

CORRECTED COPY: MEDIA ADVISORY: IDA Groundbreaking Ceremony to be held at Potomac Yard

**ALEXANDRIA, VA (August 2019)** – The Institute for Defense Analyses (IDA) will break ground on our Potomac Yard facility at 730 East Glebe Road, Alexandria, VA on Tuesday, August 13 at 8:00 a.m.

IDA Board of Trustees Chair Pete Geren and President Dr. David S.C. Chu will be joined by City of Alexandria officials to mark the latest milestone in building a new, state of the art facility in the heart of Northern Virginia's blossoming high tech corridor. Construction on the new 370,000 square foot facility is expected to be completed by early 2022.

Members of the media who would like to cover the ceremony or request additional details should email communications@ida.org.

IDA is a nonprofit corporation that operates three Federally Funded Research and Development Centers in the public interest. IDA answers the most challenging U.S. security and science policy questions with objective analysis leveraging extraordinary scientific, technical, and analytic expertise.



# Order of Events Tuesday, August 13, 2019

**7:55 a.m.** Guests are asked to make their way to their seats

8:00 a.m. Ceremony begins

8:05 – 8:15 a.m. Speakers

City of Alexandria Councilwoman Del Pepper

• IDA Board Chair Pete Geren

• IDA President Dr. David S.C. Chu

**8:20 a.m.** Official shovel ceremony and photo opportunity

8:35 a.m. Ceremony conclusion

**8:40 – 8:55 a.m.** Media time with principals

### **Pictured in Groundbreaking Shovel Ceremony**

- Del Pepper (City of Alexandria Councilwoman)
- Pete Geren (IDA Board of Trustees Chair)
- Dr. David S.C. Chu (IDA President)
- Dean Graves (IDA Director of Special Projects)

Last Update: August 8, 2019







### INSTITUTE FOR DEFENSE ANALYSES

### **Fact Sheet**

IDA (Institute for Defense Analyses) – a nonprofit corporation headquartered in Alexandria, Virginia, just outside Washington, DC – operates three Federally Funded Research and Development Centers (FFRDCs) in the public interest: the Systems and Analyses Center, the Science and Technology Policy Institute, and the Center for Communications and Computing. IDA provides objective analyses of national security issues and related national challenges, particularly those requiring extraordinary scientific, technical, and analytic expertise.

Sponsors rely on IDA for dispassionate, fact-based, and scientifically rigorous research and advice to inform their decisions. Since 1956, IDA has the best scientific, technical, and analytic talent on issues critical to U.S. national security, in a research environment free of commercial or shareholder interests where objectivity and the public interest are foremost.

The work produced by IDA's FFRDCs is characterized by unquestioned objectivity and high quality. Because of our unique relationship with our U.S. Government sponsors, IDA enjoys unusual access to highly classified and sensitive government and corporate proprietary information. We adhere to a strict regime for avoiding conflicts of interest. We are thus in the position of offering outsider perspectives on important issues with insider access to information.

At IDA, our focus is on hiring a diverse range of experienced professionals, new graduates, skilled technicians, and military veterans in assembling a team reflective of the work we do. We look for talented individuals with undergraduate and graduate degrees, including PhDs who are interested in working on some of the most challenging projects. Regardless of where you are in in your career, the experience you have will enhance the full spectrum of talents we bring to bear on the work for our sponsors.

### POTOMAC YARD FACILITY

In 2016, IDA purchased a site located at 730 East Glebe Road in Alexandria, Virginia. The purchase allowed IDA to remain within the City of Alexandria, where they have been located since 1986. The location in Alexandria's Potomac Yard community sits about a block from a future Metro station and the new Virginia Tech Innovation Campus. Once the Metro stations opens, IDA will be less than 10 minutes from the Pentagon, allowing staff and sponsors easy access in both directions. IDA is expected to move to Potomac Yard in January 2022.

- Today's ceremony marks the beginning of the construction of a new, state-of-the-art facility in the heart of Northern Virginia's blossoming high-tech corridor and is the latest milestone in a longstanding partnership between IDA and the City of Alexandria that began nearly four decades ago.
- The Potomac Yard community will be a much more vibrant community than the Mark Center, with opportunity for engagement with the new Virginia Tech Innovation Campus opening nearby.
- The new 370,000 square foot facility will afford IDA staff:
  - Modern conference room space, design, and amenities
  - Dedicated conference center
  - On-site café
  - Health and fitness center
  - Improved design for evolving security requirements
  - Better collaboration space



Last Update: August 9, 2019



## **Groundbreaking Ceremony Speakers**

## Mrs. Del Pepper Councilwoman, City of Alexandria



Del Pepper was first elected to the City Council in 1985. She served as Vice Mayor from 1996 to 1997, from 2003 to 2006, and from 2007 to 2009. Pepper co-chairs the Beauregard Street Corridor Task Force, the Alexandria-Arlington Task Force on the Waste-To-Energy Plant and the Welfare Reform Committee (Alexandria Works!). She is active with the Commission on Aging, Commission on Information Technology, Facilities Naming Committee, and the Council of Governments Air Quality Committee and Board of Directors. She was recently elected Corporate President of the COG. She is a member of the Northern Virginia Regional Commission, where she also chairs the Regional Resources Committee.

Councilwoman Pepper serves on the Boards of the YMCA, the T.C. Williams PTSA, the Alexandria Arts Forum, Bienvenidos, and the Retired Senior Volunteer Program. She is a former first vice president of the local NAACP and former board member of the City's Community Services Board. Other affiliations include the Urban League, the League of Women Voters, and the Sierra Club. She is a recipient of the Jaycees Appreciation Award, the Council of Senior Citizens Organization's Outstanding Women of Alexandria Award, and the Commission for Women's Living Legend Award. Pepper is a Grinnell College graduate. A resident of the City's west end, she and her husband, Dr. F.J. Pepper, have one son.

Mr. Preston "Pete" Geren Chair, Institute for Defense Analyses Board of Trustees President, Sid W. Richardson Foundation



Pete Geren serves as Chairman of the Board of Trustees of the Institute for Defense Analyses. IDA is a non-profit corporation operating in the public interest. Its three federally funded research and development centers provide objective analyses of national security issues and related national challenges, particularly those requiring extraordinary scientific and technical expertise.

Mr. Geren served for four terms in the United States House of Representatives from Texas's 12th District from 1989 until 1997. He joined the Department of Defense in September 2001 to serve as Special Assistant to the Defense Secretary with responsibilities in the

areas of inter-agency initiatives, legislative affairs, and special projects. He is former U.S. Secretary of the Army.

Mr. Geren is currently president of the Sid W. Richardson Foundation in Fort Worth, Texas.



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# Dr. David S.C. Chu President, Institute for Defense Analyses



David Chu serves as President of the Institute for Defense Analyses. IDA is a nonprofit corporation operating in the public interest. Its three Federally Funded Research and Development Centers answer the most challenging U.S. security and science policy questions with objective analysis, leveraging extraordinary scientific, technical, and analytic expertise.

As president, Dr. Chu directs the activities of more than 1,000 scientists and technologists. Together, they conduct and support

research requested by federal agencies involved in advancing national security and advising on science and technology issues.

Dr. Chu served in the Department of Defense as Under Secretary of Defense for Personnel and Readiness from 2001 to 2009, and earlier as Assistant Secretary of Defense and Director for Program Analysis and Evaluation from 1981 to 1993.

From 1978-1981 he was the Assistant Director of the Congressional Budget Office for National Security and International Affairs.

Dr. Chu served in the U. S. Army from 1968-1970. He was an economist with the RAND Corporation from 1970–1978, director of RAND's Washington Office from 1994 to 1998, and vice president for its Army Research Division from 1998 to 2001.

He earned his doctorate in economics, as well as a bachelor of arts in economics and mathematics, from Yale University.

Dr. Chu is a member of the Defense Science Board and a Fellow of the National Academy of Public Administration. He is a recipient of the Department of Defense Medal for Distinguished Public Service with Gold Palm, the Department of Veterans Affairs Meritorious Service Award, the Department of the Army Distinguished Civilian Service Award, the Department of the Navy Distinguished Public Service Award, and the National Academy of Public Administration's National Public Service Award.

Last Updated: August 9, 2019



### **Partners**

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- Arent Fox
- McGuireWoods LLP
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- MVA LLP
- City of Alexandria
- Alexandria Economic Development Partnership

Last Update: August 12, 2019





# **Architectural Renderings**



Building - Northeast View



Building - Southwest View

Last Update: August 8, 2019



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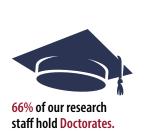


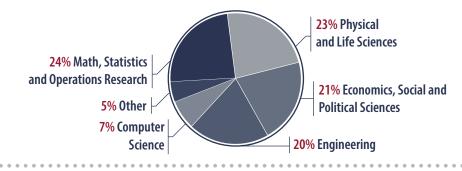
Founded in 1956, the Institute for Defense Analyses operates three Federally Funded Research and Development Centers.

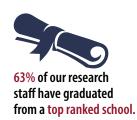
Our locations across the United States



# WE HAVE A STRONG ACADEMIC BACKGROUND







# **WE ARE HERE TO STAY**

**Retention rate of 94%** 



# **RECRUITING**

~ 11,700 applications annually

183 hired

Recent graduate new hires come from across the country.

Competitive Summer Internship Program

# WE HAVE SERVED OUR NATION

20% of employees are veterans















# WE INVEST IN OUR EMPLOYEES

\$2.6M

Spent on Staff Training and Professional Development

\$4,829

Average financial assistance to an employee pursuing academic training

IDA provides objective analyses of national security issues and related national challenges, particularly those requiring extraordinary scientific, technical, and analytic expertise.

# What Is an FFRDC?

Federally Funded Research and Development Centers (FFRDCs) are unique, private-sector entities that have unusually close, special relationships with their U.S. Government sponsors. They meet long-term research or development needs that cannot be met as effectively by existing governmental or contractor resources. FFRDCs typically assist government agencies with scientific research, systems development and acquisition, and analyses of other issues that are integral to the missions and operations of the agencies they support. They bring together the expertise and outlook of government, industry, and academia to solve complex problems.

First established during World War II, FFRDCs operate in the public interest as strategic partners with their sponsoring government agencies to ensure the highest levels of objectivity and technical excellence. They are typically managed by universities or nonprofit organizations in accordance with regulatory guidelines.



The FFRDC is required to conduct its business in a manner befitting its special relationship with the Government, to operate in the public interest with objectivity and independence, to be free from organizational conflicts of interest, and to have full disclosure of its affairs to the sponsoring agency.

-48 C.F.R. § 35.017(a)(2) 1990

# IDA manages three FFRDCs:

- Systems and Analyses Center for the Office of the Secretary of Defense
- Center for Communications and Computing for the National Security Agency
- Science and Technology Policy Institute for the White House Office of Science and Technology Policy and the National Science Foundation

Government sponsors turn to these FFRDCs for three reasons: our independence; our freedom from conflicts of interest; and our record of producing rigorous, informed, data-driven analyses that impact government decisions. A trusted, compelling contributor to U.S. security and technology debates, IDA analyzes issues and challenges of national importance, particularly those requiring extraordinary scientific, technical, and analytic expertise.

IDA has no other lines of business outside the FFRDC framework. Our sole focus is on supporting our government sponsors in service to the nation.

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The IDA Systems and Analyses Center (SAC) is one of three Federally Funded Research and Development Centers (FFRDCs) operated by the Institute for Defense Analyses (IDA), a nonprofit corporation. Sponsored by the Office of the Secretary of Defense (OSD), SAC maintains an unusually close, special relationship with the U.S. Government. SAC traces its roots to 1956 when IDA was formed. IDA's mission is to provide objective analyses of national security issues and related national challenges, particularly those requiring extraordinary scientific, technical, and analytic expertise.

## **Our federal agency sponsors**

In addition to OSD, SAC's sponsors include other joint organizations in the Department of Defense (i.e., the Joint Staff, the Combatant Commands, the Defense Agencies, and joint programs and activities). SAC conducts research for the military departments in circumstances that ensure no conflict of interest will arise.

With the encouragement and approval of OSD, SAC also conducts appropriate research for other federal departments and agencies.



To guard its objectivity and freedom from conflicts of interest, SAC does no work for commercial firms, has no financial or other stake in the implementation of its findings, and does not compete for federal contracts. SAC research projects undergo a rigorous review process to ensure the quality, independence, and objectivity of the analyses.

## Our highly experienced, interdisciplinary staff

SAC has a high-quality, interdisciplinary research staff blending long-standing experience and current knowledge to provide both corporate memory and state-of-the-art expertise. More than 90 percent of the research staff have advanced degrees; over 55 percent have PhDs. About 70 percent of SAC researchers were educated in engineering, physical and life sciences, mathematics and statistics, and computer science; the remainder were educated in economics, political science, business, and other social sciences. When needed to address sponsor problems, SAC augments its regular staff with a deep bench of adjunct staff members and consultants with specialized expertise. IDA encourages its researchers to be active professionally—including publishing in the open literature—to maintain currency and to promote career development.

### Our research focus

Initially, SAC analyzed weapons systems, tactical doctrine, and force structure issues. Over succeeding decades, SAC's research capabilities broadened to meet the evolving needs of its sponsors. Today, SAC blends expertise in technologies and systems with deep knowledge of costs, policies, human capital, intelligence, advanced analytic methods, and sponsor organizations and processes.

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SAC's contributions include the following:

- Evaluating systems and acquisition management
- Providing technical and analytic support for testing
- Supporting contingencies, commands, and operational and force planning
- Advancing cyber and information capabilities
- Analyzing resource allocation and national security economic issues
- Evaluating issues of intelligence, surveillance, and reconnaissance (ISR); chemical, biological, radiological, and nuclear (CBRN) defense; and space
- Analyzing resource allocation and national security economic issues
- Evaluating science and technology issues and operational effects
- · Assessing readiness, training, education, and personnel issues
- Evaluating institutions, management systems, processes, and support
- Analyzing international issues and regional security matters



SAC maintains a flat organizational structure; the directors of each of its eight research divisions, listed below, are responsible to IDA's President for sustaining needed research capabilities and for producing high-quality and timely analyses.

- Cost Analysis and Research Division
- Information Technology and Systems Division
- Intelligence Analyses Division
- Joint Advanced Warfighting Division

- Operational Evaluation Division
- Science and Technology Division
- Strategy, Forces and Resources Division
- System Evaluation Division

While each division has unique lines of research and expertise, sponsor problems often cut across division lines, resulting in the frequent assembly of cross-division teams that bring together interdisciplinary skills and diverse experiences to address national security challenges.

SAC research teams provide the best possible answers to sponsor questions, within the time and resources available. Their common goal is to improve government decision-making.





The IDA Science and Technology Policy Institute (STPI), located across from the White House in Washington, DC, is one of three Federally Funded Research and Development Centers (FFRDCs) operated by the Institute for Defense Analyses (IDA), a nonprofit corporation. STPI was established by Congress to inform policy decisions of the Office of Science and Technology Policy (OSTP) in the Executive Office of the President.

STPI's interdisciplinary staff provides responsive, high-quality analyses of national and international science and technology (S&T) issues important to OSTP and other executive branch sponsors, including the National Science Foundation, the National Institutes of Health, the National Aeronautics and Space Administration, the National Institute of Standards and Technology, the Department of Commerce, the Department of Energy, the Department of Homeland Security, and the Federal Aviation Administration.



## Addressing a range of topic areas

For these and other federal sponsors, STPI provides technical and analytical support that focuses on S&T issues across a wide range of areas:

- Critical infrastructure and resilience
- Energy and environment
- Homeland and national security
- Information and communication technologies
- Innovation and competitiveness
- International science and technology

- Life sciences
- Research and development infrastructure
- Science, technology, engineering, and mathematics (STEM) education and workforce
- Social and behavioral sciences
- · Space, aviation, and transportation

Some recent examples of STPI contributions to the federal S&T enterprise include:

- Policy analysis and development
  - Assessing federal policies that affect the national security
     S&T enterprise and infrastructure
  - Understanding federal initiatives and programs addressing the opioid crisis, including challenges, gaps, and areas for investment
  - Analyzing performance standards for immediate occupancy of commercial and residential buildings
- Program evaluation
  - Evaluating a federal program to fund basic research in behavioral and social sciences
  - Evaluating a program for transferring technology between national laboratories and industry
  - Providing an analysis of applications and awards of federal S&T grants to Hispanic-serving institutions



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- Science and technology assessment
  - Analyzing global trends in small satellite technology
  - Assessing the Federal Government's reliance on Earth observation systems
  - Analyzing threats to the electric power grid from geomagnetic-induced currents and man-made events
- Data collection and analysis
  - Analyzing the U.S. Antarctic logistics support program
  - Developing metrics for evaluating epidemiology and genomics research programs
  - Collecting and analyzing data to examine racial disparities in the federal research grants process
- Strategic planning and metrics
  - Evaluating priorities for critical infrastructure security and resilience
  - Developing priorities for clinical trials and other medical research
  - Assessing priorities and developing metrics for federal STEM education policies
- Economic and business case analysis
  - Forecasting the future economic impact of quantum information science
  - Assessing economic feasibility of privately funded space activities
  - Understanding aviation and commercial space-flight insurance requirements

# Leveraging a diverse and experienced staff

STPI's researchers include physical scientists, life scientists, engineers, social and behavioral scientists, economists, historians, STEM experts, and attorneys. Approximately three-quarters of the senior research staff



hold doctorates in their respective technical fields. When needed, STPI also draws on the talents of the large, diverse research staff of another IDA FFRDC, the Systems and Analyses Center, which supports the Office of the Secretary of Defense.

STPI's two-year Science Policy Fellowship Program provides recent bachelor's degree recipients with opportunities to develop professionally by using their critical thinking and analytic skills in support of a variety of S&T policy-related tasks.



Since the 1950s, the IDA Center for Communications and Computing has performed fundamental research in support of the National Security Agency's mission in cryptology, which includes both foreign signals intelligence and protecting the communications of the U.S. Government. The Center is a nonprofit entity operating in the public interest, consisting of the Centers for Communications Research with offices in Princeton, New Jersey (CCR-P), and La Jolla, California (CCR-L), and the Center for Computing Sciences in Bowie, Maryland (CCS). All three have developed distinct areas of expertise. Nonetheless, they work closely with each other and share many overlapping research teams.





### **Our research focus**

The research portfolio has evolved over the years as communications technologies have advanced. Today, areas of particular emphasis are the creation and analysis of sophisticated encryption methods, high-performance computing technologies, the development of advanced algorithms and their applications, algorithmic and mathematical foundations of cryptology, computer network technologies supporting communications security, information processing technologies supporting cyber security, and analytical applications for large data sets. This

list of problem areas gives no real hint as to the very wide diversity of mathematical approaches employed; virtually every branch of pure and applied mathematics has proved to be useful in these efforts.

Our success in providing cutting-edge research in mathematics and computer science to the National Security Agency (NSA) rests on four key pillars: exceptionally talented and versatile researchers, state-of-the-art computational capabilities, a close working relationship with NSA, and ongoing engagement with the broader research community so that the work can take advantage of advances in the academic and commercial worlds.

### Collaborative, academic environment

We work in an exceptionally collaborative, academic-style environment that combines unique areas of expertise. It is critical that we recruit the very best new mathematical talent, and we therefore foster and maintain close ties with the academic mathematical world. We emphasize breadth and depth in our mathematics. Because of the flexibility of the environment, some researchers focus on coding, while others may do none.

Perhaps the most important collaboration occurs during the summer workshops, called SCAMPs, which draw academics and others to use a concerted "tiger team" approach to tackling several truly difficult problems each summer. The invitees to these workshops

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are diverse in many ways: they come from the academic community and other research organizations; there are many levels of experience among the attendees, who range from seasoned researchers and distinguished faculty to advanced graduate students and exceptional undergraduate students; and the disciplinary backgrounds include mathematics, computer science, statistics, physics, and electrical engineering. In a typical summer, the three centers host more than a hundred visitors, and the intense and collegial atmosphere is well known.

### **Center for Communications and Research, Princeton (CCR-P)**

Dr. David Saltman, Director

The oldest of the three centers was founded in 1959 in Princeton, New Jersey, and was originally called the Communications Research Division. Our mission is to apply mathematical and computational research to cryptology and related disciplines. As the modes and means of modern communications have become more complex, we have expanded our



research into other areas including speech, the processing of signals to remove noise and distortion, and network security. Mathematics remains the fundamental science used to create and analyze the sophisticated algorithms used to encipher vulnerable communications and cryptologic problems. For more information, contact hiring@idaccr.org.

## **Center for Computing Sciences (CCS)**

Dr. Tad White, Director

CCS, founded in 1985, is located between Washington, DC, and Annapolis, Maryland. Initially focused on the development and use of high-performance computing, the CCS portfolio now includes cryptography, network security and related cyber issues, signal processing, advanced techniques for analyzing extremely complex data sets, and alternative



### Center for Communications Research, La Jolla (CCR-L)

Dr. Ryan (Skip) Garibaldi, Director

CCR-L was founded in 1989 in La Jolla, California, a hilly, seaside town within the city of San Diego. We focus on mathematical research related to cryptology and signals intelligence, including machine learning. The typical CCR-L researcher has a PhD in mathematics, although CCR-L also hires researchers with backgrounds in computer science and engineering. For more information, contact hiring@ccrwest.org.



### Work with us

You can discover what it's like to work at or with our centers without joining as a full-time employee by participating in the SCAMP Summer Program. For more information, contact the center of your choice.

U.S. citizenship is required for all applicants, and employment is contingent upon successful completion of a security background investigation and polygraph (which we sponsor).