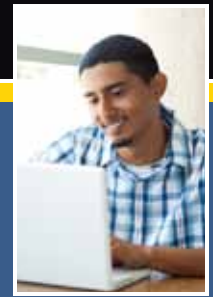




RESEARCH • EDUCATION

COLLABORATION



AMERICA'S LIGHTPATHS, KNOWN AS AMLIGHT, ENABLES RESEARCH AND education amongst the people of the Americas through the operation of production infrastructure for communication and collaboration between the U.S. and Western Hemisphere science and engineering research and education communities.



### **Unparalleled Access across the Western Hemisphere**

AMLIGHT interconnects research and

education networks from across the hemisphere, including those of CLARA (Cooperation of Latin American Research networks encompassing Latin American countries), RNP (the Brazilian NREN), ANSP (the State of Sao Paulo network) and ESnet, Florida LambdaRail, Internet2, National LambdaRail, and regional networks serving the United States.

Today's applications depend on low latency and jitter. AMLIGHT's direct, global peerings mean that video conferencing works, that 4K video is a reality, and that experiments are iterated and understood in near real time. AMLIGHT delivers interconnectivity that uniquely supports these dynamic interconnections.

### **AtlanticWave**

AMLIGHT connects to AMPATH in Miami, and, because of AtlanticWave, AMLIGHT is also in New York City, Washington D.C., Atlanta, and Sao Paulo. AtlanticWave is a unique infrastructure that

AMLIGHT leverages to provide a single peering fabric from New York to Sao Paulo—those connected to it have the same interconnectivity benefits as those in New York City. Meaning, a concert hall in Manhattan can be connected to a concert hall in Miami as easily and as quickly as if they were next-door neighbors.

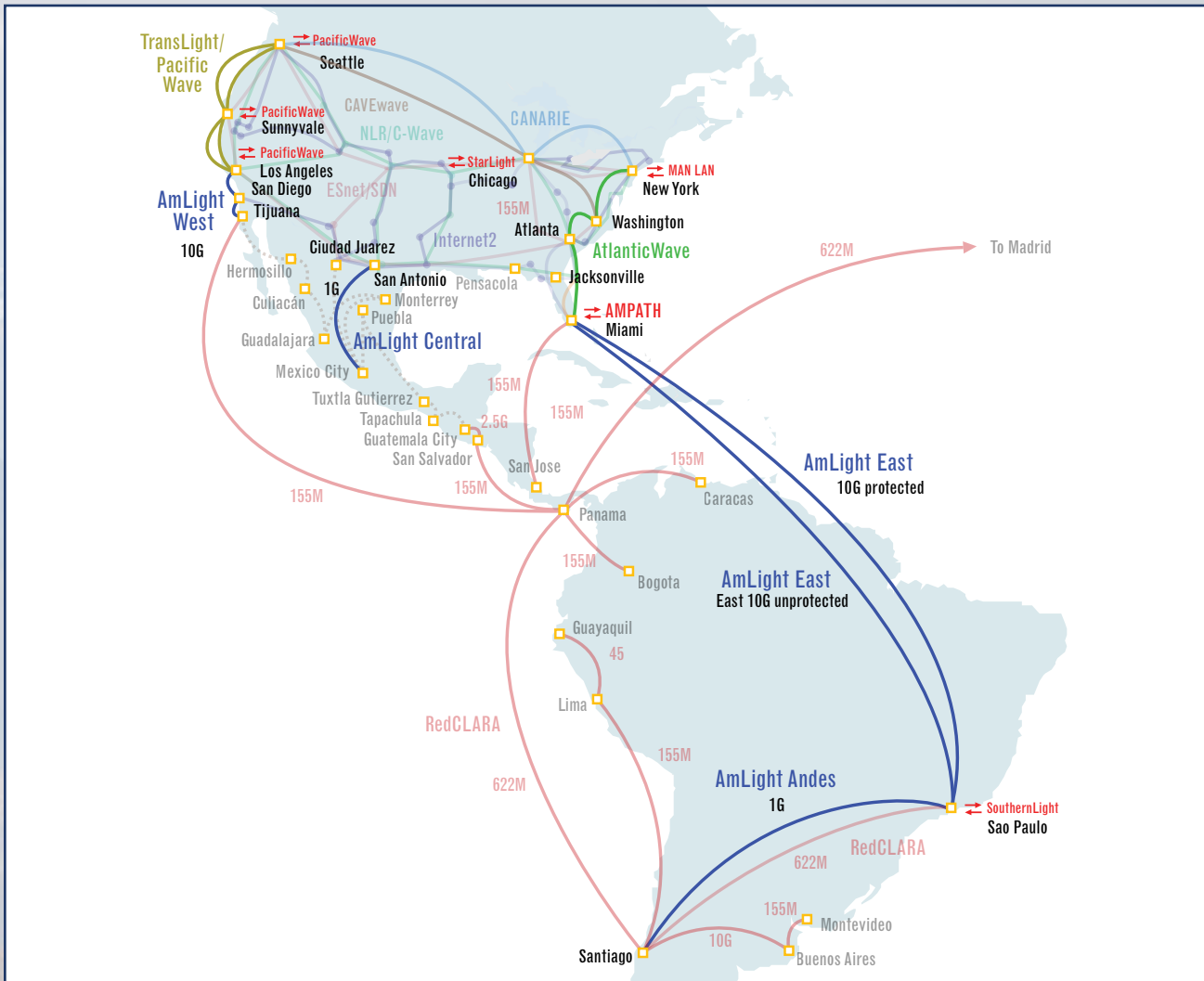
### **Leadership and Support for Research**

AMLIGHT responds to partner needs and enables an evolving terrain of research and education infrastructure. This robust system includes:

- Advanced technical infrastructure
- Responsive maintenance
- Hurricane-proof facilities

### **Engagement in Evolving Network Technology**

AMLIGHT plays a role in the next generation of network and collaborative research so it is poised to support its connectors when they need it. To ensure these future needs are met, we must work on them today. To that end, AMLIGHT has obtained more than \$20 million to participate in federally funded research—the benefit of which will manifest directly to connectors, who will have access to tomorrow's new technologies, such as dynamic networking and the streaming of uncompressed 4K video.



## 24X7X365 NETWORK OPERATIONS AND ENGINEERING

The continuity of operations for AMLIGHT is supported by the Global NOC, the country's premier resource for research and education and transit network monitoring and support. The Global NOC is available 24-hours-a-day to address users' concerns and ensure that the network is optimized for flawless use.

AMLIGHT maintains a staff of engineers, who provide continuous operations and reliable service by optimizing the technical environment, ensuring the security of links, and supporting growth.

*The AmLight project is made possible through the funding support of the National Science Foundation (Award OCI-0963053), the Academic Network of Sao Paulo (Grant 2008/52885-8), the Association of Universities for Research in Astronomy (AURA), Rede Nacional de Ensino e Pesquisa (RNP), Florida International University, the Corporation for Education Network Initiatives in California (CENIC), and the Lonestar Education and Research Network (LEARN).*