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### **The NIDA Genomics Center Updated**

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RUCDR Infinite Biologics® at Rutgers University has been the NIDA Center for Genetic Studies (NGC) since 1999, continuously serving the programmatic needs of NIDA and the research needs of its grantees. Traditional services of the NGC include customized blood and saliva collection kits, extraction of DNA and RNA, production of cryopreserved lymphocytes (CPLs) or lymphoblastoid cell lines (LCLs), banking of diverse sample types and data from clinical instruments and genomic analytical services. The latter include a 96 SNP genomic identifier (SNPtrace®) for each DNA produced by RUCDR, numerous types of Affymetrix, Illumina and Agilent genotyping and expression microarrays (e.g., Smokescreen®, BioBank and Exome), including custom-fabricated microarrays, and targeted, exome, whole genome and transcriptome NGS. Consultation and interpretation are available for genomic SNP imputation, individualized NGC database searches and genomics analytical services including assistance in uploading to databases such as dbGaP. Recently, we expanded our list of services to NIDA investigators (or as fee-for-service) to include both stem cell and epigenomics services. The former includes the production of induced pluripotent stem cells (iPSC) from blood, fibroblast and other cell types, complete pluripotency and genomic stability quality assurance through immunohistochemistry, embryoid body formation, microarray and karyotyping tests and genomic editing via CRISPR/Cas9 techniques. Epigenetics services include genomic methylation analysis through microarray (e.g., Illumina MethylationEPIC) or NGS and DNA protein interaction analysis through chromatin immunoprecipitation and NGS (ChIP-Seq). Washington University supports a website (<https://nidagenetics.org>) for distribution of phenotypic data and biomaterials and processes data for the Smokescreen initiative. Supported by contract No. N01DA-18-7797.