Contractor and Government Lab List -- Examples

NCI or FNLCR	Program, Directorate or Lab Name	Lab/Subcomponent Name	Description
FNLCR	AIDS and Cancer Virus Program (ACVP)	Biological Products Core	Provides purified preparations of various strains of retroviruses.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Cellular Immunity Core	Provides comprehensive cellular immunology including flow cytometry, cell corting and cellular immune analysis.
FNLCR	AIDS and Cancer Virus Program (ACVP)	HIV Molecular Monitoring Core	Provides molecular quantification and sequence analysis of HIV from clinical specimens, in particular ultrasensitive HIV plasma viral load measurements and cell-associated HIV RNA and DNA quantification.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Nonhuman Primate Research Support Core (NHPRSC)	Provides support for nonhuman primate studies, including scheduling; drug prep.; specimen handling, processing, storage and transportation.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Quantitative Molecular Diagnostics Core (QMDC)	Provides quantitative molecular analyses to measure specific nucleic acids in specimens relevant to retroviology and AIDs.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Retroviral Evolution Section (RES)	Researches better understand HIV transmission, persistence and evolution and how the pathogen evades eradication strategies. Molecular biology approaches and *in vivo* testing (non-human primates).
FNLCR	AIDS and Cancer Virus Program (ACVP)	Retroviral Pathogenesis Section (RPS)	*In vivo* and *in vitro* studies to understand the basis of lentiviral pathogenesis, particulalry those aspects relevant to HIV and AIDS prevention and treatment.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Retroviral Protein Chemistry Core (RPCC)	Provides preparative and analytic protein chemistry expertise to characterization of viral proteins and host associated proteins.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Retrovirus-Cell Interaction Section	Studies the interactions between retroviral vectors and host cells using macaque cell systems.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Tissue Analysis Core (TAC)	Provides tissue analysis capabilities to study retroviral pathogenesis (e.g. immunofluorescence, immunohistochemistry, *in situ* hybridization, quantitative image analysis, laser capture microdissection)
FNLCR	AIDS and Cancer Virus Program (ACVP)	Viral Evolution Core (VEC)	Provides expertise in specialized sequencing techniques, molecular cloning and viral evolution analyses.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Viral Oncology Section (VOS)	Studies the role of viruses in cancer. Approaches encompass epidemiology, molecular virology, immunology and translational studies.
FNLCR	AIDS and Cancer Virus Program (ACVP)	Viral Persistence Section (VPS)	Studies AIDS infection establishment, spread and persistence, and evaluation of approaches to reduce presistent viral reservoirs. Uses *vivo* nonhuman primate models, *in vitro* and *ex vivo* cell culture, virology, and molecular biology.
FNLCR	Basic Science Program (BSP)	Molecular Genetic Epidemiology Section	Studies are focused on understanding the genetic basis for global health disparities in the U.S. and Africa, particularly for complex conditions such as chronic kidney disease and cardiovascular disease and the interaction between host genetic factors and infectious disease. Supports CCR Basic Research Laboratory (BRL).
FNLCR	Basic Science Program (BSP)	Computational Structural Biology Section	Studies experimental techniques, accumulating unprecedented genome-scal experimental data, and addressing fundamental questions on cellular behavior under physiological conditions and disease. Supports CCR Laboratory of Integrative Cancer Immunology (LICI).
FNLCR	Basic Science Program (BSP)	Microbiome and Genetics Core	This group is focused on characterizing the role of the microbiota in cancer and inflammatory processes. Supports CCR Laboratory of Integrative Cancer Immunology (LICI).
FNLCR	Basic Science Program (BSP)	Flow Cyotmetry Core	This CCR core's primary services include: analysis using flow cytometry (data collection, statistical reduction and presentation), cell sorting, training, techology oversight, and consulting. Supports CCR Laboratory of Cancer Immunometabolism (LCIM).
FNLCR	Basic Science Program (BSP)	Human Leukocyte Antigens Immunogenetics Section	Studies the genetic basis for resistance or susceptibility to human disease conferred by polymorphic-immune-response loci through direct testing for such effects on specific disease outcomes. Supports CCR Laboratory of Integrative Cancer Immuology (LICI).
FNLCR	Basic Science Program (BSP)	Molecular Immunology Section	Studies are focused on the innate immune response and function and its potential application to cancer treatment. Supports CCR Laboratory of Cancer Immunometabolism (LCIM).
FNLCR	Basic Science Program (BSP)	Epigentics Section	Studies the dynamic regulation of chromatin accessibility as a key feature of cellular differentiation during embryogenesis. Supports CCR Mouse Cancer Genetics Program (MCGP).
FNLCR	Basic Science Program (BSP)	Hematopoiesis and Stem Cell Biology Section	Studies the molecular events that regulate hematopoietic stem cell quiescence, survival, self-renewal, and cell-fate decsions, and translate these findings into therapies to treat hematopoietic malignancies. Supports CCR Mouse Cancer Genetics Program (MCGP).
FNLCR	Basic Science Program (BSP)	Urologic Oncology Group	Studies and characterizes kidney cancer susceptibility genes through studies of families with rare, inherited renal cancer syndromes and deep sequencing of sporadic histologically defined renal tumors. Supports CCR Urologic Oncology Branch.
FNLCR	Clinical Research Directorate	Cancer Genomics Research Laboratory (CGR)	The Cancer Genomics Research Laboratory (CGR) investigates the contribution of germline and somatic genetic variation to cancer susceptibility and outcomes in support of DCEG's research. Working in concert with epidemiologists, biostatisticians and basic research scientists in DCEG's intramural research program, CGR provides the capacity to conduct genome-wide discovery studies and targeted regional approaches to identify the heritable determinants of various forms of cancer.
FNLCR	Cancer Genomics Research Laboratory (CGR)	The Molecular and Digital Pathology Laboratory (MDPL)	The Molecular and Digital Pathology Laboratory (MDPL) is an extension of the Cancer Genomics Research Laboratory (CGR) that integrates histological and molecular tissue profiling with analyses of environmental and genetic risk factors. Through molecular pathology analysis, researchers can examine the impact of genetic variation on the biology of gene expression and protein function at the tissue level and provide critical insights on cancer risk and progression.

FNLCR	Cancer Research Technology Program (CRTP)	Antibody Characterization Laboratory	Supports the development and characterization of high quality antibody reagents against cancer targets of high interest. Cancer relevant antibodies are collected from intramural, academic, and international scientists and characterized for specificity and reactivity. Targets typically are geared towards peptides and proteins, but more exotic targets such as small molecules and nucleic acids have also been awarded. Rigorous antibody validation is performed on these antibodies, which acts as an unbiased intramural reference laboratory to validate antibody specificity and reproducibility. Antigens and antibodies are expressed, purified, and characterized using standard operating procedures, with accompanying protocols and data made available to the public.
FNLCR	Cancer Research Technology Program (CRTP)	Electron Micoscopy Laboratory	Provides a wide range of electron microscopy (EM) services including but not limited to legacy thin-sectioned transmission electron microscpe virus diagnosis and ultra-structural analysis, pre-and post-embedding immunogold labeling (IEM) services, negative stain of proteins and nanoparticles and correlated light and electron microscopy analysis.
FNLCR	Cancer Research Technology Program (CRTP)	Genomics Laboratory	This lab provides dedicated genomics technology core services, including a broad range of genomics services based on next-generation sequencing (NGS) and other cutting-edge genomics technology platforms. NGS-based services include single-cell variant analysis, whole-exome sequencing (in conjunction with the Sequencing Facility), targeted gene panel sequencing, CRISPR-Cas9 high-throughput screening and validation, retroviral integration site analysis, and ImmunoSeq T-cell clonality analysis. Other genomics technology services include gene expression microarray, Illumina methylation array, drug metabolizing enzymes and transporters array, OncoScan array, quantitative polymerase chain reaction, droplet digital polymerase chain reaction (ddPCR), NanoString, and HTG EdgeSeq.
FNLCR	Cancer Research Technology Program (CRTP)	Nanotechnology Characterization Laboratory	Resource and knowledge base to facilitate regulatory review of nanotechnologies intended for cancer therapies and diagnostics. Characterizes the physical and chemical attributes of nanoparticles, their in vitro biological properties, and their in vivo compatibility through preclinical toxicology, pharmacology, and efficacy studies.
FNLCR	Cancer Research Technology Program (CRTP)	Optical Microscopy and Analysis Laboratory	Provides substantial optical microscopy, atomic force microscopy, sample preparation, and image analysis. Provide analysis of biological samples across multiple scales, from atoms to animals. Support a wide range of quantitative microscopy for spatial–temporal understanding of carcinogenesis at the molecular and tissue level.
FNLCR	Cancer Research Technology Program (CRTP)	Protein Characterization Laboratory	The group supports diverse projects involving global and targeted proteomics and metabolite analysis, macromolecular interactions (protein–protein, peptide–protein, and protein–DNA), and analysis of protein posttranslational modifications. Many of the proteomics projects involving both global protein and posttranslational modification analysis incorporate tandem mass tag labeling for higher-precision quantification.
FNLCR	Cancer Research Technology Program (CRTP)	Protein Expression Laboratory	This lab carry out cloning, protein expression, and protein purification in support of government program activities. The group focused on protein production projects supporting structural biology and drug discovery projects most recently. They also provided urgent support for COVID-19–related projects.
FNLCR	Cancer Research Technology Program (CRTP)	Cryo Electron Micoscopy Laboratory	This provides a wide range of electron microscopy (EM) services including but not limited to legacy thin-sectioned transmission electron microscpe virus diagnosis and ultra-structural analysis; pre-and post-embedding immunogold labeling (IEM) services; negative stain of proteins and nanoparticles; and correlated light and electron microscopy analysis.
FNLCR	Cancer Research Technology Program (CRTP)	Genomics Laboratory - Bethesda	This core provides expertise on molecular biology and advanced high-throughput sequencing support on Illumina sequencers for CCR labs performing their own library preparation in Bethesda. In addition, the group works closely with the Single Cell Analysis Facility team to provide additional sequencing support.
FNLCR	Cancer Research Technology Program (CRTP)	Optical Microscopy and Analysis Laboratory	This group collaborates with labs in the area of quantitative optical microscopy for spatial–temporal understanding of cancer evolution at the molecular and tissue level. Technical developments achieved by OMAL make it an integrated resource for for analysis of biological samples across multiple scales, from atoms to animals.
FNLCR	Cancer Research Technology Program (CRTP)	Sequencing Facility	The primary mission of the Sequencing Facility (SF) is to utilize high-throughput next-generation sequencing technologies to enable cancer research. SF provides NCI and NIAID investigators with access to Illumina short-read sequencing capabilties (two MiSeq sequencers, two NextSeq 2000 sequencers, two state-of-the-art NovaSeq sequencers), along with long read sequencing platforms (two Pacific Biosciences Sequel II and Oxford Nanopore's GridION) and optical genomcs mapping using Bionano's Saphyr system. The SF also provides 10X single cell technology to CCR groups based in Frederick.
FNLCR	Cancer Research Technology Program (CRTP)	Center for Molecular Microscopy	The primary mission of CMM is to develop and utilize new techniques and emerging technologies for high resolution 3-D electron microscopy in structural biology (high resolution, single particle Cryo-EM imaging) and cell biology (FIBSEM for volume EM imaging).
FNLCR	Cancer Research Technology Program (CRTP)	Imaging Mass Cytometry (IMC) Lab	Provides high-multiplex imaging and single-cell protein analysis
FNLCR	Clincial Research Directorate (CRD)	Molecular Characterization and Clinical Assay Development Laboratory (MoCha)	Utilizes state of the art molecular genomics, transcriptomic and methylomic technologies to characterize the molecular alterations in patients' tumors for assignment to personalized medicine clinical trials, evaluation of tumor cell polulations in response to treatment, and the characterization of patient derived models that are made available to the scientific research community.
FNLCR	Applied and Developmental Research Directorate	AIDS Monitoring Laboratory (AML)	Core laboratory supporting NIAID that provides critical immunologic assays and biospecimen storage on HIV, influenza, and other disease biospecimens.
FNLCR	Applied and Developmental Research Directorate	BioProcessing Laboratory (BPL)	The BioProcessing Lab provides project management, laboratory and trial logistical support for clinical trials and studies. This is performed through standardization of processes, data management, specimen handling guidance, protocol development, specimen processing, kit production, specimen transportation, and full specimen lifecycle documentation.
FNLCR	Applied and Developmental Research Directorate	NCI at Frederick Central Repository	The primary core functions of the Repository are the receipt, tracking, monitoring, distribution, and temperature appropriate storage of biomaterials for research and clinical testing. It handles and stores a diverse range of materials and preservation formats such as serum, plasma, urine, tumor tissue and extracts, whole blood and all their derivatives and fractions, bone marrow cells, body fluids, cell lines, nucleic acids, stool specimens, paraffin blocks, pathology glass slides, environmental samples and other types of specimens The Repository has the capability and capacity to store biological materials at temperatures which include: ambient, 4°C, -20°C, -40°C, -80°C, -150°C and -196°C.
FNLCR	Clincial Services Program	Support to Government Cancer Imaging Program	Provides project management in support of the Cancer Imaging Archive (TCIA) through the collection, deidentification and public accessibility of clinical trial associated images and metadata for the scientific community as well as oversight of developmental radiopharmaceutical chemistry and clinical trial medical imaging agent production, regulatory and clinical affairs, and community imaging computer assisted research and algorithm development.
FNLCR	Applied and Developmental Research Directorate	Chemistry Laboratory	The chemistry laboratory develops and improves sythnetic routes for the synthesis and scale-up to gram quantities of important intermediates and investigational agents in support of in vitro and in vivo exploratory activities of therapeutic activity in cancer models.
FNLCR	Applied and Developmental Research Directorate	Clinical PD-Biomarkers Program	Analyzes molecular drug action in tumor specimens from patients and preclinical models to confirm mechanism of action and optimize dosage regimens. Consists of the Pharmacodynamic Assay Development and Implementation Section (PADIS), the National Clinical Target Validation Laboratory (NCTVL), and the Phase I/II Pharmacokinetic/Pharmacodynamic Support Lab.
FNLCR	Applied and Developmental Research Directorate	Clinical Support Laboratory (CSL)	The CSL provides multifaceted clinical trial support to the National Cancer Institute (NCI) and other institutes. It also performs research sample testing in support of NCI principal investigators. The laboratory is Clinical Laboratory Improvement Amendments (CLIA)–certified for performing high-complexity assays. The CSL also performs sub-aliquoting of previously processed clinical specimens provided to the Biorepository facility.
FNLCR	Applied and Developmental Research Directorate/Vaccine, Immunity and Cancer Program	Human Papilloma Virus (HPV) Serology Laboratory/COVID-19 Serology Laboratory	Provides development and performance of serology testing in HPV vaccine trials and pivoted to focus on COVID-19 to develop and provide serology and qualification of testing including generation and sharing of serology standards and development of serology assays.
FNLCR	Applied and Developmental Research Directorate	Immunological Monitoring Laboratory (IML)	Provides support to the Laboratory of Clinical Investigation, NIAID, by performing immune function studies on patients in clinical trials. Responsible for the processing and storage of plasma, serum PMNs, and PBMCs from patients. Performs immune function studies on samples from the patients enrolled on clinical trials.
FNLCR	Applied and Developmental Research Directorate	Laboratory of Cell Mediated Immunity (LCMI)	Provide state of the art, clinically validated, immunological assays to NCI investigators, including ELISPOT, cytokine induction, proliferation, Cytotoxic T-lymphocyte (CTL) induction and 51Cr release assays. Perform comprehensive immunological monitoring of cancer vaccine trials. Perform murine IFN-gamma ELISPOT assays.
FNLCR	Applied and Developmental Research Directorate	Laboratory of Human Retrovirology (LHR)	Investigate molecular mechanism of drug resistance in treatment failures on NIAID clinical trials. Support characterization of the impact of novel mutations in HIV genome on susceptibility of anti-HIV drugs. Study the molecular mechanism of reactivation of HIV in latently infected cells.

FNLCR	Applied and Developmental Research Directorate	Laboratory of Immunopathogenesis and Bioinformatics (LIB)	Provides laboratory and bioinformatic support to the National Institute of Allergy and Infectious Disease, to include investigating how immunomodulating therapy influences lymphocyte turnover kinetics and cellular gene expression profiles; the operation and management of NIAID's Affymetrix GeneChip Core Facility; and the development of bioinformatic software for the evaluation of genome-scale datasets.
FNLCR	Applied and Developmental Research Directorate	Laboratory of Molecular Cell Biology (LMCB)	Provide support services to the Laboratory of Immunoregulation, NIAID to include developing and performing quantitative and qualitative polymerase chain reaction (PCR) assays. Collaborate with NIAID on research to understand the biology of T-cell activation and HIV persistence.
FNLCR	Applied and Developmental Research Directorate	Laboratory of Pathology	Develop and apply leading edge technology to diagnostic pathology; provide collaborative support for clinical research protocols investigating the genetics and biology of cancer and other diseases.
FNLCR	Applied and Developmental Research Directorate	Neutrophil Monitoring Laboratory (NML)	Provides support to NIAID in the immunological study of neutrophils and other white cells.
FNLCR	Applied and Developmental Research Directorate	Virus Isolation and Serology Laboratory (VISL)	Provides laboratory support to the National Institute of Allergy and Infectious Disease, including Next-Generation Sequencing, serology capabilites, assay evaluation, viral load, for various viruses.
FNLCR	Bioinformatics and Data Science (BIDS)	Advanced Biomedical Computing Center	Provision of these tasks may come in the form of consultation, collaboration or service delivery. Serve as advisers/experts to end users on computational approaches for data collection/dissemination, platform options, management, integration, and data analysis. Lend expertise in the proper statistical design of experiments, data mining and knowledge discovery techniques, and data workflow applications development. Formulate statistical and mathematical approaches to research questions. Provide informatics services that include data extraction, data mining, application and pipeline development. Analyze requirements, design, implement, test, deploy, customize, and maintain informatics applications and tools to meet the needs of the researchers.
FNLCR	Laboratory Animal Sciences Program (LASP)	Animal Diagnostic Laboratory	Provides the health monitoring of all rodents at NCI-Frederick and NCI-Bethesda to ensure disease prevention, detection and eradication as well as diagnostic resources and necropsy services. Along with providing health monitoring of all rodents at the NCI-Frederick and NCI-Bethesda campus, this lab provides murine genotyping of mice to investigators and consults on genotyping protocols.
FNLCR	Laboratory Animal Sciences Program (LASP)	Animal Research Technical Support	Provides broad array of customized animal technical support for animal-based research to the scientific community in Frederick and Bethesda.
FNLCR	Laboratory Animal Sciences Program (LASP)	Cell Culture Laboratory	Provides services for expansion of tissue culture lines in vitro for in vivo use in animal studies. Includes cryoarchiving stock vials of the cell lines for planned experiments.
FNLCR	Laboratory Animal Sciences Program (LASP)	Center for Advanced Preclinical Research	Provides support for research to develop and utilize reproducible preclinical studies in the development of effective therapeutics and diagnostics for human cancers.
FNLCR	Laboratory Animal Sciences Program (LASP)	Cryopreservation and Assisted Reproduction Laboratory	Offers services for banking unique mouse strains, including freezing embryos, ovaries and sperm as well as recovery of animal models from cryopreserved material.
FNLCR	Laboratory Animal Sciences Program (LASP)	High-Throughput Animal Genotyping Laboratory	Provids high-throughput technologies for genetic monitoring and management of complex genetically engineered research colonies to the NCI research community.
FNLCR	Laboratory Animal Sciences Program (LASP)	Laboratory Animal Medicine Program	Provides board-certified veterinarians and veterinary associates for all veternary care including preventative, clinical and emergency veterinary support to Bethesda and Frederick animal programs. Provides training to reseach staff as needed. Assure compliance with federal regulations and legislation governing the ethical use of animals in biomedical research including AAALAC accedidation.
FNLCR	Laboratory Animal Sciences Program (LASP)	ACUC Administrative Support Group	Provides administrative support to the NCI Animal Care and Use Committee (ACUC) in Bethesda and Frederick
FNLCR	Laboratory Animal Sciences Program (LASP)	Molecular Histopathology Laboratory	Provides comprehensive research pathology services, including support for animal health monitoring, biomarker discovery/validation, drug development, genomics and proteomics.
FNLCR	Laboratory Animal Sciences Program (LASP)	Receiving and Quarantine Program	Receipt, quarantine and diagnoistic testing of incoming animals to protect the health of the NCI at Frederick and Bethesda animal facilities. Provide on-site capabilities for rederivation of incoming animals with excluded pathogens.
FNLCR	Laboratory Animal Sciences Program (LASP)	Small Animal Imaging Program	Collaborates with investigators in development of mouse models, new molelcular imaging probes, early detechtion & therapy, in vivo tumor monitoring and drug efficacy studes using *in vivo* imaging techniques. Analyses nanoplatforms and assists in developing small animal imaging stds., integrating imaging into drug development and validation of new imaging agents.
FNLCR	Laboratory Animal Sciences Program (LASP)	Speed Congenics Service	Provides marker assisted breeding/marker assisted selection breeding to permit the production of congenic strains equivalent to 10 backcross generations in as few as five generations.
FNLCR	Laboratory Animal Sciences Program (LASP)	Animal Facility Operations/Management	Provides animal holding, husbandry, animal inventory, ordering, environmental monitoring, facility management, and maintenance of animals facilities for NCI Bethesda and Frederick. This includes highly specialized holding requirements such as gnotobiotics, ABSL2, chemical hazard, variable health status colonies, etc.
FNLCR	Laboratory Animal Sciences Program (LASP)	Genome Modification Core	Provides gene editing guidance, expertise, and validated reagents to CCR investigators and their labs.
FNLCR	Laboratory Animal Sciences Program (LASP)	NCI Mouse Repository	Provides support for the NCI mouse repository including cryoarchiving of deposited strains and distribution to scientific community.
FNLCR	Laboratory Animal Sciences Program (LASP)	Transgenic Mouse Model Laboratory	Provides a complete array of services aimed at successfully generating transgenic and gene-targeted mouse models
FNLCR	Laboratory Animal Sciences Program (LASP)	Gnotobiotics Facility	The Gnotobiotics Facility (GF) is a service that supports research efforts focused on the role of microbiota in inflammation, pathogenesis, and antitumor response. Services offered by the GF include the rederivation, breeding, and conducting of experimental studies on germ-free (axenic) and gnotobiotic (defined microbiome) mice.
FNLCR	Clinical Research Program Directorate (CRD)	Vaccine Clinical Materials Program	Produces and provides cGMP biological agents in support of NIAID's national and international clinical trials.

NCI-CCR	Basic Research Laboratory (BRL)		N/A
NCI-CCR	Cancer and Developmental Biology Laboratory (CDBL)		Focuses on the analysis of embryonic development, particularly the mechanisms of growth control and the regulation of differentiation through growth factors, cytokines, and their receptors.
NCI-CCR	Laboratory of Cancer Immunometabolism (LCIM)		Conducts research at the cellular, molecular, biochemical, and genetic level to unravel the metabolic interplay between host immune cells and developing or advancing cancers. Research in the Laboratory addresses questions relating to the metabolic and biochemical pathways of immune cells and cancers. Work encompasses immunometabolism in the cellular context.
NCI-CCR	Chemical Biology Laboratory (CBL)		Conducts basic research central to the discovery of new small molecules, peptides, macromolecules, arrays and materials that impact cancer and AIDS diagnostics and treatment.
NCI-CCR	HIV Dynamics and Replication Program (HIVDRP)		Conducting and fostering multidisciplinary basic, translational, and clinical research focused on problems related to drug-resistant HIV and important problem in virus biology.
NCI-CCR	Laboratory of Cell Development and Signaling (LCDS)		Focuses on multi-disciplinary approach to study the signal transduction pathways involved in cancer as well as normal growth and development, with expertise in protein kinase signaling, lipid second messengers, tumor suppressors, cell cycle regulation, and ciliogenesis.
NCI-CCR	Laboratory of Protein Dynamics and Signaling (LPDS)		Investigates fundamental macromolecular interactions and cellular processes that are important for cell proliferation and differentiation, apoptosis, tumorigenesis and metastasis.
NCI-CCR	Center for Structural Biology (CSB) - (new lab replaces MCL and SBL)		The Center conducts research studies on the molecular structure and interactions of biological macromolecules and therapeutics pertinent to human health, with a particular emphasis on cancer and infection through the development of new tools for molecular characterization using novel biophysical and biochemical techniques including cryo-electron microscopy, nuclear magnetic resonance (NMR) spectroscopy, x-ray diffraction and scattering methods and apply structural and chemical insights to develop mechanistic understanding to inform therapeutics strategies.
NCI-CCR	Molecular Targets Program (MTP)		Provides the focus and infrastructure that enables CCR investigators to pursue molecularly targeted drug discovery research by promoting an interdisciplinary, collaborative, team-oriented approach to identifying and validating potential cancer-pertinent targets.
NCI-CCR	Mouse Cancer Genetics Program (MCGP)		Major areas of study include developmental mechanisms and pathways usurped in cancer, stem cell and cancer-propagating cell function, genome integrity control, tumor suppressor function, transcriptional and epigenetic regulation, hematopoiesis, neurotrophin-activated signaling pathways, angiogenesis and proteomic instability in cancer. In addition, the MCGP runs world-class transgenic and knockout mouse cores.
NCI-CCR	RNA Biology Laboratory (BRL)		Research into the roles of RNAs and RNA-protein complexes in cancer, including focus on synthesized, processed and degraded RNA , the mechanisms by which noncoding RNAs and RNA-protein complexes contribute to cell function and tumor virus replication, the ways in which alterations in RNA metabolism contribute to human cancers, and the development of RNA-based therapies.
NCI-CCR	Vaccine Branch		Conducts a program of clinical and laboratory research designed to 1) elucidate basic mechanisms of immune response and molecular virology, and 2) apply these to the design and development of vaccines and immunotherapy for the prevention and treatment of cancer and AIDS, as well as viruses that cause cancer.
NCI-DCTD	Clinical Research Program Directorate (CRD)	Biopharmaceutical Development Program (BDP)	cGMP process development, manufacturing and CMC of biologics (viruses, cytokines, monoclonal antibodies, cell-based therapies) for IND filing and clinical trials.
NCI-DCTD	Applied and Developmental Research Directorate (ADRD)	Tumor Modeling and Drug Evaluation (TM&DE)	Resource and knowledge base to facilitate regulatory review of nanotechnologies intended for cancer therapies and diagnostics.
NCI-DCTD	Applied and Developmental Research Directorate (ADRD)	Investigate Toxicology Laboratory (TPL)	Develops and implements mechanism-based in vitro models to identify potential liabilities and investigate mechanisms of targeted organ toxicities in support of programs within the NCI-DCTD.
NCI-DCTD	Applied and Developmental Research Directorate (ADRD)	In Vitro Evaluation and Molecular Pharmacology	NCI-60 Cell Line Screening Laboratory as a service to the scientific community; High-throughput screening laboratory for the assessment of investigational agents and drug combinations in cell lines, patient-derived cell lines and organoids; Molecular pharmacology and mechanism of action studies.
NCI-DCTD	Applied and Developmental Research Directorate (ADRD)	Natural Products Laboratory (NPL)	Collection, repository and fractionation of natural products (plants, fungi, microbes) collected from across the globe for therapeutic screening.

The laboratories/lab groups marked in orange are Government research labs in Frederick and may receive core and/or staffing support from the prime contractor. They are not contractor run.

The laboratories marked in blue have only contractor directors and staff. Administratively they are associated with FNLCR programs like CRTP, but their serivce is dedicated to NCI DCTD entities like NSDB. DTP, OCCPR.

Please note that the CGR Lab is not prefixed DCEG-CGR, as the CGR also is fully contractor-staffed and managed.