University of Mississippi
Medical Center

Phi Le

personal website
LinkedIn
Google Scholar website

Research interest

Statistics in Health Science

- Disease Mapping
- Survival Analysis
- Spatial-Temporal Analysis/Survival Analysis
- Study Design
- GWAS
- Multi-Omics with or without Longitudinal Analysis

AI in Health Science

- Applications of Machine Learning/Neural Network to Health Science

Employment

Syracuse, NY — **Syracuse University** — **Fall 2016 – Spring 2018**

- Postdoctoral fellow in Pure Mathematics

Education

Jackson, MS — **University of Mississippi Medical Center** — **Fall 2018 –**

- Research student in Biostatistics and Data Science

Columbia, MO — **University of Missouri Columbia** — **Fall 2011 – 2016**

- Ph.D in Mathematics

Salt Lake, UT — **University of Utah** — **Fall 2008 – 2011**

- MS in Mathematics

Vietnam — **Vietnam National University - Ho Chi Minh** — **Fall 2001– 2005**

- BS in Mathematics and Computer Science

Teaching Experience

Syracuse, NY — **Syracuse University** — **Fall 2016-Spring 2018**

- Calculus I, II, III
- Introduction to Partial Differential Equations
- Putnam coach for Mathematics team (my student got ranked 59th for all students across US and Canada)

Columbia, MS — **University of Missouri** — **Fall 2011 – Summer 2016**

- Courses: Calculus I, II, III

Awards

Jackson, MS — **University of Mississippi Medical Center** — **Spring 2019**

- Associated Student Body award in Education category

Columbia, MO — **University of Missouri Columbia** — **Fall 2011-Summer 2016**

- Invited to Hausdorff Research Institute for Mathematics, Bonn, Germany, for one month with full support – May 2014
- Highest scores for Ph.D Analysis Qualifying Exams in Mathematics – Spring 2011

Professional Service

University of Mississippi Medical Center — **2018-2020**

- President of the UMMC chaper of American Statistics Association
- Chair of Data Science Officer of School of Population Heath in the UMMC Associated Student Body

Mathscinet - American Mathematical Society **Since 2017**

- Reviewer for MathScinet

Publications

Mathematics, Biostatistics and Health Science

1. Did increasing continuity of care protect patients with chronic disease from emergency and hospitalization readmission? A cohort spatial-temporal study in Mississippi (first author, preprint)
2. Effect of disparities on continuity and healthcare utilization among patients with obesity-associated chronic conditions (OCC) and the subgroup with diabetes (OCC+T2D) (first author, preprint)
3. Disparities of geography, economy, education, and uninsured rate on COVID19 cases and deaths in Mississippi (first author, submitted)
4. Continuity of Care for Patients with Obesity-Associated Chronic Conditions: Protocol for a Multisite Retrospective Cohort Study, JMIR Res Protoc 2020;9(9):e20788
5. Sharp affine Trudinger-Moser inequalities: A new argument, with N Duy and N Lam, Canadian Mathematical Bulletin, 1-14, 2020
6. Quantum divergences with p-power means, with N Lam, Linear Algebra and its Applications 609, 289-307, 2020
7. Hardy Inequalities and Caffarelli-Kohn-Nirenberg inequalities with radial derivative, with Nguyen Tuan Duy, Weijia Yin , 2020 Journal of Mathematical Inequalities, to appear
8. Sharp Trudinger-Moser inequalities with homogeneous weights, with Duy, Nguyen Tuan; Nghia, Le Trung; Electron J. Differential Equations 2019, N. 205
9. Carleson measure estimates and the Dirichlet problem for degenerate elliptic equations, with Steve Hofmann and Andrew Morris, ANALYSIS & PDE, Volume 12, No. 8, 2019
10. BMO solvability and absolute continuity of harmonic measure, with Steve Hofmann, The Journal of Geometric Analysis, Volume 28, Issue 4, pp 3278–3299
11. Uniform Rectifiability and harmonic measure IV: Ahlfors regularity plus Poisson kernels in Lp implies uniform rectifiability, with Steve Hofmann, Kaj Nystrom, Jose Maria Martell, Analysis and PDEs. Vol 10. No. 3 2017
12. Nonlinear versions of Stampacchia and Lax-Milgram theorems and applications, with Duong M. Duc and Nguyen H. Loc, Nonlinear Anal. 68 (2008), no. 4, 925931

Google Scholar Citations - 11/2020

Citations	65
h-index	3
i10-index	2

Languages and Technologies

- SQL; SAS; R; Python; STATA; Julia (Beginning); Linux;Windows;MacOS; HPC
- Bioconductor: DESeq2, limma, EdgeR, rTANDEM