



National Institutes of Health  
Office of Research on Women's Health



# **WOMEN'S HEALTH AND INNOVATION: LEVERAGING THE NIH SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM AND SMALL BUSINESS TECHNOLOGY TRANSFER (STTR) PROGRAMS TO ADVANCE WOMEN'S HEALTH RESEARCH**

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## INTRODUCTION

The Small Business Innovation Research ([SBIR](#)) and the Small Business Technology Transfer ([STTR](#)) programs, are federally funded initiatives administered across multiple U.S. agencies, including the U.S. Department of Health and Human Services (HHS) through the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), and U.S. Food and Drug Administration (FDA). Collectively, HHS provides approximately \$1.4 billion annually in non-dilutive funding to support early-stage small businesses developing innovative technologies that address biomedical research, public health, and commercialization priorities.

These programs are highly relevant to the mission of the NIH Office of Research in Women's Health (ORWH), as they promote innovation in research, accelerate the translation of discovery into improved population health, and offer crucial financial support for U.S. small businesses seeking to conduct women's health research. SBIR and STTR programs have demonstrated strong economic impact nationally, contributing to job creation, regional economic growth, and commercialization of early-stage technologies across diverse scientific sectors

With reauthorization approved for FY26, the SBIR and STTR programs are positioned to continue supporting small businesses as they develop new scientific and technological solutions. As NIH prepares updated Notices of Funding Opportunity (NOFOs) to reflect current requirements and improve clarity for applicants, ORWH looks forward to engaging fully in the next phase of these programs. ORWH is committed to supporting applicants and ensuring that women's health research remains a strong priority across funding announcements. This renewed direction supports ORWH's ongoing efforts to advance research that improves women's health, and the office is dedicated to working with our Institute and Center colleagues and innovators who are developing approaches, tools, and technologies that address the health needs of women across the life course.

## ENVIRONMENTAL SCAN

A review of NIH SBIR/STTR investments in women's health research from 2020 to 2025 reveals that 809 applications received funding during this period. The graph below illustrates the annual number of women's health SBIR/STTR awards compared to the total SBIR/STTR awards for Fiscal Years (FY) 2020 - 2025. Out of the \$3.11 billion in total costs awarded to new awards through the SBIR/STTR programs, \$420.08 million—or approximately 13.50%—was allocated to women's health projects. This funding supported new applications (Type 1 and 2). In the context of overall NIH investments in women's health from 2020-2025, the SBIR/STTR investment in women's health research represented about 6.14% of the total \$6.84 billion in total costs for Type 1 and 2 applications.

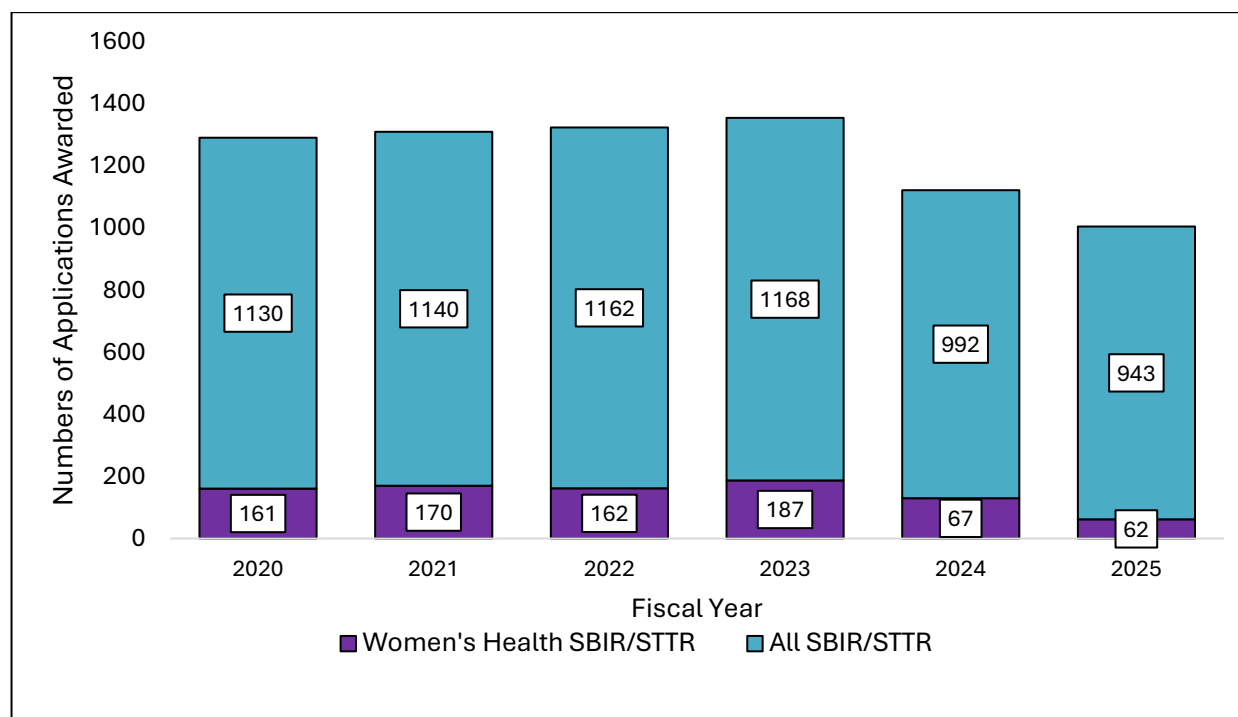
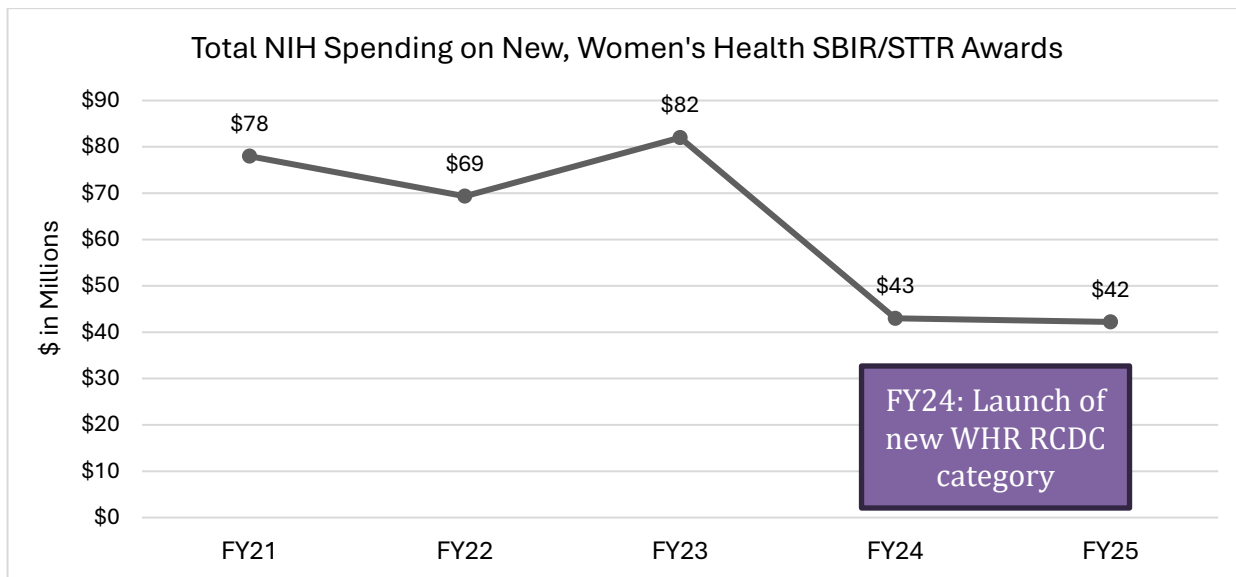


Figure 1: Women's Health SBIR/STTR Awards, FY2020 – 2025

## Updated Reporting on Women's Health Research

Beginning with the FY2024 reporting cycle, NIH has updated its annual categorical information with actual spending data and has converted the [NIH Research, Condition, and Disease Categorization \(RCDC\)](#) reporting methodology for the Women's Health Research category from manual coding to automated coding. This action aims to enhance accuracy and consistency in reporting and to better distinguish research focused on improving the health of women across the lifespan.

With the previous manual method, some projects were included that did not directly focus on women's health outcomes. The new automated system ensures a more precise reflection of research efforts and thereby supports more effective reporting of the use of taxpayer dollars. Although the updated methodology may appear to show a decrease in reported funding from FY23 to FY24, overall NIH funding for women's health research has not changed. NIH remains committed to supporting women's health research, and the change will ultimately enhance NIH's ability to track progress of the [NIH-Wide Strategic Plan for Research on the Health of Women](#). The enhanced methodology provides a clearer and more accurate representation of NIH's sustained investment in this critical area.



## ORWH Support for SBIR/STTR

FY24 marked the first time that ORWH formally participated in the HHS-wide [Omnibus solicitations](#) for SBIR/STTR by signing onto the SBIR and STTR funding announcements and identifying ORWH- interest areas. In FY24, NIH awarded 67 new women's health research SBIR/STTR awards for a total investment of nearly **\$38M** (\$37,710,229). Fifteen ICs supported women's health research SBIR/STTR awards [National Cancer Institute (NCI), Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), National Institute of Allergy and Infectious Diseases (NIAID), National Institute on Minority Health and Health Disparities (NIMHD), National Heart, Lung, and Blood Institute (NHLBI), National Institute of Mental Health (NIMH), National Institute on Aging (NIA), National Human Genome Research Institute (NHGRI), National Institute of Nursing Research (NINR), National Institute of Neurological Disorders and Stroke (NINDS), National Institute of General Medical Sciences (NIGMS), National Center for Advancing Translational Sciences (NCATS), National Institute of Biomedical Imaging and Bioengineering (NIBIB), and National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)] and ORWH contributed \$200,000.

In FY25, NIH awarded 62 new women's health research SBIR/STTR awards for a total investment of over **\$42M** (\$42,217,249). These projects were funded by 10 ICs (NCI, NICHD, NIMHD, NIAID, NIA, NIBIB, NIMH, NIDDK, NIAAA, and NCATS) and ORWH provided \$1.3M to support SBIR/STTR in FY25.

## SMALL BUSINESS WEBINAR SERIES

To expand visibility of the SBIR/STTR programs, the NIH Office of Research on Women's Health (ORWH) launched a 3-part webinar series titled *"Small Business Opportunities for Innovative Women's Health Research."* The series had two goals: to introduce the women's health research community to small business opportunities and to introduce the small business community to women's health research priorities. Across the three webinars, we recorded over 2,000 registrants (2,068 in total).



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## June 2024 Webinar

The first webinar in the series, held on June 26, 2024, featured an introduction from [the NIH Small business Education and Entrepreneurial Development \(SEED\) Office](#) as well as presentations from six NIH Institutes: National Institute on Minority Health and Health Disparities (NIMHD); National Institute of Neurological Disorders and Stroke (NINDS); National Institute of Biomedical Imaging and Bioengineering (NIBIB); National Heart, Lung, and Blood Institute (NHLBI); National Institute on Drug Abuse (NIDA), and Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD).

**NIMHD** highlighted an approved concept titled, “Innovations for Promoting the Health and Research of Women Experiencing Health Disparities,” which will support sustainable health promoting activities and interventions that lead to improved women’s health, health care delivery, and the elimination of health disparities.

**NINDS** emphasized how it leverages the SBIR/STTR programs and targeted initiatives such as the BRAIN and HEAL Initiatives to support a comprehensive pipeline of translational research and development, spanning from device prototyping and drug discovery to biomarker development and early-stage clinical trials, all with the goal of advancing innovative solutions for patients with neurological disorders.

**NIBIB** highlighted that its small business program supports the development and commercialization of innovative biomedical technologies to advancing women's health, including initiatives such as the NIH Tech Accelerator Challenge (NTAC) for Maternal Health, which offers funding and resources aimed at addressing maternal morbidity and mortality.

**NHLBI** demonstrated its robust small business program—providing over \$130M annually to support more than 300 projects—focusing on innovative technologies for heart, lung, blood, and sleep health, with notable examples including companies like Bloomer Tech, DynoCardia, Vasowatch, and REST Technologies.

**NIDA** underscored its unparalleled support for small business entrepreneurs aiming to accelerate innovation and commercialization of solutions addressing women’s unique health needs including products tackling social factors impacting substance use disorders in women.

**NICHD** highlighted its support for innovative small business research developing groundbreaking products for women’s health, such as noninvasive diagnostics for endometriosis, advanced therapies for uterine fibroids, improved pessary designs for pelvic organ prolapse, and cutting-edge surgical training and tools to enhance gynecologic care.



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## October 2024 Webinar

The second webinar, on **October 30, 2024**, again included an overview of the SBIR and STTR programs from the SEED Office, followed by presentations from seven NIH Institutes, Centers and Offices (ICOs)—National Center for Complementary and Integrative Health (NCCIH), National Eye Institute (NEI), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute of Dental and Craniofacial Research (NIDCR), National Institute of Allergy and Infectious Diseases (NIAID), National Institute of Environmental Health Sciences (NIEHS), and National Institute of General Medical Sciences (NIGMS).

**NCCIH** highlighted its support for innovative small business research focused on developing and commercializing complementary and integrative health interventions—such as digital mind-body therapies and neuromodulation devices—specifically targeting prevalent women's health conditions like irritable bowel syndrome, gastroparesis, anxiety disorders, and functional dyspepsia.

**NEI** noted that several eye diseases—including dry eye disease, Sjogren's syndrome, Fuchs endothelial corneal dystrophy, herpes zoster ophthalmicus with ocular pain, and certain types of glaucoma—are significantly more prevalent in women, emphasizing the need for innovative women's health research and small business opportunities in these areas.

**NIDDK** underscored its commitment to advancing women's health by encouraging innovative small business research on sex differences, reproductive and metabolic health, and sex-specific factors in kidney, urologic, digestive, and hematologic diseases, as outlined in the Notice of Special Interest for Women's Health Research ([NOT-OD-24-079](#)).

**NIDCR** highlighted its commitment to advancing women's health by supporting innovative research and small business opportunities that address oral health disparities, maternal oral health, sex differences in pain and autoimmune disorders, and patient-centered strategies to improve prevention, diagnosis, and treatment of dental, oral, and craniofacial conditions disproportionately affecting women.

**NIAID** demonstrated a strong commitment to women's health—particularly for underrepresented and veteran women—by supporting SBIR/STTR-funded projects and dedicated funding opportunities that advance innovative solutions for infectious disease prevention, maternal and neonatal health, autoimmune diseases, and health disparities.

**NIEHS** highlighted its focus on developing novel technologies and tools—such as biomarkers, exposure assessment methods, and intervention strategies—specifically related to developmental, reproductive, and women's health, with an emphasis on understanding and reducing environmental exposures and their effects.



**NIGMS** small business program supports a wide range of basic biomedical research and entrepreneurial training, offers various funding opportunities, including those focused on women's health, and provides resources like commercialization hubs and transition grants to foster innovation and workforce development in biomedical sciences.

## June 2025 Webinar

**The final webinar, held on June 25, 2025**, rounded out the series with an introduction from the NIH SEED Office followed by presentations from 9 NIH ICOs: National Center for Advancing Translational Sciences (NCATS), National Cancer Institute (NCI), National Heart, Lung, and Blood Institute (NHLBI), National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), National Institute of Mental Health (NIMH), National Library of Medicine (NLM), National Human Genome Research Institute (NHGRI), NIH Office of Research Infrastructure Programs (ORIP).

**NCATS** emphasized its support for innovative translational research—such as drug discovery tools, bioinformatics, and clinical research technologies—that accelerate new treatments and precision medicine for unmet needs in women's health.

**NCI** highlighted dedicated funding opportunities for women's health research, including targeted support for the commercialization of cancer-relevant technologies and the advancement of early-career entrepreneurs through initiatives such as the Women's Health Research notice of special interest ([NOT-OD-24-079](#)) and the Small Business Transition Grant.

**NHLBI** emphasized robust funding opportunities and support for small businesses developing innovative tools and technologies to improve maternal health outcomes, including dedicated SBIR/STTR initiatives and active Notices of Special Interest targeting maternal morbidity and mortality.

**NIAAA** highlighted the urgent need for research and innovation to address the rising rates and unique risks of alcohol-related harms among women, offering targeted SBIR/STTR funding opportunities to advance prevention, diagnosis, and treatment in women's health.

**NIAMS** has noted its support for research and development in rheumatic, musculoskeletal, and skin diseases—including conditions highly relevant to women's health such as lupus, rheumatoid arthritis, osteoporosis, and fibromyalgia—through its SBIR/STTR programs.

**NIMH** highlighted innovative small business funding opportunities focused on developing and commercializing technologies to predict, detect, monitor, prevent, and treat perinatal depression and associated psychiatric morbidity in women, including support for solutions that integrate with clinical workflows and address stigma in maternal mental health care.



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**NLM** underscored its strong commitment to supporting small business innovation in women's health research, particularly through funding the development of advanced, disease-agnostic data science tools and artificial intelligence methods to address conditions and health disparities that uniquely or disproportionately affect women.

**NHGRI** emphasized its support for innovative genomics research and technology development, including opportunities for small businesses, that can advance clinical genomics, population genomics, and the implementation of genomic medicine.

**ORIP** highlighted its commitment to advancing innovative women's health research by supporting and prioritizing SBIR/STTR projects led by women principal investigators and women-owned small businesses, fostering opportunities for entrepreneurship and impactful pre-clinical technologies in women's health.

## Webinar Series Summary

The NIH women's health small business webinar series showcased a wide array of SBIR and STTR funding opportunities, resources, and initiatives across more than twenty (22) NIH Institutes, Centers, and Offices, all aimed at accelerating innovation and supporting small businesses dedicated to advancing women's health research and commercialization. Presentations highlighted targeted support for conditions disproportionately affecting women—including maternal health, cancer, neurological and mental health disorders, substance use, autoimmune diseases, and health disparities—along with special emphasis on fostering women entrepreneurs, sex-specific research, and the development of novel diagnostics, therapeutics, and digital health technologies. The webinars were well attended, and participants (about 1000 people) demonstrated high engagement during the Q&A sessions, underscoring a strong interest in NIH support for women's health innovation. If you have any questions, feel free to reach out to the HHS Small Business Program Managers by following this [link](#).

## INNOVATION FUNDING SUCCESS STORIES IN WOMEN'S HEALTH

- **NHLBI** supported [research](#) demonstrating that routinely collected first-trimester prenatal whole-genome cell-free DNA (cfDNA) sequencing can be harnessed using AI/ML to predict preeclampsia risk before 16 weeks gestation. This noninvasive approach, integrated with clinical data, offers a scalable and early method for identifying high-risk pregnancies using existing Non-Invasive Prenatal Testing (NIPT) infrastructure.
- Phase I and Phase II [SBIR funding](#) from **NIA** was integral to development of **Osteoboost**—the first non-drug, prescription therapy for postmenopausal bone loss.



- **NIEHS** supported a [phase I SBIR grant to advance](#) environmental health through a personalized digital intervention that combines a urine-based testing platform to detects 13 common Endocrine Disrupting Chemicals (EDCs) with a tailored digital education program.
- Phase I and Phase II SBIR funding from **NINDS** and **NICHD** [supported](#) the development of ORILISSA by Neurocrine Biosciences—a faster-acting treatment for endometriosis, a painful condition affecting up to eleven percent of women of reproductive age.
- The NIH [Technology Accelerator Challenge \(NTAC\)](#) for Maternal Health, a prize competition led by **NIBIB** to spur the development of diagnostic technologies for improving maternal health worldwide, awarded first place to a stand-alone, integrated mobile health tool. This tool enables community health workers to monitor postpartum recovery—including anemia and wound infection—in women following cesarean delivery.
- Phase I and Phase II SBIR funding from **NIDA** supported the development of [Woebot-SUDs](#)—an automated, app-based digital therapeutic that uses conversational AI to deliver immediate, evidence-based support for substance use disorders, especially in women, and reduce barriers to treatment.
- Phase I and Phase II [SBIR funding](#) from **NICHD** supported the development of CollaSling™ by CollaMedix—a resorbable, pure-collagen sling offering a safer alternative to synthetic mesh implants for the treatment of stress urinary incontinence in women.
- **NIDDK** supported a [Phase II SBIR funding](#) for the development of a 6" Aurie Reusable Catheter System by CathBuddy, Inc.—a safely reusable, no-touch catheter specifically designed to better meet the needs of women intermittent catheterization users by reducing infection risk, cost, and plastic waste.
- A Phase I SBIR grant from **NCI** helped Biopsy Sciences develop and sell [HydroMARK](#), a gel-based marker inserted during breast biopsies to flag cancerous tissue, eliminating the need for an uncomfortable pre-surgical procedure and aiding in the preservation of healthy tissue during surgery.
- A Phase I [STTR grant](#) funded by **NIMH** is supporting CenterMom, Inc. in developing and testing a smartphone app to deliver perinatal depression screening and mindfulness-based cognitive therapy (MBCT) home practice materials, aiming to improve mental health care for underserved pregnant populations and reduce rates of perinatal depression and related maternal morbidity and mortality.
- Phase I [STTR funding](#) from **ORIP** is supporting Sensoriis, Inc. and the University of Washington in developing a wireless, flexible membrane with a micro-electrode array for ECG measurement in zebrafish, along with a 4-chamber apparatus for simultaneous ECG recording, to facilitate cardiac



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phenotype-based screening and support heart disease and regenerative medicine studies, with potential implications for improving [fetal ECG extraction methods](#) from the mother's abdominal signal in practical scenarios.

## CONCLUSION

The NIH small business programs play a vital role in fostering innovation and commercialization within women's health research in the U.S. Through targeted funding, webinar series and resources, and collaborative initiatives, these programs have significantly advanced technologies and innovative solutions addressing conditions disproportionately affecting women. The success stories highlighted demonstrate the impactful outcomes of these non-dilutive investments, paving the way for continued advancements in women's health and supporting a robust entrepreneurial landscape.