**DID YOU KNOW?**

**Before 1993,** most testing done in clinical trials and diagnostic and device development was conducted on men.

Cardiovascular disease is the #1 killer of WOMEN in the US, yet only 1/3 of the participants in clinical trials are female.

Not until 2016 were female mice mandated to be included in research by NIH.

**Male animals outnumber females 5 to 1 in pharmacology studies—and 3.7 to 1 in physiology studies.**

**Lung cancer is the #1 cause of cancer death in women.**

More women die of lung cancer each year than from breast, ovarian and uterine cancers combined.

Non-smoking women are three times more likely than non-smoking men to get it.

**Female studies**

**Twice as many women as men suffer from depression in the U.S. It is the leading cause of disability in women.**

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**Women are 3/4 of the 5.4 MILLION people suffering from Alzheimer’s disease.**

Yet 66% of the animals used in neuroscience research are male or of unreported gender.

A woman’s risk of developing Alzheimer’s disease is almost 2X (TWO TIMES) that of a man, and not just because women live longer.

**MALE STUDIES**

**FEMALE STUDIES**

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**TRIAL SUBJECTS**

**78%** of Americans with autoimmune disease are women—it is estimated that **50 million** people are afflicted.

**38%** of animal studies researching strokes used females—although these conditions occur more often in women.

Fewer than 45% of animal studies of anxiety and depression use female lab animals, although these disorders are twice as common in women.

“Studying the brain means understanding how neurodegenerative diseases affect both men and women.”

- Dr. Paul Aisen

"While many brain disorders show substantial differences across gender, animal studies using only males outnumber studies that include females 5.5 to 1."

- Dr. Linda钢

"Women are disproportionately affected by Alzheimer’s disease, yet female animals are underrepresented in research studies."

- Dr. Carrie Parton-Breidbart
THE BACKGROUND:

WHAM (whamnow.org) was created in response to the considerable funding gap, historical exclusion, and underrepresentation of women in health research.

Women are the majority of the U.S. population, nearly 50% of the workforce, and control over 60% of personal wealth. In the U.S., women are responsible for over 85% of consumer spending and make over 80% of healthcare decisions. When women are pulled from the workforce because of inadequate treatment options or to care for their families, there are direct consequences – for our businesses and our economy.

The data on the reverse side of this page represents a very small sampling of the inequities and bias that exist in women’s health research. While some progress has been made since 1993, when the National Institutes of Health mandated that women and minorities be included in any government-funded health research, there is still a long way to go.

The lives of women and men will vastly improve through research that is equally inclusive of women and men in trials – and female and male animals in preliminary research. By conducting research in parity and reporting gender outcomes separately, health breakthroughs will be accelerated and health outcomes around the world improved. As women benefit from this research and reduce their burden of disease, they will improve their own wellbeing, which is directly connected to the wellbeing of our economy.

WHAM is committed to supporting research that investigates diseases and conditions that exclusively, differently or disproportionately affect women.

OUR FOCUS

- Autoimmune Disease
- Brain Health
- Cancer
- Cardiovascular Disease

WHAM IS FOCUSED ON THREE INITIATIVES:

THE WHAM COLLABORATIVE: The WHAM Collaborative is a group of leading scientists focused on women’s health research who help inform everything WHAM does.

THE WHAM INVESTIGATOR’S FUND: WHAM funds cutting edge investigators to study women’s health and the role of sex and gender in outcomes. WHAM collaborates with leading institutions in the U.S. focused on women’s health.

THE WHAM REPORT*: The WHAM Report shows the impact of accelerating sex and gender–based health research on women, their families, and the economy. The WHAM Report will be a benchmark of change in this field and available to all.

To the best of WHAM’s and RAND’s knowledge this is the first analysis of its kind and is likely to become a seminal part of the arsenal in advocating for increased investment in women’s health research. The research methodology and the microsimulation models have been vetted by a diverse panel of experts convened by RAND.

We encourage other leaders, including advocates, economists, scientists, public health experts and policy makers to draw from and act upon the results of this report. Together, we can drive meaningful change.

OUR VISIONARY COLLABORATORS:

We are very grateful for the support of our Visionary Collaborators. WHAM’s Collaborators are premiere institutions and organizations who are seen as leaders and pathfinders in each of our four disease areas creating the criteria that will ultimately affect how women's health research is conducted.