

The Information Directorate's Information Institute® (II)

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AFRL/RI SEPTEMBER 2021



The Information Institute® (II): Established in 1996

Acknowledgement: Former Key "Contributors"





American Society for Engineering Education*
*currently contributes through the NDSEG



Cyber Research Institute (CRI)

JAG Technologies









The Information Institute® (II): Mission

- Strengthen and expand information technology research within the Information Directorate
- Develop collaborative relationships among and between the academic members and the Information Directorate
- Increase research emphasis in areas of information technologies critical to RI's mission

The II is a virtual organization created by the Information Directorate

The II facilitates on-site* fundamental research collaborations with academia

The AFRL/RI Information Institute® is a registered trademark of the United States Air Force

^{*} on-site collaborations will be the goal, but in deference to directorate health/safety policies



The Information Institute® (II): Description and Roles

- A Registered Trademark in 2018
- An RI Office
 - Established 1996
 - RI's principal outreach to academia
- A Virtual Organization
 - Membership through Educational Partnership Agreements (EPAs)
 - Consortium of universities performing research in areas of information technology of interest to the Information Directorate
- A Focal Point, Coordinator and Facilitator
 - RI faculty/student programs
 - AFOSR-funded faculty/student programs
 - National faculty/student programs





The Information Institute® (II): An RI Office

- Located in Building 106, second floor, room F2B-09 and F2B-12
- Faculty and Students are located:
 - In Building 3 with their Advisors/collaborators
 - At the Griffiss Institute (when necessary, e.g., for US Permanent Resident faculty and students)
 - On Griffiss Park
 - Conveniently close
- 2020/2021 have been unique years for everyone including the II
 - AFOSR's programs have been implemented/transitioned to remote collaborations for this year; updates on this policy to follow at later time
 - RI likewise has implemented their II component programs as remote collaborations; updates on this policy to follow at a later time
 - These policies are necessary but will impact some collaborations, e.g., when specialized equipment cannot be accessed by associates



The Information Institute® (II): A Virtual Organization, via Educational Partnership Agreements

- Formal, non-binding agreement, that establishes a mutual understanding between the university and RI
 - Establishes II membership for the university
- Useful for
 - Equipment exchange
 - Personnel hosting
 - Information exchange
- II membership benefits
 - Early access to program announcements, II bulletins
 - Notifications, like employment opportunities
 - Research networking/collaborations

Information Institute Membership

Air Force Academy

Air Force Institute of Technology

AFRL Information Directorate

Arizona State University

Boise State University

Brescia University

California State University, Northridge

Central State University

City College of New York

Clarkson University

Clayton State University

Colorado State University

Columbia University

Cornell University

Dartmouth Collage

Dillard University

Duke University

Embry-Riddle Aeronautical University

Farleigh Dickenson University

Florida Atlantic University

Florida Institute of Technology

Florida International University

Georgia Institute of Technology

George Mason University

Hamilton College

Howard University

Indiana University of Pennsylvania

Iowa State University

Kansas State University

LaSalle University

Louisiana State University

Louisiana Tech University

Michigan State University

Missouri University of Science & Technology

Navajo Technical University

New Jersey Institute of Technology

New York University

North Carolina Agricultural and Technical State

University

Northeastern University

Northern Arizona University

Northwestern University

Norwich University

Ohio State University

Prairie View A&M University

Princeton University

Purdue University

Rensselaer Polytechnic Institute

Rochester Institute of Technology

Rose-Hulman Institute of Technology

Rutgers, The State University of New Jersey

St. Mary's University

San Diego State University

SUNY Binghamton

SUNY Polytechnic Institute

SUNY Stony Brook

Syracuse University
Temple University

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Tennessee State University

Texas A&M University

Texas Southern University

The Pennsylvania State University

Tuskegee University

Universidad Ana G. Méndez, Gurabo

University at Albany

University of Arkansas

University of Buffalo

University of California, Berkley

University of California, Los Angeles University of California, Riverside

University of California, Santa Barbara

University of Central Florida

University of Cincinnati

University of Connecticut

University of Dayton

University of Florida

University of Hawaii

University of Illinois

University of Kansas

University of Maryland

University of Massachusetts, Amherst

University of Massachusetts, Dartmouth

University of Michigan

University of Minnesota, Twin Cities

University of Missouri, Kansas City

University of Nevada, Las Vegas

University of New Mexico

University of North Texas

University of Oklahoma University of Rochester

University of South Alabama

University of Southern California

University of South Carolina

University of South Florida, Tampa

University of Texas, Austin

University of Texas, Dallas

University of West Florida

University of Tulsa

Utah State University

Utica College

Vanderbilt University

Villanova University

Virginia Commonwealth University

Virginia Polytechnic Institute and State University

Washington University, St. Louis

Wichita State University

Wright State University

York College of Pennsylvania







The Information Institute® (II): A Focal Point of Programs

- AFRL/RI's focal point for fostering of, administration and oversight of, component on-site faculty (and student) research programs
 - AFOSR Summer Faculty Fellowship Program (SFFP)
 - Faculty and their Graduate Students
 - RI Visiting Faculty Research Program (VFRP)
 - Faculty and their Students
 - AFRL Science and Technology Fellowship Program (STFP)
 - (Formerly the National Research Council (NRC) Post-Doc Program)
 - Administered by The National Academies of Sciences Engineering and Medicine
 - Post-Doctoral Researchers, Senior Researchers
 - RI Research Fellowship Program
 - PhD Candidate Researchers
 - Post-Doctoral Researchers
 - Senior Researchers
 - National Defense Science and Engineering Graduate (NDSEG) Fellowship
 - PhD Students
 - Administered by Systems Plus Inc. (SysPlus)



The Information Institute® (II): A Focal Point of Programs

Information Directorate

Function

- Funding support; II function
 - VFRP
 - Extension Awards (VFRP and SFFP)
 - RI Research Fellowship
 - II Membership EPAs



AFOSR

Function

- Funding support
 - SFFP Contracted through SysPlus, Inc
 - STFP (Science and Technology Fellowship Program)
 Contracted through the National Academies









Function

Solicit input from labs



Information Institute





RI Research Fellowship

STFP

NDSEG



The Information Institute® (II): SFFP, VFRP, By the Numbers



II Visiting Research Faculty Program (VFRP)

 Funded by II and Technical Divisions

http://www.wpafb.af.mil/afrl/ri/

- AFOSR Summer Faculty Fellowship Program (SFFP)
 - 31 Fellows in 2020
 - 21 Fellows in 2019
 - 20 Fellows in 2018

http://afsffp.sysplus.com/

Year	Professors	Students		
2016	64	25		
2017	54	15		
2018	56	16		
2019	42	11		
2020	61	17		

*SFFP = 36 F; 9 S Current as of 9/27/2021 **VFRP** = 34 F; 8 S



The Information Institute® (II): Impact

Impact to AFRL/RI

- Early access to innovation
- Help us stay abreast of new technology trends
- Enhance the RI workforce
- Help foster a collegial environment for research
- Serve as mentors for staff enrichment
- Source of seminar speakers
- Serve as a clearing house and broker for collaborative research opportunities



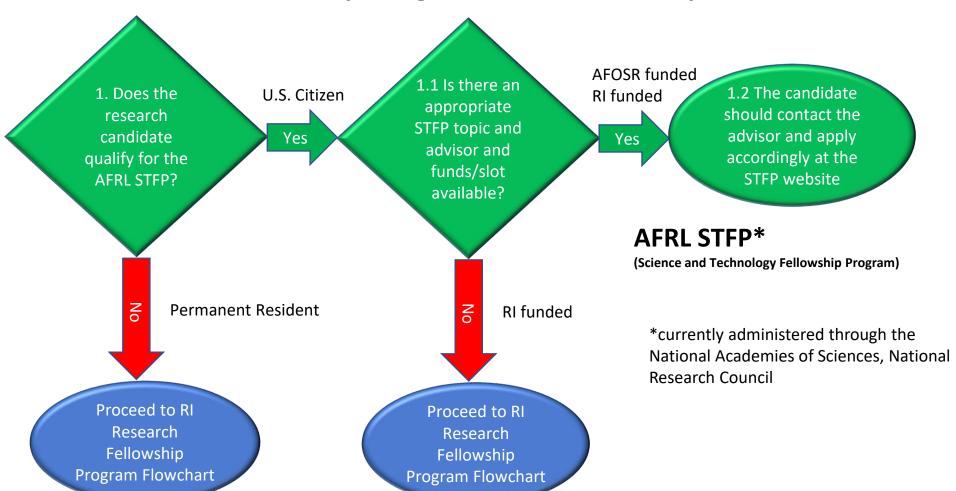
Impact to Academia

- Interesting problems
- Opportunities for collaborative research
- Employment opportunities for students (and Post-Docs)
- Sabbatical leave appointments
- Financial support for research
- Aid in the transition of technology to customers
- Connection to research opportunities with AFOSR



The Information Institute® (II): General Background on Hosting On-Site Post-Doctoral and Senior Researchers

Fellowship Programs Utilization Steps



THE AIR FORCE RESEARCH LABORATORY

AFRL

The Information Institute® (II): General Background on Hosting On-Site Post-Doctoral and Senior Researchers

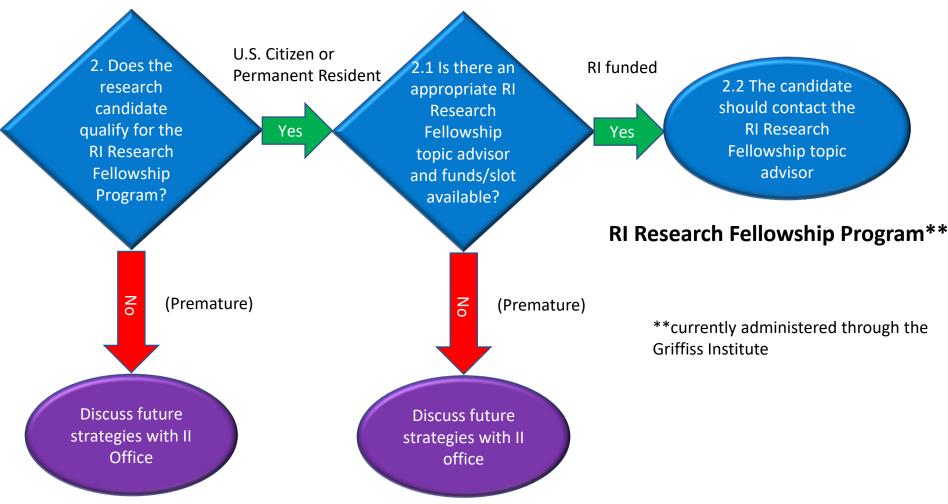
The following chart can be used by RI research topic advisors (VFRP, SFFP, or STFP) and others as a guide for the RI Research Fellowship Program.

Note: these are funded by the advisor with RI project funds.



The Information Institute® (II): General Background on Hosting On-Site Post-Doctoral and Senior Researchers

Fellowship Programs Utilization Steps



THE AIR FORCE RESEARCH LABORATORY



Other Example Opportunities for Research

- II related:
 - Extension Awards (formerly called Extension Grants); watch for our call for proposals (open to VFRP or SFFP summer associates at RI)
- Non II related (contractual):
 - SBIR/STTR; Small Business Innovative Research, Small Business Technology Transfer https://www.sbir.gov/tutorials/program-basics/tutorial-1
 - BAAs; Broad Agency Announcements https://www.wpafb.af.mil/afrl/ri/
- AFOSR sponsored
 - BAA; <a href="https://www.afrl.af.mil/About-Us/Fact-Sheets/Fact-Sheets/Fact-Sheets/Fact-Sheets/Fact-Sheets/Pact-
 - Includes various things, such as Multi-disciplinary University Research Initiative (MURI)



The Information Institute® (II): Program Utilization Matrix

		II Hosting Mechanism							
INFORMATION INSTITUTE e-mail: rrs.iiweb@us.af.mil		AFOSR Summer Faculty Fellowship Program (SFFP)	RI Visiting Faculty Research Program (VFRP)	AFRL Science and Technology Fellowship Program (STFP)		RI Research Fellowship Program			
				Post-Doc	Senior	Doctoral Candidate	Post-Doc	Senior	
	AFOSR Funded	Yes	Not Directly	6 "s	lots"	Not Directly	Not Directly	Not Directly	
Program Characteristics	RI Funded	No	Yes	Can be	Can be	Yes (advisor)	Yes (advisor)	Yes (advisor)	
	U.S. Citizen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	Permanent Resident	No	Yes	No	No	Yes	Yes	Yes	
	Tenure Dates	Summer	Summer and Flexible	See below	See below	See below	See below	See below	
	Opening Flexibility	No	Can be (if outside of main summer component)	Quarterly	Quarterly	Yes	Yes	Yes	
Pro	Tenure Duration Flexibility	No	Can be (if outside of main summer component)	1 Year with 1 Year Renewal Possible	Typically 1 Year	Minimum 2 Months	Typically 1 Year, Minimum 2 Months	Typically 1 Year, Minimum 2 Months	
	On-Site Location	RI Facilities	Permanent Residents Hosted at Open Campus	RI Facilities	RI Facilities	Permanent Residents Hosted at Open Campus	Permanent Residents Hosted at Open Campus	Permanent Residents Hosted at Open Campus	

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Questions?

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The Information Institute® (II)

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