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GENERAL OVERVIEW
INSTITUTE FOR POLITICS AND STRATEGY

WELCOME

At Carnegie Mellon University (CMU), the Institute for Politics and Strategy (IPS) is home to the study of politics through the discipline of political science. Since its founding in 2015, IPS has grown rapidly.

In the spring semester of 2018, CMU elevated IPS to a university-wide institute. This status will help to build on the interdisciplinary work that IPS has conducted since its founding by facilitating partnerships throughout campus, especially new efforts involving technology, policy, and the social sciences.

The main objective of IPS is to foster in students the ability to think about politics systematically. This requires analytical training in both quantitative and qualitative methods. IPS does this through both undergraduate and graduate academic programs, along with research opportunities.

The following review demonstrates the growth IPS has made throughout the past two academic years.

ACADEMIC PROGRAMS

BACHELOR OF SCIENCE IN INTERNATIONAL RELATIONS AND POLITICS (IRP)

The name of the major signifies that those studying IRP do so by examining both international relations and domestic politics. IRP offers courses and research opportunities with faculty in most of the subfields of political science, including domestic politics, comparative politics, international relations, and theory. In order for students to be able to engage in these courses in a systematic, analytical manner, the IRP major is offered as a Bachelor of Science degree. Therefore, students have prerequisites in mathematics, statistics, and analytical methods.

The IRP major focuses on the study of grand strategy and political institutions through the discipline of political science. At the same time, the major draws on interdisciplinary methods as students are exposed to the use of game theory, economic and statistical analysis, qualitative analysis, rational choice theory, and theories of behavioral decision-making.

In the spirit of interdisciplinary methods, IRP launched an innovative initiative to incorporate decision science into international relations. The combination of international relations and decision science enables students to learn and apply the science of decision-making to understanding political actors’ strategies, the strengths and weaknesses of formal methods of policy analysis (e.g., cost, risk, benefit, analysis), and the factors shaping public responses to politics and policies.

BACHELOR OF SCIENCE IN ECONOMICS AND POLITICS

Politics and economics are deeply interconnected. Political institutions and decision-making impact economic growth, income distribution, and many other aspects of economic life. Both fiscal and monetary policies affect the economy, but these policies are often employed with political considerations in mind and can influence political activity. Conversely, economic outcomes shape political preferences and policy choices. The overlap between these two disciplines is endless.

The BS in Economics and Politics is an interdisciplinary major. It is offered jointly between the Undergraduate Economics Program (UEP) and IPS. Students are equal members of both academic units and receive advising from both units.

IPS’ strengths lie in topics like national security, grand strategy, and globalization. Economic policy is just one facet of grand strategy, through which an administration pursues domestic and international goals. This major addresses key issues such as the complementarity between the multilateral economic institutions such as the IMF and World Bank and the use of economic coercion, and enables students to understand economic statecraft more broadly. Whether coercion is successful depends not just on the levers of power but on also on variations in authoritarian regime structure, and complex linkages in the international economy. This is
also important for our understanding of the relationship between international economics on human rights practices, extending even to how treaty commitments can facilitate compliance with a global initiative to combat climate change. And, not least important, there is broad recognition that the viability of the “Euro Zone” depends on whether the political-economic agreements necessary to mitigate institutional weaknesses are politically feasible or destined to failure.

MINOR IN INTERNATIONAL RELATIONS AND POLITICS

The study of grand strategy and political institutions is the flagship initiative of the minor. Students analyze the role of politics at the national, regional, international, and transnational levels, examine political and institutional arrangements within and among these levels and investigate the grand strategy of nation-states. Similar to the major in International Relations and Politics, students with the minor engage with political science in an interdisciplinary manner through the perspectives of behavioral decision science, complex social systems, economics, strategy, entrepreneurship and technological change, and political history.

MINOR IN CYBERSECURITY AND INTERNATIONAL CONFLICT

The minor in Cybersecurity and International Conflict is a new initiative from IPS, which launched in the fall semester of 2018. The minor tackles the social-scientific dimensions of cybersecurity with a focus on the implications for modern statecraft, warfare, elections (local, state, and national), and politics. The minor aims to give students foundational knowledge in the strategy surrounding cybersecurity. The emphasis on strategy and political concerns supplements a technical degree. Additionally, basic knowledge of technology concepts regarding cybersecurity supplements a social science degree.

MINOR IN POLITICS AND PUBLIC POLICY

Rooted in the discipline of political science, the minor in Politics and Public Policy investigates US public policy issues and other matters of domestic politics while providing students hands-on and practical learning experiences. Students pursuing the minor must participate in the Carnegie Mellon University Washington Semester Program (CMU/WSP).

CARNEGIE MELLON WASHINGTON SEMESTER PROGRAM (CMU/WSP)

The CMU/WSP program was designed for students from all disciplines to gain experience in our nation’s policy center. Students intern twenty-four hours per week in any sector or field of interest in Washington, DC, while taking a full semester of courses taught by IPS faculty. On a daily basis, students are exposed to national thought leaders and public servants, engaging them in the most pressing issues of today.

ACCELERATED MASTER OF SCIENCE IN INTERNATIONAL RELATIONS AND POLITICS (IRP/AMP)

The accelerated Master of Science in International Relations and Politics allows undergraduate students at CMU to complete a master’s degree in one additional year of study. Open to students with a major or minor in the Institute for Politics and Strategy, applications are due in the spring of the junior year. Students complete some coursework towards the master’s degree in the senior year, pursue an internship during the summer between the fourth and fifth years, and write a graduate thesis in the fifth year. IRP/AMP students participate in a three-day networking trip during the fifth year and are included in regular roundtables with policy and political thought leaders. Students may receive a half-tuition fellowship for the fifth year.

For the generation of students we are now teaching, war has been a constant in their lifetime. Accordingly, the primary focus of the IRP/AMP is international security. Perhaps at no time since the interwar period of the twentieth century has there been so much uncertainty about what path the international system will take and how states will internally organize themselves. Courses in political institutions are also integral to IRP/AMP because they enrich students’ scientific understanding of political processes.

IRP/AMP prepares students with a comparative advantage in the job market and makes them more competitive for doctoral programs and
law school. Our first cohort of IRP/AMP students graduated in the spring semester of 2018.

MASTER OF INFORMATION TECHNOLOGY STRATEGY (MITS)

The Master of Information Technology Strategy is a cooperative endeavor of CMU’s College of Engineering, School of Computer Science, and the Institute for Politics and Strategy. The rapidly evolving landscape of technology and related cyber challenges requires an understanding of the broad range of network and cyber operations, data analytics and forensics, cyber security, decision science, politics and strategy, international security, and the ability to apply best practices to solutions.

For students interested in becoming leaders within the information and cyber-security domains, the MITS program offers a multidisciplinary approach, within which students obtain:

- Breadth through the study of four areas: Data Analytics, Politics and Strategy, Information Security, and Software and Networked Systems, and
- Depth through a concentration in one of those areas.

CENTER FOR INTERNATIONAL RELATIONS AND POLITICS (CIRP)

The Center for International Relations and Politics emerged in connection with the IRP major in the 1999–2000 academic year. CIRP houses both programmatic and research work.

POLICY FORUM

The Policy Forum represents one of the means by which the Center for International Relations and Politics integrates international relations and politics into the intellectual conversation at Carnegie Mellon University. CIRP’s Policy Forum regularly brings statesmen, scholars, policy makers, journalists, and other thought leaders to the university to address major issues facing the United States and the world.

From free trade to technological developments and cybersecurity, the CIRP Policy Forum engaged students on emerging issues relevant to international affairs. Students were also able to hear from subject matter experts in domestic policy matters that have become salient in recent years.

RESEARCH

IPS highly encourages both undergraduate and graduate students to engage in research. Students have the opportunity to conduct independent research with faculty, apply to research assistant positions for projects that faculty are working on, or apply to research associate positions in the CIRP Research Lab.

In the CIRP Research Lab, students use both quantitative and qualitative analysis for several research projects. The lab’s main project is titled Organizing for War (OFW). The goal of the OFW project is to observe the shifts in US grand strategy throughout the Cold War regarding the Middle East and terrorism.

CIRP JOURNAL

Launched in 2013, the CIRP Journal showcases interdisciplinary research by Carnegie Mellon University students. Every edition contributes to scholarly literature on politics, yet each edition focuses on a unique topic. For example, past journal topics include national security and international development. Many of the students published in the journal have gone on to work in the same fields about which they wrote for the CIRP Journal.

INSTITUTE FOR STRATEGIC ANALYSIS

The Institute for Strategic Analysis (ISA) was founded in 2013 to facilitate engagement between government leaders and CMU faculty, an important exercise in applied studies. ISA organizes scientific short courses and year-long seminars in cyber security and other military challenges for government officials. In these courses, government officials are introduced to research by CMU faculty members who are leaders in their fields. This engagement aims to help our national security apparatus to better defend the nation against a range of constantly changing threats.
ORGANIZATION CHART

Institute for Politics and Strategy (IPS)

Degree-Granting Programs

Graduate Programs

Accelerated MS International Relations and Politics (IRP/AMP)

Master of Information Technology Strategy (MITS)

Undergraduate Programs

BS International Relations and Politics (IRP)

BS Economics and Politics

Minor in International Relations and Politics

Minor in Cybersecurity and International Conflict

Minor in Politics and Public Policy

Carnegie Mellon University Washington Semester Program (CMU/WSP)

Center for International Relations and Politics (CIRP)

Institute for Strategic Analysis (ISA)

CIRP Journal

Research Lab

Policy Forum

Visitors and Events

Executive Education

IPS AFFILIATIONS

• American Political Science Association (APSA)
• Consortium for Educational Resources on Islamic Studies (CERIS)
• Consortium on Qualitative Research Methods (CQRM)
• International Studies Association (ISA)
INSTITUTE FOR POLITICS AND STRATEGY

STUDENT ENROLLMENT: END OF THE ACADEMIC YEAR

- Master of Information Technology Strategy
- MS International Relations and Politics (IRP/AMP)
- BS Economics and Politics
- Cybersecurity and International Conflict Minor
- Politics and Public Policy Minor/BHA Concentration
- IRP Minor
- IRP additional major/BHA concentration
- BS International Relations and Politics (IRP)

Years:
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019

Counts:
- 2008: 15
- 2009: 36
- 2010: 76
- 2011: 97
- 2012: 99
- 2013: 98
- 2014: 80
- 2015: 76
- 2016: 106
- 2017: 144
- 2018: 152
- 2019: 161

Legend:
- Dark blue: BS International Relations and Politics (IRP)
- Light blue: IRP Minor
- Gray: IRP additional major/BHA concentration
- Light gray: MS International Relations and Politics (IRP/AMP)
- Light green: Cybersecurity and International Conflict Minor
- Light purple: Politics and Public Policy Minor/BHA Concentration
- Light red: BS Economics and Politics
- Light orange: Master of Information Technology Strategy

Total Enrollment:
- 2008: 15
- 2009: 36
- 2010: 76
- 2011: 97
- 2012: 99
- 2013: 98
- 2014: 80
- 2015: 76
- 2016: 106
- 2017: 144
- 2018: 152
- 2019: 161

Total Enrollment Over Years:
- 2008-2019: 989
### Student Internships

#### Museum/Arts
- Ford’s Theater
- National September 11 Memorial and Museum
- United States Holocaust Memorial Museum

#### Military Service
- United States Marine Corps
- United States Navy

#### Embassy
- US Mission to the European Union
- Peruvian Embassy in Washington, DC
- US Embassy in Seoul, South Korea

#### Media
- Xinhua Media Entertainment
- PoliticsPA
- MSNBC

#### Consulting/Contractor
- McKinsey Consulting
- Deloitte
- Raytheon
- Lockheed Martin

#### Legal/Advocacy
- ACLU
- Massachusetts Education Justice Alliance
- World Affairs Council

#### Government
- NASA
- CIA
- Pittsburgh Mayor Bill Peduto’s Office
- Singapore Prime Minister’s Office

#### Political Science
- Senator Bob Casey (D-PA)
- Senator Ron Johnson (R-WI)
- US Senate Committee on Foreign Relations

#### Consulting/Contractor
- RAND
- Council on Foreign Relations
- Institute for the Study of War

### Data Presented
Data presented here represents all internships held by International Relations and Politics primary and additional majors between 2011 and 2019. The lists below each category demonstrate a few examples for that category.
FACULTY AND STAFF

DIRECTOR, EXECUTIVE COMMITTEE, AND CORE FACULTY

KIRON SKINNER
Director and Taube Professor, Institute for Politics and Strategy; Director, Center for International Relations and Politics; Director, Institute for Strategic Analysis; Distinguished Fellow, Cylab; W. Glenn Campbell Research Fellow, Hoover Institution

INTERIM DIRECTOR, EXECUTIVE COMMITTEE, AND CORE FACULTY

BARUCH FISCHHOFF
Howard Heinz University Professor, Institute for Politics and Strategy and the Department of Engineering and Public Policy; Member, National Academy of Sciences, National Academy of Medicine; Past President, Society for Judgment and Decision Making, Society for Risk Analysis

EXECUTIVE COMMITTEE

KATHLEEN CARLEY
Professor of Computer Science, Institute for Software Research; Fellow, Institute of Electrical and Electronics Engineers (IEEE); Director, Center for Computational Analysis of Social and Organizational Systems (CASOS)

CORE FACULTY

COLIN CLARKE
Assistant Teaching Professor, Institute for Politics and Strategy; Senior Fellow, Foreign Policy Research Institute; Senior Research Fellow, The Soufan Center; Associate Fellow, International Centre for Counter-Terrorism (ICCT)—The Hague
FACULTY AND STAFF

POSTDOCTORAL FELLOWS

GIORLENY ALTAMIRANO RAYO
Postdoctoral Fellow, Institute for Politics and Strategy (2017–2018)

IGNACIO ARANA
Postdoctoral Fellow, Institute for Politics and Strategy (2016–present)

JOHN CHIN
Postdoctoral Fellow, Institute for Politics and Strategy (2016–present)

DANIEL HANSEN
Postdoctoral Fellow, Institute for Politics and Strategy (2018–present)

TAKIYAH HARPER-SHIPMAN
Postdoctoral Fellow, Institute for Politics and Strategy (2017–2018)

DOV LEVIN
Postdoctoral Fellow, Institute for Politics and Strategy (2016–2018)

DANI NEDAL
Postdoctoral Fellow, Institute for Politics and Strategy (2018–present)

DANIEL SILVERMAN
Postdoctoral Fellow, Institute for Politics and Strategy (2017–present)

ARMY WAR COLLEGE FELLOWS

LTC JONATHAN HUGHES
Army War College Fellow, Institute for Politics and Strategy (2017–2018)

LTC DANIEL C. WOOD
Army War College Fellow, Institute for Politics and Strategy (2018–2019)

LECTURERS

MOLLY DUNIGAN
Lecturer, Institute for Politics and Strategy; Political Scientist, RAND Corporation

GEOFFREY MCGOVERN
Lecturer, Institute for Politics and Strategy; Political and Social Scientist, RAND Corporation
FACULTY AND STAFF

CMU/WSP FELLOWS

RASHALL BRACKNEY  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

FRED CRAWFORD  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

DALE CROWELL  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

MARCIELA DEGRACE  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

JOSEPH DEVINE  
Fellow, Carnegie Mellon  
University Washington  
Semester Program; Associate  
Dean, Dietrich College of  
the Humanities and Social  
Sciences

ADAM GARFINKLE  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

THOMAS KARAKO  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

MELANIE MARLOWE  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

KIM SMACZNIK  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

SACHIKO TAKAYASU  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

BEVERLY WHEELER  
Fellow, Carnegie Mellon  
University Washington  
Semester Program

JULIE WILSON  
Fellow, Carnegie Mellon  
University Washington  
Semester Program
FACULTY AND STAFF

STAFF

SUSAN SOHLER EVERINGHAM
Adjunct Instructor, Institute for Politics and Strategy; Political Scientist, RAND Corporation

EMILY BADDOCK
Executive Director, Carnegie Mellon University Washington Semester Program

ALLISON A. FRYMOYER
Program Manager, Institute for Politics and Strategy

EMILY HALF
Deputy Director, Institute for Politics and Strategy

DANA KIM
CIRP Fellow, Institute for Politics and Strategy (2017-2018)

GRANT LOFTESNES
Administrative Coordinator, Institute for Politics and Strategy

HILLARY TANOFF
CIRP Research Coordinator, Institute for Politics and Strategy

EDITH YETTS
Business Manager, Institute for Politics and Strategy

ADJUNCT INSTRUCTORS

SOPHIE LE BLANC
Adjunct Instructor, Institute for Politics and Strategy; Teaching Consultant, Eberly Center

FORREST MORGAN
Adjunct Instructor, Institute for Politics and Strategy; Senior Political Scientist, RAND Corporation; Affiliate Faculty, Pardee RAND Graduate School

ISAAC PORCHE
Adjunct Instructor, Institute for Politics and Strategy; Senior Engineer, RAND Corporation

CHAD SERENA
Adjunct Instructor, Institute for Politics and Strategy; Political Scientist, RAND Corporation

SUSAN SOHLER EVERINGHAM
Adjunct Instructor, Institute for Politics and Strategy; Political Scientist, RAND Corporation

ISAAC PORCHE
Adjunct Instructor, Institute for Politics and Strategy; Senior Engineer, RAND Corporation

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Business Manager, Institute for Politics and Strategy

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ISAAC PORCHE
Adjunct Instructor, Institute for Politics and Strategy; Senior Engineer, RAND Corporation

HILLARY TANOFF
CIRP Research Coordinator, Institute for Politics and Strategy

EDITH YETTS
Business Manager, Institute for Politics and Strategy
For Carnegie Mellon University students interested in a future in public policy or public service, the Carnegie Mellon University Washington Semester Program (CMU/WSP) was built to provide comprehensive exploration directly to students.

Statistics show that a significant majority of students entering their undergraduate program will change majors and courses of study at least once. Along the way, students explore their professional and academic options though a variety of means, including summer internships, networking events, and countless information sessions. As these opportunities are often pursued independently, there is increasing pressure on students to deftly navigate their options and successfully forge their own pathways.

Alternatively, the semester-long program, based out of the university’s Institute for Politics and Strategy consolidates the resources, guidance, and real-world experiences that are critical to finding academic and professional footing. As a result, students leave Washington, DC, with greater confidence in their ability to navigate professional environments, communicate and network across industries, and refine their academic and professional pursuits.

This spring, Carnegie Mellon celebrates five years of exploration in the nation’s capital through the CMU/WSP. Founded in 2014, students from across the university have participated, including computer scientists, violin players, engineers, and more traditional “policy wonks.”
With interdisciplinary efforts at the core of CMU’s academic experience, participation in CMU/WSP presents a prime opportunity for students to tangibly diversify their studies by earning a minor in politics and public policy.

The semester program experience includes a part-time internship, policy-focused coursework taught by CMU faculty and adjunct alumni faculty, consistent networking with DC-based CMU alumni and access to city-wide cultural events. While in Washington, students also have the chance to meet with thought-leaders through the weekly policy forum roundtable. Program favorites include sessions with former Director of National Intelligence James Clapper, Center for American Progress President Neera Tanden, and National Security Council Deputy Director Nadia Schadlow. Group trips to the Kennedy Center for the Performing Arts, tapings of Meet the Press, and access to guided Smithsonian museum tours round out the immersive experience.

As an extension of the CMU campus experience, courses are discussion-based and kept small, often focused on applying skills to group policy implementation projects. Internship opportunities are student-driven, allowing professional goals, current skills, and areas of interest to guide individual searches. Working directly with program staff, each participant develops their application materials, explores various DC industries, and deliberately strengthens their professional development skills.

Applications to participate in the fall 2019 semester in Washington, DC, are due April 1, 2019. Follow along @CMUips #WashingtonWednesday for program highlights as we continue to celebrate our five-year CMU/WSP legacy!

The following bios feature five exceptional members of the CMU/WSP alumni network.
Victor Tavarez, 2018 graduate

**Current Role:** Associate, FSG Non-Profit Consulting Firm

**CMU/WSP semester:** Spring 2017

**CMU/WSP Internship:** Joint appointment with Congressional House Committee on Small Business and the Office of Representative Nydia Velázquez

**Program Takeaway:** “My semester at CMU/WSP was a transformative experience that helped me gain a better understanding of the sectors that govern our society. While working in Congress, I witnessed the day-to-day development of federal policy while interacting with advocates of causes ranging from environmentalism to marijuana decriminalization. Additionally, through my course work I received specialized attention from field experts and mentorship on how best to represent myself through my work. Lastly, living with and attending class with a set group of students working in different sectors in DC helped me learn from their work experiences as well.”

Dana Kim, 2016 graduate

**Current Role:** Center for Strategic & International Studies, Project Coordinator and Research Assistant (Satellite Imagery Analysis), Korea Chair and External Relations

**CMU/WSP semester:** Fall 2015

**CMU/WSP Internship:** The Federal Judicial Center

**Program Takeaway:** “The lessons I learned during the Washington Semester Program are invaluable and continue to help me progress in my career. Hard work always receives the recognition it deserves and never goes unnoticed. The relationships you make matter and it is important to continue to foster them—you never know how they will help you in the future. Be friendly, and always aim to meet at least two new people a week. Think outside the box and be vocal about your ideas because there is nothing you can lose, but much you can gain! Regardless of where you work or what your position is, your experience will only be as valuable as you make it. Most importantly, I learned that the internship you had in college, your first job after graduation, or even your major does not define the rest of your career. WSP allowed me to realize that it’s okay to be curious and explore your options. I genuinely do not believe that I would be where I am now had I not seized the opportunity to participate in the program.”
**Emmett Eldred, 2017 graduate**

**Current Role:** Youth Ministry Assistant, Church of the Brethren; Accepted to Yale Law School, Fall 2019

**CMU/WSP semester:** Spring 2016

**CMU/WSP Internship:** Office of Representative Brendan Boyle (PA-13)

**Program Takeaway:** “The Washington Semester Program was my most formative semester at CMU for my career trajectory in politics, policy, and advocacy. Yes, my internship in the office of Rep. Brendan Boyle was a once-in-a-lifetime experience. But it went beyond that. The classes were unlike anything I had taken before: some taught or visited by prominent thought leaders, while others gave me and my cohort of WSP the chance to process and build upon our professional experiences in a safe, supportive, and challenging setting. It was also inspiring to be in the place where so much happens. During WSP, I was able to both witness and jump into that world by attending briefings and panels, networking with established professionals, and taking full advantage of the many, many opportunities for free food. I can safely say that without the WSP—the people met and friendships built, the issues experienced and explored, the knowledge and skills gained—I would never have decided to apply to law school to continue an advocacy career first set into motion during that memorable and irreplaceable semester in DC.”

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**Jahque Bryan-Gooden, 2016 graduate**

**Current Role:** Research and Policy Analyst, NYU Metropolitan Center for Research on Equity and the Transformation of Schools

**CMU/WSP semester:** Spring 2015

**CMU/WSP Internship:** Center for American Progress

**Program Takeaway:** “During CMU/WSP I learned the importance of determining what I value in a career and workplace, and to this very day that has helped me determine which positions are right for me and which are not. I believe that my internship and connecting with the guest speakers solidified my career goals—to pursue a career in education policy. In fact, thanks to the Washington Semester Program I secured a summer internship with one of the guest speakers and was so certain of my interest in education policy that I pursued a master’s in Education Policy after graduating from CMU.

Anyone can get an internship but coupling a semester-long internship with coursework and networking opportunities is an experience that will teach you about work-life balance, professionalism, and politics. While at CMU the stereotype was that CMU students are in a bubble. The CMU/WSP is a chance to burst that bubble.”
Carnegie Mellon University has introduced a new bachelor’s degree of science program in economics and politics, launching this spring. A joint effort between the Institute for Politics and Strategy and the Undergraduate Economics Program, the degree program involves interdisciplinary study emphasizing a data-driven approach to understanding economic and political decision-making.

“The connections between politics and economics are nearly endless. Political decisions have an effect on economic growth, and economic outcomes shape political decisions,” said Sevin Yeltekin, professor of economics and senior associate dean of education at the Tepper School of Business. “This new program reflects the realities of these important interactions.”

The curriculum includes several key foundational and analytical economics courses from the Tepper School and the Dietrich College of Humanities and Social Sciences, which jointly offer the undergraduate degree programs in economics. In addition to foundational and intermediate level courses in microeconomics and macroeconomics, the curriculum includes advanced courses in economics and data science, econometrics and economic elective courses (including regulation, political economy, financial crises and risk, emerging markets, etc.).

“A strong focus on a data-driven, analytical approach to decision-making sets our program apart from similar programs at other schools,” said Christopher Sleet, professor of economics at the Tepper School who heads CMU’s economics programs. “Students graduating with a BS in Economics and Politics will have the technical skills to conduct well-
informed, strategic policy discussions. They will be able to build strong careers in financial policy, governmental regulation, political and business consulting, law, or lobbying.”

In parallel with the economics coursework, students pursuing the economics and politics degree will gain a background in political science, international security, and international relations from courses offered at the Institute for Politics and Strategy. Students will take foundational courses in US politics, comparative politics, and international relations. More advanced coursework includes courses in international political economy, political science research methods and electives (e.g., international and national security, grand strategy, cybersecurity and international conflict, international development, etc.)

The Bachelor of Science in Economics and Politics will be available as a primary major and an additional major.

“Economics and politics are interwoven in countless ways, from fiscal and monetary policies to political decision-making that influence economic growth and income distribution,” said Carol Goldburg, executive director of the Undergraduate Economics Program. “The importance of understanding and navigating the overlap between these two disciplines is crucial.”

Institute for Politics and Strategy is a university-wide institute dedicated to research and education in the fields of political science, international relations, national security policy, and grand strategy. The institute was formed under the leadership of Kiron Skinner, Taube Professor of International Relations and Politics, with the guidance of an executive committee that included the late Allan Meltzer, The Allan H. Meltzer University Professor of Political Economy. Meltzer championed the interdisciplinary study of economics and politics at Carnegie Mellon during his long career at the university.

“Without a solid awareness of the complex dynamics of governing decisions, economic policymakers cannot produce effective solutions,” Skinner said. “The research and educational aims of the economics program and the Institute of Politics and Strategy have a natural harmony in the study of political economy. I am happy to see this innovative and collaborative endeavor launch at Carnegie Mellon.”

Students pursuing the degree program are encouraged to participate in the Washington Semester Program led by Skinner. Undergraduate students from any program at CMU may participate in the program, which involves firsthand policy experience through an internship and coursework in Washington, DC.

“In this transformative era for international politics and economics, it is critical that our students, as future leaders in these sectors, possess a comprehensive understanding of financial principles, political interests, and policymaking,” said CMU Provost James H. Garrett, Jr. “With our university’s steadfast commitment to interdisciplinary education and a data-driven approach to the study of social sciences, graduates of this new program will be well-poised to address the challenges and opportunities that nations may face during times of societal and economic change.”
INSTITUTE FOR POLITICS AND STRATEGY GRADUATE STUDENTS EXPLORE CAREER OPPORTUNITIES IN NATION’S CAPITAL

By Grant Loftesnes

Following last year’s trip to Silicon Valley, this year’s cohort of students in the International Relations and Politics Accelerated Master’s Program (IRP/AMP) traveled to Washington, DC, in December to receive a first-hand glimpse in international relations career pathways.

Carnegie Mellon University’s IRP/AMP program allows students to receive both a bachelor of science and master of science degree in International Relations and Politics in just five years. In addition to coursework and a required graduate thesis, IRP/AMP students complete a summer internship and take part in a cohort trip designed for networking and practical application of the curriculum.

“The IRP/AMP trip to Washington, DC, is a phenomenal opportunity for our master’s students to identify ways in which their work in international relations, political science and international and national security can be applied to solve many US and global issues,” said Emily Half, Institute for Politics and Strategy (IPS) deputy director. “At Carnegie Mellon, we are training the next generation of leaders, and I am excited to see what they can accomplish after graduation.”

Traveling from CMU’s Pittsburgh campus to Washington, students spent three days visiting...
government sites and think tanks, engaging with DC-based CMU alumni, and exploring international relations and security-adjacent opportunities.

Site visits included the National Counterterrorism Center (NCTC), the Pentagon, the United States Institute of Peace (USIP), Blue Origin, and the Pew Research Center. At each site, students spoke with experts about national security issues of the day and the intersection of emerging technologies and global security.

As students are in the process of completing their theses and exploring future research projects, the conversations with experts are especially relevant.

For IRP/AMP student Colin Tait, hearing from specialists at the United States Institute for Peace was particularly insightful.

“It was interesting to talk to the specialists to learn about their work, and seeing how my current studies in conflict resolution and peace agreement formation is relevant to such professional organizations,” he said.

Ian Asenjo, also an IRP/AMP student, agrees. “I have always known what I was interested in career-wise, but I was not as familiar with the organizations that actually performed the work that I wanted to pursue. Meeting with representatives from USIP exposed me to the complex nature of peacekeeping,” he said.

During the site visits, students also received career advice from recent graduates and career civil servants, creating connections and providing guidance on how to break into national security, intelligence, and consulting fields.

“All of the speakers painted a picture as to what life post-college was like in terms of seeking a job, which was very helpful,” said IRP/AMP student Jacqueline Puschmann.

Outside of site visits, DC-based CMU alumni joined the group for meals to discuss their work and share their experiences moving from campus to Washington. Hearing from recent CMU alumni who successfully transitioned to careers in DC provided unique, accessible insight to future possibilities.

“I never considered consulting before,” Tait said, “but after talking to the alumni involved in federal consulting I have applied to several companies.”

As students settle back into campus life, they will focus on completing their theses, preparing for graduation, and planning for their next professional steps. After the trip to Washington, DC, these plans have come into sharper focus.

“I really enjoyed how much the trip brought the program together,” Puschmann added. “It made me feel excited to potentially have a career in Washington, DC!”
EFFECTIVE SCIENCE COMMUNICATION BEGINS WITH COLLABORATION

By Adam Dove

Carnegie Mellon University’s Baruch Fischhoff says the key to communicating scientific research is simple: Collaborate.

“Communicating science effectively can require an unnatural act: collaboration among experts from professional communities with different norms and practices,” wrote Fischhoff in his paper “Evaluating science communication,” published in the Proceedings of the National Academy of Sciences. “Those experts include scientists who know the subject matter and scientists who know how people communicate. They include practitioners who know how to create trusted two-way communication channels and practitioners who know how to send and receive content through them. They also include professionals who straddle these worlds, such as public health officials managing pandemics and climate scientists defending their work.”

Fischhoff, the Howard Heinz University Professor in the Department of Engineering and Public Policy and the interim director of CMU’s Institute for Politics and Strategy, offers an approach to facilitating communication by combining two strategies for addressing complex problems: bounded rationality, typically employed by the scientists; and satisficing, typically employed by practitioners.

Bounded rationality is the process of looking for the best possible solution to a manageable subset of a problem, while deliberately ignoring some aspects of the problem. Satisficing requires looking for an adequate solution, while considering all aspects.

In other words, scientists ignore issues they can’t treat systematically, using the restraints of their specific field of study to reach strong conclusions. Practitioners generally pay attention to anything that might be relevant and are typically willing to accept imperfect solutions. When working together properly, these two methods can lead to effective communication. But what about when they don’t?

“When these two worlds fail to connect, each is the worse for it,” Fischhoff wrote. “Scientists can overestimate how far their results generalize, and offer practitioners unsupported advice or summaries. Practitioners can absorb fragments of science, and exaggerate its value on their own. Scientists can unwittingly or naively let their values color their research or expositions. Practitioners can selectively pursue or accept convenient truths.”

As an example, Fischhoff uses an effort he participated in to aid decisions related to sexual assault by better communicating relevant scientific evidence as an alternative to the universal, contradictory advice often offered to women regarding whether to resist physically when attacked. After reviewing the limited evidence on the efficacy of self-defense measures, and interviewing a diverse group of women, men and experts on the subject, it became clear to Fischhoff and his colleagues that the answer wasn’t as simple as “yes” or “no.”

“When uncertainty is great, advice is unproven,” Fischhoff wrote. “Unless those limits are acknowledged, if things go badly, then decision-makers may bear the insult of blame and regret in addition to the injury that occurred. Whatever they did, some ‘expert’ had advised otherwise.”

This is why effective scientific communication is so important—not because it can perfectly inform decision-making every single time, but precisely because it can’t. When scientists and practitioners work together to communicate both the context and the limitations of scientific research, only then can the research be used to its full potential for the benefit of all.
INSTITUTE FOR POLITICS AND STRATEGY LAUNCHES NEW MINOR IN CYBERSECURITY AND INTERNATIONAL CONFLICT

By Hillary Tanoff

Carnegie Mellon University’s Institute for Politics and Strategy (IPS) launched an undergraduate minor in cybersecurity and international conflict in fall 2018. The cybersecurity and international conflict minor tackles the social-scientific dimensions of cybersecurity with a focus on the implications of the cyber age for modern statecraft, warfare, elections (local, state, and national), and politics, more generally.

IPS created the new minor in response to growing concerns over the divide between cybersecurity and regulation by government, as well as concerns over public and private sector cybersecurity capabilities.

“The new minor in cybersecurity and international conflict brings together some of the most important issues facing both nation-states and non-state actors today, from hacking and network defense, to mercenaries and cyber-warfare capabilities of near peer adversaries,” said Colin Clarke, an assistant teaching professor in IPS who teaches a number of core classes for the new minor.

The undergraduate minor has already enrolled students. Radhika Gupta, a junior majoring in computer science, values the minor because “it “allows me to learn about the policy side of cybersecurity, while my major in computer science gives me the technical expertise in cybersecurity. Just knowing the technical details isn’t enough, because in the end, I want to know what I am building, why I am building it and who it’s going to impact.”

The minor aims to give students foundational knowledge in the strategy surrounding cybersecurity. The emphasis on strategy and political concerns supplements a technical degree. Additionally, basic knowledge of technology concepts regarding cybersecurity supplements a social science degree.

Currently enrolled students like Alison Munden, a junior majoring in international relations and politics (IRP), recognize the supplementary value in the new minor.

“The coursework develops my understanding [of] the actual components and processes of cybersecurity and warfare—both common topics of policy discussions in IRP courses. Cybersecurity is particularly relevant in politics today, yet background knowledge of it is fairly rare in the political arena. The minor develops skills that differentiate my education from the average international relations or political science curriculum,” Munden said.
CMU values interdisciplinary research and programs, as does its students.

“Studying computer science involves a lot of math problems and writing lots of code, so it’s nice to take some classes that give some context into how those technical skills can be relevant to global politics and the national security interests of the United States. It’s also refreshing to see a mixture of students from an engineering background, as well as students from a humanities background,” said Alex Smith, a senior majoring in computer science with a minor in cybersecurity and international conflict.

Along with the new minor in cybersecurity and international conflict, IPS is raising the profile of cybersecurity policy by bringing cybersecurity experts to campus through the Center for International Relations and Politics (CIRP) Policy Forum. At 4:30 p.m. on Wednesday, Nov. 14, Clint Watts will discuss the misinformation campaigns, fake news, and electronic espionage operations that have become the cutting edge of modern warfare—and how we can protect ourselves and our country against them. Watts is a Distinguished Research Fellow at the Foreign Policy Research Institute, a Senior Fellow at the Center for Cyber and Homeland Security at The George Washington University, and a former FBI Special Agent and US Army officer.

CIRP will also host J.M. Berger, author of Extremism, research fellow with VOX-Pol, and postgraduate researcher at Swansea University’s School of Law, at 4:30 p.m. on Tuesday, Nov. 27, for the talk, “Analyzing Extremist Ideologies, Online and Offline.” Berger will discuss the new threats posed by the use of technological tools by extremists.

IPS expects the program to grow in the coming years. Cybersecurity has become prevalent as a policy concern, with no easy solutions in sight.
ALEXANDER HAMILTON SOCIETY DEBATE ON SINGAPORE SUMMIT BRINGS MORE AGREEMENT THAN DEBATE

By Gabriel Bamforth

A group of fifteen students gathered in the Simmons Auditorium in the Tepper Quad last Monday for a moderated debate about the Singapore Summit of US President Donald Trump and North Korean Supreme Leader Kim Jong Un. While eating Chipotle under a projector displaying larger-than-life images of the US and North Korean flags, the small audience watched moderator Dan Silverman of the Institute for Politics and Strategy (IPS) prompt his colleague Dani Nedal and visiting professor Aaron Friedberg to share their thoughts on the diplomatic effort.

The unprecedented summit, which took place in June after a brief cancellation period, was intended to usher in new diplomatic relations between the two countries, mainly by denuclearizing North Korea and halting provocative joint-military operations between the United States and South Korea. Each speaker was chosen for their expertise on the summit.

Nedal is a postdoctoral fellow at the IPS who teaches a number of undergraduate courses. His work has a special focus on international security and nuclear weapons. Friedberg is a professor of politics and international affairs at Princeton University and served the US State Department from 2003 to 2005. His work has mainly been focused on US foreign policy regarding East Asian countries.

For the students who organized the event, choosing experts was easy. Chandler Stacy, a sophomore in the Dietrich College of Humanities and Social Sciences, is currently taking a class with Dr. Nedal. “When we decided on this topic, I knew Dani would have experience in this field and that we would get a good discussion out of it,” he said.

The “we” he’s referring to is the campus chapter of the Alexander Hamilton Society (AHS), a national nonprofit which sponsors political debates on college campuses around the United States. Dr. Friedberg is a co-founder and an official speaker for AHS, so when the chapter reached out to him, he agreed.

The push to start a chapter at Carnegie Mellon came from Dr. Kiron Skinner, director of the Institute for Politics and Strategy and founder of the Washington Semester Program, who is currently on leave. “Dr. Skinner reached out to all of the IRP students, and we thought it sounded really interesting,” said Nick Bellante, a member of the AHS executive board.

The organization’s debate goals seem well suited to Dr. Skinner’s research interests, which include “The inherent tension among political conservatism, political liberalism, and libertarianism.” She was appointed Director of Policy Planning at the US State Department in August and is currently on leave from Carnegie Mellon to work in Washington.

The Singapore summit, Nedal and Friedberg agreed, didn’t accomplish much. Nedal called it a “vacuous statement” and Friedberg lambasted President Trump for “casting in his hand for a photo op.” With these fundamental agreements, the event proceeded much
more like a conversation than a debate.

“We didn’t go for a topic that would bring a lot of divisive issues to the table,” said Millie Zhang, president of the young chapter. Her vision is to reduce partisanship in political discourse on campus. “We’re trying to foster discussion where it’s constructive,” she explained. “Politics is a really hard topic for most students to talk about.”

Politics is personal, and as the student body of US higher education becomes more diverse, a long-overdue questioning of traditional discourse is taking place. Student protests opposing conservative speakers on campuses across the country have put pressure on school officials to think more deeply about the opposing thorns of free speech and hate speech: one person’s political opinion could marginalize their classmates’ lives and experiences. Topics like police brutality, reproductive rights, gun control, and immigration rights make this issue painfully clear because so many students have personal experiences with such topics, making it impossible to separate personal struggle from political opinions.

Officially recognized in September, the Carnegie Mellon chapter is the newest addition to the AHS network, which has chapters at thirty-six schools and three professional offices in New York, Washington, DC, and San Francisco. The national organization was founded in 2010 by Dr. Friedberg and his colleague Dan Blumenthal, director of Asian Studies at conservative think tank American Enterprise Institute. Though most of its leadership is conservative, AHS identifies itself as a nonpartisan organization, hosting debates on topics such as the economy, foreign policy, and national security, all of which came into play during Monday’s debate.

The main point on which Nedal and Friedberg disagreed was on how to move forward from the summit: Nedal advocated for more South Korean and Japanese involvement, while Friedberg maintained that continued American pressure on North Korea is the best way to guarantee denuclearization.

With a subject so removed from most students’ daily lives, their opinions were met with quiet inquiry from the audience. Zhang wants to continue this kind of dialogue in the future: “Our main goal is to have more political discussions on these issues,” she said. That way, students can be involved in debates without the intense personal stakes that domestic topics raise.
The Andrew Carnegie Society (ACS) Scholars Class of 2019 has been announced, and seven seniors from the Dietrich College of Humanities and Social Sciences have been selected.

ACS Scholars are Carnegie Mellon University undergraduate students who combine high academic standards with extracurricular activities, such as volunteering, playing sports, taking on leadership roles, and participating in student organizations and the arts.

The Dietrich College’s new ACS Scholars include:

Orchi Banerjee
Primary majors: Decision Science, International Relations and Politics
Minor: Arabic Studies

In the past, Banerjee has conducted research with faculty in both of her primary departments, including how personality factors and legislative constraints impact presidential decision-making and the environmental effects of cooking Thanksgiving dinner. Through the Washington Semester Program, Banerjee’s research skills were utilized during the spring and summer of 2018 in her internship with the Institute for the Study of War under the Iraq portfolio, where she investigated current developments in Iraqi security and political spheres to extrapolate key insights on trends pertinent to US national security objectives. Banerjee’s studies have taken her abroad. During the summer of 2017, she spent two months studying Arabic in Morocco. Banerjee also is an academic counselor with CMU Academic Development.

Sarah Boyle
Primary major: Global Studies
Minor: French and Francophone Studies

Whether on campus or abroad, Boyle is an active member of the CMU community. This summer, she worked as a legal and paralegal support intern for the Center for Migration and International Relations in Kathmandu, Nepal. There, she worked to solve cases of Nepali migrant workers. Before taking on her internship, Boyle studied abroad in Rabat, Morocco, taking classes taught in both French and English. At CMU, Boyle has worked as an orientation leader, teaching assistant, and research assistant in the Human-Computer Interaction Institute and the Institute for Politics and Strategy. She has served as president of Facilitating Opportunities for Refugee Growth and Empowerment (FORGE) and currently is manager for the improvisation troupe No Parking Players. Boyle has also been initiated into the Phi Beta Kappa Society.

Seth Henry
Primary major: Economics
Minors: Innovation and Entrepreneurship, International Relations and Politics

Henry has three summer internships under his belt, working as a lobbyist intern for the Information Technology Industry Council in Washington, DC; a Congressional intern for the US
Senate; and, most recently, as a summer games intern with Booz Allen Hamilton. Henry stays busy during the academic year as a captain of CMU’s basketball team and as a member of the University Student Affairs Council, Student-Athlete Advisory Council, Economics Student Advisory Council, Special Olympics of Pennsylvania Committee, and SPIRIT. He also is a student blogger for the Tepper School of Business and a reading and math tutor at Lincoln Elementary School. In addition, Henry is working with a company in Texas to market a malware program and encryption software to potential US government clients. He intends to return to Booz Allen Hamilton next year as a cyber analyst and continue his basketball career as a semi-professional.

Maggie Mertz
Primary major: Global Studies
Additional major: Creative Writing
Minors: Film Studies, Animation and Special Effects

Mertz is a history-lover, filmmaker, and storyteller, who has spent her time at CMU researching female and minority representation in the film industry, both behind the camera and in front of it. Her passion for film and cross-cultural entertainment has taken Mertz abroad to Cuba and Copenhagen, and helped her found a female film group, Momoka Studios, which has produced her past three short films. As a Dietrich College Honors Fellow, Mertz started her thesis this summer, a film which addresses issues of female friendship, diversity, and connection despite cultural differences. While at CMU, Mertz has been a resident assistant in Mudge House, a prose editor for the literary magazine The Oakland Review and the communications officer and president of Sigma Tau Delta, the English honor society. When not working on films, she can be found with CMU’s Ballroom Dance Club.

Valene Mezmin
Primary major: Professional Writing
Additional major: Physics

For the past two summers, Mezmin has interned at New York law offices. First, Mezmin was a press office and legislative intern with the Manhattan District Attorney’s Office, and more recently worked as a legal intern with the Queens Borough President’s Office. On campus, Mezmin is editor-in-chief of The Tartan, where she worked as the news editor for two years prior. She also is a writing tutor with CMU Academic Development and a member of Scotch ‘n’ Soda Theatre, where she paints and builds sets for various student-run shows. Mezmin has been inducted into the English honor society Sigma Tau Delta and the physics honor society Sigma Pi Sigma. During her senior year, Mezmin is working on a research paper on dark matter and dark energy.

Jack Verser
Primary major: Decision Science
Additional major: Russian Studies
Minor: Politics and Public Policy

From studying abroad in St. Petersburg, Russia, to his leadership positions on campus, Verser is an active member of the CMU community. Verser has worked as a research assistant in the Tepper School of Business and Department of Social and Decision Sciences, a data analytics and community outreach intern for the National Women’s Hockey League, a research intern for the American Foreign Policy Council, and as a Council of American Ambassadors Fellow in the Office of Policy and Evaluation in the US Department of State’s Bureau of Educational and Cultural Affairs. Outside of the classroom, Verser is a captain on CMU’s rugby team and co-president of the CMU chapter of Amnesty International.

Yu Wu
Primary major: Statistics and Machine Learning
Minors: Economics, French and Francophone Studies

During her time at CMU, Wu has immersed herself in the campus community. As a member of FORGE, Wu has tutored junior and senior high school students whose first language was not English, working with them on school assignments, ACT and SAT preparation, and college applications. In addition, Wu has been a teaching assistant and was a peer adviser with Dietrich College’s Academic Advisory Center (AAC), helping incoming students discover opportunities at CMU. Wu also worked as an intern at iCarbonX this summer, constructing a speech emotion recognition neural-net model using Python and Keras. Last summer, Wu was a data analyst intern with Secu-ring GmbH in Berlin, Germany.
FORMER CONGRESSMEN COME TO CIRP’S POLICY FORUM TO TALK BIPARTISANSHIP IN THE MODERN ERA

By Evangeline Liu

This past week, former Congressmen Rep. David Skaggs (D-CO) and Rep. Donald Manzullo (R-IL) visited Carnegie Mellon as part of the “Congress to Campus” program to promote bipartisanship and to get young people interested in public service.

The former congressmen gave a lecture titled “Closing our Political Divide: A Bipartisan Approach to Legislation” on September 27 and sat down for an interview with The Tartan. In the interview, they discussed the value of bipartisanship in politics, the importance of public service and voting, their opinions on the president’s conduct, and their take on the single headline that has dominated political news for days—the hearings for Supreme Court nominee Brett Kavanaugh.

Skaggs’ work promoting bipartisanship goes back two decades, around the time when he says modern hyper-partisanship started influencing national politics. He created the House Bipartisanship Retreats, which went on for eight years, in order to give Republican and Democratic representatives the chance to know each other as human beings and as more than just political adversaries. He and Manzullo, through the “Congress to Campus” program, want to demonstrate that despite the partisan politics that dominate the evening news, people of both parties can—and do—work together, even in today’s Congress.

Both Skaggs and Manzullo emphasized that they also wanted to get young people interested in public service. “Our big concern is that a lot of people are not becoming involved in public service because they don’t think it’s worth it,” said Manzullo. Part of their goal is to impress upon students that public service is a worthwhile alternative to all the competing opportunities out there.

They expressed concern about polls repeatedly showing extremely low levels of public faith in Congress. Manzullo cited a study that showed Brussels sprouts and proctologists seemed to be more popular than Congress, and said that there was “something going wrong in America” if the House of Representatives—which he pointed out was also known as the “People’s House”—was held in such low regard. Skaggs added that although it is easy to blame the politicians for Washington dysfunction, “the politics of the country reflect the people of the country.”

“[Politics is] not a spectator sport,” Skaggs asserted. If people are dissatisfied with current politics, Skaggs says “the answer isn’t just to dump on politicians, it’s to get involved [as citizens].”

It is well known that voter turnout is generally low, especially among young people. The former Congressmen noted that this was a contrast to their college years during the Vietnam era and the Civil Rights Movement, both of which spawned waves of student activism. In response to the problem of low voter turnout, Manzullo emphasizes the fact that there are close races in every election cycle, and that one cannot know which race will be decided by a few votes. He gave examples of past elections where the winner was decided by a dozen votes or less.

Skaggs added that other contributors to this problem were the educational system and the politicians themselves. He believes that there should be more civics classes that teach young people how the government works so that young people are able to make an informed decision when voting. He also lays some of the blame at the feet of politicians who tend to engage only older voters who are more reliable on election day. According to survey research, “if young people are...engaged with [and taken seriously] by politicians, [who then] ask them for their vote, they’ll respond to that,” Skaggs stated. In his view, since young people often feel ignored by candidates, it is no surprise that they tend not to vote.

Manzullo and Skaggs weighed in on more specific issues within the current administration—
specifically, the president’s general conduct in office and on Twitter. Manzullo came out unequivocally against President Trump’s off-the-cuff style online, which contrasts with the silence of current congressional Republicans. “I don’t think presidents should tweet! I’m serious! I think it’s a very cheap form of communication...a lot of people don’t think [before they tweet] and if you’re the president of the United States, you have to think very seriously about what you’re going to say,” he maintains. He calls it beneath the dignity of the presidency when Trump insults and attacks people on Twitter.

Skaggs agrees, saying that Trump has made a mockery of the office and that the president should not be a molester of women. They also agree that congressional Republicans need to speak up more forcefully against the president, because politicians have an obligation to challenge anything they don’t believe is right, including members of one’s own party. Both Skaggs and Manzullo did just that in office: Manzullo criticized President Bush heavily over tariff policies, while Skaggs filed a lawsuit against President Clinton over the line-item veto, which Skaggs believed was a constitutional violation.

The Kavanaugh hearings, which have gripped and divided the nation and forced Republicans to call for an FBI investigation into Dr. Christine Blasey Ford’s allegations of sexual assault against the Supreme Court nominee is where the two diverge. Skaggs emphasized the “appalling fashion” that Senate Republicans handled the allegations, called them hypocrites because of how they held up Merrick Garland’s nomination for political reasons, and called on Kavanaugh to apologize rather than relying on what Skaggs termed “convenient memory” or committing perjury.

In contrast, Manzullo believed that Senator Dianne Feinstein should have handled the case better and referred the allegations to the FBI earlier. Rather than making it a public circus, he said that Feinstein should have confronted Kavanaugh privately and given him a chance to resolve it without dragging all of it into the limelight. He called it “unfortunate” for both Ford and Kavanaugh that the way it was handled caused it to become the political drama it is now. Both Skaggs and Manzullo, however, agreed that there needed to be an FBI investigation, which was ordered by the White House on September 28.

The two former representatives also made some political predictions of their own for the upcoming midterm elections and beyond. Skaggs believed that Nancy Pelosi will likely hang onto her leadership position and become Speaker of the House again and that Democrats may pick up 230 seats in the House. He also believes that Trump will not likely finish his term, describing the president’s ego as having “no bounds.” Manzullo isn’t sure if Democrats will win the majority but thought that if they do win, it would either be a landslide or a very close margin.

Although hyper-partisanship seems to be the rage these days, Manzullo and Skaggs are trying to show us a side of politics that isn’t just about ramming nominees and legislation through at all costs but instead about finding common ground and working together to get things done.
Kiron Skinner, the Taube Professor of International Relations and Politics at Carnegie Mellon University, has been named senior policy adviser to US Secretary of State Mike Pompeo. Skinner also will serve as director of policy planning, one of the State Department’s most influential positions.

Skinner is the founding director of Carnegie Mellon’s Institute for Politics and Strategy (IPS). The center for research, undergraduate and graduate education focuses on university-wide initiatives in the fields of political science, international relations, national security policy, and grand strategy.

Skinner is a renowned expert in foreign policy who served on President Donald Trump’s national security transition team in 2016.

“I am honored to assume the role of Director of the Office of Policy Planning and Senior Policy Advisor to the Secretary of State,” Skinner said. “The Office of Policy Planning has a long and distinguished history of supporting the Secretary of State and the President in crafting US grand strategy. My charge now is to assemble an intellectually diverse set of leading policy thinkers to create a twenty-first century US grand strategy that brings American values and international commitments into focus while supporting the cause of peace, freedom, and security throughout the world.”

“Kiron Skinner is a national security powerhouse,” said United States Secretary of State Mike Pompeo. “She is a one-woman, strategic thinking tour de force. I’m confident that she will enhance our influence overseas, protect the American people, and promote our prosperity. I am thrilled to bring her on board to the State Department team.”

In addition to US foreign policy, Skinner’s areas of expertise are international relations, international security, and political strategy.

“As director of Carnegie Mellon’s Institute for Politics and Strategy, Kiron Skinner has created and supported countless opportunities for students, faculty, and global thought leaders to cut across disciplines to examine key issues shaping our world,” said Carnegie Mellon President Farnam Jahanian. “Being called to serve the nation in Washington, DC, reflects her distinguished career and exemplifies the growing role CMU faculty play in shaping the policy and research agenda at the national level.”

Skinner directs several other academic initiatives at CMU, including the Center for International Relations and Politics and the Institute for Strategic Analysis. She holds appointments in the Dietrich College of Humanities and Social Sciences, Heinz College of Information Systems and Public Policy and the School of Computer Science. She’s also a distinguished fellow of CMU’s CyLab Security and Privacy Institute within the College of Engineering.

“Kiron is a thought leader in her field, best-selling author and highly accomplished faculty member whose work intersects many disciplines across Carnegie Mellon,” said James E. Rohr, chair of the CMU Board of Trustees. “Her expertise will be a tremendous asset to the nation as she serves in the State Department.”

Skinner has previously advised several presidential candidates and was named to the Department of Defense’s Policy Board in 2017. She will begin her new post at the State Department, September 4.
MEET THE NEWEST DIETRICH COLLEGE FACULTY MEMBERS

By Stefanie Johndrow

Each new academic year brings new faces. This fall, almost thirty new faculty members are joining Carnegie Mellon University’s Dietrich College of Humanities and Social Sciences, bringing expertise in the fields of creative writing, cognitive science, behavioral economics and more.

Department of English
- David Brown, Visiting Assistant Professor of Rhetoric
- Robert Canton, Visiting Assistant Professor of First Year Writing
- Jason England, Assistant Professor of Creative Writing
- Kevin Haworth, Visiting Assistant Professor of First Year Writing
- Stephanie Larson, Assistant Professor of Rhetoric

Department of History
- Andrew Pope, Postdoctoral Fellow for Center for African American Urban Studies and the Economy

Department of Modern Languages
- Stephan Caspar, Assistant Teaching Professor of Media Creation and Multicultural Studio

Department of Philosophy
- Simon Cullen, Assistant Teaching Professor of Philosophy of Science Cognitive Science

Department of Psychology
- Jessica Cantlon, Associate Professor of Cognitive Science
  *Cantlon was honored as one of Time’s People of the Year in 2017
- Cvetomir Dimov, Postdoctoral Researcher of Cognitive Science
- Brad Mahon, Associate Professor of Cognitive Science
- Anne Margarete Mallo, Postdoctoral Researcher of Human Vision Science
- Barbara Shinn-Cunningham, Director of the new CMU neuroscience institute

Department of Social and Decision Sciences
- Palvi Aggarwal, Postdoctoral Fellow in Cyber Security
- Ashley Angulo, Postdoctoral Fellow in Behavioral Decision Research
- Lynn Conell-Price, Postdoctoral Fellow in Behavioral Economics
- Kevin Jarbo, Postdoctoral Fellow in Psychology
- Korosh Mahmoodi, Postdoctoral Fellow in Evolutionary Game Theory

Department of Statistics and Data Science
- Mikael Kuusela, Assistant Professor of Statistics
- Yixuan Qui, Postdoctoral Fellow in Statistics
- Aaditya Ramdas, Assistant Professor of Statistics
- Alex Reinhart, Assistant Professor of Statistics

Information Systems Program
- Susan Hagan, Associate Teaching Professor of Information Systems

Institute for Politics and Strategy
- Colin Clarke, Assistant Teaching Professor for Institute for Politics and Strategy
- Daniel Hansen, Postdoctoral Fellow for Institute for Politics and Strategy
- Dani Nedal, Postdoctoral Fellow for Institute for Politics and Strategy

Professor Daniel Hansen Attending a CIRP Policy Forum Lecture
Nine distinguished Carnegie Mellon University juniors will spend the summer working on research and creative projects that span across the college’s various disciplines, including psychology, international relations, creative writing, and more.

The students’ work is funded through the Dietrich College of Humanities and Social Sciences Honors Fellowship, an extension of the college’s Senior Honors Program, and gives the fellows a head start on their thesis development.

“The Dietrich College Honors Fellowship supports some of our most promising and interesting honors research projects by giving the students a summer stipend to get a head start on their work, receive additional mentoring and have access to networking opportunities,” said Brian Junker, associate dean for academic affairs. “Past fellows have continued their work in medical school, in graduate studies in psychology and economics, as a Fulbright scholar, an international design researcher, an entrepreneur who founded two tech startups, a Luce scholar, a filmmaker and more.”

Since the spring of her freshman year, Maggie Mertz has been researching female and minority representation in the film industry. As part of her work, Mertz, a global studies and creative writing major, founded the film production studio Momoka Studios. It is run by women and other minorities in the film industry, as part of an effort to increase diverse representation behind the camera as well as in front of it.

“My senior honors thesis, ‘Breathing Words,’ will be a culmination of my work at Carnegie Mellon University, and the largest production Momoka Studios has made to date,” Mertz said. “The project itself revolves around a deep, female friendship and is inspired by my coursework in film, literature, history and cross-cultural entertainment.”

She continued, “I applied to be a fellow so that I could begin my research as soon as possible. Due to the scope and size of the project, I am extremely grateful for the opportunity to work with my adviser during the summer and to get a start on filming before our campus is crowded again.”

“What strikes me about this cohort is the high degree of relevance of their topics to important current societal issues, such as state-wide politically-motivated gerrymandering, or a combined research and creative project that explores and deconstructs the relationship between violence and humor,” said Joseph E. Devine, associate dean for undergraduate studies. “It is very heartening to see students’ interests be so attracted to thorny issues that matter so much to our society, and that hold such promise of positive insight and impact.”

Alexandra Halberstadt’s first experience conducting research involved cigarette smoking.
She’s expanding on that interest in her senior honors thesis. Majoring in biology and psychology, Halberstadt plans to gather personality dimensions to investigate the relationship between personality and nicotine addiction.

“With this project, I really wanted to combine my interest in the tendencies of people who smoke cigarettes and my interest in mental health,” Halberstadt said. “I want to look into personality traits that predict nicotine addiction, and my research mentor, Assistant Professor of Psychology Kasey Creswell, has a lot of background in addiction research.”

Now in its fifth year, the Honors Fellowship Program is administered by Devine, Junker and Jennifer Keating, assistant dean for educational initiatives.

“We have seen the program grow in its disciplinary diversity since its inception, and we are especially excited to see how this cohort will explore a rich array of topics in the summer months and throughout the academic year,” said Keating. “One of the distinguishing features of this program is not just an opportunity for students to delve into their chosen research enterprise, but also an opportunity to build an intellectual community.

Keating continued, “A wide array of topics, a variety of faculty mentors and regular opportunities to communicate about their work in progress through the Dietrich Honors Fellowship Program blog and regular meetings throughout the summer months give this year’s fellows a variety of ways to grow and explore as thinkers and developing practitioners in their fields. We can’t wait to see what this group will do.”

The 2018-2019 Dietrich College Honors Fellows:

Brian Bizier
Major: Creative Writing, Dramaturgy
Bachelor of Humanities and Arts
Project: Revenge Project: Untitled Screenplay
Adviser: Stephen Wittek

Will Crouch
Major: Cognitive Neuroscience, Health Psychology
Minor: Biomedical Engineering
Project: Relationship Intimacy as a Moderator for Unmitigated Communion and Psychological Distress
Adviser: Vicki Helgeson

Allison Guzman
Major: Ethics, History and Public Policy
Minors: Professional Writing, Politics and Public Policy
Project: A Comparative Analysis of Racial and Partisan Gerrymandering in Texas and Pennsylvania
Adviser: Geoffrey McGovern

Alexandra Halberstadt
Major: Biology, Psychology
Science and Humanities Scholars
Project: Personality and Nicotine Dependence
Adviser: Kasey Creswell

Paloma Sierra Hernandez
Major: Creative Writing, Drama, Bachelor of Humanities and Arts
Minor: Hispanic Studies
Project: Project-LOGUE: Cultural Exchange Through Artistic Translation
Adviser: David Shumway

Jieming (Lewis) Li
Major: Psychology
Project: Intervetional Methodology Comparisons in Male Gender Stereotype
Adviser: Kody Manke

Maggie Mertz
Major: Global Studies, Creative Writing
Minors: Film Studies, Animation and Special Effects
Project: Breathing Words
Adviser: Sharon Dilworth

Isabella Starvaggi
Major: Psychology, Statistics
Project: Vegetative Rumination in Seasonal Affective Disorder
Adviser: Kasey Creswell

Sahana Thirumazhusai
Major: International Relations and Politics, Social and Political History
Project: Shared Trauma: The Recovery Process of Communities in Former Conflict Zones
Adviser: Jennifer Keating
Carnegie Mellon University’s Baruch Fischhoff has won a 2018 Carnegie Corporation of New York Andrew Carnegie Fellowship. Fischhoff is one of thirty-one scholars and writers who will receive $200,000 to devote significant time to research, write and publish in the humanities and social sciences.

The awards build on Carnegie Corporation of New York’s century-old philanthropic tradition of investing in creative scholarly research. The 2018 awards total $6.2 million, making it the largest pool for humanities and social sciences research.

“We were reassured by the immense talent and breadth of experience reflected in the proposals from this year’s nominees for the Andrew Carnegie Fellows Program,” said Vartan Gregorian, president of Carnegie Corporation of New York and president emeritus of Brown University. “Since its founding in 1911, the corporation has provided strong support to individual scholars, as well as a wide variety of institutions, causes, and organizations. The response to the fellows program gives me great hope for the future of the study of the humanities and the social sciences as a way for this country to learn from the past, understand the present and devise paths to progress and peace.”

Fischhoff, the Howard Heinz University Professor in the Department of Engineering and Public Policy and Institute for Politics and Strategy, is a world-renowned expert in decision science. His project, “Decisions,” will produce a book drawing together his decades-long experiences studying and observing individuals and institutions facing difficult decisions in diverse settings.

“As one of the intellectual founders of decision science as a field, Baruch Fischhoff has written seminal papers on decision making in domains ranging from health to the energy and the environment to national security. He was the driving force behind the Dietrich College’s decision science major, which was the first of its kind. This award is a great testament to everything he has contributed to the field so far, and I’m sure that the book will serve as an invaluable resource,” said Richard Scheines, dean of the Dietrich College of Humanities and Social Sciences.
Scheines added, “Baruch is not only a highly original and productive interdisciplinary scholar, he is also an incredibly effective teacher and mentor.”

Fischhoff’s book will focus on how to increase the range of autonomous decision-making without denying people needed protections. It will consider how to use analytical procedures to inform, rather than replace, judgment and how to engage laypeople in situations when they must depend on experts’ knowledge and claims. Fischhoff hopes that it will contribute to both public discourse and academic research.

“For over 30 years, Baruch has been an invaluable member of the College of Engineering,” said Doug Sicker, head of the Department of Engineering and Public Policy. “As one of the earliest members of our Engineering and Public Policy Department, there are few who have had a bigger impact on the university’s ability to affect change in the broader world. The interdisciplinary spirit with which he approaches his work has helped to shape the Carnegie Mellon community into what it is today. I can’t think of anyone more deserving of this fellowship than him.”

Fischhoff, a member of the National Academy of Medicine, will be formally inducted into the National Academy of Sciences this Saturday. A cognitive psychologist by training, Fischhoff joined the CMU faculty in 1987 and has served as an adviser to many governmental agencies, including as founding chair of the Food and Drug Administration Risk Communication Advisory Committee and the Environmental Protection Agency Homeland Security Advisory Committee. Recently, he chaired the National Research Council Committee on Behavioral and Social Science Research to Improve Intelligence Analysis for National Security and co-chaired three National Academy of Sciences Sackler Colloquia on the Science of Science Communication.

Fischhoff is a past president of the Society for Judgment and Decision Making and of the Society for Risk Analysis. He is a Fellow of the American Psychological Association, the Association for Psychological Science, the Society of Experimental Psychologists, and the Society for Risk Analysis. He has published many articles and books, including *Risk: A Very Short Introduction*.

CMU alumna Shahzeen Attari, associate professor of public and environmental affairs at Indiana University, Bloomington, is also among the 2018 Andrew Carnegie Fellowship winners. Attari, who received her PhD in civil and environmental engineering and engineering and public policy in 2009, will work on a project titled, “Motivating Climate Change Solutions by Fusing Facts and Feelings.”

In 2017, David Danks, the L.L. Thurstone Professor of Philosophy and Psychology and head of the Department of Philosophy, won an Andrew Carnegie Fellowship to explore trust and autonomous technologies.
Belfer Center News

March 30, 2018

NATIONAL STUDENT HACKATHON SHOWCASES INNOVATIVE PROPOSALS TO THWART CYBERATTACKS AND INFORMATION OPERATIONS

By Josh Burek

“Honey bots” that counter malicious bots. An app called Sanity Check. Cyber Security Bonds. And technology that breaks the grip of online echo chambers. Those are just some of the ideas that college students from around the country presented Thursday in Cambridge as part of the Defending Digital Democracy Project’s (D3P) first-ever Information Operations Technical and Policy Hackathon.

Nine teams of finalists presented their ideas to a team of judges, including former Secretary of Defense and Belfer Center Director Ash Carter and former Pentagon “cyber czar” and current D3P Director and Belfer Center Co-Director Eric Rosenbach.

“This is the issue of our time,” said Carter, referring to the challenges posed by malicious misinformation. “There’s a crying need for good ideas.” What we need to enlist, he said, is “the best thinking by good people. There’s plenty of bad ingenuity at work and we need to overpower that with good ingenuity.”

That good ingenuity was on full display as students from Carnegie Mellon, Harvard, Georgetown, Tufts, Georgia Tech, and other leading universities made their pitches in the ballroom of The Charles Hotel. The hackathon presentations were the culmination of a three-day D3P conference dedicated to fortifying election security and digital democracy. Several state election officials, who had convened earlier in the week for a series of training exercises, stayed to hear the student proposals.

Winnona DeSombre and Gabriella Roncone, two students from Tufts University, claimed the grand prize of $10,000 for their development of Sanity Check, an app that utilizes natural language processing, bot detection, source greylisting, risk rules, and reverse image searching to identify information operations over social media, as well as suspicious unverifiable information. Sanity Check can be appended to any social media platform and incorporated into default Google Chrome browsing. By understanding what constitutes risky behavior in an automated way, DeSombre and Roncone explained, the app can output good threat intelligence.

“I’m so proud of these students,” said Rosenbach, who organized the hackathon. “From big data and machine learning to psychology and financial markets, these policy and tech entrepreneurs combined insights from across disciplines to craft some truly innovative ideas to fight back against the enemies of digital democracy.”
THE WINNERS:

MINIMUM VIABLE CONCEPT CATEGORY

- First place: Winnona DeSombre and Gabriella Roncone (Tufts University) – $10,000
- Second place: Samuel Liu (Harvard College) and Andres Gvirtz (Clark University) – $2,000

POLICY CATEGORY

- First place: Karim Farhat and Karl Grindal (Georgia Institute of Technology) – $5,000
- Second place: Nathan Bruschi (Harvard Kennedy School and Harvard Business School) – $2,000
- Third place: Kellen Carleton and Arya Hezarkhani (Carnegie Mellon University) – $1,000

CONCEPT CATEGORY

- First place: Sean Letendre and Christopher Ferris (Georgetown University) – $5,000
- Second place: Neal Ferrano (National Intelligence University) – $2,000
- Third place: Kellen Carleton and Arya Hezarkhani (Carnegie Mellon University) – $1,000

HACKATHON JUDGES

- Ash Carter (Belfer Center Director and former Secretary of Defense)
- MG John Davis (Federal Chief Security Officer, Palo Alto Networks, and former Senior Military Advisor for Cyber to the Under Secretary of Defense for Policy)
- Andrew Gully (Technical Research Manager, Google Jigsaw)
- Shane Huntley (Director, Threat Analysis Group, Google)
- Robby Mook (former Hillary Clinton campaign manager)
- Kathy Pham (Computer scientist, Berkman Klein Center for Internet & Society)
- Eric Rosenbach (Belfer Center Co-Director and former Pentagon “cyber czar”)
- Anu Saha (Head of Technology IA, Salesforce)
- Suzanne Spaulding (Senior Advisor, Center for Strategic and International Studies and former Under secretary for the National Protection and Programs Directorate at the Department of Homeland Security)
- Charles Stewart III (Kenan Sahin Distinguished Professor of Political Science at MIT)
Fox News

March 28, 2018

NEWT GINGRICH: THE FUTURE IS AMAZING—HERE’S AN INCREDIBLE GLIMPSE OF WHAT AWAITS US

By Newt Gingrich

I had the opportunity to glimpse a large part of the future this week. I think you will find it as amazing as I did.

Dr. Kiron Skinner, a remarkable scholar, hosted me at Carnegie Mellon University in Pittsburgh.

According to the U.S. News & World Report’s “Best Colleges” rankings, Carnegie Mellon has the nation’s top graduate level artificial intelligence (AI) program and one of the top five undergraduate computer engineering programs. On Wednesday, the people at Carnegie Mellon showed me a few of the reasons they are held in such high regard.

Before I get into what I saw this week, let me better explain what I mean by seeing a glimpse of the future.

Every aspect of government procurement will have to be replaced (not just reformed—replaced) given the speed of new capabilities inherent in the artificial intelligence revolution.

Years ago, while serving as commanding general of the Training and Doctrine Command for the US Army, Gen. Fred Franks told me he looked for “glimmerings” of the future. He said “glimmerings” were ideas, events or developments that were not yet clear but might evolve into something important.

I was intrigued with glimmerings because of two earlier developments in my life.

First, in 1965, as an undergraduate student at Emory University, I began working with Pete Jensen at what would later become the Rich Computer Center at Georgia Tech. Pete was one of the great pioneers of computing and in a few years introduced me to ideas (glimmerings), which evolved over the next half century into the Internet and modern computing. My own activities had been dramatically enriched by Pete’s ideas and teaching.

Second, I had been privileged to work with Alvin and Heidi Toffler as their thinking evolved
from their bestselling book, *Future Shock*, to their even more important book, *The Third Wave*. The observations and insights they developed for *The Third Wave* are still valid over three decades later. They gave me an entirely different perspective on the scale of change our civilization was going through. The Tofflers and their work were very influential in the thinking that led to the *Contract with America* in 1994.

With this background, I have always been looking for the breakthroughs that will dramatically change our way of doing things. Starting in 2001, I began looking at nanoscale science and technology, quantum computing and the revolution these two systems would bring about—a revolution that is still only in its infancy.

Around 2007, I began talking with oil and gas experts about the revolutionary breakthroughs in fracking, and their inevitable impact on our ability to produce oil and gas. In 2008 that led me, in collaboration with my former colleague Vince Haley and Sean Hannity, to launch “Drill Here, Drill Now, Pay Less.”

My wife Callista and I also made a documentary, *We Have the Power*. The left, led by President Obama, ridiculed the whole idea of using America’s resources to become energy independent.

Influenced by the growth of fracking, in 2012 I wrote the book, *$2.50 a Gallon*. Again, President Obama singled it out and attacked me as a demagogue who was suggesting the impossible. Of course, he was totally wrong, and the fracking revolution has made America dramatically better off.

On Wednesday, in Pittsburgh, I saw another powerful glimmering of technologies that will change our world. The ability to develop intelligent systems that can learn and adjust is rapidly evolving. These systems will give us new capabilities and new insights in ways we have never imagined.

In a few brief hours at Carnegie Mellon, I saw a voice analysis system that could be combined with cellphone technology to enable remote medical analysis of virtually everyone on the planet. It would create an extraordinary new approach to early diagnostics and constant monitoring at an astonishingly low cost.

I watched a robotic assistant reduce the invasiveness of heart surgery so that instead of patients taking fourteen days to recover, they could leave the hospital after one day.

And the potential for 3-D printing and robotics, combined with reusable rockets, will totally change how we think about space. This is just astonishing.

Every aspect of government procurement will have to be replaced (not just reformed—replaced) given the speed of new capabilities inherent in the artificial intelligence revolution.

We will also have to rethink adult education.

Artificial intelligence will displace many traditional service jobs, while also creating new jobs. The challenge will be helping adults make the transition from outdated skills to the new, higher-paying, and more interesting skills made possible by artificial intelligence.

Of course, during this development, we must constantly work to improve these systems to make sure they are safe. This constant development in itself will require advancements in both human and machine learning.

We must learn from and continuously work to prevent tragic accidents like the one this week in Tempe, Arizona, where a woman was struck and killed by an autonomous car.

It is also clear that we have to invest heavily in artificial intelligence if we are going to maintain our competitive and national security advantages in the face of massive Chinese investment in the artificial intelligence field. We already know Chinese companies are working to build a huge fleet of self-driving vehicles. You can bet they will use and apply everything they learn in this endeavor in their military programs.

As I learn more over the next few months, I will report on additional exciting new developments.

The future is going to be amazing, and we should be optimistic that as a free people we can lead the world into that future—just as we led the world with new developments in cars, airplanes, computers, and the Internet.

There is much more to come.
Senior Eliza Donohue, a policy and management and social and political history double major from Lancaster, Pennsylvania, answers a few questions about student life at Carnegie Mellon, talks about her internships, what she’s excited for during spring semester, how she decided on her major, and what she’s enjoyed about Pittsburgh.

1. What do you enjoy about campus life?

I have always enjoyed the sense of community that I feel at CMU. Everyone is passionate and competitive about what they study and it’s a unique experience to be at a college surrounded by such a high level of dedication. I am always interested in the research that my friends are doing and always love hearing about what they are achieving.

2. What do you get involved in outside of volleyball?

I am active in Greek life in the sorority Kappa Alpha Theta. I also was able to be a part of the Washington Semester Program for my spring 2017 semester. CMU sends a handful of students each semester to Washington, DC, to take classes and intern. CMU provided me unique opportunities to expand my comfort zone and network.

3. Tells us about any internships you’ve had?

I have been lucky enough to have had three internships while at Carnegie Mellon. My first internship was my freshman summer and I interned at the Pennsylvania Immigration Research Center in York, Pennsylvania. I worked for the non-profit legal team and used Excel to create a donor database as well as accompanied the lawyers as they taught legal classes to inmates at the county jail. My sophomore summer, I interned with the Ross Township Municipal Center Parks and Recreation Center and created a cost-benefit analysis and policy plan to combat the Township’s loss of revenue on their baseball fields. My most recent internship was from January until August of 2017 in Washington, DC, and was at the United States Holocaust Memorial Museum in their National Operations Department.
I used Smartsheet to create reports, schedules, and manage events for project leads as well as update the museum’s website. I also got to work the high-profile events for donors to the museum which were always fast-paced and fun.

4. How did your internships help form your career decision?

I learned valuable lessons at each internship about what I wanted in a career. I realized through my most recent internship at the Holocaust Memorial Museum that I loved group-work, probably stemming from my extensive time on a team, and that this is something that I really wanted in my future. Also working at the museum showed me that I loved Washington, DC, and really wanted to live there after graduation. I am lucky enough to be working in DC next year with a new team.

5. What are you excited about this spring semester?

I am a senior so I am very excited to spend as much time as possible with my friends before we graduate. I also will be moving to DC after graduation to start my job as a Security Analyst for Accenture. I am really looking forward to enjoying these next few months and getting ready for life after college.

6. Why did you select your course of study – what class have you enjoyed the most?

I came in to CMU undecided and chose to major in policy and management my freshman spring. I liked that I could take classes on economics and business without being restricted to only business options. I decided to double major in social and political history sophomore year after realizing I was filling all of my gen eds with history classes and really loving them.

7. What class would you recommend someone take?

I really enjoyed my Body Politics class with Professor Lisa Tetrault. Anything taught by her is going to be incredibly eye-opening and informative.

8. What have you enjoyed about living in Pittsburgh?

I have a lot of family who live in Pittsburgh so I have loved being able to visit them more often.

Pittsburgh also has great restaurants and food options. I have loved attending events downtown like Penguins or Pirates games as well as the Christmas events in Market Square in December. CMU students also get free admission to Phipps Conservatory and the Carnegie Museum of Art and Natural history so I have loved spending a lot of time in both of these beautiful institutions.

9. How do you want people to remember you when you graduate?

I want people to remember me as someone who worked hard while still having a lot of fun at Carnegie Mellon. I have really enjoyed investing my time in my studies and relationships at CMU and have made many good memories. I would want people to remember me as a fun-loving and good person.

Eliza Donohue is a middle blocker for the Carnegie Mellon Women’s Volleyball Team and a student in the Institute for Politics and Strategy.
Carnegie Mellon University has elevated the Institute for Politics and Strategy (IPS) to a university-wide institute, as its programming and scholarship increasingly bring together scholars and students from different fields across the university.

Originally founded in 2015, IPS serves as a center for research, undergraduate and graduate education, and university-wide initiatives in the fields of political science, international relations, national security policy, and grand strategy.

Its signature programs include the Washington Semester Program, the Center for International Relations and Politics, and the Institute for Strategic Analysis. This new status will help build on a growing number of collaborations across CMU’s campus, especially new efforts that involve technology, policy, and the social sciences.

IPS will continue to be directed by Kiron Skinner, a renowned expert on international relations, national security, foreign policy, defense policy, cybersecurity, and diversity. Recently named the Taube Professor of International Relations and Politics, Skinner uses IPS to create opportunities for CMU students and faculty in addition to national and international thought leaders to engage with ideas and issues in politics and policy in a highly multidisciplinary way.

“In addition to her own research and public service, Kiron has been a leader in providing distinctive, collaborative opportunities for students at all levels, crossing traditional boundaries,” said Laurie R. Weingart, CMU interim provost. “Giving the institute this cross-college platform will allow Kiron and her colleagues to forge new partnerships.”
IPS will be governed by the deans of the Dietrich College of Humanities and Social Sciences, the College of Engineering, and the School of Computer Science. IPS programs include undergraduate majors and minors in international relations and politics, an undergraduate minor in politics and policy, and an accelerated master’s program in International Relations and Politics. In addition, IPS is the social science lead in the Master of Information Technology Strategy (MITS), an interdisciplinary cybersecurity-oriented graduate program that also includes core courses and tracks in computer science and engineering. Degrees from IPS programs are from the Dietrich College, with the exception of the interdisciplinary MITS program, which is granted by the School of Computer Science.

The research, writing, teaching, and Washington work of IPS at the intersection of technology, policy, cybersecurity, national security, and artificial intelligence is being supported by grants to IPS and its entities, the Center for International Relations and Politics and the Institute for Strategic Analysis, from the Bradley Foundation, the Hewlett Foundation, Scaife Foundation, an endowment from Glen and Diane Meakem, among other donors.

Skinner joined CMU in 1999. She is a distinguished fellow of CMU’s CyLab and holds courtesy faculty appointments in Heinz College of Information Systems and Public Policy and the Institute for Software Research. She served on President Donald Trump’s transition team’s executive committee, and the teams for the National Security Council and the State Department.

In December, US Secretary of Defense James N. Mattis appointed her to the Defense Policy Board, which provides the secretary, deputy secretary and under secretary for policy with independent, informed advice and opinion concerning matters of defense policy. The Office of the Secretary of Defense also appointed Skinner to the Board of Advisors of the Naval Postgraduate School.

Skinner currently serves as special adviser to Admiral John Richardson, the Chief of Naval Operations, is a member of the Council on Foreign Relations, a life director of the Atlantic Council, and is a research fellow at the Hoover Institution at Stanford University. From 2001-2007, she was a member of the US Defense Department’s Defense Policy Board as an adviser on the wars in Iraq and Afghanistan. During the Bush and Obama presidencies, she served on the Chief of Naval Operations Executive Panel and the National Security Education Board, the latter of which required confirmation by the US Senate in 2005.

Her books have appeared on the *New York Times* and *Wall Street Journal* best-seller lists, and serialized in the *New York Times Magazine* and *New York Times* opinion page. One of her co-edited books, *Reagan, A Life in Letters*, was as the subject of an editorial on the editorial page of *New York Times*, selected as one of the best books of 2003 by the *Los Angeles Times*, was the subject of a *Time* magazine cover story, and reviewed in the *New York Review of Books*.

Skinner’s scholarly work focuses on US national security, international relations, and American politics. She currently co-chairs a working group on national security and democracy for the Social Science Research Council. For Palgrave MacMillan, Skinner has created a book series on American political ideology in the twentieth century. She serves as the editor of the series and is writing its first book. Her recent essays on the US presidency have appeared in books published by Harvard University Press and Oxford University Press.

Skinner recently became a Fox News Channel contributor, which allows her to offer both foreign policy and political analysis across FNC and FOX Business Network’s daytime and primetime programming.

“It has been really exciting to see IPS have an important impact in education, research and programming activities in a short amount of time,” Skinner said. “I am grateful to the university for putting their support into this endeavor and look forward to building new partnerships and momentum for politics and strategy across campus.”

Baruch Fischhoff, the Howard Heinz University Professor, is also an IPS faculty member, making the institute one of the only international relations programs at a top research university with decision science as a core part of its education and research. Fischhoff, also a member of the Department of Engineering and Public Policy, is a member of the National Academy of Sciences and of the National Academy of Medicine.
CMU News  
February 9, 2018

STUDENTS SEE HOW SECURITY, POLICY, STRATEGY ALIGN IN SILICON VALLEY

By Ann Ritchie Lyon

Carnegie Mellon University students from the Institute for Politics and Strategy (IPS) recently got a glimpse of Silicon Valley’s political side.

IPS organized the trip for the inaugural cohort in its International Relations and Politics Accelerated Master’s Program (IRP/AMP) to show students some of the current issues and career opportunities at the intersection of technology, public policy, and international and domestic security.

“For many years now, I have been convinced that a deep understanding of the international system and national security is central to maintaining the United States’ position as the world’s leading tech hub,” said Kiron Skinner, IPS director and the Taube Professor of International Relations and Politics. “My IPS colleagues and I are training our students to be fully prepared to amplify the growing field of global public policy in the tech industry. Our trip to Silicon Valley underscored the fundamental importance of this endeavor.”

Over three days, the group met with Safra Catz, the chief executive officer of Oracle Corporation; Ray Lane, a partner emeritus at Kleiner Perkins Caufield and Byers and former chairman of CMU’s Board of Trustees; and Eric Schmidt, the executive chairman of Alphabet, among others.

“All of the speakers discussed a need to integrate policy and security considerations as technology intertwines more closely with daily life,” said Rob Stephens, who received his undergraduate degree from CMU in 2017 in international relations and politics and global studies, a student in the first IRP/AMP cohort.

Trends show technology companies are hiring
public policy teams. The speakers recommended the students follow their personal career interests. While some employers might seek certain skills, some of the large firms, such as Google, look for the brightest minds and not necessarily specific kinds of training.

“When you start to study policy, your initial expectations are to someday work for state or local governments or in Washington, DC, but I was astonished to learn there is room for [expertise in] political science and public policy everywhere in the tech sector,” Stephens added.

Borge Feliz, another student who also graduated from CMU in 2017 with an undergraduate degree in international relations and politics, said “a whole new world” opened up for pursuing his career interests in political analysis and consulting. He especially liked the talks with Quinn Slack, the CEO and co-founder of Source Graph, and Tasha Russman, who worked on a Bay Area Video Coalition project in workforce development with the City of San Francisco.

Many of the IRP/AMP students also have visited or studied in Washington, DC.

“The students are currently writing their master’s theses and may integrate the insights they gained from the tech leaders into their final submissions,” said Emily Baddock, an IPS staff member and the program director of CMU’s Washington Semester Program.

IPS recognizes that technology companies play a growing role in international and domestic security policy, said Arlane Gordon-Bray, executive director of the Institute for Strategic Analysis, which is affiliated with IPS. She points to visits by military leaders to the Bay Area and how venture capital firms influence what new products will become available to consumers.

“It was an eye-opening experience for our students,” Gordon-Bray said.

The trip was supported by a grant from the Bradley Foundation for initiatives to increase understanding about national security and international security policy.
US Secretary of Defense James N. Mattis has appointed Carnegie Mellon University’s Kiron Skinner to the Defense Policy Board. The board provides the secretary, deputy secretary and under secretary for policy with independent, informed advice and opinion concerning matters of defense policy.

Skinner, founding director of the Institute for Politics and Strategy in the Dietrich College of Humanities and Social Sciences, is a renowned expert in national security and foreign policy. She recently was named the Taube Professor of International Relations and Politics.

Secretary Mattis tapped J.D. Crouch, a former assistant to the president and deputy national security advisor and currently the chief executive officer and the president of the United Services Organization, to chair the Defense Policy Board. Four additional members were also announced: Wanda Austin, Making Space, Inc; Eric Cantor, Moelis & Company; David McCormick, Bridgewater Associates; and James Talent, American Enterprise Institute.

They will join returning members Madeleine Albright, Rudy deLeon, Michèlle Flournoy, Jamie Gorelick, Frank Miller, William Perry and Adm. (Ret) Gary Roughead.

Skinner joined CMU in 1999 and is also a distinguished fellow of CMU’s CyLab and holds courtesy faculty appointments in Heinz College and the Institute for Software Research. She served on President Donald Trump’s transition team’s executive committee, and the teams for the National Security Council and the State Department.

CMU’s Institute for Politics and Strategy, which was launched by Skinner in 2015, serves as a center for research, undergraduate and graduate education, and university-wide initiatives in the fields of political science, international relations, national security policy, and grand strategy.

At Carnegie Mellon, Skinner also directs the Center for International Relations and Politics, Washington Semester Program, and Institute for Strategic Analysis, a joint effort between Dietrich College, College of Engineering, Heinz College of Information Systems and Public Policy, School of Computer Science, and the Software Engineering Institute. She co-created CMU’s Master of Information Technology Strategy program, which provides a multidisciplinary education focusing on cybersecurity issues, decision-making challenges, and international security.

Skinner currently serves as special adviser to Admiral John Richardson, the chief of Naval Operations, is a member of the Council on Foreign Relations, a life director of the Atlantic Council, and is a research fellow at the Hoover Institution at Stanford University. From 2001-2007, she was a member of the US Defense Department’s Defense Policy Board as an adviser on the wars in Iraq and Afghanistan.

She is the co-author, along with political scientists Serhiy Kudelia, Bruce Bueno de Mesquita and Condoleezza Rice, of *The Strategy of Campaigning: Lessons from Ronald Reagan and Boris Yeltsin*, which is used in political science courses at leading research universities. She authored *Turning Points in Ending the Cold War*, a landmark work in international history featuring a collection of essays by leading American and Russian statesmen and scholars. She co-authored the *New York Times* best sellers *Reagan, In His Own Hand* and *Reagan, A Life In Letters*. She is a frequent contributor of opinion essays and has written for CNN.com, *National Review* online, the *New York Times*, the *Wall Street Journal* and the *Washington Post*.

In October, Fox News Channel signed Skinner as a contributor to offer foreign policy and political analysis across FNC and FOX Business Network’s daytime and primetime programming.

Skinner earned master’s and doctoral degrees in political science and international relations from Harvard University and undergraduate degrees from Spelman College and Sacramento City College. She received an honorary doctor of laws degree from Molloy College in Long Island, New York.
CMU STUDENT TO CHARTER THIRD PLANE TO DELIVER AID TO PUERTO RICO

By Julianne Mattera

In the wake of a hurricane that devastated Puerto Rico, a Carnegie Mellon University student and Puerto Rican native has chartered two planes and delivered roughly three thousand pounds of supplies to the island. On the first trip, the plane brought back six people to the US mainland for medical care. On the second trip, October 14, twenty-two people were evacuated.

Rosana Guernica is raising an additional $25,000 for two more relief trips. On Saturday, Guernica will make her third trip. She is chartering a seventy-passenger plane that will deliver sixteen thousand pounds of supplies to Puerto Rico and evacuate roughly sixty people needing medical attention.

Guernica, a third-year student majoring in decision science and minoring in innovation and entrepreneurship at CMU’s Dietrich College of Humanities and Social Sciences, has completed each round trip each in one day. Her crowdfunding campaign for the humanitarian mission has so far raised more than $125,000.

Guernica’s team for the second flight included Ivan Cao-Berg, Mellon College of Science alumnus and a senior research programmer in the Computational Biology Department at the School of Computer Science; Javier Spivey, College of Fine Arts student; Gabriel Ostolaza, master’s degree student in Electrical and Computer Engineering; José López Sánchez, program coordinator for pre-college summer studies and master’s degree student in International Relations and Politics at Dietrich College; and Dr. Yasdet Maldonado of Allegheny Health Network, who is also a student in the Heinz College of Information Systems and Public Policy.

On October 4, Guernica made her first relief trip along with a medical resident from Allegheny Health Network. They flew from Pittsburgh to Fort Lauderdale, Florida, where they filled a plane with nearly one thousand pounds of medical supplies for the University Pediatric Hospital in San Juan and Hospital UPR in Carolina, Puerto Rico.

“Helping them has been one of the most meaningful things I’ve ever done,” Guernica said shortly after the trip. “I’m so grateful that I was able to do so.”

Guernica said her time at CMU, an institution that teaches students to think outside of the box and pursue creative solutions, helped her
complete her first humanitarian mission.

“It helped me come up with the idea and believe that I could do it,” Guernica said. “What’s really special about Carnegie Mellon and the people who make up the university is that they’re not people who go down the beaten path. They find their own way. They find their own solutions to problems. They really are out-of-the-box thinkers, and I think that’s one of the main reasons I was able to come up with this plan. And so many people supported me in doing it.”

Guernica’s effort has received support from Heinz College, which sent a message in early October calling on their alumni, students, and faculty to contribute to Guernica’s effort. Mayor of San Juan Carmen Yulín Cruz is a Heinz College alumna, and the college has separately raised more than $5,000 for the American Red Cross to help victims in Puerto Rico and the earthquake in Mexico.

Ann English, Heinz College associate dean for finance and operation, said Heinz Dean Ramayya Krishnan and the college community were moved to action after hearing Cruz’s pleas for help. English said the Heinz community helped Guernica raise about $20,000 in the three days before Guernica left for her first relief trip to Puerto Rico.

The Dietrich College, led by Dean Richard Scheines, also jumped at the chance to help Guernica raise awareness of her efforts by emailing students and sharing her campaign on social media.

“I am in awe of Rosana’s compassion and determination. She decided last week that she must help, and seven days later she was on a plane to San Juan,” English said following Guernica’s first relief trip. “Rosana found a charter company in Fort Lauderdale, made contact with doctors in San Juan and in Florida to arrange for nearly one thousand pounds of supplies to be delivered to the airport in Fort Lauderdale, found patients in need of evacuation, and ensured that they had family who could meet them in Fort Lauderdale. She did all of this while attending classes, doing homework and preparing for an internship interview the day before she left.”

In other recent fundraising efforts, CMU students raised $4,000 during an event called “Together We Rise,” which collected funds to aid communities in Mexico, Puerto Rico, and the Caribbean.

Manuel Casasnovas, a Puerto Rico native and CMU student involved in Together We Rise, said the ongoing effort is not only about collecting donations but about raising awareness and bringing students together.

“We’re trying to create an environment where we support each other regardless of where you’re from,” he said.
Laura Chinchilla shares her hopes for Latin America’s future

By Nora Mattson

Though Laura Chinchilla, former president of Costa Rica, has spent fourteen years in public office and only one year as a fellow at Georgetown University, the tone struck in her talk on Wednesday, November 1, was decidedly more professorial than political. This event, sponsored by the Center for International Relations and Politics, the Office of Government Relations, and the Department of Modern Languages, explored Chinchilla’s hopes for the future of Latin America in the face of what she sees as the encroaching threat of populism.

The Rashid Auditorium was packed to the brim with faculty, students, trustees, and visiting business, foundation, and nonprofit leaders by the time Kiron Skinner, Director of the Center for International Relations and Politics, the Institute for Politics and Strategy, and the Institute for Strategic Analysis gave her introduction to Interim President Farnam Jahanian, interim president of Carnegie Mellon University, who kicked off the event by explaining the place of the policy forum on campus, finding that “the Center for International Relations and Politics integrates international relations and politics into intellectual conversations at Carnegie Mellon.”

He continued by highlighting the focus on analytical social science that Carnegie Mellon brings to policy discussions, joking that since this was Carnegie Mellon that, of course, the social science in question was analytical before also touching on how “analytical social science and interdisciplinary scholarship work together to broaden our perspective on major issues not just facing the United States but the world.”

For this purpose, Dr. Jahanian introduced former president Laura Chinchilla, reminding audiences that she was the first female president of Costa Rica and the fifth woman to be elected to lead Latin America in the past forty years before quipping that impressed audiences “can clap, if you want, by the way.”

Chinchilla started by bringing up that, though Latin America is often on the backburner of American foreign policy, its social and political situation affects the United States in a way that few other regions do. “Trade, immigration, and drug trafficking are three of the more important domestic policy challenges that the United States faces today. And to succeed in all of them, it will require the action and cooperation of all of Latin America,” emphasized Chinchilla.

She finds that this inattention to Latin America is where “precisely, lies the importance of academia in organizing events like this one to highlight priorities and redress long due policies within the public administration.” She echoed Dr. Jahanian’s point that events like these are necessary to reevaluate priorities in stating that “if academia continues to care about the relationship with Latin America, the government will not be able to ignore that call.”

In her analysis of the current political and economic situation of Latin America, she diagnosed the frequent fluctuations of Latin American economies as the reason for the lack of sustainable growth, stating that “the variation in the economic cycle that has characterized our nations has also affected our social indicators.”
She specifically brought up the example of Venezuela, noting that it had moved from being one of the largest economies in the world to a country in economic collapse, experiencing a humanitarian crisis. “Instead of devising new ways to expand democracies, some governments have come up with new ways to undermine it. Corruption, for example.” This is an issue that hits close to home for Chinchilla, as the New York Times cited anger about “unemployment, crime, and corruption scandals” as part of the reason she left office with one of the lowest approval ratings of any Latin American leader.

Her talk was titled “Hope in Times of Populism,” so the bleak opening that cited the “strong sense of wasted opportunity” which she felt was unique to the region was surprising for many in the audience. After outlining the problem, she quickly assured that she “would like to take a kind of different approach today. I am a very strong critic of my own region because also I understand that criticism is very important to try to move everybody ahead.”

The “hope in times of populism” which the title of her talk referenced was that Latin America was poised to combat what she saw as the problem that “the benefits of free trade, democracy, and globalization have been called into question.” She felt that “deepening democratic reforms,” by strengthening commercial ties with the rest of the world, attempting to create a robust middle class, and “advocating for a peaceful resolution to international conflict,” which she felt was a particular strength of the region, could not only stabilize Latin America socially and economically but could serve to combat anti-globalist sentiment.

She views this anti-globalist sentiment as inherently detrimental to democracy regardless of the ideological foundations, stating “it doesn’t matter if it is from the left or from the right, populism itself is something really terrible for a democracy because it does not have any kind of ideology,” when asked about left-wing populist movements in the United States.

The points Chinchilla made in her talk strongly reflected her agenda during her tenure as president. In office, she reduced crime rates and combated the corruption that she so derided in her talk. She cited education as a means to avert populism, and it was under presidency that the Costa Rican constitution was amended to mandate that eight percent of the government’s money be spent on education.

Her experience also led her to warn the audience against viewing the shift from autocracy to democracy as a permanent one. The work she has done after her presidency, such as leading Electoral Observation Missions for the Organization of American States in the United States and Mexico, demonstrates her commitment to reinforcing the norms of international liberal democracy in political and academic spaces.
A commonly proposed solution to help diffuse the political and religious polarization surrounding controversial scientific issues like evolution or climate change is education.

However, Carnegie Mellon University researchers found that the opposite is true: people’s beliefs about scientific topics that are associated with their political or religious identities actually become increasingly polarized with education, as measured by years in school, science classes, and science literacy.

“The lot of science is generally accepted and trusted, but certain topics have become deeply polarizing. We wanted to find out what factors are related to this polarization, and it turns out the ‘deficit model’—which says the divisions are due to a lack of education or understanding—does not tell the whole story,” said Caitlin Drummond, the lead author who recently received her PhD in behavioral decision research from CMU’s Department of Social and Decision Sciences and will be a postdoctoral research fellow at the Erb Institute at the University of Michigan this fall.

Published in the Proceedings of the National Academies of Sciences (PNAS), Drummond and CMU’s Baruch Fischhoff used data from the nationally representative General Social Survey. They examined predictors of Americans’ beliefs about six potentially controversial issues—stem cell research, the big bang, human evolution, genetically modified foods, nanotechnology, and climate change. And they measured education by the highest degree earned, science classes taken in high school and college, and aptitude on general science facts.

They found that beliefs were correlated with both political and religious identity for stem cell research, the big bang, and evolution and with political identity alone on climate change. On each of these issues, individuals with more education, science education, and science literacy had more polarized beliefs.

The researchers found little evidence of political or religious polarization for nanotechnology and genetically modified food.

“These are troubling correlations. We can only speculate about the underlying causes,” said Fischhoff, the Howard Heinz University Professor in the Institute for Politics and Strategy and the Department of Engineering and Public Policy. “One possibility is that people with more education are more likely to know what they are supposed to say, on these polarized issues, in order to express their identity. Another possibility is that they have more confidence in their ability to argue their case.”

The results also showed that for all six issues, people who trust science more are also more likely to accept scientific findings.

“We would love to be able to understand what is causing the relationship we observe between education and polarization, and how certain science topics got so polarized in the first place,” Drummond said. “Disagreements about science seem to be about more than the science itself, but also what the science’s implications are for a person’s identity.”

Grants from the National Science Foundation Graduate Research Fellowship, National Science Foundation and Riksbankens Jubileumsfond supported this research.
IMPROVING SECURITY SCIENCE THROUGH COLLABORATION:
FISCHHOFF CO-CHAIRS NATIONAL ACADEMIES CYBERSECURITY RESEARCH COMMITTEE

By Ann Lyon Ritchie

Computer scientists need to collaborate with their counterparts in the natural and social sciences to advance cybersecurity research, according to a new report from the National Academies of Sciences, Engineering and Medicine.

Carnegie Mellon University’s Baruch Fischhoff co-chaired the Committee on Future Research Goals and Directions for Foundational Science in Cybersecurity, along with Peter Weinberger from Google.

Online environments have become essential to both the public and private sectors, affecting everything from the power grid to the banking system. Asked to identify key research opportunities, the committee called for supporting an interdisciplinary security science, capable of broad application.

“The strategies and procedures to secure cyber technologies would be improved through a better understanding of the social, behavioral and decision sciences because people are an integral component—in designing technologies, operating them, allocating security resources—and in attacking them,” said Fischhoff, is the Howard Heinz University Professor in the Dietrich College of Humanities and Social Sciences’ Institute for Politics and Strategy and the College of Engineering’s Department of Engineering and Public Policy.

The committee made four broad recommendations: support a long-term, inclusive, multidisciplinary approach to security science; integrate the behavioral, organizational and decision sciences into the research effort; integrate engineering and operations for a lifecycle understanding of systems; and sustain long-term support for security science research, providing institutional and community opportunities to support these approaches.

As a step toward implementing these recommendations, the report strongly encourages adapting experimental methods and investigational approaches from the natural and social sciences to the special demands of cybersecurity research—as a complement to detailed system design.

Fischhoff took part in the fourteen-person committee made up of members from industry and academia.

The project was initiated by the federal government’s Special Cyber Operations Research and Engineering (SCORE) Interagency Working Group and sponsored by the National Science Foundation.

Roy Maxion, research professor in the School of Computer Science, was also a committee member.

“More of computer science research, particularly in cybersecurity, could benefit from developing a foundationally sustained science and by incorporating lessons learned in experimental design and analysis from other disciplines into a science of security,” Maxion said.

The report also examined areas in more traditional cybersecurity topics, such as cryptography and systems engineering.

“We engage in critical issues of national security through CMU’s work in politics and strategy, as well as engineering, public policy and computer science. Cybersecurity is headed toward a more multidisciplinary approach, ideally suited for the kind of collaboration we see at CMU,” Fischhoff said.
ACADEMIC PROGRAMS
BACHELOR OF SCIENCE IN INTERNATIONAL RELATIONS AND POLITICS

Offered through the Institute for Politics and Strategy (IPS), the International Relations and Politics (IRP) major analyzes the role of politics at the national, regional, international, and transnational levels; examines political and institutional arrangements within and among these levels; and investigates the grand strategy of nation-states.

Statesmen, scholars, and policy makers often define grand strategy as the combination of diplomatic, economic, military, and political factors used by leaders to defend their respective nation-states. The IRP major investigates the way in which leaders and citizens construct grand strategy and national security policy more generally; the impact of domestic and international forces on states’ security and economic policies; and the significance of alliances, coalitions, and international institutions for world politics.

Although the study of grand strategy and political institutions is the flagship initiative of the major, students are also able to study the effects of culture, economics, and society on the international system through a rich set of elective courses.

Thinking systematically about international and domestic politics is the core objective of the IRP major. To this end, the major has prerequisites in mathematics and statistics that help to sharpen students’ ability to undertake scientific analysis in the required substantive and historical courses.

The major is rooted in the discipline of political science but also utilizes the interdisciplinary strengths of decision science, economics, and political history. Thus, students pursuing this major will use the analytic tools of game theory, economic and statistical analysis, qualitative analysis, rational choice theory, and theories of behavioral decision-making as they study alliances, coalitions, institutions, and political strategy.

The name of the major signifies that those studying IRP learn about international relations and domestic politics from the standpoint of the discipline of political science. Also, the major taps into and contributes to CMU’s strengths in other social sciences that combine analytical and empirical methods. IRP has recently launched an innovative initiative to incorporate decision science in international relations. It enables students to apply the burgeoning science of judgment and decision-making to understanding political actors’ strategies and foibles, the strengths and weaknesses of formal methods of policy analysis (e.g., cost, risk, benefit, analysis), and the factors shaping public responses to politics and policies.

Recognizing the influence of language and culture on politics, students are required to complete the intermediate (200) level, or its equivalent, in a modern language other than English. Advanced-level study is strongly encouraged.

Open to all Carnegie Mellon undergraduates, the Carnegie Mellon University Washington Semester Program (CMU/WSP) allows students to study public policy and intern in Washington for one semester. Courses taken through CMU/WSP will count toward the elective sequence in public policy for IRP majors.
Students’ understanding of politics is further informed by courses and colloquia offered by CMU’s top-ranked departments, divisions, and schools in business, computer science, and engineering.

IRP majors interested in developing their research skills are encouraged to apply for a research position with the Center for International Relations and Politics or work directly with a member of the IPS faculty. Students are also encouraged to join student organizations focused on domestic or international politics. Becoming involved in the Institute for Politics and Strategy, as well as attending lectures and events sponsored by the Center for International Relations and Politics will provide additional opportunities for students.

The International Relations and Politics major is available as a primary major and additional major.

**BACHELOR OF SCIENCE IN ECONOMICS AND POLITICS**

Politics and economics are deeply interconnected. Political institutions and decision-making impact economic growth, income distribution, and many other aspects of economic life. Both fiscal and monetary policies affect the economy, but these policies are often employed with political considerations in mind and can influence political activity. Conversely, economic outcomes shape political preferences and policy choices. The overlap between these two disciplines is endless. For example, while the United Nations is often thought of in purely political terms, the Security Council can and does impose sanctions on countries—an example of an economic policy used for political change.

The Economics and Politics major is offered jointly between the Undergraduate Economics Program (UEP) and the Institute for Politics and Strategy (IPS). Students are equal members of both academic units and receive advising from both units. The major will appeal to any student interested in the design, evaluation, and political implementation of policy. It will be especially attractive to students considering careers in politics, government agencies, political and business consulting, lobbying, or the law.

The BS in Economics and Politics is an interdisciplinary major. The major will develop the political context and underpinnings of economic policy making. It will explore how political institutions resolve the tradeoffs and disagreements associated with policymaking and how they can facilitate or impede desirable economic outcomes.

IPS’ strengths lie in topics like national security, grand strategy, and globalization. Economic policy is just one facet of grand strategy, through which an administration pursues domestic and international goals. This major will also address key issues such as the complementarity between the multilateral economic institutions such as the IMF and World Bank and the use of economic coercion, and enable students to understand economic statecraft more broadly. Whether coercion is successful depends not just on the levers of power but also on variations in authoritarian regime structure, and complex linkages in the international economy. This is also important for our understanding of the relationship between international economics on human rights practices, extending even to how treaty commitments can facilitate compliance with a global initiative to combat climate change. And, not least important, there is broad recognition that the viability of the “Euro Zone” depends on whether the political-economic agreements necessary to mitigate institutional weaknesses are politically feasible or destined to failure.

**MINOR IN INTERNATIONAL RELATIONS AND POLITICS**

The International Relations and Politics (IRP) minor analyzes the role of politics at the national, regional, international, and transnational levels; examines political and institutional arrangements within and among these levels; and investigates the grand strategy of nation-states.

Statesmen, scholars, and policy makers often define grand strategy as the combination of diplomatic, economic, military, and political factors used by leaders to defend their respective nation-states. The IRP minor investigates the way in which leaders and citizens construct grand strategy and national security policy more generally; the impact of domestic and international forces on states’ security and economic policies; and the significance of alliances, coalitions, and international institutions for world politics. The study of grand strategy and political institutions is the flagship initiative of the minor.
In the tradition of Carnegie Mellon University, political science is studied and taught in an interdisciplinary manner. Utilizing the interdisciplinary strengths of the social sciences at CMU, IRP students study political phenomena through the perspectives of behavioral decision science, complex social systems, economics, strategy, entrepreneurship and technological change, and political history. Students pursing the minor may find it helpful to develop their analytical tools of game theory, economic and statistical analysis, qualitative analysis, rational choice theory, and theories of behavioral decision-making as they study alliances, coalitions, institutions, and political strategy. Recognizing the influence of language and culture on politics and international relations, students are encouraged to study a modern language other than English.

MINOR IN POLITICS AND PUBLIC POLICY

Rooted in the discipline of political science, the minor in Politics and Public Policy investigates US public policy issues and other matters of domestic politics while providing students hands-on and practical learning experiences. Students pursuing the Politics and Public Policy minor must participate in the Carnegie Mellon University Washington Semester Program for one semester during their undergraduate experience.

From embassy headquarters to nongovernmental organizations, think tanks to advocacy organizations, and consulting firms to media outlets, Washington, DC, is a focal point for many international and public policy activities. Open to all Carnegie Mellon undergraduates, the Carnegie Mellon University Washington Semester Program (CMU/WSP) allows students to study public policy and intern in Washington for one semester. Undergraduates from any course of study who would value firsthand policy experience are invited to apply to the Carnegie Mellon University Washington Semester Program and declare a minor in Politics and Public Policy.

In this semester-long program, students live, work, and study in Washington, DC, coming into direct contact with political, business, and community leaders and learning about the most pressing policy issues of the day. Students earn 48 units for the Carnegie Mellon University Washington Semester Program, interning twenty-four hours per week in any sector or field of interest within Washington, DC, while taking classes taught by Carnegie Mellon faculty. The Institute for Politics and Strategy sponsors events and policy-oriented opportunities in Washington for students participating in the program to further enrich their experience and enhance their understanding of how Washington functions as a hub of international and public policy decision-making.

MINOR IN CYBERSECURITY AND INTERNATIONAL CONFLICT

IPS received approval for a new minor in April 2018. The minor in Cybersecurity and International Conflict became available to students beginning in the fall 2018 semester.

The minor in cybersecurity and international conflict analyzes the role of cyber warfare and cybersecurity in international politics—past, present, and future. Cyber attacks by nation-states and their proxies have the potential to reshape how wars are fought in the twenty-first century. As such, the complexity and policy challenge of cyber-engagements is immense and altogether without precedent. The minor addresses the role of deterrence, dissuasion, and attribution in cyber conflict, while also studying the nuances of key components of modern warfare—from the security dilemma to escalation management.

Courses in this minor focus on the existing gaps in our understanding of cybersecurity and international conflict, is cyberspace offense or defense dominant? Which factors are most important in determining the answer to this, and other relevant questions? Students consider how nation-states, their primary adversaries, and a bevy of non-state actors engage online and in the virtual and information environments. Accordingly, the minor exposes students to basic technology concepts, methods of attack and defense, potential strategy and goals for cyber-engagement, and response and forensics for cyber-engagements.

Alongside conventional methods of warfare, cybersecurity has rapidly developed into a centerpiece of states’ ability to project power and impose its will in order to achieve its national priorities and strategic objectives. As the United States and other emerging cyber
powers craft and implement doctrine in this nascent domain, there is likely to be a rapid increase in activity, from efforts to disrupt the online activities of global terrorist networks like the Islamic State to near daily raids on foreign networks designed to cripple states’ cyberweapons before they can be deployed.

In the shifting landscape of cyber capabilities, how will laws, authorities, and policies keep pace? What are the implications and consequences of actions that may be considered “short of war” by some countries but “above the threshold” of conflict by others? Will a more aggressive defensive posture with respect to cybersecurity inadvertently increase the risk of conflict with states that sponsor malicious hacking groups? What is the proper balance between offense and defense in cybersecurity and how are cyber operations best integrated into a country’s overall military strategy?

Unlike other kinds of conflicts, the attribution of attacks presents significant challenges. Indeed, in many cases, it can be difficult to determine whether the attacker is a nation-state, a non-state actor, a criminal gang, or a lone hacktivist. Investigators must combine technical and traditional methods to identify potentially responsible parties and to understand their intent. If the aggressor’s identity cannot be confirmed, how can a counterattack be launched? Some attackers may seek to mount “false flag” attacks and deception, for example, that misdirect defenders to counter-attack in the wrong direction. Additionally, what are appropriate responses to attacks made on civil infrastructure and private business operations, such as in the areas of financial services, transportation, energy, entertainment, and health care? In other words, what are the appropriate rules of engagement for national systems, infrastructural systems, businesses, and individuals? When, for example, is a counterattack or a “kinetic” response permissible?

These questions have major implications for the study of war and peace. More than at any time in the past, those who seek to start war may be harder to find and their motives more difficult to discern. Many of the technical challenges posed by cyberspace activities will be addressed in the School of Computer Science’s new security and privacy concentration for SCS students. The SCS program, available to non-SCS students as a minor, requires a high degree of math and quantitative training. The cybersecurity and international conflict minor tackles the social-scientific dimensions of cybersecurity with a focus on the implications of the cyber age for modern statecraft, warfare, elections (local, state, and national), and politics, more generally.

**ACCELERATED MASTER OF SCIENCE IN INTERNATIONAL RELATIONS AND POLITICS (IRP/AMP)**

At the end of the Cold War, there was widespread belief among democratic elites that the end of history finally had arrived. They predicted that the United States (indeed the West, if not the world) would benefit from the peace dividend resulting from the dissolution of the Soviet Union and the undisputed role of the United States as the world’s predominant power. But the spread of democracy across Eastern Europe and Latin America as the Cold War ended has been met with highly unanticipated reversals. Relations among nation-
states are in flux. In the twenty-first century, the United States has been engaged in continuous Middle East and South Asian wars, intense territorial disputes among the great powers (United States, China, and Russia) are redefining the international landscape, civil wars routinely spill over into larger regional conflicts, and cyber warfare and terrorism intersect in deadly ways.

For the generation of students we are now teaching, war has been a constant in their lifetime. Accordingly, the primary focus of the International Relations and Politics Accelerated Master’s Program (IRP/AMP) is international security.

Areas other than international security, such as political economy and income distribution, clearly bear upon twenty-first century politics and are causal factors in major international outcomes. International security is the focus of this program, however, because the Institute for Politics and Strategy already offers in-depth courses and policy initiatives to undergraduate and graduate students in this area. Furthermore, international issues, such as trade and development, are being taught in other CMU graduate programs. IRP/AMP not only fills intellectual lacunae at CMU but also offers courses and research opportunities to graduate students across the university who seek to become conversant in the concepts and theories associated with the study of international relations.

Perhaps at no time since the interwar period of the twentieth century has there been so much uncertainty about what path the international system will take and how states will internally organize themselves. During this current period of uncertainty, transformation, and chaos, there is no denying President Barack Obama’s dictum: The United States is the world’s indispensable nation. In other words, the United States is the main nation-state actor that helps to
organize and enforce norms in the anarchic international system. It is a system marked by the absence of any authority above states or any commonly agreed-upon authority for the use of force—the opposite of domestic society. Perforce, understanding domestic political institutions must be a component of the accelerated master’s program.

It is important to comprehend how the political institutions of other nations function because domestic political processes of all sorts help to shape international relations. Theorists of international relations no longer contend, as they did a half century ago, that politics stops at the water’s edge. Courses in political institutions also are integral to IRP/AMP because they enrich students’ scientific understanding of political processes.

With the support of the Bradley Foundation, IPS led a field trip for the first cohort of IRP/AMP graduate students to Silicon Valley in January 2018. The focus of the trip was for students to understand the intersection of technology, public policy, and international and domestic security in Silicon Valley. Additionally, it contributed to the students’ development as future leaders in international and national security, able to critically think through the policy implications and applications of emerging technology. The trip builds upon ISA’s activities with leaders in defense and intelligence, policy makers, venture capitalists, CEOs, computer scientists, and engineers.

The trip was three days of briefings, meetings, and dinners with individuals from start-ups, Fortune 500 companies, and top venture capital firms. These leaders included Eric Schmidt, executive chairman of Alphabet; Safra Catz, CEO of Oracle Corporation; and Ray Lane, former chairman of CMU’s Board of Trustees and partner emeritus at Kleiner Perkins, Caufield, and Byers.

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IPS graduated its first cohort of students with a Master of Science in International Relations and Politics in May 2018. Each student completed a successful master’s thesis in the area of national security and political science. Since graduating, IPS master’s degree alumni have gone on to begin exciting careers as, for example, a legislative correspondent in the US Senate and an Analyst with Radiant Solutions.

The second cohort of IRP/AMP students attended a three-day trip to Washington, DC, in December 2018. Through conversations with experts in their various fields, this trip allowed students to get a firsthand look at some of the career options relevant to their studies, all while gaining a deeper understanding of the critical national security issues of the day. During the trip, students conducted site visits, attended briefings, and had conversations with experts from the National Counterterrorism Center, the Pew Research Center, the United States Institute for Peace, and the Pentagon, among others.

**MASTER OF INFORMATION TECHNOLOGY STRATEGY (MITS)**

The Master of Information Technology Strategy (MITS) is a cooperative endeavor of the College of Engineering (CIT), School of Computer Science (SCS) and the Institute for Politics and Strategy (IPS).

The rapidly evolving landscape of technology and related cyber challenges requires an understanding of network and cyber operations, data analytics and forensics, cyber security, decision science, politics and strategy, international security, and the ability to apply best practices to solutions. For students interested in becoming leaders with the critical thinking skills and strategic perspective needed to solve challenges within the information and cyber-security domains, the MITS program offers a multi-disciplinary approach within which students obtain:

- Breadth through the study of four areas: Data Analytics, Politics and Strategy, Information Security, and Software and Networked Systems, and
- Depth through a concentration in one of these four areas.

Additionally, students carry out a multifaceted, team-based project that allows them to apply learned principles and techniques to a practical problem.

With faculty, research centers, and degree programs of international renown, the program leverages Carnegie Mellon’s broad expertise in the critical areas of cyber security and information dominance, drawing from CMU’s Carnegie Institute of Technology, Institute for Politics and Strategy, and School of Computer Science.

The MITS program provides a multidisciplinary education that prepares students to define and conceptualize:

- the emerging environment of threats caused by cyber operations;
- opportunities for enhanced information analysis and exploitation;
- development and management of innovative information technology systems; and
- decision-making challenges associated with the above.

Since its establishment, the Master of Information Technology Strategy program has helped shape students into leaders with the critical thinking skills and strategic perspective needed to help work towards solutions for some of the most complex challenges in the information and cyber-security domains.
CARNEGIE MELLON UNIVERSITY WASHINGTON SEMESTER PROGRAM (CMU/WSP)
From embassy headquarters to nongovernmental organizations, think tanks to advocacy organizations, and consulting firms to media outlets, Washington, DC, is a focal point for many international and public policy activities.

Undergraduates from any course of study who would value firsthand policy experience are invited to apply to the Carnegie Mellon University Washington Semester Program (CMU/WSP), sponsored by the university’s Institute for Politics and Strategy. In this semester-long program, students live, work, and study in Washington, DC, coming into direct contact with political, business, and community leaders and learning about the most pressing policy issues of the day.

CMU/WSP students earn 48 units for their semester in Washington, interning twenty-four hours per week in any sector or field of interest within Washington, DC, while taking a full semester of courses taught by IPS faculty. The Institute for Politics and Strategy sponsors events and policy-oriented opportunities in Washington for students participating in the program to further enrich their experience and enhance their understanding of how Washington functions as a hub of international and public policy decision-making.

Data presented for the Internship Breakdown represents all internships held through CMU/WSP between 2014 and 2019. The lists below each category demonstrate a few examples for that category.
CMU/WSP celebrated its fifth anniversary in its newly expanded office in the heart of DC on June 17, 2019. Overlooking the Supreme Court and Capitol buildings on the top floor of the United Methodist Building, CMU/WSP hosted alumni of the program and of the greater CMU community in DC.

Dr. Kiron Skinner, IPS Director and Taube Professor, and Mary Jo Dively, Vice President and General Counsel of Carnegie Mellon University, both remarked on the presence that the offices afford the university in our nation’s capital. Three CMU/WSP alumni, Andres Anzola, Dana Kim, and Satvika Neti, also delivered remarks on how the program influenced their career trajectories.

Alumni, current students, and IPS faculty and staff networked throughout the event. Many of the CMU/WSP alumni in attendance were able to catch up with faculty, updating them on academic and career progress since their CMU/WSP semester.
Bella Bettino
American Foreign Policy Council
International Relations and Politics
Class of 2020

Gabby Giancola
Smithsonian Office of Sponsored Projects
International Relations and Politics
Class of 2020

Aden Halpern
US Department of State, Labor Affairs
International Relations and Politics; Behavioral Economics, Policy and Organizations
Class of 2021

Henry Hausmann
Climate Institute
Physics; Science, Technology, and Public Policy
Class of 2020

Lauren Kelly
House Democratic Caucus
International Relations and Politics; Professional Writing
Class of 2020

Warda Khan
Signal Strategic Communications
Policy and Management
Class of 2020

Cindy (Xinyang) Lu
Americans for Democracy & Human Rights in Bahrain
Psychology; Global Studies; French and Francophone Studies
Class of 2021

Alison Munden
Congresswoman Lois Frankel (D-FL-21)
International Relations and Politics
Class of 2020

Pierre Saint-Perez
Stand Up Republic
Ethics, History and Public Policy; Science, Technology and Public Policy
Class of 2021

Sunny Su
Venga
Business Administration
Class of 2021

Casey Wong
Precision Strategies, Campaign Management
International Relations and Politics
Class of 2019
Anna-Jamieson Beck  
Ford's Theatre–Development Department  
BHA: Politics and Public Policy and Dramaturgy  
Class of 2019

Kenneth Hong  
Washington Metropolitan Area Transit Authority (WMATA), Strategic Initiatives Chemistry  
Class of 2020

Michael Mattson  
Office of Senator Kirsten Gillibrand D-NY) International Relations and Politics  
Class of 2020

Micah Rabin  
Office of Senator Bob Casey (D-PA) Decision Science; International Relations and Politics  
Class of 2019

Peter Rezk  
Center for American Progress Generation Progress Biological Sciences  
Class of 2020

Jamie Slomka  
Office of Senator Cory Booker (D-NJ) Policy and Management  
Class of 2020

Christina Sotirescu  
720 Strategies–Public Affairs Decision Science  
Class of 2020

Caroline Trueblood  
Senate Committee on Banking, Housing, and Urban Affairs (Minority) Mathematics  
Class of 2020

Gabrielle Vennitti  
Office of Congresswoman Kathleen Rice (D-NY-4) International Relations and Politics  
Class of 2020
Orchi Banerjee  
*Institute for the Study of War–Iraq Project*  
Decision Science; International Relations and Politics  
Class of 2019

Mike Cheng  
*Washington Metropolitan Area Transit Authority (WMATA), Strategic Initiatives*  
Behavioral Economics, Policy and Organizations  
Class of 2019

Sihan Dong  
*American Enterprise Institute–Video Production*  
Decision Science; Human-Computer Interaction  
Class of 2019

Antonio Freiria  
*Office of Representative Al Lawson (FL-05)*  
International Relations and Politics  
Class of 2019

Sara Graves  
*Climate Institute*  
Physics  
Class of 2019

Allison Guzman  
*Office of Senator Bob Casey (D-PA)*  
Ethics, History, and Public Policy; Professional Writing  
Class of 2019

Guthrie Scrimgeour  
*DC Public Schools*  
International Relations and Politics; Creative Writing  
Class of 2020

Mohammed Siddiqui  
*Solar United Neighbors*  
Business Administration; International Relations and Politics  
Class of 2020

Lucy Truschel  
*Center for American Progress–Early Childhood Policy*  
International Relations and Politics; Psychology  
Class of 2019

Yuxi (Christina) Xie  
*Office of Congressman Bill Foster (IL-11)*  
Psychology  
Class of 2020

Joanne Zulinski  
*Environmental and Energy Study Institute–Policy and Communications Internship*  
Mechanical Engineering; Engineering and Public Policy  
Class of 2019
CMU/WSP FALL 2017 STUDENTS

Julia Adams  
US Department of State–Bureau of Intelligence and Research, Office of Analytic Outreach  
International Relations and Politics  
Class of 2019

Winston Ching  
Washington Metropolitan Area Transit Authority (WMATA), Strategic Initiatives  
Electrical and Computer Engineering  
Class of 2019

Makenzie Donaldson  
Active Minds  
Ethics, History, and Public Policy  
Class of 2018

Jure Erlic  
Embassy of Peru–Department of Relations with States of the Union and International Cooperation  
International Relations and Politics; Social and Political History  
Class of 2019

Aysar Gharibeh  
Embassy of Mexico–Political Affairs Office  
International Relations and Politics  
Class of 2018

Devin Gund  
US Securities and Exchange Commission (SEC)–Office of Strategic Initiatives  
Electrical and Computer Engineering; International Relations and Politics  
Class of 2018

Jules Ross  
White House Council of Economic Advisors  
Economics and International Relations and Politics  
Class of 2019

Jack Sather  
Office of Senator Patty Murray (D-WA)  
Mechanical Engineering and Engineering and Public Policy  
Class of 2019

Sahana Thirumazhusai  
Brownstein Hyatt Farber Schreck LLP–Legislative Research Internship  
International Relations and Politics; Social and Political History  
Class of 2019

Isabella Velasco  
Jacques & Associates  
Business Administration  
Class of 2020

John (Jack) Verser  
American Foreign Policy Council  
Decision Science and Behavioral Economics, Policy and Organizations  
Class of 2019
SPRING 2019, MINI 2
INSTRUCTOR: ADAM GARFINKLE

Aaron David Miller
Vice President and Middle East Program Director, The Wilson Center
April 23, 2019

Dov Zakheim
Aspen Strategy Group Member, Senior Fellow and Senior Advisor, CAN Corporation and Center for Strategic and International Studies
April 16, 2019

Charles Dunne
Scholar, Middle East Institute; Senior Fellow, Freedom House
April 9, 2019

Ron Neumann
Former American Ambassador to Afghanistan
April 2, 2019

SPRING 2019, MINI 1
INSTRUCTOR: THOMAS KARAKO

Todd Harrison
Director, Defense Budget Analysis; Director, Aerospace Security Project; Senior Fellow, International Security Program, CSIS
March 8, 2019

George Cristian Maior
Romanian Ambassador to the United States
March 1, 2019

James Clapper
Former Director of National Intelligence
February 22, 2019

Brian Todd
CNN Correspondent
February 5, 2019

Whitney McNamara
Senior Analyst, Center for Strategic and Budgetary Assessments
February 8, 2019

Frank Rose
Former Assistant Secretary of State
February 1, 2019
FALL 2018, MINI 2
INSTRUCTOR: ADAM GARFINKLE

Philip Gordon
Senior Fellow, US Foreign Policy, Council on Foreign Relations
November 29, 2018

Ron Neumann
Former American Ambassador to Afghanistan
November 15, 2018

Fred Hof
Senior Fellow, Atlantic Council
November 9, 2018

Dov Zakheim
Aspen Strategy Group Member, Senior Fellow and Senior Advisor, CAN Corporation and Center for Strategic and International Studies
November 8, 2018

FALL 2018, MINI 1
INSTRUCTOR: THOMAS KARAKO

Jamil N Jaffer; Greg Lukianoff; Melanie Marlowe; Gabriel Schoenfeld
Founder, National Security Institute (Jaffer); President, Foundation for Individual Rights in Education (Lukianoff); Fellow, CMU IPS (Marlowe); Senior Fellow, Hudson Institute (Schoenfeld)
November 17, 2018

Michael Morell
Former Acting CIA Director
November 12, 2018

Victor Cha
Senior Adviser and Korea Chair, Center for Strategic and International Studies
October 5, 2018

Kerry Greenwald
Kerry A. Greenwald & Associates (1974 CMU alumnus)
October 3, 2018

Mark Oleszek
Congressional Research Service
September 21, 2018

Beverly Kirk
Former Reporter; Fellow, Center for Strategic and International Studies
September 11, 2018
Michael Morell  
Former Acting Director, Central Intelligence Agency  
April 30, 2018

Tom Sanderson  
Senior Associate, Center for Strategic and International Studies Transnational Threats Project  
April 27, 2018

LTG James Dubik  
Senior Fellow, Institute for the Study of War  
April 17, 2018

Mark Oleszek  
Congressional Research Service  
April 13, 2018

Beverly Kirk  
Former Reporter; Fellow, Center for Strategic and International Studies  
April 6, 2018

Nadia Schadlow  
Deputy Assistant Secretary to the President, National Security Council  
March 22, 2018

Derek Chollet  
Executive Vice President for Security and Defense Policy, German Marshall Fund of the US  
February 21, 2018

Philip Gordon  
Senior Fellow, US Foreign Policy, Council on Foreign Relations  
February 14, 2018

Mary Beth Long  
Former Assistant Secretary of Defense for International Security Affairs  
February 7, 2018

Fred Hof  
Senior Fellow, Atlantic Council  
January 31, 2018

Mike Green  
Senior Vice President for Asia and Japan Chair, CSIS  
January 24, 2018
FALL 2017, MINI 2
INSTRUCTOR: MELANIE MARLOWE

Jared Bernstein
Senior Fellow, Center on Budget and Policy Priorities
November 29, 2017

Patrick Roberts
Associate Professor, Virginia Tech
November 8, 2017

Mallory Stewart
Fellow, WMD, Nonproliferation, and Security Program, Stimson Center
November 1, 2017

Michael Morell
Former Deputy Director, Central Intelligence Agency
October 25, 2017

Christine Wormuth
Director of the Adrienne Arsht Center for Resilience, Atlantic Council
October 24, 2017

FALL 2017, MINI 1
INSTRUCTOR: THOMAS KARAKO

Matt Kroenig
Associate Professor, Georgetown University
October 13, 2017

William McCants
Fellow, Center for Middle East Policy, Brookings Institution
October 3, 2017

Menna Demessie
Vice President of Policy Analysis and Research, Congressional Black Caucus Foundation
September 29, 2017

Jennifer Griffin
National Security Correspondent, FOX News
September 22, 2017

Todd Harrison
Senior Fellow, Center for Strategic and International Studies
September 15, 2017
CIRP OVERVIEW

Carnegie Mellon University derives its intellectual distinction from research across disciplines as well as from the application of basic science to issues of public policy. Firmly situated in this long-standing tradition, the Center for International Relations and Politics (CIRP) uses analytical social science and interdisciplinary research to better understand, explain, anticipate, and solve public policy problems.

RESEARCH LAB TEAM MEMBERS

CIRP FELLOW
Dana Kim, Fellow, Center for International Relations and Politics (2017–2018)

CIRP RESEARCH COORDINATOR
Hillary Tanoff, Center for International Relations and Politics (2018–present)

AUGUST 2017–MAY 2019
RESEARCH ASSOCIATES:

- Julia Adams
- Priya Agarwal
- Ian Asenjo
- Tessa Conrardy
- Morgan Dively
- Jure Erlic
- Antonio Freiria
- Michael Gormley
- Carrie Haney
- Raaga Kalva
- Esther Kim
- Jack Kroger
- Trevor Lazar
- Jules Ross
- Abigail Savit
- Mohammed Siddiqui
- Robert Stephens
- Irene Sun
- Colin Tait

CIRP RESEARCH PROJECTS

Undergraduates, graduate students, and faculty members in the Center for International Relations and Politics (CIRP) research lab apply scientific reasoning and findings to problems in the political sphere. Carnegie Mellon University’s comparative advantage in the social sciences rests in its ability to investigate issues, be they functional or specific to a country or region, through interdisciplinary research that combines fields such as social science and engineering.

Contributing to this tradition, CIRP fosters research, teaching, and policy analysis in diverse regions of the world through its flagship program, Grand Strategy, as well as its Regions Initiative.

Over the past several years, CIRP research associates have worked in collaboration with managing senior research associates to conduct research on a variety of subjects.

The following projects have been completed or are in the process of being completed.

ORGANIZING FOR WAR

The primary research activities of the CIRP lab support the Organizing for War (OFW) project. The goal of the project is to observe the shifts in US grand strategy throughout the Cold War regarding the Middle East and terrorism. These changes are examined through historical, textual, geographic, and data analysis.

ANALYZING SPEECH AROUND TERRORISM

A major component of OFW has been the textual analysis of public statements and speeches by presidents and secretaries of state from the administrations of Presidents Jimmy Carter, Ronald Reagan, and George H.W. Bush. This effort consists of two parts: first, collection of all the public statements of the identified key officials; and, second, examination of the frequency of certain terms, phrases, and syntax related to terrorism.

Using statistical analysis, CIRP has been working with the statistics departments of CMU and Harvard University to examine the language related to terrorism and counterterrorism during the Carter, Reagan, and Bush I administrations. Researchers have used online databases, archival research, and resources from the Library of Congress, the National Archives, and the US Department of State Historian.

MILITARY BASE LOCATIONS AND PERSONNEL NUMBERS

Included in the OFW analysis of grand strategy
shifts are the locations of domestic and international US military bases. Examination of the installation locations, openings, closings, shifts in location or acreage, and changes in personnel reflect strategic and tactical shifts in policy. The final presentation for both sets of research will consist of a set of time-series graphs and maps using GIS software.

MILITARY EXERCISES

This section of the project includes collection and analysis of the frequency and type of military exercises the United States conducted around the world during the examined time period. The results of this analysis will serve as a supplement to the strategic and tactical policy shifts found in the military base locations and personnel numbers section. The final presentation for this research will consist of a set of heat maps using a statistical and graphics programming language.

ARMS TRADE AND AID

This section looks at both weapons and aid given to foreign countries by the US government. The former utilizes government published World Military Expenditures and Arms Trade (WMEAT) documents to collect data on arms transfers from the United States to foreign countries. The latter pulls from the USAID Greenbook, which divides US government aid into two categorical subsections, economic and military aid. Greenbook data can also be isolated by regional subsections, and even further by individual countries.

US DIPLOMATIC RELATIONS

The next section of the project, an examination of diplomatic relations, is achieved in two parts. First, meetings between presidents and US ambassadors or presidential visits to an embassy are recorded. This database also includes meetings between a country’s ambassador to the United States and the president. Second, the research team records presidential meetings and calls with heads of state from other countries. In addition to presidential schedules, the research team has been given access to the schedules of Secretary of State George Shultz for inclusion in the project. The final presentation will include visual representations of the data using a statistical and graphics programming language.

STATE DEPARTMENT AND DEFENSE DEPARTMENT BUDGETS

Another section of the project includes collection and analysis of budget trends within the Department of State and Department of Defense. Changes in spending within the department can represent how each administration utilized its resources in order to respond to the rising global threat of terrorism. The following section was added based on our findings in this section.

NATIONAL DEFENSE GUIDANCE DOCUMENTS

The final section of the project is the collection and analysis of national defense guidance documents produced by the executive branch and the Department of Defense throughout the Cold War.

The review of national defense guidance documents in an elementary analysis could stand alone in a study of the United States’ implementation of a grand strategy. In this project, the collection of these documents complements the primary research components, providing additional context through which we might view these aforementioned research components.

ADDITIONAL RESEARCH

Additional small briefing books include Artificial Intelligence and Implications for the Future, Free Speech in America, North Korea and Global Reactions, The United States Navy, and various briefing books related to the activities of the current administration.
The Policy Forum represents one of the means by which the Center for International Relations and Politics integrates international relations and politics into the intellectual conversation at Carnegie Mellon University. CIRP’s Policy Forum regularly brings statesmen, scholars, policy makers, journalists, and other thought leaders to the university to address major issues facing the United States and the world. During the spring 2019, fall 2018, spring 2018, and fall 2017 semesters, CIRP sponsored several public lectures on campus, that were promoted and open to the public in the greater Pittsburgh area.

**SPRING 2019**

**Scott Sagan**  
Caroline S.G. Munro Professor of Political Science at Stanford University  
“The North Korean Nuclear Crisis: Avoiding Cliffs on the Backside of the Summit”  
April 22, 2019

**Robert Chesney**  
James Baker Chair and Associate Dean for Academic Affairs at the University of Texas School of Law  
“CYBERCOM and the Law of Military Operations in Cyberspace”  
April 4, 2019

**Jorge Quiroga**  
Former President of Bolivia (2001–2002)  
“China, Venezuela, Corruption, and Its Effects on Bolivia and Latin America”  
March 20, 2019
SPRING 2019 (CONTINUED)

Colonel Liam Collins
Director of Modern War Institute and Director of the Department of Instruction at the United States Military Academy at West Point
“Russian Hybrid War, Ukraine, and US Policy”
February 27, 2019

P.W. Singer
Author of LikeWar, and Strategist and Senior Fellow at the New America Foundation
“LikeWar: How Social Media is Changing the World and How the World is Changing Social Media”
January 29, 2019

George Cristian Maior
Ambassador Extraordinary and Plenipotentiary of Romania to the United States
“Defending the West’s Strategic Frontier: The Black Sea and Beyond”
January 22, 2019
FALL 2018

J.M. Berger
Author of *Extremism* (MIT Press, August 2018), research fellow with VOX-Pol, and a postgraduate research student at Swansea University’s School of Law
“Analyzing Extremist Ideologies, Online and Offline”
November 27, 2018

Clint Watts
Distinguished Research Fellow at the Foreign Policy Research Institute and Senior Fellow at the Center for Cyber and Homeland Security at The George Washington University
“Messing with the Enemy: Surviving in a Social Media World of Hackers, Terrorists, Russians, and Fake News”
November 14, 2018

Eric Herschthal
Race and Medicine Postdoctoral Fellow in the African American Studies Department at The Ohio State University
“Frederick Douglass on Science: What he said, why he said it, and what he thought it ought to be”
November 13, 2018

Brazilian Presidential Election Panel
Panelists from Carnegie Mellon and the University of Pittsburgh discussed the effect of the Brazilian presidential election on the nation and its neighbors.
October 30, 2018
David Skaggs (D-CO), and
Donald Manzullo (R-IL)
Former Congressmen
“Congress to Campus: Closing our Political Divide
– A Bipartisan Approach to Legislation”
September 27, 2018

Debbie Lee James
Former Secretary of the Air Force
“Current Threats to our National Security”
September 26, 2018

David Ranz
Deputy Assistant Secretary for Pakistan
“South Asia Strategy–The Bilateral Relationship between
Pakistan and the United States”
September 24, 2018
Aizaz Chaudhry
Ambassador of the Islamic Republic of Pakistan to the United States
“Pakistan’s Role in Regional Stability”
February 21, 2018

Khawar Nasim
Deputy Consul General of Canada in New York
“NAFTA Lunch and Learn”
February 16, 2018

Anne Applebaum
Columnist, The Washington Post; Professor of Practice, London School of Economics
“Red Famine: Stalin’s War on Ukraine - and why it still matters”
February 14, 2018
FALL 2017

Elizabeth Erin Walsh
Assistant Secretary of Commerce for Global Markets (GM); Director General of the US and Foreign Commercial Service (CS)
“Innovation and Exporting: Creating Jobs through Free and Fair Trade”
November 13, 2017

Anthony Foxx
17th United States Secretary of Transportation; former mayor of Charlotte, North Carolina
“Smart and Connected Cities”
November 10, 2017

Laura Chinchilla
Former President of Costa Rica (2010–2014)
“Latin America: Hope in Times of Populism?”
November 1, 2017

Joyce Mushaben
Curators’ Professor of Comparative Politics and former Director of the Institute for Women’s and Gender Studies, University of Missouri–St. Louis
“Becoming the World’s Most Powerful Woman”
October 13, 2017
CIRP PARTNERS

2017-2019 CIRP EVENT PARTNERS

Casop: A Requiem for Rice
Department of Modern Languages
Department of History
Office of Government Relations
Office of the President
Office of Vice Provost for Government Relations
University Lecture Series

OUTSIDE PARTNERS

Duquesne University
Oakland Catholic High School
World Affairs Council of Pittsburgh
University of Pittsburgh Graduate School of Public and International Affairs

CIRP INTERNATIONAL ADVISORY BOARD

The CIRP International Advisory Board is a group of individuals who help guide and support the center in future endeavors. The board is made up of the following people:

• Karl Eikenberry
• Alonzo Fulgham
• Franklin “Pitch” Johnson
• Steve Kahng
• Mark Kamlet
• Charles J. Queenan, Jr.
• Thomas J. Ridge
• Merline Saintil
• George P. Shultz
• Nathan Urban

IN MEMORIAM

• David Morgenthaler
The Center for International Relations and Politics (CIRP) sponsors the *CIRP Journal*, an opportunity provided to undergraduate and graduate students to publish their work in international relations and political science. Students contribute scholarly analyses of current problems facing the United States and the international system and perform interviews with the nation’s thought leaders.

The spring 2019 Issue of the *CIRP Journal* focused on the decision-making behind policy in domestic and international politics. Student contributors included undergraduate students and a master’s candidate. The topics included in the issue spanned a wide variety of policy issues, such as active shooter safety drills in schools and vaccination policies by the World Health Organization. This issue features an interview with P.W. Singer, the author of *LikeWar: The Weaponization of Social Media*.
The fall 2018 issue of the CIRP Journal featured the abridged theses of our inaugural cohort of the Advanced Master of Science in International Relations and Politics (IRP/AMP). All of the students chose to focus on national security issues. Within that, a wide array of topics were pursued, including how intelligence collection had been affected by Foreign Intelligence Surveillance Courts (FISC) and the timely topic of the relationship between Russia and cybercrime. This issue features an interview with former secretary of the Air Force, Debbie Lee James, and author Clint Watts.

The summer 2018 issue of the CIRP Journal focused on international development. Student contributors included undergraduate students and a master’s candidate. Within international development, topics ranged from the management of which refugees the United States admits into the country and international funding for family planning and reproductive health. This issue features an interview with Bibhuti Aryal, President of the Rukmini Foundation.
INSTITUTE FOR STRATEGIC ANALYSIS (ISA)
Carnegie Mellon University’s status as a top-ranked university is attributable in part to a faculty engaged in and committed to interdisciplinary research with real-world implications. CMU scholars are known for esoteric scholarship, but even those involved in highly theoretical research also work alongside colleagues who focus primarily on applied studies.

Founded in the fall of 2013, the Institute for Strategic Analysis (ISA) serves as an intellectual resource for CMU faculty and for government officials who seek to apply basic research to matters of national security. Areas of concentration include terrorism, cyber challenges, war avoidance, intelligence, and the intersection of energy and security.

In facilitating introductions between government leaders and CMU faculty, ISA helps sharpen the understanding of military and intelligence priorities, especially those involving cybersecurity. ISA is uniquely situated to inform the national conversation on cybersecurity precisely because its faculty members are deeply engaged in cybersecurity research from numerous disciplinary and interdisciplinary standpoints. Furthermore, through CyLab, CMU has a well-established research center in cybersecurity. ISA routinely partners with CyLab in hosting government officials and other national thought leaders who are working on cyber challenges.

Organizing scientific short courses and year-long seminars in cybersecurity and other military challenges for government officials is one of ISA’s primary activities. In these courses, government officials are introduced to cutting-edge scientific research that may help them better defend the nation against a range of internal and external threats.

ISA has been recognized for its work in furthering the national discourse on civil liberties, privacy versus security, cybersecurity, and intelligence gathering. It receives funding from the William and Flora Hewlett Foundation’s Cyber Initiative and the Lynde and Harry Bradley Foundation.

ISA EVENTS
Under the direction of Dr. Kiron Skinner, the Institute for Strategic Analysis (ISA) expanded its activities, engagements, and networks in 2017-2019. Each of these new relationships contributed to ISA’s mission of bringing scientific research to support defense and intelligence priorities. ISA continued to receive funding to support its activities from the William and Flora Hewlett Foundation’s Cyber Initiative and the Lynde and Harry Bradley Foundation. ISA maintains a strategic position in the university by contributing to Carnegie Mellon’s artificial intelligence (AI) initiative.

MEETING OF NATIONAL THOUGHT LEADERS
A key activity of ISA has been convening the Meeting of National Thought Leaders at the National Security Agency (NSA). ISA co-hosts the series of unclassified briefings with Dr. Emily Goldman, director of the NSA/Cyber Command Combined Action Group. The Institute’s role is to bring together leaders from academia, the private sector, civil society, and former government officials. ISA began co-hosting these meetings in 2014, under NSA General Keith Alexander, and has been privileged to continue this role under the former NSA director Admiral Michael Rogers,
Two meetings were hosted in July and October 2017. The initial impetus of the briefings was to provide small group conversations about the NSA and Cyber Command functions in a post-Snowden environment. In 2017, these discussions expanded to include diversity and inclusion efforts, talent recruitment, and NSA 21 (NSA’s restructuring initiative). With the support of the Bradley and Hewlett foundations, ISA has been able to extend the invitations of briefings to a broader network and curate the most diverse group in the series.

**EXECUTIVE COURSE: ADVANCES IN AI AND SECURITY BETWEEN 2016-2019—WHAT YOU NEED TO KNOW**

In July 2017, ISA offered its first executive course focused on the latest technology research from Carnegie Mellon University in the area of AI and security. *Advances in AI and Security between 2016 and 2019—What You Need to Know* participants were introduced to technology, tools, and research in security and the artificial intelligence stack. The course contributed to the CMU AI campus-wide initiative launched in 2017, showing participants presentations and demonstrations about AI use in voice forensics, cybercrimes, verifying autonomy, human factors in security, data science, and network analytics. In addition to introducing participants to the deep research at the university, it prioritized the identification of pathways for further engagement and direct applications. Course participants included leadership from the NSA, US Air Force, US Marine Corps, the Joint Improvised-Threat Defeat Organization (JIDO), and the National Security Council. Subsequent to the course, a group of technical and research leads from NSA came to CMU to learn more about our deep research in machine learning, architecture, autonomy, and artificial intelligence.

**ISA DINNER DISCUSSION: NATIONAL SECURITY STRATEGY**

Elections and the subsequent changing of presidential administrations create risks and opportunities. Through her national public service on the presidential transition team, ISA Director, Dr. Kiron Skinner, had the opportunity to connect with current key leaders and advisors in the administration. One developing relationship was with Dr. Nadia Schadlow, Deputy Assistant to the President for National Security Strategy. In the process of her drafting of the National Security Strategy, Dr. Schadlow participated in external and internal listening tours with defense and intelligence officials, scholars, and other stakeholders. In order to support this important work, ISA began a new public engagement activity, ISA Dinner Discussions. This new initiative provides leaders in government with a casual atmosphere to connect with scholars and thought leaders on pressing national security challenges.

Dr. Skinner co-hosted with Dr. Nadia Schadlow on September 19, 2017, for the first of these dinners as part of her listening tour while drafting the National Security Strategy. The dinner allowed Dr. Schadlow to present the overall theme of the document, discuss the main areas of national security focus for the administration, and receive feedback. Through this public engagement, ISA brought professors, historians, and think tank scholars together to assist in the drafting of the National Security Strategy.

**THE NATIONAL SECURITY COUNCIL HOSTED ISA FOR AN EVENT ON AI AND CYBERWARFARE IN OCTOBER 2017. NATIONAL SECURITY ADVISOR LTG H.R. MCMASTER PICTURED GIVING OPENING REMARKS, ABOVE.**

**NATIONAL SECURITY COUNCIL HOSTED ISA BRIEFING: PRESENT AND FUTURE INFLUENCES OF ARTIFICIAL INTELLIGENCE AND CYBER WARFARE**

In a first for ISA, the institute was hosted by the National Security Council (NSC) to present at the White House. The briefing, “Present and Future Influences of Artificial Intelligence and Cyber Warfare,” brought leading CMU faculty to the White House to present on the deep research, current developments, and
The ISA roundtable discussion at the NSC is a culmination of maintaining relationships and the reputation of CMU and ISA. LTG McMaster visited CMU as guest of ISA in 2016. He maintained a relationship with various faculty in the university. During his time as the National Security Advisor, LTG H.R. McMaster hosted book discussions for members of the NSC. He invited CMU to present on the current developments and future use of artificial intelligence. ISA and all attendees had the privilege of an extended introduction by the National Security Advisor prior to the presentation.

ISA used this opportunity to wider engagement, inviting scholars and leaders from across government and the private sector. The event created pathways for further engagement with CMU research and contributed to the CMU AI initiative.

STUDENT AND FELLOW ROUNDTABLE WITH PAUL SCHARRE, SENIOR FELLOW AND DIRECTOR OF THE TECHNOLOGY AND NATIONAL SECURITY PROGRAM AT THE CENTER FOR A NEW AMERICAN SECURITY

ISA Faculty Affiliate, Professor David Danks hosted the CMU visit of Paul Scharre. Paul Scharre is the Senior Fellow and Director of the Technology and National Security Program at the Center for a New American Security (CNAS). The primary agenda of the visit included briefings with different faculty from across the university exploring research in artificial intelligence, autonomy and ethics. ISA arranged a roundtable with Paul Scharre for students from the Accelerated Master of Science in International Relations and Politics Program (IRP/AMP), undergraduate International Relations and Politics (IRP) students, US Army War College Fellows, students from across the university, and recent alumni. The informal discussion covered Mr. Scharre’s portfolio at CNAS, his previous experience in the Office of the Secretary of Defense, and how he believes emerging technologies will affect defense.

ISA AND US DEPARTMENT OF COMMERCE

A hallmark of ISA is cultivated relationships across the defense, intelligence, and business communities. In the fall of 2017, ISA began an affiliation with the United States Department of Commerce through visits to CMU, faculty visits to the Department of Commerce, and development of an executive course. The first engagement was the CMU visit and public lecture from Elizabeth Erin Walsh, Assistant Secretary of Commerce for Global Markets and Director General, US Foreign Commercial Service. Her visit included demonstrations and briefings on the future of work, the CMU start-up community, and machine learning. The Assistant Secretary participated in a roundtable with IRP/AMP students about Women in Global Affairs. Her campus engagement ended with a public lecture on “Innovation and Exporting: Creating Jobs through Free and Fair Trade.” The final part of the visit included a dinner for visiting executives from LG hosted by the Mayor of Pittsburgh, Bill Peduto, and the County Executive, Rich Fitzgerald.

The second engagement was a visit of CMU faculty to the Bureau of Industry and Security (BIS). The visit was hosted by Ms. Mira Ricardel, Undersecretary of Commerce for Export Administration, Bureau of Industry and Security. CMU faculty received an overview of the work of the bureau, after which they presented CMU’s research in artificial intelligence and machine learning. The visit culminated in a roundtable between CMU faculty and Commerce staff about
emerging dual use technologies and the machine learning application for data. Following the visit, BIS began discussions on the development of an executive course and CMU faculty consultations on data management solutions.

**US ARMY WAR COLLEGE INTERNATIONAL FELLOWS PROGRAM**

The US Army War College has a program of International Fellows from more than seventy-five countries that study at the college each year. A component of the program allows the fellows to tour universities, defense labs, and US Army Commands. For the second and third year in a row, the US Army War College chose CMU as one of the universities included in the program for 2018 and 2019. ISA co-hosted the visit with CyLab Security and Privacy Institute. The program included roundtables and demonstrations on formal methods, network analysis, decision science, and cybersecurity. In addition to the fellows and program administrators, the US Army War College commandant, MG Kem, was in attendance in 2018.

**TOWNHALL DISCUSSION WITH NADIA SCHADLOW**

Following the September 2017 National Security Strategy dinner discussion, a second event to discuss the implementation of the NSS document was organized between ISA and Stanford University’s Hoover Institution. With the same goal of providing leaders in government with a casual atmosphere to connect with scholars and thought leaders on pressing national security challenges, on March 22, 2018, a town hall discussion featuring Dr. Schadlow took place in Hoover’s Washington Office. After an introduction from Dr. Kiron Skinner, Dr. Schadlow delivered prepared remarks and saved the majority of time for questions and discussion. The town hall was attended by approximately sixty people, including academics, students, and think tank leaders across the Washington community.

**EXECUTIVE EDUCATION SHORT COURSE: A PRIMER ON THE AI AND CYBERSECURITY LANDSCAPE IN 2018, AND WHAT MAY COME NEXT: TECHNOLOGY, ETHICS, AND POLICY**

On May 1, 2018, ISA hosted the Army Cyber Command, and the Army War College at our Washington, DC, office for a day-long discussion on Artificial Intelligence. The executive short course focused on emerging trends in artificial intelligence/machine learning and big data, and their impacts on decision-making, national strategy and policy. The instructors for this course were: Dr. David Brumley, Dr. David Danks, Dr. Baruch Fischhoff, Dr. Andrew Moore, and Dr. Bill Scherlis. After an introduction from Dr. Kiron Skinner discussing the role of Carnegie Mellon in the development of AI technologies and their applications in the real world, each instructor presented on their topics of expertise and provided time for answering questions from the attendees from the Army War College and Army Cyber Command.

**LECTURE FROM FORMER SECRETARY OF THE AIR FORCE, DEBBIE LEE JAMES**

ISA and CIRP co-hosted Debbie Lee James, Former Secretary of the Air Force, when she visited Carnegie Mellon University on September 26 and 27, 2018. Ms. James was the 23rd Secretary of the Air Force. She has thirty years of senior homeland and national security experience in the federal government and the private sector. During her time on campus, she gave a lecture for the CIRP Policy Forum. Her talk was titled “Current Threats to our National Security,” which covered a wide range of topics including Syria, China, Russia, how cyber and space factor into our national security, military recruiting, and the acquisition process. She also sat for an interview featured in the fifth edition of the CIRP Journal.
EXECUTIVE EDUCATION SHORT COURSE: THE AI STACK

On November 15, 2018, ISA hosted the Eisenhower School for National Security and Resource Strategy from the National Defense University at the Gates-Hillman Center on CMU’s Pittsburgh campus for a three-hour short course on the AI Stack. Dr. Andrew Moore launched the short course by providing an overview of the AI Stack and a blueprint for the remainder of the course. The course was divided into three segments: Historical Perspective, AI in Systems, and AI in Use. Dr. Roni Rosenfeld provided the historical perspective, recent developments, and open challenges; Dr. Bill Scherlis discussed AI in Systems and the engineering challenges that AI poses; and Dr. David Danks discussed the ethics behind using Artificial Intelligence. After the discussions, the group toured the biorobotics lab in the School of Computer Science, and traveled to the National Robotics Engineering Center (NREC).

CYBERSECURITY AND CYBERWAR LECTURES

During the Fall 2018 semester, ISA co-hosted two lectures focusing on the cyber aspect of warfare with the Center for International Relations and Politics. On November 14, 2018, former FBI Special Agent and US Army officer, Clint Watts visited our campus and had a roundtable discussion with IPS and MITS Students where they discussed emerging issues in cyberwarfare, including social media, the Russian misinformation campaign, and the future of the cyber domain. He also gave a campus-wide lecture on his book *Messing with the Enemy: Surviving in a Social Media World of Hackers, Terrorists, Russians, and Fake News.*

On November 27, 2018, author J.M. Berger visited our campus and had a roundtable discussion with IPS and MITS students where they discussed terrorism, extremism, the move towards the cyber domain, and how to counter violent extremism. He gave a campus-wide lecture on his book *Extremism,* and the online component of extremist organizations. During the lecture, he detailed definitions of extremism and how extremist organizations behave online, as well as recent trends and how to combat these organizations.

During the Spring 2019 semester, ISA co-hosted several lectures with the Center for International Relations and Politics, ranging in topics from the North Korean Nuclear Crisis to the impact of social media on cyber warfare. On January 29, 2019, P.W. Singer visited our campus to have a roundtable discussion with students and to give a lecture about his new book *LikeWar,* which explores how social media has changed war and politics, and how war and politics have changed social media. For five years, he researched how social media works and what was its effect on the news, politics, and war, crossing examples that ranged from how ISIS copies the Instagram tactics of Taylor Swift, how a former World of Warcraft addict foils war crimes thousands of miles away, how internet trolls shape elections, and how China uses a smartphone app to police the thoughts of 1.4 billion citizens.

On February 27, 2019, Colonel Liam Collins visited campus for a roundtable discussion with students and to give a lecture titled “Russian Hybrid War, Ukraine, and US Policy.” Colonel Collins recounted his experiences in Ukraine as the executive office for General (ret.) John Abizaid in his Secretary of Defense role as the Senior Defense advisor to Ukraine. He discussed his help in reforming Ukraine’s defense establishment to produce a more capable force that meets western norms and NATO standards.

On April 4, 2019, University of Texas School of Law professor Robert Chesney came to campus to host a roundtable discussion and give a public lecture titled “CYBERCOM and the Law of Military Operations in Cyberspace.” In his lecture, Professor Chesney addressed the sweeping legal and policy changes that have taken place in recent years as Cyber Command has come into its own. The roundtable focused on a more in-depth discussion of the implications of those policy changes.

In the final Policy Forum lecture of the academic year, Stanford professor Scott Sagan came to campus on April 22, 2019, to have a roundtable discussion with students and to give a public lecture on the North Korean nuclear crisis. In the roundtable discussion, Dr. Sagan presented recent research on the public perception of nuclear policies and solicited input from the group on the findings. In his campus-wide lecture, he focused on the relationship between leadership in the United States and North Korea, and he
presented arguments for why the United States should tailor its nuclear doctrine in order to better deter the personalist dictatorships that possess, or could possess, nuclear weapons.

ISA partnered with the School of Computer Science and CMU AI to bring together faculty members from across campus to present an executive short course to constituents from Advanced Robotics for Manufacturing, Microsoft, and Lockheed Martin, as well as local educators in the K-12 community to provide an overview of the work being done in AI at CMU. Roni Rosenfeld, Head of Machine Learning Development; Martial Hebert, Director of the Robotics Institute; Colin Clarke, Assistant Teaching Professor in CMU’s Institute for Politics and Strategy; Matthew Gaston, Director of the Software Engineering Institute; and David Danks, Department Head in Philosophy all gave presentations on their work. Peter Rander, President of Argo AI, came to campus to talk about Argo AI’s work in engineering AI for the physical world, including their work on autonomous vehicles. The day also included tours of two CMU Robotics Institute Labs, so that the participants could get a first-hand look at some of the applications of the research happening on campus.

Lastly, USSOCOM selected CMU as one of the locations around Pittsburgh for its 2019 Sovereign Challenge. The week-long conference unfolded at venues across the city, including the Heinz History Center for remarks from Pittsburgh Mayor Bill Peduto and from Secretary of the United States Air Force the Honorable Heather Wilson. In addition to organizing the panels for the entire conference, ISA partnered with CyLab to put together a half-day of programming on campus around the theme of CMU AI for national defense, irregular warfare and Nation-State sovereignty. Faculty presenters included Greg Shannon’s work in defensible AI, Rita Singh’s work in voice recognition and forensics, Lujo Bauer’s work in cyber autonomy, Marios Savvides’s work in biometrics and real-time AI, and Howie Choset’s work in humanitarian assistance and disaster recovery. Mark Nolan also gave remarks on partnering with CMU. To close out the day on campus, several CMU AI labs were on site to provide demos of their work. The remainder of the conference took place downtown and consisted of panel discussions ranging from current and emerging technologies; to strategic and operational adaptation of emerging technology; to ethics, law of war, and national security policy. Panelists came to Pittsburgh from around the world with a wide range of backgrounds, including military, academia, and think tanks.
### ISA EVENTS

#### SPRING 2019

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<tr>
<th>Date</th>
<th>Visitor/Event</th>
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<tbody>
<tr>
<td>April 30, 2019</td>
<td>USSOCOM 2019 Sovereign Challenge</td>
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<tr>
<td>April 29, 2019</td>
<td>Executive Short Course on the AI Stack for constituents from Advanced Robotics for Manufacturing, Microsoft, and Lockheed Martin</td>
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<tr>
<td>April 25, 2019</td>
<td>“Blue Sky” discussion on the future of global Jihadism</td>
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<tr>
<td>April 22, 2019</td>
<td>Scott Sagan lecture “The North Korean Nuclear Crisis: Avoiding Cliffs on the Backside of the Summit”</td>
<td>Caroline S.G. Munro Professor of Political Science, Mimi and Peter Haas University Fellow in Undergraduate Education, and Senior Fellow at the Center for International Security and Cooperation and the Freeman Spogli Institute at Stanford University</td>
</tr>
<tr>
<td>April 4, 2019</td>
<td>Robert Chesney lecture “CYBERCOM and the Law of Military Operations in Cyberspace”</td>
<td>James Baker Chair and Associate Dean for Academic Affairs at the University of Texas School of Law</td>
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<tr>
<td>February 27, 2019</td>
<td>Colonel Liam Collins lecture “Russian Hybrid War, Ukraine, and US Policy”</td>
<td>Director of the Modern War Institute and the Director of the Department Instruction at the United States Military Academy at West Point</td>
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<tr>
<td>February 13, 2019</td>
<td>US Army War College International Fellows Program</td>
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<tr>
<td>January 29, 2019</td>
<td>P.W. Singer lecture “LikeWar: How Social Media is Changing the World and How the World is Changing Social Media”</td>
<td>Author of LikeWar, and Strategist and Senior Fellow at the New America Foundation</td>
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<tr>
<td>November 27, 2018</td>
<td>J.M. Berger lecture “Analyzing Extremist Ideologies, Online and Offline”</td>
<td>Author of <em>Extremism</em>, and research fellow with VOX-Pol</td>
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<tr>
<td>November 15, 2018</td>
<td>Executive Short Course on the AI Stack for the National Defense University</td>
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<tr>
<td>November 14, 2018</td>
<td>Clint Watts lecture “Messing with the Enemy: Surviving in a Social Media World of Hackers, Terrorists, Russians, and Fake News”</td>
<td>Distinguished Research Fellow at the Foreign Policy Research Institute, Senior Fellow at the Center For Cyber and Homeland Security at The George Washington University</td>
</tr>
<tr>
<td>September 26, 2018</td>
<td>Debbie Lee James lecture “Current Threats to our National Security”</td>
<td>Former Secretary of the Air Force</td>
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**FALL 2018**

**SPRING 2018**

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>May 1, 2018</td>
<td>Executive Education Short Course: A Primer on the AI and Cybersecurity Landscape in 2018, and What May Come Next: Technology, Ethics, and Policy</td>
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<tr>
<td>March 26, 2018</td>
<td>Meeting of National Thought Leaders at the National Security Agency</td>
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<tr>
<td>March 22, 2018</td>
<td>Townhall meeting with Dr. Nadia Schadlow at the Hoover Institution</td>
<td>Deputy Director of the National Security Council</td>
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<tr>
<td>March 22, 2018</td>
<td>Roundtable Discussion with Jon Parrish Peede</td>
<td>Chairman of the National Endowment for the Humanities</td>
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<td>March 21, 2018</td>
<td>Roundtable Discussion with Newt Gingrich</td>
<td>Former Speaker of the US House of Representatives and 2012 presidential candidate</td>
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<tr>
<td>February 14, 2018</td>
<td>US Army War College International Fellows Program</td>
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<tr>
<td>January 12, 2018</td>
<td>Sue Gordon DOD Visit to CMU</td>
<td>Principal Deputy Director of National Intelligence</td>
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### FALL 2017

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<tr>
<th>Date</th>
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<tr>
<td>December 19, 2017</td>
<td>CMU Visit to the Department of Commerce</td>
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<td>December 11, 2017</td>
<td>NSA Visit at CMU</td>
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<tr>
<td>November 30, 2017</td>
<td>Roundtable Discussion with Paul Scharre</td>
<td>Senior Fellow and Director of the Technology and National Security Program at the Center for a New American Security (CNAS)</td>
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<tr>
<td>November 13, 2017</td>
<td>Elizabeth Erin Walsh lecture “Innovation and Exporting: Creating Jobs through Free and Fair Trade”</td>
<td>Assistant Secretary of Commerce for Global Markets (GM) and Director General of the US and Foreign Commercial Service (CS)</td>
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<tr>
<td>November 10, 2017</td>
<td>Anthony Foxx lecture &quot;Smart and Connected Cities&quot;</td>
<td>17th United States Secretary of Transportation and the former mayor of Charlotte, North Carolina</td>
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<tr>
<td>October 26, 2017</td>
<td>Meeting of National Thought Leaders at the National Security Agency</td>
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<tr>
<td>October 25, 2017</td>
<td>NSC White House Meeting: Present and Future Influences of Artificial Intelligence and Cyber Warfare</td>
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<tr>
<td>September 19, 2017</td>
<td>Dinner with Dr. Nadia Schadlow- Drafting of the National Security Strategy</td>
<td>Deputy Director of the National Security Council</td>
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### SUMMER 2017

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<tr>
<td>July 31, 2017</td>
<td>Executive Education Short Course: Advances in AI and Security Between 2016-2019: What You Need to Know</td>
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<tr>
<td>July 17, 2017</td>
<td>Meeting of National Thought Leaders at the National Security Agency</td>
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