CURRICULUM VITAE

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EDUCATION

PhD IN MATHEMATICS (in progress)

Sep 2022 – Present University of Toronto, St. George Campus

PhD Advisor: Elden Elmanto

M.Sc. IN MATHEMATICS

Oct 2021 – July 2022 University of Oxford, St Edmund Hall

M.Sc. in Mathematical Sciences, Distinction

B.A. IN MATHEMATICS

Aug 2017 – May 2021 University of California, Berkeley GPA: 3.939

B.A. in Mathematics, Highest Honors High distinction in General Scholarship

TEACHING EXPERIENCE

TAships (UofT St George campus):

Spring 2025: MAT224: Linear Algebra II

MAT267: Advanced Ordinary Differential Equations

Fall 2024: MAT224: Linear Algebra II

MAT327: Introduction to Topology

Summer 2024: MAT235: Multivariable Calculus

Winter 2024: MAT224: Linear Algebra II

Fall 2024: MAT224: Linear Algebra II

Summer 2023: MAT301: Groups and Symmetries

Winter 2023: MAT136: Calculus II

Fall 2022: MAT135: Calculus I

CONFERENCES + WORKSHOPS

Dec. 2024: Life After the Telescope Conjecture (SLMath)

Aug. 2024: Talbot Workshop: Topological Cyclic Homology of Ring Spectra

Mentored by Jeremy Hahn and Allen Yuan

July 2024: PCMI Graduate Summer School: Motivic Homotopy Theory

June 2024: Ontario Graduate Mathematics Conference

May 2024: Atlantic TQFT Spring School

Oct. 2023: FRG Workshop on Brauer Groups and Derived Categories

Organized by Ben Antieau

TALKS

June 2024: Ontario Graduate Mathematics Conference: What is Algebraic K-theory?

Mar. 2024: Bird's Eye Conference (@UofT): An introduction to p-adic geometry

OTHER ACTIVITIES

Directed Reading Program (University of Toronto):

Spring 2025: Introduction to Hodge Theory (following Voisin's text)

Math Mentorship Program (University of Toronto):

Spring 2024: Mentee: Anousha Khan: Complex Analysis

Spring 2023: Mentee: Taran Singh: Category theory and linear algebra

RESEARCH EXPERIENCE

Summer 2020 Numerical Covers of the Modular Surface REU Participant

Supervised by Alex Kontorovich Rutgers University DIMACS

Fall 2018 Ji Lab (Cortical Fear Learning) Undergraduate volunteer

Supervised by Ryan Natan

UC Berkeley departments of MCB and Physics

Berkeley, CA

Summer 2018 Sims-Lucas Lab (Nephrology) Paid intern

Supervised by Takuto Chiba Children's Hospital of Pittsburgh

Pittsburgh, PA

PUBLICATIONS

- 1. **Shaikh KJ**, Rajakumar V, Osio VA, Shaikh N. (2021). Neutrophil gelatinase-associated lipocalin for urinary tract infection and pyelonephritis: a systematic review. Pediatric Nephrology, 36, 1481-1487.
- 2. Chiba T, Cerqueira D, Li Y, Bodnar AJ, Mukherjee E, Pfister K, Phua, YL, **Shaikh KJ**, Sanders B, Hemker S, Pagano PJ, Wu YL, Ho J, Sims-Lucas S. (2021). Endothelial-derived miR-17~92 promotes angiogenesis to protect against renal ischemia-reperfusion injury. Journal of the American Society of Nephrology: JASN, 32(3), 553.
- 3. **Shaikh KJ**, Osio V, Shaikh N, et al. (2020). Procalcitonin, C-reactive protein, and erythrocyte sedimentation rate for the diagnosis of acute pyelonephritis in children. Cochrane Database of Systematic Reviews, Issue 9. Art. No.: CD009185.
- 4. Hum SW, **Shaikh KJ**, Musa SS, et al. (2019). Adverse Events of Antibiotics Used to Treat Acute Otitis Media in Children: A Systematic Meta-Analysis. The Journal of Pediatrics, 215, 139-143.

LANGUAGES

Fluent: English

Conversational: Spanish

Intermediate Proficiency: French, Chinese (普通话)

Beginner: Tibetan, Farsi

INTERESTS

Birding, Classical Persian Music (setar)