

# Advancing Health Care Research

## CLINICAL RESEARCH AT CARILION CLINIC



At Carilion Clinic, we base everything we do on three pillars: patient care, education and research. Together, our commitment to these equally vital areas helps us reach our mission to improve the health of the communities we serve. While our focus on patient care and education is visible every day, our research is often conducted behind the scenes. We'd like to give you a glimpse into many of the ways our growing research initiatives are moving medicine forward—right here at home.

### WHAT ARE CLINICAL TRIALS?

Clinical trials are research studies that test new and improved medical treatments for a broad range of conditions. Our trials are performed under strict supervision to compare new treatments and therapies to current medical practices.

### OUR TEAM AND RESEARCH SPECIALTIES

In 2023, 200 Carilion physicians collaborated on more than 135 clinical trials, giving patients access to promising new interventions in over 20 medical and surgical specialties.

- » Cardiology
- » Cardiothoracic Surgery
- » Dermatology
- » Emergency Medicine
- » Endocrinology
- » Family Medicine
- » Gastroenterology
- » Infectious Diseases
- » Neurointerventional Radiology
- » Neurosurgery
- » Nuclear Medicine
- » OB/GYN
- » Oncology: Adult and Pediatric
- » Orthopaedics
- » Pediatric
- » Psychiatry and Psychology
- » Pulmonology
- » Radiology
- » Rheumatology
- » Surgery
- » Urology

### 2023 BY THE NUMBERS

Total Clinical Trials

**135+**

Total Trial Budgets

**\$3.6 million**  
*(projected)*

Active Grants

**90**

New Grant Awards

**34**

Grant Award Budget

**\$15 million**

### OUR AWARDS AND LEADERSHIP

Our Oncology, Neurosurgery and Cardiovascular research earned national and international recognition in 2023. We are a top enroller on several trials and many of our principal investigators lead or serve on national research committees.

Together with Carilion Clinic Innovation, we create opportunities for the development of new products and therapies to advance and improve health care.

We participate in several national research consortiums, such as StrokeNet, Children's Oncology Group, and NRG Oncology.

## OUR PARTNERS AND COLLABORATORS

We are honored to partner with a growing list of prestigious national and statewide research centers and health care organizations.

These include:

- » Innovative public-private partnerships with Virginia Tech, the Virginia Tech Carilion School of Medicine, the Fralin Biomedical Research Institute at VTC, Radford University Carilion and others
- » International industry-sponsored research with Children's Oncology Group and the STARBURST theranostics trial with Australia-based Telix Pharmaceuticals
- » Leadership on national research initiatives such as with Strokenet Patel, Live Stream and numerous addiction and mental health trials

We also collaborate internally by supporting innovative thinking among Carilion's 13,000 employees. In 2023, our Research Acceleration Program (RAP) granted seed funds for:

- » An antisense-peptide nucleic acid coating to target catheter-based polymicrobial biofilms
- » An AI-guided volumetric predictive modeling project to predict fetal weight
- » A project to reduce undiagnosed and misdiagnosed TBI in older adults
- » The identification of factors that predict return to driving after total knee arthroplasty

## OUR COMMUNITY

Taking research from the lab to the bedside is a top priority. A few of our recent community-focused research projects are highlighted here.

**Infection Control:** Secured federal flow-through grants focused on infection control training and reducing antibiotic overprescription.

**Environmental Literacy and Climate Resilience:** Secured a NOAA grant to promote environmental literacy and strengthen climate resilience in Southwest Virginia.

**Rapid TBI Diagnosis and Prognosis:** Partnering with Brainbox on NIH-funded research on rapid bedside TBI diagnosis and prognosis for geriatric patients.

**Stroke Intervention:** Became the top-enrolling site for three stroke studies: FAST-BGC, Paradigm and Safe STEMI for Seniors.

**Oncology Trial Access:** Formed a strategic partnership with VCU's Massey Cancer Center to expand oncology trials in southwest Virginia, and established an R&D unit focused on supporting Oncology clinical research at Carilion.

**Expanded Regional Lab Space:** With the Virginia Tech Corporate Research Center, won a \$2.8 million GO Virginia grant to expand regional wet and dry laboratory space and facilities; Johnson & Johnson Innovation will offer a virtual residency program to early-stage innovators.

## OUR PARTICIPANTS

People who choose to participate in clinical trials are our most valued collaborators.

In the last five years, our participants have grown from 200 to over 900 people. To each of them, we say thank you: You make it possible for our work to advance health care in the community we share.

