

TAMU 2406, College Station, TX 77843 • (979) 845-5618 • kate.willyard@tamu.edu

DEGREES AWARDED

PhD, Sociology (Expected) August 2018

Texas A&M University, College Station, TX

Major Areas: Political and Economic Sociology
Sociology of Complex Organizations

Graduate Certificates: Geographic Information Systems, Geography Department
Advanced Research Methods, Education Department

Thesis Title: The Effects of Organizational, Community, and State
Regulatory Characteristics on Texas Oil and Gas Extraction
Facility Venting and Flaring Practices

(Funded by NSF)

Committee Chair: Dr. Theresa Morris, Sociology Department

Committee Members: Dr. Arthur Sakamoto, Sociology Department
Dr. Mary Campbell, Sociology Department
Dr. Daniel Goldberg, Geography Department

MS, Sociology 2014

Texas A&M University, College Station, TX

Graduate Certificate: Nonprofit Management, Bush School

Thesis Title: Politics and Power: The 1992 Israeli Loan Guarantees

Committee Chair: Dr. Harland Prechel, Sociology Department

Committee Members: Dr. Joseph Jewell, Sociology Department
Dr. Michelle Taylor-Robinson, Political Science

BS, Sociology 2008

Texas A&M University, College Station, TX

RESEARCH AND TEACHING INTERESTS

Coupled Human Natural Systems, Social Science Research Methods, Sociology of Organizations, Environmental Sociology, Medical Sociology, Social Inequality

PROFESSIONAL APPOINTMENTS

Graduate Research Assistant June 2015 – Current

Texas Federal Statistical Research Data Center

Texas A&M University, College Station, TX

Supervisor: Dr. Mark Fossett, Director

Instructor of Record (Social Problems) January 2015 – July 2015

Department of Sociology

Texas A&M University, College Station, TX

Supervisor: Dr. Judith Lineman, Instructional Professor

Graduate Research Assistant
Department of Sociology
Texas A&M University, College Station, TX
Supervisor: Dr. Harland Prechel, Professor

August 2014 – December 2014

Undergraduate Academic Advisor
Department of Sociology
Texas A&M University, College Station, TX
Supervisor: Dr. Jane Sell, Department Head

May 2012 – August 2014

Graduate Intern
International Student Services
Texas A&M University, College Station, TX
Supervisor: Mrs. Samantha Clements, Senior Advisor

May 2011 – May 2012

PEER-REVEIWED PUBLICATIONS

Manuscripts Under Review

“The Organizational Political Economy of the Environment and Changes in Texas Oil and Gas Flaring Regulations from 1889-1990,” Under review at *Energy Policy* (sole author)

“Disproportionalities in Facility Production of and Community Exposure to Texas Oil and Gas Venting and Flaring,” Under review at *Social Forces* (sole author)

Manuscripts in Preparation

“Who Is Burning Money and Throwing It In the Air?: A Quantitative Analysis of Disproportionality of Texas Oil and Gas Venting and Flaring Practices in 2012” (sole author)

- Awarded the Rural Sociological Society Natural Resources Research Interest Group Best Graduate Student Paper

“Comparing Gas Flaring Data from Company Reports to Satellite Data” (coauthored with Dr. Gunnar Schade, Nina Canal, Angelina Dumlao, Miranda Hooper, and Will Thompson)

“Contextual Influences on Help-seeking Behavior for Intimate Partner Violence” (coauthored with Dr. Megan Augustyn)

- Active three-year Federal Statistical Research Data Center project (TX1392)

Research in Progress

“Residential Segregation, Neighborhood Disadvantage, and Allostatic Load.” (coauthored with Dr. Verna Keith and Dr. Mark Fossett)

“The Contextual Effects of Supplemental Nutrition Assistance Program Participation on Health Care Expenditures Among Low-Income Adults.” (coauthored with Dr. Sarah Gatson and Marissa Cisneros)

“Understanding the Effects of Firm and Establishment Organizational Characteristics, the Characteristics of Organizational Institutional Environments on Texas Oil and Gas Venting and Flaring Practices Using Restricted Business and Community Data” (sole author)

- Active five-year Federal Statistical Research Data Center project (TX1758)

OTHER PUBLICATIONS

Op-Ed Articles

2017. “The Need for Better Texas Oil and Gas Industry Regulatory Data.” Retrieve at <https://www.tribtalk.org/2017/05/17/the-need-for-better-texas-oil-and-gas-industry-regulatory-data/> (sole author)

Web Applications

2017. “Texas Community Exposure to Oil and Gas Facility Venting and Flaring Practices in 2012.” [Mobile Application Software]. Retrieve at <http://tamu.maps.arcgis.com/apps/webappviewer/index.html?id=05ba58ab4ef1441389289d34395d3587> (sole author)

Data Products

2017. “The Relationship Between Organizational, Community, and State Regulatory Characteristics and Texas Oil and Gas Extraction Facility Venting and Flaring Practices.” [Data] Ann Arbor, MI: Inter-University Consortium for Political and Social Research [Distributor] <http://doi.org/10.3886/E101192V1> (sole author)

2017. “Texas County Oil and Gas Production, Venting, and Flaring Volumes.” [Data] Ann Arbor, MI: Inter-University Consortium for Political and Social Research [Distributor] <http://doi.org/10.3886/E100901V1> (sole author)

HONORS, AWARDS, AND GRANTS

International Awards

Graduate Scholar Award	2014
International Interdisciplinary Social Sciences	
Amount Awarded: \$500	

National Awards

Best Graduate Paper- Natural Resources	2018
Rural Sociological Society	
Amount Awarded: \$100	

Center for Economic Studies Dissertation Mentorship 2017
 United States Department of Commerce
 Mentor: Dr. Randy Becker, Principal Economist and
 Special Assistant to the Chief Economist

Doctoral Dissertation Research Improvement Grant ([SES-1702683](#)) 2017
 National Science Foundation
 Amount Awarded: \$11,954

Regional Awards

Best Graduate Presentation- Visual Sociology 2011
 Southwestern Social Science Association
 Amount Awarded: \$100

University Awards

Seed Grant (co-authored with Dr. Sarah Gatson) 2018
 Texas Federal Statistical Research Data Center
 Texas A&M University
 Amount Awarded: \$4,250

GIS Day Paper Competition, 2nd Place 2017
 (winners selected by panel of industry representatives)
 Texas A&M University
 Amount Awarded: \$100

Glasscock Graduate Research Fellow 2015-2016
 Melbern G. Glasscock Center for Humanities Research
 Texas A&M University
 Amount Awarded: \$2,000

Academy for Future Faculty Fellow 2015
 Graduate Teaching Academy
 Texas A&M University

Texas Aggie Graduate Grant 2014
 Scholarships and Financial Aid
 Texas A&M University
 Amount Awarded: \$1,500

Online Student Scholar 2011
 Bush School of Public Service
 Texas A&M University
 Amount Awarded: \$1,000

College Awards

Professional Development Support Award 2015
 College of Liberal Arts
 Texas A&M University
 Amount Awarded: \$2,337

Department Awards

Graduate Research Award 2018
 Sociology Department
 Texas A&M University
 Amount Awarded: \$900

Graduate Research Award 2017
 Sociology Department
 Texas A&M University
 Amount Awarded: \$3,082.50

Graduate Research Award 2016
 Sociology Department
 Texas A&M University
 Amount Awarded: \$4,135

Graduate Research Award 2015
 Sociology Department
 Texas A&M University
 Amount Awarded: \$765

Graduate Research Award 2011
 Sociology Department
 Texas A&M University
 Amount Awarded: \$600

Academic Recognition Scholarship 2011
 Sociology Department
 Texas A&M University
 Amount Awarded: \$1,000

ACADEMIC PRESENTATIONS

Papers Presented at Conferences

“Disproportionalities in Facility Production of and Community Exposure to Oil and Gas Venting and Flaring” August 13, 2018
 Innovative Perspectives on Environmental Justice
 Paper Session
 American Sociological Association Annual Meeting
 Philadelphia, PA

- “Who Is Burning Money and Throwing It in the Air?:
A Quantitative Analysis of Disparities in Texas Oil and Gas
Extraction Facility Venting and Flaring Practices in 2012”
Annual Meeting of the Rural Sociological Society
Portland: OR July 27, 2018
- “Contextual Influences on Help-seeking Behavior for
Intimate Partner Violence” (with PI: Megan Augustyn)
American Society of Criminology Annual Meeting
Philadelphia, PA November 17, 2017
- “Comparing Block Group and Facility Analysis of
Disproportionate Community Exposure to Texas
Oil and Gas Venting and Flaring Practices in
2012”
Texas A&M GIS Day
College Station, TX November 14, 2017
- “Community Exposure to Texas Gas Well Venting and
Flaring Emissions in 2012”
Southwestern Social Science Association Annual
Meeting
Austin, TX April 13, 2017
- “Organizational Political Economy and Greenhouse
Gas Emissions: A Multilevel Analysis of the U.S.
Energy Sector” (with PI: Harland Prechel)
Federal Statistical Research Data Center (FSRDC)
Annual Research Conference
College Station, TX September 15, 2016
- “Corporate-State Relations and State Environmental
Policy: A Historical Study of Texas Flaring
Regulations, 1930-2013”
Round Table Session
American Sociological Association Annual Meeting
Chicago, IL August 23, 2015
- “Understanding U.S. Foreign Policy in the Middle East:
The 1992 Israeli Loan Guarantee Showdown”
International Interdisciplinary Social Science
Conference
Vancouver, CA June 12, 2014

“The 1992 Israeli Loan Guarantees: A Key to Understanding Political Power in U.S. Middle East Foreign Policy” April 17, 2014
 Southwestern Social Science Association
 Annual Meeting
 San Antonio, TX

Posters Presented at Conferences

“Separation Barriers” March 3, 2011
 Southwestern Social Science
 Association Annual Meeting
 Las Vegas, NV

Invited Talks

“Graduate Student Dissertation Research in a Federal Statistical Research Data Center (FSRDC): The Effects of Organizational Characteristics and the Characteristics of Organizational Institutional Environments on Texas Oil and Gas Venting and Flaring Practices” June 7, 2017
 Rocky Mountain Federal Statistical Research Data Center
 University of Colorado- Boulder
 Boulder, CO

Campus Talks

“Introduction to Bayesian Models Using Stata” May 15, 2018
 (with Ernesto Amaral)
 Texas Research Data Center
 Texas A&M University
 College Station, TX

“Graduate Student Dissertation Research in the Texas Federal Statistical Research Data Center (TXRDC): The Effects of Organizational Characteristics and the Characteristics of Organizational Institutional Environments on Texas Oil and Gas Venting and Flaring Practices”
 May 11, 2018
 February 2, 2018
 May 5, 2017
 December 9, 2016
 Texas Research Data Center
 Texas A&M University
 College Station, TX

“Corporate-State Relations and State Environmental Policy: Texas Oil and Gas Flaring Regulations, 1890-2014” February 9, 2016
 Glasscock Center Library
 Texas A&M University
 College Station, TX

TEACHING EXPERIENCE

Lecturer (Full Responsibility) Department of Sociology Texas A&M University	Courses: <ul style="list-style-type: none"> • Social Problems 	Spring 2015 Summer 2015
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Guest Lecturer Department of Sociology Texas A&M University	Lectures: <ul style="list-style-type: none"> • The Nature and Types of Social Theory • Resource Dependence Theory 	Fall 2014 Spring 2017
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UNDERGRADUATE RESEARCH ADVISING EXPERIENCE

Aggie Research Leadership Program Texas A&M	Mentees: <ul style="list-style-type: none"> • Nina Canal • Angelina Dumlao • Miranda Hooper • William Thompson 	Spring 2018
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Environmental Program Senior Thesis Group Advisor Texas A&M	Mentees: <ul style="list-style-type: none"> • Nina Canal • Angelina Dumlao • Miranda Hooper • William Thompson 	Fall 2017
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Corporate Structure Data Collection Training Texas A&M	Mentees: <ul style="list-style-type: none"> • Garrison Reed 	Summer 2017
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UNIVERSITY SERVICE

Member ATMentors Texas A&M University	Duties: <ul style="list-style-type: none"> • Mentored students • Assisted students in preparing documents for the job market or graduate school 	2012 – 2016
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Elected Member Diversity Committee Department of Sociology Texas A&M University	Duties: <ul style="list-style-type: none"> • Crafted department responses to university diversity issues 	2013-2014
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Advisor Sociology Club Texas A&M University	Duties: <ul style="list-style-type: none"> • Advised student leaders on organizational best practices and how to manage the University bureaucracy 	2012-2013
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PROFESSIONAL INVOLVEMENT

Member American Sociological Association	Sections: <ul style="list-style-type: none"> • Environmental Sociology • Sociological Practice and Public Sociology • Organizations, Occupations, and Work 	2010 – Current
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Member Southwestern Sociological Association		2010 – Current
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Member Rural Sociological Society	Sections: <ul style="list-style-type: none"> • Natural Resources • Population 	2018 – Current
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RESEARCH SKILLS

Facilitating Large Restricted Federal Data Analysis	<ul style="list-style-type: none"> • Administered 1920, 1930, and 1940 IPUMS-USA micro-level Census data files located at Texas A&M University • Managed and analyzed restricted business, community, health and crime data available at a Federal Statistical Research Data Center
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Quantitative Analysis	<ul style="list-style-type: none"> • Bayesian Analysis • Econometric models for dealing with excess zeros • Econometrics for experimental economics • Generalized linear mixed modeling for clustered and longitudinal data • Two-step multilevel analysis to deal with large level-two sample sizes
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Spatial Analysis	<ul style="list-style-type: none"> • ArcGIS • ArcPy • Spatial statistics
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Statistical Software

- Stata
- SAS
- R
- MATLAB
- Excel

Other Programming Skills

- Python
- VBA
- HTML
- CSS

Qualitative Analysis

- Archival research
- Content analysis
- Focus groups
- Historical comparative analysis
- Interviews
- Participant observation
- Program evaluations
- Surveys

Qualitative Software

- ATLAS.ti
- Qualtrics

Quantitative Datasets

- Annual Survey of Public Employees and Payroll
- American Community Survey (Public and Restricted Versions)
- Business Register/Standard Statistical Establishment List (Restricted)
- Census Annual Estimates of Population
- Census of Mining (Restricted)
- Census Small Area Income Population Estimates
- Compustat
- County Business Patterns
- Decennial Census (Public and Restricted Versions)
- Economic Research Service SNAP Policy Database
- Greenhouse Gas Reporting Program
- Integrated Public Use Microdata Series- United States (Restricted)
- Lexis Nexis Corporate Affiliations
- Longitudinal Business Database (Restricted)
- Medical Expenditure Panel Survey
- National Health Interview Survey (Public and Restricted Versions)
- National Center for Charitable Statistics
- National Cooperative Soil Survey/States Soil Geographic dataset

- National Crime Victimization Survey (Public and Restricted Versions)
- Police-Public Contact Survey (Public and Restricted Versions)
- Report of Organizations (Restricted)
- Risk-Screening Environmental Indicators
- Suomi National Polar-Orbiting Partnership Visible Infrared Imaging Radiometer Suite Global Gas Flaring Observed from Space
- State Soil Geographic Database
- Texas Railroad Commission Databases
- Topologically Integrated Geographic Encoding and Referencing/Line Shapefiles
- Toxic Release Inventory
- Uniform Crime Reporting Program
- United States Department of Agriculture SNAP Policy Database
- United States Department of Agriculture Local Food Directories

ADMINISTRATIVE TRAINING

Research Ethics

- Data Stewardship Training
- Title 26 Awareness Training

Diversity and Inclusiveness

- Building a Community of Respect in the Classroom
- Enhancing Teaching and Learning for All Students with Universal Design and Technology
- Working with Students with Disabilities

Communication

- Assertiveness Training
- Interpersonal Communication Skills
- Understanding Communication Styles
- Working in a Team Environment

Teaching

- Effective Exam Item Creation
- High Impact Practices and Measuring Effectiveness
- Humanizing Education, Learning, and Leadership On/Offline
- Metacognition
- Questioning Skills and Techniques
- Strategies to Promote Active Learning
- Technology Enhanced Approaches for Engaging Students in Large Classes
- Techniques in Lecturing
- The Six Pillars of Engagement
- Teaching College Writing

Advising

- Fundamentals of Managing Departmental Records
- Goal Setting
- Intrusive Academic Advising: An Effective Strategy to Increase Student Success
- Organizational Alignment and Culture

Student Safety

- Brutality 101- Bullying in Higher Education
- Emergency Preparedness
- QPR Suicide Prevention Gatekeeper
- Responding to Reports of Sexual Harassment
- Shots Fired on Campus

REFERENCES

Dr. Theresa Morris, Professor
Department of Sociology, Texas A&M University
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979-862-3193 / theresa.morris@tamu.edu

Dr. Mary Campbell, Associate Professor & FSRDC Associate Director
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979-845-6549 / m-campbell@tamu.edu

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Dr. Daniel Goldberg, Assistant Professor & Director of GeoInnovation Service Center
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Eller O&M Building 810, Mail Stop 3147, College Station, TX 77843-3147
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