |
|  | Mark Cullen | Professor | Variations in sex differences in mortality |
|  | Christopher Gardner | Professor | Weight loss diets in women |
|  | Robert Haile | Professor | Sex differences in cancer |
|  | Sigurdis Haraldsdottir | Assistant Professor | Precision medicine in colorectal cancer |
|  | Pamela Kunz | Assistant Professor | Sex differences in colorectal cancer |
|  | Allison Kurian | Associate Professor | Women at high risk for developing breast and gynecologic cancers |
|  | Uri Ladabaum | Professor | Colorectal cancer screening and prevention in women |
|  | David Miklos | Associate Professor | Clinical impact of H-Y alloimmunity |
|  | Beverly Mitchell | Professor | Sex differences in cancer |
|  | Mindie Nguyen | Professor | Sex differences in liver cancer and chronic hepatitis B |
|  | Mark Pegram | Professor | Male breast cancer; Breast cancer diagnosis and treatment in the genomic age |
|  | Judith Prochaska | Associate Professor | Social media support groups for promoting heart health |
|  | David Rehkopf | Associate Professor | Sex and gender differences in health outcomes |
|  | Marcia Stefanick | Professor | Sex and gender differences in medicine; Women’s health across the lifespan |
|  | Melinda Telli | Associate Professor | Understanding breast cancer risk and screening |
|  | Heather Wakelee | Professor | Sex differences in lung cancer |
|  | Joseph C. Wu | Professor | *PI 2018 WHSDM seed grant:* Sex-dependent contribution of endothelial progenitor cells to fibrosis in calcific aortic valve disease  *Co-I 2019 WHSDM seed grant:* Impact of sex hormones on thoracic aortic aneurysm formation of Marfan syndrome; *Co-I 2018 seed grant:* Modeling endothelial dysfunction in preeclampsia using patient-specific iPSCs; *Co-I 2015 seed grant:* Sex differences in ventricular adaptation and recovery in patients with aortic stenosis undergoing transcatheter aortic valve replacement; *Co-I 2015 seed grant:* Global gene expression profiling of the effects of estrogen and testosterone on human cardiomyoctes derived from induced pluripotent stem cells |
|  | Joy Wu | Assistant Professor | Effects of parathyroid hormone on male and female skeletal metastases |
| **Microbiology & Immunology** | | | |
|  | Mark Davis | Professor | Systems analysis of sex differences reveals an immunosuppressive role for testosterone in the response to influenza vaccination |
|  | Juliana Idoyaga | Assistant Professor | *PI 2017 WHSDM seed grant:* Investigating sex differences in human plasmacytoid dentritic cell function and regulation |
|  | Holden Maecker | Professor | Sex differences in the human immune monitoring center |
| **Neurosurgery** | | | |
|  | Summer Han | Assistant Professor | *Co-I 2018 WHSDM seed grant:* X-ploring the sex specific genetic architecture of late-onset Alzheimer’s disease |
|  | Theo D. Palmer | Professor | *PI 2016 WHSDM seed grant:* Examining sex differences in the human and mouse placental transcriptome during a vulnerable neurodevelopmental window |
| **Obstetrics & Gynecology** | | | |
|  | Jonathan Berek | Professor | Immunotherapy and small molecules for gynecologic cancers |
|  | Paul Blumenthal | Professor | Contraception and Abortion services; RCTs; Systematic Reviews; Global health care in Low Resource Settings; Demedicalization and simplification of Family Planning and Abortion programs; Development of New Contraceptive Technologies (microspheres, Apps for self-management); Cervical Cancer Prevention in Low Resource Settings |
|  | Oliver Dorigo | Associate Professor | Immunotherapy and Genomics of Ovarian Cancer |
|  | Lisa Diver | Assistant Professor | Gestational trophoblastic disease |
|  | Erinn Rankin | Assistant Professor | Bone Development; Novel oncogenic pathways in ovarian cancer, FAST radiation |
|  | Nelson Teng | Professor | Ovarian Cancer and Humeral Immune System |
| **Otolaryngology** | | | |
|  | Edward J. Damrose | Professor | Effects that hormones and exogenous factors such as anabolic steroids may exert on the voice and the subsequent changes to the vocal cords that these substances may incur |
|  | Chris Holsinger | Professor | Epidemic of papillary thyroid cancer and the quandary of active surveillance |
|  | Uche Megwalu | Associate Professor | Sociodemographic disparities in head and neck cancer |
|  | C. Kwang Sung | Assistant Professor | Voice outcomes following feminization laryngoplasty in trans women |
| **Pathology** | | | |
|  | Kristin Jensen | Associate Professor | Clinical-pathological studies of breast cancer |
|  | Christina Kong | Professor | Gynecologic pathology  *Co-I 2018 WHSDM seed grant:* Sex differences in lower urinary tract dysfunction after pelvic radiation |
|  | Teri A. Longacre | Professor | Gynecological, breast and gastrointestinal pathology with major emphasis on ovarian cancer and ovarian tumors of low malignant potential; Pathology of familial and hereditary breast-ovarian-GI cancer |
|  | Matt van de Rijn | Professor | Genetic and phenotypic studies of the pathogenesis & subclassification of human breast cancer, employing genetic, tissue array, 3SEQ, and computer learning approaches |
|  | Marius Wernig | Professor | Breast cancer - stem cells and reprogramming into the neural lineage |
|  | Robert West | Professor | Genetic and phenotypic studies of the pathogenesis & subclassification of human breast cancer, employing genetic, tissue array, 3SEQ, and computer learning approaches |
| **Pediatrics** | | | |
|  | Bonnie Halpern-Felsher | Professor (Research) | Understanding and reducing health risk behaviors such as tobacco use, alcohol and marijuana use, risky driving, and risky sexual behavior |
| **Psychiatry and Behavioral Sciences** | | | |
|  | Oxana Palesh | Associate Professor | Intellectural impairement in women with breast cancer; Management of insomnia in breast cancer patients |
|  | David Spiegel | Professor | Group therapy and community support to improve outcomes and mental health for women with breast cancer; Intellectural impairement in women with breast cancer; Management of insomnia in breast cancer patients |
| **Radiation Oncology** | | | |
|  | Kathleen Horst | Associate Professor | Breast cancer; Partial breast irradiation |
|  | Elizabeth Kidd | Assistant Professor | Treatment of gynecologic cancer  *PI 2018 WHSDM seed grant:* Sex differences in lower urinary tract dysfunction after pelvic radiation |
| **Radiology** | | | |
|  | Bruce Daniel | Professor | New techniques for MRI of breast cancer - ultra high spatial resolution MRI and contrast-agent-free detection of breast tumors; MRI-guided interventions, especially MRI-compatible remote manipulation and haptics; Methods of fusing patients and their images to potentially improve breast conserving surgery |
|  | Dominik Fleischmann | Professor | *Co-I 2015 WHSDM seed grant:* Sex differences in ventricular adaptation and recovery in patients with aortic stenosis undergoing transcatheter aortic valve replacement |
|  | Debra M. Ikeda | Professor | Improving the health and lives of women by breast cancer detection and diagnosis using imaging, in both development and testing of new imaging techniques, and transfer of new technology to the clinical arena |
|  | Sharon Pitteri | Associate Professor | *Co-I 2015 WHSDM seed grant:* Integrated proteomic and transcriptomic analysis of X and Y sperm |
| **Surgery** | | | |
|  | Frederick M. Dirbas | Associate Professor | Minimizing the impact of breast cancer from a diagnostic and therapuetic standpoint. |
|  | Geoffrey Gurtner | Professor | Breast reconstruction surgery |
|  | Stefanie S. Jeffrey | Professor | Factors influencing decision-making about the use of chemoprevention in women at increased risk for breast cancer; Molecular analysis of breast cancer; Temsirolimus to reverse androgen insensitivity for castration-resistant prostate cancer |
|  | Michael Longaker | Professor | Cellular and molecular biology of extracellular matrix with specific applications to the differences between fetal and post-natal wound healing |
|  | Samuel So | Professor | Global hepatitis B prevention of pregnant women and mothers |
|  | Irene Wapnir | Professor | Clinical treatment trials in breast cancer, especially locally recurrent breast cancer; improving surgical outcomes mastectomies and breast cancer surgery; exploring the activity of breast sodium-iodide transporter (NIS) in breast cancer; elucidating the potential application of NIS-based therapies |
| **Urology** | | | |
|  | Michael Eisenberg | Associate Professor | Paternal factors and birth outcomes |
|  | Wendy Fantl | Assistant Professor (Research) | Enhance the understanding of high grade serous ovarian cancer at the single cell level |
|  | Linda Shortliffe | Professor, Emerita | Effects of sex hormones and pregnancy on urinary tract physiology to better understand their involvement in renal and urinary tract pathophysiology |
|  | Zijie Sun | Professor, Emeritus | *PI 2014 WHSDM seed grant:* Androgen signaling in alcohol-seeking behavior between genders |