Biographical Sketch

Personal:
Name: Jun Ye
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Education:
- Ph. D., Statistics, University of Georgia, Athens, GA, 2008
  Advisor: Nicole A. Lazar
  Dissertation: Geostatistical methods for spatio-temporal analysis of fMRI data
- M.S., Statistics, University of Georgia, Athens, GA, 2007

Appointments:
- 08/2017-present, **Associate Professor of Statistics (Tenured),** Department of Statistics, University of Akron, Akron, Ohio
- 08/2012-07/2017, **Assistant Professor of Statistics (Tenure-Track),** Department of Statistics, University of Akron, Akron, Ohio
- 08/2010-07/2012, **Assistant Professor of Biostatistics (Tenure-track),** Department of Mathematics and Statistics, South Dakota State University, Brookings, South Dakota
- 08/2010-07/2012, **Biostatistician (Second Appointment),** College of Agricultural and Biological Sciences (ABS) and Agricultural Experiment Station (AES), South Dakota State University, Brookings, South Dakota
- 09/2008-08/2010, **Biostatistician and Epidemiologist (Clinic Research Staff),** Division of Nephrology, Department of Medicine, Massachusetts General Hospital and Harvard Medical School, Boston, Massachusetts
- 08/2006-08/2008**, Research Assistant (Supported by NIH Funded Grants),** Department of Communication Sciences and Special Education, University of Georgia, Athens, Georgia

Honors and Awards:
- **2014 University of Akron Friends of the Library Grant,** 05/2014
- **2014 University of Akron BCAS Faculty Scholarship Award**, 04/2014
- **2011 South Dakota State University Faculty Research and Scholarship Support Fund,** 04/2011
- **2011 South Dakota NASA EPSCoR Travel Grant,** Global Hydrology and Climate Center NSSTC/MSFC/NASA, Huntsville, Alabama, 02/2011

External Funding:
- Northern Grapes: Integrating Viticulture, Winemaking, and Marketing of New Cold-Hardy Cultivars Supporting New and Growing Rural Wineries, NIFA SCRI Coordinated Agriculture Project, USDA, $2,511,333 in total and South Dakota State University received $484,973, 09/2011- 08/2013, Co-PI

Selected Refereed Journal Publications

Statistical Methodology:

- **Ye, J.,** Li, Y., Lazar, N. A., Schaeffer, D. J. and McDowell, J. E., Finding common active regions in fMRI data from multiple subjects by periodogram clustering and clustering ensemble, *Statistics in Medicine,* 2016, 35, 2635-2651

- **Ye, J.,** Li, Y. and Guan, Y., Joint modeling of longitudinal drug using pattern and time to first relapse in cocaine dependence treatment data, *Annals of Applied Statistics,* 2015, 9, 1621-1642

- **Ye, J.,** Lazar, N. A. and Li, Y., Geostatistical analysis in clustering fMRI time series, *Statistics in Medicine*, 2009, 28, 2490-2508

Computational Neuroscience:

- **Ye, J.,** Lazar, N. A. and Li, Y., Nonparametric variogram modeling with hole effect structure in analyzing the spatial characteristics of fMRI data, *Journal of Neuroscience Methods*, 2015, 240, 101-115

- **Ye, J.,** Lazar, N. A. and Li, Y., Sparse geostatistical analysis in clustering fMRI time series, *Journal of Neuroscience Methods*, 2011, 199, 336-345

Environmental Science:

- Moreno-Madrinan, M. J., Rickman, D. L., Flores-Cordova, A. L., Irwin, D. E., **Ye, J.,** Al-Hamdan, M., A., Using remote sensing to monitor the influence of river discharge on watershed outlets and adjacent coral Reefs: Magdalena River and Rosario Islands, Colombia, *International Journal of Applied Earth Observation and Geoinformation*, 2015, 38, 204-215

- Moreno-Madrinan, M. J., Al-Hamdan, M., A., Rickman, D. L. and **Ye, J.,** Association between watershed land cover/land use chance (LC/LU) and water turbidity status of Tampa Bay tributaries, Florida, USA, *Water, Air and Soil Pollution*, 2012, 223, 2093-2109

Special Education:

- Davidow, J. H., Bothe, A. K. and **Ye, J.,** Systematic studies of modified vocalization: speech production changes during a variation of metronomic speech in persons who do and do not stutter*, Journal of Fluency Disorders*, 2011, 36, 93-109

- Davidow, J. H., Bothe, A. K., Andreatta, R. D. and **Ye, J.,** Measurement of phonated intervals during four fluency-inducing conditions, *Journal of Speech, Language and Hearing Research*, 2009, 52, 188-205

Nephrology:

- Thadhani, R., Appelbaum, E., Chang, Y., Pritchett, Y., Bhan, I., Agarwal, R., Zoccali, C., Wanner, C., Jones, D. L., Cannata, J., Thompson, T., Audhya, P., Adress, D., Zhang, W., **Ye, J.,** Packham, D., Singh, B., Zehnder, D., Manning, W. J., Pachika, A. and Solomon, S. D., Vitamin D receptor activation and left ventricular hypertrophy in advanced kidney disease, *American Journal of Nephrology*, 2011, 33, 139-149

- Bhan, I., Burnett-Bowie, S. A., **Ye, J.,** Tonelli, M. and Thadhani, R., Clinical measures identify vitamin D deficiency in dialysis, *Clinical Journal of the American Society of Nephrology*, 2010, 5, 460-467

- Thadhani, R., Powe, C. E., Tjoa, M. L., Khankin, E., **Ye, J.,** Ecker, J., Schneyer, A. and Karumanchi, S. A., First trimester follistatin-like-3 levels in pregnancies complicated by subsequent gestational diabetes mellitus, *Diabetes Care*, 2010, 33, 664-669

Crops

Study: Winemaking in the Dakotas

SOUTH Dakota State University is part of a USDA-funded project to stimulate the profitability and sustainability of an expanding cold-climate grape and wine industry in South Dakota, North Dakota and other northern states.

Production and sales of cold-climate wines are expected to double in the next five years. This multistate, multi-institutional project will examine the winemaking

Northern Seed *Extra*

process from startup to sustainably profitable. Areas of focus include improving the taste and quality of cold-hardy grapes that thrive in northern climates, identifying pest- and disease-control strategies to protect those crops, and establishing

unique regional marketing identities for wineries in rural areas of the Midwest and Northeast, spurring economic development and growth.

The SDSU effort is headed by Anne Fennell, professor of plant science, who will lead the fruit composition/genetics team. The team also includes researchers from the University of Minnesota. SDSU will receive $484,973 and be responsible

for identification and characterization of novel flavor and aroma compounds that define quality in new cold-hardy cultivars and for vineyard trials in South Dakota.

"SDSU is leading the effort to integrate components of fruit quality from gene expression to the flavors the consumer tastes," says Fennell. "This is a completely integrated project, applying genomic tools we have developed at SDSU, conducting field studies with growers and marketing studies to promote a strong industry."

Other members of the SDSU team include Rhoda Burrows, professor of plant science, who will serve on the vineyard studies team, along with Dong He, assistant professor of bioinformatics, and Jun Ye, assistant professor of biostatistics, who will provide data integration and statistical analysis.

"This research award demonstrates South Dakota State University's scientists' recognized leadership in cold-climate grape and wine industry research," says Daniel Scholl, director of South Dakota Agricultural Experiment Station. "Our scientists are able to leverage the unique position of the Experiment Station and SDSU by virtue of its geographical location and long-standing, strong relationships with South Dakota's growers, combined with effective campus-wide collaborative relationships, to provide science-based solutions to some of the challenges faced by the state's growers. It is our responsibility and privilege to continue to cultivate these relationships internally on campus and with our constituents in the state to provide our scientists an environment in which they can flourish. Their discoveries promote the state's economic and lifestyle successes."

South Dakota growers from the Belle Joli Winery in Belle Fourche, Lewis & Clark Vineyard near Yankton and ChrisaMari Vineyard near Pierre are among state industry partners participating in the project.

The total award from USDA is for $2.5 million over 24 months. Cornell University will lead the overall effort, with a team including researchers from SDSU, the Connecticut Agricultural Experiment Station, Iowa State University, Michigan State University, North Dakota State University, Oklahoma State University, the University of Illinois, the University of Massachusetts–Amherst, the University of Minnesota, the University of Nebraska, the University of Vermont and the University of Wisconsin.

According to Tim Martinson, overall project director at Cornell, prospects are good for renewal funding to cover an additional three years set out in the project proposal.

Source: SDSU

VITAMIN D DEFICIENCY LIKELY AMONG SOME KIDNEY DISEASE PATIENTS STARTING DIALYSIS

Study Provides Some Potential Explanations

Washington, DC (February 22, 2010) — Vitamin D deficiency is almost universal among kidney disease patients who have low blood protein levels and who start dialysis during the winter, according to a study appearing in an upcoming issue of the *Clinical Journal of the American Society Nephrology* (CJASN). The research identifies a group of patients who are at extremely high risk of being deficient in vitamin D and provides some clues as to why the deficiency occurs in these individuals.

Vitamin D deficiency is common in patients with end-stage renal disease (ESRD) on dialysis, but it's not clear which patients are at increased risk. Ishir Bhan, MD, MPH (Massachusetts General Hospital), and his colleagues sought to determine whether routinely measured clinical and demographic characteristics could identify dialysis patients who have a high risk of vitamin D deficiency. The researchers analyzed data from 908 patients in the Accelerated Mortality on Renal Replacement (ArMORR) cohort, a nationally representative group of U.S. dialysis patients. Data from 60% of the patients were used to find potential predictors of vitamin D deficiency, while data from the other 40% of patients were used to validate the predictors.

The investigators found that 79% of the study population was vitamin D deficient. Black race, female sex, winter season, and low blood levels of the protein albumin (≤ 3.1 g/dL) were the strongest predictors of vitamin D deficiency. In the validation set, the presence of low blood albumin levels and winter season increased the likelihood of vitamin D deficiency in black females (from 90% to 100%), black males (from 85% to 100%), white females (from 82% to 94%), and white males (from 66% to 92%).

"This research identifies risk factors for nutritional vitamin D deficiency in the dialysis population and may provide clues to its biology in this population," said Dr. Bhan. One interpretation of the finding that low blood albumin levels were associated with deficiency is that at-risk patients leak large amounts of protein in their urine. The investigators suspect that vitamin D binding protein, which transports the vitamin through the blood, may also be lost through the urine. Its loss could lead to the loss of vitamin D as well. In addition, while previous studies have suggested that patients on

dialysis have an impaired ability to generate vitamin D from sun exposure, these findings emphasize that skin-based production of the vitamin is likely to be important in patients with ESRD.

Study co-authors include Sherri-Ann Burnett-Bowie, MD, MPH, Jun Ye, PhD, Ravi Thadhani, MD MPH (Massachusetts General Hospital), and Marcello Tonelli, MD (University of Alberta, Edmonton, Canada).

Disclosures: Dr. Thadhani has received research support from Abbott Laboratories. The remaining authors reported no financial disclosures.

The article, entitled "Clinical Measures Identify Vitamin D Deficiency in Dialysis," will appear online at http://cjasn.asnjournals.org/ on February 25, 2010, doi 10.2215/CJN.06440909.

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Founded in 1966, the American Society of Nephrology (ASN) is the world's largest professional society devoted to the study of kidney disease. Comprised of 11,000 physicians and scientists, ASN continues to promote expert patient care, to advance medical research, and to educate the renal community. ASN also informs policymakers about issues of importance to kidney doctors and their patients. ASN funds research, and through its world-renowned meetings and first-class publications, disseminates information and educational tools that empower physicians.

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