

Perspectives in *Women's Health*

A PRESENTATION AND PANEL BY UR IGEM AND UR HPO

Who We Are

University of Rochester iGEM Team

- International Genetically Engineered Machine (iGEM) competition
 - Emphasizes synthetic biology
 - Solves a global problem
- 12 undergraduate students
 - Diverse areas of studies
 - Unique perspectives



What is our goal?

Create a noninvasive diagnostic for endometriosis

Endometriosis is a chronic disease that affects 10% of women of reproductive age worldwide. Current standards for diagnosis involve expensive medical tests and exploratory surgery. Once diagnosed, there are limited treatment options available. We hope to create a noninvasive diagnostic using menstrual blood that can inform physicians of a personalized medicine approach for treatment.

Resolve gender gaps in healthcare worldwide

The lack of knowledge about endometriosis has its roots in gender differences in healthcare. Funding for endometriosis is limited and there still is not a clear explanation on the pathophysiology of this chronic disease. We hope that by creating educational resources and making them accessible globally, that we can help inform better care for endometriosis patients.

Endometriosis

Shocking Statistics

11.7 years is the average diagnostic delay from the onset of symptoms for patients.

46% of patients see five or more doctors before receiving a diagnosis.

40% of patients feel disrespected by their physicians.

"Men get remedies and women get resignation. Some people think that equality is to apply the model of man to solve women's problems."

- *Luci Gutierrez*



Issues Affecting Women's Health

Lack of Progression

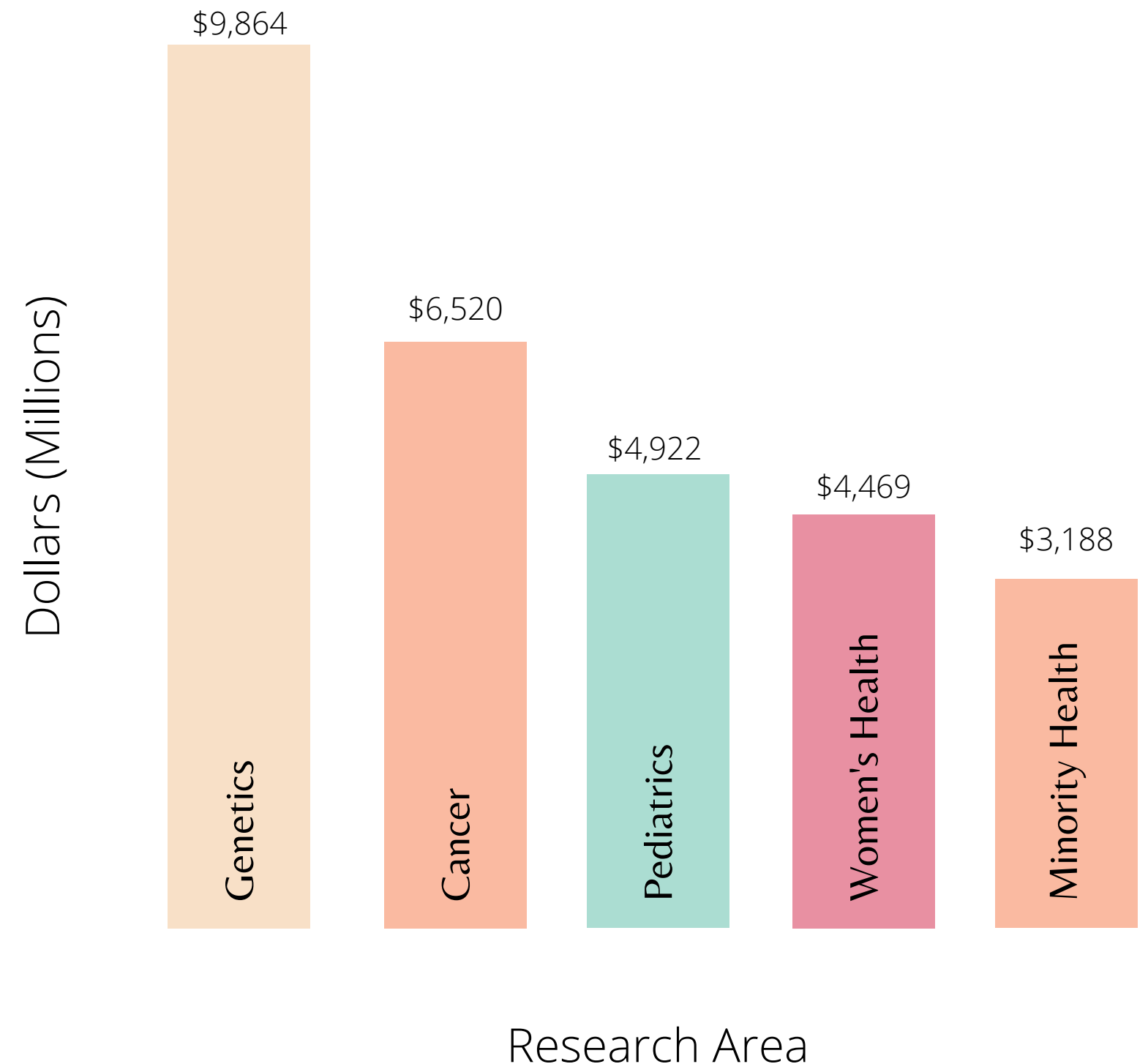
Women were only mandated to be a part of research studies in 1993.

Consideration of Women's Health

Women's health was dependent upon female participation in studies rather than clinical relevance until this past year (2019).

Funding for Women's Health

Research funding is far lower for women's health than other research categories



Source: "Addressing inequalities in women's Health Research" (Contemporary OBGYN).
Published August 4, 2020. Data collected from NIH Categorical Spending.



What Does This Mean?

Effect on Healthcare

Women are receiving lower quality healthcare due to limited research and education on medical issues. This extends past female reproductive health issues and into all facets of medical care. Greater funding needs to be allocated to women and there needs to be greater inclusion of women in medical studies.

“[Endometriosis patients] are really touched when they find someone that just listens and takes them seriously... and that’s really heartbreaking.”

- Dr. Ashley Gubbels, MD