School of Public & International Affairs
2017 Report of Faculty Research & Scholarship

p 5  faculty
   tenured & tenure-track

p 12 honors & awards
   for research, scholarship, instruction, & outreach

p 13 publications
   books or monographs authored, books edited, book chapters, articles, other publications

p 25 presentations
   papers presented at professional meetings & invited presentations

p 33 funded research and projects
The School of Public and International Affairs (VT SPIA) plays an integral role in Virginia Tech’s mission as a land grant university that makes a critical impact at the local, national and international level. VT SPIA is strategically located in the Blacksburg main campus, the National Capital Region in Old Town Alexandria, and in the State Capital of Richmond.

The School of Public and International Affairs (VT SPIA) consists of three programs: Urban Affairs and Planning (UAP), the Center for Public Administration and Planning (CPAP), Government and International Affairs (GIA) and the Institute for Policy and Governance (IPG). SPIA prepares students for public service and policy leadership, and translates scholarship to practice by addressing pressing public problems. SPIA engages with communities and organizations across Virginia and the world to work on questions of planning, policy, administration and governance, performance, security, sustainability, collaboration, resilience, economic development, and more. It offers a set of interdisciplinary and flexible programs at the undergraduate, post-graduate and doctoral level, as well as online programs, graduate certificates, study abroad and experiential learning opportunities and a series of professional education programs.

SPIA is a major player in Virginia Tech’s drive to be a global leader in the destination areas of Integrated Security, Intelligent infrastructure, and Data Analytics and Decision Sciences. SPIA professors and students will be at the forefront of developing research and policies in these high priority global destination areas, and SPIA is a leader in developing the Policy Strategic Growth Area.

SPIA’s new undergraduate programming continued to develop this year, including the approval of a new Pathways Minor in Community Systems and Engagement in partnership with VT Engage, with the development of two new majors in Smart Sustainable Cities and Environmental Planning and Policy which will be introduced in 2018. In partnership with the

- Joel Peters
  Interim Director
Virginia Local Government Management Association (VLGMA), the graduate certificate program in local government management has continued to flourish. It provides the next generation of local government managers and leaders with the tools to advance their careers and provide exceptional leadership within the communities.

In Richmond, Governor Terry McAuliffe announced the launching of the Virginia Management Fellows (VMF) program. This program is an initiative of the Commonwealth of Virginia developed with School of Public and International Affairs to meet the state’s needs for future leaders. Fellows will be engaged in a two-year leadership and management development certificate program with a cutting-edge approach to state leadership learning.

Our two Washington Semester programs: The Washington Semester in Global Engagement and the Washington Semester in Policy and Governance reflects SPIA ongoing commitment to experiential learning, by bringing students from Blacksburg to Washington D.C. and bridging the gap between theory and practice through offering them an insight into the policy making world.

SPIA’s faculty have been highly engaged in both teaching and scholarship. This commitment to excellence in both of these field is reflected in the award this year of the College of Architecture and Urban Studies (CAUS) Certificate of Excellence in Scholarship to Max Stephenson and the College of Architecture and Urban Studies (CAUS) Certificate of Excellence in Teaching to Robin Lemaire. During the past year, SPIA faculty have published 5 books, 4 edited books, 20 book chapters and 56 journal articles. SPIA faculty have secured funding to support their research from funding bodies such as: National Science Foundation (NSF), National Institute for Health (NIH), Department of Transport and the Environmental Protection Agency. And they have presented the findings of their research at universities and conferences across the United States and Europe, and in Brazil, Israel, Egypt, China and Japan.

Some of the highlights of that research and teaching are summarized in this report.
SPIA FACULTY
Faculty

Ariel Ahram
Assistant Professor, GIA | Alexandria.

David Bieri
Associate Professor, UAP | Blacksburg.
Ph.D. Virginia Tech (2010), planning, governance, and globalization. The intersection of public finance, monetary theory and economic geography; regulatory aspects of international finance, global monetary governance, and their role in the process of financialization; history of economic thought. 2015.

Ralph Buehler
Associate Professor, UAP | Alexandria.

Brian Cook
Professor, CPAP | Alexandria.

Margaret Cowell
Associate Professor, UAP | Alexandria.

Giselle Datz
Associate Professor and Chair, GIA | Alexandria.
Assistant Professor of Practice and Associate Chair, CPAP | Blacksburg. Ph.D. Virginia Commonwealth University (2018), public policy and administration. Organizational theory, collaboration theory, local government. 2017.


Assistant Professor, UAP | Blacksburg. Ph.D. University of Minnesota (2014), civil engineering. Measuring and modeling non-motorized traffic; modeling within-city spatial patterns of air pollution; health impacts of the built environment and neighborhood design; real-time, mobile measurements of air pollution. 2014.

Professor, CPAP | Blacksburg. Ph.D. University of Minnesota (1984), political science. Organizational theory; U.S. national institutions (especially the presidency, executive branch, and the courts); state politics; social science methodologies. 1998.
Laura Jensen

Anne Khademian

Paul Knox
University Distinguished Professor and Sr. Fellow for International Advancement. UAP | Blacksburg. Ph.D. University of Sheffield (1972), geography. University Distinguished Professor and Sr. Fellow for International Advancement. Comparative analysis of urbanization and urban planning, social production of the built environment. 1985.

Robin Lemaire

Timothy Luke

Shalini Misra
Assistant Professor, UAP | Blacksburg. Ph.D. University of California - Irvine (2010), planning, policy and design. Social and cultural consequences of the Internet and digital communication technologies, health and behavioral impacts of environmental stressors from virtual environments, environment and behavior studies, science of team science. 2012.
Associate Professor of Practice, UAP | Blacksburg.
Ph.D. Massachusetts Institute of Technology (2006), urban studies and planning. Community design policy and preservation, urban design, historic preservation, commemoration. 2005.

Associate Professor, GIA | Blacksburg.

Professor, GIA and SPIA Director | Alexandria.

Associate Professor, CPAP | Richmond.

Associate Professor, CPAP | Alexandria.
Ph.D. University of Virginia (2005), political Science. Public policy, public organizations, federal agencies. 2006.

Professor, GIA | Blacksburg.
Ph.D. UC-Santa Barbara (1977), sociology. Democratic governance especially in civil society; critical organizational theory especially alternatives to bureaucracy and hierarchy; economic restructuring and its implications for democracy and social equity. 1991.
Faculty

Tom Sanchez
Professor and Chair, UAP | Alexandria.
Ph.D. Georgia Tech (1996), city planning. Transportation, land use, residential location behavior, and questions of social equity in planning; geographic information systems. 2010.

Todd Schenk
Assistant Professor, UAP | Blacksburg.
Ph.D. Massachusetts Institute of Technology (2015), public policy and planning. Assistant Professor. Collaborative planning and decision making; public sector dispute resolution; joint fact finding; environmental policy and planning; climate change adaptation; sustainable development; serious games for action research. 2015.

Tom Skuzinski
Assistant Professor, UAP | Blacksburg.
Ph.D. University of Michigan (2015), urban urban and regional planning. Planning and law; policy implementation and governance; land use and housing policy at local, interlocal, and regional levels in the U.S.; the “cultural cognition of governance.” 2015.

Max Stephenson
Professor, UAP, and Director, Inst. for Policy and Governance | Blacksburg.

Gerard Toal
(Ó Tuathail, Gearóid)
Professor, GIA | Alexandria.

Kris Wernstedt
Associate Professor, UAP | Alexandria.

Assistant Professor, UAP | Blacksburg. Ph.D. Georgia Institute of Technology (2017), city and regional planning. Innovative transportation and land use interaction, sustainable transportation, energy consumption, big and open data, applied machine learning in urban studies. 2017.

Associate Professor and Associate Chair, UAP | Blacksburg. Ph.D. Texas A&M University (2006), urban and regional studies. Environmental planning; environmental science; research methods; fundamentals of GIS; advanced GIS applications; land use planning; planning methods; applied planning. 2008.

Awards

Steve Hankey

**Outstanding Paper Award**
Transportation Research Board - Committee on Pedestrians
Paper Title: “Facility-Demand Models of Peak-Period Pedestrian and Bicycle Traffic: A Comparison of Fully-Specified and Reduced-Form Models”

Robin Lemaire

**2017 Certificate for Excellence in Teaching**
College of Architecture and Urban Studies, Virginia Tech

Shalini Misra

**Fellowship**
National Academies Keck Futures Initiative Think Tank Style Conference “Beyond Boundaries”

Trish Nickel

**Visiting Research Scholar**
School of Social and Cultural Studies, Fall 2017

Joel Peters

**Visiting Fellow**
Davis Institute for International Relations, Hebrew University, July 2017

Patrick Roberts

**Wertheim Study Researcher-in-Residence**
New York Public Library, August-December 2017

Max Stephenson

**2017 Excellence in Scholarship Award**
College of Architecture and Urban Studies, Virginia Tech
PUBLICATIONS
Publications

Books or Monographs

Paul Knox


Tim Luke


Joel Peters


Tom Sanchez


Tom Skuzinski


Gerard Toal

Toal, G. (2017). Near Abroad Putin, the West and the Contest over Ukraine and the Caucasus. Oxford University Press.

Books Edited

Shalini Misra


Todd Schenk


Max Stephenson

**Book Chapters**

**Ariel Ahram**


**David Bieri**


**Maggie Cowell**


**Paul Knox**


**Shalini Misra**


**Patrick Roberts**

**Publications**

**Book Chapters continued**

**Tom Sanchez**


**Todd Schenk**


**Tom Skuzinski**


**Yang Zhang**


**Publications**

**Articles**

**Ariel Ahram**


**David Bieri**


**Ralph Buehler**


**Maggie Cowell**


**Matt Dull**


Articles continued

Ralph Hall


Steve Hankey


Sara Jordan


Robin Lemaire


Tim Luke


**Articles continued**


**Shalini Misra**


**Trish Nickel**


**Patrick Roberts**


Articles continued

Tom Sanchez


Todd Schenk


Tom Skuzinski


Max Stephenson


Gerard Toal


Articles continued


Wenwen Zhang


Other Papers and Reports

Ariel Ahram


David Bieri


Ralph Buehler


Brian Cook


Ralph Hall


Steve Hankey


**Other Papers & Reports continued**


**Sara Jordan**


**Anne Khademian**


**Robin Lemaire**


**Tim Luke**


Other Papers & Reports continued

Elizabeth Morton


Trish Nickel


Patrick Roberts


Tom Sanchez

Sanchez, T. (2017). “In a wealthy Md. suburb, some residents have waited more than 30 years for a ride,” Washington Post. Quote: https://wpo.st/DbJb2

Max Stephenson


Yang Zhang


Zhang, Y. (Keynote, 2017) “Building Food Resilient Cities: Modeling Effects of Land Development on Flooding.” College of Architecture, Chang’an University, Xi’an, China, June 2017.
PRESENTATIONS
**Ariel Ahram**


**David Bieri**


**Ralph Buehler**


**Adrienne Edisis**


**Giselle Datz**


**Presentations**


**Stephanie Davis**


**Ralph Hall**


**Steve Hankey**


**Sara Jordan**


**Anne Khademian**


**Robin Lemaire**


**Tim Luke**


**Shalini Misra**


**Joe Rees**

Presentations

Patrick Roberts


Roberts, P. S. (Keynote. 2017). “From Crisis Management to the Governance of Risk.” In From the management of crisis to the governance of risk: Time for a paradigm shift?. Haikou, China.


Tom Sanchez


Todd Schenk


**Tom Skuzinski**


**Max Stephenson**


**Wenwen Zhang**


**Ray Zuniga**


Funded Research

**Ariel Ahram**
ISCE Middle East, ISCE, USD 25,000 (01/01/2017 - Present)

Nuclear Security, Safety, and Security in the Middle East, ISCE, USD 20,000 (05/02/2015 - Present). Principal Investigators: Roberts, Patrick; Schmidt, Sonja

**David Bieri**
NRT-DESE: UrbComp: Data Science for Modeling, Understanding, and Advancing Urban Populations, National Science Foundation, National Science Foundation, USD 2,999,328, Principal Investigators: Ramakrishnan, Narendran (30%), Abbas, Kaja M (5%), Batra, Dhruv (5%), Bieri, David S (5%), Embree, Mark P (5%), House, Leanna L (5%), Keller, Sallie A (5%), Others (40%), 09/01/2015-08/31/2020

**Ralph Buehler**
Street noise relationship to vulnerable road user safety, Safety Through Disruption National Universality Transportation Center (SAFE-D), Department of Transportation, 09/01/2017

Planning for Walking and Cycling in an Autonomous Vehicle Future, USDOT - MATS - Region 3, Department of Transportation, 08/21/2017

Multi-city, national-scale direct-demand models of peak-period bicycle and pedestrian traffic, 08/10/2016-05/17/2017

**Brian Cook**
The Design and Implementation of Trade Secret Protections in Transparency-based Environmental Regulation, Institute for Society, Culture, and Environment, 06/01/2015-05/31/2018

**Maggie Cowell**
NRT: Disaster Resilience and Risk Management (DRRM) - Creating quantitative decision making frameworks for multi-dimensional and multi-scale analysis of hazard impact National Science Foundation. PI: R. Weiss Robert, Co-PIs: M. Paretti, M. Cowell, J. Irish, Y. Zhang, C. Zobel $2,999,782, 2/17-present

Cities ‘After Decline’: Urban Revival in the USA and Russia. German Research Foundation PIs: J. Bohland, N. Kinossian; Co-PIs: J. Bohland, T. Scuzinski, M. Cowell. ~$30,000 USD, 9/17-2/18

Improving Virginia Competitive-ness Virginia Chamber of Commerce PI: S. Lyon-Hill, Co-PIs: S. Tate, M. Cowell, J.Provo. $36,000, 6/17-10/17

Appealing to the Authority of Data: Social Complexity, Fragmented Decisionmaking, and the Politics of Smart Cities. National Science Foundation PIs S. Sterett (44%) and A. Eckerd (44%) Co-PIs Orr (8%) and Cowell (4%). $200,000, 8/16-8/17

**Adrienne Edisis**
Incentive Effects of Workers’ Compensation Insurance Employer Costs, U.S. Department of Labor (Administrator: Avar Consulting Inc), Other, USD 29,896, Principal Investigators: Edisis, Adrienne T. (100%), 08/01/2016-08/31/2017

**Ralph Hall**
Convergence HTF: RCN: “Enhancing small and mid-level farm viability through a systems-based research network: Linking technology and sustainable development and practice,” National Science Foundation, , 09/01/2017
Ralph Hall cont. International Program and Sustainable Infrastructure Development, University Grant Commission, USD 61,576, Principal Investigators: Hall Ralph P (34%), Garvin Michael J (33%), Misra Shalini (33%), 08/01/2012-07/31/2016

Steve Hankey

Characterizing urban- and finer-scale spatio-temporal variability for select VOC Superfund compounds, National Institutes of Health, Co-Principal Investigator, Total award: $700,000; share to VT: $69,291, 08/01/2017-07/31/2022.

Planning for walking and cycling in an autonomous vehicle future, Mid-Atlantic Transportation Sustainability University Transportation Center, Department of Transportation, Co-Investigator, Total award: $91,250; share to VT: $84,436, 08/01/2017-05/31/2018.

Street noise relationship to vulnerable road user safety, Safe-D University Transportation Center, Department of Transportation, Co-Principal Investigator, Total award: $54,066; share to VT: $20,352, 06/01/2017-05/31/2017.

Developing VOC land use regression models in Minneapolis, MN, City of Minneapolis, Principal Investigator, Total award (and share to VT): $6,300, 05/15/2017-08/25/2017.

Center for air, climate, and energy solutions (CACES), Environmental Protection Agency, Co-Principal Investigator, Total award: $10 million; share to VT: $278,629, 05/01/2016-04/30/2021.

Multi-city, national-scale direct-demand models of peak-period bicycle and pedestrian traffic, Mid-Atlantic Transportation Sustainability University Transportation Center, Department of Transportation, Principal Investigator, Total award (and share to VT): $89,232, 06/01/2016-05/31/2017.

Towards real-time air quality models: Adding temporal precision to empirical models of air quality, Institute for Critical Technology and Applied Science, Principal Investigator, Total award: $79,820, 07/01/2017-06/30/2019.

Mood state in transport environments: Assessing the impact of mode, purpose, and the built environment, Institute of Society Culture and Environment, Principal Investigator, Total award: $12,630, 07/01/2016-12/31/2017.

Sara Jordan

Institutional Transformation: Cultivating an ethical STEM culture through an integrated undergraduate general education, National Science Foundation, USD 599,282. Principal Investigators: Bairaktarova, Diana (35%), Jordan, Sara R. (25%), Sible, Jill C (25%), Staley, Thomas W (10%), Riley, Donna M. (5%), 08/15/2017-07/31/2022.

Shalini Misra


2017-18: Co-PI, Caution: Heavy Load Ahead, Smart and Connected Communities- Planning Grant, National Science Foundation ($99,354)

2017-2018: Principal Investigator, Thinking and Decision Making in An Age of Divided Attention, Institute for Society, Culture, and Environment, Virginia Tech ($30,000)

Faculty Mentoring Grant, Office of the Provost, Virginia Tech. Role: Principal Investigator, ($1500)
Funded Research


Joel Peters

Breaking the Impasse: Beyond the Two-State solution.; ISCE/Middle East Small Grant Program, USD 4,000 (on going: 06/01/2017 - 06/01/2019)

Patrick Roberts

Nuclear & Security Affairs IPA, Council on Foreign Relations, USD 125,000, Principal Investigators: Roberts Patrick S (100%), 10/30/2017-08/31/2018

SCC-Planning: Caution: Heavy Load Ahead, National Science Foundation, USD 99,354, Principal Investigators: Wernstedt Kris F (18%), Heaslip Kevin P (17%), Misra Shalini (17%), Murray-Tuite Pamela M (17%), Roberts Patrick S (17%), Swarup Samarth (14%), 09/15/2017-08/31/2018

Regulating Climate Change: Governance and Legal Mobilization, Oñati International Institute for the Sociology of Law/National Science Foundation Workshop Grant, Approx. $1500, National Science Foundation, 07/17/2017


Tom Sanchez


Todd Schenk

Collaborative remedies for fragmented societies - Facilitating the collaborative turn in environmental decision-making (CORE), Strategic Research Council of Finland, 09/01/2017-08/31/2021

A synthetic population approach to modeling human health and the environment: A tool for adaptation planning, Global Change Center (VT), 11/01/2017-05/31/2018

Stresses and Instability in Coastal Systems: Sustaining Prosperity, Increasing Diversity and Achieving Resilience, Global Systems Science Destination Area (VT), 09/01/2017-05/31/2018

Sustainable Renewable Energy Systems (SRES) Project, Policy Strategic Growth Area (VT), 09/01/2017-05/30/2018

Pathways Development/Delivery Grant, General Education at Virginia Tech, 02/17/2017-05/30/2018

Tom Skuzinski

Regional Studies Association Early Career Grant Scheme. PI: Thomas Skuzinski, $14,345. 11/13/17 – 11/12/18

Reimagining metropolitan fragmentation: The Local Autonomy Project. Department of Transportation (University Transportation Centers), Center for Transportation Equity, Decision, and Dollars (C-TEDD) #017-08. PI: David Weinreich; Co-PI: Thomas Skuzinski; Co-PI: Shima Hamidi, $63,457. 9/1/17 – 8/31/18
**Funded Research**

*Tom Skuzinski cont.* Local Barriers to Regional Transportation: Understanding Transit System Fragmentation from an Institutionalist Perspective. Institute for Critical Technology and Applied Sciences (ICTAS). Research Experiences for Undergraduates NSF Pilot Funding. PI: Thomas Skuzinski. $10,000. 11/1/17 – 6/30/18


**Max Stephenson**

Small Communities and the Challenge of Social and Economic Change, Bridge Valley Community Technical College; VT Outreach and International Affairs, Principal Investigators: Stephenson M, 03/06/2017-11/20/2017, $17,000.

Loudoun County Nonprofit Needs Assessment, County of Loudoun, $75,000, Principal Investigators: Dunkenberger Mary E (90%), Stephenson Max O (10%), 11/04/2016-11/03/2017

**Yang Zhang**


**Diane Zahm**

American Planning Association, Chapter President’s Council grant, $7500, “Creating Vibrant Communities Through Inclusionary Planning: Diversity and Equity” (Project Director; award is to the Virginia Chapter of the APA).
School of Public & International Affairs

spia@vt.edu  www.spia.vt.edu  540-231-2291

DEGREES OFFERED

B.A. in Public & Urban Affairs
(Environmental Policy & Planning (EPP) major)
(Smart & Sustainable Cities (SSC) major)

Master of Public Administration

Master of Public & International Affairs

Master of Urban & Regional Planning

Ph.D. in Public Administration & Public Affairs

Ph.D. in Planning, Governance & Globalization
(Governance & Globalization track)
(Urban & Environmental Design & Planning track)

PROGRAMS in SPIA

Center for Public Administration & Policy
www.cpap.vt.edu
cpap@vt.edu
blacksburg: 540-231-5133
arlington: 571-858-3102

Government & International Affairs
www.gia.vt.edu
gia@vt.edu
arlington: 571-858-3102

Urban Affairs & Planning
www.uap.vt.edu
uapvt@vt.edu
blacksburg: 540-231-5485
arlington: 571-858-3102

CENTERS & INSTITUTES

Center for Housing Research
www.vchr.vt.edu

Institute for Policy & Governance
www.ipg.vt.edu

Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, sex, handicap, age, veteran status, national origin, religion, political affiliation, or sexual orientation. Anyone having questions concerning discrimination should contact the Equal Opportunity/Affirmative Action Office.