Introduction

The terms differences (or sometimes disorders) of sex development (DSD) and Intersex refer to reproductive development that varies from binary definitions of physical sex. This can include any congenital variation in sex chromosomes, gonadal development, sex hormone synthesis or function, and the appearance of external genitalia. The NIH research projects specific to DSD & Intersex for fiscal year (FY) 2018 were a subset of the full portfolio of 384 sexual and gender minority (SGM) projects. The full portfolio is identified using the SGM fingerprint, which includes a subset of key terms specific to DSD & Intersex conditions. The full SGM portfolio was manually reviewed to determine which of the projects in the SGM portfolio were related to DSD & Intersex. Those 34 DSD & Intersex projects are presented in this Snapshot. DSD & Intersex projects comprise 8.9% of the SGM portfolio for FY 2018.

Projects by Institute or Center

The majority (67.6%) of DSD & Intersex projects were funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). The only other Institutes that had more than one project were the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), with six projects (17.6%), and the National Institute of Environmental Health Sciences (NIEHS), with two projects (5.9%).

Funding Amount by Institute or Center

Although NICHD was the largest single funder of projects, with 52.1% of the approximately $16.6 million spent on DSD & Intersex projects, three projects—two from NIEHS and one from the National Cancer Institute (NCI)—accounted for nearly a third (32.3%) of all DSD & Intersex funding for FY 2018. NIDDK, the National Institute of General Medical Sciences (NIGMS), and the National Institute of Mental Health (NIMH) accounted for the remaining 15.6% of funding.
Projects by State

Together, the neighboring states of Texas and Oklahoma have the largest number of DSD & Intersex projects in the country (23.5%). California, Massachusetts, and Michigan were the only states other than Texas that had more than two DSD & Intersex projects. Six remaining projects (not included on the map) took place on the NIH campus in the intramural program.

The map indicates the location of the funded institution and not necessarily where activity on a project took place.

Projects by Disease Area/Health Condition

More than two-thirds (67.6%) of DSD & Intersex projects pertain to Contraception/Reproduction. More than one in six (17.6%) were related to mental health. These pertained to the impacts of treatment decisions, emotional processing, behavior, depression, and suicide. Other projects were related to obesity and cancer. Please note that the total number across conditions is greater than 34 because projects may be counted in more than one category.

Projects by Grant Type (Activity Code)

Nearly half (47.1%) of DSD & Intersex projects were funded through the R01 Research Project Grants. Almost one in six (14.7%) were NIH intramural projects. The remaining 13 projects were supported by a variety of nine different funding mechanisms: K01, K08, K23, P50, R13, R15, R21, R37, and U01.