

On Creating Agency, Inter-agency and National Initiatives

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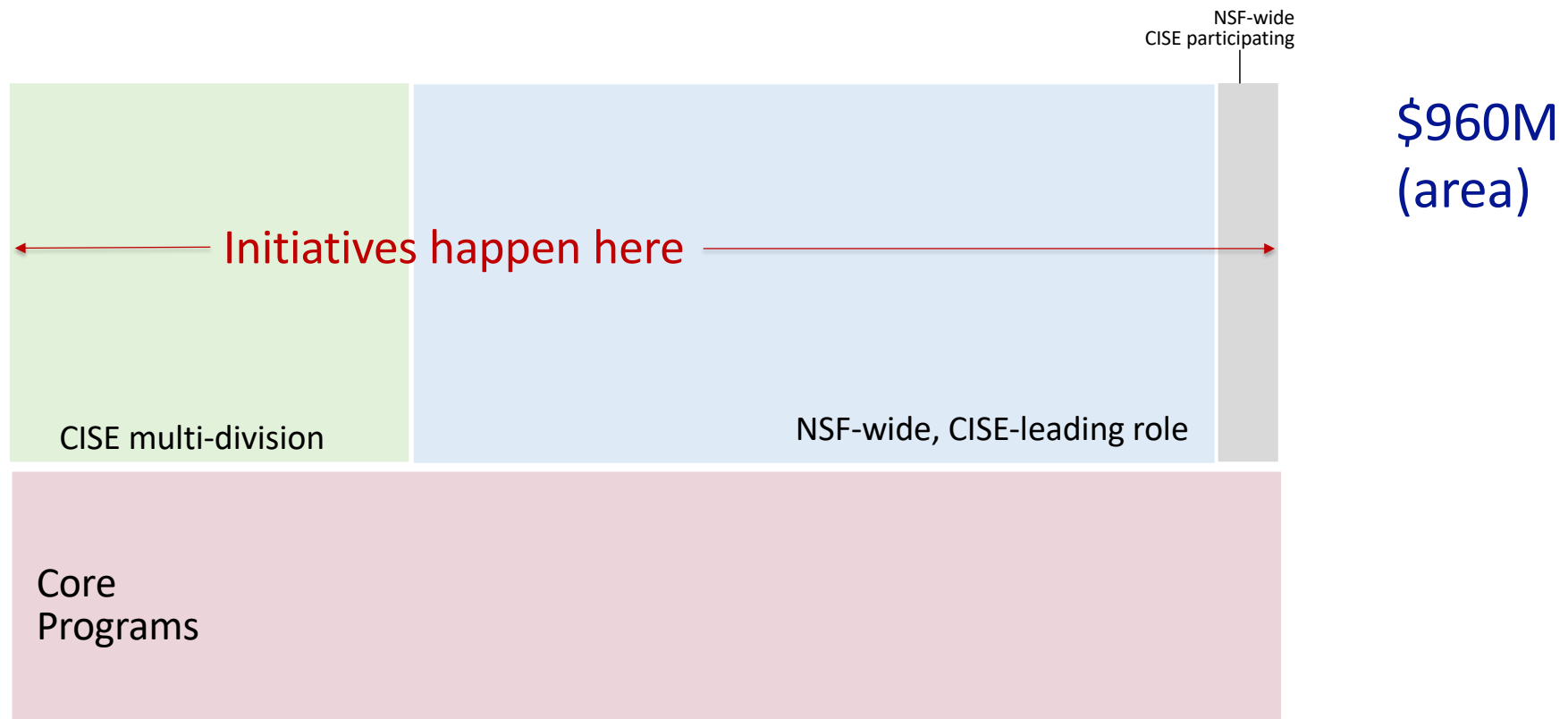
Outline



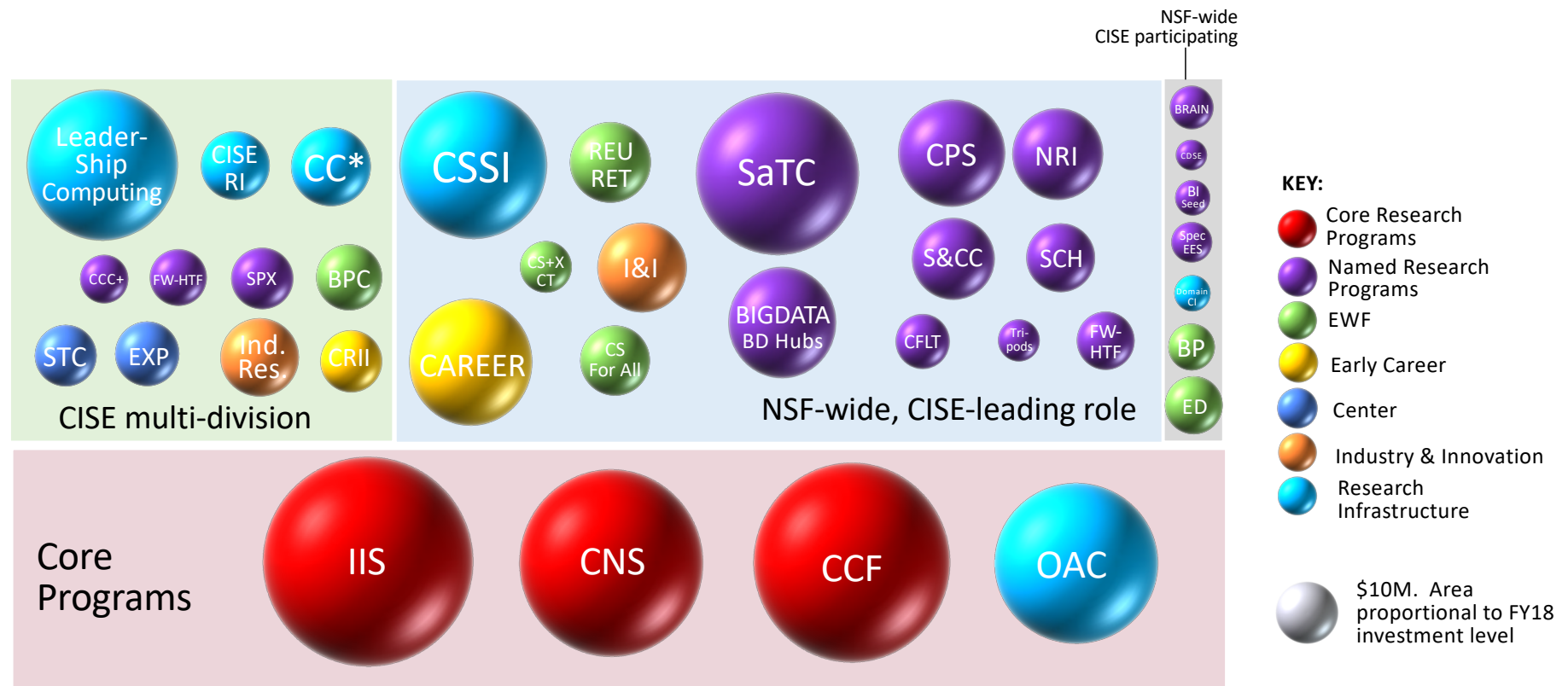
What is an “Initiative”?

- New, “named” program, typically with new solicitation
 - Different scopes:
 - completely/mostly within NSF/CISE
 - across NSF
 - national initiatives
 - Different funding mechanisms
 - Different lifetimes
- 
- all may have inter-agency collaboration

2018 CISE Programmatic: Overview



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Why is a new initiative started?

- Need for “named” program to increase emphasis/attention/awareness, funding for research topic area
 - particular importance to CS field
 - national importance
- Community consensus
 - within research community, NSF
- Consistent with NSF mission: *“To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense...”*

How is a new initiative started?

Within CISE, and some NSF-wide initiatives:



The idea!

- Research community
- CISE PDs, DDs, DAD, AD



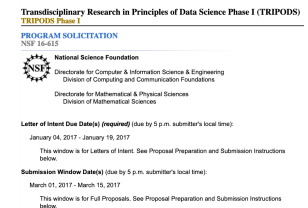
Community building

- Technical: workshops, reports (NSF, CCC, NASEM)
- Advisory committees (e.g., CISE-AC)
- Identifying partners



Budget commitments

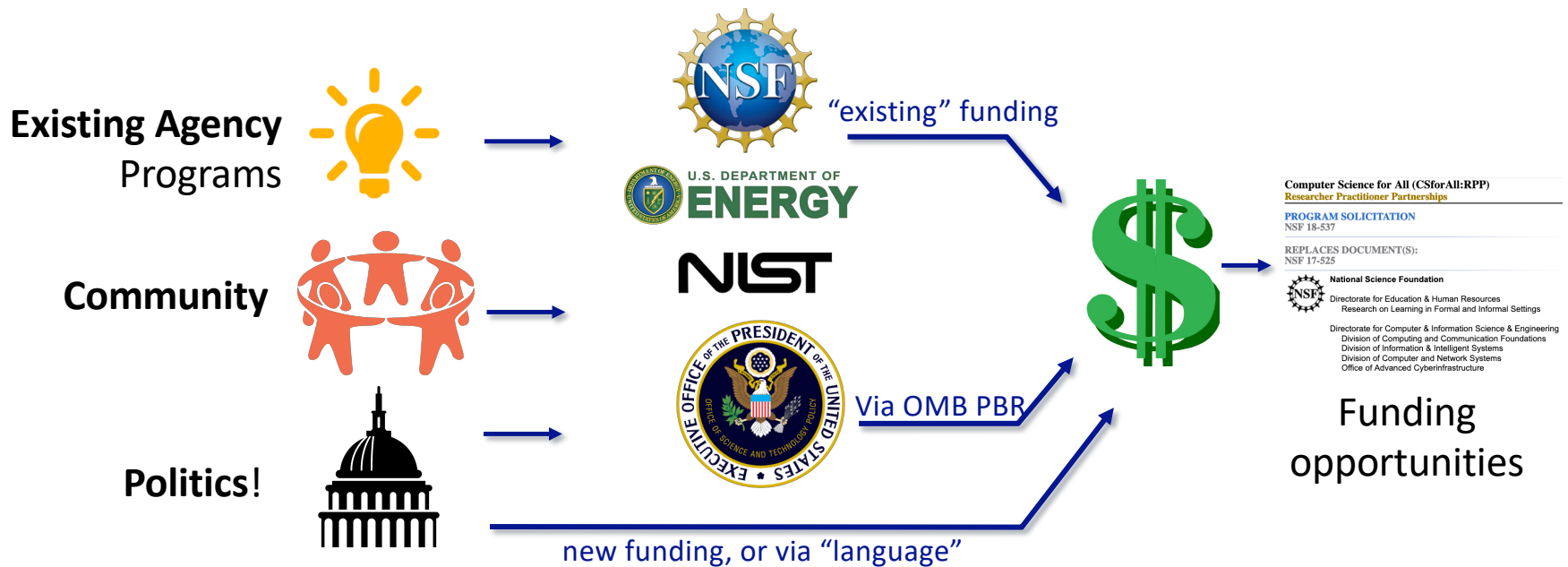
- Scope, partners
- Typically from existing budget (e.g., from core programs, returned to core programs)



Funding opportunity

How is a new initiative started?

National initiatives: (e.g., CSforAll, Smart Cities/Smart & Connected Communities, AI for America)



Thoughts, observations

The importance of people

- Ideas always start somewhere – *someone* has to step forward!
- Passionate champion needed within organization (agency, OSTP, industry). Others must also care (or become convinced to care)
- Soft skills needed for community/consensus building and “selling”: good/great ideas don’t “win” on their own
- Community consensus (e.g., NRI white papers)

Need for thoughtful, scientifically-talented, well-spoken,
“aggressive” (in a good way) people to “move the needle” and lead
CISE research community (in many different ways) nationally
(this is why we have LISPI)

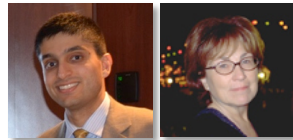
Thoughts, observations

- Understanding the larger value proposition: progress of science (yes), but also national economic competitiveness, national health, security, defense, welfare
- Active research community support/leadership critical
 - providing technical foundations/rationale
 - “circling wagons and shooting in” can kill
- Again: it’s all about people!



Looking forward

Important: CISE science leadership – dedicated, creative IPA/Fed mix



**Deputy
Assistant
Directors**



Division/Office Directors



Advisors



Deputy Division/Office Directors

Looking forward

**Important: strong academic computing
presence in agencies, White House**



Backups

CISE programs address national priorities



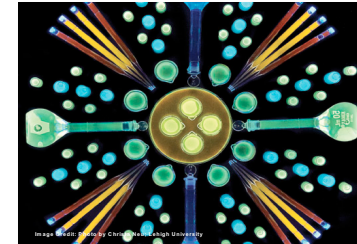
AI and Big Data



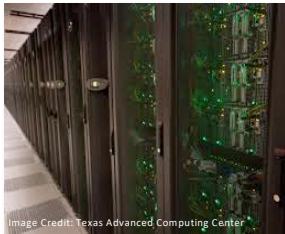
Cybersecurity



**Robotics &
Manufacturing**



**Quantum Information
Sciences**



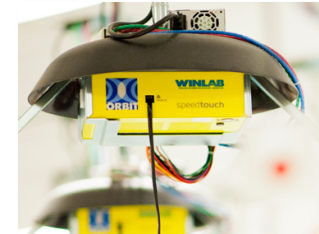
**Advanced
Cyberinfrastructure**



**Smart
Communities**



**Computer Science
Education**



**Advanced Wireless
Research**

