FREDERICK NATIONAL LABORATORY FOR CANCER RESEARCH – KEY MILESTONES

The Frederick National Laboratory for Cancer Research (FNLCR) is the federal government's only national laboratory dedicated to biomedical research. FNLCR offers an array of resources supporting the full continuum of cancer research. Examples include –

1960s
Tumor Repository
A resource of experimental tumor lines that NCI offers to cancer scientists to advance their research

1990
Preclinical Biologics Repository
A resource of reagents (cytokines, monoclonal antibodies, etc.) supporting non-clinical cancer research

2000
NCI Mouse Repository
A resource of mouse cancer models and mouse embryonic stem cells available to support cancer research

2004
Nanotechnology Characterization Lab
A national resource to assist cancer scientists who use nanotechnology particles for cancer vaccines, therapeutics, and diagnostics

2009
NCI Experimental Therapeutics Program
Works with scientists to advance promising therapies through early stage research and into cancer clinical trials

2017
Patient-Derived Models (PDM) Repository
A resource of PDMs – patient-derived xenografts, tumor cell cultures, and organoids – to advance drug discovery and other cancer research

2017
National Cryo-Electron Microscopy Facility
Uses high-resolution imaging to generate atomic models of proteins and other molecules to support cancer research

1986
Natural Products Repository
80,000 plant samples, 20,000 marine invertebrates and algae, and 16,000 microbes available to support cancer research

1998
Biopharmaceutical Development Program
Manufactures novel antibodies, proteins, CAR T-cells, and other biological products for research and cancer clinical trials

2001
Protein Expression Lab
Generates DNA, cell lines, and protein reagents from bacteria, insect cells, or mammalian cells for use by cancer researchers

2007
Antibody Characterization Lab
Develops and characterizes antibodies for the cancer science community, allowing researchers to select the best antibodies to support their science

2017
HPV Serology Laboratory
Develops standardized approaches to measure antibody response to HPV vaccination and distributes assays and reagents to support development of new HPV vaccines

2020
Serological Sciences Network (SeroNet)
Improves our understanding of immune response to the virus responsible for the COVID-19 pandemic and addresses key questions about the virus, including in immunocompromised individuals and cancer patients