# Tyler N. Felgenhauer

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#### **CURRENT APPOINTMENTS**

Postdoctoral Associate and Research and Programming Scholar, Pratt Initiative on Risk and Resilience Engineering (PIRRE), Duke University	2017-
Regular Contributor, Yale Climate Connections, New Haven, CT	2017-
Brain Trust Member, IronOak Energy (clean energy financial advisory), Chapel Hill, NC	2017-

#### **SUMMARY**

I am a social scientist working to understand climate change and the options for responding as an integrated system, drawing on systems analysis, modeling, decision analysis, and other methods of public policy analysis. I have applied these approaches to exploring different optimal portfolios of mitigation and adaptation, policy options in the face of limited adaptation capacity, and water-energy system dynamics, publishing in *Climatic Change*, *Global Environmental Change*, and *Environmental Science & Policy* among other places. My current research investigates how real options analysis can be applied to policy decisions on geoengineering, and how trading on climate change damages and risk can be better understood by looking at the reinsurance industry. 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, 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

#### RESEARCH

Fields: climate change policy and economics, adaptation and climate-society interactions, water-energy system dynamics, climate risk and insurance trading, risk and decision analysis for geoengineering, clean energy policy, international climate governance

Methods: strategic decision making under uncertainty, systems analysis, framework development, integrated assessment modeling, policy analysis, cost benefit analysis

Software: GAMS, Stella, @Risk, Stata, Excel modeling

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

#### **PUBLICATIONS**

#### Peer-Reviewed Journal 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
- **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). "Water and Greenhouse Gas Tradeoffs Associated with a Transition to a Low Carbon Transportation System," 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. <a href="https://doi.org/10.1504/IJGW.2009.027082">https://doi.org/10.1504/IJGW.2009.027082</a>

# Short Analyses and Postings

- "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 Executive 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.

#### 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, and 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).
- —, 16<sup>th</sup> 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," 16<sup>th</sup> PhD Workshop on International Climate Policy, Centre for European Economic Research (ZEW), Mannheim, Germany (May, 2008).
- —, 4<sup>th</sup> Annual University Research Day, UNC (Mar, 2008).
- —, Progress Energy Fellows Lunch, UNC (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," 2<sup>nd</sup> 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," 3<sup>rd</sup>
Workshop for the Engineering for Climate Extremes Partnership (ECEP), NCAR – National Center for Climate Research, Boulder, CO (Aug 19–20, 2015).

- 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, NC (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, NC 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, NC 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, NC (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, NC (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," 3<sup>rd</sup> Annual University Research Day, UNC (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, 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).
- "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 (Jan, 2009).
- -, Progress Energy Fellows Lunch, UNC (Oct, 2008).
- "Game Theoretic Modeling of a Two-Period International Climate Change Mitigation and Adaptation Choice," Progress Energy Fellows Lunch, UNC (Jan, 2008).
- "Nuclear Power in North Carolina," Royster Society of Fellows Graduate Seminar, UNC (Feb, 2006).

#### Paper Discussant

- Löschel R. "On Discriminatory Allocations of EU CO<sub>2</sub> Allowances," 16<sup>th</sup> 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 4<sup>th</sup> 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 (Feb 17, 2011).
- "Conceptualizing Climate Change," Global Climate Change: Science, Impacts, Solutions (ENVR 890), UNC (April 21, 2009).
- "Climate Change and International Policy," Energy Policy, UNC (April 2, 2009).
- "Exploring Mitigation and Adaptation Policies Together," UNC Student Exchange Program at Cambridge University, Cambridge, UK (July 4, 2008).
- "PhD Employee Self-Evaluation Report," Dept. of Public Policy PhD Seminar (PLCY 810), UNC (April 14, 2008).

#### PREVIOUS WORK EXPERIENCE

## North Carolina Institute for Climate Studies, Asheville, NC

2016-2017

Climate Science Assessment Writer/Editor

Provided editorial and review support for the State Summaries of the *Climate Science Special Report*, as well as the *Fourth National Climate Assessment*, under the U.S. Global Change Research Program.

#### IronOak Energy, Chapel Hill, NC

2015-2017

Director

Developed firm's business lines in solar power, energy storage, and electric vehicles. Crafted analyses on these and other topics in the clean energy space. Created a network of vetted experts to build business in custom market, economic, and policy research.

#### Ben Stuckart for Congress, 5th Congressional District, Spokane, WA

2017

Climate and Energy Policy Advisor

Provided regular analysis and insight on current climate change and clean energy policy developments.

#### RoadMap 2025 Project, Think NC First, Raleigh, NC

2015-2016

Expert Member, Energy and Environment Policy team, nc-roadmap.org

Participated in an initiative to develop forward-looking and non-partisan energy and environmental policy recommendations for North Carolina, for consideration by state-wide candidates in the 2016 elections. I wrote the group's analysis of the U.S. Clean Power Plan and how it could apply to NC energy scenarios.

# U.S. Environmental Protection Agency, Office of Research and Development, RTP, NC

2010-2014

Social Scientist, Energy and Climate Assessment Team

Managed the mitigation and adaptation policies task under the agency's research plan for the Air, Climate, and Energy program. Research work included framing the mitigation and adaptation portfolio decision from a risk and uncertainty perspective, modeling adaptation stock and flow responses with mitigation using an integrated assessment model, characterizing water and energy tradeoffs in the U.S. energy system, and describing the limits of human adaptation to climate change from a systems perspective. Co-author for a white paper that looks at how the EPA can begin to think about the health and environmental risks of geoengineering, as well as an effort to better characterize hurdle rates for consumer adoption of green technologies within the MARKAL energy systems model. Founder and Moderator, *CSI:RTP* (*Climate-Society Interactions*) professional seminar, 2011–2013.

#### RTI International, RTP, NC

Summer 2009

Researcher, Global Climate Change and Environmental Sciences Division

Researched water policy adaptations to climate change, as well as nanotechnology and associated environmental, health, and safety risk assessment frameworks.

#### International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

Summer 2007

Young Summer Scientist, dual appointment, Greenhouse Gas Initiative and Risk and Vulnerability Programs Modeled optimal mitigation and adaptation climate response policies, with uncertainty and learning over climate sensitivity. Resulting paper earned the Conference Best Paper Award, Global Conference on Global Warming, Istanbul, Turkey (2008).

# **Center for Sustainable Energy, Environment, & Economic Development**, UNC-Chapel Hill *Research Assistant*

Summer 2006

Investigated the institutional structure of energy policy development at the U.S. state level, with special recommendations for North Carolina.

#### U.S. Department of Energy Research Grant, UNC-Chapel Hill

2005-2006

Research Assistant

Performed Monte Carlo analyses of uncertainty in CO<sub>2</sub> reduction costs to compare federal climate proposals.

#### Carolina Environmental Program, UNC-Chapel Hill

Summer 2005

Research Assistant

Conducted the first greenhouse gas emissions assessment for the UNC campus, and established a mechanism for ongoing accounting as applied to the drafting of a campus emissions plan.

Pacific Environment, San Francisco, CA

2003-2004

#### **Exchange Coordinator**

Managed and facilitated international exchange programs and conferences among Russian and American environmental advocates, promoting local initiatives for sustainable development in the Russian Far East.

# **Institute for Market Transformation**, San Francisco and Sacramento, CA

2003

**Project Consultant** 

Facilitated the visit of a team of Russian and Kazakh energy-efficiency experts to learn U.S. best practices.

## Center for Resource Solutions, San Francisco, CA

2003

Consultant

Researched global electricity market restructuring laws for current practice on renewable energy targets and market design, for recommendations on a new Chinese electricity law.

#### Liechtenstein Institute on Self-Determination, Princeton University, Princeton, NJ

1999-2002

Research Associate and Program Manager for Eurasia

Managed two-year research project on self-determination and state power in Russia. Assistant Editor of book on self-determination and co-author of book chapter on Chechnya. Organized and coordinated nine major policy conferences and panels on international security, self-determination, and conflict resolution, with two held in Europe among international stakeholders.

#### **EARLY CAREER POSITIONS**

U.S. Department of State, U.S. Embassy, Bangkok, Thailand. Political Section Intern	Summer 1998
National Democratic Institute for International Affairs, Baku, Azerbaijan, and Washington, DC. <i>Program Assistant</i>	1996–1997
Global Environment Facility, World Bank, Washington, DC. Staff Assistant	Spring 1996
Moscow News Weekly, Moscow, Russia. Senior Copy Editor	1995
Baltic News Service/The Baltic Observer, Moscow, Russia. Copy Editor	1995
Interperiodica, Russian Academy of Sciences, Moscow, Russia. Language Editor	1994–1995
Tom Foley for Congress, 1994 Campaign, Spokane, WA. Campaign Staffer	1994
Speaker of the House Thomas Foley, U.S. Capitol, Washington, DC. Intern	Summer 1993
Center for Strategic & International Studies (CSIS), Political/Military Program, Washington, DC. I	Intern Fall 1992
Spokane County Superior Court, Office of the Judicial Administrator, Spokane, WA. Intern	Summer 1992

## FELLOWSHIPS, HONORS, AWARDS, AND GRANTS

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Bronze Medal for Commendable Service, U.S. Environmental Protection Agency, as a member of the MARKAL Development and Application Team	e 2013
Fellow, Economy, Energy, Environment (E3) Foundation, Cambridge University	2010-2013
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"	al 2008
Graduate School Transportation Grant, UNC (\$1,000)	2008
Graduate School Special Opportunities Fund, UNC (\$1,000)	2008
Doctoral Student Conference Grant, UNC, Department of Public Policy (\$500)	2008
Progress Energy Graduate Fellow, UNC Institute for the Environment, Center for Sustainable Energy, Environment, and Economic Development	2007–2009
Royster Society Fellow, UNC (full tuition, \$18,000 annual stipend; \$1,000 for conference travel)	2004–2009

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, 1997–1999 Princeton University (two years of tuition and annual \$10,000 stipend)

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

1994

# **TEACHING**

Class Advisor, *Decisions on Complex Interdisciplinary Problems of Health and Environmental Risk (D-CIPHER)*, Bass Connections, Duke University (Fall 2017).

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

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

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

#### SERVICE AND ENGAGEMENT

# Referee

5<sup>th</sup> 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)

Third U.S. National Climate Assessment, adaptation chapter (U.S. Federal Government 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

Fourth National Climate Assessment (NCA4), multiple chapters and Glossary, and Climate Science Special Report (CSSR), State Summaries and Glossary, with the North Carolina Institute for Climate Studies, U.S. Global Change Research Program (2016–)

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

Several books in social sciences as a 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, and 2017.

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

12<sup>th</sup> Annual Research Symposium in Water Resources and Engineering, poster session judge, Department 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.

#### **Invited Workshop Participation**

3<sup>rd</sup> 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).

#### **Professional Memberships**

American Association for the Advancement of Science (AAAS)

#### Other Service and Volunteering

Merit Badge Counsellor, Boy Scout Troop 39 (Citizenship in the World, Citizenship in the Nation, Sustainability), 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). <u>"Project Report on the Role of Foreign Aid for Legal Reform Programs in the Russian Federation,"</u>
Wilson School Policy Workshop on Legal Development Projects After Communism (Jan).

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

#### **REFERENCES**

#### Rebecca Dodder

**Physical Scientist** 

Office of Research and Development, U.S. Environmental Protection Agency

109 T.W. Alexander Dr., Research Triangle Park, NC 27711, (919) 541-5376, dodder.rebecca@epa.gov

#### Tim Johnson

Associate Professor of the Practice in Energy and the Environment, Energy and Environment Program Chair Nicholas School of the Environment, Duke University

9 Circuit Dr., Environment Hall 3113, Durham, NC 27708, (919) 681-9339, <a href="mailto:timothy.l.johnson@duke.edu">timothy.l.johnson@duke.edu</a>

#### Mort Webster

Associate Professor of Energy Engineering
Department of Energy and Mineral Engineering, Penn State University
123 Hosler Building, University Park, PA, 16802, (814) 863-1640, mort@psu.edu

#### Wolfgang Danspeckgruber

Director, Liechtenstein Institute on Self-Determination
Woodrow Wilson School of Public and International Affairs, Princeton University
Bendheim Hall, Princeton, NJ 08544, (609) 258-5685, wfd@princeton.edu