



Advanced Research Projects Agency for Health (ARPA-H)

*A New Paradigm for Propelling Use-Driven, High
Impact Biomedical and Health Research*

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Acting Principal Deputy Director

National Institutes of Health



National Institutes of Health
Turning Discovery Into Health

Key Elements of ARPA Model

1 Program Manager Centric
Nucleus; responsible for program from proposal to transition

2 Lean, Nimble Organization
Relatively small sized; limited hierarchy

3 High Risk-High Reward
“DARPA hard”; demonstrates possibility; failure is accepted

4 Time-Bound and Urgent
Staff (3-5 yr terms) and programs

5 Mission-Driven
Not requirement or task-driven

6 Independent and Autonomous
Top-level support and cover

7 Active Program Management
Quantitative metrics

8 Accountability
Technical gates; stage-gating

Every decision at ARPA-H is informed by the “Heilmeier Questions”

ARPA-H's Mission: Our Why, How, and What

- **Our WHY:** “To empower every American to realize their health potential.”
- **Our HOW:** “Through pivotal investments in high-impact solutions for well-defined problems.”
- **Our WHAT:** “And demonstrating what health futures are possible for all.”

ARPA-Hq's - The Heilmeier Questions

- What are you trying to do? Articulate your objectives using absolutely no jargon.
- How does this get done at present? Who does it? What are the limitations of present approaches?
- What is new about your approach? Why do you think you can be successful at this time?
- Who cares? If you succeed, what difference will it make? *How will you ensure equity in the outcomes?**
- What are the risks?
- How long will it take?
- How much will it cost?
- What are your mid-term and final exams to check for success?
- *Will your solution be applicable to other challenges?**

ARPA-H: Guiding Principles Driving Culture

Linked to NIH – draw on vast knowledge, expertise, and infrastructure, but remain distinct, with unique culture and organization



Seek innovative ideas and collaborative, diverse people



Be nimble and urgent, time-bound



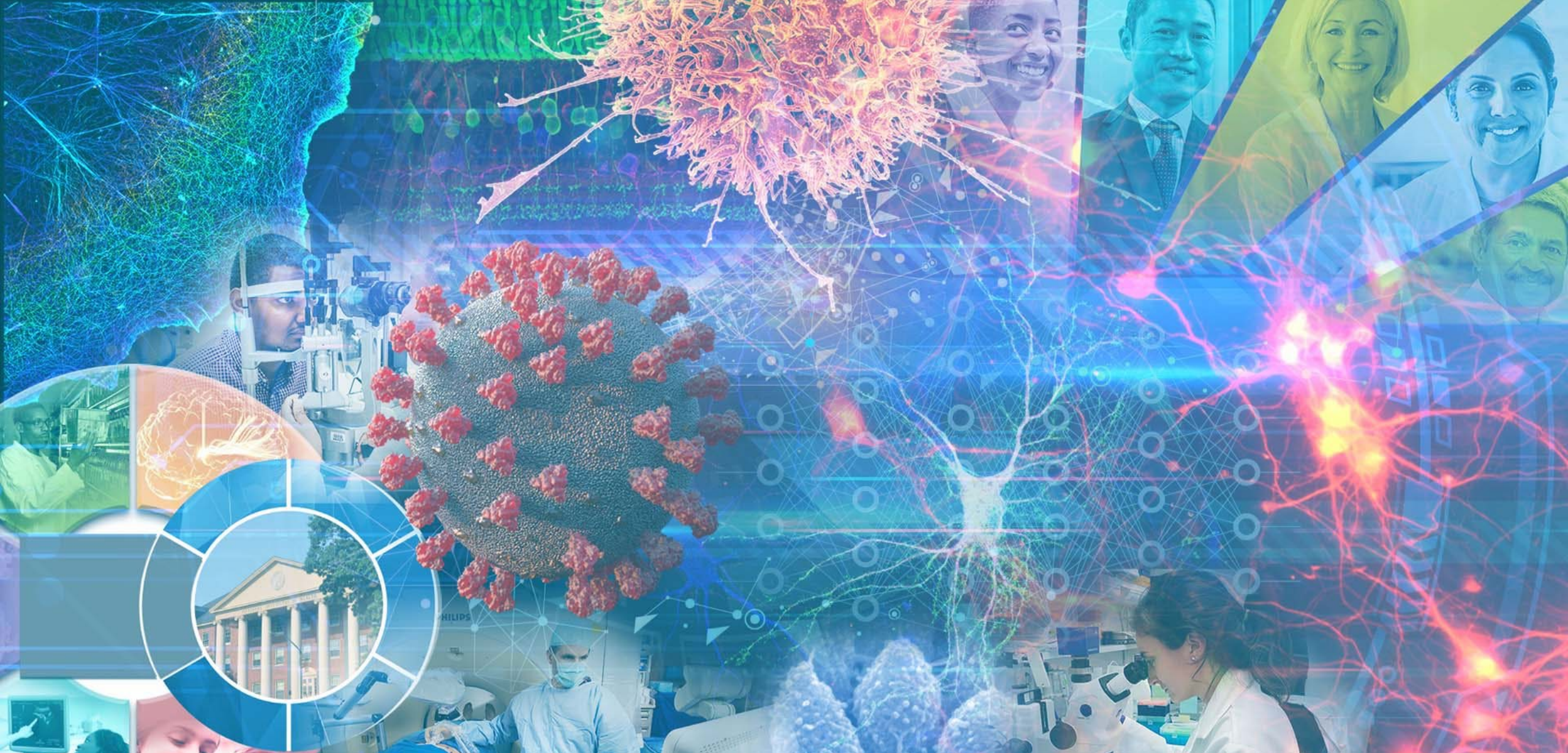
Be open and transparent, engage stakeholders



Be milestone driven and independent



Seek boldness with outsized impact



What is the legislative status?

ARPA-H: Path to Innovation

Summer 2021

- OSTP & NIH publish commentary in Science outlining vision for ARPA-H
- OSTP & NIH launch engagement activities to gather community feedback

March 2022

- Congress passes & POTUS signs FY22 omnibus—\$1B available for 3 years
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April 2022

- ARPA-H transferred to NIH
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May 2022

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- Acting Deputy Director announced

FY22 Appropriations Language

For carrying out section 301 and title IV of the PHS 19 Act with respect to advanced research projects for health, \$1,000,000,000, to remain available through September 30, 2024: *Provided*, That the President shall appoint in the Department of Health and Human Services a director of advanced research projects for health (Director): *Provided further*, That funds may be used to make or rescind appointments of scientific, medical, and professional personnel without regard to any provision in title 5 governing appointments under the civil service laws: *Provided further*, That funds may be used to fix the compensation of such personnel at a rate to be determined by the Director, up to the amount of annual compensation (excluding expenses) specified in section 102 of title 3, United States Code: *Provided further*, That the Director may use funds made available under this heading to make awards in the form of grants, contracts, cooperative agreements, and cash prizes, and enter into other transactions (as defined 11 in section 319L(a)(3) of the PHS Act): *Provided further*, That activities supported with funds provided under this heading shall not be subject to the requirements of sections 406(a)(3)(A)(ii) or 492 of the PHS Act: *Provided further*, That the Secretary may transfer the Advanced Research Projects Agency for Health, including the functions, personnel, missions, activities, authorities, and funds, within 30 days of enactment of this Act to any agency or office of the Department of Health and Human Services, including the National Institutes of Health: *Provided further*, That the Committees on Appropriations of the House of Representatives and the Senate shall be notified at least 15 days in advance of any transfer pursuant to the preceding proviso.

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(Director): *Provided further*, That funds may be used to make or rescind appointments of scientific, medical, and professional personnel (including graduate students) governing appointments under the civil service laws: *Provided further*, That funds may be used to fix the compensation of such personnel at a rate to be determined by the Director (not to exceed the maximum rate of pay (including expenses) specified in section 102 of title 5, United States Code: *Provided further*, That the Director may use funds made available under this heading towards the following: (1) contracts, grants, cooperative agreements, and cash prizes, and enter into other transactions (as defined in section 319L(a)(3) of the PHS Act): *Provided further*, That activities supported with funds provided under this heading shall not be subject to the requirements of section 319L(a)(3) of the PHS Act: *Provided further*, That the Secretary may transfer the Advanced Research Projects Agency for Health, including the functions, personnel, missions, activities, authorities, and funds, within 30 days of enactment of this Act to any agency or office of the Department of Health and Human Services, including the National Institutes of Health: *Provided further*, That the Committees on Appropriations of the House of Representatives and the Senate shall be notified at least 15 days in advance of any transfer pursuant to the preceding proviso.

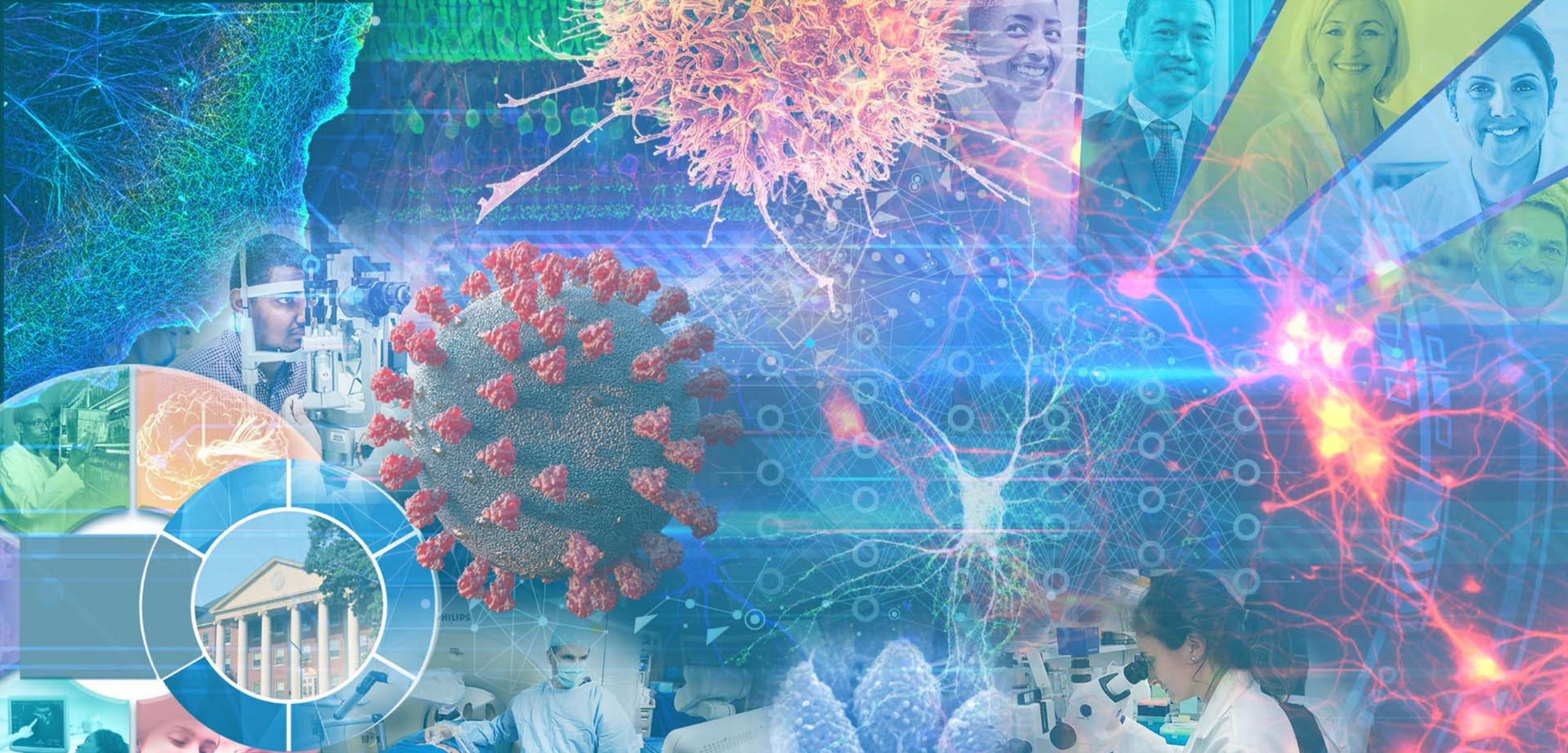
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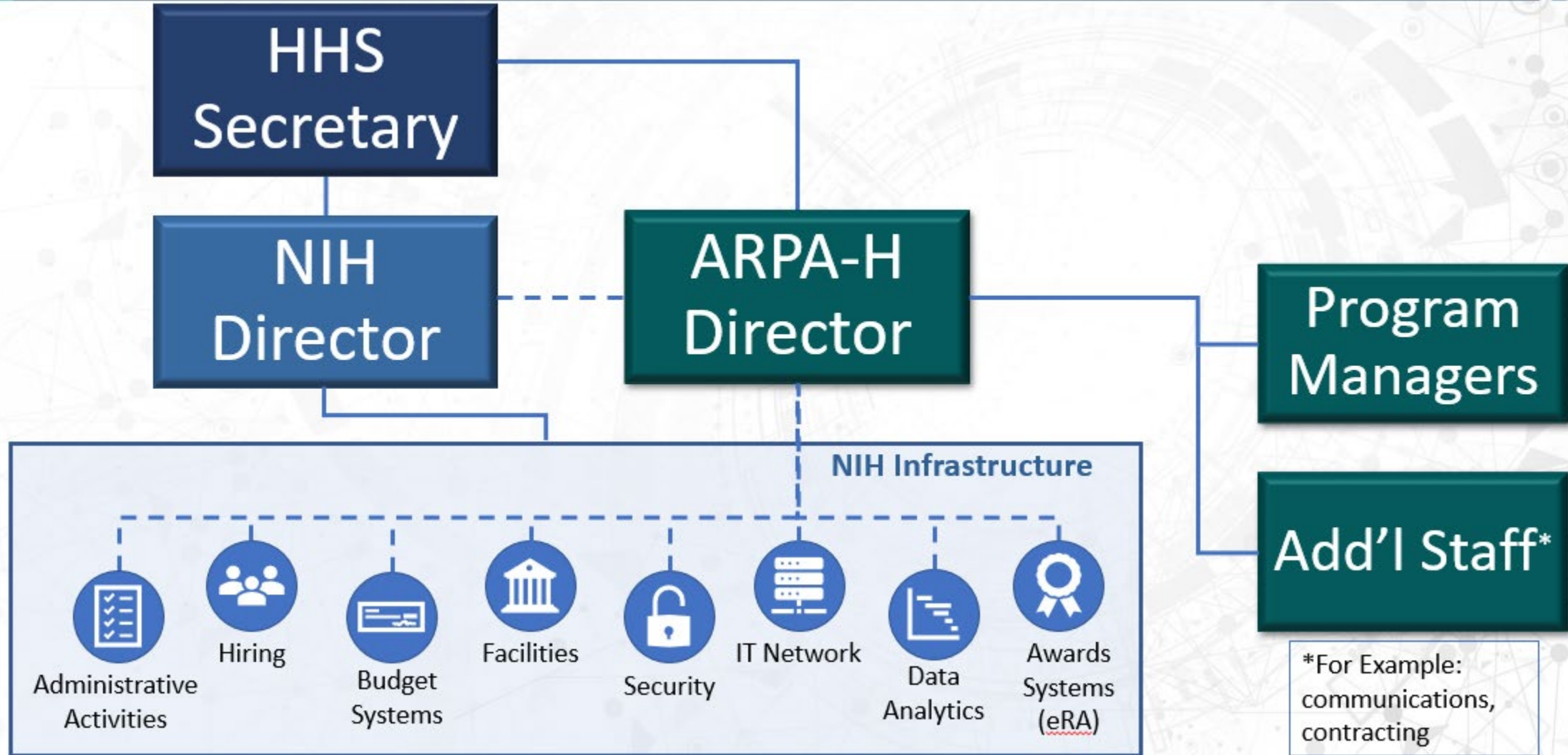
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ARPA-H Organization within HHS/NIH



Planning: Focus Areas



ARPA-H: Goals (6 Months - 1 Year)

Scientific/Technical

Develop appropriate PM processes and systems from Ideation to Transition / Build and launch programs / Determine how to measure impact of ARPA-H programs

Strategic Planning and Data Gathering

Develop processes and capture relevant data / Leverage current and collaboratively develop new systems and processes to capture, track, and enable data analysis

Commercialization, Innovation, Partnerships

Establish a commercialization program / Execute ARPA-H Innovation Network & Roadshow strategy / Develop interagency and partnership strategy

Strategic Resources/ People Planning

Build robust resources to support staff / Customize onboarding and offboarding / Maximize hiring flexibility / Conduct robust and expansive outreach and recruitment

Contracting and Budget

Obtain provisional procurement authority / Develop office structure and hire essential staff / Build and leverage industry relationships / Establish finance processes

Project Management/ Communication

Ensure collaborative development of offices and workstreams / Support teams with appropriate resources / Change Management / Culture development

ARPA-H Leadership



Characteristics

- Extraordinary leader
- Proven innovation track record
- Vision for driving transformative change in health & biomedicine
- Strong private sector background
- Experience working in government and/or academia
- Diplomatic advocate
- Charismatic partnership builder

Acting ARPA-H Deputy Director Announced

Adam H. Russell, D. Phil.

- Chief Scientist at UMD's Applied Research Laboratory for Intelligence and Security (ARLIS)
- Former DARPA and IARPA Program Manager
- Social Anthropologist



Hiring Going Forward

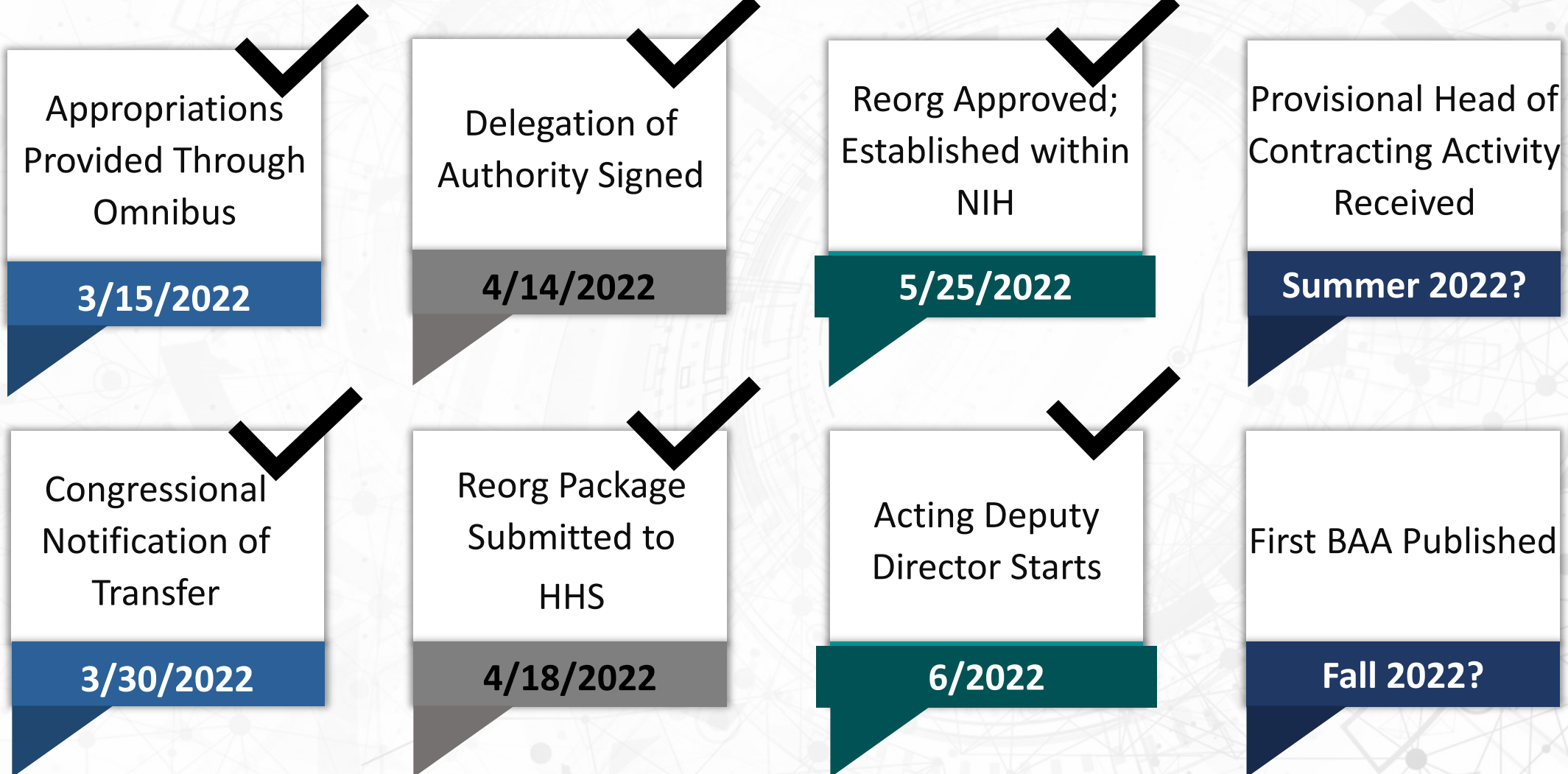
Working with HHS to determine the best path forward

- Anticipate needing to bring on ~100 FTEs over the next year
- Plan to rely on contractors for support functions, similar to DARPA

PMs

- Will wait to ramp up hiring until a director is onboard
- Will be required to “pitch” an idea as part of the interview
- Total number is dependent on budget
 - Assuming \$1B, estimate ~30-40 PMs

ARPA-H: Milestones



Questions?

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<https://directorsblog.nih.gov/>



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