

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 INSIGN UP

Q

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. Enduvo 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.

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BioViz Lab Design Priorities

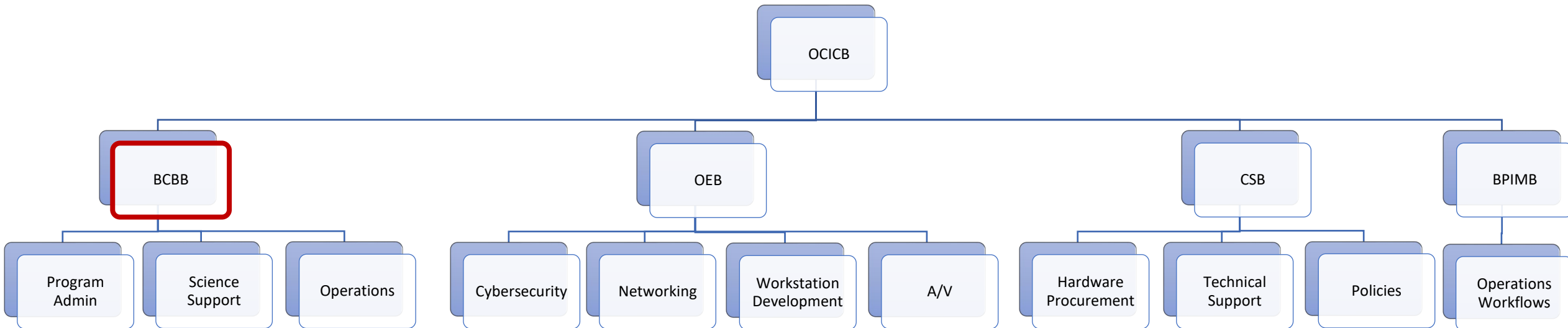
Organizational Needs

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

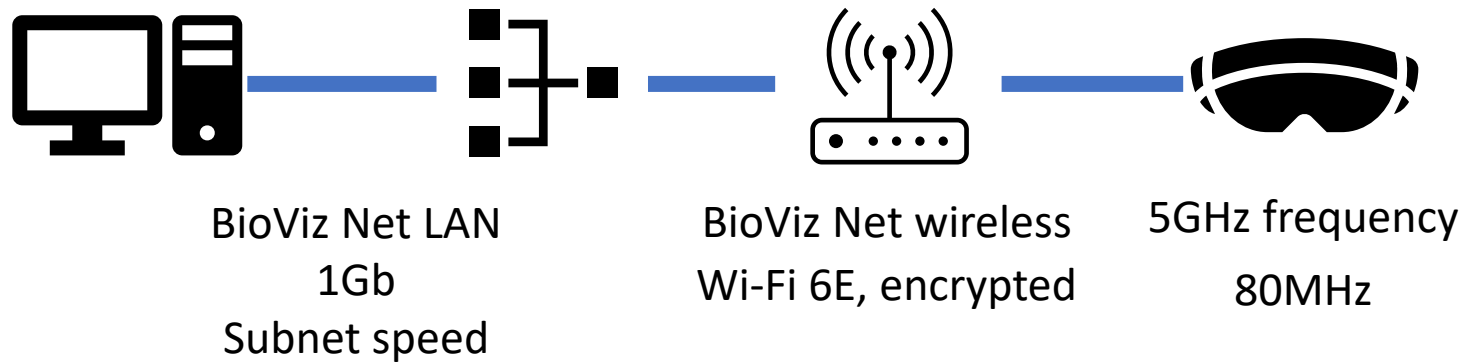
End User Needs

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

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

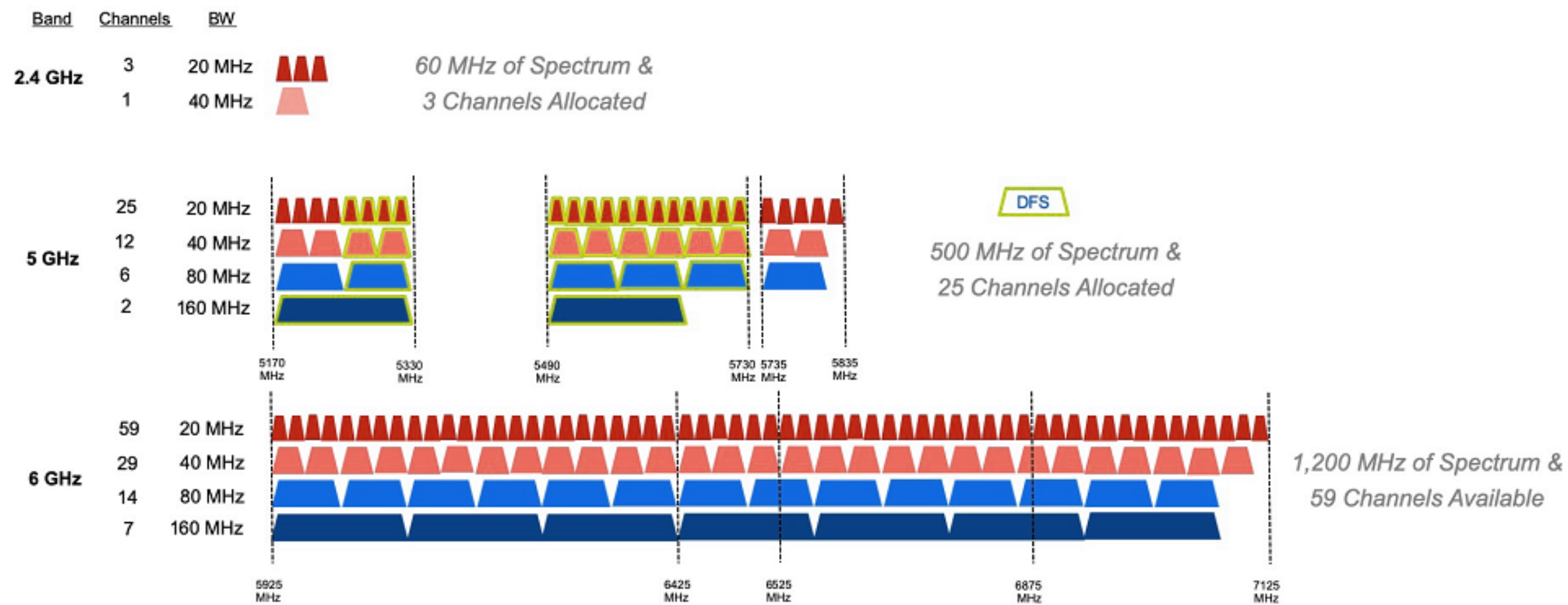


The dream: untethered PC streaming with 12+ users in the same physical space



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

