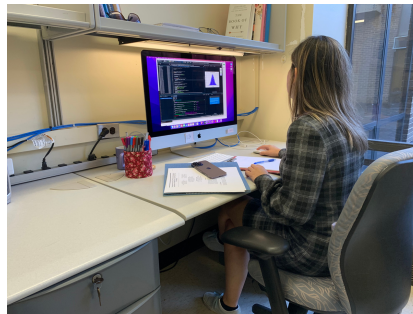


Department of Obstetrics, Gynecology and Reproductive Medicine



**Message from the
Vice Chairman**

Mission

**Staff & Affiliated
Faculty**

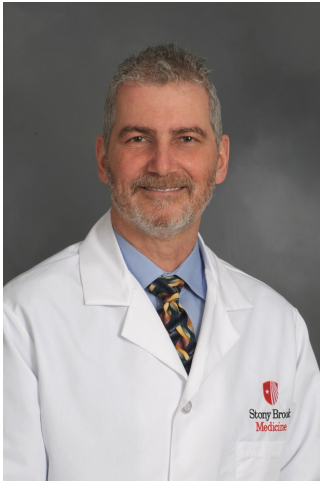
**Publications,
Presentations, &
Outreach**

**Newly Approved
Studies**

Funding Activity

**DIVISION OF RESEARCH ANNUAL REPORT
2021-2022**

MESSAGE FROM THE VICE CHAIRMAN



Michael Pearl, MD, FACOG, FACS, FAAHPM

*Professor, Division of Gynecological Oncology
Vice Chairman, Research and Faculty Development
Director of Women's Cancer Services, Cancer Center
Medical Director, Cancer Center Clinical Trials Office*

Recently, our department faculty had the opportunity to have a conversation with Dr. Peter Igarashi, the new Dean of the Renaissance School of Medicine (RSOM). Dr. Igarashi, a nationally-recognized physician scientist, joined the RSOM from the University of Minnesota Medical School. Dr. Igarashi elucidated several research-related themes during the conversation: 1) community participation in research (also known as participatory health research), 2) interdisciplinary research and 3) interprofessional education.

Community Participation in Research

"Research is not a value-neutral exercise, and a high level of engagement can facilitate richer data with greater social utility" (Minkler M. Using Participatory Action Research to build Healthy Communities. *Public Health Reports*. 2000;115(2-3):191–197).

One mechanism by which to improve the level of engagement is increasing community participation.

"Participatory health research (PHR) is a methodological orientation which aims to achieve equitable community participation in all aspects of the research process. It is a group of approaches, including participatory action research (PAR) and community-based participatory action research (CBPR) for health, in which members of the community being studied participate in selecting the research topic, designing and implementing the research and analyzing and acting on the results. Participation in the research process is thought to have benefits for community members, for example to allow them to build capacity and become empowered to improve their health and shape the research agenda. Community participation is also thought to strengthen the research methodology, enhance its ethical rigour and cultural sensitivity and increase the likelihood that results will be translated into actions which benefit the community being studied." [Michelle Brear, Karin Hammarberg, Jane Fisher. Community participation in research from resource-constrained countries: a scoping review. *Health Promotion International*, Volume 33, Issue 4, August 2018, Pages 723–733, <https://doi.org/10.1093/heapro/dax010>]

Within our department, we have established Diversity, Equity & Inclusion (DEI), Underrepresented Minorities, and LBGQT Committees under the leadership of a newly appointed Vice Chair. According to the position description, "The Vice Chair is empowered to create recommendations for addressing and eliminating inequities in sexual and reproductive health across the lifespan, utilizing community-led and informed recommendations as a model." In addition, with the establishment of our philanthropy-funded Polycystic Ovarian Syndrome Institute, we are actively seeking community participation in the research and clinical activities of the Institute.

As always, the devil is in the details. Community participation in research (aka, participatory health research) is in its infancy at RSOM and it is clear that it will take substantial thought, time, effort and changes in our departmental and institutional processes to develop meaningful community participation in research.

Interdisciplinary Research

Dr. Igarashi's emphasis on interdisciplinary research echoes the stated goal of Stony Brook University (SBU) President, Dr. Maurie McMinnis. Dr. McMinnis has committed SBU to "broadening its research mission, providing more support, creating opportunities for researchers beyond the STEM disciplines, and fostering more effective collaboration on our campuses and with partners in our community." (<https://www.stonybrook.edu/commcms/financial-sustainability/conversations>). She established the Research & Innovation Task Force to focus "on identifying new opportunities and areas for growth, more effective alignment of resources, infrastructure and new ways to encourage interdisciplinary collaboration and innovation." (<https://www.stonybrook.edu/commcms/financial-sustainability/taskforces/research-and-innovation/index.php>).

As I wrote in my report in 2016, reflected in the Department of Obstetrics, Gynecology & Reproductive Medicine mission, we are "committed to a multidisciplinary team approach to women's healthcare, clinical education and research. Our mission is to add value to our hospital, its medical school and our community for the benefit of our patients. We strive to deliver compassionate patient care, educational excellence and to create and expand knowledge of women's health through basic and clinical research.

The breadth and depth of advances in medical knowledge continue to expand at an ever-increasing pace. In academic departments such as ours, scientific researchers and clinicians are able to closely collaborate. On one hand, this collaboration allows clinicians to guide researchers towards addressing important clinical questions; in many circumstances, it is a question raised by a clinician about patient care that leads to a treatment breakthrough. On the other hand, this collaboration allows researchers to rapidly bring innovative treatment to the clinicians for patient care. Our multidisciplinary research teams strive to create and expand knowledge of women's health through basic and clinical research and to bring the fruits of scientific discovery to our patients.

We have numerous, well-established and productive interdisciplinary research projects with other departments, including Psychiatry, Medicine and Physiology & Biophysics in the RSOM, Psychology, Chemistry, Electrical Engineering and Computer Science on the West Campus, and within Engineering Driven Medicine. As examples, but not as a comprehensive list:

1) Drs. J. Gerald Quirk and Cassandra Heiselman (Maternal-Fetal Medicine) are in the fourth year of their NIH-funded RO1, "Predictive Analytics for Monitoring the Well-Being of Fetuses", with Drs. Petar Djuric (Electrical Engineering), IV Ramakrishnan (Computer Science), Christian Luhmann (Psychology) and Paul Fodor (Computer Science).

2) Dr. Theofano Orfanelli (Gynecologic Oncology) is collaborating with Dr. Eszter Boros (Chemistry) on a "Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer". Dr. Orfanelli is also collaborating with Dr. Mehdi Damaghi (Pathology) on a "Multiomics Approach to Overcome Acquired Resistance to poly ADP ribose polymerase (PARP) Inhibitors in Ovarian Cancer."

3) Drs. Heidi Preis (Psychology), Marci Lobel (Psychology) and Brittain Mahaffey (Psychiatry) received funding through an urgent competitive revision (NOSI) to Dr. Preis' current NIH-funded R21: "Evaluation and Validation of a Novel Instrument to Assess the Psychosocial and Drug History Backgrounds of Pregnant Women with or without Opioid Use Disorder". This is an ongoing 2-year study by faculty in Obstetrics and Maternal Fetal Medicine, especially Dr. Heiselman. The funded supplement is "The Stony Brook COVID-19 Pregnancy Experiences (SB-COPE) Study: Effects of Stress and Social Determinants of Health on Maternal Physical and Mental Health Morbidities During the COVID-19 Pandemic".

4) Drs. David Garry (Maternal-Fetal Medicine) and Maricedes Acosta (Physiology & Biophysics) are collaborating to investigate the "Role of Extracellular Vesicles in Prenatal Opioid Exposure".

Interprofessional Education

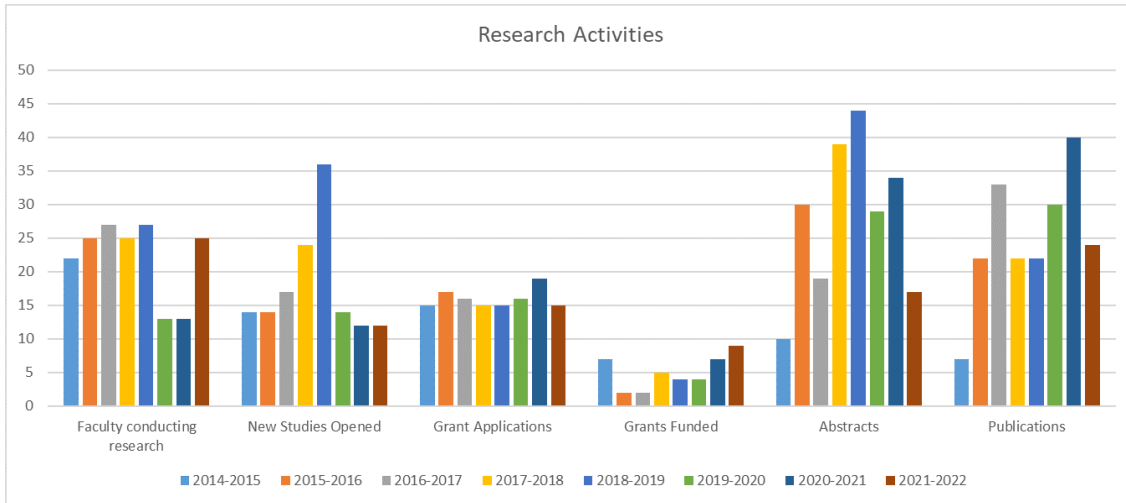
Interprofessional education "refers to occasions when students from two or more professions in health and social care learn together during all or part of their professional training with the object of cultivating collaborative practice for providing client- or patient-centered health care."

[https://en.wikipedia.org/wiki/Interprofessional_education]. Globally, the World Health Organization published the Framework for Action on Interprofessional Education and Collaborative Practice in 2010 to provide "strategies and ideas that can help health policymakers implement the elements of interprofessional education and collaborative practice that will be most beneficial in their own jurisdiction." [World Health Organization, 2010. Framework for Action on Interprofessional Education and Collaborative Practice. Geneva: WHO Press] Interprofessional education (IPE) is an increasingly common component of medical education within the US.

Two of our faculty, Drs. Kimberly Herrera and Cassandra Heiselman, applied for the Josiah Macy, Jr. Foundation Catalyst Award "intended to support interventions in the clinical learning environment that enhance graduate medical education and improve the experience of learners". Their proposed project, "Improving Education of Opioid Use Disorder in Pregnancy Using a Multimodal Educational Tool", creates a "curriculum surrounding three topics: stigma, screening the power of language; withdrawal and detox during pregnancy; and multimodal pain control intra- and postpartum; in order to improve communication with and delivery of prenatal care for these persons. Through our multiprong interactive learning modules simulation, we hope to improve patient-provider communication, confidence and empathy, while decreasing overall stigma and burnout. This will hopefully improve relationship-based care, patient and provider satisfaction, and result in better maternal and neonatal outcomes in persons with OUD. Our expanded goals would be to disseminate the online learning modules and train other institutions with our simulation practice to expand the impact of this curriculum beyond our own networks."

In summary, our department's research activities align closely with Dr. Igarashi's three themes of community participation in research, interdisciplinary research and interprofessional education. Further integration of these themes, with the commitment of the RSOM, will substantially improve our research program.

As you can see from the data below, we remained productive with a return to our pre-Covid number of faculty participating in research and an increase in funded grants. We continue to focus on solutions, rather than bemoan the challenges. With the support of Stony Brook University and Renaissance School of Medicine's new leadership, the unwavering support of our chairman, Dr. Griffin, and the Division of Research's staff, we remain optimistic about our research program.



2021-2022 Data

Grant applications: 15

Publications: 24

Abstracts: 17

New studies opened: 12

Faculty conducting research: 25

Grants funded: 9

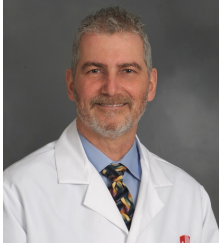
MISSION

The Department of Obstetrics, Gynecology and Reproductive Medicine recognizes the importance of research by our faculty members, residents and students. One of our core values, as part of the academic mission of the department, is to establish an atmosphere of respect and excitement for research. Our commitment to multidisciplinary team-based women's healthcare is a key component of our efforts to create and expand knowledge and improve the quality of our patients' lives through excellent basic, translational, and clinical research. The Department's mission to foster clinical investigation and translational research amongst the faculty is supported by an established and rapidly growing Division of Research.

Critical to the success of our endeavor is the integration of the pillars of academic medicine: clinical care, education, and research. Excellence in one of these domains is always dependent upon success in the other two. To this end, the Division of Research is dedicated to supporting our faculty members, residents and students in a variety of ways. A few of these, all part of an ever-expanding list, include:

- Aiding our investigators in developing their research interests
- Assisting researchers in the design and development of their projects
- Providing assistance with regulatory compliance
- Helping to identify and secure funding for research projects
- Providing mechanisms to find collaborators in other departments
- Creating opportunities to meet with other investigators to discuss common interests
- Fostering inter-departmental and inter-institutional collaborative research efforts
- Hosting regular research meetings for faculty and staff where projects can be discussed

STAFF



Michael Pearl, MD | Vice-Chair for Research and Faculty Development

Dr. Michael Pearl is a Professor, Division of Gynecological Oncology; the Vice Chairman, ObGyn Research and Faculty Development; the Director of Women's Cancer Services, Cancer Center and the Medical Director, Cancer Center Clinical Trials Office. He is the Principal Investigator at Stony Brook Medicine for NRG Oncology, a National Cancer Institute-funded cooperative research group dedicated to promoting excellence in the quality and integrity of scientific research. As Vice-Chair, Dr. Pearl oversees departmental research projects and advises faculty and staff on related matters.



Elizabeth Roemer, MA | Associate Director of Research

Elizabeth Roemer is the primary point-of-contact between the Division of Research and the SUNY Research Foundation offices and the Stony Brook Office of Vice President for Research. She facilitates interaction with academic departments on and off campus and aids faculty and residents in developing their research interests. In addition, Ms. Roemer identifies and tracks funding opportunities and works with faculty to develop strategies and proposals for grant and clinical research funding. She is the Division's key resource to obtain auxiliary services and assistance for research enterprises.



Deidre Lee, MHS | Senior Research Support Specialist

Deidre Lee provides support for faculty and residents in their research studies and coordinates industry-sponsored clinical trials. In this role, she assists with preparation and submission of regulatory documents, consent and enrollment of eligible patients as study participants, and data collection and management. Ms. Lee also manages IRB submissions and ensures appropriate regulations are being followed throughout the course of studies. Additionally, she assists with building databases in REDCap, grant writing, chart reviews, and is responsible for managing undergraduate and medical student research assistants.

AFFILIATED FACULTY



Marci Lobel, PhD | Director, Stress and Reproduction (STAR) Lab, Professor, Department of Psychology and Department of Obstetrics, Gynecology and Reproductive Medicine

Marci Lobel, Ph.D. holds a primary appointment as Professor of Psychology. She is Director of the Stony Brook Stress and Reproduction (STAR) Lab which focuses on perinatal stress, coping, and health behaviors that affect maternal and child health. She collaborates with colleagues in the US and Europe, is an author of more than 300 articles and conference presentations, and is the recipient of national and university awards for her research, service, teaching, and mentorship. She directs the International COVID-19 Pregnancy Experiences (I-COPE) Study and is Co-Investigator of a project to develop the Profile for Maternal & Obstetric Treatment Effectiveness (PROMOTE) prenatal vulnerability screening tool.



James E. Swain, MD, PhD, FRCPC | Associate Professor of Psychiatry, Behavioral Health and Psychology

Dr. Swain is cross appointed to Obstetrics, Gynecology & Reproductive Medicine at Stony Brook Medicine, where he serves as perinatal mental health consultant to maternal fetal medicine. He is Principal Investigator of National Institutes of Health research projects on Maternal Brain-Behavior Adaptations and Interventions in the Early Postpartum. Currently a fellow member of the American College of Neuropsychopharmacology, Dr. Swain has authored over one hundred peer-reviewed articles and book chapters on the neuroscience of parenting, stress, and development.



Heidi Preis, MSW, PhD | Research Scientist, Department of Psychology and Department of Obstetrics, Gynecology and Reproductive Medicine

Dr. Heidi Preis received her PhD in Social Work in 2018 and conducted a two-year postdoctoral fellowship at the Stress and Reproduction Laboratory at Stony Brook University. She is currently a Research Scientist in the Department of Psychology and an Assistant Research Professor in the Department of Obstetrics, Gynecology and Reproductive Medicine. She is the PI of two federally and institutionally funded research project. The SB-COPE Study which follows a large national cohort of mothers who were pregnant during the COVID-19 pandemic and their children and the PROMOTE project to improve screening for psychosocial vulnerabilities and substance use in prenatal care.

PUBLICATIONS, PRESENTATIONS & OUTREACH

July 2021

WBAB 102.3 Radio Interview: The HPV Vaccine, July 29th 2021 (Gabrielle Gossner, Michelle Gruttadauria, Megan Gorman)

Abuzeid O, Moustafa ASZ, Abuzeid MI. Role of Hysteroscopy in Diagnosis of Incomplete Uterine Septum and Significant Arcuate Uterine Anomaly In: Advances in Minimally Invasive Gynecologic Reproductive Surgery. Editor: Botros Rizk, Mostafa I. Abuzeid, Ibrahim Alkatout, Liselotte Mettler. CRC Francis & Taylor Group, 2021 Jul 20, Chapter 3, p. 14-23. Book Chapter

Abuzeid O, Heiselman C, Fuchs A, La Chance J, **Herrera K, Garry D**, Abuzeid M. P-746 Obstetric outcomes of singleton birth after hysteroscopic division of septate uterus, Human Reproduction, Volume 36, Issue Supplement_1, July 2021, deab128.034, <https://doi.org/10.1093/humrep/deab128.034> Poster

Kim SK, Tsui ST, Yang J, Zhang X, **Griffin T**, Pryor AD, **Burke WM**. The Risk of Female-specific Cancer After Bariatric Surgery in the State of New York. Gynecologic Oncology. 2020 Jul 1;158(1):e9. DOI: <https://doi.org/10.1016/j.ygyno.2020.04.020> Poster

Raju R, **Abuzeid OM**, Abuzeid MI. Subtle Fallopian Tube Pathology: Diagnosis and Surgical Treatment In: Advances in Minimally Invasive Gynecologic Reproductive Surgery. Editor: Botros Rizk, Mostafa I. Abuzeid, Ibrahim Alkatout, Liselotte Mettler. CRC Francis & Taylor Group, 2021 Jul 20, Chapter 20, p. 192-209. Book Chapter

August 2021

Ajirak M, **Heiselman C, Fuchs A, Heiligenstein M, Herrera K, Garretto D**, Djurić PM. Bayesian Nonparametric Dimensionality Reduction of Categorical Data for Predicting Severity of COVID-19 in Pregnant Women. In 2021 29th European Signal Processing Conference (EUSIPCO) 2021 Aug 23 (pp. 1980-1984). IEEE. DOI: <https://doi.org/10.23919/EUSIPCO54536.2021.9616021> Meeting Presentation

Gruttadauria M, Pollard J, **Kim S, Lian X**. Streptococcal toxic shock syndrome in the setting of recent gynecologic surgery: A case report. Case Rep Women's Health. 2021 Aug 20;32:e00352. PMID: 34466390; PMCID: PMC8385388. DOI: <https://doi.org/10.1016/j.crwh.2021.e00352>

Tsui ST, Yang J, Zhang X, Spaniolas K, **Kim S, Griffin T, Burke WM**, Pryor AD. The risk of female-specific cancer after bariatric surgery in the state of New York. Surgical Endoscopy. 2021 Aug;35(8):4267-74. PMID: 32851468. DOI: [10.1007/s00464-020-07915-8](https://doi.org/10.1007/s00464-020-07915-8)

Yang L, Ajirak M, **Heiselman C, Quirk JG**, Djurić PM. Unsupervised Detection of Anomalies in Fetal Heart Rate Tracings using Phase Space Reconstruction. In 2021 29th European Signal Processing Conference (EUSIPCO) 2021 Aug 23 (pp. 1321-1325). IEEE. <https://doi.org/10.23919/EUSIPCO54536.2021.9616264> Meeting Presentation

September 2021

Gruttadauria MD, M., Gorman MD, M., Oak MD, C., Hasan MD, R., Griffin MD, T., Burke MD, W., Ndubisi MD, C. Access Gyn: A Community Outreach Program Aiming to Promote Cervical Cancer Screening and Preventative Gynecologic Care to the Uninsured Population of Suffolk County (2021)- ACOG District II Virtual Conference Poster

Gruttadauria MD, M., Oh BA, K., Tiwari BS, M., Milone MD, G., Kowalska MD, D. Implementation of Video Education to Improve Patient Satisfaction in Colposcopy; ACOG District II Virtual Conference. Poster

Sheen JJ, Reimers L, Govindappagari S, Ngai IM, **Garretto D**, Donepudi R, Tropper P, Goffman D, Dayal AK, Bernstein PS. A SWIFT Method for Handing Off Obstetrical Patients on the Labor Floor. Journal of patient safety. 2021 Sep 1;17(6):437-44. <https://doi.org/10.1097/pts.0000000000000377>

PUBLICATIONS, PRESENTATIONS & OUTREACH

October 2021

Ajirak M, Heiselman C, Quirk JG, Djuric PM. BOOST ENSEMBLE LEARNING FOR CLASSIFICATION OF CTG SIGNALS. ResearchGate.net Oct 2021

<https://www.researchgate.net/publication/355351389> Boost Ensemble Learning for Classification of CTG Signals

Doulaveris G, Orfanelli T, Renz M, Barlow S, Kaplan J, Fridman D, Dar P, Rotenberg O. Obesity is an independent risk factor for endometrial polyps and surgical interventions in women with postmenopausal bleeding. 31st World Congress on Ultrasound in Obstetrics and Gynecology, October 2021 (Virtual) Oral presentation

Mena MD, S., Gruttadauria MD, M., Factor MD, M., DeLemos DO, M., Spinal Anesthesia in Suspected Brugada Syndrome. ASA Annual Meeting October, 2021. Meeting Presentation

Staszewski C, Herrera KM, Kertowidjojo E, Ly V, Iovino N, Garretto D, Kaplan C, Persad MD, Garry DJ. Histological Changes Observed in Placentas Exposed to Medication-Assisted Treatment. Journal of Pregnancy. 2021 Oct 7;2021.

November 2021

Gruttadauria M, Liu YX, Griffin T. Laparoscopic Hysterectomy with Large Posterior or Upper Cervical Myomas. Journal of Minimally Invasive Gynecology. AAGL's 50th Global Congress on MIGS. 2021 Nov 1;28(11):S118.

<https://doi.org/10.1016/j.jmig.2021.09.187> Poster

Gruttadauria M, Huber A, Kim SK, Blaber JM, Burke WM. Robotic Assisted Laparoscopic Wedge Resection of a Large Cornual Ectopic Pregnancy. Journal of Minimally Invasive Gynecology. AAGL's 50th Global Congress on MIGS 2021 Nov 1;28(11):S41. <https://doi.org/10.1016/j.jmig.2021.09.394> Meeting Presentation

Liu YX, Kim SK, Oak C, Oh K, Burke WM. A Retrospective Cohort Study on the Effects of Postoperative Phone Calls after Benign Gynecologic Surgery. Journal of Minimally Invasive Gynecology. 2021 Nov 1;28(11):S85. <https://doi.org/10.1016/j.jmig.2021.09.675> Meeting Presentation

Orfanelli T, Giannopoulos S, Zografos E, Athanasiou A, Bongiovanni AM, Doulaveris G, Moo TA, LaPolla D, Bakoyiannis CN, Theodoropoulos GE, Zografos GC. Alterations of the 70 kDa heat shock protein (HSP70) and sequestosome-1 (p62) in women with breast cancer. Scientific reports. 2021 Nov 15;11(1):1-6. PMID: 34782665, <https://doi.org/10.1038/s41598-021-01683-8>

Preis H, Djurić PM, Ajirak M, Mane V, Garry DJ, Garretto D, Herrera K, Heiselman C, Marci L. Missingness patterns in a comprehensive instrument identifying psychosocial and substance use risk in antenatal care. Journal of Reproductive and Infant Psychology. 2021 Nov 19:1-5. <https://doi.org/10.1080/02646838.2021.2004302>

December 2021

Plair A, Smith W, Hines K, Schachar J, Parker-Autry C, Matthews C. Gluteal and Posterior Thigh Pain From a Suture Compared With an Anchor-Based Device in Patients Undergoing Sacrospinous Ligament Fixation: A Randomized Controlled Trial. Obstetrics & Gynecology. 2021 Dec 2:10-97. PMID: 34856573 DOI: [10.1097/AOG.0000000000004629](https://doi.org/10.1097/AOG.0000000000004629)

Plair A, Evans RJ, Langefeld CD, Matthews CA, Badlani G, Walker SJ. Anesthetic Bladder Capacity is a Clinical Biomarker for Interstitial Cystitis/Bladder Pain Syndrome Subtypes. Urology. 2021 Dec 1;158:74-80. <https://doi.org/10.1016/j.urology.2021.07.009>

PUBLICATIONS, PRESENTATIONS & OUTREACH

January 2022

Abuzeid O, Heiselman C, Fuchs A, Nouredine LR, Heiligenstein MA, Fassler R, Korgaonkar-Cherala C, Iovino N, Garry D, Garretto D, Herrera K. Factors that affect opioid use for postpartum pain control in women with opioid use disorder. American Journal of Obstetrics & Gynecology. 2022 Jan 1;226(1):S133-4. DOI:<https://doi.org/10.1016/j.ajog.2021.11.235> Poster

Doulaveris G, Orfanelli T, Barlow S, Rotenberg O. Differences between proximal and distal endometrial monolayer thickness in women aged over 50 years undergoing saline infusion sonohysterography. Acta Radiologica. 2022 Jan 13;02841851211072278. <https://doi.org/10.1177/02841851211072278> Paper

Heiligenstein MA, Fuchs A, Nouredine LR, Fassler R, Abuzeid O, Korgaonkar-Cherala C, Iovino N, Herrera K, Garry D, Garretto D, Heiselman C. Risk Factors for Severe Pain Scores after Delivery in Women with Opioid Use Disorder. American Journal of Obstetrics & Gynecology. 2022 Jan 1;226(1):S535. DOI:<https://doi.org/10.1016/j.ajog.2021.11.884> Poster

Heiselman C, Fuchs A, Heiligenstein MA, Nouredine LR, Fassler R, Abuzeid O, Korgaonkar-Cherala C, Iovino N, Herrera K, Garretto D, Garry D. Discordance between maternal and newborn drug screening at delivery. American Journal of Obstetrics & Gynecology. 2022 Jan 1;226(1):S37. DOI:<https://doi.org/10.1016/j.ajog.2021.11.057> Oral Presentation

Nouredine LR, Fuchs A, Heiligenstein MA, Fassler R, Abuzeid O, Korgaonkar-Cherala C, Iovino N, Herrera K, Garry D, Garretto D, Heiselman C. Predictors of Positive Edinburgh Postnatal Depression Scale in Opioid Use Disorder. American Journal of Obstetrics & Gynecology. 2022 Jan 1;226(1):S575-6. DOI:<https://doi.org/10.1016/j.ajog.2021.11.953> Poster

Nouredine LR, Parikh B, Saliba E, Monaco GL, Herrera K, Heiselman C. How Comprehensive Are Websites of Maternal Fetal Medicine Programs for Prospective Fellows?. American Journal of Obstetrics & Gynecology. 2022 Jan 1;226(1):S140. DOI:<https://doi.org/10.1016/j.ajog.2021.11.246> Poster

February 2022

Hussain FN, Parikh B, Shenoy MS, Al-Ibraheemi Z, Lewis D. A case report of mirror syndrome in monochorionic diamniotic twins presenting as maternal hyponatremia and edema. Case Reports Women's Health. 2022 Feb; 34:e00401. <https://doi.org/10.1016/j.crwh.2022.e00401> Paper

Vanderpuye VD, Clemenceau JR, Temin S, Aziz Z, Burke WM, Cevallos NL, Chuang LT, Colgan TJ, del Carmen MG, Fujiwara K, Kohn EC. Assessment of Adult Women With Ovarian Masses and Treatment of Epithelial Ovarian Cancer: ASCO Resource-Stratified Guideline. Obstetrical & Gynecological Survey. 2022 Feb 1;77(2):96-7. <https://doi.org/10.1097/OGX.0000000000001007> Paper

Zhang J, Pastore LM, Sarwana M, Klein S, Lobel M, Rubin LR. Ethical and moral perspectives of individuals who considered/used preimplantation (embryo) genetic testing. Journal of Genetic Counseling. 2022 Feb;1(1):176-87. <https://doi.org/10.1002/jgc4.1471> Paper

March 2022

Chelmow D, Brooks R, Cavens A, Huber-Keener K, Scott DM, Sheth SS, Whetstone S, Worly B, Burke W. Executive Summary of the Uterine Cancer Evidence Review Conference. Obstetrics & Gynecology. 2022 Mar 10:10-97. <https://doi.org/10.1097/AOG.0000000000004711> Paper

Whetstone S, Burke W, Sheth SS, Brooks R, Cavens A, Huber-Keener K, Scott DM, Worly B, Chelmow D. Health disparities in uterine cancer: report from the Uterine Cancer Evidence Review Conference. Obstetrics & Gynecology. 2022 Mar 10:10-97. <https://doi.org/10.1097/AOG.0000000000004710> Paper

PUBLICATIONS, PRESENTATIONS & OUTREACH

April 2022

Chelmow D, Brooks R, Cavens A, Huber-Keener K, Scott DM, Sheth SS, Whetstone S, Worly B, **Burke W**. Executive summary of the Uterine Cancer Evidence Review Conference. *Obstetrics and Gynecology*. 2022 Apr;139(4):626.

[doi: 10.1097/AOG.0000000000004711](https://doi.org/10.1097/AOG.0000000000004711) Paper

Kohut AY, Kuhn T, Conrad LB, Chua KJ, Abuelafiya M, Gordon AN, Flowers L, **Orfanelli T**, Blank S, Khanna N. Thirty-day Postoperative Adverse Events in Minimally Invasive versus Open Abdominal Radical Hysterectomy for Early-stage Cervical Cancer. *Journal of Minimally Invasive Gynecology*. 2022 Apr 9. DOI: <https://doi.org/10.1016/j.jmig.2022.03.014> Paper

Whetstone S, **Burke W**, Sheth SS, Brooks R, Cavens A, Huber-Keener K, Scott DM, Worly B, Chelmow D. Health disparities in uterine cancer: report from the Uterine Cancer Evidence Review Conference. *Obstetrics and Gynecology*. 2022 Apr;139(4):645. [doi: 10.1097/AOG.0000000000004710](https://doi.org/10.1097/AOG.0000000000004710) Paper

May 2022

Ajirak M, **Heiselman C**, **Quirk JG**, Djurić PM. Boost Ensemble Learning for Classification of CTG SIGNALS. In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2022 May 23 (pp. 1316-1320). IEEE. [doi: 10.1109/ICASSP43922.2022.9746503](https://doi.org/10.1109/ICASSP43922.2022.9746503) Paper

Chen T, Feng G, **Heiselman C**, **Quirk JG**, Djurić PM. Improving Phase-Rectified Signal Averaging for Fetal Heart Rate Analysis. In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2022 May 23 (pp. 1326-1330). IEEE. [doi: 10.1109/ICASSP43922.2022.9747860](https://doi.org/10.1109/ICASSP43922.2022.9747860) Paper

Iovino N, **Chappelle J**. Immediate Versus Delayed Admission in Early Labor [A214]. *Obstetrics & Gynecology*. 2022 May 1;139:62S. [doi: 10.1097/01.AOG.0000826132.06960.73](https://doi.org/10.1097/01.AOG.0000826132.06960.73) Meeting Presentation

Yang L, **Heiselman C**, **Quirk JG**, Djurić PM. Unsupervised Clustering and Analysis of Contraction-Dependent Fetal Heart Rate Segments. In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2022 May 23 (pp. 1331-1335). IEEE. [doi: 10.1109/ICASSP43922.2022.9747598](https://doi.org/10.1109/ICASSP43922.2022.9747598) Paper

June 2022

Hussain FN, Al-Ibraheemi Z, Kaplowitz E, **Parikh B**, Feldman K, Lam MC, Brustman L, Lewis D. Incidentally found midtrimester shortened cervical length: Practice patterns among American Maternal-Fetal Medicine specialists. *American Journal of Perinatology*. 2022 Jun 17. [doi: 10.1055/a-1877-6491](https://doi.org/10.1055/a-1877-6491) Paper

NEWLY APPROVED STUDIES

August 2021

Randomized Controlled Trial of Double Simultaneous Uterotonic Agents (misoprostol plus intravenous oxytocin) versus Single Agent Regimen (intravenous oxytocin only) to Prevent Early Postpartum Hemorrhage

Principal Investigator: James Bernasko, MD

September 2021

Admission vs expectant management in early labor

Principal Investigator: Joseph Chappelle, MD

Surgical volume and outcomes during the COVID-19 pandemic

Principal Investigator: Theofani Orfanelli, MD

November 2021

Biomarkers in Vulvodynia

Principal Investigator: David Baker, MD

January 2022

Intraoperative hemostatic agent use and surgical site infection rates after hysterectomy

Principal Investigator: Sara Kim, MD

Examining clinical features of patients with malpositioned IUDs on 3D Ultrasound

Principal Investigator: Sara Kim, MD

March 2022

Is postpartum anemia a predictor of anemia in future pregnancies?

Principal Investigator: Joseph Chappelle, MD

April 2022

Comparing attitudes toward oocyte preservation among Obstetricians/Gynecologists (OB/GYNs) at Stony Brook Medicine and Catholic Health

Principal Investigator: Avner Hershlag, MD

Treatment of Non-Anemic Iron Deficiency in Pregnancy

Principal Investigator: Kimberly Herrera, MD

May 2022

Pregnancy and neonatal outcomes with substance use disorder before versus during the COVID pandemic

Principal Investigator: Cassandra Heiselman, DO, MPH

June 2022

The use of a BRCA information webinar as an educational tool to raise awareness of at-risk population regarding reproductive options

Principal Investigator: Avner Hershlag, MD

Retrospective Study of Induction of Labor (≤ 39 weeks' gestation): Perinatal and Maternal Outcomes Stratified by Parity and Service

Principal Investigator: Cecilia Avila, MD

FUNDING ACTIVITY

July 2021

Theofano Orfanelli (Gyn Onc) and co-Investigator Eszter Boros (Chemistry) submitted "Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer" a TRO- FUSION Seed grant application to the Dean of Medicine.

Cassandra Heiselman (MFM) and co-Investigator Petar Djuric (Electrical and Computer Engineering) submitted "Application of Deep learning to FHR predict tolerance of Labor" a TRO-

August 2021

Theofano Orfanelli (Gyn Onc) was funded by the American Society of Clinical Oncology for 5 years for: "ASCO-ACCC Tool & Training Pilot Study" a Gyn Onc Clinical Trial to increase racial and ethnic diversity in cancer treatment trials

September 2021

Heidi Preis (Psychology), with co-Investigators Marci Lobel (Psychology) and Brittain Mahaffey (Psychiatry) received funding through an urgent competitive Revision (NOSI) to her current R21: "Evaluation and validation of a novel instrument to assess the psychosocial and drug history backgrounds of pregnant women with or without Opioid Use Disorder". This is an ongoing 2-year study involving both Obstetrics and Maternal Fetal Medicine, especially Cassandra Heiselman. They refer to the supplement as "The Stony Brook COVID-19 Pregnancy Experiences (SB-COPE) Study: Effects of stress and social determinants of health on maternal physical and mental health morbidities during the COVID-19 pandemic".

October 2021

Theofano Orfanelli (Gyn Onc) and co-Investigator Eszter Boros (Chemistry) submitted "Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer" to the SBU Fall 2021 OVPR Seed Grant Program.

Theofano Orfanelli (Gyn Onc) began a Gyn Onc clinical trial: GOG- 3043 "A Randomized Controlled Trial of Robotic versus Open Radical Hysterectomy for Cervical Cancer (ROCC trial)".

Michael Pearl (Gyn Onc) with co-PI James Hayward (Applied DNA Sciences Inc.) submitted: "Comprehensive Genomic Profiling for Target Therapy of Epithelial Ovarian Cancer (EOC)" to ThermoFisher Scientific for an OncoPrint Clinical Research grant.

November 2021

Sierra Washington (Global Medicine) submitted "Butterfly IQ+ in Mozambique: Using mHealth Technology to Save Lives" an application for an NIH R21/R33 in response to: PAR-21-303: Mobile Health: Technology and Outcomes in Low- and Middle-Income Countries

December 2021

Michael Pearl (Gyn Onc) was awarded ongoing support for the NRG General Project Fund from the NRG Oncology Foundation, Inc.

Theofano Orfanelli (Gyn Onc) and co-Investigator Eszter Boros (Chemistry) received ObGyn Research Division Funds for partial support of "Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer". These funds will help support a PhD student, Jennifer Whetter (Chemistry), who is working on the project.

FUNDING ACTIVITY

January 2022

Dr. Cecilia Avila is a co-PI with Dr. Noelle Mann on "HOPE (Heart Outcomes in Pregnancy: Expectations) for Mom and Baby Study" an application for an NIH flow through grant from Saint Lukes' Hospital of Kansas City.

Dr. Sierra Washington is a collaborator on a funded Center for AIDS Research International Pilot Grant "Exploring the Effect of SARS Cov-2/ HIV Co-Infection in Parturients" from the San Diego Center for AIDS Research (SD CFAR). The PI is Dr. Benjami Matingane at the University of California, San Diego.

February 2022

Jennifer Griffin continues as an active clinician on Dr. Sharon Nachman's application for renewal of the "Ryan White Part D WICY Base and Supplemental" grant 2022" from the Health Resources and Services Admin.

Dr. Cassandra Heiselman is a co-Investigator on Dr. Heidi Preis' NIH R01 grant application: "Experiences (SB-COPE) Study: Short-and long-term effects of perinatal and pandemic stress on maternal and child health and development".

March 2022

Dr. Michael Pearl is the PI on a subcontract to LineaRx Incorporated's SBIR Phase I application to NIH: "Genetic Analysis of Invasive Circulating Tumor Cells (iCTCs) for Early Diagnosis and Treatment".

April 2022

Dr. Gerald Quirk and Dr. Petar Djurić received funding for year 4 of their 5 year NIH R01: "Predictive analytics for monitoring the well-being of fetuses" with co-investigators Dr. Cassandra Heiselman, Elizabeth Roemer, Dr. Christian Luhmann, Dr. IV Ramakrishnan and Dr. Paul Fodor.

An administrative supplement: "Cloud-based Open-Source Fetal Heart Rate Database System: Administrative Supplement for Rethinking Electronic Fetal Monitoring to Improve Perinatal Outcomes and Reduce Frequency of Operative Vaginal and Cesarean Deliveries" to the R01 grant "Predictive analytics for monitoring the well-being of fetuses" was submitted to NIH.

May 2022

Dr. Theofano Orfanelli was the PI on an application to the American Cancer Society IRG Funds for "A Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer".

Dr. Maricedes Acosta and Dr. Dave Garry submitted a TRO Fusion grant application: "Role of extracellular vesicles in prenatal opioid exposure".

Dr. Theofano Orfanelli and Dr. Mehdi Damaghi submitted a TRO Fusion grant application "Multiomics Approach to Overcome Acquired Resistance to poly ADP ribose polymerase (PARP) Inhibitors in Ovarian Cancer".

June 2022

Dr. Theofano Orfanelli was awarded funds for "A Theranostic Nuclear Medicine Approach to the Management of Ovarian Cancer" by the American Cancer Society.

Dr. Dave Garry and Dr. Chris Kocis are collaborating with Dr. James Swain on an NIH R01: "Postpartum Intervention for Mothers with Opioid Use Disorders - Brain-Behavior Mechanisms" which is under final review and expecting funding.

Dr. Michael Pearl submitted a funding application to the NRG Oncology Foundation Inc.