

## J. GAINES 'JEFF' WILSON

### ADDRESS

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### EDUCATION/TRAINING

Institution	Degree/Training	College/Org
Harvard	Post-Doctorate	School of Public Health/HIGH
University of Canterbury (NZ)	Ph.D. Environmental Science	Science
Texas State University	M.S. GIS (Geography)	Liberal Arts
Texas A&M University	B.S. Industrial Distribution	Engineering

### PROFESSIONAL EXPERIENCE

2013-	Dean, University College. Huston-Tillotson University. Austin, TX;
2013-	Associate Professor of Biology, Huston-Tillotson University, Austin, TX;
2013-	Executive Director & Professor Dumpster, The Dumpster Project (501c3), Austin, TX: <a href="http://www.dumpsterproject.org">www.dumpsterproject.org</a> ;
2012-2013	<i>Assistant Dean</i> . College of Science, Math and Technology. University of Texas at Brownsville; Brownsville, TX;
2008-2013	<i>Assistant Professor</i> . Environmental Science Program. Dept. of Chemistry and Environmental Sciences. University of Texas at Brownsville; Brownsville, TX;
2010-	<i>Faculty Affiliate</i> , The Texas Center for Transnational and Border Studies; University of Texas at Brownsville; Brownsville, TX.
2007-2008	<i>Adjunct Faculty</i> . Texas State University; San Marcos, TX; Dept. of Geography;
2006	<i>Research Fellow</i> . Harvard University; Cambridge, MA; School of Public Health (based at the Harvard Initiative for Global Health);
2002-2005	<i>Lecturer</i> . University of Canterbury; Christchurch, New Zealand;
2000-2002	<i>GIS Teaching Assistant and Instructor</i> . Texas State University; San Marcos, TX;
1998-1999	<i>Project Manager</i> . IBM Corporation; San Jose, CA;
1996-1998	<i>Consultant</i> . Ernst & Young Management Consulting – Strategy Group; Houston.

### AWARD HIGHLIGHTS

Regents' Outstanding Teaching Award, The University of Texas System. 2011 (USD\$25,000). Largest award for undergraduate teaching in the United States. As the top-scoring portfolio of all Assistant Professor awardees across the nine academic Institutions of the UT System, was invited to present to the UT System Board of Regents on teaching philosophy. See the talk at <http://youtu.be/ccGAIERHbfQ>. Various Additional Teaching Awards. 'Best Professor at UTB' (Barnes and Noble: 2012); Piper Professor Award Nomination by UTB President (2012).

Exceptional Merit. 2011, 2012. Awarded to the top 5% of faculty at UT-Brownsville, based upon teaching and research performance.

### PEER-REVIEWED JOURNAL PUBLICATIONS

\*Graduate Student \*\*Undergraduate

29. Zou, Bin; Fen Peng, Neng Wan, Keita Mamady, and **J. Gaines Wilson**. (under review). Fine-scale spatial cluster analysis of air pollution exposure inequalities across the United States.

28. Wan, Neng, **J. Gaines Wilson**, F.B. Zhan, B. Zou and **J. Gaines Wilson**. 2013. Spatial Access to Healthcare Services and Disparities in Colorectal Cancer Stage at Diagnosis in Texas. *The Professional Geographer*: 2, No. 23: 527-541.
27. Tian, Nancy\*, Pierre Goovaerts, F. Benjamin Zhan, Edwin Chow, and **J. Gaines Wilson**. 2013 (in press). Racial and geographic disparities in female breast cancer mortality in Texas: Does proximity to mammography facilities matter? *Women's Health Issues*:
26. Salinas, J.J., B. Adelbary\*, **J. Gaines Wilson**, J. McCormick, and S. Fisher-Hoch. 2012. Using the Framingham Risk Score to Evaluate Cardiovascular Disease Risk in Poor Mexican Americans on the Texas-Mexico Border. *Journal of Health Care for the Poor and Underserved*: 23, No. 2.
25. Salinas, J.J., B. Adelbary\*, J. Brinkworth\*\*, M. Hossain, S. Fisher-Hoch, A. Rentfro, J. McCormick, and **J. Gaines Wilson**. 2012. Mexican Cultural Neighborhood Environment and Diabetes Risk in Mexican Americans. *Hispanic Health Care International*. 10, No. 3: 146-58.
24. Zou, B\*, Y. Zeng, F.B. Zhan, **J. Gaines Wilson**, K. Wu, and F. Peng. 2011. Spatial-temporal variations of regional ambient sulfur dioxide concentration and its source contribution analysis: a dispersion modeling approach. *Atmospheric Environment (Online)*: 1-9.
23. Tian, N\*, **J. Gaines Wilson** and F.B. Zhan. Spatial association of racial/ethnic disparities between late-stage diagnosis and mortality for female breast cancer: where to intervene? 2011. *International Journal of Health Geographics* 10:24.
22. **Wilson, J. Gaines**, J. Benavides, K. Engle, A. Reisinger\*\*, D. Gilman, J. Spangler\*\*, and J. Lemen\*\*. 2010. Due diligence and demographic disparities: effects of the planning or the U.S.-Mexico border fence planning on marginalized populations. *Southwestern Geographer* 14: 41-55.
21. **Wilson, J. Gaines**, J. Ballou\*, C. Yan\*, S. P. Fisher-Hoch, B. Reininger, J. Gay, J. Salinas, P. Sanchez, Y. Salinas, L. Lopez, F. Calvillo, I. P. deLima, and J. B. McCormick. 2010. Utilizing spatiotemporal analysis of influenza-like illness and rapid tests to focus swine-origin influenza virus intervention. *Health and Place* 16: 1230-9.
20. **Wilson, J. Gaines**, S. Kingham and J. Pearce. 2010. Air pollution and restricted activity days among New Zealand school children. *International Journal of Environment and Pollution* 41: 140-154.
19. Tian, N., P\*. Goovaerts, F. B. Zhan, and **J. Gaines Wilson**. 2010. Identification of racial disparities in breast cancer mortality: does scale matter? *International Journal of Health Geographics* 9:35.
18. Zou, B.\* , F. B. Zhan, **J. Gaines Wilson**, and Y. Zeng. 2010. Performance of AERMOD at different temporal scales. *Simulation Modeling Practice and Theory* 18: 612-23.
17. Fisher-Hoch, Susan, A.R. Rentfro, J.J. Salinas, A. Perez, H.S. Brown, B.M. Reininger, B.I. Restrapo, **J. Gaines Wilson**, M.M. Hossain, M.H. Rahbar, C.M. Hanis, J.B. McCormick. 2010. Socioeconomic status and prevalence of obesity and diabetes in a Mexican American community, Cameron County, Texas. *Preventing Chronic Diseases* 7(3): 1-10.
16. Tian, Nancy\*, **J. Gaines Wilson**, and F. B. Zhan. 2010. Female breast cancer mortality clusters within racial groups in the United States. *Health and Place* 16: 209-18.

15. McCormick, J. B., C. Yan\*, J. Ballou\*, Y. Salinas, B. Reininger, J. Gay, F. Cavillo, **J. Gaines Wilson**, L. Lopez, and S. P. Fisher-Hoch. 2010. Local response to H1N1 in a US Mexico border community: local experience with the national preparedness plan. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 8(3): 1-10.
14. Zou, B.\*, **J. Gaines Wilson**, F. B. Zhan, and Y. Zeng. 2009. Spatially differentiated and source specific population exposure to ambient urban air pollution. *Atmospheric Environment* 43: 3981 - 3988.
13. Zou, B.\*, **J. Gaines Wilson**, F.B. Zhan and Y. Zeng. 2009. Air pollution exposure assessment methods utilized in epidemiological studies. *Journal of Environmental Monitoring* 11: 475-490.
12. Zou, B.\*, **J. Gaines Wilson** and F.B. Zhan. 2009. An emission-weighted proximity model for air pollution exposure assessment. *Science of the Total Environment* 407: 4939-4945.
11. Cavanaugh, J., P. Zawar-Reza and **J. Gaines Wilson**. 2009. Spatial attenuation of ambient particulate matter air pollution within an urbanised native forest patch. *Urban Forestry and Urban Greening* 8: 21-30.
10. Arku, Raphael E.\*, J. Vallarino, K. L. Dionisio, H. Choi, R. Willis, **J. Gaines Wilson**, C. Hemphill, A. Quaye, S. Agyei-Mensah, J. Spengler, and M. Ezzati. 2008. Characterizing air pollution in two low-income neighborhoods in Accra, Ghana. *Science of the Total Environment* 402: 217-31.
9. Sabel, C. E., **J. Gaines Wilson**, S. Kingham, C. Tisch, and M. Epton. 2007. Spatial implications of covariate adjustment on patterns of risk: Respiratory hospital admissions in Christchurch, New Zealand. *Social Science and Medicine* 65: 43-59.
8. **Wilson, J. Gaines** and P. Zawar-Reza. 2006. Intraurban-scale dispersion modelling of particulate matter concentrations: Applications for exposure estimates in cohort studies. In *Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes*.
7. **Wilson, J. Gaines**, S. Kingham, and A. Sturman. 2006. Intraurban variations of particulate matter air pollution in Christchurch, New Zealand: Implications for epidemiological studies. *Science of the Total Environment* 367: 559-72.
6. **Wilson, J. Gaines** and P. Zawar-Reza. 2006. Intraurban-scale dispersion modelling of particulate matter concentrations: Applications for exposure estimates in cohort studies. *Atmospheric Environment* 40: 1053-63.
5. Durand, M. and **J. Gaines Wilson**. 2006. Spatial analysis of respiratory disease clusters on an urbanized geothermal field. *Environmental Research* 101: 238-45.
4. Kingham, Simon, M. Durand, J. Harrison, **J. Gaines Wilson**, and M. Epton. 2006. Winter comparison of TEOM, MiniVol and DustTrak PM<sub>10</sub> monitors in a wood smoke environment. *Atmospheric Environment* 40: 338-47.
3. Durand, M. and **J. Gaines Wilson**. 2006. Ball lightning and fireballs during volcanic air pollution. *Weather* 61: 40-3.
2. **Wilson, J. Gaines**, S. Kingham, J. Pearce, and A. Sturman. 2005. Intraurban particulate air pollution and restricted activity days in New Zealand school children. *Epidemiology* 16: S136.

1. **Wilson, J. Gaines**, S. Kingham, J. Pearce, and A. Sturman. 2005. A review of intraurban variations in particulate air pollution: Implications for epidemiological research. *Atmospheric Environment* 39: 6444–62. *\*cited >125 times.*

## **FUNDING AND RESEARCH PROJECT PARTICIPATION**

### **Funding (funded: active, under review and historical)**

**The Rio Grande Valley Initiative: Resource Stewardship STARS for Sustainability of the Rio Grande Valley.** 2013-2015. Wilson: Principal Grant Author (no official/recognized PI on this project). The University of Texas System. (USD\$5,000,000: funded).

**AUGMENTS: Advancing Undergraduate to Geoenvironmental Masters for Engaged Needs-based Talented Students.** 2011-2014. Principal Investigator: Andrew Hunt (UT – Arlington). Co-PI: Wilson. National Science Foundation S-STEM program. (USD\$600,000: funded/active).

**Eastside Thrives Infrastructure Network.** (under review). Elizabeth Walsh, UTSOA. Public Impact on Community and Climate. (USD\$294,917).

**DUMPSTER: Developing Underutilized Methods for Promoting Sustainable, Transformative Education & Research.** (under review). Principal Investigator: Vanessa Svihla (U New Mexico). Co-PI: Wilson. American Honda Foundation. (USD\$59,642).

**University of Texas System Regents' Outstanding Teaching Award.** 2011. The highest level of recognition for teaching excellence in the University of Texas System. Top scoring portfolio in UT System for tenure-track category. (USD\$25,000: awarded)

**Scorpion Fund Award.** 2011. To present built environment research at the International Conference for Environmental Health. Salvador, Brazil. UTB/TSC. Recipient – Wilson. (USD\$2,339: funded).

**College Faculty Development Fund.** 2010. To present research in Washington D.C. at the Association of American Geographer's Annual Meeting. College of Science, Math and Technology. PI/Recipient – Wilson. (USD\$1,400: funded)

**Rusteberg Fellowship Award.** 2008-2009. PI: Wilson. Funding for web site development and field equipment. University of Texas at Brownsville. (USD\$3,600: funded).

**Health and Air Pollution in Poor Neighborhoods of Accra, Ghana.** 2006. Co-PIs: Jack Spengler and Majid Ezzati. Designed, operated and managed most comprehensive small-area spatial assessment of air pollution concentrations to date globally in a developing country. National Science Foundation. (USD\$600,000: funded).

**Health and Air Pollution in New Zealand (HAPiNZ).** 2002-2006. Co-PIs: Gavin Fisher, Tord Kjellstrom and Simon Kingham. Designed and operated winter particulate matter air pollution monitoring network for validation of dispersion and GIS models. Presented overviews of various phases of study at three international conferences. Supported by the New Zealand Health Research Council and the Ministry for the Environment. Grant Number 03/470 (USD\$210,000: funded).

**Protecting New Zealand's Clean Air.** 2005-2007. PI for University of Canterbury: Prof. Andrew Sturman. Designed and operated urban forest monitoring network. Foundation for Research, Science and Technology (FRST). Grant No. C01X0405 (USD\$105,000: funded).

### **Proposals Submitted**

**DUMPSTER recycling program for San Benito Independent School District.** PI-Wilson. Ford Foundation College Community Challenge (USD\$24,759: not funded).

**EXP: Supporting Practice, Integrating Research in Immersive Technologies into Educational Designs (SPIRITED).** 2013. PI: V. Svilha. Advisory Committee: Wilson. National Science Foundation. Not funded.

**Integrated Seawater Agricultural Systems (ISAS): sustainable biofuel production for the Gulf of Mexico and the desert Southwest.** 2010. PI: Benavides. Co-PI: Wilson. Department of Energy. (US\$6,600,000: not funded).

**Center of Excellence for Diabetes in Americans of Mexican Descent.** 2013-1017. PI: McCormick and Reininger. Co-Investigator: Wilson (25% salary + summer for 5 years). National Institutes of Health P60: (USD\$7,000,000: Scored 44, not funded).

**Spatio-temporal pattern and its driving mechanism of ecological population exposure to ambient air pollution in China.** 2010. PI: Bin Zou. Co-PI: Wilson. National Natural Science Foundation of China (Chinese RMB: 219,500; USD\$35,000: not funded).

**Recruiting High Achieving Hispanics into Forensics & STEM.** University of Texas at Brownsville / Texas Southmost College. 2011. PI: Lytle. Co-PI: Wilson. US Department of Homeland Security. (USD\$500,000: not funded).

**A longitudinal study of Mexican American neighborhoods and diabetes disparities.** 2010. Co-PIs: Salinas (lead) and Wilson. National Institutes of Health (R01). (USD\$1,662,951: not funded first round - to be resubmitted in 2011).

**Open AVATAR: Ambient Visualization of Advanced Teaching and Retention.** 2010. PI: Betsy Price. Co-PI: Wilson. Next Generation Learning Challenges Wave 1: Building Blocks for College Completion. The Bill and Melinda Gates Foundation. (US\$750,000: not funded).

**The places we live: Effects on behavior and adiposity in low-income Hispanics.** 2010. (Co-Principal Investigators for UT HSC SPH: Jennifer Gay and Belinda Reininger. Principle Investigator of subcontract at UTB: Wilson. National Institutes of Health (R01). (USD\$3,491,711: scored 35; 39<sup>th</sup> percentile: resubmission in 2011).

**The Working Group on Human Rights and the Border Wall, 2008-.** A multi-disciplinary collective of faculty and students at the University of Texas at Austin and UT-Brownsville analyzing the impact of the construction of a border wall on the Texas/Mexico border. The Working Group is collaborating with affected individual property owners, indigenous communities, environmental groups, and other academics and advocates to bring human rights norms and perspectives to the debate on the Texas/Mexico border wall. (Research project only).

**Health, air pollution and environmental justice in Latin American megacities.** 2006. PI – J. Gaines Wilson. Written with collaborators in São Paulo, Brazil; Santiago, Chile; and Mexico City this project will ascertain small-area estimates of air pollution exposure within three mega-cities with a focus on environmental justice. Wellcome Trust (UK). (USD\$360,000: withdrawn at final round to take post-doc at Harvard).

#### **PRESENTATIONS, POSTERS, INVITED TALKS and UNPUBLISHED MANUSCRIPTS**

**Wilson, J. Gaines.** A four-act play: the student experience. 2012. Invited keynote talk at The UTB Student Excellence awards. Brownsville: April.

Ranney, M. A., Clark, D., Reinholz, D., Farjadi, R., Beale, M., & **Wilson, J. Gaines.** 2012. "Changing people's incorrect global warming beliefs with true statistics and mechanistic information. Association for Psychological Science. Chicago: May.

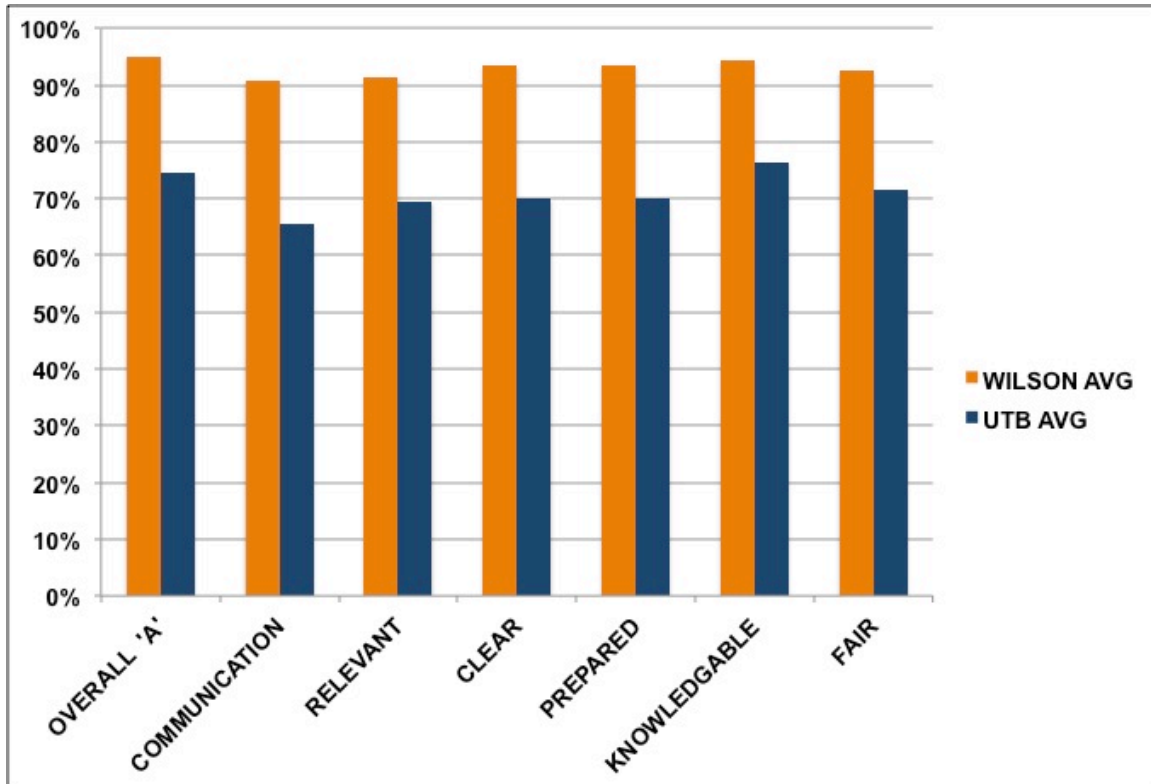
**Wilson, J. Gaines,** J. Brinkworth, & J.J. Salinas. Exposure of unhealthy food to young children in a Mexican American Community. 2012. Association of American Geographers. New York: March.

- Wilson, J. Gaines.** 2011. Who can we be? Invited talk on teaching philosophy at the University of Texas Board of Regents' meeting. Austin: August.
- Ver Hoeve E., Kristina Vatcheva, Anne Rentfro, **Jeff Wilson**, Belinda M. Reininger, Joseph McCormick, Susan Fisher-Hoch. 2011. 8th Annual Bi-National Health Week. Brownsville: October.
- Ranney, M. A., Clark, D., Reinholz, D., Cohen, S., & **Wilson, J. Gaines.** 2011. "Rick Perry, methane, & an early hominid enter a saloon...": Climate change, evolution, (anti)knowledge, math, and geopolitics. Invited colloquium for the Institute of Cognitive & Brain Sciences, University of California, Berkeley: October.
- Wilson, J. Gaines,** C. Barroso, J. Brinkworth, J.J. Salinas. Disproportionate fast food exposure to low-income Mexican American children. Environmental Health 2011: Resetting Our Priorities. Salvador, Brazil: February.
- Wilson, J. Gaines.** 2010. Health, wealth, and a hole in the wall: GIScience and the geography of the border. Invited Talk. Department of Geography and the Environment. The University of Texas – Austin. Austin: November.
- Wilson, J. Gaines,** C. Barroso, J. Brinkworth, J.J. Salinas. 2010. See no veggies, eat no veggies: Are preschoolers in Brownsville overexposed to fast food? 7<sup>th</sup> Annual Bi-National Health Week. Brownsville: October.
- Betsy Price, **J. Gaines Wilson**, Mario Marquez, Jennifer Brinkworth, Maria Medina, Dawn Conley, Tanya Marroquin and Joey Chaney. 2010. First timers: Lessons learned from a rookie attempt at teaching presentation skills to upper-level students in Second Life and challenges faced in institutional implementation (Poster). UT Systems Virtual World Undergraduate Conference. San Francisco (SL HQ): June.
- Wilson, J. Gaines,** J. Ballou, C. Yan, S. P. Fisher-Hoch, B. Reininger, J. Gay, J. Salinas, P. Sanchez, Y. Salinas, L. Lopez, F. Calvillo, I. P. deLima, and J. B. McCormick. 2010. Pigs flying through time and space: spatiotemporal analysis of the 2009 H1N1 pandemic from the US-Mexico Border (Presentation). In *Proceedings of the Annual Meeting of the Association of American Geographers*. Washington, DC: April.
- Wilson, J. Gaines.** 2009. Hole in the Wall: Gaping Disparities. April 21, 2009. UTB Border Symposium "The effects of the border wall on the Rio Grande Valley Community" (Invited Talk). Brownsville, Texas. April 21.
- Wilson, J. Gaines.** 2009. Spatial context and health in a Mexican-American community. Hispanic Health Research Series. University of Texas at Brownsville and University of Texas Health Science Center School of Public Health (Invited Talk). Brownsville, Texas. April 3.
- Wilson, J. Gaines,** A. Reisinger and J. Benavides. 2009. Hole in the Wall: Demographic Disparities and the US-Mexico Border Wall (Presentation). In *Proceedings of the Annual Meeting of the Association of American Geographers*. Las Vegas. March.
- Wilson, J. Gaines.** 2009. Human Rights and the Border Wall. (Invited Panel Participant) Human Rights at the University of Texas. Austin. March.
- Wilson, J. Gaines.** 2008. The Border Wall and Disparate Impacts on Marginalized Populations. International week at the University of Texas Pan American (Invited speaker). Environmental Awareness Club: Edinburg, Texas. 17 November.

- Wilson, J. Gaines.** 2008. Special Hearing of the International Commission on Human Rights. Expert Testimony. Organization of American States: Washington D.C. 22 October.
- Kingham, S., **J. Gaines Wilson**, and J. Pearce. 2007. Variations in PM<sub>10</sub> and restricted activity days among residents of Christchurch, New Zealand (Presentation). *Proceedings of the 12<sup>th</sup> International Medical Geography Symposium (IMGS)*, Bonn, Germany.
- Zawar-Reza, P., A. Dehghanpour, **J. Gaines Wilson**, and M. Titov. 2006. Observational and numerical analysis of dust storm events over the Central Plateau of Iran. *The International Geographical Union*. Brisbane, Australia.
- Wilson, J. Gaines.** 2006. Spatial variability of intraurban particulate air pollution: epidemiological implications and applications. Dissertation for PhD in Environmental Science. University of Canterbury: Christchurch, New Zealand.
- Wilson, J. Gaines**, S. Kingham, A. Sturman, and J. Pearce. 2005. Intraurban particulate matter variations and restricted activity days in New Zealand school children (poster). In *17<sup>th</sup> Annual Proceedings of International Society of Environmental Epidemiology*. Johannesburg.
- Sabel, C.E., **J. Gaines Wilson**, S. Kingham, C. Tisch, and M. Epton. 2005. The modification effect of deprivation and pollution on the location of cardio-respiratory disease clusters in Christchurch, New Zealand. In *11<sup>th</sup> International Medical Geography Symposium*. Ft. Worth, Texas, United States.
- Wilson, J. Gaines**, S. Kingham, and P. Zawar-Reza. 2004. Health and air pollution in New Zealand: The HAPiNZ project (presentation and abstract). In *Proceedings of the Annual Meeting of the Association of American Geographers*. Philadelphia.
- Wilson, J. Gaines**, S. Kingham, A. Sturman, J. Pearce, and P. Zawar-Reza. 2004. Health and air pollution in New Zealand: The HAPiNZ project update (presentation). *GeoHealth 2004*. Wellington, New Zealand.
- Wilson, J. Gaines**, F. B. Zhan, J. Brender, and D. Bryan. 2002. Geographic concentrations of prostate cancer incidence in Texas and their relationship to socioeconomic conditions. In *Proceedings of the Annual Meeting of the Association of American Geographers*. Los Angeles.
- Wilson, J. Gaines**, S. Kingham, and R. Spronken-Smith. 2003. Health and air pollution in New Zealand. Focus: Christchurch (abstract and presentation). *23<sup>rd</sup> Conference of the New Zealand Geographical Society*. Auckland.
- Wilson, J. Gaines** and M. Durand. 2003. Clustering of health events associated with chronic hydrogen sulphide exposure in Rotorua, New Zealand (abstract and presentation). *23<sup>rd</sup> Conference of the New Zealand Geographical Society*. Auckland.
- Wilson, J. Gaines.** 2002. Geographic Concentrations of Prostate Cancer Incidence in Texas and Their Relationship to Socioeconomic Conditions. Thesis for Masters of Science in Geography. Texas State University: San Marcos.

## TEACHING

Wilson Teaching Performance Summary 2008-2012<sup>1</sup>



<sup>1</sup>Figures are the % rating the professor overall an 'A' or as 'strongly agree' with individual measures. UTB/TSC average ratings are from the office of institutional research, planning and effectiveness since 2008.

### Classroom methods:

- Second Life lecturing and research poster presentations by students
- Student-only text number for class questions
- Skype lectures and interviews with overseas guests
- Case studies on climate change and the scientific method
- Mind mapping and concept maps
- Student-driven lectures
- Peer-reviewed article critiques by lower-level undergraduates



## Course evaluations by semester

Semester <sup>†</sup>	Course (code)	Credit Hours	Students/ Completed Evaluations (n/n)	Communication	Relevant	Clear	Prepared	Knowledgeable	Fair	Overall Rating 'A'
<b>THE UNIVERSITY OF TEXAS – BROWNSVILLE<sup>1</sup></b>										
SPR.2011	Cons. Natrl. Rsrcs. (ENVR3334)	3	11	100%	100%	100%	100%	100%	100%	<b>100%</b>
SPR.2011	Earth Science (GEOL1301)	3	33	91%	88%	87%	82%	91%	88%	<b>91%</b>
SPR.2011	Earth Science Lab (GEOL1101.1)	2	33	93%	97%	97%	97%	97%	97%	<b>94%</b>
SPR.2011	Earth Science Lab (GEOL1101.1)	2								
SM2.2010	Earth Science (GEOL1301)	3	16	100%	100%	100%	100%	100%	100%	<b>100%</b>
SM2.2010	Earth Science Lab (GEOL1101)	2	16	94%	100%	100%	100%	100%	93%	<b>100%</b>
SPR.2010	*Cons. Natrl. Rsrcs. (ENVR3334)	3	12	73%	82%	73%	56%	100%	64%	<b>82%</b>
SPR.2010	Earth Science (GEOL1301)	3	39	92%	89%	92%	94%	94%	86%	<b>94%</b>
SPR.2010	Earth Science Lab (GEOL1101.1)	2	34	84%	78%	78%	75%	78%	92%	<b>94%</b>
FALL.2009	Earth Science (GEOL1301.1)	3	34	96%	93%	93%	93%	96%	89%	<b>100%</b>
FALL.2009	Earth Science (GEOL1301.2)	3	34	94%	97%	100%	100%	100%	91%	<b>97%</b>
FALL.2009	Earth Science Lab (GEOL1101.2)	2	27	96%	93%	93%	96%	100%	100%	<b>96%</b>
FALL.2009	Earth Science Lab (GEOL1101.3)	2	29	80%	80%	84%	80%	88%	84%	<b>96%</b>
SM2.2009	Earth Science (GEOL1301)	3	22	90%	86%	90%	95%	90%	95%	<b>90%</b>
SM2.2009	Earth Science Lab (GEOL1101)	2	22	90%	86%	90%	90%	90%	90%	<b>90%</b>
SPR.2009	Earth Science (GEOL1301)	3	34	95%	95%	95%	95%	95%	95%	<b>89%</b>
SPR.2009	Earth Science Lab (GEOL1101.1)	2	28	79%	89%	100%	100%	95%	95%	<b>95%</b>
SPR.2009	Earth Science Lab (GEOL1101.2)	2	17	79%	86%	86%	86%	93%	79%	<b>86%</b>
SPR.2009	Earth Science Lab (GEOL1101.3)	2	23	95%	95%	95%	95%	95%	95%	<b>95%</b>
FALL.2008	*Earth Science (GEOL1301)	3	31	85%	77%	92%	92%	85%	92%	<b>100%</b>
FALL.2008	*Earth Science (GEOL1301)	3	30	79%	89%	84%	84%	84%	84%	<b>89%</b>
FALL.2008	*Earth Science Lab (GEOL1101.3)	2	28	92%	92%	92%	92%	96%	96%	<b>100%</b>
<b>TEXAS STATE UNIVERSITY<sup>2</sup></b>										
SPR.2008	Quant. Methods (GEOG3331.1)	3								
SPR.2008	Quant. Methods (GEOG3331.2)	3	>80	4.8	n/a	4.8	5	n/a	4.9	<b>4.7/5</b>
SPR.2008	Quant. Methods (GEOG3331.3)	3								
SPR.2008	Quant. Methods (GEOG3331.4)	3								
FALL.2007	*Quant. Methods (GEOG3331.1)	3								
FALL.2007	*Quant. Methods (GEOG3331.2)	3	>80	4.4	n/a	4.5	4.8	n/a	4.4	<b>4.5/5</b>
FALL.2007	*Quant. Methods (GEOG3331.3)	3								
FALL.2007	*Quant. Methods (GEOG3331.4)	3								
<b>U. OF CANTERBURY<sup>2</sup></b>										
FALL.2005	*Env'l Hazards (GEOG305)	3	71	4.7	4.3	n/a	4.6	4.9	n/a	<b>4.7/5</b>
FALL.2005	*Global Env'l Change (GEOG106)	3	181	4.4	4.6	n/a	4.5	4.3	n/a	<b>4.5/5</b>
SPR.2005	*Env'l Hazards (GEOG305)	3	51	4.5	4.2	n/a	4.4	4.8	n/a	<b>4.5/5</b>

<sup>1</sup>Percentages reflect percent of students in section/class that rated 'completely agree' with relative evaluation metric.

<sup>2</sup>Scores represent class average from 1-5 (five being highest)

\*Newly developed course. Evaluations improves to 100% across the board in subsequent offerings.

<sup>†</sup>Fall 2010 student evaluations were ruled invalid by the UTB Provost due to poor online sample size (~30% participation).

## **COURSES DEVELOPED (since 2001)**

- Data Analysis and Field Methods;
- World Regional Geography;
- Earth Science (Physical Geography);
- Conservation of Natural Resources;
- Research Problems in Environmental Science;
- Environmental Hazards and Management;
- Fundamentals of GIS;
- Management and Implementation of GIS;
- The Restless City (Urban Geography);
- Geography, Health and Welfare;
- Global Environmental Change; and
- Quantitative Methods for Geographers.

## **STUDENT ADVISING**

### **PhD Students**

*Nancy Tian*. Department of Geography. Texas State University. 2007-2010. Dissertation: *Disparity analysis of breast cancer incidence and mortality in Texas*. Co-authored paper in *Health & Place*. (PhD committee member). Current position: Postdoctoral Fellow at Environmental Protection Agency.

*Bin Zou*. Department of Geography. Texas State University. 2007-2009. Dissertation: *Air pollution exposure assessment and spatial epidemiological analysis of low birth weight*. Co-authored four publications in international peer-reviewed journals (extra-committee informal advisor). Current position: Assistant Professor, China South University.

### **Master's Students**

*Jessica Ballou*. 2009-2010. Master's of Public Health. A Community-Based Assessment of the spatiotemporal distribution of influenza in a US-Mexico Border County during the Spring 2009 Novel H1N1 Swine-origin Influenza Pandemic. The University of Texas Health Science Center at Houston School of Public Health – Brownsville Campus. (MPH thesis committee member). Current Position: Medical Student at Southwestern, Dallas, Texas.

*Karla Vargas*. 2008-09. Doctor of Jurisprudence and Master's of Public Administration. University of Texas School of Law and LBJ School of Public Affairs. *The U.S. – Mexico Border Wall: Disparate Impact & Condemnation Suits in Cameron County, Texas*. 2008-09. (MPA thesis committee member). Current Position: Non-profit law firm in San Antonio, Texas.

### **High School Students**

*Michelle Lee Perez*. Summer 2009. Summer Science Intern Program. Math and Science Academy (Mercedes, TX). The University of Texas Health Science Center at Houston School of Public Health – Brownsville Campus. Advised student on study design for neighborhoods and walkability project. Trained student on utilizing GPS and Google Earth for project analysis.

## **HONORS, AWARDS and DISTINGUISHED ACTIVITIES (FULL LIST)**

The University of Texas System Regents' Outstanding Teaching Award. 2011. Top scoring portfolio of the 17 assistant professor recipients in the System. Largest cash award in the United States for teaching. (USD\$25,000).

Invited Special Presentation to University of Texas System Board of Regents. 2011. As the top-scoring portfolio of Assistant Professors for the UT System outstanding teaching award, was invited to present on teaching philosophy to the Board of Regents. August 24: Austin.

Exceptional Merit. 2011. Awarded to the top 5% of faculty at UT-Brownsville, based upon teaching and research performance.

Faculty Leadership Development Cohort. 2010-2011. Selected as one of seven faculty at UTB for program to train future campus leaders and administration.

Rusteberg Fellow. 2008-09. Awarded to exceptional faculty for support of research and teaching. University of Texas at Brownsville. (US\$2,000).

Top national dissertation finalist. 2006. New Zealand.

TerraSeer Graduate Student Research Prize Winner, 2002-2003. (US\$4,800 in software).

International Post-Graduate Award and Doctoral Scholarship; University of Canterbury; September 2002 - May 2006. Full tuition, fees and stipend. (US\$82,000).

Student Paper Prize; New Zealand Geographical Society; 2003; Clustering of health events associated with chronic hydrogen sulphide exposure in Rotorua, New Zealand (presentation). Auckland.

Student Travel Award; International Society for Environmental Epidemiology; 2005; Johannesburg (US\$600).

### **ADDITIONAL WORKSHOPS, STUDY and TRAINING**

**College and Career Readiness Initiative (CCRI).** 2011. Dallas, Texas. Nov. 4-5<sup>th</sup>.

**Grant Submission Workshop.** National Institutes of Health (NIH). Regional Seminar. 2011. Phoenix. April.

**Grant Writing Workshop.** 2011. American Grant Writers Association. San Diego. January.

**College and Career Readiness Initiative (CCRI).** 2010. Dallas, Texas: Nov 5-6<sup>th</sup>.

**National Math and Science Initiative.** 2010 Conference. UTeach Institute. The University of Texas at Austin. Austin, Texas: May 25-27, 2010.

**Teaching Case Studies in the Sciences.** 2010. National Center for Case Study Teaching in Science - Summer Workshop. SUNY Buffalo. Buffalo, New York: May 2010.

**Developing Students' Understanding of Complex Systems in the Geosciences.** National Science Foundation. Carlton College: Fairfield, Minnesota: April 2010.

**Workshop on the recruitment and retention of Hispanic males in science, technology, engineering, and mathematics (STEM).** Quality Education for Minorities (QEM) Network, with support from the National Science Foundation. Las Vegas: March 2010.

**CAREER workshop for new faculty.** National Science Foundation. Quality Education for Minorities (QEM) Network. Las Vegas: February 2010.

**Hispanic-Serving Institution Development Follow-Up.** National Science Foundation Quality Education for Minorities (QEM) Network. Las Vegas: December 2009.

**Workshop on instruction in second life.** University of Texas System. Brownsville: November 2009.

**An Outreach Forum on Building STEM Research and Education Capacity at Hispanic-serving Institutions.** National Science Foundation Quality Education for Minorities (QEM) Network. Albuquerque: September 2009.

**National Institutes of Health (NIH) Grant Writing Workshop for Minority Institutions.** University of Kentucky. Lexington, Kentucky: May 2009.

**Population Health Risk Assessment for Epidemiologists.** Johns Hopkins University Bloomberg School of Public Health, Risk Sciences and Public Policy Institute. International Society for Environmental Epidemiology. Johannesburg: September 2005.

**Spatial Analysis in Environmental and Social Epidemiology.** Australian National University, National Center for Epidemiology and Public Health. Canberra: September 2005.

**Workshop on National and Sub-National Data Sources in Environmental Health.** Australian National University, National Center for Epidemiology and Public Health. Canberra: May 2003.

## **SERVICE AND MEMBERSHIPS**

### **Academic Committee Service (University of Texas at Brownsville)**

#### *System-wide: The University of Texas System*

- The Rio Grande Valley Initiative
- Chancellor's Dashboard Faculty Expert Group (2012-), *UTB representative*. [Provost Appointed]
- Apple Corporation strategic committee for technology integration, UTB and UTPA (2012-)
- Energy and the Environment in the Rio Grande Valley (2010). Chancellor's Rio Grande Valley Initiative. Final report proposal to Texas State Legislature, *co-author*.
- STEM Task Force. Chancellor's Rio Grande Valley Initiative (2010). Final report proposal to Texas State Legislature, *member*.

#### *University-wide: University of Texas at Brownsville*

- University Council (2012-), *member*
- UTB Faculty to Student Mentoring Committee (2013-), *member*
- 21<sup>st</sup> Century University Commission Work Group on Family: A Family Affair. Juliet Garcia, Chair (2012), *member*
- UTB 21<sup>st</sup> Century University Commission Work Group on Innovative Technology for Teaching, Learning and Connections (2012-), *member*
- UTB University Computing and Technology Committee (2012-) [Provost Appointed].
- UTB Social Media Steering Committee (2012-), *faculty representative*.
- UTB Data Integrity Committee (2011-), *member*. [Provost Appointed].
- Undergraduate Education Transformation Committee (2011-), *member*
- New Faculty Orientation Panel Member (2011, 2012), *participant*
- New UTB (post-split with TSC) Research Mission Statement Development Committee appointed by President (2011), *member*
- Activity Insight/Digital Measures Implementation Team (2010-), *member*.
- Provost Web Task Force (2010-), *member*.
- Provost Committee on Faculty Bios (2010), *member*.
- Excellence in STEM Education Center Institute (2010), *member*.
- Search Committee for UTB/TSC director of web communications (2009-2010, 2011), *member*.

- Scorpion Leadership Ring representative for the College of Science Math and Technology (2008, 2009), *member*.

*College-wide: The College of Science Math and Technology*

- CSMT
- CSMT Scholarship Committee (2011-2012), *member*
- CSMT data dashboard (2011-), *project manager*
- CSMT web re-development and overhaul committee (2009,2010-), *chair*.
- Excellence in STEM Education (2010-), *member*.
- College Promotions Committee (2010-), *member*.
- College Fund Committee – Dept. Representative for College of Science Math and Technology (2009, 2010), *member*.

*Departmental Committees.*

- Webmaster for Dept. of Chemistry and Environmental Sciences (2008-), *chair*.
- Masters in Environmental Science Planning Committee (2008-), *member*.
- Undergraduate Curriculum Committee (2008, 2009, 2010), *member*.
- Chemistry Faculty Search Committee (2008, 2009), *member*.

**Scholarly Service**

Manuscript and professional reviewer since 2006:

- *AAG Health Geographer Prize - Dissertation Reviewer*
- *Atmospheric Environment*
- *Atmospheric Research*
- *Clean Air and Environmental Quality*
- *Environment International*
- *Environmental Research*
- *International Journal of Health Geographics*
- *Journal of Environmental Management*
- *Science of the Total Environment*

Professional memberships (past and current)

- *Association of American Geographers (AAG)*
- *Sigma Xi Scientific Research Society*
- *International Society for Environmental Epidemiology (ISEE)*
- *Supporting Women in Geography (SWIG)*

**Community Service and Outreach**

- Brownsville Area High Schools UTB/TSC College Day, *Guest Speaker* (2010)
- High School Outreach, Port Isabel High School College Fair (2010)
- Science Fair: Brownsville (2008, 2009, 2010)
- Annual UTPA GEAR UP Student Conference for High School Students: Edinburgh (November 2009).

**LANGUAGES**

- English (native)
- Brazilian Portuguese (reading: proficient; writing: intermediate; speaking: intermediate)
- Spanish (reading: intermediate; writing: beginner; speaking: intermediate)