Tyler N. Felgenhauer

Postdoctoral Associate, and Research and Programming Scholar Interdisciplinary Program in Risk and Resilience Engineering Department of Civil and Environmental Engineering Pratt School of Engineering Duke University 169 Hudson Hall, Box 90287 Durham, NC 27708 (919) 668-1496 tyler.felgenhauer@duke.edu www.linkedin.com/in/climatepolicy/

SUMMARY

I am a social scientist working to understand the climate-society system and resulting options for responding to climate change in an integrated way. In answering these questions I apply the methods of systems dynamics and analysis; integrated assessment and other modeling; decision, risk, and uncertainty analysis; and other tools of public policy framing and economic analysis. I have used these approaches to explore optimal portfolios of mitigation and adaptation, policy options in the face of limited adaptation capacity, water-energy system dynamics, clean energy policy, and international climate governance.

In my current research I am applying risk, decision, policy analytical perspectives to better characterize geoengineering as a possible response to climate change. A separate project will look at the reinsurance industry, gauging the feasibility of trading on climate damages and risk. On a third project I am working to develop scenarios to analyze environmental impacts from Chinese infrastructure investments in Eurasia.

I have over fifteen years of experience in climate change, clean energy, and related environmental policy issues, and seven years with a prior career focus on international political development and conflict resolution. This includes extensive program management and implementation success across academic, non-profit, and business settings, and collaborations with policymakers, scientists, and other stakeholders.

EDUCATION

Ph.D. University of North Carolina at Chapel Hill, Public Policy, 2010

Dissertation: "Prevention and Protection – The Simultaneous Implementation of Climate Change Mitigation and Adaptation Policy Responses"

Committee: Mort Webster (advisor), Richard "Pete" Andrews, Doug Crawford-Brown, Jonathan Wiener, Gary Yohe

MPA **Princeton University, Woodrow Wilson School of Public and International Affairs**, Master in Public Affairs, International Relations focus, 1999

BA Cornell University, Government, with International Relations Concentration, 1994

PROFESSIONAL EXPERIENCE

Postdoctoral Associate and Research and Programming Scholar, Interdisciplinary Program	2017–
in Risk and Resilience Engineering, Department of Civil and Environmental Engineering,	
Pratt School of Engineering, Duke University, Durham, NC	
Fellow, Kenan Postdoc Working Group, The Kenan Institute for Ethics at Duke University,	2018-
Durham, NC	
Climate Change Policy Lead, IronOak Energy Brain Trust, Chapel Hill, NC	2017-
Climate Science Assessment Writer/Editor, North Carolina Institute for Climate Studies,	2016–2017
Asheville, NC	

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Director, IronOak Energy, Chapel Hill, NC	2015–2017
Climate and Energy Policy Advisor , Ben Stuckart for Congress, 5 th Congressional District, Spokane, WA	2017
Expert Member, Energy and Environment Policy Team , RoadMap 2025 Project, Think NC First, Raleigh, NC	2015–2016
Social Scientist , U.S. Environmental Protection Agency, Energy and Climate Assessment Team, Office of Research and Development, Research Triangle Park, NC	2010–2014
Fellow, Economy, Energy, Environment (E3) Foundation, Cambridge University, UK	2010-2013
Researcher , Global Climate Change and Environmental Sciences Division, RTI International, Research Triangle Park, NC	Summer 2009
Young Summer Scientist , International Institute for Applied Systems Analysis (IIASA), dual appointment with the Greenhouse Gas Initiative and the Risk and Vulnerability Program, Laxenburg, Austria	Summer 2007
Research Assistant, Center for Sustainable Energy, Environment, & Economic Development, UNC-Chapel Hill	Summer 2006
Research Assistant, U.S. Department of Energy Research Grant, UNC-Chapel Hill	2005–2006
Research Assistant, Carolina Environmental Program, UNC-Chapel Hill	Summer 2005
Exchange Coordinator, Pacific Environment, San Francisco, CA	2003-2004
Project Consultant, Institute for Market Transformation, San Francisco and Sacramento, CA	2003
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Consultant, Center for Resource Solutions, San Francisco, CA	2003
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Consultant, Center for Resource Solutions, San Francisco, CA	
Consultant, Center for Resource Solutions, San Francisco, CA PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-	2003
Consultant, Center for Resource Solutions, San Francisco, CA PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ	2003 1999–2002 Summer 1998
Consultant, Center for Resource Solutions, San Francisco, CA PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self- Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan	2003 1999–2002 Summer 1998
PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC	2003 1999–2002 Summer 1998 , 1996–1997
Consultant, Center for Resource Solutions, San Francisco, CA PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC Staff Assistant, Global Environment Facility, World Bank, Washington, DC	2003 1999–2002 Summer 1998 , 1996–1997 Spring 1996
PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC Staff Assistant, Global Environment Facility, World Bank, Washington, DC Senior Copy Editor, Moscow News Weekly, Moscow, Russia	2003 1999–2002 Summer 1998 , 1996–1997 Spring 1996 1995
PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC Staff Assistant, Global Environment Facility, World Bank, Washington, DC Senior Copy Editor, Moscow News Weekly, Moscow, Russia Copy Editor, Baltic News Service/The Baltic Observer, Moscow, Russia	2003 1999–2002 Summer 1998 , 1996–1997 Spring 1996 1995 1995
PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC Staff Assistant, Global Environment Facility, World Bank, Washington, DC Senior Copy Editor, Moscow News Weekly, Moscow, Russia Copy Editor, Baltic News Service/The Baltic Observer, Moscow, Russia Language Editor, Interperiodica, Russian Academy of Sciences, Moscow, Russia	2003 1999–2002 Summer 1998 , 1996–1997 Spring 1996
Consultant, Center for Resource Solutions, San Francisco, CA PREVIOUS CAREER IN INTERNATIONAL AFFAIRS & POLITICS Research Associate and Program Manager for Eurasia, Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ Political Section Intern, U.S. Department of State, U.S. Embassy, Bangkok, Thailand Program Assistant, National Democratic Institute for International Affairs, Baku, Azerbaijan and Washington, DC Staff Assistant, Global Environment Facility, World Bank, Washington, DC Senior Copy Editor, Moscow News Weekly, Moscow, Russia Copy Editor, Baltic News Service/The Baltic Observer, Moscow, Russia Language Editor, Interperiodica, Russian Academy of Sciences, Moscow, Russia Campaign Staffer, Tom Foley for Congress, 1994 Campaign, Spokane, WA	2003 1999–2002 Summer 1998 , 1996–1997 Spring 1996 1995 1995 1994–1995 1994

PUBLICATIONS

Peer-Reviewed Articles

Felgenhauer T. (2015). "Addressing the limits to adaptation across four damage-response systems," Environmental Science & Policy 50: 214–224. https://doi.org/10.1016/j.envsci.2015.03.003

Felgenhauer T. and Webster M. (2014). "Modeling adaptation as a flow and stock decision with mitigation," *Climatic Change* 122(4): 665–679. https://doi.org/10.1007/s10584-013-1016-9

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- **Felgenhauer T.** and Webster M. (2013). "Multiple Adaptation Types with Mitigation: A Framework for Policy Analysis," *Global Environmental Change* 23(6): 1556–1565. https://doi.org/10.1016/j.gloenvcha.2013.09.018
- Dodder R., **Felgenhauer T.**, Yelverton W., and King C. (2011). <u>"Water and Greenhouse Gas Tradeoffs Associated with a Transition to a Low Carbon Transportation System,"</u> ASME 2011 International Mechanical Engineering Congress and Exposition IMECE2011, American Society of Mechanical Engineers (ASME), Denver, CO (Nov 11–17): 531–547.
- **Felgenhauer T.** and de Bruin K.C. (2009). "The Optimal Paths of Climate Change Mitigation and Adaptation Under Certainty and Uncertainty," *The International Journal of Global Warming* 1(1–3): 66–88. https://doi.org/10.1504/IJGW.2009.027082

Short Analyses

- "When an adaptation effort no longer suffices," Yale Climate Connections (July 5, 2017).
- "What does the U.S. energy storage project pipeline look like? A snapshot from the DOE's Energy Storage Database," IronOak Energy Executive Briefing (Mar 25, 2016).
- "Financing Energy Storage Capturing its Benefits," IronOak Energy Insights (Mar 1, 2016).
- "Of all the cost savings of behind-the-meter energy storage, peak demand charge management may be the highest," IronOak Energy Executive Briefing (Jan 24, 2016).
- "Understanding renewable energy and energy efficiency under the Clean Power Plan -- what role for the Clean Energy Incentive Program?" IronOak Energy Executive Briefing (Dec 9, 2015).
- "Wind Market Trend Report: A snapshot of wind power in the United Kingdom growth despite policy uncertainty," IronOak Energy Insights (Nov 12, 2015).
- "Market Trends Report: Wind Power," IronOak Energy Insights (Oct 14, 2015).
- "The Clean Power Plan will create large changes in the U.S. electricity generation mix, and large opportunities," g-bit (Green Business Informatics Tools)/IronOak Energy Exec. Briefing (Sept 21, 2015).
- "Building a clean tech company from the employee up," g-bit blog (Sept 1, 2015).
- "The risks of climate change can face your organization in many ways; what matters is how you manage these risks," g-bit/IronOak Energy Executive Briefing (Aug 27, 2015).
- "The Clean Power Plan What do we now know?" g-bit blog (Aug 3, 2015).
- "Can we prepay for future climate damages with climate risk bonds?" g-bit blog (July 30, 2015).
- "Climate risk management as an iterative approach," g-bit blog (July 28, 2015).
- "Clean Power Plan: SIP vs FIP," g-bit blog (July 21, 2015).
- "Climate derivatives and adaptation financing," g-bit blog (July 14, 2015).
- "Uncertainty and the Clean Power Plan," g-bit blog (July 6, 2015).

Datasets

Crawford-Brown D., and **Felgenhauer T.** (2005). "Carolina Climate Impacts: An Application of the Carbon Reduction Project (CRED) Methodology to the UNC-Chapel Hill Campus," Carolina Environmental Program, UNC-Chapel Hill.

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Other Manuscripts

- Hemming B., **Felgenhauer T.**, and Miller A. (2014). "A Consideration of the Health and Environmental Risks/Effects of Geoengineering."
- Beach R., **Felgenhauer T.**, and Yang J. (2013). "What are the Goals of Water Policy in Adapting to Climate Change? Extreme Events and Complementary Responses."
- **Felgenhauer T.** (2011). "Climate Change Mitigation Research in the Sustainable Communities Program: Addressing the Technological Shortfall," Office of Research and Development, U.S. EPA.
- **Felgenhauer T.** (2007). "Developing North Carolina's Energy and Climate Policies: A Need for Institutional Capacity and Coherence. An Options Paper on Promising Organizational Models for State Energy and Climate Policy Analysis, Policy Planning, and Coordination under a New State Climate Action Plan," Center for Sustainable Energy, Environment, & Economic Development, UNC-Chapel Hill.

PRESENTATIONS AND TALKS

Conference Presentations

- "Modeling Adaptation as a Flow and Stock Decision with Mitigation," Climate Adaptation Futures: Second International Climate Change Adaptation Conference 2012, University of Arizona, Tucson, AZ (May 30, 2012).
- "Multiple Adaptation Types with Mitigation: A Framework for Policy Analysis," American Meteorological Society Conference on Adaptation, Asheville, NC (July 18, 2011).
- "International Adaptation Financing as Part of the Evolving Climate Change Regime: Tradeoffs in Participation and Compliance to Achieve Mitigation Goals," Association for Public Policy Analysis and Management (APPAM), 31st Annual Research Conference, Washington, DC (Nov 6, 2009).
- "Optimal Paths of Climate Change Mitigation and Adaptation Under Certainty and Uncertainty," Global Conference on Global Warming, Istanbul, Turkey (July, 2008).
- —, International Energy Workshop, International Energy Agency, Paris, France (July, 2008).
- —, 16th Annual Conference of the European Association of Environmental and Resource Economists, Gothenburg, Sweden (June, 2008).
- "Modeling the Optimal Portfolio of Climate Change Mitigation and Adaptation," 16th PhD Workshop on International Climate Policy, Centre for European Economic Research (ZEW), Mannheim, Germany (May, 2008).
- —, 4th Annual University Research Day, UNC-Chapel Hill (Mar, 2008).
- —, Progress Energy Fellows Lunch, UNC-Chapel Hill (Oct 15, 2007).
- —, International Institute for Applied Systems Analysis, Final Summer Report, Laxenburg, Austria (Aug, 2007).
- "The Optimal Portfolio of Mitigation and Adaptation as Climate Change Risk Management Strategies," 2nd International Young Scientists' Global Change Conference, Beijing, China (Nov, 2006).

Poster Presentations

Felgenhauer T. (2015). "Addressing the limits to adaptation across four damage-response systems," 3rd Workshop for the Engineering for Climate Extremes Partnership (ECEP), NCAR – National Center for Climate Research, Boulder, CO (Aug 19–20, 2015).

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- Johnson E., Yates A., Andrews R., Arunachalam S., Lenox C., **Felgenhauer T.**, "Quantifying and Disaggregating Consumer Purchasing Behavior for Energy Systems Modeling," Community Modeling and Analysis System (CMAS) Conference, UNC, Chapel Hill (presented in absentia, Oct 27–29, 2014).
- **Felgenhauer T.**, "The Limits to Adaptation: A Systems Approach" American Geophysical Union (AGU) Annual Meeting, San Francisco, CA (Dec, 2013).
- **Felgenhauer T.**, "Mitigation and Adaptation within a Climate Policy Portfolio: A Research Program," Joint U.S. EPA and NCSU Interactive Collaboration Forum & Poster Session for EPA and NCSU Researchers, EPA, RTP, NC (Mar 28, 2013).
- —, Annual Poster Competition, Networking & Leadership Training Organization, EPA, RTP, NC (June 14, 2012).
- —, U.S. Environmental Protection Agency and North Carolina State University Poster Session for EPA and NCSU Researchers, North Carolina State University, Raleigh, NC (May 15, 2012).
- Dodder R., Gage C., Johnson T., Kaplan O., Lenox C., Loughlin D., Wu T., Yelverton W., Deshpande B., Felgenhauer T., Schultz P., Cameron C., Lu A., "Energy, Environment, and Climate Assessment Using the MARKAL Energy Model," U.S. Environmental Protection Agency and North Carolina State University Poster Session for EPA and NCSU Researchers, North Carolina State University, Raleigh, NC (May 15, 2012).
- **Felgenhauer T.**, "Multiple Adaptation Types with Mitigation: A Framework for Policy Analysis," Annual Poster Competition, Networking and Leadership Training Organization, EPA, RTP, NC (May 24, 2011).
- —, Putting Solar Energy in Its Place: A Public Dialog on Renewable Energy Issues and Needs, Solar Energy Research Center (SERC), UNC-Chapel Hill (Jan 14, 2011).
- **Felgenhauer T.**, "Placing Climate Change Mitigation and Adaptation Policy Decisions Within an Applied Theoretical Framework," Solar Fuels and Energy Storage: The Unmet Needs, Solar Energy Research Center (SERC), UNC-Chapel Hill (presented in absentia, Jan 14–16, 2010).
- —, RTI Fellows Symposium: Integrating Basic and Applied Research, Chapel Hill, NC (Nov 2, 2009).
- **Felgenhauer T.**, "Optimal Paths of Climate Change Mitigation and Adaptation Under Certainty and Uncertainty," Research Triangle Energy Consortium (RTEC) Sustainable Energy Symposium, RTP, NC (Nov, 2007).
- **Felgenhauer T.**, "The Optimal Portfolio of Mitigation and Adaptation as Climate Change Risk Management Strategies," 3rd Annual University Research Day, UNC-Chapel Hill (Mar, 2007).
- —, Global Environmental Change: Regional Challenges, Open Science Conference, Beijing, China (Nov, 2006).
- **Felgenhauer T.**, "Prevention or Adaptation: What is the Best Way to Respond to Climate Change?" The 10th Anniversary Celebration of the Royster Society of Fellows, UNC-Chapel Hill, presented in absentia (Sept, 2006).

Seminar Talks

- "Addressing the Limits to Adaptation Across Four Damage-Response Systems," Air, Climate, and Energy biweekly call, U.S. EPA, Office of Research and Development, RTP, NC (Oct 15, 2014).
- "Mitigation and Adaptation Responses to a Changing Climate," Environment and Energy Seminar Series, The World Bank and the International Monetary Fund, Washington, DC (Feb 12, 2014).
- —, RTI International, Economics Group, RTP, NC (Oct 28, 2016).

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- "Modeling Adaptation as a Flow and Stock Decision with Mitigation," Computing and Systems Colloquium, North Carolina State University, Raleigh, NC (Mar 30, 2012).
- "Water Requirements for a Transition to a Low Carbon Transportation System," RTI International, Global Climate Change and Environmental Sciences Group, RTP, NC (Nov 21, 2011).
- "Prevention and Protection: The Simultaneous Implementation of Climate Change Mitigation and Adaptation Policy Responses," Post-Doc talk at U.S. EPA, Air Pollution Prevention and Control Division, Office of Research and Development, RTP, NC (Feb 23, 2011).
- "Mitigation and Adaptation for Climate Change: Framing of Flexible and Committed Responses," Engineering Systems Division, Massachusetts Institute of Technology, Cambridge, MA (Jan 15, 2010).
- "Prevention and Protection: The Simultaneous Implementation of Climate Change Mitigation and Adaptation and the Implications for International Policy," U.S. EPA, Energy and Climate Assessment Team, Office of Research and Development, RTP, NC (Feb 11, 2010).
- —, RTI International, Global Climate Change and Environmental Sciences Group, RTP, NC (April 16, 2009).
- —, Royster Society of Fellows Graduate Lunch, UNC-Chapel Hill (Jan, 2009).
- —, Progress Energy Fellows Lunch, UNC-Chapel Hill (Oct, 2008).
- "Game Theoretic Modeling of a Two-Period International Climate Change Mitigation and Adaptation Choice," Progress Energy Fellows Lunch, UNC-Chapel Hill (Jan, 2008).
- "Nuclear Power in North Carolina," Royster Society of Fellows Graduate Seminar, UNC-Chapel Hill (Feb, 2006).

Paper Discussant

- Löschel R. "On Discriminatory Allocations of EU CO₂ Allowances," 16th Ph.D Workshop on International Climate Policy, Centre for European Economic Research (ZEW), Mannheim, Germany (May, 2008).
- Dieckmann U. "Evolutionarily Sustainable Harvesting of Living Marine Resources," Evolution and Ecology Program, International Institute for Applied Systems Analysis, Laxenburg, Austria (July, 2007).

Class Lectures

- "Responses to Climate Change: Mitigation, Adaptation, and Geoengineering," EPA Climate Change Workshop for High School Students, EPA, RTP, NC (June 14, 2013).
- "Climate Change Adaptation and Mitigation Role Play," EPA-NIEHS Climate Change Workshop for High School Students, EPA, RTP, NC (June 16, 2011 and June 14, 2012).
- "Adaptation: The Other Response to Climate Change," EPA Apprenticeship for Citizens Schools, Lowe's Grove Middle School, Durham, NC (May 3, 2011).
- "Climate Change," presentations for all 4th graders at the EPA Science Day at Bethesda Elementary School, Durham, NC (April 29, 2011).
- "Perspectives on Environmental Policy," English Composition and Rhetoric (ENG 102), UNC-Chapel Hill (Feb 17, 2011).
- "Conceptualizing Climate Change," Global Climate Change: Science, Impacts, Solutions (ENVR 890), UNC-Chapel Hill (April 21, 2009).
- "Climate Change and International Policy," Energy Policy, UNC-Chapel Hill (April 2, 2009).
- "Exploring Mitigation and Adaptation Policies Together," UNC Student Exchange Program at Cambridge University, Cambridge, UK (July 4, 2008).

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"PhD Employee Self-Evaluation Report," Department of Public Policy PhD Seminar (PLCY 810), UNC-Chapel Hill (April 14, 2008).

INVITED WORKSHOP PARTICIPATION

- 3rd Workshop for the Engineering for Climate Extremes Partnership (ECEP), NCAR National Center for Climate Research, Boulder, CO (Aug 19–20, 2015).
- Managing the Environmental Impacts of Growth Under Climate Change: A Workshop for State and Local Decision Makers, RTP, NC (Nov 8–9, 2011).
- Coastal and Waterfront Smart Growth and Hazard Mitigation Roundtable, National Oceanographic and Atmospheric Administration, Silver Spring, MD (Aug 24–25, 2011).
- Health Effects of Global Climate Change Workshop, RTI International, RTP, NC (Dec 17–18, 2009).
- Water, Climate, and Development Issues in the Amu Darya Basin, Environmental and Societal Impacts Group, National Center for Atmospheric Research (NCAR), Philadelphia, PA (June 18–19, 2002).
- Flashpoints Informal Planning Meeting, Environmental and Societal Impacts Group, National Center for Atmospheric Research (NCAR), Columbia University, New York, NY (April 4–5, 2002).

RESEARCH FUNDING

Seed Fund Grant, Duke University Energy Initiative, \$40,824

Researcher (PI: Mark Borsuk); proposed for 4/1/18-3/30/19

"Scenario Analysis of the Belt and Road INitiative's Environmental impacts (SABRINE)"

Duke Collaboratory, \$92,312

Deputy Project Manager and Research Team Member (PI: Mark Borsuk); finalizing for 4/1/18–9/30/19 "Decisions, Risks, and Governance of Geoengineering"

INTERDISCIPLINARY FUNDING

Intellectual Community Planning Grant (ICPG), Duke University, \$4,500 Project Team Member (PI: Mark Borsuk); in progress 1/1/18–12/31/18 "Duke Center on Risk and Resilience"

D-SIGN – Interdisciplinary Graduate Network, Duke University, \$18,560 Network Member (Main Advisor: Billy Pizer); proposed for 2018–2019 "Riding the Belt and Road"

AWARDS, FELLOWSHIPS, AND GRADUATE GRANTS

Bronze Medal for Commendable Service, U.S. Environmental Protection Agency, as a member of the MARKAL Development and Application Team	2013
Joseph L. Fisher Doctoral Dissertation Fellowship, Resources for the Future (\$18,000)	2009–2010
Conference Best Paper Award, Global Conference on Global Warming, Istanbul, Turkey, for "Optimal Paths of Climate Change Mitigation and Adaptation Under Certainty and Uncertainty	2008 nty"
Graduate School Transportation Grant, UNC-Chapel Hill (\$1,000)	2008
Graduate School Special Opportunities Fund, UNC-Chapel Hill (\$1,000)	2008
Doctoral Student Conference Grant, UNC-Chapel Hill, Department of Public Policy (\$500)	2008
Progress Energy Graduate Fellow, UNC Institute for the Environment, Center for Sustainable	2007-2009

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Energy, Environment, and Economic Development

Royster Society Fellow, UNC-Chapel Hill (full tuition, \$18,000 annual stipend, and \$1,000 for conference travel)

Award for best exam score in graduating class in the international relations field, Woodrow Wilson School of Public and International Affairs, Princeton University

Sasakawa Fellow, The Ryochi Sasakawa Young Leaders Fellowship Fund, Woodrow Wilson School, Princeton University (full tuition and annual \$10,000 stipend)

Dean's List, College of Arts and Sciences, Cornell University

SKILLS

Software: GAMS, Stella, @Risk, Stata

Models: DICE (climate and economy integrated assessment model, user); MARKAL (energy systems,

familiar); Excel modeling and tools

Languages: Russian (intermediate)

TEACHING

Class Advisor (planned), <u>DECIPHER: Case Studies in Drinking Water Quality</u>, Bass Connections, Duke University (2018–2019).

Class Advisor, <u>Decisions on Complex Interdisciplinary Problems of Health and Environmental Risk</u> (<u>DECIPHER</u>), Bass Connections, Duke University (2017–2018).

Workshop Facilitator, "Fishbanks" Renewable Resource Management Simulation, *Introduction to Public Policy Analysis* (2006 and 2007) and *Environmental Decision Making*, UNC-Chapel Hill (Spring 2006).

Preceptor, The Theory and Practice of International Diplomacy, Princeton University (Fall 2001).

Instructor, Intermediate English, Sunny English Language School, Moscow, Russia (Spring 1995).

SERVICE, LEADERSHIP, AND ENGAGEMENT

Referee

5th Assessment Report of the Intergovernmental Panel on Climate Change, Working Group II, 2013 (U.S. Federal Government reviewing team):

"Adaptation Opportunities, Constraints, and Limits" (ch. 16)

"Economics of Adaptation" (ch. 17)

"Climate-Resilient Pathways: Adaptation, Mitigation, and Sustainable Development" (ch. 20)

3rd U.S. National Climate Assessment, adaptation chapter (U.S. Federal Govt. reviewing team), 2013 *Ecological Economics* (2016–); *Environmental Science & Policy* (2015–); Elsevier Publishers, book proposal (2014); *Climate Policy* (2011); American Society of Mechanical Engineers (ASME), International Mechanical Engineering Congress & Exposition IMECE2011; Earthscan Publishing (2009–10); *International Journal of Global Warming* (2008).

Scientific Editing

4th National Climate Assessment (NCA4), multiple chapters and Glossary, and <u>Climate Science Special</u> <u>Report (CSSR)</u>, <u>State Summaries</u> and Glossary, with the NC Institute for Climate Studies (2016–17)

Multiple journal articles in environmental science and economics, as a Scientific Editor with American Journal Experts, Durham, NC (2014–16)

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Several social science books as proofreader with Lynne Rienner Publishers, Inc., Boulder, CO (2002–05)

Funding Review and Judging

Austrian Climate Research Programme, project funding judge/reviewer, 2011–12, 2014, 2016–17.

Centennial Campus Magnet School Science Fair, judge and screening panel member, Raleigh, NC, 2012 & 2014.

12th Annual Research Symposium in Water Resources and Engineering, poster session judge, Dept. of Civil, Construction, and Environmental Engineering, North Carolina State University, Raleigh, NC, 2013.

Tokyo Foundation, member of the Research Funding Selection Committee, Joint Research and Exchange Program, Tokyo, Japan, 1999 and 2000.

Professional Memberships

American Association for the Advancement of Science (AAAS) Society for Risk Analysis (SRA)

Other Service and Volunteering

Merit Badge Counsellor, Boy Scout Troop 39, Chapel Hill, 2016–2017.

Member, Cutting Edge Speakers Series organizational committee, EPA-RTP, 2013–2014.

Member, EPA-RTP Environmental Speakers Bureau, 2010–2014.

Campaign Volunteer, Barack Obama for President, South Carolina Primary, Jan, 2008.

Classroom and PTA Volunteer, Estes Hills Elementary School, Chapel Hill, 2006–2008.

Student Representative to the Faculty, UNC Department of Public Policy, 2006–2007.

Faculty Search Committee Member, UNC Department of Public Policy, 2005–2006.

Assistant Editor, Journal of Public and International Affairs, Princeton University, 1997–1998.

Interview Editor, Cornell Political Forum, 1993–1994.

INTERNATIONAL EXPERIENCE

Lived and worked in Russia (one year), Azerbaijan (six months), Thailand (three months), and Austria (three months). Additional travel experience throughout 26 other countries in Europe, Asia, and the Former Soviet Union. I speak conversational Russian.

PREVIOUS PUBLICATIONS IN INTERNATIONAL AFFAIRS

Felgenhauer T. and Wohlforth W. (2001). "Self-Determination and the Stability of the Russian Federation," ch. 9 in Wolfgang Danspeckgruber, ed., <u>The Self-Determination of Peoples: Community, Nation, and State in an Interdependent World</u>, Boulder, CO: Lynne Rienner.

Danspeckgruber W. and **Felgenhauer T.** (2001). "Minorities in the Former Soviet Union: Some Fundamental Legal and Political Issues," in Sabina A.-M. Crisen, ed., "Minorities and Tolerance in Central and Eastern Europe & the NIS," conference proceedings (April 24), Woodrow Wilson International Center for Scholars, Washington, DC.

Felgenhauer T. (1999). "Ukraine, Russia, and the Negotiations for the Black Sea Fleet Accords," Woodrow Wilson School of Public and International Affairs, Princeton, NJ.

Borbely M., Carlsson H., Chastenay C., **Felgenhauer T.**, Fung C., Hykl R., Pentony P., Sachs N., Sieber-Messick M. (1999). "Project Report on the Role of Foreign Aid for Legal Reform Programs in the Russian Federation," Wilson School Policy Workshop on Legal Development Projects After Communism (Jan).

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Felgenhauer T. (1995). "Russian TV Journalist Brutally Murdered in Moscow," *The Baltic Observer* (Mar): 1.

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