



# Intelligence Advanced Research Projects Activity (IARPA)

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# Overview

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IARPA's mission is to invest in **high-risk/high-payoff** research programs that have the potential to provide the U.S. with an overwhelming intelligence advantage over our **future** adversaries

- **This is about taking real risk.**
  - This is NOT about “quick wins”, “low-hanging fruit”, “sure things”, etc.
- **Failure is completely acceptable as long as ...**
  - It is not due to failure to maintain technical and programmatic integrity
  - Results are fully documented
- **Best and brightest.**
  - Competitive awards and world-class PMs.
  - Every IARPA program will start with a good idea and a good person to lead it. Without both, IARPA will not start a program.
- **Cross-community focus.**
  - Address cross-agency challenges
  - Leverage agency expertise (both operational and R&D)
  - Work transition strategies and plans

# The “P” in IARPA is very important

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- Technical and programmatic excellence are required
- Each Program will have a clearly defined and measurable end-goal, typically 3-5 years out.
  - Intermediate milestones to measure progress are also required
  - Every Program has a beginning and an end
  - A new program may be started that builds upon what has been accomplished in a previous program, but that new program must compete against all other new programs
- This approach, coupled with rotational PM positions, ensures that...
  - IARPA does not “institutionalize” programs
  - Fresh ideas and perspectives are always coming in
  - Status quo is always questioned
  - Only the best ideas are pursued, and only the best performers are funded.

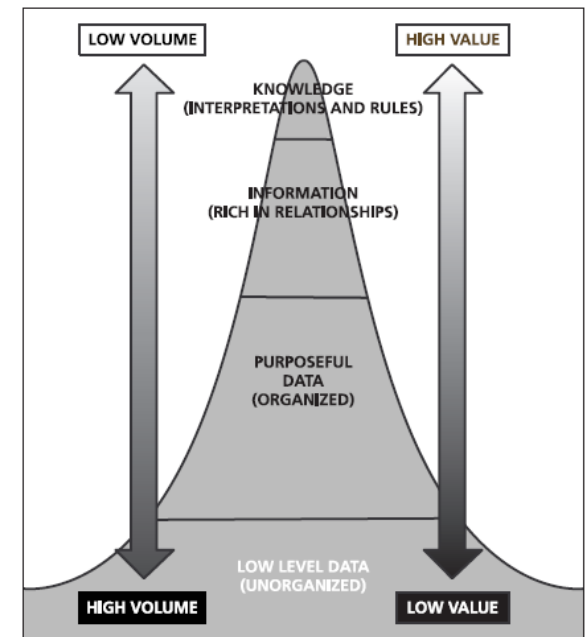
# The “Heilmeier Questions”

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1. What are you trying to do?
2. How does this get done at present? Who does it? What are the limitations of the present approaches?
  - Are you aware of the state-of-the-art and have you thoroughly thought through all the options?
3. What is new about your approach? Why do you think you can be successful at this time?
  - Given that you’ve provided clear answers to 1 & 2, have you created a compelling option?
  - What does first-order analysis of your approach reveal?
4. If you succeed, what difference will it make?
  - Why should we care?
5. How long will it take? How much will it cost? What are your mid-term and final exams?
  - What is your program plan? How will you measure progress? What are your milestones/metrics? What is your transition strategy?

# The Three Strategic Thrusts (Offices)

- **Smart Collection:** dramatically improve the value of collected data
  - Innovative modeling and analysis approaches to identify where to look and what to collect.
  - Novel approaches to access.
  - Innovative methods to ensure the veracity of data collected from a variety of sources.
- **Incisive Analysis:** maximizing insight from the information we collect, in a timely fashion
  - Advanced tools and techniques that will enable effective use of large volumes of multiple and disparate sources of information.
  - Innovative approaches (e.g., using virtual worlds, shared workspaces) that dramatically enhance insight and productivity.
  - Methods that incorporate socio-cultural and linguistic factors into the analytic process.
  - Estimation and communication of uncertainty and risk.
- **Safe and Secure Operations:** countering new capabilities of our adversaries that could threaten our ability to operate effectively in a networked world
  - Cybersecurity
    - Focus on future vulnerabilities
    - Approaches to advancing the "science" of cybersecurity, to include the development of fundamental laws and metrics
  - Quantum information science & technology



# Concluding Thoughts

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- Technical Excellence & Technical Truth
  - Scientific Method
  - Peer/independent review
  - Full and open competition
- True multidisciplinary approaches will be key.
- We are looking for outstanding PMs.
- How to find out more about IARPA:

[www.iarpa.gov](http://www.iarpa.gov)



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Future Events TBD

### SOLICITATIONS

- > [BAA: IARPA-BAA-09-09](#)  
Circuit Analysis Tools (CAT) Broad Agency Announcement (BAA)
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Multi-qubit Coherent Operations Program Broad Agency Announcement (BAA)
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- > [RFI: IARPA-RFI-09-04](#)  
Cultural Insights from the Use of Metaphors Program Request for Information (RFI)
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### JOIN IARPA

Are you a scientist or engineer with a creative idea that you think could provide the nation with an overwhelming intelligence advantage? If so, consider [joining IARPA](#) as a Program Manager.