

Name of Core	Location	Manager	Manager Email	Description	Website
BioBank and Molecular Analysis Program (BMAP)	Nemours Children's Hospital	Diana Corao-Urbe & Jen Holbrook	diana.coraouribe@nemours.org & jennifer.holbrook@nemours.org	BMAP houses a tissue biorepository and a wet lab specializing in molecular biology instrumentation and methodologies. BMAP offers clinical trial support as well as basic specimen processing. Services offered include: serum and plasma isolation, mononuclear cell isolation, liquid nitrogen flash freezing, and cell culture of surgery specimens, nucleic acid extraction and QC, specimen identification and profiling, Real-Time qPCR and gene expression analysis, CNV (copy number variation) detection and digital PCR, and DNA Sanger sequencing.	https://www.nemours.org/pediatric-research/labservices/core/biobank-and-molecular.html
BioImaging Center (University of Delaware)	University of Delaware	Jeff Caplan	jcaplan@udel.edu	The BioImaging Center houses state-of-the-art microscopy instrumentation, including transmission and scanning electron microscopy, atomic force microscopy, and advanced light	http://bioimaging.dbi.udel.edu

				<p>microscopy. The Biomaging Center contains a breadth of equipment enabling us to acquire information from the millimeter to nanometer scales. Whether you want to look at whole organisms, cells, organelles, or individual proteins, we'll be able to accommodate your research needs.</p>	
Data Science Core (DSC)	University of Delaware	Shawn Polson	polson@udel.edu	<p>The DSC offers many services to help with planning your research or analyzing your current data. Services include: consultation, proposal assistance, training, and software and hardware resources, database and web services, next gen analysis, and custom analysis</p>	https://bioinformatics.udel.edu/core
Biostatistics Epidemiology Research Design Core (BERD)	ChristianaCare	Claudine Jurkovitz	cjurkovitz@christianacare.org	<p>The BERD Core offers consultative services including epidemiology, biostatistics, research design, data management, and bio- and medical informatics. Services offered include: assistance with statistics</p>	https://www.de-ctr.org/cores/biostatistics-epidemiology-and-research-design-berd-core/

				analysis and advanced statistical methodologies.	
Cardiovascular Research Core (CVRC)	University of Delaware	Shannon Lennon	slennon@udel.edu	CVRC offers a variety of services to assist with cardiovascular research goals. Services offered include: custom vascular studies, echocardiography, 24-hour blood pressure, monitoring Standard and Doppler Carotid ultrasound. Personnel support includes ultrasound expertise, cell culture support, a research nurse, and support for graded exercise testing	https://sites.udel.edu/cvhealth/
Cawley Center for Translational Cancer Research (CCTCR)	ChristianaCare	Lynn Opdenaker	lopdenaker@christianacare.org	CCTCR offers a variety of services and techniques including: flow cytometry / cell sorting, real time PCR, and microirradiator.	https://christianacare.org/us/en/care/cancer-care/cancer-research/cawley-center-for-translational-cancer-research-at-christianacare
Cell Science Core (CSC)	Nemours Children's Hospital	Sonali Barwe	sonali.barwe@nemours.org	The Cell Science Core (CSC) assists researchers in flow cytometry, cell sorting, and other cell sciences. The core provides access to a variety of state-of-the-art technology and technical expertise to researchers. Services	https://www.nemours.org/pediatric-research/labservices/core/cell-science.html

				<p>offered include: flow cytometry, cell culture, 2-D electrophoresis, 2-D DIGE, LC-MS/MS, and HPLC.</p>	
<p>Center for Biomedical and Brain Imaging (CBBI)</p>	<p>University of Delaware</p>	<p>Keith Schneider</p>	<p>keithas@udel.edu</p>	<p>CCBI offers a state-of-the-art research facility houses the first research fMRI scanner in the state of Delaware—with the capability to map brain activity, as well as provide remarkably detailed images of muscles, discs, bones and organs. Services offered include: functional and structural magnetic resonance imaging (MRI) for humans, with two 3T scanners for humans and large animals, and a 9.4T scanner for samples and small animals. Additionally, simultaneous MRI with EEG or TMS can be performed.</p>	<p>https://cbbi.udel.edu/</p>
<p>Center for Human Research Coordination</p>	<p>University of Delaware</p>	<p>Karin Gravare Silbernagel & Marlo Goss</p>	<p>kgs@udel.edu & mgoss@udel.edu</p>	<p>University of Delaware’s Center for Human Research Coordination (CHRC) was established to support UD researchers focused on human subject research.</p>	<p>https://chrc.udel.edu/</p>

				<p>Research changes people's lives and we are here to support the endeavor of advancing research at the University of Delaware. CHRC will assist with recruitment of participants, coordination of studies and registries, as well as REDCap and data management.</p>	
Custom Synthesis Lab	University of Delaware	Yinzhi Fang	yinzhi@udel.edu	<p>The Custom Synthesis Lab offers many services including: synthetic chemistry services, broadly defined, mainly to non-specialists with limited access to organic chemistry facilities.</p>	For more information please email the core manager
Delaware Center for Musculoskeletal Research (DCMR)	University of Delaware	Mary Boggs & Liyun Wang	mboggs@udel.edu & Lywang@udel.edu	<p>The DCMR core offers a wide range of services and expertise in support of furthering musculoskeletal research. Services offered include: mechanical testing and measurements, multimodal animal imaging, histology, and preclinical experimentation/lab and animal medicine.</p>	https://dcmr.udel.edu/dcmrcore/

DNA Sequencing & Genotyping Center	University of Delaware	Bruce Kingham	brucek@udel.edu	The University of Delaware Genomics Technology Center contains a wide range of instrumentation which enables us to acquire genetic/genomic information from the smallest virus to to the largest mammals. Services offered include: DNA sequencing (Sanger and next-generation sequencers); nucleic acid extraction, purification, and amplifications; nucleic acid quality analysis; DNA fragmentation; DNA size selection.	https://dna.dbi.udel.edu/
Flow Cytometry Core	University of Delaware	Arit Ghosh	aghos@udel.edu	The Flow Cytometry Core offers a full service flow cytometry and cell sorting facility. Services offered include: Immunophenotyping, DNA content analysis, veterinary hematology, sample processing, figure preparation, data analysis, consultation, assay design, cell culture, and cell sorting	https://bioimaging.dbi.udel.edu/flow-cytometry-core-2/
High Throughput Experimentation (HTE) Center	University of Delaware	Jessica Sampson	jrsampso@udel.edu	The HTE Center offers compound library synthesis, reaction	https://sites.udel.edu/htecenter/

				development, and collection of data sets for statistical model development. Services offered include organic reactions in parallel format for 24- and 96-well microscale experiment screening to support rapid identification of catalysts for new reactions and optimization of reaction conditions.	
Histochemistry and Tissue Processing Center (HTPC)	Nemours Children's Hospital	Heather Hardy	heather.hardy@nemours.org	The Histochemistry and Tissue Processing Core (HTPC) is a full-service histology laboratory providing routine and specialty histology techniques. Services offered include: a wide array of instrumentation, and provides consultation for research projects for special staining, enzyme histochemistry, immuno-histochemistry and routine processing. The lab offers TMA services, and can prepare slides from normal controls or provide custom arrays	https://www.nemours.org/pediatric-research/labservices/core/histotechnology.html

				from provided sample blocks.	
Life Science Research Facility (LSRF)	University of Delaware	Gwen Talham	gtalham@udel.edu	The LSRF provides housing for research rodents and technical expertise is available to train research staff or conduct experimental procedures.	For more information please email the core manager
Mass Spectrometry Core	University of Delaware	PapaNii Asare-Okai	pasare@udel.edu	Training, state-of-the-art equipment, and expertise for mass spectrometry and proteomics. Services include a wide variety of instruments using EI, CI, FD, ESI, APCI and LIFDI for analyses in GC-MS, LC-MS, MS-MS modes.	https://sites.udel.edu/mslab/
Nuclear Magnetic Resonance (NMR) Spectroscopy Core	University of Delaware	Steve Bai	bais@udel.edu	The NMR Spectroscopy Core is home to nine NMR spectrometers ranging from 9.4 to 20.0 T (400-850 MHz in proton frequency) in magnetic field strength, with a full range of capabilities from solution to solid state to HR-MAS NMR, as well as an EPR spectrometer. Services offered include solution and solid-state nuclear magnetic resonance spectroscopy. These spectrometers are	https://sites.udel.edu/nmr/

				equipped with various state-of-the-art probes and other key accessories for general and specialized applications to meet the needs of our diverse user group.	
Optical Science Center for Applied Research (OSCAR) Imaging Facility	Delaware State University	Hacene Boukari & Michael Moore	hboukari@desu.edu & mmoore@desu.edu	The OSCAR Imaging Facility is a multi-user core facility that offers state-of-the-art equipment for imaging, microscopy, spectroscopy, and image analysis. Services offered include imaging, microscopy, spectroscopy, and image analysis including: confocal microscopy, electron microscopy, atomic force microscopy, light microscopy, sample prep.	https://www.desu.edu/oscar-imaging-center
Pediatric Genomics Laboratory (PGL) Project	Nemours Children's Hospital	Diana Corao-Urbe	diana.coraouribe@nemours.org	The PGL Project offers consultation/experiment design, library preparation, next generation sequencing, and downstream data analysis. Services currently offered include: RNA, DNA, and Targeted Panel library	https://genomics.nemours.org/

				prep, Illumina BeadArrays, sequencing, bioinformatics, nucleic acid extraction and 10x single cell applications.	
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