

## CURRICULUM VITAE

### Daehyun Kim, Ph.D.

Department of Geography  
University of Kentucky  
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### PROFESSIONAL APPOINTMENTS

2014 - **Associate Professor** with tenure, Department of Geography, University of Kentucky  
2009 - 2014 **Assistant Professor**, Department of Geography, University of Kentucky  
2008 - 2009 **Instructor and Head of Graduate Teaching Assistants**, Department of Geography, Texas A&M University  
2007 - 2008 **Graduate Research Assistant**, Department of Geography, Texas A&M University  
2006 - 2007 **Graduate Teaching Assistant**, Department of Geography, Texas A&M University  
2000 - 2002 **Platoon Leader** (1st Lieut.), the 2nd Division, Republic of Korea Marine Corps

### EDUCATION AND MAJOR

2005 - 2009 Ph.D., Texas A&M University (Geography)  
Dissertation: "*Spatial and temporal dynamics of salt marsh vegetation across scales*"  
Dissertation Adviser: Dr. David M. Cairns  
2002 - 2004 M.A., Seoul National University, South Korea (Geography)  
Thesis: "*Spatial distribution of plant species in relation to soil-topography-distance factors in a coastal dune ecosystem, South Korea*"  
Thesis Adviser: Dr. Keun Bae Yu  
1996 - 2000 B.A., Seoul National University, South Korea (Geography)  
1993 - 1996 Daeil Foreign Language High School, South Korea (German)

### AREAS OF SPECIALIZATION

- Biogeomorphology
- Ecological multivariate analysis
- Earth surface systems modeling
- Biogeography
- Geospatial analysis
- Predictive simulation modeling

### GENERAL RESEARCH INTERESTS

- Complexity, feedback, and scale-dependence in organism–environment relationships
- GIS-based spatial modeling for various ecological systems and natural resources
- Implications of spatial autocorrelation for spatial modeling outcomes

## PUBLICATIONS

## Articles Published in Refereed Journals:

- Kim, D.** & Kupfer, J.A. (2016) Tri-variate relationships among vegetation, soil, and topography along gradients of fluvial biogeomorphic succession. *PLOS ONE* 11: e0163223.  
[doi:10.1371/journal.pone.0163223](https://doi.org/10.1371/journal.pone.0163223).
- Kim, D.** & Campbell, J.J.N. (2016) Effects of tree size, shade-tolerance, and spatial pattern on the mortality of woody plants in a semi-natural urban woodlot, central Kentucky, USA. *The Professional Geographer* 68: 436–450.
- Kim, D.**, Hirmas D.R., McEwan, R.W., Mueller, T.G., Park, S.J., Šamonil, P., Thompson, J.A. & Wendroth, O. (2016) Predicting the influence of multi-scale spatial autocorrelation on soil–landform modeling. *Soil Science Society of America Journal* 80: 409–419.
- Kim, D.** & Shin, Y.H. (2016) Spatial autocorrelation potentially indicates the degree of changes in the predictive power of environmental factors for plant diversity. *Ecological Indicators* 60: 1130–1141.
- Kim, D.**, Bartholdy, J. & Bartholdy, A.T. (2016) Varying patterns of vegetation dynamics across multiple levels of organization in a salt marsh of the Danish Wadden Sea. *Hydrobiologia* 771: 67–81.
- Kim, D.**, DeWitt, T.J., Costa, C.S.B., Kupfer, J.A., McEwan, R.W. & Stallins, J.A. (2015) Beyond bivariate correlations: Three-block partial least squares illustrated with vegetation, soil, and topography. *Ecosphere* 6: 135. <http://dx.doi.org/10.1890.ES15-0074.1>.
- Corenblit, D., Baas, A., Balke, T., Bouma, T., Fromard, F., Garófano-Gómez, V., González, E., Gurnell, A.M., Hortobágyi, B., Julien, F., **Kim, D.**, Lambs, L., Stallins, J.A., Steiger, J., Tabacchi, E. & Walcker, R. (2015) Engineer pioneer plants respond to and affect geomorphic constraints similarly along water-terrestrial interfaces worldwide. *Global Ecology and Biogeography* 24: 1363–1376.
- Bartholdy, J., Bartholdy, A.T., **Kim, D.** & Pedersen, J.T.P. (2014) On autochthonous organic production and its implication for the consolidation of temperate salt marshes. *Marine Geology* 351: 53–57.
- Kim, D.** & Arthur, M.A. (2014) Changes in community structure and species–landform relationship after repeated fire disturbance in an oak-dominated temperate forest. *Ecological Research* 29: 661–671.
- Kim, D.** (2014) Rates of vegetation dynamics along elevation gradients in a backbarrier salt marsh of the Danish Wadden Sea. *Estuaries and Coasts* 37: 610–620.
- Kim, D.** (2013) Incorporation of multi-scale spatial autocorrelation in soil moisture–landscape modeling. *Physical Geography* 34: 441–455.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2013) Tidal creek morphology and sediment type influence spatial trends in salt marsh vegetation. *The Professional Geographer* 65: 544–560.  
(Winner of 2012 *J. Warren Nystrom Award* from the Association of American Geographers)
- Kim, D.**, Grant, W.E., Cairns, D.M. & Bartholdy, J. (2013) Effects of the North Atlantic Oscillation and wind waves on salt marsh dynamics: A quantitative model as proof of concept. *Geo-Marine Letters* 33: 253–261.
- Kim, D.** & Phillips, J.D. (2013) Predicting the structure and mode of vegetation dynamics: An application of graph theory to state-and-transition models. *Ecological Modelling* 265: 64–73.

- Park, E.J., Yu, K.B., Ku, C.Y., Psuty, N.P., **Kim, D.** & Shin, Y.H. (2012) Short-term sedimentation processes and accretion rates in the Suncheon Bay estuarine marsh, South Korea. *Journal of Coastal Research* 28: 1057–1067.
- Kim, D.** (2012) Biogeomorphic feedbacks drive dynamics of vegetation–landform complex in a coastal riparian system. *Ecosphere* 3: 74. <http://dx.doi.org/10.1890/ES12-00028.1>.
- Kim, D.**, Cairns, D.M., Bartholdy, J. & Morgan, C.L.S. (2012) Scale-dependent correspondence of floristic and edaphic gradients across salt marsh creeks. *Annals of the Association of American Geographers* 102: 276–294.
- Kim, D.** & Zheng, Y. (2011) Scale-dependent predictability of DEM-based landform attributes for soil spatial variability in a coastal dune system. *Geoderma* 164: 181–194.
- Kim, D.**, Bartholdy, J., Jung, S. & Cairns, D.M. (2011) Salt marshes as potential indicators of global climate change. *Geography Compass* 5: 219–236.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2011) Wind-driven sea-level variation influences dynamics of salt marsh vegetation. *Annals of the Association of American Geographers* 101: 231–248.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2010) Environmental controls on multiscale spatial pattern of salt marsh vegetation. *Physical Geography* 31: 58–78.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2009) Spatial heterogeneity and domain of scale on the Skallingen salt marsh, Denmark. *Danish Journal of Geography* 109: 95–104.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2009) Scale-dependent interactions and community structure along environmental gradients on a coastal salt marsh. *Journal of Coastal Research* SI 56: 429–433.
- Kim, D.** & Yu, K.B. (2009) A conceptual model of coastal dune ecology synthesizing spatial gradients of vegetation, soil, and geomorphology. *Plant Ecology* 202: 135–148.
- Filippi, A.M., Brannstrom, C., Dobрева, I., Cairns, D.M. & **Kim, D.** (2009) Unsupervised fuzzy ARTMAP classification of hyperspectral Hyperion data for savanna and agriculture discrimination in the Brazilian Cerrado. *GIScience & Remote Sensing* 46: 1–23.
- Kim, D.**, Yu, K.B. & Park, S.J. (2008) Identification and visualization of complex spatial pattern of coastal dune soil properties using GIS-based terrain analysis and geostatistics. *Journal of Coastal Research* 24(4C): 50–60.

#### Articles Published in Refereed Korean Journals:

- Yu, K.B., Shin, Y.H., **Kim, D.** & Kim, S.H. (2012) Spatio-temporal variation of incoming nutrient into the Sindu coastal dune, Korea. *Journal of the Korean Geographical Society* 47: 159–314 (in Korean).
- Park, S.J., Ruecker, G.R., Agyare, W.A., Akramhanov, A., **Kim, D.** & Vlek, P.L.G. (2009) Influence of grid cell size and flow routing algorithm on soil–landform modeling. *Journal of the Korean Geographical Society* 44: 122–145 (in English).
- Kim, D.** (2004) Spatial distribution of nutrients from sea water and aeolian sands in a coastal dunefield, South Korea. *Journal of Geography* 43: 57–79 (in Korean).

#### Articles Submitted to Refereed Journals (Under review):

None currently

**Journal Articles in Preparation (Data analyses completed):**

- Kim, D.**, Characterizing the pathway and rate of vegetation dynamics across salt marsh creeks in the Danish Wadden Sea: A multivariate approach.
- Kim, D.**, Vegetation–environment relationships reconsidered: Toward dynamic species distribution modeling.
- Kim, D.** & Jung, S., Varying effects of hydroperiod on sedimentary processes in tidal marshes over space and time.
- Kim, D.**, Millington, A.C. & Lafon, C.W., Trees under wind stress: Spatial pattern explains susceptibility to hurricane damage.
- Kim, D.**, Millington, A.C. & Lafon, C.W., Disturbance after disturbance: two hurricanes impacted the same forest plots within three years.
- Shouse, M., **Kim, D.** & Fei, S., Scale-dependent predictability of logistic and auto-logistic models for invasive exotic plants at an urban–rural interface.

**Books:**

- Yu, K.B., Shin, Y.H., **Kim, D.** & Kim, S.H. (2012) *Coastal Dunes in Western Korea as Biological Habitats*. Seoul National University Press, Seoul (in Korean).

**Book Reviews:**

- Kim, D.** (2011) *Comparative Biogeography: Discovering and Classifying Biogeographical Patterns of a Dynamic Earth* by Lynne R. Parenti and Malte C. Ebach & *Mapping Species Distributions: Spatial Inference and Prediction* by Janet Franklin. *Annals of the Association of American Geographers* 101: 1384–1386.

**Encyclopedia Contribution:**

- Kim, D.** (In press) Complexity in biogeography, In: Richardson, D. and others (eds.), *The International Encyclopedia of Geography*, Wiley–Blackwell and AAG.
- Kim, D.** (2015) Vegetation dynamics, In: *The McGraw–Hill Education Encyclopedia (Yearbook of Science & Technology)*, McGraw–Hill, pp. 370–372.
- Kim, D.** (2010) Complex systems models, In: Warf, B. (ed.), *Encyclopedia of Geography*, Vol. 2, SAGE Publications, London, pp. 561–567.

**Refereed Proceedings:**

- Filippi, A.M., Brannstrom, C., Cairns, D.M. & **Kim, D.** (2007) Hyperion and CBERS satellite image classification intercomparison for Cerrado and agricultural mapping, In: Ehlers, M. & Michel, U. (eds.), *Remote Sensing for Environmental Monitoring, GIS Applications, and Geology VII*, (Proceedings of SPIE), vol. 6749, pp. 674913-1–674913-12.

**Technical Reports:**

- Kim, D.** (2007) Spatial and temporal dynamics of salt marsh vegetation across scales. *European Union Center of Excellence Research 2006–2007* (<http://euce.tamu.edu>).

Park, K. & Kim, D. (2003) Analysis of physical and chemical properties of dune sediments, In: National Institute of Environmental Research and Ministry of Environment (eds.), *Nationwide Detailed Survey on Coastal Dune Ecosystems of South Korea*, pp. 165–178 (in Korean).

#### RESEARCH GRANTS

- Awarded (Sep 2016–Feb 2019) Regular Research (PI with co-PIs Heejun Chang and Yongwan Chun), **NSF Geography and Spatial Sciences Division BCS-1560907**: *'Analyzing the effects of spatial autocorrelation in geospatial databases'*, Total grand sum, \$336,478 (Lead institute UKY portion, \$169,420)
- 2016 (Not invited) Regular Research (PI with co-PI Julian Campbell), **National Science Foundation**: *'Preliminary Proposal: The potential role of herbivory in shaping spatial pattern of vegetation: Exploring a new hypothesis for eutrophic woodland in eastern North America'*
- 2016 Sabbatical year research fund, College of Arts & Sciences, **University of Kentucky**: *'Continuing long-term collaborative research and teaching efforts in coastal dunes and salt marshes of the United States, South Korea, and Denmark,'* \$4,985
- 2015 (Unfunded) Regular Research (co-PI with PI Betsy Beymer-Farris), **Western Indian Ocean Marine Science Association**: *'Seaweed and sea level as seen through a gendered lens: A feminist political ecology and ecological resilience analysis of seaweed commodity chains from Tanzania to China'*
- 2014 (Unfunded) Regular Research (co-PI with PI Jimmy Fox), **National Science Foundation**: *'Water sustainability model under mountaintop coal mining and climate change in the southern Appalachian forest region'*
- 2013 Summer Research Fellowship, College of Arts & Sciences, **University of Kentucky**: *'Initiation of salt marsh platforms: Toward an explicit inclusion of negative effects of vegetation in biogeomorphology,'* \$1,965
- 2013 (Unfunded) Major Research Instrumentation Program (co-PI with PI Kevin Yeager), **National Science Foundation**: *'Acquisition of an optically stimulated luminescence system for expanded research and learning in earth, environmental, geographical and anthropological sciences and engineering'*
- 2013 (Unfunded) Regular Research (Senior personnel), **National Science Foundation**: *'The influence of land use and climate on coupled hydrobiogeochemical processes in karst systems: A proposal to establish a karst Critical Zone Observatory'*
- 2011 (Unfunded) Regular Research (co-PI with PI Jesper Bartholdy), **Danish Agency for Science, Technology, and Innovation**: *'Morphodynamics of accreting tidal marshes'*
- 2011 (Not invited) Regular Research (co-PI), **U.S. Department of State**: *'Preliminary Proposal: Bureau of Democracy, Human Rights and Labor Request for Statements of Interest: China Programs'*
- 2011 (Unfunded) Regular Research (sole PI), **National Science Foundation**: *'Mechanisms of plant species coexistence under harsh environmental conditions: Is niche differentiation required? Or is the issue scale-dependent?'*

- 2010 Visiting Scientist Research Grant, **Belle W. Baruch Institute for Marine and Coastal Sciences**: '*Spatial trends in vegetation and microbial diversity along environmental gradients*,' \$3,000
- Awarded (Aug 2008–Jul 2009) Doctoral Dissertation Research Improvement Grant (co-PI with PI David Cairns), **NSF Geography and Spatial Sciences Division** BCS-0825753: '*Spatial and temporal dynamics of salt marsh vegetation across scales*,' \$11,730
- 2008 Graduate Student Research Grant, Geography Department, **Texas A&M University**: '*Estimating the rate of sedimentation under different successional states*,' \$300
- 2007 Graduate Student Research Grant, **Society of Wetland Scientists**: '*Linking micro-scale spatial zonation of vegetation across tidal creeks with fluvial–geomorphic processes on a coastal salt marsh*,' \$1,000
- 2007 Graduate Student Research Grant, Biogeography Specialty Group, **Association of American Geographers**: '*Spatial zonation of vegetation on a salt marsh ecosystem: Implications of micro-spatial scale processes and land use history*,' \$1,000
- 2006 Graduate Student Research Grant, **European Union Center of Excellence**: '*Long-term dynamics of vegetation on a salt marsh of the Wadden Sea: implications of climate change and land use history*,' \$2,065
- 2006 Graduate Student Research Grant, Geography Department, **Texas A&M University**: '*Long-term dynamics of vegetation on a Danish salt marsh*,' \$1,000

#### AWARDS AND HONORS

- 2015 *Outstanding Reviewer Status* by *Geomorphology*
- 2012 *J. Warren Nystrom Award*, Association of American Geographers
- 2008 *Best Oral Presentation* at the International Meeting of ASA–CSSA–SSSA, Houston, TX
- 2007 *Honorable Oral Presentation* at the International Meeting of the Society of Wetland Scientists, Sacramento, CA
- 2005 Regents Fellowship, Texas A&M University, \$15,000

#### CONFERENCE PRESENTATIONS

##### Oral:

- Kim, D.** & Kupfer, J.A. (2016) Tri-variate relationships among vegetation, soil, and topography along the gradient of fluvial biogeomorphic succession. *Annual Meeting of the Association of American Geographers*, San Francisco, CA, March 29-April 2.
- Kim, D.**, Millington, A.C. & Lafon, C.W. (2016) Trees under wind stress: spatial pattern explains susceptibility to hurricane damage. *Annual Meeting of the US-IALE*, Asheville, NC, April 2-8.
- Kim, D.** (2015) Effects of spatial autocorrelation on the prediction of plant diversity along a foredune ridge in Taeanhaean National Park, South Korea. *Annual Meeting of the Association of American Geographers*, Chicago, IL, April 21-25.
- Landrum, C., **Kim, D.**, Mueller, T. & Zourarakis, D. (2014) Spatiotemporal relevance of soil moisture's interaction with measured soil–terrain parameters. *Kentucky Water Resources Research Institute Annual Symposium*, Lexington, KY, March 10.

- Kim, D.** (2012) Biogeomorphic feedbacks drive dynamics of vegetation–landform complex in a coastal riparian system. *Symposium of the International Association for Vegetation Science*, Mokpo, South Korea, July 23-28.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2012) Fluvial–geomorphic processes of salt marsh creeks shape spatial trends in vegetation by complicating environmental stress gradients. *Annual Meeting of the Association of American Geographers*, New York, NY, February 24-28 (Selected as the recipient of 2012 J. Warren Nystrom Award).
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2011) Fluvial–geomorphic processes of salt marsh creeks shape spatial trends in vegetation across environmental stress gradients. *Symposium of the International Association for Vegetation Science*, Lyon, France, June 20-24.
- Kim, D.,** Grant, W.E., Cairns, D.M. & Bartholdy, J. (2011) Effects of wind-driven sea-level variation and its implications for ecological succession: A modeling approach. *Annual Meeting of the Southeastern Estuarine Research Society*, Athens, GA, March 16-18.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2010) Species-centered perspective on stress–diversity relationships under stressful but non-lethal conditions. *Annual Meeting of the Southeastern Division of the Association of American Geographers*, Birmingham, AL, November 21-23.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2010) Spatial trends in vegetation diversity across environmental stress gradients on a salt marsh. *Symposium of the International Association for Vegetation Science*, Ensenada, Baja California, Mexico, April 18-23.
- Kim, D.,** Cairns, D.M., Bartholdy, J. & Morgan, C.L.S. (2010) Scale-dependent correspondence of floristic and edaphic gradients across tidal creeks. *Annual Meeting of the Association of American Geographers*, Washington, D.C., April 14-18.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2009) Environmental controls on multiscale spatial pattern of salt marsh vegetation. *Annual Meeting of the Southeastern Division of the Association of American Geographers*, Knoxville, TN, November 21-24.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2009) Scale- and species-dependent interactions shape complex community structure along environmental gradients. *Society of Wetland Scientists International Conference*, Madison, WI, June 22-26.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2009) Scale-dependent interactions and community structure along environmental gradients on a coastal salt marsh. *International Coastal Symposium*, Lisbon, Portugal, April 13-18.
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2009) Species-specific competition and facilitation across spatial scales and environmental gradients. *Annual Meeting of the Association of American Geographers*, Las Vegas, NV, March 22-27.
- Kim, D.,** Cairns, D.M., Bartholdy, J. & Morgan, C.L.S. (2008) Soil spatial variability associated with tidal creek meandering on a salt marsh. *ASA-CSSA-SSSA International Annual Meeting*, Houston, TX, October 5-9 (Received *Best Presentation Award*).
- Kim, D.,** Cairns, D.M. & Bartholdy, J. (2008) Climate variability associated with the North Atlantic Oscillation influences dynamics of salt marsh vegetation. *Society of Wetland Scientists International Conference*, Washington, D.C., May 26-30.

- Millington, A.C., Lafon, C.W. & **Kim, D.** (2008) Rita's legacy: inter-specific and spatial patterns of tree damage in east Texas forests. *Annual Meeting of the Association of American Geographers*, Boston, MA, April 15-19.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2008) Spatial zonation of salt marsh vegetation in response to edaphic and topographic gradients across tidal creeks. *Annual Meeting of the Association of American Geographers*, Boston, MA, April 15-19.
- Kim, D.**, Cairns, D.M., Yu, K.B. & Park, S.J. (2007) Scale dependence of environmental correlation of soil spatial variability: a comparison of three adaptive techniques. *ASA-CSSA-SSSA International Annual Meeting*, New Orleans, LA, November 4-8.
- Kim, D.**, Millington, A.C. & Lafon, C.W. (2007) Hurricane-induced tree damage in mixed hardwood-softwood forests in the Big Thicket National Preserve, Texas. *Annual Meeting of the Southwestern Division of the Association of American Geographers*, College Station, TX, November 1-3.
- Filippi, A.M., Brannstrom, C., Cairns, D.M. & **Kim, D.** (2007) Hyperion and CBERS satellite image classification intercomparison for Cerrado and agricultural mapping. *SPIE Europe Remote Sensing*, Florence, Italy, September 17-20.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2007) Linking micro-scale spatial zonation of vegetation across tidal creeks with fluvial-geomorphic processes on a coastal salt marsh. *Society of Wetland Scientists International Conference*, Sacramento, CA, June 10-15 (received *Honorable Presentation Award*).
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2007) Spatial patterns and long-term dynamics of salt marsh vegetation on the Skallingen Peninsula, Denmark. *Annual Meeting of the Association of American Geographers*, San Francisco, CA, April 17-21.
- Yu, K.B., Kim, S.H., Rhew, H., Shin, Y.H., **Kim, D.** & Kwon, K.H. (2004) Geomorphic influence on the variations of incoming nutrients in a coastal dune ecosystem. *East Asian Federation of Ecological Societies International Congress*, Mokpo, South Korea, October 20-24.
- Kim, D.**, Yu, K.B. & Park, S.J. (2004) Topographic indicators of plant distribution in a coastal dunefield. *International Geographical Union*, Glasgow, U.K., August 15-20.
- Kim, D.**, Park, S.J. & Yu, K.B. (2004) Topography as an indicator of soil properties in a coastal dunefield. *Biannual Meeting of the Geomorphological Association of Korea*, Chungju, Korea, August 12-14.
- Kim, D.**, Park, S.J. & Yu, K.B. (2004) Spatial distribution of nutrients from sea water and aeolian sands in a coastal dunefield. *Biannual Meeting of the Korean Geographical Society*, Kongju, Korea, May 28-29.
- Poster:**
- Monge, J., Stallins, J.A. & **Kim, D.** (2013) Mapping of domain and threshold state space for barrier island morphologies and dune biogeomorphic processes across multiple scales. *Annual Binghamton Geomorphology Symposium*, Newark, NJ, October 18-20.
- Kim, D.** (2012) Biogeomorphic feedbacks drive dynamics of vegetation–landform complex in a coastal riparian system. *INTECOL 9 – International Wetlands Conference*, Orlando, FL, June 3-8.
- Kim, D.** (2011) Biogeomorphic characterization of coupled dynamics in geomorphology and vegetation across salt marsh creeks. *Annual Binghamton Geomorphology Symposium*, Mobile, AL, October 21-23.

- Kim, D.** & Zheng, Y. (2010) Scale-dependent predictability of landform attributes for soil spatial variability: A spatial regression approach. *Annual Binghamton Geomorphology Symposium*, Columbia, SC, October 15-17.
- Kim, D.**, Cairns, D.M. & Bartholdy, J. (2009) A comparison of floristic and edaphic gradients responding to fluvial–geomorphic processes of tidal creeks. *Annual Binghamton Geomorphology Symposium*, Blacksburg, VA, October 2-4.
- Millington, A.C., Lafon, C.W. & **Kim, D.** (2009) Order or disorder: what is the effect of hurricanes on forest ecosystem structure? *International Congress of Ecology*, Brisbane, Australia, August 16-21.
- Srinath, I., Flatley, W.T., Graff, C., Hopf, F., **Kim, D.**, Krustchinsky, A.R., Redo, D. & Young, A.B. (2007) The urban expansion of Bryan and College Station, TX from 1867-2003. *Annual Meeting of the Southwestern Division of the Association of American Geographers*, College Station, TX, November 1-3.

#### EDITORIAL RESPONSIBILITIES

- 2016                      Guest editor for “Implications of spatial autocorrelation for environmental modeling”, *International Journal of Geospatial and Environmental Research*
- 2015 -                    Member, Editorial board, *AIMS Geosciences*
- 2015 -                    Member, Editorial board, *International Journal of Geospatial and Environmental Research*
- 2012 -                    Member, Editorial board, *Journal of the Korea Geomorphological Association*
- 2013 - 2015            Member, Editorial board, *The Geographical Journal of Korea*

#### MANUSCRIPT REVIEWER

- 2016 (9 reviews)      *PLOS ONE*; *Ecological Indicators* (2); *AIMS Geosciences*; *Geomorphology* (2); *Sedimentary Geology*; *Geoderma*; *Physical Geography*
- 2015 (17 reviews)    *Applied Geography*; *Applied Vegetation Science*; *Ecological Indicators* (6); *Geomorphology* (5); *Earth Surface Processes and Landforms* (2); *PeerJ*; *Soil Science Society of America Journal*; *South African Journal of Botany*  
(Awarded *Outstanding Reviewer Status* by *Geomorphology* as of May 2015)
- 2014 (19 reviews)    *Geomorphology* (4); *Folia Geobotanica*; *Physical Geography* (3); *Geoderma*; *Ecological Indicators* (6); *Applied Vegetation Science* (2); *Plant Ecology*; *Book chapter (Natural Disturbances in the Central Hardwood Region)*
- 2013 (5 reviews)      *Geomorphology* (3); *Ecological Engineering*; *Folia Geobotanica*
- 2012 (5 reviews)      *Geomorphology* (2); *Pedosphere* (2); *Plant Ecology*
- 2011 (5 reviews)      *Geomorphology* (3); *Hydrobiologia*; *Plant Ecology*
- 2010 (6 reviews)      *Geomorphology* (5); *Scientia Agricola*
- 2009 (3 reviews)      *Earth Surface Processes and Landforms*; *Sensors*; *Soil Science Society of America Journal*

**PROPOSAL REVIEWER**

- 2015 (11 reviews) *National Science Foundation (Division of Environmental Biology); Korean–American Association for Geospatial and Environmental Sciences (6 proposals); Biogeography Specialty Group Graduate Students Grant Competition (Association of American Geographers; 4 proposals)*
- 2014 (6 reviews) *National Science Foundation (Division of Environmental Biology); National Science Foundation (Geography and Spatial Sciences Program); Biogeography Specialty Group Graduate Students Grant Competition (Association of American Geographers; 4 proposals)*
- 2013 (3 reviews) *Biogeography Specialty Group Graduate Students Grant Competition (Association of American Geographers; 3 proposals)*
- 2012 (5 reviews) *Provincia Autonoma Di Bolzano (Italy)  
Center for Global Change and Arctic System Research (USA)  
Biogeography Specialty Group Graduate Students Grant Competition (Association of American Geographers; 3 proposals)*

**SERVICE TO PROFESSIONAL ASSOCIATIONS**

- 2016 *Organizer and chair of “Career & Professional Development Advice for International Graduate Students” (sponsored by the Jobs & Careers Center), Annual Meeting of the Association of American Geographers, San Francisco, March 29-April 2.*
- 2015 - *Director, Scholarship Committee, Korean–American Association for Geospatial and Environmental Sciences.*
- 2015 - *Board member, Korean–American Association for Geospatial and Environmental Sciences.*
- 2013 - 2014 *SEDAAG program committee, SouthEastern Division of the Association of American Geographers.*
- 2012 - 2015 *Scholarship committee, Korean–American Association for Geospatial and Environmental Sciences.*
- 2012 *Organizing committee, International Association for Vegetation Science, Mokpo, South Korea, July 23-28.*
- 2012 *Organizing committee, Korean Scientists and Engineers Association Kentucky Chapter Winter Conference, Lexington, KY, January 14.*
- 2011 - 2013 *Kentucky State Representative and Steering Committee, SouthEastern Division of the Association of American Geographers.*
- 2010 *Organizer and chair of “Vegetation Dynamics II” (sponsored by the Biogeography Specialty Group), Annual Meeting of the Association of American Geographers, Washington, D.C., April 14-18.*
- 2009 *Organizer of “Vegetation Dynamics II” (sponsored by the Biogeography Specialty Group), Annual Meeting of the Association of American Geographers, Las Vegas, NV, March 22-27.*

**INVITED TALKS**

03/2016	Department of Geography, Seoul National University, South Korea (Honorarium ca. \$300)
04/2015	Department of Geography, University of Tennessee, TN (Honorarium \$250)
03/2014	<i>Keynote speaker</i> , 1 <sup>st</sup> Annual Geography Graduate Student Research Symposium, Texas A&M University, TX
03/2014	Department of Geography, Texas A&M University, TX
02/2014	Department of Forestry, University of Kentucky, KY
10/2012	Department of Biology, University of Kentucky, KY
09/2012	Korean–American Scientists and Engineers Association Kentucky Chapter
04/2012	Department of Geography, University of Cincinnati, OH
03/2012	Department of Earth and Environmental Sciences, University of Kentucky, KY
12/2010	Department of Geography, Seoul National University, South Korea (Honorarium ca. \$1000)
08/2010	Belle W. Baruch Institute for Marine and Coastal Sciences, University of South Carolina, SC
07/2010	Department of Geography, Seoul National University, South Korea (Honorarium ca. \$200)
12/2009	Department of Plant and Soil Sciences, University of Kentucky, KY
02/2009	Department of Geography, University of Kentucky, KY

**TRAVEL GRANTS**

2014	Faculty Travel Grant, Southeastern Conference (SEC): <u>\$2,102</u>
2009	Travel Grant, Southeastern Division of the Association of American Geographers: ' <i>2009 Annual Meeting of the Southeastern Division of the Association of American Geographers</i> ,' <u>\$100</u>
2009	Travel Grant, Geography Department, Texas A&M University: ' <i>2009 Society of Wetland Scientists International Conference</i> ,' <u>\$600</u>
2008	Travel Grant, Ecology and Evolutionary Biology Program, Texas A&M University: ' <i>2008 Society of Wetland Scientists International Conference</i> ,' <u>\$490</u>
2007	Travel Grant, Ecology and Evolutionary Biology Program, Texas A&M University: ' <i>2007 Society of Wetland Scientists International Conference</i> ,' <u>\$820</u>

**SCHOLARSHIPS**

2005 - 2006	Incentive Tuition Scholarship, Texas A&M University, <u>\$2,000</u>
2002 - 2004	Scholarship of LG Yonam Foundation, South Korea, <u>\$3,000</u>
1998 - 1999	Scholarship of Army R.O.T.C., Seoul National University, <u>\$1,000</u>

**SERVICE TO DEPARTMENT, COLLEGE, UNIVERSITY, AND COMMUNITY**

Department

03/2015 - Executive Committee: Earth Surface Systems Joint Graduate Program  
 01/2013 - 12/2014 Chair of Colloquium Organizing Committee  
 09/2010 - 02/2011 Hiring Committee: 2 tenure-track positions, Geography  
 Other committees Graduate Studies Committee  
 Colloquium Organizing Committee  
 External Relations Committee  
 Laboratory Advisory Committee  
 Ad-hoc Committee on Geotechnologies

College

10/2011 - New Mappings Collaboratory

University

09/2009 - 03/2012 Geospatial Science & Technology Working Group  
 09/2014 Steering Committee: Water Week, Tracy Farmer Institute for Sustainability and the Environment

Community

08/2011 - Vice President, Association of Korean Faculty in Central Kentucky  
 01/2011 - Primary Advisor, UK Korean Student Association  
 01/2011 - Campus Security Authority, University of Kentucky  
 09/2010 - 07/2013 President, Korean Catholic Community in Lexington  
 08/2010 - 07/2011 Treasurer, Association of Korean Faculty in Central Kentucky

**COURSES TAUGHT**

Department of Geography, University of Kentucky

GEO 705 Advanced Geographic Methods: Applications of Geospatial Techniques  
 GEO / BIO 530 Biogeography and Conservation  
 GEO 351 Physical Landscapes  
 GEO 310 Quantitative Methods in Geography  
 GEO 230 Weather and Climate  
 GEO 130 Earth's Physical Environment

Department of Geography, Texas A&M University

GEOG 213 Planet Earth Lab

**GRADUATE STUDENT SUPERVISION**

Ph.D. committee chair (in progress)

Guetchine Gaspard (Geography)  
 Li-Chih Hsu (Geography), "Visualizing ecological typology of barrier island dune topography and the detection of biogeomorphic discontinuities and regime changes," Co-Chair: J.A.

Stallins

Ph.D. committee member (in progress)

Sarah McCormack (Geography), "Living landforms: An investigation of the tributaries of the Kentucky River system," Chair: J.D. Phillips

Barry Kidder (Anthropology), "Negotiating social distinctions at Ucanha," Chair: S. Hutson

Ph.D. committee member (completed)

2015 Ate Poorthius (Geography), "Social space and social media: Analyzing urban space with big data," Chair: M.A. Zook

2015 Chris van Dyke (Geography), "One-way street? Using state-and-transition models to characterize the multiple pathways of channel evolution," Chair: J.D. Phillips

2014 Michael Shouse (Geography), "Spatially explicit analysis of biomechanical weathering of trees," Chair: J.D. Phillips

2013 Carla Landrum (Plant & Soil Sciences), "Mapping and decomposing scale-dependent soil moisture variability within a karst landscape," Chair: J. Zhu

2012 Christopher Stieha (Biology), "Mechanisms of the maintenance of the sexes," Chair: D.N. McLetchie; Co-Chair: P.H. Crowley

M.A. committee Chair (in progress)

Lorrayne Miralha Marins da Silva (Geography)

M.A. committee Chair (completed)

2014 Jackie Monge (Geography), "Identifying measures for North American barrier island classification," Co-Chair: J.A. Stallins

M.A. committee member (completed)

2013 Rachel Hatch (Earth & Environmental Sciences), "Effects of petroleum hydrocarbon exposure following the Deepwater Horizon spill on tidal marsh sedimentary and biological processes: An investigation using radioisotopes and benthic foraminifera," Chair: K.M. Yeager

2010 Paul Bradway (Geography), "Pre-settlement forest composition of the inner Bluegrass region of Kentucky, USA," Chair: J.D. Phillips

Ph.D. outside examiner

2014 Ryan Anderson (Anthropology), "A place of value: The politics of development in Cabo Pulmo, BCS, Mexico," Chair: S. Lyon

2013 Patti Meyer (Anthropology), "Health consequences in healthcare-seeking strategies for South American immigrant careworkers in Genoa, Italy," Chair: M. Anglin

### **MEMBERSHIP**

Association of American Geographers (AAG)  
SouthEastern Division of the Association of American Geographers (SEDAAG)  
International Association for Vegetation Science (IAVS)  
Society of Wetland Scientists (SWS)  
Soil Science Society of America (SSSA)  
Korean Geographical Society (KGS); Geomorphological Association of Korea (GAK)

### **RELEVANT SKILLS**

#### **Computing:**

GIS (ArcView, ArcGIS) / Remote sensing (ENVI)  
Spatial analysis (GeoDa, S-plus with Spatial Analyst, SURFER, ArcGIS, SAM)  
Simulation modeling (STELLA, MATLAB)  
Multivariate statistics (S-plus, SPSS, AMOS, CANOCO for Windows, R, PC-ORD, MS EXCEL)  
Terrain analysis – familiar with various algorithms for extracting terrain parameters

#### **Scientific Skills:**

Experiences in soil, vegetation, and landscape survey (GPS and total station)  
Proficiency in physical and chemical soil analyses