

The NIAID Biovisualization Lab: a central resource for immersive exploration of data with virtual reality and advanced visualization technologies

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GatesNotes THE BLOG OF BILL GATES

LOG IN SIGN UP



NOT PLAYING GAMES

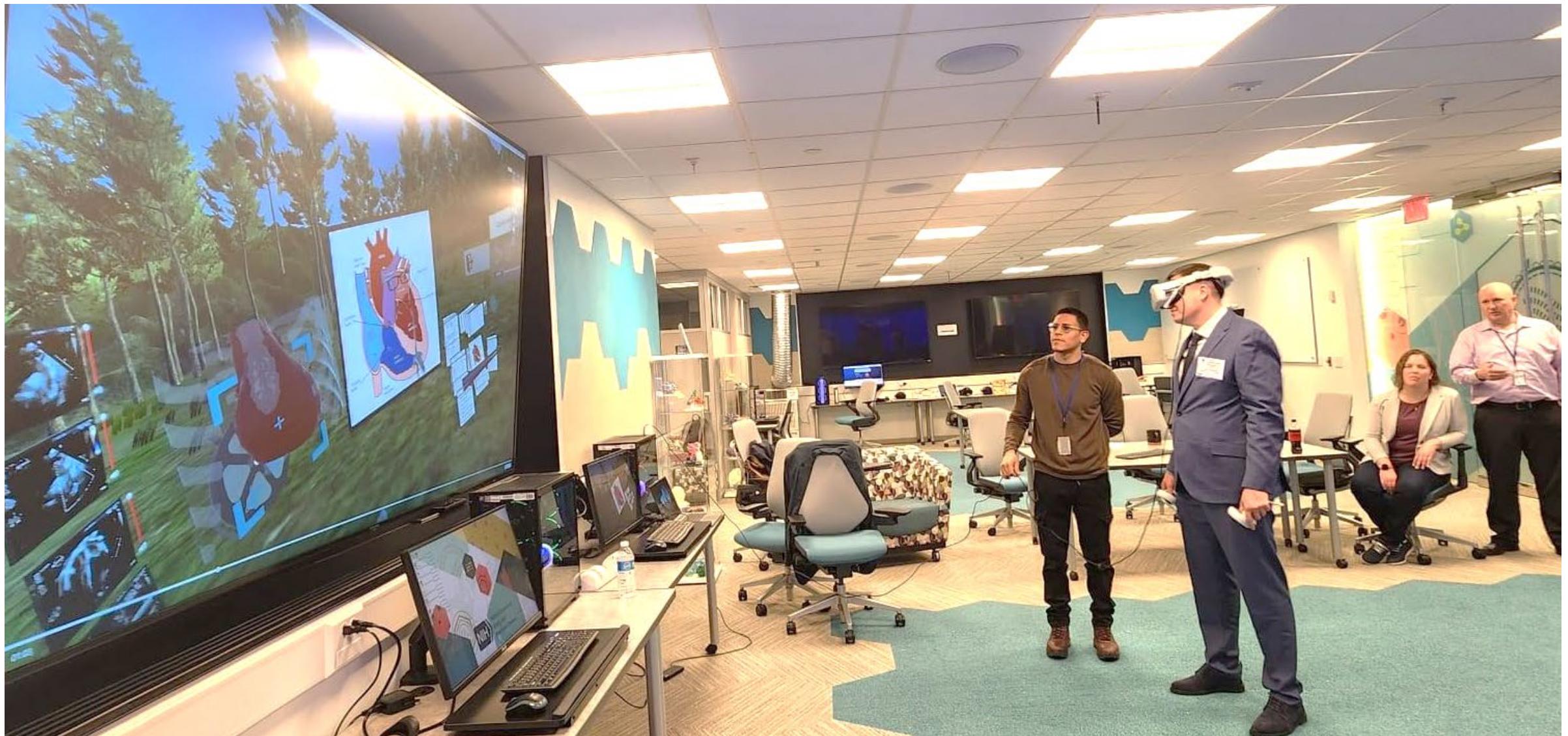
Here's how virtual reality can help fight disease

And other insights from my visit to the NIH.

By Bill Gates | July 11, 2017 • 3 minute read







Dr. Dmitro Butov, Kharkiv National Medical University, explores cardiac anatomy training in VR during a visit to the BioViz Lab with the TB Portals team. Enduovo training content is free to the public, and may provide opportunities for remote learning.

The Biovisualization lab is a technology sandbox that will naturally adapt and change over time based on both technology advances as well as newly envisioned needs. . . this is not a “design, build, and leave” facility but a space that will technically adapt to utilize new and/or leading-edge products that closely align with the vision and mission of the BioViz Lab.

BioViz Lab Design Priorities

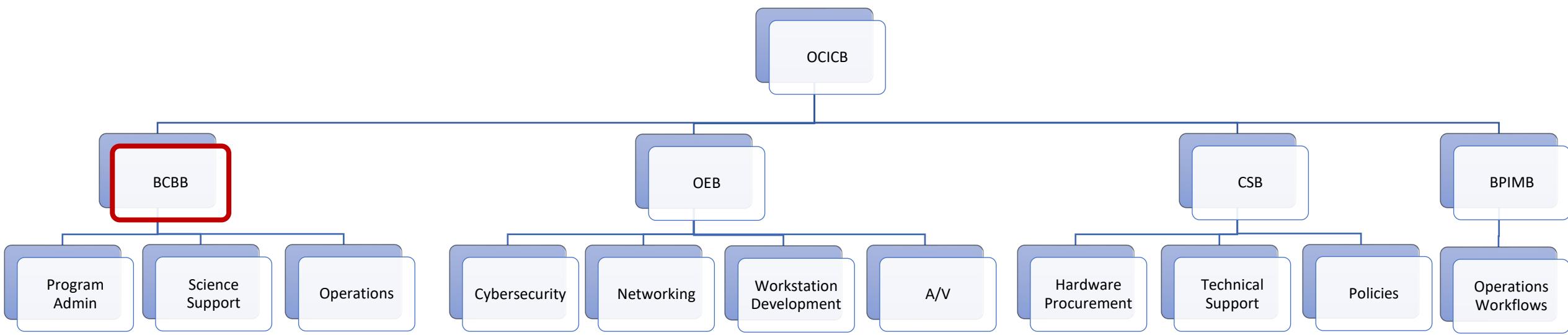
Organizational Needs

- Uniformity of business processes
- Uniformity of technology
- Security
- Cost efficiency

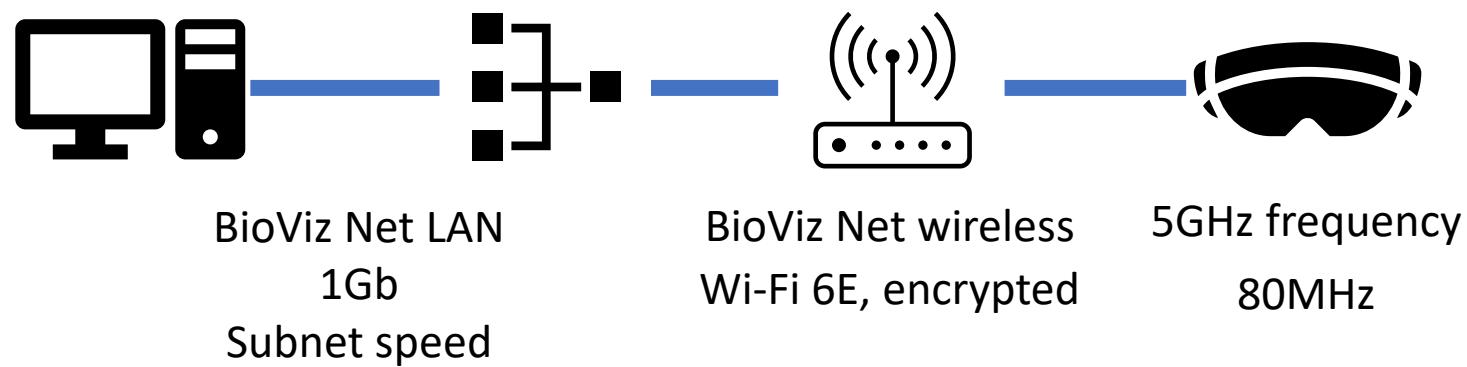
End User Needs

- Useful
- Desirable
- Accessible
- Usable
- Valuable
- Findable
- Credible

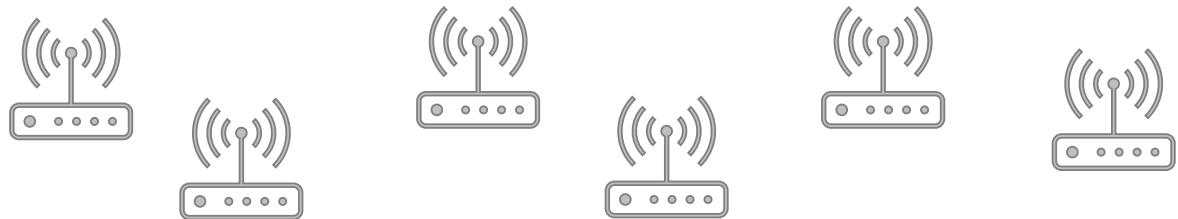
Established a multidisciplinary team to drive infrastructure design and implementation *from within*

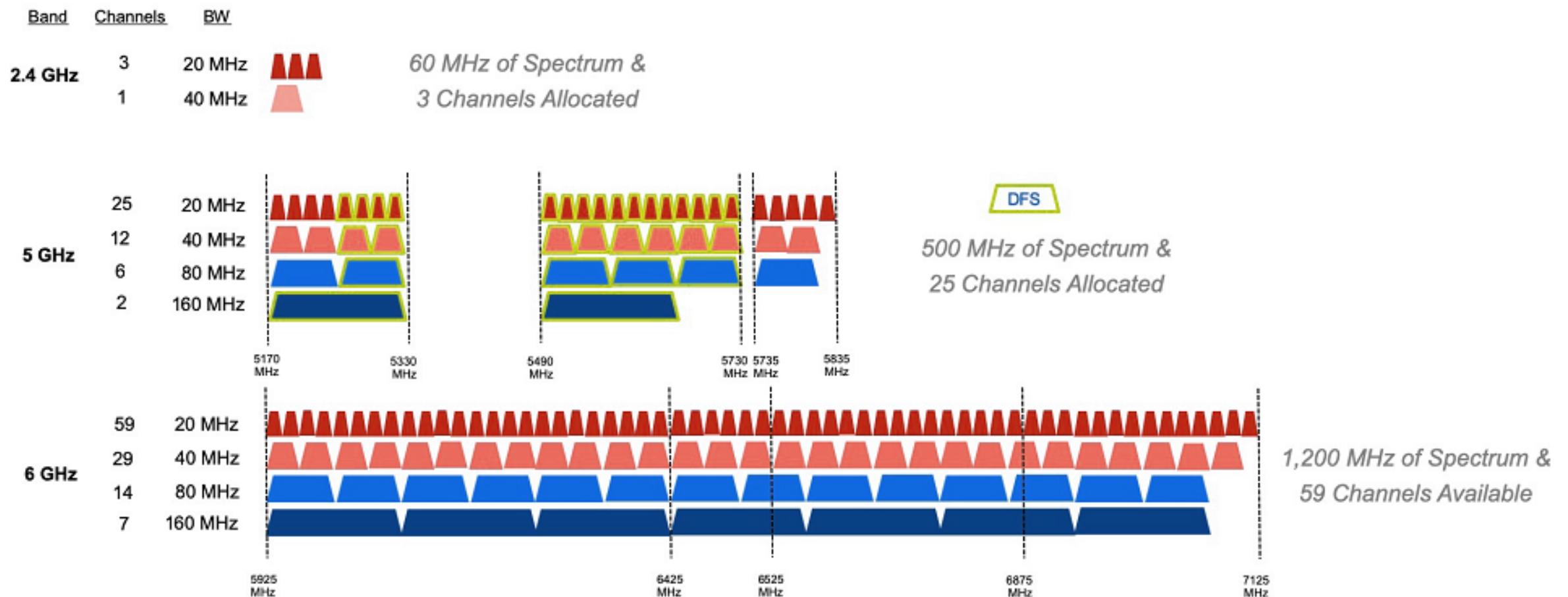


The dream: untethered PC streaming with 12+ users in the same physical space



What if we are trying to do something that can't be done?





XR Technology Challenges



Meta

STEAM

NVIDIA



VIRTUALSPEECH

enduvo

Ultimate goal: Provide oversight without stifling innovation

- Advising CIT and working on mobile device management
- All HMD purchases need to be approved by us
- Should headsets be accountable property?
- Are other headsets in use at NIAID right now?
- How can we support remote workers?
- How and to what extent should we provide guidance and oversight?
- Providing advice to other government and academic organizations

NIAID/OCICB is establishing policies for device procurement and management at NIAID



Q4 2024 – will publish a white paper outlining challenges, solutions, and lessons learned

NIAID African Centers of Excellence in Bioinformatics & Data Intensive Science

