

# Experiences in Gynecological Oncology Health Services Research

## Sebastian Spataro

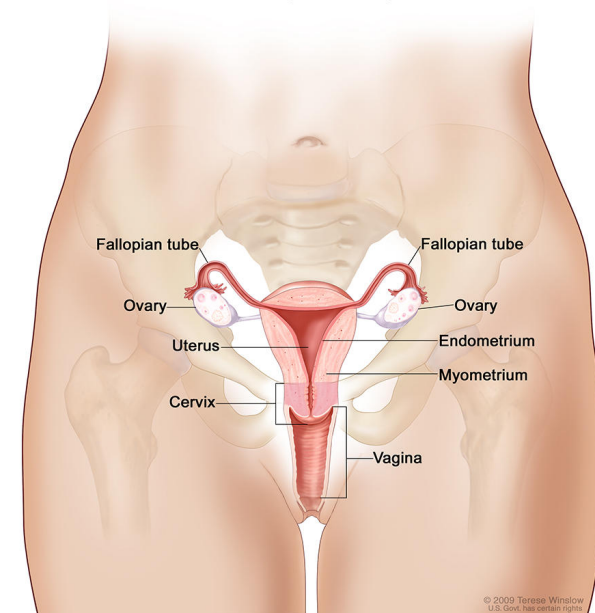
BA and BS Candidate, Class of 2026

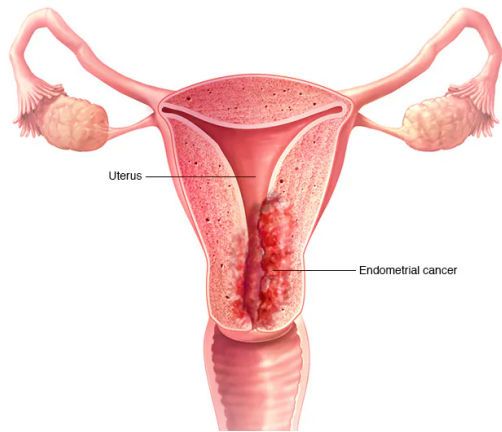
Rice University

Leonard Davis Institute

Mentor: Dr. Emily M. Ko, MD, MSCR

Female Reproductive System





**PROJECT 1:**  
**DISPARITIES IN ENDOMETRIAL CANCER**  
**CLINICAL TRIAL ENROLLMENT**

# Project Overview

## Rationale / Background

- ◆ **Endometrial cancer:** most common, rising incidence/death rates
    - Racial disparities in treatment and outcomes
  - ◆ **Previous studies:** Similar primary treatment in clinical trial patients = similar outcomes, regardless of race → value of clinical trials.
  - ◆ **Previous trials:** underrepresentation of minorities.
  - ◆ **Previous research:** lacking, regarding endometrial cancer trials diversity.
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- ◆ **Objective:** examine the association of clinical trial participation with patient, health system, and cancer factors in endometrial cancer.
  - ◆ **Methods:**
    - Retrospective cohort study
    - Nationwide de-identified electronic health record-derived database:
      - Flatiron (biggest cancer registry in the nation: +800 sites).
      - Cancer and treatment level information
    - Multilevel Poisson regression modeling

# Manuscript Highlights & Suggestions

## ◆ Most relevant findings

- Disparities found related to Black under enrollment
- Also found disparities in histology, region, and BMI
- Shortage of endometrial cancer clinical trials
- Most patients treated at community centers



## ◆ Many policy / further action suggestions. A few:

- Physician bias: referral and patient education.
- Costs: lack of Medicare and Medicaid for trials until 2021.
  - Routine costs
- NCI / journals promotion of equity committed studies.
- Follow FDA guidance. For example:
  - Covering expenses incurred in clinical trials
  - Strategic process of choosing site for trial
  - Decentralized trials
- Working on community center diversity
- Increasing number of endometrial cancer clinical trials



# Research Contribution / Lessons Learned

- ◆ Reviewed data analyses
- ◆ Discussed interpretation of results
- ◆ Identified secondary analyses questions
- ◆ Performed updated literature review
- ◆ *Drafted manuscript*



# Future Plans:

## ◆ Presentation at MAGOS

- October 26-28 (My birthday!)
- Charlottesville, VA



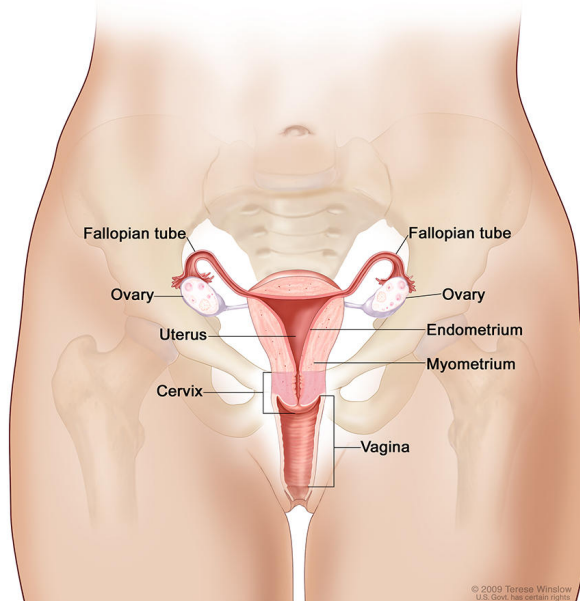
Mid-Atlantic Gynecologic Oncology Society

## ◆ 1 or 2 publications

- Endometrial Cancer Disparities in Biomarker Usage



Female Reproductive System



## Project 2

# GEOSPATIAL ANALYSES TO DETERMINE DISPARITIES IN CLINICAL TRIAL ACCESS

# Project overview

## ◆ Rationale:

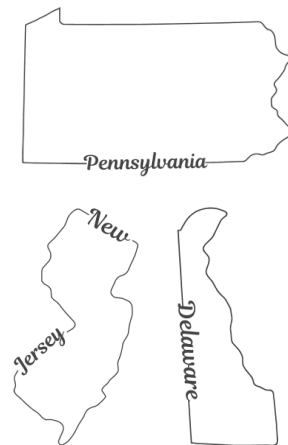
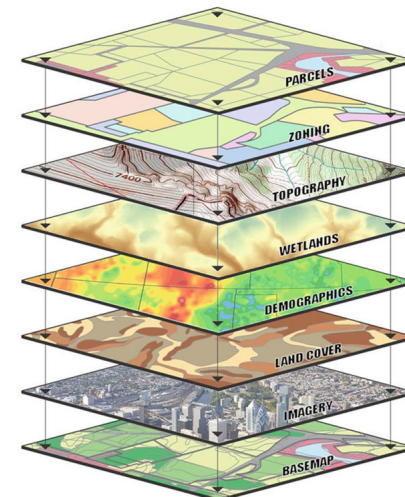
- Virtually the same as paper 1
- Disparities in trial enrollment have been found in other cancers.

## ◆ Objective:

- Evaluate behavioral, social, public and institutional data sources regarding the association with enrollment of minorities onto gynecological cancer trials in tris-state area.

## ◆ Methods:

- Public and institutional databases
  - EDDIE database; County databases; American Cancer Society.





# Findings and suggestions

## ◆ Analysis in progress.

- Expect findings elucidating disparities, as I have seen in literature reviews and previous studies.

## ◆ Suggestions: Pending on our analysis.

- Socioeconomic (driver) factors - significant for policy
- Data specific to states - significant for policy
- Rigorous data - elucidate many realities around clinical trial enrollment disparities.



# Research Contribution / Lessons Learned

- ◆ Participated in research design meetings
- ◆ Supported creation of analytic dataset
  - Significantly improved my Excel skills
  - Cleaned data of around 2,000 clinical trials in tri-state area
- ◆ Learned to brainstorm “paper ideas” by listening.

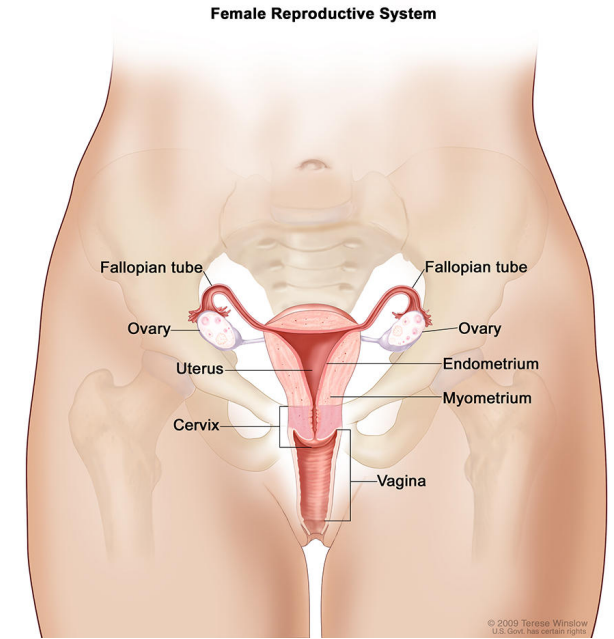


# Future Plans:

## ◆ 1 or 2 publications

- I have cleaned all data and such may lead to several papers.





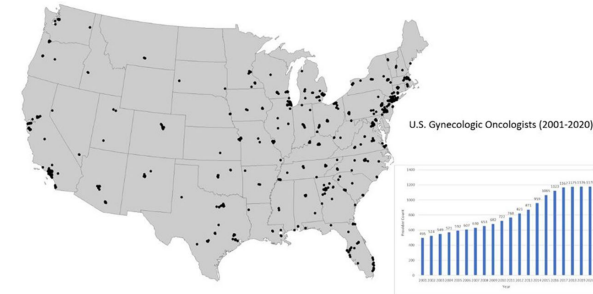
## Project 3

# ACCESS TO GYNECOLOGIC ONCOLOGY CARE IN THE U.S.

## Project Overview

### ◆ Rationale:

- Gynecological Oncology is a “high quality” specialty.
  - Supported by research.
- U.S. healthcare system and quality medicine inverse relationship.



### ◆ Objective:

- Identify disparities in access to care by a gynecologic oncologist in patients newly diagnosed with gynecologic cancers in the U.S.

### ◆ Methods:

- SEERMedicare Database from 1999-2019: links patient clinical and demographic data collected by SEER cancer registries to longitudinal health care claims for Medicare enrollees.
  - Insurance claims merged with cancer data
- Patients with at least one visit) after diagnosis with gynecologic cancer

# Findings and suggestions

## ◆ Analysis in progress

- Expect findings elucidating disparities, given large and rich database.

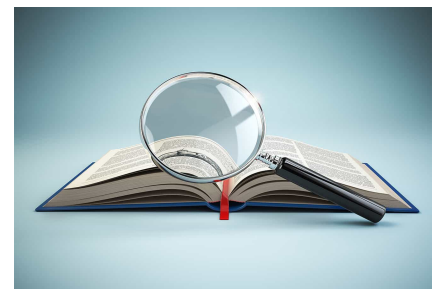
## ◆ Suggestions: Pending on our analysis.

- More specialists: around 1,500 in the U.S.
- Insurance coverage
- Telemedicine, referral patterns
- Will know more when results come out.



# Research Contribution / Lessons Learned

- ◆ Participated in research meetings
- ◆ Learned database structure, extensive data dictionary
- ◆ Identified and selected variables specific to socioeconomic status, considering the study's aims.
- ◆ Performed literature review of origin, validation studies, and application of variables such as Yost index





# Future Plans:

## ◆ 1 publication





# Thank You

## ◆ Research Mentors:

- Dr. Emily Ko, MD, MSCR

## ◆ Also worked with

- Dr Anna Jo Smith, MD, MPH, MSc
- Dr. Clare Cutri-French, MD
- Dr. Elizabeth Tubridy, MD
- Dr. Mary Regina Boland, MA, MPhil, Ph.D., FAMIA

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