

# FLR Partners and Affiliates

FLR responds to participants' needs and provides an infrastructure to meet their educational and research demands. Affiliates gain access to the network either through a FLR Equity partner's network or a direct connection to the FLR infrastructure. Current Partners and affiliates include:

## PARTNER INSTITUTIONS

- Florida Atlantic University
- Florida Gulf Coast University
- Florida Institute of Technology
- Florida International University
- Florida State University
- Nova Southeastern University
- University of Central Florida
- University of Florida
- University of Miami
- University of North Florida
- University of South Florida
- University of West Florida

## EDUCATION

- Barry University
- Eckerd College
- Education Networks of America (ENA) serving Clay County Public School District
- Embry Riddle Aeronautical University
- Florida A&M University
- Florida Department of Education
- Florida State College at Jacksonville
- Florida Virtual Campus: State College Library Services
- Gulliver Schools
- Indian River State College
- Lake Sumter Community College
- Miami Dade College
- Northwest Regional Data Center
- Palm Beach State College
- Pasco-Hernando Community College
- Pensacola State College
- Polk County Public Schools
- Polk State College
- Rollins College
- Santa Fe College
- Seminole State College of Florida
- St. Petersburg College
- St. Thomas University
- State College of Florida Manatee-Sarasota
- Valencia Community College
- University of Central Florida - Lake County Campuses
- University of Florida Apopka Mid-Florida Research & Education Center (MREC)
- University of Florida/IFAS Citrus Research & Education Center (CREC)
- University of Florida/IFAS Ft. Lauderdale Research & Education Center (FLREC)
- University of Florida/IFAS Indian River Research & Education Center (IRREC)
- University of Florida Gulf Coast Research & Education Center (GCREC) - Plant City
- University of Florida Gulf Coast Research & Education Center (GCREC) - Wimauma
- University of West Florida Emerald Coast (UWF EC)

## RESEARCH

- H. Lee Moffitt Cancer & Research Institute
- Max Planck Florida Corp. DBA Max Planck Florida Institute
- Orlando Health, Inc.
- Research Park at Florida Atlantic University
- Sanford-Burnham Medical Research Institute
- Scripps Florida

## HEALTHCARE

- Central Florida Health Alliance
- Shands Medical Center University of Florida
- Tallahassee Memorial Healthcare

## GOVERNMENT

- City of Gainesville Engineering Services
- City of Jacksonville
- Lee County Clerk of Court
- Martin County, Florida
- Orange County, Florida
- Palm Beach County, Florida



Florida's Research and Education Network  
www.flrnet.org



The Florida LambdaRail (FLR) was established in 2003 as an independent research and education network owned and operated on behalf of the FLR partner institutions and affiliates of the Florida LambdaRail, LLC. FLR's 1,540 miles of fiber provide direct connections to a wide range of domestic and international research networks, including the Internet2 and the National LambdaRail (NLR) networking infrastructures.

FLR was created to facilitate advanced research and education in the State of Florida.

The company uses next generation network technologies and services to allow university faculty members, researchers and students to collaborate with colleagues in-state, across the country and around the world.

Because of Florida LambdaRail's proven performance and success, participants have experienced substantial savings in the average yearly costs for broadband access to state-wide, regional, national and global resources.

# What FLR Means To Its Members

## Collaboration

Twelve Florida universities (9 public, 3 private partner institutions) have come together to create and maintain an advanced fiber optic network. Along with a growing number of affiliates that include research and education institutions and other not-for-profit organizations, FLR enables their ability to collaborate over the network at incredible speeds, enhancing shared research between them.

## Super Fast Data Transmission

FLR participants can be connected to the statewide backbone (primary line) at speeds of up to 100 gigabits per second (over 10,000 times faster than typical home internet connections). Even though our members typically connect at speeds of 100 megabits to 1 gigabit FLR has the ability to provide them with additional “capacity on demand” to accommodate special, short-term needs such as unusually large data traffic or videoconferencing.

## Superior Reliability

FLR has peering arrangements (sharing of networks) with telecommunications and network service providers. These services are typically accessed via the Internet. FLR’s direct peering connection with these content networks significantly reduces members’ Internet bandwidth requirements. This lowers members overall cost for Internet access.

## Enhanced Network Performance

FLR obtains increased transmission efficiency by providing only the amount of bandwidth needed for the period of time that data is actually being transmitted.

## World Class Support

The FLR Network Operations Center (NOC) is located in Gainesville, Florida and provides network coordination, engineering and installation services to its members. FLR uses industry-leading network monitoring hardware, software to supply, monitor, and manage those services. The NOC is staffed around the clock seven days a week, 365 days a year and provides trouble ticketing, network maintenance, diagnosis and other essential functions.

## Strategic Relationships

FLR maintains strategic relationships with Internet2 and National LambdaRail providing access to the resources of these national advanced networks. Other strategic relationships include US Ignite (a White House initiative), US UCAN (connecting anchor institutions such as law enforcement, local government, libraries, etc.) and SSERCA (superfast computing for advanced research).

## Financial Savings

In addition to the services that FLR members receive they also save substantial dollars because of FLR’s efficient operations and strategic partnerships. These savings can be used to obtain additional network services or support other parts of member organizations’ operations.

## Dedicated Wavelengths

Florida LambdaRail can also set up dedicated waves or pathways exclusively between FLR participants or exclusively between FLR and NLR participants.

## Dedicated Virtual Private Networks (VPN)

Participants can securely connect their geographically separated local area networks, servers or intranets without the relatively high expense and complexity of leasing lines for a private network by requesting that FLR set up a virtual private network or VPN.

# Strategic Relationships

**Internet2** – An integral component of the services offered by the Florida LambdaRail is connectivity to Internet2. Internet2, an advanced technology community, owned and led by U.S. research and education community, provides a collaborative environment for U.S. research and education (R&E) organizations to solve common technology challenges, and develop innovative solutions in support of their educational, research, and community service missions.

**National LambdaRail (NLR)** – Florida LambdaRail, along with other regional optical networks around the country, own National LambdaRail. NLR members, and the over 280 leading research universities and U.S. government laboratories associated with the regional networks, use NLR as the platform for cutting-edge research and innovation in disciplines as diverse as atmospheric research, biomedicine, ecology, network science and physics.

**US Ignite** – FLR partnered in the launch of US Ignite which leverages existing broadband infrastructure, giving it new capabilities. Specifically, US Ignite is partnering with commercial providers, communities, and research and education networks like FLR that can offer 100MB+ broadband networks and is encouraging them to create programmable, experimental networks (test beds) within their service areas. New computer applications that emerge from these test beds will help people live and work better.

**United States Unified Community Anchor Network (US UCAN)** – Florida LambdaRail and other regional research and education networks across the country are working with US UCAN to connect community anchor institutions, including schools, libraries, health care facilities and other public institutions, to advanced broadband capabilities. The goal is to enable these anchor institutions to serve their communities with telemedicine, distance learning and other life-changing applications.

**Sunshine State Education & Research Computing Alliance (SSERCA)** – Florida LambdaRail is a SSERCA member in support of its efforts to further the development of a state-wide computational science network of advanced scientific computing, communication and education resources by promoting cooperation between Florida’s universities.

**Campus Cyberinfrastructure-Network Infrastructure Engineering (CC-NIE)** – FLR was an important component of winning National Science Foundation awards at Florida International University, Florida State University and the University of Florida. Florida LambdaRail will continue to be important as these universities use the grants won from the NSF to upgrade their on-campus cyberinfrastructure.

**AmericasPATH (AMPATH)** – AMPATH serves as the premiere Network Access Point (NAP), or connection, between the United States of America, Latin America and the Caribbean. The facility, called NAP of the Americas, is ideally located in downtown Miami. AMPATH is a collaborative that gives its customers access to Florida LambdaRail (FLR), Internet2, National LambdaRail (NLR) and the Energy Sciences Network (ESnet). AMPATH works as a major research facility recognized by the U.S. National Science Foundation, supporting international e-science.

**Atlantic Wave** – AtlanticWave is an international fabric of shared networks (peering), including FLR and AMPATH, that interconnects the United States, Canada, Europe and South America.

*FLR is Florida’s research and education network designed explicitly to support the most demanding network needs*

# Florida LambdaRail