Justin Petrovich

Assistant Professor of Statistics and Business Analytics
Saint Vincent College
306 Aurelius Hall
Latrobe, PA 15650
Phone: (724)-805-2424
Email: justin.petrovich@stvincent.edu

Positions

2022—Present	Chair, Department of Marketing, Analytics, and Global Commerce, Saint Vincent College
2018—Present	Assistant Professor of Statistics and Business Analytics, Saint Vincent College
2016—2018	Research Assistant, Center for Collegiate Mental Health
2014—2016	Graduate Assistant, Pennsylvania State University Statistics Department

Education

2014—2018	Ph.D., Statistics, Pennsylvania State University
2010—2014	B.Sc., Mathematics and Finance, Saint Vincent College

Teaching and Supervising Experience

Courses Taught

Advanced Business Analytics (BA 355)	Saint Vincent College
Business Statistics I Excel Lab (BA 350A)	Saint Vincent College
Data Science and Analytics Capstone (DS 400)	Saint Vincent College
Business Statistics II Excel Lab (BA 351A)	Saint Vincent College
Data Science and Sports (DS 099)	Saint Vincent College
Econometrics R Lab (EC 361)	Saint Vincent College
Econometrics (EC 360)	Saint Vincent College
Business Statistics II (BA 351)	Saint Vincent College
Psychology Statistics I (PY 209)	Saint Vincent College
Business Statistics I (BA 350)	Saint Vincent College
Elementary Statistics (STAT 200)	Pennsylvania State University

Lab Assistant

Elementary Statistics (STAT 200)	Pennsylvania State University
Applied Regression Analysis (STAT 462)	Pennsylvania State University
Applied Statistics (STAT 500)	Pennsylvania State University

Supervision

SU 2022	Abigail Schwartz*	Saint Vincent College
SU 2021—FA 2021	Kethrie Heasley†	Saint Vincent College
SU 2021	Kimberly Weinman†	Saint Vincent College
FA 2020	Steve Patterson*	Saint Vincent College
SU 2019—FA 2019	Paige Montrose*	Saint Vincent College
FA 2016—SP 2017	Jinglin Feng*	Pennsylvania State University
FA 2016—SP 2017	Andrew Hwang*	Pennsylvania State University

* independent study
† internship

Publications

[1] Davis, Z., **Petrovich, J.** A Functional Covid Recovery: Applying Functional Data Analysis to the Post-Covid Economic Recovery. In preparation.

[2] **Petrovich, J.**, Taoufik, B., Davis, Z. Functional Concurrent Regression with Instrumental Variables. Accepted by the Journal of Applied Statistics, 2023.

[3] Rallis, B. A., **Petrovich, J.**, Scofield, B. E., Kim, Sangsun, Locke, B. (2023). A Comparison of Treatment Response Between College Students with and without Suicide Risk at University College Counseling Centers. *Cogent Mental Health*, 2(1), 1–27. https://doi.org/10.1080/28324765.2023.2169583.

[4] **Petrovich, J.**, Reimherr, M., & Daymont, C. (2022). Highly Irregular Functional Generalized Linear Regression with Electronic Health Records. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 71(4), 806–833. https://doi.org/10.1111/rssc.12556.

[5] Hayes, J. A., **Petrovich, J.**, Janis, R. A., Yang, Y., Castonguay, L. G., Locke, B. D. (2020). Suicide among College Students in Psychotherapy: Individual Predictors and Latent Classes. *Journal of Counseling Psychology*, 67(1), 104–114. http://dx.doi.org/10.1037/cou0000384

[6] Dziak, J., Coffman, D., Reimherr, M., **Petrovich, J.**, Li, R., Shiffman, S., and Shiyko, M. (2019). Scalar-on-Function Regression for Predicting Distal Outcomes from Intensively Gathered Longitudinal Data: Interpretability for Applied Scientists. *Statistics Surveys*, 13, 150–180. https://doi.org/10.1214/19-SS126

[7] **Petrovich, J.** and Reimherr, M. (2017). Asymptotic Properties of Principal Component Projections with Repeated Eigenvalues. *Statistics and Probability Letters*, 130, 42–48. https://doi.org/10.1016/j.spl.2017.07.004

Posters

[1] **Petrovich, J.**, Reimherr, M., & Daymont, C. (2019, April). *Functional Regression Models with Highly Irregular Designs.* Poster session presented at the 2019 American Statistical Association Pittsburgh Chapter Banquet, Pittsburgh, PA.

[2] **Petrovich, J.**, Reimherr, M., & Daymont, C. (2018, May). *Functional Regression Models with Highly Irregular Designs.* Poster session presented at the Pennsylvania State University Statistics Department 50 Year Anniversary Conference, The Pennsylvania State University.

[3] **Petrovich, J.**, & Reimherr, M. (2017, May). *Asymptotic Properties of Principal Component Projections with Repeated Eigenvalues.* Poster session presented at the 2017 Rao Prize Conference, The Pennsylvania State University.

Presentations

[1] Krom, M., Sams, A., & **Petrovich, J.** (2022, November). *The Good, the True, and the Beautiful: The Enduring Value of Classical Education.* Presented at the Schooling Your Way Conference, Saint Vincent College, Latrobe, PA.

[2] **Petrovich, J.**, Taoufik, B., & Davis, Z. (2022, August). *Sparse Functional Concurrent Regression with Instrumental Variables.* Paper presented at the Joint Statistical Meetings, Washington D.C.

[3] **Petrovich, J.** (2022, January). *Listen to the Data: Emphasizing (Statistical) Reasoning in a Flipped Classroom.* Paper presented at the Ora et Labora Conference, Saint Vincent College, Latrobe, PA.

[4] **Petrovich, J**., Reimherr, M., & Daymont, C. (2018, July). *Functional Regression Models with Highly Irregular Designs.* Paper presented at the Joint Statistical Meetings, Vancouver, Canada.

[5] **Petrovich, J.** (2018, February). *Functional Concurrent Regression for Sparse Functional Data.* Presented at the Functional Data Analysis Working Group, Pennsylvania State University.

[6] **Petrovich, J.** (2017, September). *Multiple Imputation for Sparse Functional Data.* Presented at the Functional Data Analysis Working Group, Pennsylvania State University.

[7] **Petrovich, J.**, (2017, March). *Creating an R Package.* Presented at the Graduate Student Workshop, Pennsylvania State University.

[8] **Petrovich, J.** (2017, February). *Generalized Linear Mixed Models for Functional Data.* Presented at the Functional Data Analysis Working Group, Pennsylvania State University.

[9] **Petrovich, J.** (2015, December). *Alternating Direction Method of Multipliers.* Presented at the Functional Data Analysis Working Group, Pennsylvania State University.

Essays and Other Scholarly Work

[1] **Petrovich, J.** (2023). Book Review of *Wild Problems*, by Russ Roberts, in *Conversatio*, 3. In preparation.

[2] **Petrovich, J.** (2021). Uncertainty is Beautiful. *Conversatio*, 1, 62-67.

Consulting Work

- XTO Energy, 2023
- Electrical Power Research Institute (EPRI), 2022—2023
- GO Laurel Highlands, 2022

Professional Activities

- Reviewer for *Business Ethics, the Environment & Responsibility*, 2022
- Reviewer for *Journal of the Royal Statistical Society, Series C*, 2021
- Editorial Board member of *Conversatio: A Journal in the Tradition of Catholic, Benedictine, and Liberal Education*, 2021—

- Contributor to STAT 200 curriculum redesign, Pennsylvania State University, Summer 2017

- STAT 200 TA trainer and coordinator, Pennsylvania State University, Spring 2016

Committee Work

[1] Search Committee for Data Science/Business Data Analytics faculty member (Fall 2022 — Spring 2023)

[2] Search Committee for Marketing faculty member (Fall 2022 — Spring 2023)

[3] Search Committee for Finance faculty member (Spring 2022)

[4] Search Committee for Data Science/Business Data Analytics faculty member (Spring 2022)

[5] Ad Hoc Committee for Large-Credit Majors Affected by the New Core (Spring 2021 — Present)

[6] Core Curriculum Assessment Team (Spring 2021 — Present)

[7] Educational Policies Committee (Fall 2020 — Spring 2022)

[8] Search Committee for Computing and Information Systems faculty member (Spring 2021)

[9] Educational Policies Committee, Subcommittee for the Core Curriculum (Fall 2018 — Spring 2021)

[10] Ad Hoc Committee for Student Recruitment (Fall 2019 — Spring 2020)

[11] Data Science/Analytics Exploration Committee (Fall 2018 — Fall 2019)

Conferences and Workshops Attended

[1] Joint Statistical Meetings (JSM), Washington D.C., August 2022

[2] United States Conference on Teaching Statistics (USCOTS), remote, June 2021

[3] National Workshop on Data Science Education, remote, June 2021

[4] National Workshop on Data Science Education, remote, June 2020

[5] Electronic Conference on Teaching Statistics (eCOTS), remote, May 2020

[6] Allied Social Science Association/American Economic Association Annual Meeting, San Diego, CA, January 2020

[7] United States Conference on Teaching Statistics (USCOTS), State College, PA, May 2019

[8] Joint Statistical Meetings (JSM), Vancouver, Canada, July 2018

[9] Electronic Conference on Teaching Statistics (eCOTS), remote, May 2018

[10] Pennsylvania State University Statistics Department 50 Year Anniversary Conference, May 2018

[11] Rao Prize Conference, The Pennsylvania State University, May 2017

[12] United States Conference on Teaching Statistics (USCOTS), State College, PA, May 2017

Selected Honors and Awards

2023   Quentin Schaut Faculty Award, Saint Vincent College

2023   Student Government Association Award, Saint Vincent College

2023   Faculty Research Grant, Saint Vincent College

2021   Faculty Research Grant, Saint Vincent College

2014   Academic Excellence in Finance Award, Saint Vincent College

2013   Father Ronald Gorka Scholarship, Saint Vincent College

Programming Languages

- R (expert)
- SPSS (applied experience)
- Matlab (applied experience)
- C++ (applied experience)
- Python (applied experience)

Professional Memberships

- Allied Social Sciences Association (ASSA), 2019—Present
- American Statistical Association (ASA), 2014–Present