

NREN for AUB

Why Joining the NREN Community is
Strategic For AUB

Yousif Asfour, PhD
Chief Information Officer
American University of Beirut



THAT THEY
MAY HAVE
LIFE AND
HAVE IT MORE
ABUNDANTLY

THE
UNIVERSITY
OF
THE
MIDDLE
EAST

Founded in 1866
Chartered in New York
Private & Independent
Non-sectarian
Excellence in Education
Research Institution
Liberal arts education
Serve the Middle East

A wide-angle photograph of a sunny day on a university campus. A paved walkway leads from the foreground into the distance, flanked by lush greenery. On the left, a brick building with arched windows is partially visible. On the right, tall palm trees and dense red-leafed shrubs line the path. Several people are walking along the path, and a black lamppost stands on the left. The sky is clear and blue.

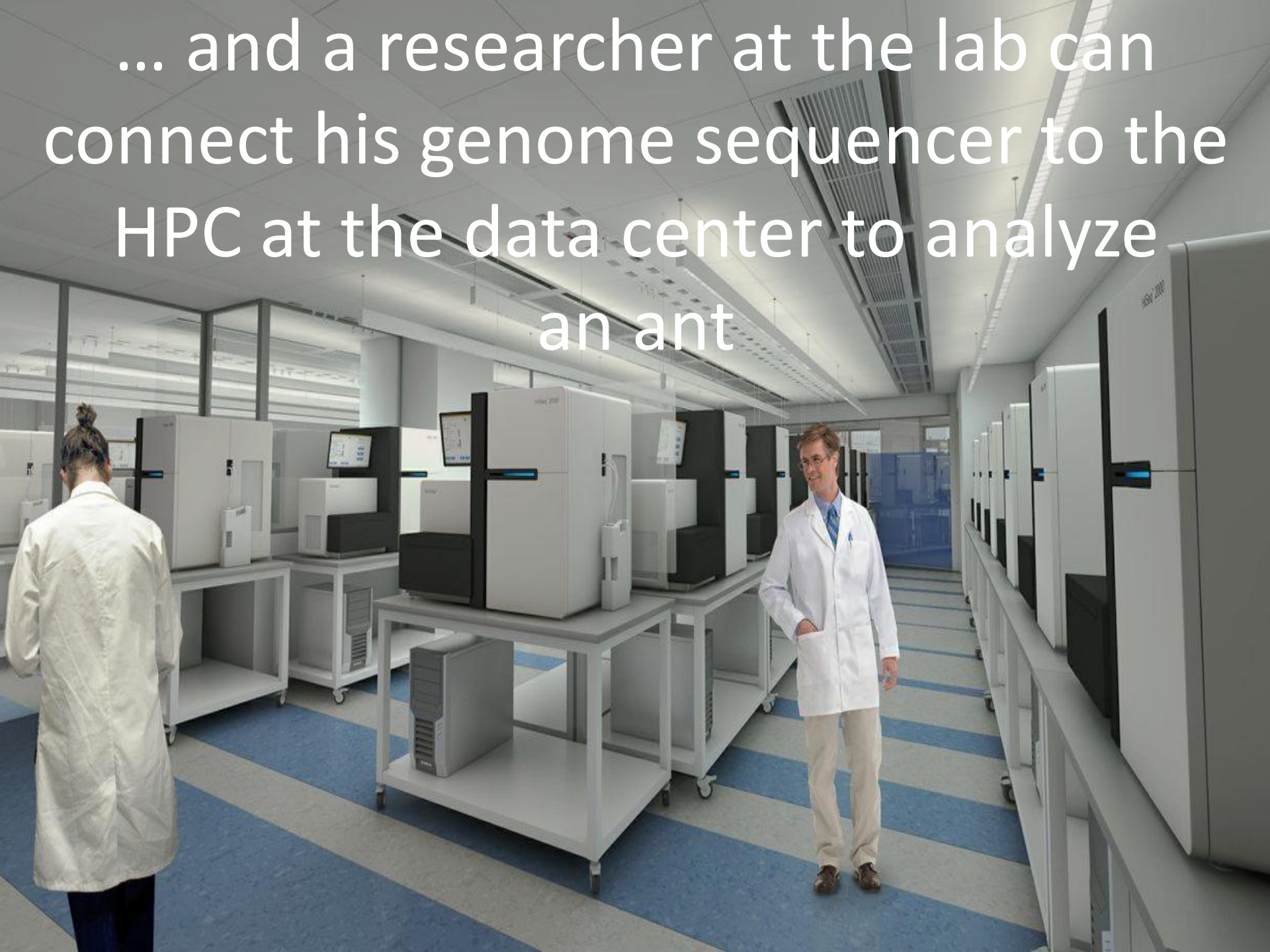
**Our vision is to make
IT @ AUB
a strategic partner
with
the Academic units to
help transform
teaching, research ,
student life & patient care
at AUB**

So that ...




... a lecturer in New York can connect
his projector to the laptops in a
classroom in Beirut to teach

... and a researcher at the lab can
connect his genome sequencer to the
HPC at the data center to analyze
an ant



A photograph of two surgeons in an operating room. They are wearing blue scrubs, masks, and hairnets. They are standing in front of a large, illuminated surgical field. A monitor in the background shows a close-up of the surgical site. The room is dimly lit, with the primary light source being the surgical lamps. The text "... and doctors can collaborate with each other remotely" is overlaid on the image in white font.

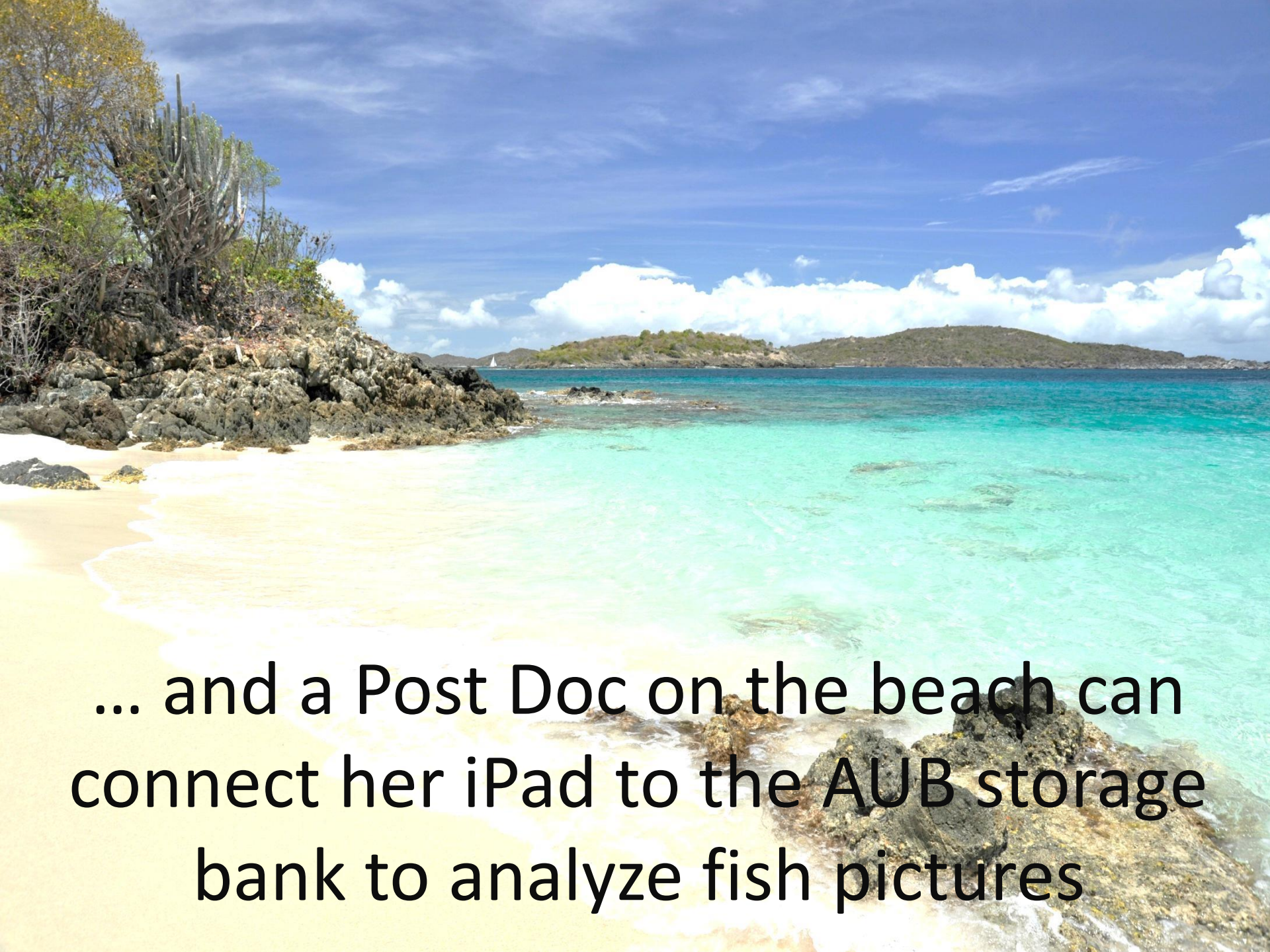
... and doctors can collaborate with
each other remotely



... and a physicist on campus
can connect his laptop to CERN
to discover the next new quark



... and a student at her dorm connect
to a server on the web to invent the
new Facebook



... and a Post Doc on the beach can
connect her iPad to the AUB storage
bank to analyze fish pictures



... and a student at a coffee shop can
connect to her roommate to finish her
homework!

A photograph of a complex industrial piping system mounted on a light-colored concrete wall. The system features numerous metal pipes, elbows, tees, and a central valve with a blue handle. The pipes are interconnected in a dense, crisscrossing pattern. The text "We are shifting our focus from managing infrastructure" is overlaid on the right side of the image in a black, sans-serif font.

We are shifting
our focus
from
managing
infrastructure

... to creating research and
teaching services



We are
transforming
our role from
being service
providers ...



to become
service
brokers



We a are
transforming
our staff
from mostly
engineers



... to mostly
consultants and service managers



We are transforming
our environment...



...from a “Castle & Moat” model...

... to a connected community model ...



... by creating an (Any)⁶ infrastructure



(connect any one, from any where, through any device, at any time, to any resource, to do any thing)

... and joining an NREN ...

A not-for-profit organization providing advanced services to a well bounded community.

At their core, NRENs exist to enable efficient, reliable data communications and networking services for their nation's research and education communities. NRENs also form a local and international research and education network, allowing local and global collaboration

The ultimate purpose of an NREN is to serve scholars and innovators, ensuring that Lebanon research and development is contributing to the local and global economy

To expand our network capabilities ...



...by catalyzing the deployment of cost-effective high speed networks

To utilize external services...

- EduRoam
- Federated services
- Educational Databases
- Shared Libraries
- HPC and specialized computing
- Collaboration services

... by sharing technology and
information services and resources
from other NREN members

To join a community for education and research organizations ...

... Engage in national, regional and international collaboration in education and research

... Engage in shaping legislation in support the use of technology and networks in education and research

We are shifting our focus ...

Business Analysis
Development
Operations

Skills

Outsource Apps

(Any)⁶ Infrax

Consulting

Integration

Management

...and it all
depends on the
NREN



The Plan



Ensure quality service and focus on customer service

Utilize the “cloud” for commodity services

Build the (Any)⁶ environment

Develop staff to become service managers and “consultants”

Engage with the community

An NREN helps us achieve all this ...

- Catalyze the rapid deployment of a high speed general purpose digital communications infrastructure
- Share technology services and resources among members
- Engage in national, regional and international collaboration in education and research
- Join a common culture and community for education and research organizations
- Engage in shaping legislation in support the use of technology and networks in education and research

“Mr. CIO, bring
down the
wall!”

IT @ AUB
has to
transform



... and moving from a
“Standards Based” utilization model ...



... to a “If It Fits, Plug It In”
utilization model



End users are ENCOURAGED to play and experiment with technology

A large crowd of graduates in black caps and green stoles is shown at a commencement ceremony. They are clapping and looking towards the front. The background is filled with a large audience of spectators.

53,000 alumni in 105 countries
19 signatories on the UN charter
35 universities

World and regional leaders in all politics, humanities, architecture, engineering and business