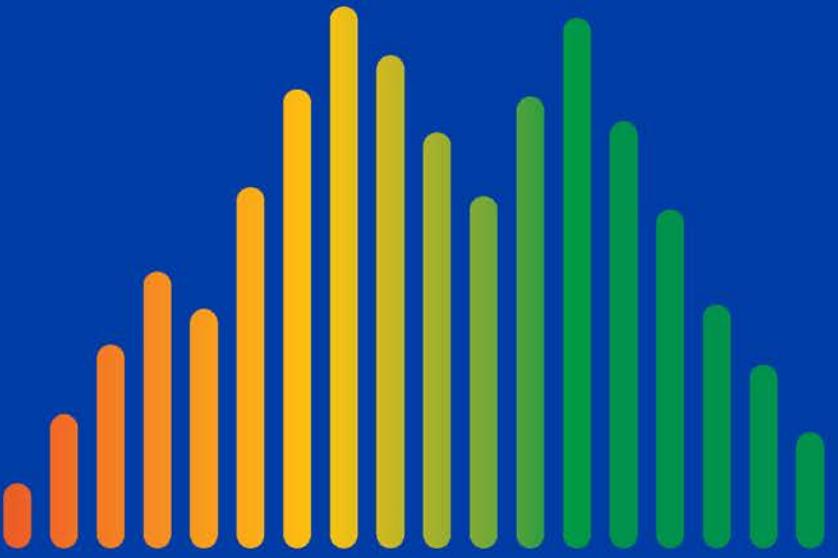


**Sexual & Gender  
Minority Research**



# PORTFOLIO ANALYSIS



Fiscal Year 2018



National Institutes of Health  
Sexual & Gender Minority Research Office

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>1</b>
<b>METHODS .....</b>	<b>2</b>
<b>2018 PORTFOLIO ANALYSIS .....</b>	<b>3</b>
Number of SGM-Related Projects by NIH Institutes, Centers, and Offices (ICOs).....	4
SGM-Related Projects, FY 2015–2018 by ICO .....	5
SGM Funding Across NIH.....	6
SGM Projects Related to HIV/AIDS Research.....	7
Non-HIV/AIDS SGM Projects, FY 2015–FY 2018 by ICO.....	8
SGM Projects by Disease Area/Health Condition .....	9
SGM Funding by Disease Area/Health Condition .....	10
Proportion of SGM-Related Projects by NIH Grant Mechanism .....	11
Proportion of SGM-Related Projects by Type of Training/Career Funding Mechanism .....	12
Proportion of Projects with New and Early-Stage Investigators .....	13
U.S. Funding of SGM Research by Location of Administering Institution .....	14
Funding of International SGM Research by Country of Administering Institution .....	15
SGM Projects by Institution .....	16
SGM Projects by Category.....	17
Population.....	18
Race and Ethnicity .....	19
Age .....	20
Other Research Categories.....	21
Research Methods .....	22
Type of Study Category .....	23
Selected Topic Categories .....	24
<b>CONCLUSION.....</b>	<b>25</b>
<b>APPENDIX I: CURATION VARIABLES .....</b>	<b>26</b>
<b>APPENDIX II: NIH INSTITUTES, CENTERS, AND OFFICES .....</b>	<b>27</b>
<b>APPENDIX III: SGM-RELATED PROJECTS BY ICO, FY 2015–2018 .....</b>	<b>28</b>
<b>APPENDIX IV: SGM FUNDING FY 2015–2018 .....</b>	<b>29</b>
<b>APPENDIX V: NON-HIV/AIDS SGM PROJECTS BY ICO, FY 2015–2018.....</b>	<b>30</b>
<b>APPENDIX VI: FUNDING BY DISEASE AREA/HEALTH CONDITIONS, FY 2018 .....</b>	<b>31</b>

# INTRODUCTION

The mission of the National Institutes of Health (NIH) is to seek fundamental knowledge about the nature and behavior of living systems and apply that knowledge to enhance health, lengthen life, and reduce illness and disability. As part of that mission, the NIH strives to support a range of biomedical, clinical, behavioral, and social science research to improve and protect the health of all sexual and gender minority (SGM) populations and has a specific interest in the disease areas and health conditions that most disparately affect these individuals.

The Sexual & Gender Minority Research Office (SGMRO) coordinates SGM research and related activities by working directly with the NIH's 27 Institutes and Centers, as well as many Offices. The SGMRO also serves as a resource on SGM health and research for the NIH and extramural research and stakeholder communities. For this reason, the SGMRO is situated within the Office of the Director (OD)—the central Office responsible for setting policy for the NIH and for planning, managing, and coordinating the programs and activities of all NIH components—and resides more specifically within the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) within the OD. The populations that fall within the SGM portfolio at the NIH are defined below:

***Sexual and gender minority populations*** include, but are not limited to, individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer, and/or intersex. Individuals with same-sex or -gender attractions or behaviors and those with a difference in sex development are also included. These populations also encompass those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by non-binary constructs of sexual orientation, gender, and/or sex.

The SGM portfolio has historically focused on HIV and AIDS research; however, it is becoming more balanced and includes more projects in additional disease areas and health conditions. This change reflects NIH's commitment to SGM health research across the spectrum of health conditions, along with an expansion of interest from the research community. The NIH will continue to stimulate grant applications in fields within and outside the realm of HIV/AIDS to broaden our understanding of the health of SGM individuals.

On October 6, 2016, the [NIH designated sexual and gender minorities](#) as a health disparity population for research. This designation builds on previous steps taken by the NIH to advance SGM health research. In 2015, the NIH developed the first agency-wide strategic plan devoted to advancing SGM health research and established the SGMRO to help eliminate barriers to conducting SGM-related research. The health disparity population designation marks an important and necessary step in realizing NIH's mission to advance the health of all Americans. The [Mid-Course Strategic Plan Review](#), released in January 2019, details progress to date on the goals of the [NIH FY 2016–2020 Strategic Plan to Advance Research on the Health and Well-being of Sexual and Gender Minorities](#).

This FY 2018 Portfolio Analysis describes the SGM-related portfolio at the NIH and aims to highlight various gaps and needs for additional SGM-related research in specific areas. This analysis also serves as one way that the NIH tracks progress on our agency-wide SGM research strategic plan.

# METHODS

The projects included in the *NIH SGM Portfolio Analysis for FY 2018* are NIH-funded grants classified under the “Sexual and Gender Minorities” Research, Condition, and Disease Categorization (RCDC) spending category in the NIH’s [RePORTER database](#). The “Sexual and Gender Minorities” category was added in FY 2015 to the official list of more than 280 RCDC categories. As a result, this estimate of SGM projects and spending constitutes the fourth annual analysis to include those data. RCDC uses text data mining (categorizing and clustering words and multiword phrases) in conjunction with a list of concepts and synonyms selected by NIH scientific experts to define spending categories. The RCDC category is based on a fingerprint of more than 80 terms designed to capture projects included in the [NIH definition](#) of sexual and gender minorities. Some SGM-related projects may not be captured because of the project terms used.

Using this method, the SGM fingerprint (definition) may include projects that focus on a disease or condition that significantly affects SGM participants, such as HIV (as is the case with pre-exposure prophylaxis, commonly known as PrEP). Alternatively, a project may be incidentally related to SGM research, such as a study about mental health that includes some SGM participants as a control, comparison, or sub-group. RCDC funding amounts are an estimate based on the SGM fingerprint, text-mining approach, and attribution of all grant funds to a given category.

The second half of the FY 2018 Portfolio Analysis ([starting on page 18](#)) is based on the same 384 projects as the first half of the report. However, rather than using existing RCDC categories and processes for the variables under examination, each SGM-related project abstract was reviewed and manually coded on the basis of the variables listed in [Appendix I](#). These categories were created because they were noted as being of special interest to SGM research by SGMRO staff, members of the SGM Research Coordinating Committee, and the SGM Research Working Group of the Council of Councils.

Each curator considered the presence or absence of variables of relevance to SGM research studies that are not currently captured by RCDC categories. For projects where the coders did not agree, or there was not a clear majority for any variable, reconciliation was made during in-person meetings. Reconciliations were made by consensus.

# 2018 PORTFOLIO ANALYSIS

According to the NIH RePORTER, a total of 384 SGM-related projects were funded in FY 2018.

The total dollar amount of SGM-related funding across the NIH was \$304,095,902.

Key findings from the FY 2018 Portfolio Analysis include the following:

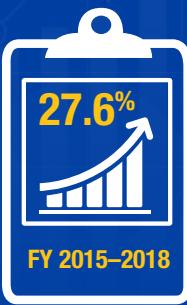
## SGM Projects and Funding

The number of projects and the amount of funding for SGM projects have increased for four consecutive fiscal years.



## SGM Projects Increases

The total number of projects have increased 27.6% since 2015, from 301 to 384.



## Non-HIV/AIDS Funding

The total funding for non-HIV/AIDS projects has more than doubled since 2015.



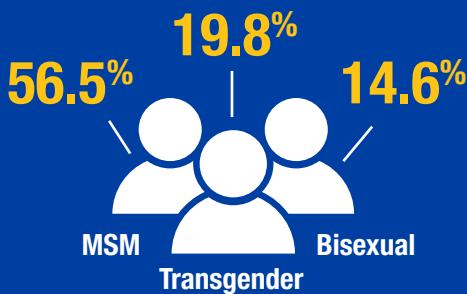
## Training & Awards

The total number of training and career-related awards increased by 26.5% from FY 2015 to FY 2018.



## Largest Populations Represented

Men who have sex with men (MSM), transgender individuals, and bisexual individuals are the three largest populations represented, accounting for 56.5%, 19.8%, and 14.6% of the projects, respectively.



## SGM-categorized Projects

In total, 8.9% of all SGM-categorized projects pertain to Disorders or Differences of Sex Development (DSD) and Intersex.



## SGM Portfolio Project Increases

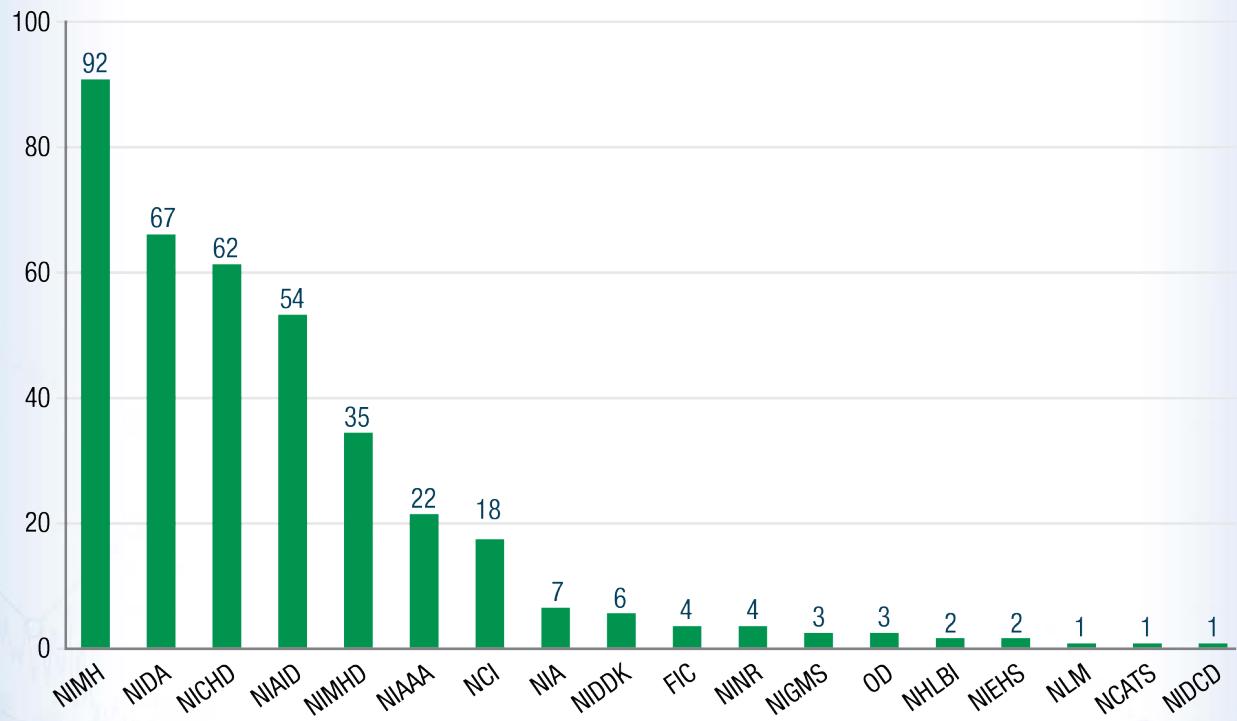
The total number of projects at the NIH increased from 73,432 in FY 2015 to 80,747 in FY 2018, an increase of 9.9%. The SGM portfolio, by contrast, increased from 301 in FY 2015 to 384 in FY 2018, an increase of 27.6%.



# Number of SGM-Related Projects by NIH Institutes, Centers, and Offices (ICOs)

The 384 SGM projects at the NIH in FY 2018 were administered by 18 of the 24 grant-making components of the NIH. Approximately 71.6% of all projects (275 of 384), were administered by the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), and the National Institute of Allergy and Infectious Diseases (NIAID). The remaining 28.4% of projects were administered by 14 other ICOs. For a list of abbreviations for all NIH ICOs, see [Appendix II](#).

## FY 2018, Number of SGM-Related Projects by NIH ICO ( $N = 384$ )

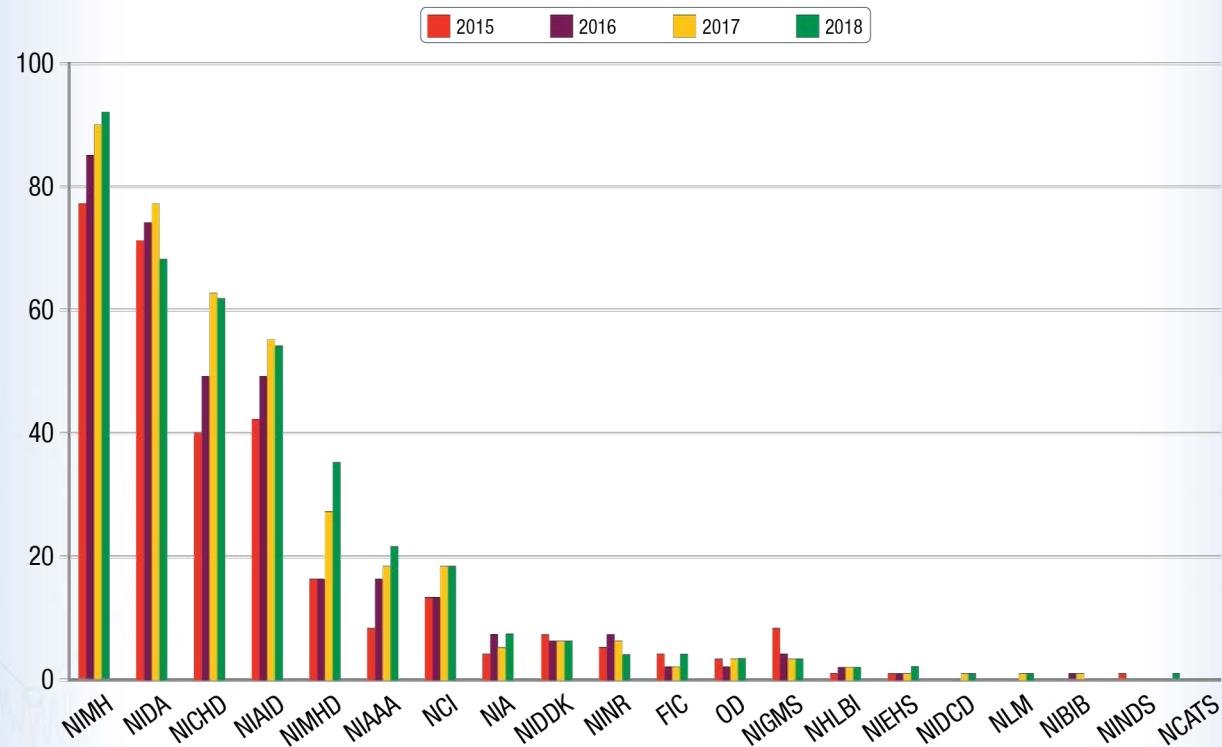


Note: Only ICOs that reported data are included in this graph.

# SGM-Related Projects, FY 2015–2018 by ICO

The number of SGM-related projects has increased in the majority of ICOs, indicating that the growth of the portfolio, in terms of the number of projects, is driven by multiple ICOs. Twelve of the 19 ICOs shown in the graph below experienced an increase in the number of projects between FY 2015 and FY 2018.

**FY 2015–2018, Number of SGM-Related Projects by NIH ICO  
(2015 = 301, 2016 = 334, 2017 = 379, 2018 = 384)**

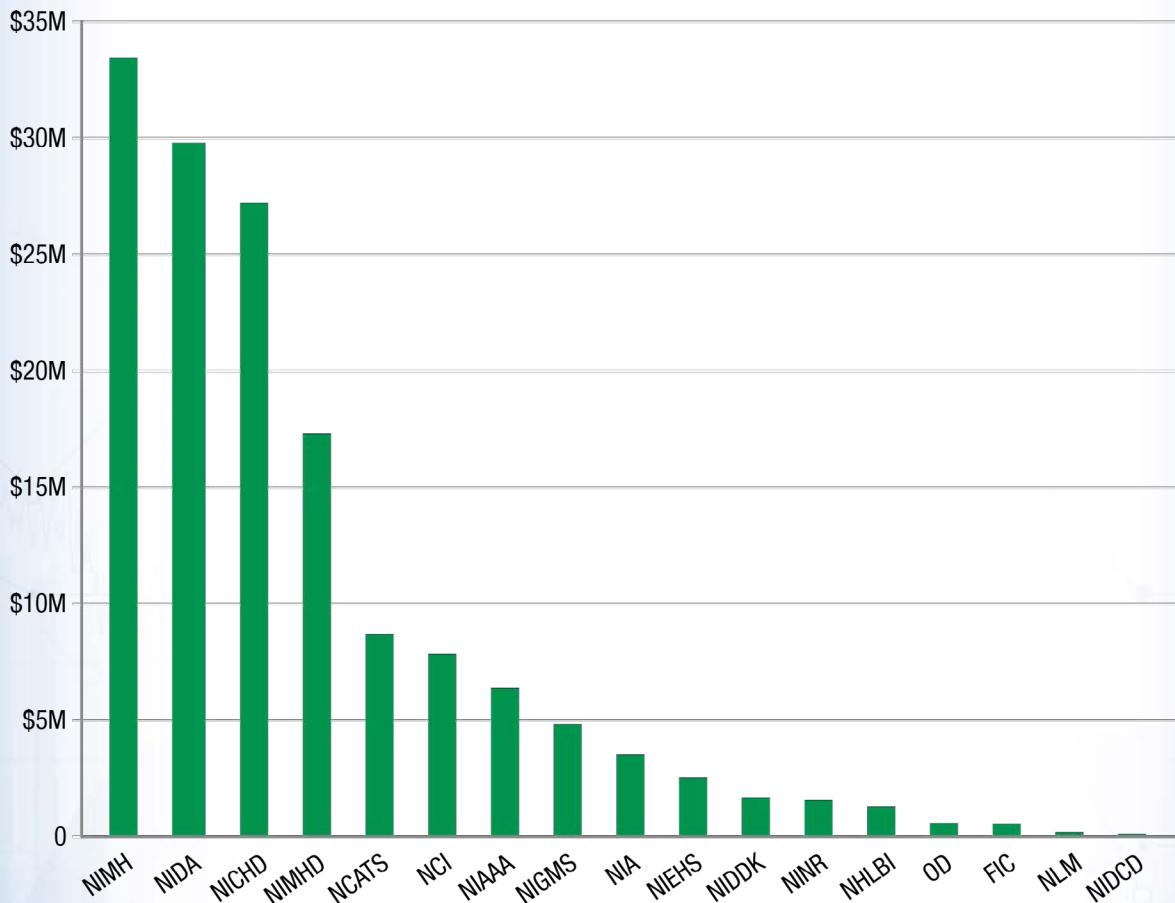


Note: The number of SGM-Related Projects by NIH ICO for years 2015–2018 can be found in [Appendix III](#).

# SGM Funding Across NIH

The total amount of funding for SGM-related research in FY 2018 was \$304,095,902. The same ICOS that fund the largest number of projects also provide the most funding support. Specifically, NIAID, NIMH, NIDA, and NICHD together accounted for 81.1% of NIH SGM funding in FY 2018 (a total of \$246,637,750). It is noteworthy that NIAID is the single largest funder of SGM research and contributes more than 4.5 times the amount of the next largest funding IC, with a total of \$156,276,560. Note that the NIAID HIV/AIDS Clinical Trials (CT) Networks are funded annually over a 7-year cycle through five large, multisite, multi-Principal Investigator (PI) cooperative agreements. Due to the complex nature of tracking and reporting funding allocations to these networks, funding totals for NIAID may fluctuate from year to year. This may result in a large increase in SGM-related funding that does not correspond with the increase in projects. For actual dollar amounts, please see [Appendix IV](#).

## FY 2018, SGM Funding by NIH ICO (Excluding NIAID)

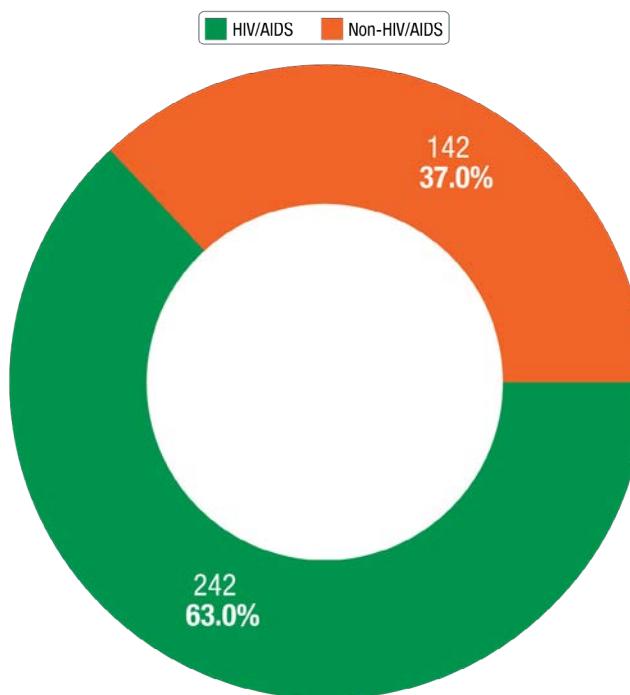


Note: Dollar amounts are in millions. Only ICOS that reported data are included in the graph, with the exception of NIAID. Actual dollar amounts appear in [Appendix IV](#).

# SGM Projects Related to HIV/AIDS Research

The majority of NIH's SGM projects (63.0%, or 242 of 384) pertain to HIV/AIDS and are considered "HIV/AIDS-specific" based on a metric established for the categorization of projects by spending category, meaning the project focuses on that condition. Some projects are "HIV/AIDS-relevant," meaning that they pertain in some way to HIV/AIDS but are not included in the HIV/AIDS group, as another methodological or population focus is considered primary. The prevalence of HIV/AIDS-related projects (both HIV-specific and HIV-relevant) reflects the historical and contemporary disproportionate incidence and prevalence of HIV/AIDS among SGM persons, particularly MSM and transgender women. In addition, for decades, people conducting SGM research could more readily obtain funding by doing HIV/AIDS-related research. The percentage of HIV/AIDS-related projects in the FY 2018 SGM research portfolio is approximately 4.0% less than that of the FY 2017 (67.0%) portfolio and 10.0% less than that of FY 2016 (73.0%).

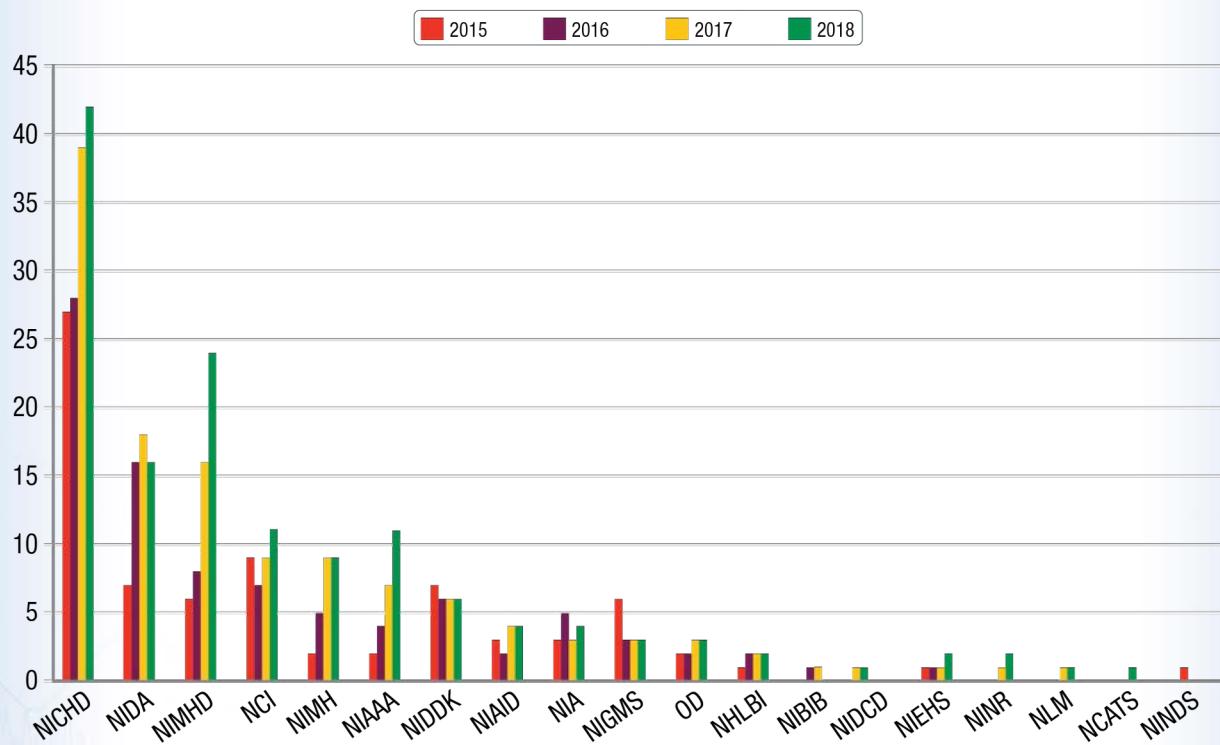
## FY 2018, HIV/AIDS Projects in the SGM Portfolio



# Non-HIV/AIDS SGM Projects, FY 2015–FY 2018 by ICO

The number of non-HIV/AIDS SGM-related projects increased from 2015 to 2018, from 80 to 142, an increase of 77.5%. In 14 of the 19 ICOs presented in the figure below, the number of non-HIV/AIDS funded projects increased between 2015 and 2018.

**FY 2015–2018, Number of Non HIV/AIDS SGM-Related Projects by NIH ICO  
(2015 = 80, 2016 = 90, 2017 = 124, 2018 = 142)**

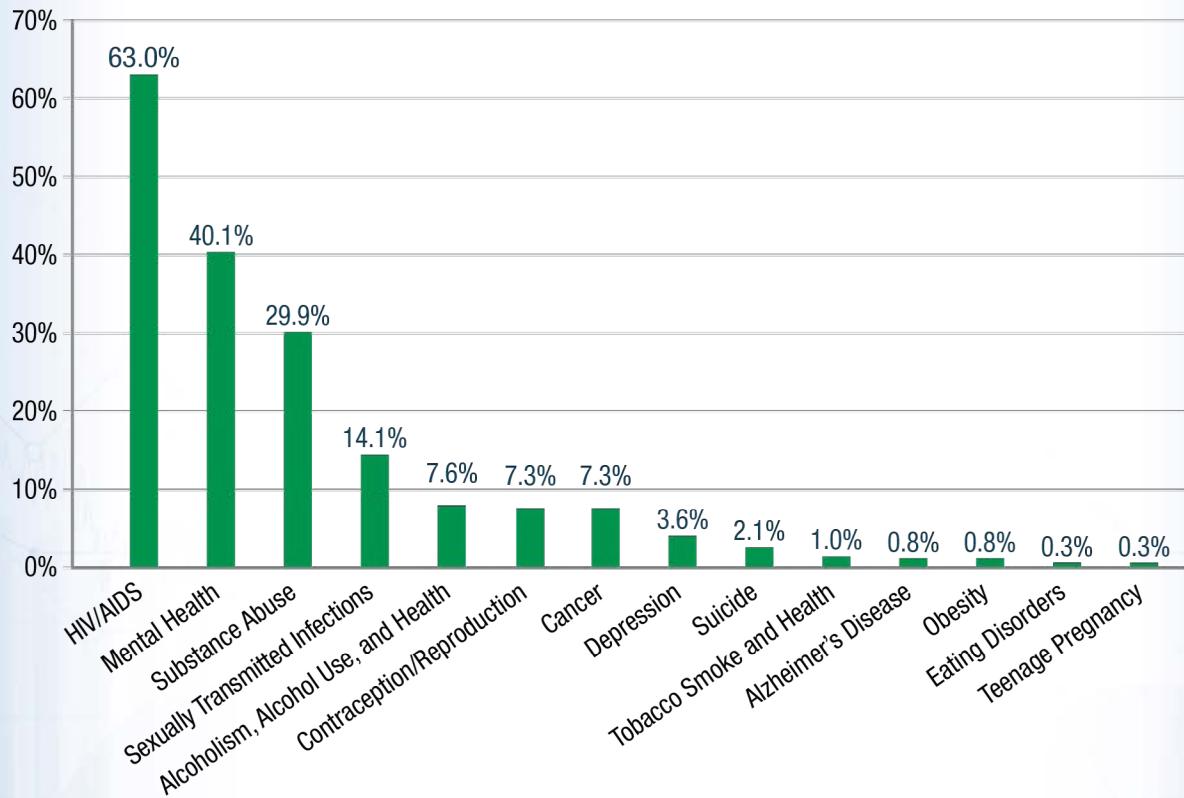


Note: The number of Non HIV/AIDS SGM-Related Projects by NIH ICO for years 2015–2018 can be found in [Appendix V](#).

# SGM Projects by Disease Area/Health Condition

Although the majority of SGM projects are in some way related to HIV/AIDS, a broad range of disease areas and health conditions were addressed in SGM-related projects funded by the NIH in FY 2018. These projects may focus on health care access or utilization or another subtopic in the context of specific diseases or risk factors. The graph below illustrates the proportion of projects within a selected number of existing RCDC categories. The number of projects in fields outside of HIV/AIDS have been increasing for at least the past 2 years. Other than HIV/AIDS, the most common areas included mental health, substance abuse, sexually transmitted infections, and cancer. Other projects addressed alcoholism, alcohol use, and health; contraception/reproduction; depression; suicide; smoking and health; Alzheimer's disease; obesity; eating disorders; and teenage pregnancy. Categories reported below are not mutually exclusive, because a project can focus on more than one disease area or health condition; therefore, percentages add to more than 100%.

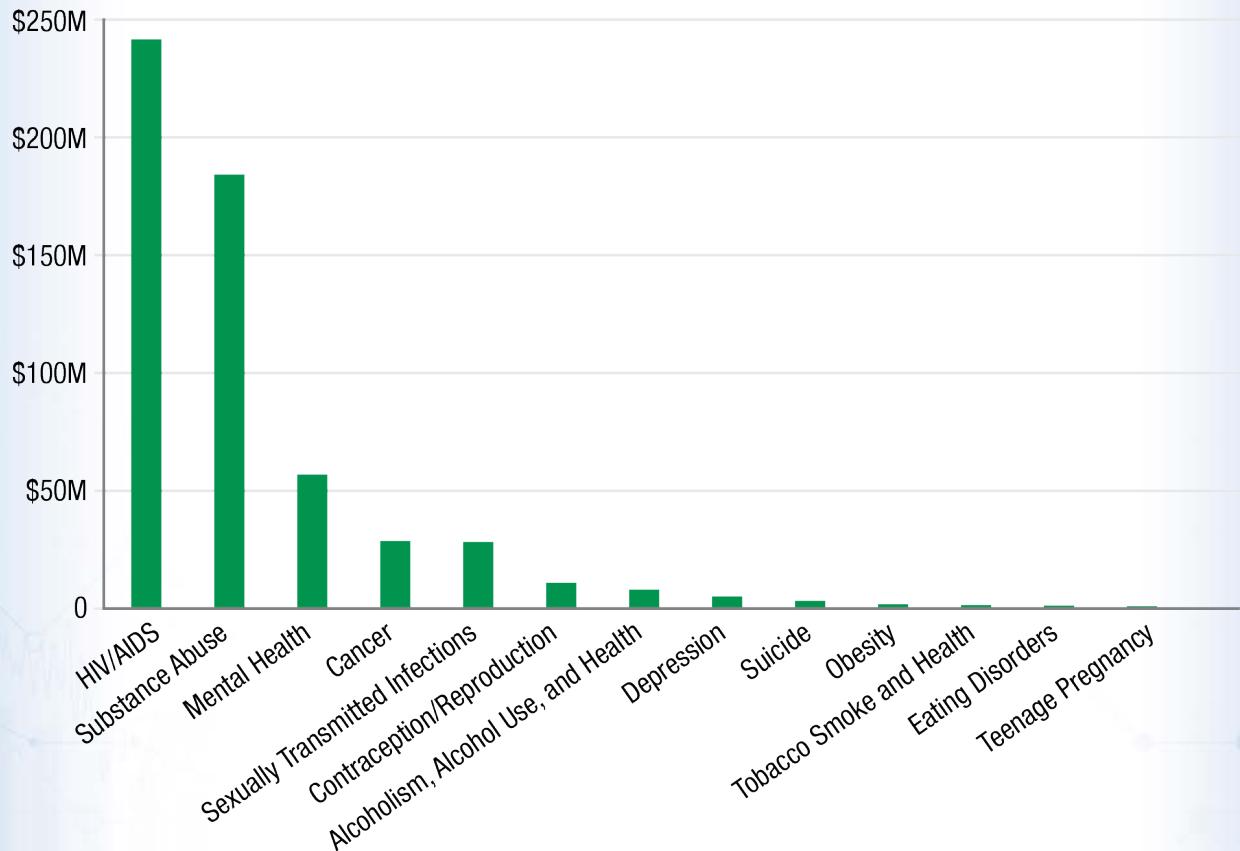
## FY 2018, Proportion of SGM Projects by Disease Area/Health Condition ( $N = 384$ )



# SGM Funding by Disease Area/Health Condition

The amount of funding in each of the disease areas/health conditions corresponded roughly to the number of grants in those areas. Funding in HIV/AIDS totaled \$241.6 million. Funding for SGM research in substance abuse, mental health, cancer, and sexually transmitted infections all exceeded \$26 million. Categories reported below are not mutually exclusive and represent multiple areas of research within the RCDC categorization system. Therefore, dollars may be counted toward more than one disease area or health condition.

## FY 2018, Total Grant Dollars by SGM Disease Area/Health Condition

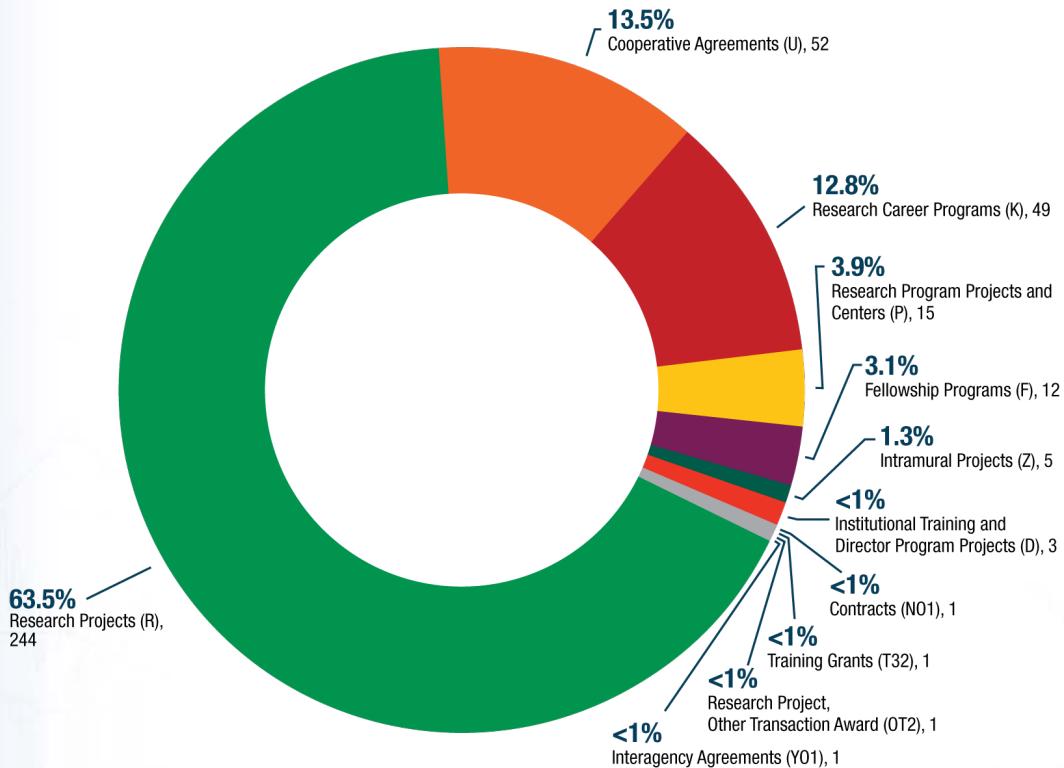


Note: Dollar amounts are in millions. Actual dollar amounts appear in [Appendix VI](#).

# Proportion of SGM-Related Projects by NIH Grant Mechanism

The distribution of projects by [grant mechanism](#) reveals the recipients of research funding, comparing the percentage going to research projects, career development, research centers, and other categories. Looking at the distribution may help the NIH prioritize particular mechanisms for enhanced support or emphasis. The Research Project (R) mechanism constituted the majority of grants (63.5%), followed by Cooperative Agreements (U) at 13.5%, and Research Career Programs (K) at 12.8%. Program Projects and Centers (P; 3.9%), Fellowships (F; 3.1%), Intramural Projects (Z; 1.3%), Institutional Training and Director Program Projects (D), Training Grants (T), Interagency Agreements (Y), Contracts (N), and Research Project, Other Transaction Award (OT2)—<1%—together accounted for 39 projects, or 10.2%, of the total SGM portfolio.

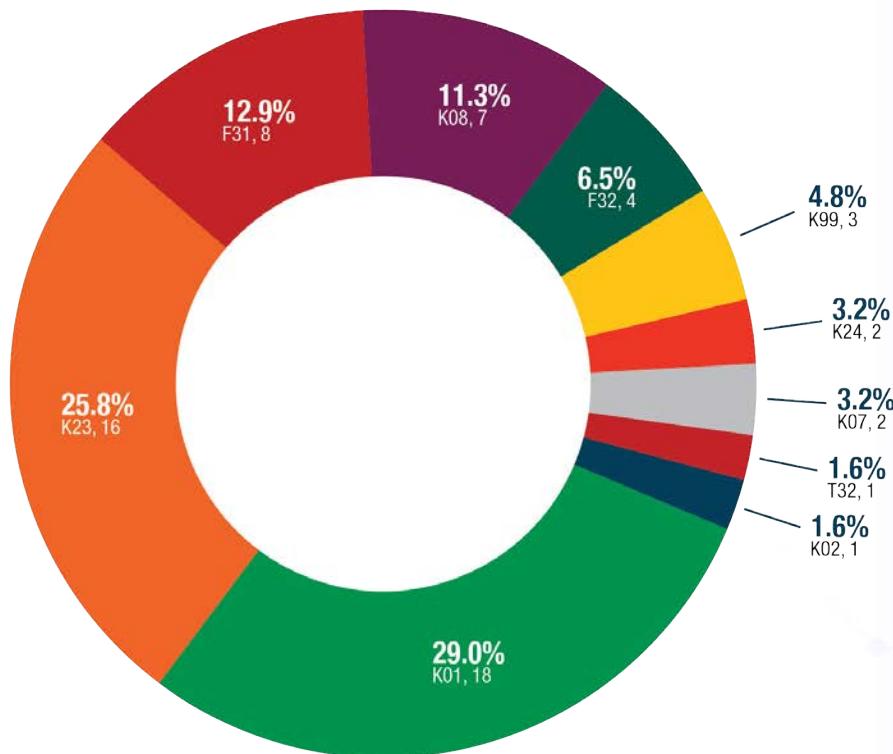
FY 2018, Proportion of Projects by Grant Mechanism ( $N = 384$ )



# Proportion of SGM-Related Projects by Type of Training/Career Funding Mechanism

This analysis was completed to assess an important component of the SGMRO's goal of strengthening the community of researchers conducting SGM research. Research Scientist Development Awards (K01), Clinical Investigator Awards (K08), Mentored Patient-Oriented Research Career Development Awards (K23), and Predoctoral Fellowships (F31) accounted for more than three-quarters (79.0%) of projects pertaining to training and career development in FY 2018. The total number of training and career-related awards in FY 2018 was 62, reflecting a 26.5% increase in these types of awards since FY 2015.

## Proportion of SGM-Related Projects by Type of Training/Career Funding Mechanism, FY 2018 ( $N = 62$ )

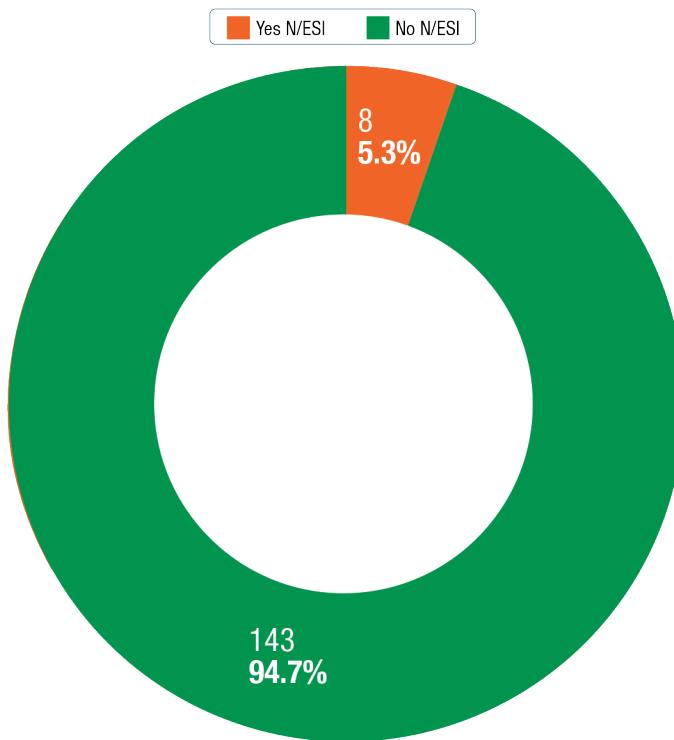


# Proportion of Projects with New and Early-Stage Investigators

Of the 151 [R01](#) FY 2018 grant awards in SGM health research, eight (5.3%) were awarded to either New Investigators (NI), who prior to this award had not received substantial NIH funding, or Early-Stage Investigators (ESI), who had received their terminal degree within the last 10 years but had not yet been the PI on a substantial NIH research award.

Note that this statistic illustrates NI and ESI status at the time of the initial application and reflects the status of only the PI, not other members of the investigative team. An increase in the number of NIs and ESIs from year to year may indicate success in both removing barriers to research and supporting the community of scholars.

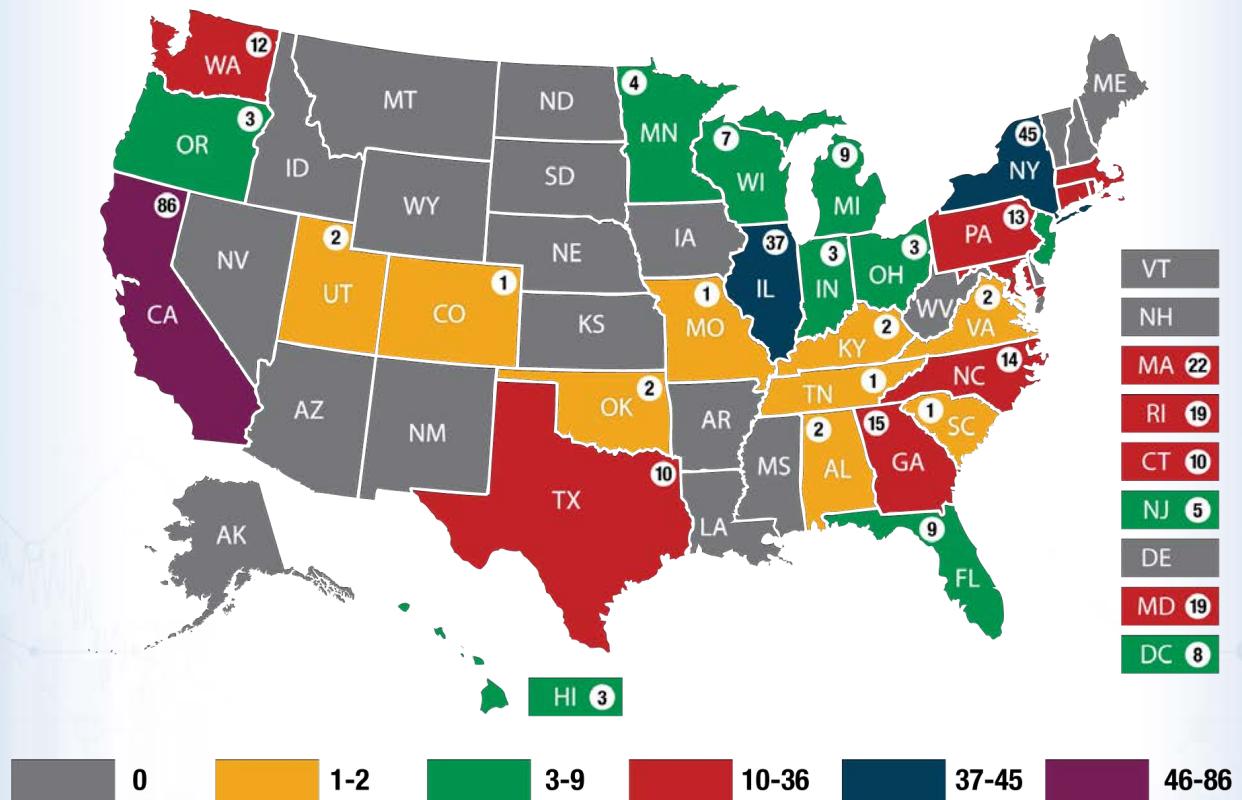
## FY 2018, Proportion of Projects with a New/Early Stage Investigator ( $N = 151$ )



# U.S. Funding of SGM Research by Location of Administering Institution

SGM funding was provided to organizations in 30 states and the District of Columbia. Approximately 370 of the projects in the SGM portfolio were domestic, and 14 projects were administered by organizations not associated with a U.S. state. The states with the largest number of projects (37 or more each) were California, New York, and Illinois. More than one-third of the projects (35.4%, or 131 of 370) were awarded to institutions located in either California or New York. Virginia, South Carolina, and Utah did not have any funded projects in FY 2017, but all had at least one project funded in FY 2018. The map below indicates the location of the funded institution and not necessarily where an activity on a project took place.

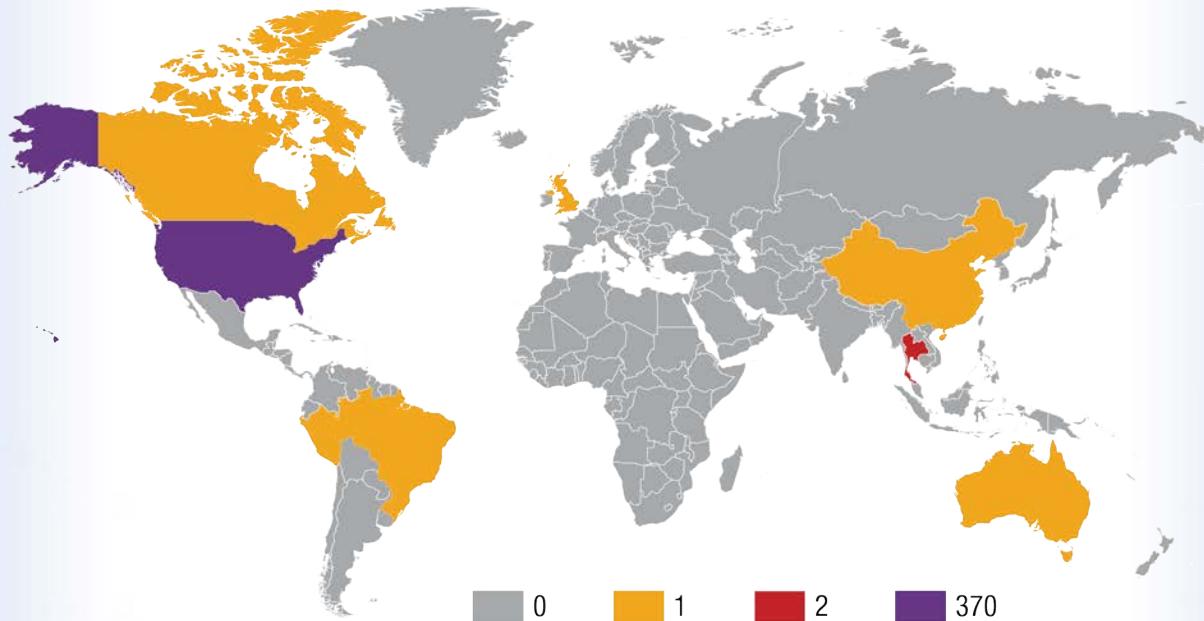
## FY 2018, SGM Projects by U.S. State ( $N = 370$ )



# Funding of International SGM Research by Country of Administering Institution

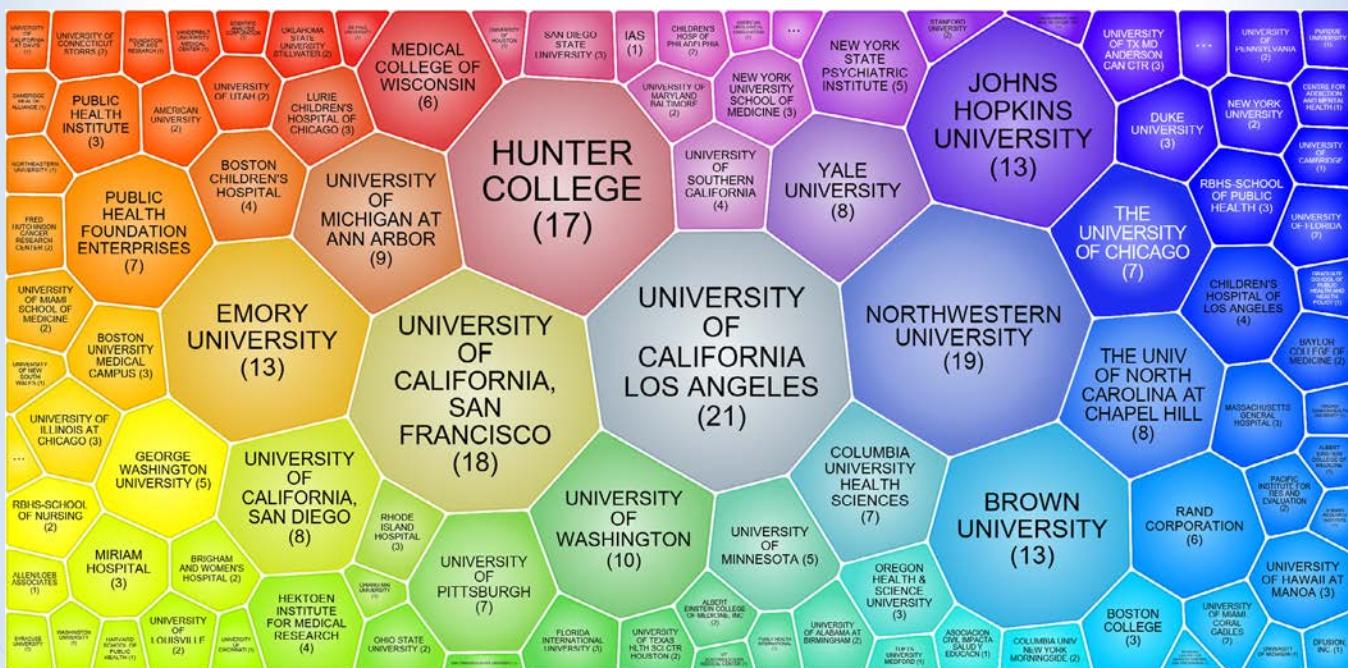
SGM funding was provided directly to foreign organizations in seven nations (Australia, Brazil, Canada, China, Peru, Thailand, and the United Kingdom). It should be noted that six SGM projects were funded but not categorized with respect to geographic location. Only Thailand had more than a single funded research grant, with a total of two.

## FY 2018 SGM Projects by Country ( $N = 378$ )



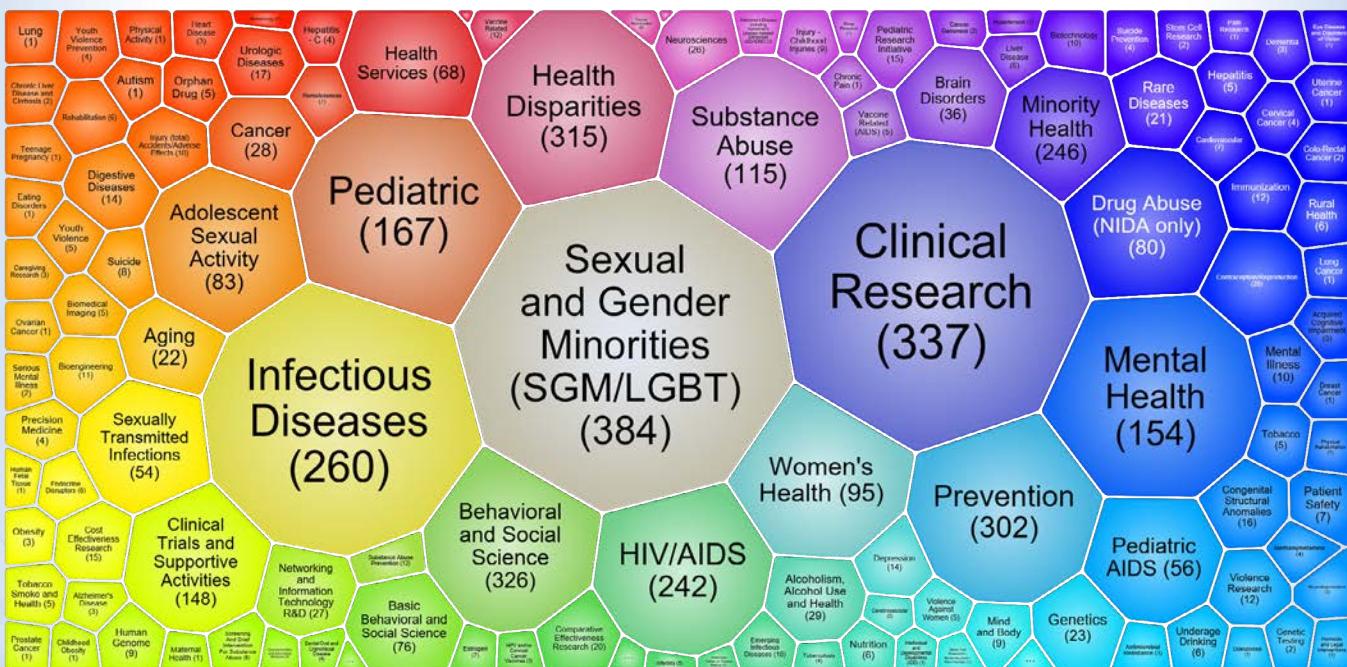
# SGM Projects by Institution

NIH projects in SGM health research are funded to institutions across the country and the world. The illustration below provides a visual representation of the specific domestic and global institutions with the largest number of projects. The visualization algorithm identifies and clusters projects by the location of the primary institution of the project grant. The area of the polygon is proportional to the number of awards. The projects in this visualization are unique and only counted once.



# SGM Projects by Category

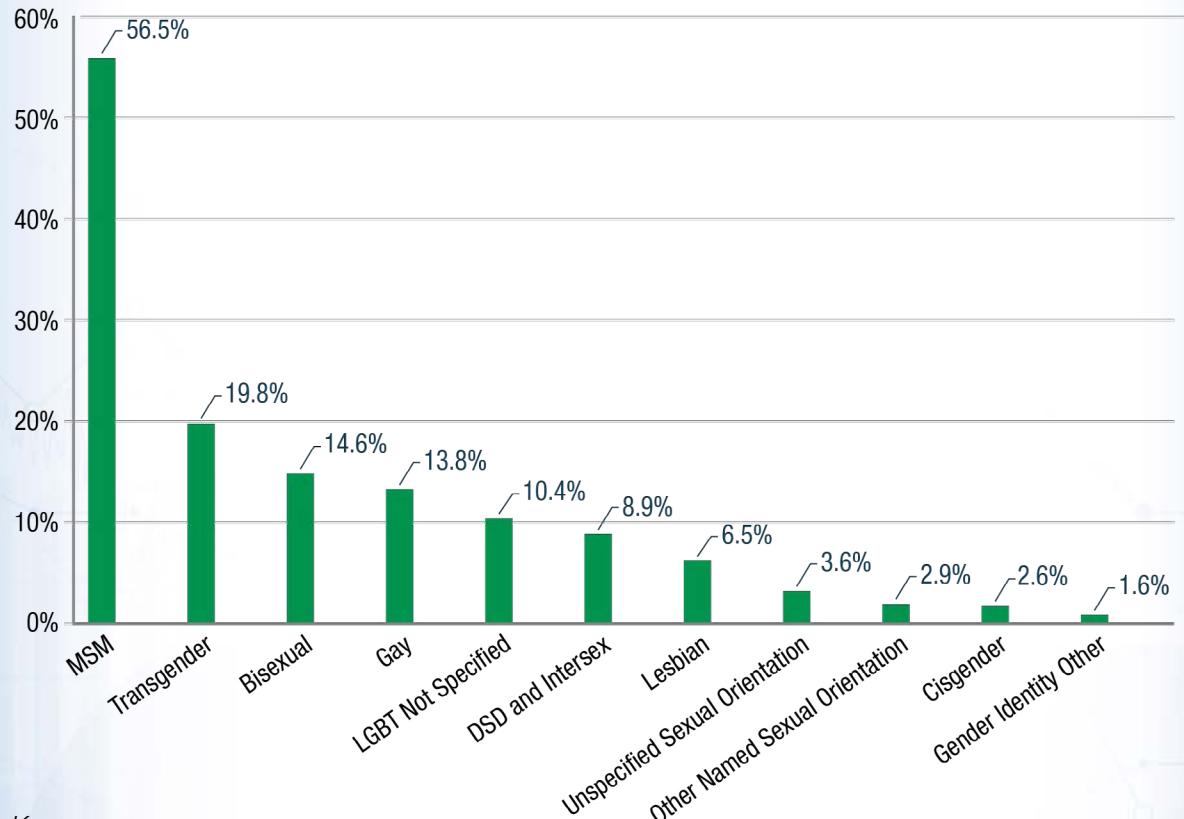
The SGM research portfolio also can be characterized in terms of the RCDC categories to which each research project belongs. In this illustration, an automated system uses RCDC indexing terms to group projects into various categories. These categories may be the focus of the research, such as “mental health,” or simply related to the research in some way, as is the case with “behavioral and social science.” The figure below depicts all of the categories to which any particular project in the SGM portfolio belongs. The majority of projects belong to at least one category in addition to SGM, listed here as “SGM/LGBT.” The area of the polygon is proportional to the number of awards in the category.



# Population

Each project was assigned a “population” based on various identities, behaviors, or diagnoses, depending on the population under study. Each project was assigned to at least one population category and could be assigned any number of additional population categories as appropriate. This was done in part to enumerate the communities that are being studied. More than half of the portfolio (56.5%) consists of projects that pertain to MSM. Nearly one in five projects pertain to transgender individuals (19.8%). The third-largest population category is bisexual, with 14.6% of the projects pertaining to this population category. One in 10 projects (10.4%) do not specify subcategories within the LGBT population but indicate that LGBT individuals are included in the project. Additional categories, including DSD, intersex, and lesbian, pertained to fewer than one in 10 projects. Cisgender, sexual orientation categories not previously mentioned, conceptual investigation of sexual orientation, and other gender identities all pertained to fewer than one in five projects. There were no Two-Spirit projects in FY 2018. The proportion of projects belonging to each category are depicted in the figure below. Categories are not mutually exclusive, so percentages add to more than 100 percent.

## FY 2018, Proportion of SGM Projects by Population



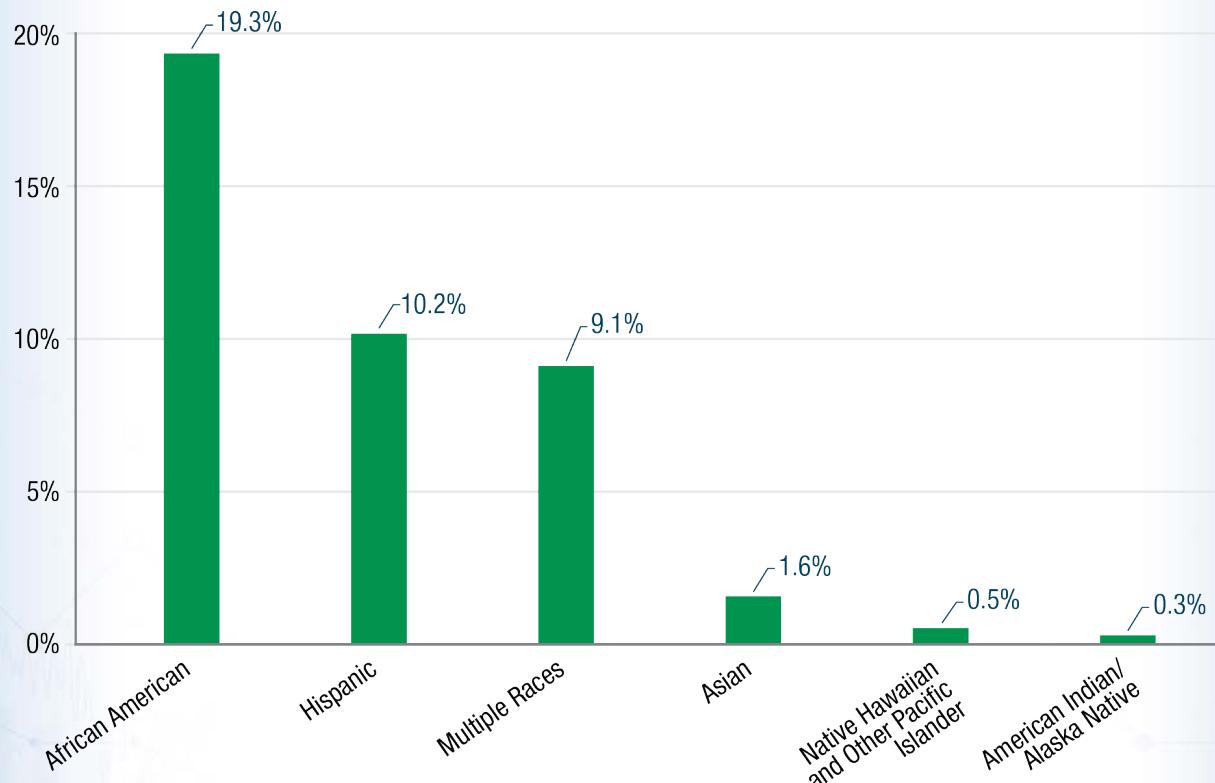
### Key:

**MSM** = men who have sex with men. **LGBT Not Specified** = the project does not specify a population but indicates an LGBT population is included. **DSD and Intersex** = disorders or differences of sex development and intersex. **Unspecified Sexual Orientation** = the project conceptually investigates sexual orientation, but does not specify an identity. **Other Named Sexual Orientation** = other named sexual orientation categories not previously listed (e.g., queer, pansexual, etc.). **Gender Identity Other** = gender identity other than transgender (e.g., non-binary, gender non-conforming, etc.).

## Race and Ethnicity

No specific racial or ethnic group was associated with the majority of projects. However, for those projects that specified inclusion of racial or ethnic groups, African Americans were included at the highest rate (19.3% of all SGM projects). Hispanics were included at a lower rate (10.2%), as were those people of multiple races (9.1%), which were sometimes referred to as “people of color.” Asian, Native Hawaiian and other Pacific Islander, and American Indian/Alaska Native populations were included at the lowest rates (1.6%, 0.5%, and 0.3%, respectively).

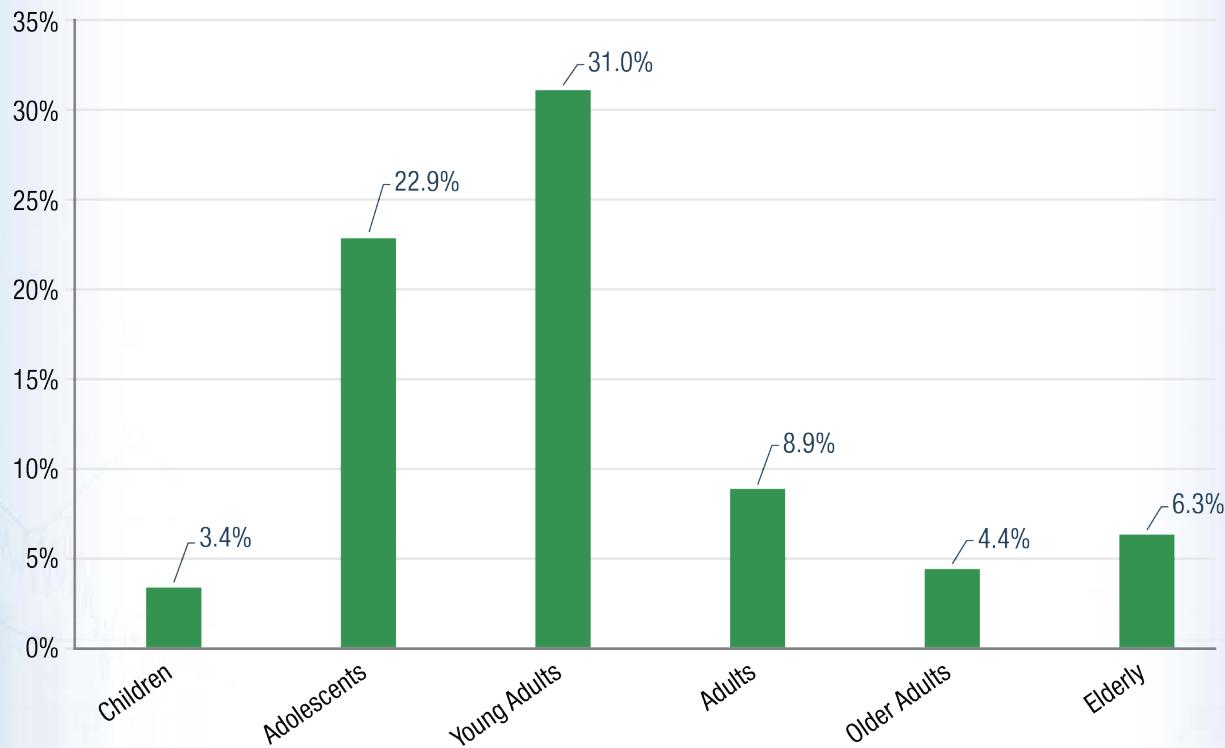
### FY 2018, Proportion of SGM Projects by Race and Ethnicity ( $N = 384$ )



## Age

A total of 176 projects in the SGM portfolio of 384 funded grants (45.8%) specified an age group. Some projects identify more than one age group, and categories below are not mutually exclusive (meaning the same project can appear in more than one group). It is likely that we are underrepresenting age groups, because some projects that pertain to a specific age group do not make that explicit. The age groupings are as follows: children (12 years and under), adolescents (13–17 years), young adults (18–35 years), adults (36–55 years), older adults (56–64 years), and elderly (65 years and older). The age group with the largest proportion of projects in the SGM portfolio was young adults (31.0%), followed by adolescents (22.9%), adults (8.9%), elderly (6.3%), older adults (4.4%), and children (3.4%).

### FY 2018, Proportion of SGM Projects by Age Group (N = 384)



## Other Research Categories

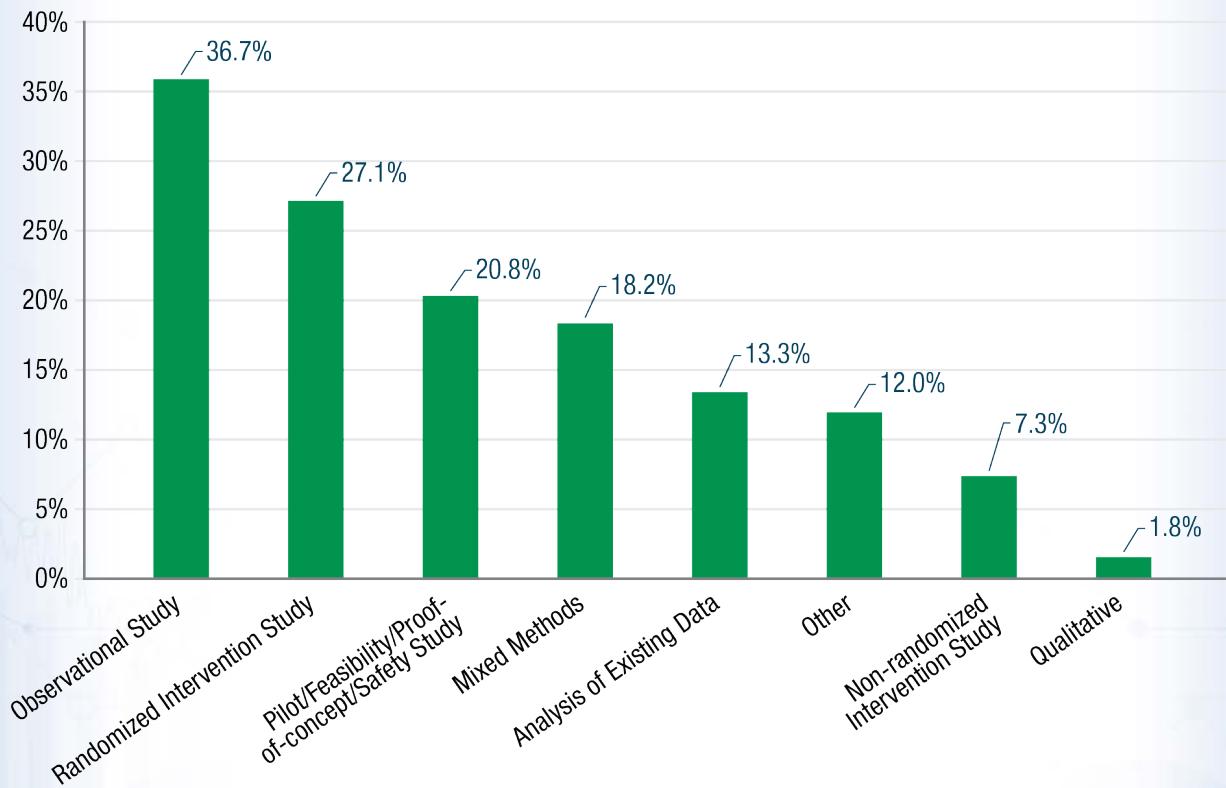
Below is a list of additional categories used to classify the 384 projects of the FY 2018 SGM portfolio. The categories were based on feedback about potential variables to include from SGM researchers and reflect an increased interest in the intersection of social categories, particularly race, socioeconomic status (SES), sexual orientation, and gender identity. However, due to the small numbers, only the total number of relevant projects in each category, and not the proportions, is presented in the table below. Notably, no projects pertained to children involved in the foster care system. Low SES was associated with the largest number of projects. These numbers are minimums, because other projects may have included members of these groups without specifically identifying them in project descriptions.

Other Research Categories	Number of Projects
People who live in poverty	16
People who live in rural areas	11
People experiencing homelessness	9
People involved with the criminal justice system	6
People with disabilities	2
People who have immigrated from other countries	2
People who have served in the U.S. armed forces	2

# Research Methods

Each of the projects was curated for the research methods used in the research study. Nearly two-thirds of the projects (63.8%) were either observational studies (36.7%) or randomized interventions (27.1%). One in five (20.8%) were pilot/feasibility/proof-of-concept/safety studies, whereas 18.2% employed mixed methods. More than one in 10 projects involved analysis of existing data (13.3%), whereas 12.0% employed some other type of research method. Additionally, 7.3% of the projects were non-randomized intervention studies, whereas 1.8% employed solely qualitative research methods. “Other” was a relatively broad category, because a number of training and center-type grants were included that do not focus on conducting research, per se. The same project can appear in more than one category; therefore, the total percentage across categories exceeds 100%.

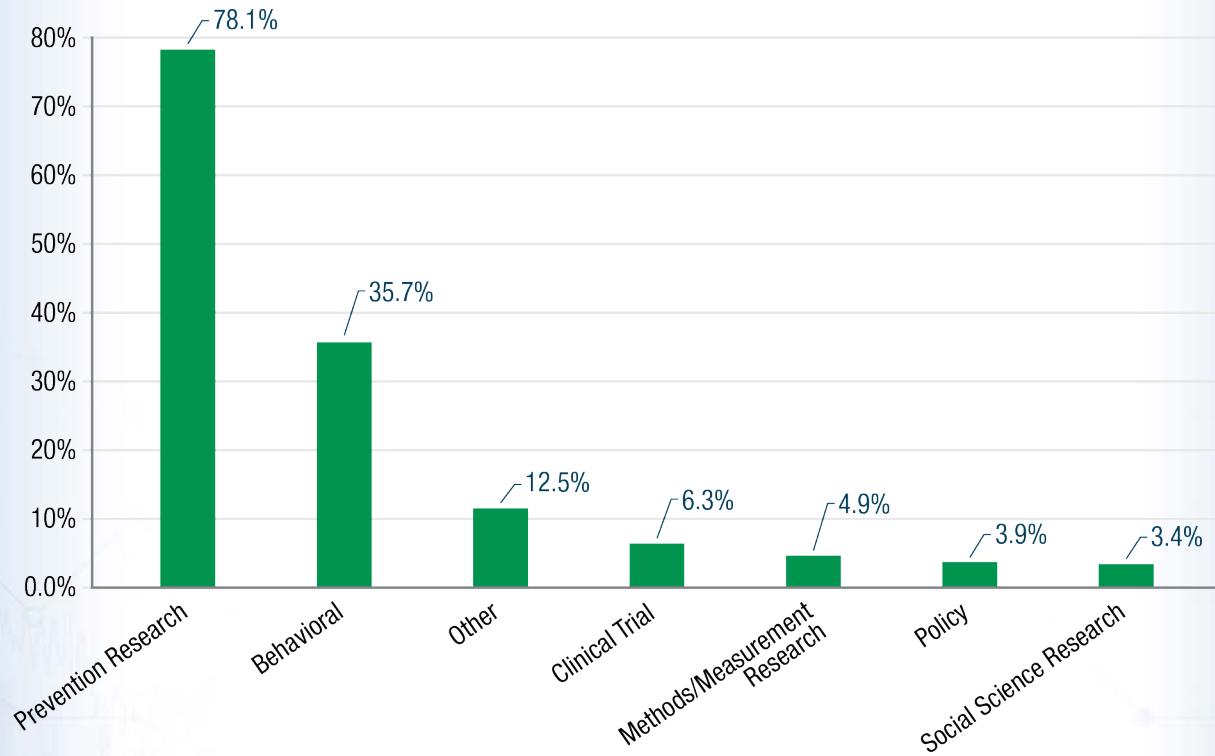
## FY 2018, Proportion of SGM Projects by Research Methods ( $N = 384$ )



## Type of Study Category

Each of the projects also was curated for the type of study category. Seven study categories were coded, with the majority of projects identified as prevention research (78.1%). Behavioral research was conducted in more than a third of all projects (35.7%). Smaller proportions of the projects in the portfolio fell under clinical trials (6.3%), methods/measurement research (4.9%), policy research (3.9%), and social science research (3.4%). Other types of studies—those that did not fall within the existing categories—accounted for 12.5%. The same project can appear in more than one category; therefore, the total percentage across categories exceeds 100%.

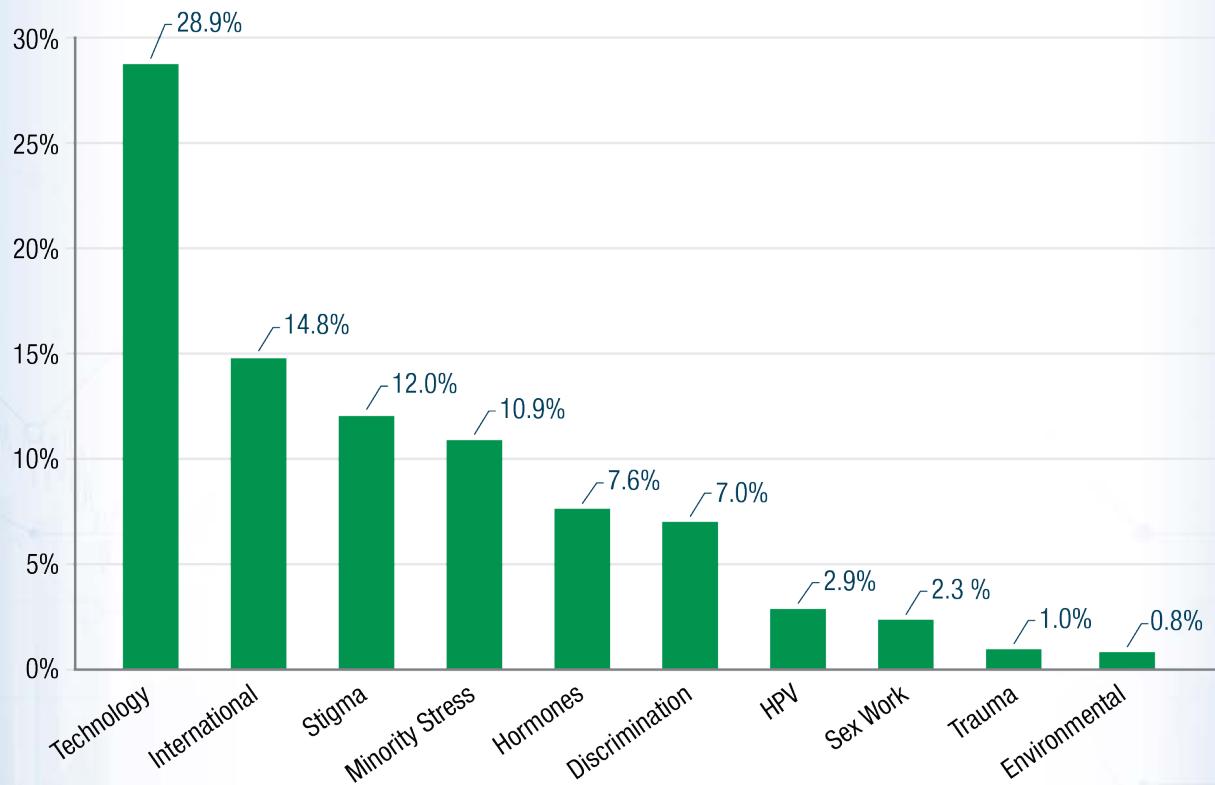
### FY 2018, SGM Projects by Type of Study ( $N = 384$ )



## Selected Topic Categories

A number of other topics noted as being of interest to SGM researchers did not fit into the other groupings previously described. They were included in the curation and the results are presented here. More than one in four projects (28.9%) had a technological component—such as the use of a website, mobile phone application (app), or computer—used to deliver the intervention. Often, these studies were in conjunction with health information, medication tracking and reminders, or social networks. Nearly one project in six (14.8%) had an international component, taking place in or concerning a population outside the United States or in addition to a population in the United States. Stigma, minority stress, and discrimination pertain to 12.0%, 10.9%, and 7.0% of the projects, respectively. More than one in 20 (7.6%) projects pertain to hormones, their use, their production, or their effects on development. Smaller percentages of projects pertain to human papillomavirus (HPV) (2.9%), sex work, (2.3%), trauma (1.0%), or the environment (0.8%). Note that all projects were curated for these topics, but not all projects included one.

### FY 2018, Proportion of SGM Projects by Special Topic Category ( $N = 384$ )



# CONCLUSION

The number of projects in the NIH SGM portfolio and the associated funding levels have gradually increased since 2015. This indicates a long-term pattern of the NIH's increased investment in the SGM portfolio. This is true for the total number of projects, as well as for projects that are not HIV/AIDS-related. The increased investment in non-HIV/AIDS-related projects over the past 4 years has contributed to the broadening of the SGM portfolio at the agency. Additionally, the total number of training and career-related awards in FY 2018 increased by more than 25% over FY 2015.

Notably, the majority of projects in FY 2018 included one of three groups: MSM, transgender individuals, and bisexuals. Another 8.6% of projects pertained to DSD and Intersex populations. The curation conducted this year indicates that the SGM portfolio is diverse, with an estimated one in five projects involving African Americans and nearly the same proportion of projects spanning the life course. Additionally, the curation identified such groups as people who live in rural areas, persons with disabilities, and people who have served in the U.S. armed forces, among others, all of whom are the subject of health research in projects in the FY 2018 SGM portfolio.

Most of the projects in the portfolio (78.6%) are prevention projects, and nearly one in 20 projects (4.9%) included research to develop or improve SGM methods and measurement. This indicates that a strong body of information about prevention is being developed, while simultaneously, efforts are underway to accurately measure the populations that fall under the SGM umbrella so that the larger impacts of interventions can be assessed and understood. Moving forward, the agency hopes to see a greater influx of SGM-related projects, especially those that seek to answer questions related to understudied health conditions and underrepresented populations.

# APPENDIX I:

## CURATION VARIABLES

### Population

Bisexual  
Cisgender  
Gay  
Gender Identity Other  
Lesbian  
LGBT, not specified  
MSM  
Other Named Sexual Orientation  
Transgender  
Two-Spirit  
Unspecified Sexual Orientation

People involved with the criminal justice system  
People with disabilities  
People who have immigrated from other countries  
People who have served in the U.S. armed forces  
People involved in the foster care system

### Race/Ethnicity

African-American  
American Indian/Alaska Native  
Asian  
Native Hawaiian or Other Pacific Islander  
Hispanic Ethnicity  
Multiple Races

### Research Methods

Analysis of Existing Data  
Non-Randomized Intervention Research  
Observational Study  
Pilot/Feasibility/Proof of Concept/Safety  
Randomized Intervention Study  
Qualitative  
Methods Research  
Other Research Method/s  
Mixed Methods Research

### Type of Study

Clinical Trial  
Prevention Research  
Methods/Measurement Research  
Behavioral  
Social Science Research  
Policy  
Other Type of Study

### Sex

Male  
Female  
DSD and Intersex

### Other

Environmental  
Sex Work  
Hormones  
Trauma  
HPV  
Health Disparities  
International  
Technology  
Stigma  
Minority Stress  
Discrimination

### Age

Children (12 and under)  
Adolescents (13 to 17)  
Young Adult (18 to 35)  
Adult (35 to 55)  
Older Adult (56 to 64)  
Elderly (65 and above)

### Other Research Categories

People who live in poverty  
People who live in rural areas  
People experiencing homelessness

# APPENDIX II:

## NIH INSTITUTES, CENTERS, AND OFFICES

### NIH Institutes

National Cancer Institute (NCI)  
National Eye Institute (NEI)  
National Heart, Lung, and Blood Institute (NHLBI)  
National Human Genome Research Institute (NHGRI)  
National Institute on Aging (NIA)  
National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
National Institute of Allergy and Infectious Diseases (NIAID)  
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)  
National Institute of Biomedical Imaging and Bioengineering (NIBIB)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD)  
National Institute on Drug Abuse (NIDA)  
National Institute on Deafness and Other Communication Disorders (NIDCD)  
National Institute of Dental and Craniofacial Research (NIDCR)  
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)  
National Institute of Environmental Health Sciences (NIEHS)  
National Institute of General Medical Sciences (NIGMS)\*  
National Institute of Mental Health (NIMH)  
National Institute on Minority Health and Health Disparities (NIMHD)  
National Institute of Neurological Disorders and Stroke (NINDS)  
National Institute of Nursing Research (NINR)  
National Library of Medicine (NLM)

### NIH Centers

Clinical Center (CC)†  
Center for Information Technology (CIT)†  
Center for Scientific Review (CSR)†  
Fogarty International Center (FIC)\*  
National Center for Advancing Translational Sciences (NCATS)\*  
National Center for Complementary and Integrative Health (NCCIH)

### NIH Offices

Office of the Director (OD)

\*Indicates no intramural program.

†Indicates no grant-making authority.

# APPENDIX III:

## SGM-RELATED PROJECTS BY ICO, FY 2015–2018

ICO	2015	2016	2017	2018
NIMH	77	85	90	92
NIDA	71	74	77	67
NICHD	40	49	63	62
NIAID	42	49	55	54
NIMHD	16	16	27	35
NIAAA	8	16	18	22
NCI	13	13	18	18
NIA	4	7	5	7
NIDDK	7	6	6	6
FIC	4	2	2	4
NINR	5	7	6	4
NIGMS	8	4	3	3
OD	3	2	3	3
NHLBI	1	2	2	2
NIEHS	1	1	1	2
NLM	0	0	1	1
NCATS	0	0	0	1
NIDCD	0	0	1	1
NIBIB	0	1	1	0
NINDS	1	0	0	0
<b>TOTAL</b>	<b>301</b>	<b>334</b>	<b>379</b>	<b>384</b>

# APPENDIX IV:

## SGM FUNDING FY 2015–2018

INSTITUTE	FY 2015	FY 2016	FY 2017	FY 2018
<b>FIC</b>	\$730,186	\$437,569	\$461,067	\$655,891
<b>NCATS</b>	—	—	—	\$8,757,478
<b>NCI</b>	\$9,991,090	\$8,279,332	\$8,464,477	\$7,905,839
<b>NHLBI</b>	\$811,954	\$932,741	\$892,597	\$1,284,043
<b>NIA</b>	\$1,069,939	\$2,792,329	\$2,848,625	\$3,513,115
<b>NIAAA</b>	\$2,678,842	\$5,020,318	\$4,640,697	\$6,353,760
<b>NIAID</b>	\$61,640,360	\$59,043,639	\$99,922,189	\$156,276,560
<b>NIBIB</b>	—	\$221,250	\$265,500	—
<b>NICHD</b>	\$13,178,918	\$18,057,038	\$29,602,401	\$27,169,305
<b>NIDA</b>	\$29,886,832	\$32,278,080	\$30,099,799	\$29,762,873
<b>NIDCD</b>	—	—	\$97,802	\$30,257
<b>NIDDK</b>	\$1,898,377	\$1,415,141	\$1,540,040	\$1,776,864
<b>NIEHS</b>	\$182,920	\$2,015,207	\$2,127,583	\$2,568,759
<b>NIGMS</b>	\$6,041,087	\$4,465,457	\$4,919,606	\$4,906,869
<b>NIMH</b>	\$24,501,620	\$26,931,099	\$30,643,798	\$33,429,012
<b>NIMHD</b>	\$6,467,439	\$10,201,837	\$14,092,073	\$17,219,873
<b>NINDS</b>	\$178,378	—	—	—
<b>NINR</b>	\$1,469,185	\$2,116,894	\$2,128,327	\$1,655,638
<b>NLM</b>	—	—	\$219,102	\$173,778
<b>OD</b>	\$570,073	\$781,862	\$1,298,752	\$655,988
<b>TOTAL</b>	<b>\$161,297,200</b>	<b>\$174,989,793</b>	<b>\$234,264,435</b>	<b>\$304,095,902</b>

# APPENDIX V:

## NON-HIV/AIDS SGM PROJECTS BY ICO, FY 2015–2018

ICO	2015	2016	2017	2018
<b>NICHD</b>	27	28	39	42
<b>NCI</b>	9	7	9	11
<b>NIDDK</b>	7	6	6	6
<b>NIDA</b>	8	16	18	16
<b>NIMHD</b>	6	8	16	24
<b>NIGMS</b>	7	3	3	3
<b>NIA</b>	3	5	3	4
<b>NIAID</b>	3	2	4	4
<b>OD</b>	3	2	3	3
<b>NIAAA</b>	2	4	7	11
<b>NIMH</b>	2	5	9	9
<b>NINDS</b>	1	0	0	0
<b>NHLBI</b>	1	2	2	2
<b>NIEHS</b>	1	1	1	2
<b>NIBIB</b>	0	1	1	0
<b>NINR</b>	0	0	1	2
<b>NLM</b>	0	0	1	1
<b>NIDCD</b>	0	0	1	1
<b>NCATS</b>	0	0	0	1
<b>TOTAL</b>	<b>80</b>	<b>90</b>	<b>124</b>	<b>142</b>

# APPENDIX VI:

## FUNDING BY DISEASE AREA/HEALTH CONDITIONS, FY 2018

DISEASE AREA/HEALTH CONDITION	ALL SGM FUNDING
HIV/AIDS	\$241,558,274
Substance Abuse	\$180,355,341
Mental Health	\$57,284,297
Cancer	\$26,993,580
Sexually Transmitted Infections	\$26,041,561
Contraception/Reproduction	\$11,428,521
Alcoholism, Alcohol Use, and Health	\$8,775,424
Depression	\$5,601,808
Suicide	\$3,271,249
Obesity	\$1,108,035
Tobacco Smoke and Health	\$765,670
Eating Disorders	\$677,278
Teenage Pregnancy	\$591,244



**National Institutes of Health**  
*Sexual & Gender Minority Research Office*