JUNRUI DI

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RESEARCH INTERESTS

Statistical methods for wearable devices, Matrix/Tensor decomposition, Functional data analysis, Physical activity assessment, mHealth

EDUCATION

Johns Hopkins Bloomberg School of Public Health

Ph.D, Biostatistics

Advisor: Vadim Zipunnikov, Ph.D.

Georgetown University

Dec 2013

Expected: May 2019

M.S., Biostatistics

Thesis: Robust Integrative Analysis of Multi-Block Contaminated Datasets

Advisor: Valeriy Korostyshevskiy, Ph.D.

University of California, Berkeley

May 2012

B.A. Applied Mathematics

High Distinction General Scholarship (roughly equivalent to Magna Cum Laude), Phi Beta Kappa

EXPERIENCE

Research Assistant

Jun 2015 - Present

Baltimore, MD

 $Johns\ Hopkins\ Bloomberg\ School\ of\ Public\ Health$

Supervisor: Vadim Zipunnikov, Ph.D.

Co-Investigator

May 2013 - Apr 2014

Multicenter AIDS Cohort Study

Washington, DC

Supervisor: Michael Plankey, Ph.D.

Research Assistant

Sep 2012 - May 2013

Georgetown University Washington, DC

Supervisors: George Luta, Ph.D. and Valeriy Korostyshevskiy, Ph.D.

PUBLICATIONS

Published / In Press

- 1. **Di, J.**, Li, Y., Friedman, MR., Reddy, S., Surkan, PJ., Shoptaw, S., and Plankey, M.. Determining Survey Satisficing of Online Longitudinal Survey Data in the Multicenter AIDS Cohort Study using a Group-Based Trajectory Analysis. *Journal of Medical Internet Research Public Health and Surveillance*. 2016; 2(2): e150.
- 2. Varma, V., Dey D., Leroux A., **Di**, **J.**, Urbanek, J., and Zipunnikov, V.. Re-evaluating the effect of age on physical activity over the lifespan. Accepted by *Preventive Medicine*.

Under Review / Revision

- 3. Zipunnikov, V., Dey, D., Leroux, A., **Di, J.**, Urbanek, J., Harris, T., and Crainiceanu, C.. Objectively measured late-morning physical activity predicts mortality in the NHANES 2003-2006 cohorts. Under Revision *PLOS One*.
- 4. **Di**, **J**., Leroux, A., Urbanek, J., Spira, A., Schrack, J., and Zipunnikov, V.. Methods to quantify fragmentation of accelerometry-measured physical activity. Under review *Medicine & Science in Sports & Exercise*.
- 5. Johns, J., **Di, J.**, Zipunnikov, V., Swendsen, J., Merikangas, K.. Fragmentation as a novel measure of mood stability assessed by electronic diaries. Under review *Psychological Methods*.
- 6. Grigsby, M., **Di**, **J**., Leroux, A., Xiao, L., Zipunnikov, V., Crainiceanu, C., and Checkley, W.. Novel Metrics for Growth Model Selection. Under review *Emerging Themes in Epidemiology*.
- 7. Urbanek, J., Spira, A., **Di, J.**, Leroux, A., Crainiceanu, C., and Zipunnikov, V.. Epidemiology of Objectively Measured Bedtime and Chronotype in the US adolescents and adults: NHANES 2003-2006. Under review *Chronobiology International*.

In Preparation

- 8. A study on extension of the fragmentation metrics.
- 9. A study on analyzing accelerometry data measured at multiple days.

HONORS & AWARDS

The Louis I. and Thomas D. Dublin Award

Mar 2017

Washington Statistical Society Outstanding Graduate Student Award

Jun 2013

PRESENTATIONS

- 1. Integrative Analysis of Multi-Block Contaminated Datasets (oral contributed). 2013 JSM, Montreal, Canada
- 2. Novel Statistical Framework to Quantify Fragmentation of Physical Activity (oral contributed). 2017 ENAR, Washington, DC.
- 3. Fragmentation of Physical Activity and Its Application (oral). 2017 ICAMPAM, Bethesda, MD.
- 4. NFragmentation of Daily Physical Activity: Prediction of Mortality in NHANES 2003-2006 (oral). 2017 IAGG, San Francisco, CA.

TEACHING EXPERIENCE

PH.140.621-4 - Statistical Methods in Public Health I-IV

2016 - 2017

PH.140.751-4 - Advanced Methods in Biostatistics I-IV

2015 - 2016

BIST 514 - Linear Modeling & Multivariate Analysis

Spring 2014

CERTIFICATIONS

SAS Certified Advanced Programmer for SAS 9

Aug 2013

COMPUTING SKILLS

R, Matlab, SAS, LATEX