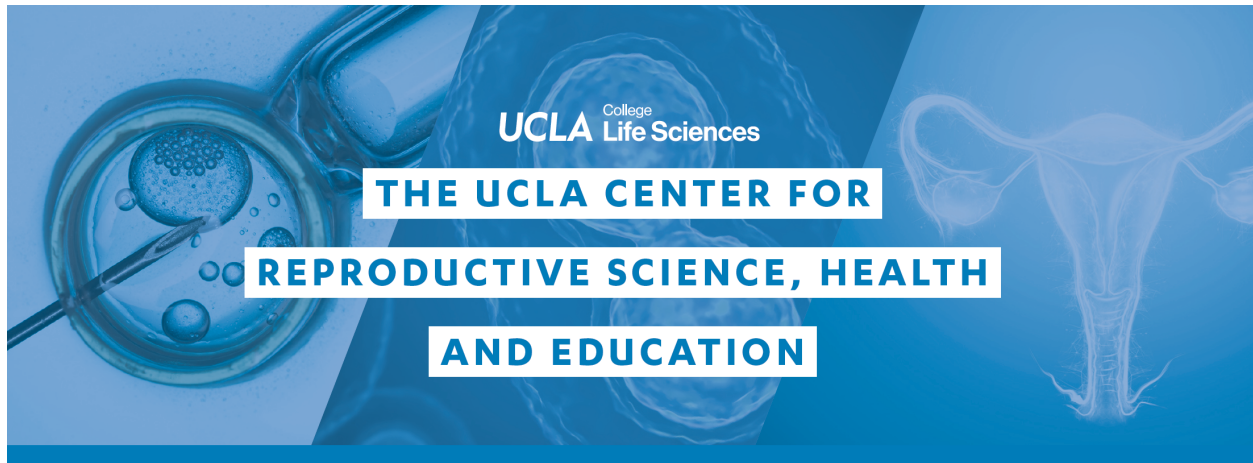


The background of the entire page is a microscopic image of cells. The cells are stained with a blue and green fluorescent dye, highlighting their internal structures. The cells are of various sizes and are scattered across the frame. The overall color palette is dominated by deep blues and bright greens, creating a scientific and biological atmosphere.

Beginnings

2023 Annual Report for the UCLA Center
for Reproductive Science, Health and
Education



Directors Message

If there was ever a field of scientific enterprise that cannot be allowed to progress in the vacuum of the laboratory or closed scientific meetings, it is the field of reproductive science. This is because reproductive science is the discipline with the most promise to improve a person's reproductive health and the health and wellness of future generations. Reproductive health has always been a part of national policy discussion. The *Dobbs v Jackson Women's Health Organization* landmark decision of the US Supreme Court revealed critical knowledge gaps in the science of reproductive health and wellness by the US public stemming from an educational system that reserves training and instruction in this field to students with a bachelor's degree. Changing this requires creating a community of scientists and educators dedicated to reproductive and sexual health research and training at an earlier stage in the educational pipeline, an infrastructure to support community engagement of scientists with each other and the general public, and the resources to build a critical mass of scientists with a common mission of improving reproductive health for all.



The UCLA Center for Reproductive Science, Health and Education launched in February 2023 with a public symposium hosted by the Dean of Life Sciences Tracy Johnson PhD. Attended by more than 140 people, key members of the center presented their research including author and center Co-Director Professor Hannah Landecker PhD, who talked about reproductive justice and the importance of Life Scientists, physicians and social scientists working collaboratively on key scientific questions in reproductive health. We also heard from reproductive toxicologist Professor Patrick Allard PhD, who researchers the impact of environmental exposure on reproductive health and the health of future generations. Feedback was impressive, with major

themes including the need for increased education and public awareness of research in the reproductive sciences and the influence of reproductive justice on reproductive science; activities the center aims to prioritize over the coming years.

Identifying researchers at UCLA who focus on the science of reproductive health and wellness has been a major priority during our first year. To achieve this, we held meetings with faculty, fellows, trainees and students. We also created the first of a kind UCLA Reproductive Science and Health fellowship and grant competition with generous support from the Dr. Daniel Dumesic, MD of the OBGYN Women's Reproductive Health and Science Research Program at UCLA. Below, you can read about the exciting and innovative research projects supported by the Center, and read about Dr Dumesic and his motivation for supporting early career investigators in women's reproductive health. In May we established our internal scientific advisory board composed of Department Chairs from Molecular Cell and Developmental Biology, Integrated Biology and Physiology, Psychology, Institute for Society and Genetics, Microbiology, Immunology and Genetics and Ecology and Evolutionary Biology in the Division of Life Sciences. The diversity of our advisory board reflects our commitment to building a comprehensive and inclusive center.

Finally, we capped off our first year by hiring the Center's inaugural Associate Director, Stephanie Kiesow-Edoh. An alumnus of UCLA, Stephanie received her MA from the Department of Psychology, with her thesis work focused on the benefits of a probiotic maternal diet on infant outcomes. Following this, she pursued an MPH in the UCLA Fielding School of Public Health, focusing on public health strategies to reduce cesarian section in community hospitals that serve the poor. After graduating and motivated by the magnitude of reproductive health issues in the US, Stephanie sought creative opportunities to impact reproductive science from designing and teaching courses on reproductive health and women's empowerment to teaching newborn care courses at a reproductive health center in Los Angeles, to working alongside community members as a birth and postpartum doula. Each of these different opportunities have provided Stephanie with the valuable hands-on experience and insights to lead the educational and outreach missions of the Center. We are delighted to welcome her back to UCLA in this important new role.

It has been an exciting first year at the Center, and look forward to providing you with future updates as we focus on creating our educational pipeline, building partnerships with the Los Angeles community, and performing innovative research that can lead to new procedures and biomarkers for improving reproductive health.

With best wishes,



Amander Clark PhD
Director, UCLA Center for Reproductive Science, Health and Education
Professor, Molecular Cell and Developmental Biology.

Meet Our 2023 Fellowship Winners

Following competitive review, our fellowship winners were awarded \$5,000 each to use towards their research and/or travel to a scientific meeting.



Ashley Appleton

Medical Student, DGSOM
Department of Urology
Mentors: Jesse Mills MD and Sriram Eleswarapu MD PhD

Ashley's research is focused on creating a noninvasive diagnostic tool for fertility status based on semen microbiome composition.



Joni Brown

Graduate Student, Department of Psychology
Mentor: Professor Christine Dunkel Schetter PhD

Joni's work is focused on understanding the relationship between sexual socialization and contraceptive use amongst adolescent girls and black women.



Max Levinson

Graduate Student, Cell and Developmental Biology
Institute for Society and Genetics
Mentor: Professor Patrick Allard PhD.

Max's project examines ethanol consumption on the germline epigenome. This information could be used to identify the molecular basis for how alcohol consumption in pregnancy impacts child health.



Sissy Peng (Female Reproductive Health and Science Fellowship)

Doctoral Student, Department of Communications
Fellow of the Center for Scholars and Storytellers.
Mentor: Professor Martie G Haselton PhD

Sissy seeks to understand menstrual stigma on social media, and how this information can be used to inform future public health interventions.



Olivia Scott

Medical Student, DGSOM
Department of Obstetrics and Gynecology
Mentor: Professor Yalda Afshar MD

Olivia aims to create a tool for early diagnosis of Placental Accreta Spectrum Disorders. This is a potentially life-threatening emergency that occurs due to pathological invasion of the placenta into the uterus.



Vida Zhang PhD (Female Reproductive Health and Science Fellowship)
Postdoctoral fellow, DGSOM
Center for Iron Disorders
Mentor: Elizabeta Nemeth PhD

Vida's research is focused on iron disorders during pregnancy. Her work may lead to a novel diagnostic tool that can be used to ensure healthy iron levels in maternal blood during pregnancy.

Meet Our 2023 Grant Winners

Following competitive review, our fellowship winners were awarded \$1,000 each to use towards their research and/or travel to a scientific meeting.



Charlotte Abel
Graduate Student, Department of Sociology
Mentor: Stefan Timmermans PhD

Charlotte is conducting an ethnographic study of the medical management of pregnant women with psychiatric diagnoses. The goal of this study is to examine how patient autonomy is balanced with the interests of the fetus in order to allow for the empowerment of patients.



Tommy Jiang
Medical Student, DGSOM
Department of Urology
Mentor: Sriram Eleswarapu MD PhD

Tommy's work aims to identify less invasive predictive factors that can facilitate patient screening for male-factor infertility.



Neema Pithia MD

Neonatology Fellow, DGSOM
Department of Pediatrics- Neonatology
Mentor: Suhas Kallapur MD

Neema aims to identify anti-inflammatory factors that could reduce maternal-fetal morbidity and pre-term birth following intra-uterine infection.



Sonia Raghuram

Medical Student
Department of Obstetrics and Gynecology
Mentor: Tina Nguyen MD and Aparna Sridhar MD MPH

Sonia is interested in understanding the relationship between menstrual cycle hormones and muscle strength in female athletes. Outcomes from this work could better define windows of peak performance.



Isaias Roberson

Graduate Student, Cell and Developmental Biology
Department of Molecular Cell and Developmental Biology
Mentor: Amander Clark PhD

Isaias uses stem cells to build ovarian tissue in the laboratory. Isaias' work can be used as a diagnostic screening tool to uncover the cell and molecular basis of reproductive disorders in people with ovaries.



Joanne Sarsam

Undergraduate student,
Department of Obstetrics and Gynecology and Division of Life Sciences
Mentor: Professor Yalda Afshar MD

Joanne aims to use echocardiograms recorded from fetal and postnatal babies to create 3D models as an approach to better understand the congenital heart disease coarctation of the aorta.



Chelsea Stewart MD

T32 Patient Centered Outcomes Research Fellow, DGSOM
Department of Obstetrics and Gynecology and Urology
Mentor: Beth Karlan MD

Chelsea's project is focused on the intersection of genetic counselling and fertility preservation for women diagnosed as carrying an ovarian cancer-causing mutation.

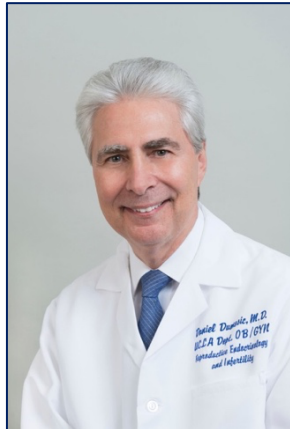


Alec Szlachta-McGinn MD

Urogynecology Fellow, DGSOM
Department of Obstetrics and Gynecology
Mentor: Anne Lenore-Ackerman MD PhD

Alec is focused on interstitial cystitis/bladder pain syndrome, a chronic debilitating disease linked to sexual dysfunction. Alec's work seeks to understand the role of fungal burden in this disease.

The Center is grateful to Dr Daniel Dumesic, MD for his support of the Female Reproductive Health and Science Research Fellowships.



Daniel Dumesic, MD is Professor of Reproductive Endocrinology and Infertility in the Department of Obstetrics and Gynecology at UCLA. His clinical/research interests include female infertility, *in vitro* fertilization and polycystic ovary syndrome. As a clinician-scientist, he believes that early career development in bench-to-bedside translational research by students interested in biomedical careers is crucial for improving reproductive health and advancing the well-being of society. In 2023, he worked closely with Dr. Amander Clark to help develop Female Reproductive Health and Science Research Fellowships as part of the UCLA Center for Reproductive Science, Health and Education. The goal of these fellowships is to assist young investigators at UCLA in their scientific research into the understanding of women's reproductive health.

If you are interested in learning more about the activities of the Center, getting involved in the science, education or public outreach of the Center, or supporting initiatives that you care about where science and education can make a difference, we welcome you to get in touch with us.

<https://reprohealth.ucla.edu> or crshe@ucla.edu