



Veronica Sarjeant
Chief Operations Officer
Veronica.sarjeant@flrnet.org

January 13, 2012

Mr. Mark Johnson
Executive Director
U. S. UCAN
1000 Oakbrook Drive, Suite 300
Ann Arbor, MI 48194

Re: U.S. UCAN Affiliate Pilot Program Call for Participation

Dear Mark:

Florida LambdaRail (FLR) appreciates the opportunity to establish a strategic partnership with the United States Unified Community Anchor Network (U.S. UCAN) in the Affiliate Pilot Program to facilitate advanced and innovative applications for community anchor institutions. In response to the Call for Participation, FLR offers the enclosed strategic partnership proposal.

As a regional optical network and service provider, FLR provides direct connectivity to a wide range of domestic and international networks, including the Internet2 and National LambdaRail (NLR) networking infrastructures. Our network services and resources place FLR in the forefront of educational and research activities that lead to a diversified and knowledge driven economy. As such, FLR is ideally positioned to participate as a partner in the U. S. UCAN Affiliate Pilot program.

FLR is already enabling and facilitating advanced and innovative applications for community anchor institutions in our region. As we continue to move forward facilitating partnerships and collaboration, we welcome an opportunity to work together with the U.S. UCAN to bring expanded access to the Florida community-based organizations.

Sincerely,

Veronica Sarjeant
Chief Operations Officer

**Florida LambdaRail Submission to
The U.S. UCAN Affiliate Pilot Program Call for Participation
January 13, 2012**

The United States Unified Community Anchor Network (U.S. UCAN) is seeking participants in its pilot affiliate program designed to facilitate advanced and innovative applications for community anchor institutions delivered over broadband networks. In response, Florida LambdaRail (FLR) offers the following proposal.

FLR, an independent statewide fiber optical network owned and operated on behalf of its partner universities and affiliates, LLC, is dedicated to producing knowledge and prosperity within the state of Florida through education and research activities that drive economic development. Utilizing next generation network technologies, protocols and services, FLR facilitates collaboration and academic, scientific, educational, and clinical application development through high-speed communications. FLR brings together people, resources, and information, enables resource aggregation and sharing over large distances, and fosters innovation and discovery.

FLR's 1,540 miles of fiber provides direct connectivity to a wide range of domestic and international networks, including AMPath IXC located in Miami, and the Internet2 and National LambdaRail (NLR) networking infrastructures. High performance services are optimized for innovative and competitive advantage, placing FLR in the forefront of educational and research activities that lead to a diversified and knowledge-driven economy. As such, FLR is well positioned to participate in the U. S. UCAN Affiliate Pilot program.

The FLR optical network infrastructure provides a dedicated statewide communications facility linking major nodes located in several major cities in the state of Florida. FLR delivers advanced services tailored to participants' specific needs. Through this infrastructure, FLR is capable of providing expanded access to U.S. UCAN community-based organizations including K-12 schools, libraries, community colleges, health centers, museums, performing arts, public media, hospitals, and public safety organizations.

FLR enables applications and fosters collaboration. As an example, FLR is a member of the Sunshine State Education and Research Computing Alliance (SSERCA), whose mission is to bring together geographically distributed organizations and resources in such a way that their collective impact is far greater than the sum of their individual parts. SSERCA, a portal to new research frontiers, furthers the development of a statewide computational science infrastructure and educational resources by promoting cooperation and collaboration between Florida's universities.

Today, SSERCA is actively engaged in five collaborative activities that leverage FLR's 20 Gbps backbone network: 1) data sharing; 2) CPU sharing via the NSF/DOE funded Open Science Grid; 3) access to the Compact Muon Solenoid (CMS) Experiment at CERN's Large Hadron Collider; 4) access to the Cryo Electron Microscope project,

which hosts world class imagining resources that support leading-edge research related to HIV/AIDS, heart disease, hypertension, and cancer; and 5) Coupled Ocean-Atmosphere Models, and the development of a state-of-the-art ensemble ocean atmosphere wave coupled forecasting system.

As an early adopter of FLR services, Palm Beach State College in West Palm Beach Florida provides access to the Internet and Internet2 for the college's four campuses and 55,000 students. As a comprehensive community college that recently began offering limited baccalaureate programs, Palm Beach State College has a strong relationship with FLR through Florida Atlantic University (FAU), one of the FLR equity members. This alliance between Palm Beach State College, FAU, and FLR supports joint institutional educational and research projects; access to the Community College Center for Library Automation (also an FLR affiliate participant); availability of increased Internet service bandwidth; access to FLR peering partners; and access to Internet2 and NLR.

Delivering dedicated internet access, enhanced email services, and centralized firewall services across the FLR backbone via a direct connection between Atlanta, Georgia and Orlando, Florida, Education Network of America (ENA) effectively serves the needs of students and teachers in the Orange County Florida K-12 School District. Located in Orlando, a growing, diverse community, the public school district has more than 178,000 students and 170 schools. Students in Orange County Public Schools are from 179 different countries, with 137 different languages and dialects.

Florida LambdaRail's impact is not limited to research and education. Several of the participants use FLR infrastructure to back up business data to remote locations for business continuity. Municipalities and regions of our state are coming to view FLR as a critical resource for interconnecting agencies. For example, the K-12 School District of Palm Beach County takes advantage of its FLR connection via the Palm Beach County Florida network infrastructure to obtain server hosting and disaster recovery services from the Northwest Regional Data Center (also an FLR affiliate member) located in Tallahassee.

FLR members such as the University of Central Florida <catss.ucf.edu> and the University of Florida <<http://mctrans.ce.ufl.edu>> are involved in Intelligent Traffic Signal Modeling, Operations and Research that may be of interest to the Public Safety sector. Recently, FLR engaged in discussions with one city's Traffic Engineering Division, which is interest in utilizing FLR's network to collaborate with other traffic divisions in the state and the University of Florida's Civil Engineering department.

FLR's advanced high-speed infrastructure is poised to support emerging healthcare education and research initiatives. Health service-related facilities with access to FLR include the Colleges of Medicine at equity member universities, medical research facilities, and not-for-profit hospitals and health-related research centers such as the H. Lee Moffitt Cancer & Research Institute, the Sanford-Burnham Medical Research Institute, Shands Medical Center at the University of Florida, Max Planck Florida Institute, and Scripps Florida.

In order to connect to FLR, a community anchor institution (CAI) will require approval by the FLR Board of Directors and must meet one of the following conditions:

1. It is an integral part of a Florida economic development initiative.
2. It is an educational institution (i.e., private, non-profit educational institution, Florida public university, community or state college, for-profit college, or private-12 school).
3. It collaborates with other FLR non-profit participants in support of research, education, healthcare, or economic development initiatives.
4. It is engaged with an FLR equity or affiliate participant in research, healthcare or economic development activities.
5. It facilitates connecting other State of Florida government entities that fall within FLR's mission.

Once approved, the eligible CAI's relationship to FLR will be established as an affiliate and both parties will enter into an agreement that specifies their respective rights and obligations. (Note: FLR refers to non-owner entities as "affiliates.")

As the primary contact for the Pilot Affiliate Program, FLR will play a major role in facilitating the communication, connectivity and community building that will be essential to sustain CAI success. FLR will also serve as the middle mile access provider between CAIs and U.S. UCAN, partnering with other network service providers such as the State of Florida MyFloridaNet network (the network serving state agencies in Florida), as well as other telecommunication carriers for last mile access. Partnership with MyFloridaNet and other commercial carriers will also facilitate FLR's ability to provide access to the Healthcare, Public Safety, and Government sectors of the state.

Coordinated and supervised by the FLR Network Operation Center (NOC), the CAI will gain access to the FLR infrastructure either through an FLR Equity Member's network or a direct connection to the FLR network infrastructure. The FLR NOC will also be responsible for coordination, communications, and control between and among the FLR participants, vendors, and upstream service providers.

The FLR NOC is staffed for continuous, 24 x 365 network monitoring, and coordinates restoration of any failures that may occur. Should the NOC become unavailable, the FLR network design facilitates rapid NOC relocation to any of the other FLRNet core sites.

Effective communication is critical to the success of this project. Consequently, FLR will engage in significant information exchange and collaboration among the various participants. The FLR NOC will be responsible for the day-to-day operations of the network, monitoring all aspects of network performance (e.g., fiber paths, optical equipment, routers, and switching equipment). End-to-end network allocation, network availability, network events, performance status, performance trend analysis, etc. for all segments will be made available to all participants. In an effort to manage expectations

and increase understanding, project communication with the U.S. UCAN National Program Office will be a coordinated effort achieved through:

- Weekly or bi-weekly meetings (telephone and/or video conference calls)
- Face-to-face and interactive video meetings as needed
- Electronic mail

As a participant of the U.S. UCAN Affiliate Pilot Program, FLR agrees to contribute to a repository of information on advanced applications, resources, and processes being developed by U.S. UCAN.

Access to broadband will enhance efficiency of operations within and among community anchor institutions, between community anchor institutions and businesses, and it will enhance the ability of Florida's research universities to carry out their research, education, and service missions. Extending broadband access to community anchor institutions will also lead to the development of new applications and business processes and redefine the capabilities of anchor institutions in Florida, creating new opportunities for economic development in Florida.



Education Networks of America

1101 McGavock Street • Nashville, TN 37203
tel: (615) 312-6000 • fax: (615) 312-6099
www.ena.com

January 12, 2012

Ms. Veronica Sarjeant
Chief Operations Officer
Florida LambdaRail
2509 Barrington Circle, Suite 106
Tallahassee, FL 32308

Dear Ms. Sarjeant:

Education Networks of America, Inc. (ENA) supports Florida LambdaRail's (FLR) application to be designated as a pilot U.S. UCAN Affiliate Organization.

In cooperation with FLR, ENA provides access for Orange County Public Schools (Orlando, FL) to statewide community and education collaborations within Florida as well as throughout the world through FLR's connections to Internet2 and National Lambda Rail.

ENA has worked with FLR and its principals for years and we have observed the level to which they support their members and affiliates in providing big bandwidth connectivity to community anchor institutions in Florida. We are confident that FLR will become an example amongst the pilot U.S. UCAN Affiliates and are excited to be part of the FLR team in this endeavor.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Collie', is written over a light blue horizontal line.

Bob Collie
Sr. Vice President
Education Networks of America, Inc.



Anthony Carvalloza
Director, I.T. Services Florida

130 Scripps Way, 2B2
Jupiter, FL 33458
Telephone: 561 228 2852
Facsimile: 561 228 3093
E-mail: anthonyc@scripps.edu

January 11, 2012

Ms. Veronica Sarjeant
Chief Operations Officer
Florida LambdaRail
2509 Barrington Circle
Suite 106
Tallahassee, FL 32308

Dear Ms. Sarjeant,

Scripps Florida supports Florida LambdaRail's (FLR's) application to be designated as a pilot US UCAN Affiliate Organization.

The Scripps Research Institute has been an avid user of FLR's connectivity since we began operations out of temporary facilities on the FAU campus in January of 2005. The institute leverages FLR's state-of-the-art network to support our top-ranked graduate program, in which classes are conducted by faculty on both the Jupiter, Florida, and La Jolla, California campuses. The institute is also beginning to decommission the leased lines we maintain between the East and West coast campuses, enabling us to reinvest the money saved into our research objectives. Additionally, we are hoping to continue to use FLR's connectivity, as well as their leadership team's relationship with the key academic and research institutions in Florida, to facilitate the idea of the Florida "Virtual Bioscience Cluster." This vision would foster scientific collaboration with the other research institutions in the state, such as the Max Planck Florida Institute, the Torrey Pines Institute for Molecular Studies, and the Sanford-Burnham institute, and help eliminate the geographic roadblocks that often stifle collaboration.

I fully endorse and support FLR's application to become a US UCAN Affiliate Organization.

Sincerely,

Anthony C. Carvalloza

MAX PLANCK FLORIDA INSTITUTE



5353 Parkside Drive, MC19-RE
Jupiter, FL 33458-2906 USA

Mailing Address:
P.O. Box 998
Jupiter, FL 33468-0998 USA

www.maxplanckflorida.org

January 10, 2012

Veronica Sarjeant
Chief Operations Officer
Florida LambdaRail (FLR)
2509 Barrington Circle, Suite 106
Tallahassee, FL 32308

Ivan C. Baines, PhD
Chief Operating Officer

e-mail: ivan.baines@mpfi.org

+1 561.972.9040 office
+1 561.972.9001 fax


Dear Ms. Sarjeant,

It is my pleasure to provide this letter in support of the Florida LambdaRail (FLR) application to the U.S. UCAN to be the Affiliate Organization and State point of contact for local Community Anchor Institutions (CAIs) in Florida. The Max Planck Florida Institute (MPFI) is a private non-for-profit research institution with the mission to understand how the brain functions. MPFI has community outreach and education programs and works with area schools as well as partners with the Scripps Research Institute to bring neuroscience and a broader understanding of science to those students and their teachers who may benefit. Critical to these and other like efforts is the network connectivity between relevant institutions to provide access for students and the public to resources made available by the State, county, Federal government and other sources to benefit the public and increase opportunities for education and improvement to a broad cross-section of the community.

MPFI has already placed educational material and initiated programs to disseminate brain and neuroscience awareness over the web. FLR's application and involvement as U.S. UCAN's Affiliate Organization would enhance and support these efforts. Furthermore, a recent decision in the Life Sciences Corridor Florida Executive committee is to strive to open up technology resources as well as make available expertise by networking educational institutions in South Florida from Orlando to Miami. The first goal is to establish an online portal that would give access to the full South Florida asset map with contact information of what resources for research and education exist where. Again, the involvement of Florida LambdaRail in the U.S. UCAN initiative would support these efforts.

In conclusion, we believe FLR is the best positioned and most appropriately qualified organization to serve as U.S. UCAN's Affiliate Organization for the State of Florida.

Sincerely,


Ivan C. Baines, PhD
Chief Operating Officer



January 11, 2012

Veronica Sarjeant
Chief Operations Officer
Florida LambdaRail
2509 Barrington Circle
Suite 106
Tallahassee, FL 32308

Information Systems Services

301 N. Olive Avenue, 8th Floor
West Palm Beach, FL 33401
(561) 355-2823
FAX: (561) 355-3482 (8th Floor)
FAX: (561) 355-4120 (4th Floor)

www.pbcgov.com



**Palm Beach County
Board of County
Commissioners**

Shelley Vana, Chair

Steven L. Abrams, Vice Chairman

Karen T. Marcus

Paulette Burdick

Burt Aaronson

Jess R. Santamaria

Priscilla A. Taylor

County Administrator

Robert Weisman

*"An Equal Opportunity
Affirmative Action Employer"*

Official Electronic Letterhead

Dear Ms. Sarjeant,

Palm Beach County is pleased to provide this letter of support regarding the UCAN Affiliate Pilot Program.

As you are aware, Palm Beach County government has installed and maintains several hundred miles of fiber optic cable as part of the County's Wide Area Network. While the network infrastructure initially served only county agencies, a major event occurred in 2008 when we interconnected our network to the Florida LambdaRail. We are now focused on providing broadband to our Community Anchor Institutions (CAI's), including the following agencies currently connected to the County Network:

- Public Libraries
- The School District of Palm Beach County (*13th largest in the US*)
- All of the major municipalities within the county
- The Health Care District (*Hospital, TraumaHawk, Pharmacies, etc*)
- The Kravis Center for the Performing Arts (*whose Board includes Mikhail Baryshnikov, Luciano Pavarotti, Jimmy Buffett and Itzhak Perlman*)
- Palm Beach State College
- Florida Atlantic University
- Max Planck Florida Research Institute
- Scripps Research of Florida
- Numerous non-profit organizations

In addition, Palm Beach County collaborates with the School District and other community partners in several successful "Digital Divide" projects to bring wireless Internet access to underprivileged areas.

Palm Beach County is committed to the concept of eliminating 'broadband as a barrier' and welcomes the opportunity to collaborate with FLR on the UCAN initiative to facilitate 'advanced and innovative applications.' We believe this program will build on the successful relationship FLR and Palm Beach County have established over the past four years.

Sincerely,

Steve Bordelon

January 9, 2012

Ms. Veronica Sarjeant
Chief Operations Officer
Florida LambdaRail
2509 Barrington Circle
Suite 106
Tallahassee, FL 32308

Dear Ms. Sarjeant

Palm Beach State College supports Florida LambdaRail's (FLR's) application to be designated as a pilot US UCAN Affiliate Organization.

Palm Beach State College was an early adopter of FLR's services providing access to the Internet and Internet2 for the college's four campuses and 55,000 students. As comprehensive community college that recently began offering limited baccalaureate programs, we have had a strong relationship with Florida Atlantic University who was one of the FLR equity members in the State of Florida.

FLR and Florida Atlantic University have been outstanding partners in bringing creative and innovative ideas that have helped the college expand network services while reducing costs. Their partnership with Palm Beach County Government to provide interconnectivity and "last mile" service to the college's campuses is one example of this partnership that has provided expanded bandwidth at considerably lower cost.

I believe the leadership and innovation demonstrated by FLR makes them a strong candidate to become a US UCAN Affiliate Organization and they have my full support.

Sincerely,

A. J. Parziale

Anthony J. Parziale
Chief Information Officer

