

# CURRICULUM VITAE

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## Education

UNIVERSITY OF VIRGINIA – CHARLOTTESVILLE, VIRGINIA

August 1998 to May 2003

M.S. in Mathematics: May 2000

Ph.D. in Mathematics: May 2003

Dissertation: *On the norm of a composition operator*

Dissertation advisor: Barbara D. MacCluer

UNIVERSITY OF THE SOUTH – SEWANEE, TENNESSEE

August 1994 to May 1998

B.A. *summa cum laude* in English and Mathematics, with departmental honors in both majors and a minor in Religion

## Employment

CONNECTICUT COLLEGE – NEW LONDON, CONNECTICUT

Professor of Mathematics

July 2021 to the present

Associate Professor of Mathematics

July 2009 to June 2021

Assistant Professor of Mathematics

July 2003 to June 2009

Assistant Chair, Department of Mathematics and Statistics

July 2024 to the present

Chair, Department of Mathematics and Statistics

July 2021 to June 2024

Chair, Department of Mathematics

July 2012 to the June 2015

Consultant to the Registrar's Office  
July 2021 to the present

Associate Dean of the College for Curriculum  
July 2015 to June 2021

Courses taught: Calculus I, Calculus II, Calculus A, Calculus B, Calculus C, Intimations of Infinity (first-year seminar), Discrete Mathematics, Multivariable Calculus, Ordinary Differential Equations, Linear Algebra, Real Analysis I, Real Analysis II, Abstract Algebra I, Complex Analysis, Advanced Linear Algebra, Topology

Individual studies supervised: Elementary Number Theory, Pedagogy and Group Theory, Ordinary Differential Equations, Linear Algebra, Real Analysis I, Advanced Linear Algebra, Abstract Algebra II

Honors thesis supervised: *Functional Analysis and its Applications* by P. M. Luthy (winner of the 2005 Oakes and Louise Ames Prize)

Undergraduate research supervised: "Operator-theoretic properties of linear transformations" (E. A. Parillo, Summer 2005); "Weighted Jamesian functions" (A. G. Woods, Summer 2015).

New courses developed: Mathematics from a Cultural Perspective (with B. Baird and A. Robertson), Intimations of Infinity (first-year seminar), Advanced Linear Algebra, Topology

UNIVERSITY OF VIRGINIA – CHARLOTTESVILLE, VIRGINIA

Graduate Teaching Assistant  
August 1998 to May 2003

Courses taught: Introduction to Statistics, Applied Calculus I, Applied Calculus II, Calculus I, Calculus II

### Peer-Reviewed Publications

20. Complex symmetric weighted composition-differentiation operators of order  $n$  on the weighted Bergman spaces (with M. Moradi and M. Fatehi), *Oper. Matrices* **16** (2022), 479–494.
19. Numerical range of weighted composition operators on the Fock space (with M. Haji Shaabani and M. Fatehi), *Complex Var. Elliptic Equ.* **67** (2022), 1529–1541.
18. A second look at the second ratio test (with E. Omeý), *Amer. Math. Monthly* **128** (2021), 579–596.

17. Normality and self-adjointness of weighted composition–differentiation operators (with M. Fatehi), *Complex Anal. Oper. Theory* **15** (2021), Paper No. 9, 13 pp.
16. Multi-opponent James functions (with W. P. Johnson), *Math. Slovaca* **70** (2020), 935–952.
15. Ratios, roots, and means: a quartet of convergence tests, *Elem. Math.* **75** (2020), 89–102.
14. Another function with discontinuous derivative, *Math. Gaz.* **104** (2020), 315–318.
13. Composition–differentiation operators on the Hardy space (with M. Fatehi), *Proc. Amer. Math. Soc.* **148** (2020), 2893–2900.
12. Norms of weighted composition operators with automorphic symbol (with M. Fatehi), *Integral Equations Operator Theory* **92** (2020), Paper No. 13, 12 pp.
11. The case for Raabe’s test, *Math. Mag.* **93** (2020), 36–46.
10. The James function (with W. P. Johnson and S. J. Miller), *Math. Mag.* **88** (2015), 54–71.
9. Which weighted composition operators are complex symmetric? (with S. R. Garcia), *Oper. Theory Adv. Appl.* **236** (2014), 171–179.
8. Norm inequalities for composition operators on Hardy and weighted Bergman spaces (with L. J. Patton), *Oper. Theory Adv. Appl.* **202** (2010), 265–272.
7. Adjoints of composition operators with rational symbol (with J. Moorhouse and M. E. Robbins), *J. Math. Anal. Appl.* **341** (2008), 626–639.
6. Zeros of hypergeometric functions and the norm of a composition operator, *Comput. Methods Funct. Theory* **6** (2006), 37–50.
5. Composition operators with maximal norm on weighted Bergman spaces (with B. J. Carswell), *Proc. Amer. Math. Soc.* **134** (2006), 2599–2605.
4. The norm of a composition operator with linear symbol acting on the Dirichlet space, *J. Math. Anal. Appl.* **303** (2005), 499–508.
3. Isolation and component structure in spaces of composition operators (with B. D. MacCluer), *Integral Equations Operator Theory* **53** (2005), 269–285.
2. Norms of linear-fractional composition operators (with P. S. Bourdon, E. E. Fry, and C. H. Spofford), *Trans. Amer. Math. Soc.* **356** (2004), 2459–2480.

1. On the norm of a composition operator with linear fractional symbol, *Acta Sci. Math. (Szeged)* **69** (2003), 813–829.

### Open Educational Resources

- The Art of Analysis* (2022). Open Educational Resources. 3.  
<https://digitalcommons.conncoll.edu/oer/3>

### Recent Talks

October 12, 2022

Providence College

Mathematics/Computer Science Department Colloquium

“When does a series ‘look like’ a  $p$ -series?”

October 4, 2019

Northeastern Analysis Meeting (Syracuse, New York)

“Composition–differentiation operators on the Hardy space”

November 18, 2017

MAA Northeastern Sectional Meeting (Fairfield, Connecticut)

“The case for Raabe’s test”

October 21, 2016

Providence College

Mathematics/Computer Science Department Colloquium

“The James function”

September 22, 2016

United States Coast Guard Academy

Mathematics Department Colloquium

“The James function”

August 7, 2015

MathFest (Washington, DC)

Contributed Paper Session

“Multi-opponent James functions”

August 8, 2014

MathFest (Portland, Oregon)

Contributed Paper Session

“The James function”

March 6, 2014

College of Wooster

“The James function”

### **Other Activities**

Referee for 103 papers submitted to mathematical journals

Author of 88 reviews for Mathematical Reviews

Contributed abstracts of books and articles to the journal *Historia Mathematica*

### **Service at Connecticut College**

Serving as chair of the Student-Designed Interdisciplinary Majors and Minors Committee

Serving on the Priorities, Planning, and Budget Committee

Served as chair of the Academic and Administrative Procedures Committee

Served as chair of the the Educational Planning Committee

Served as chair of the Integrative Pathways Approval Committee

Served on the Faculty Steering and Conference Committee

Serving as coordinator of the New London Scholars Program

Served as coordinator of the Eye of the Mind Integrative Pathway

Served on the planning committee for the 2006 presidential inauguration

Served on hiring committees for six tenure-track and three visiting faculty positions

Serving as faculty advisor for the local chapter of Pi Mu Epsilon (Connecticut Epsilon)

Serving as chair of the membership committee for the local chapter of Phi Beta Kappa (Delta of Connecticut)

### **Honors and Memberships**

Member of the American Mathematical Society

ExxonMobil fellow for Project NExT (New Experiences in Teaching)

Recipient of the Helen Brooks Regan Faculty Leadership Award (Spring 2022)

Recipient of departmental Dissertation Year Fellowship (Spring 2003)

Finalist for departmental Graduate Teaching Assistant Award (Spring 2002)

Awarded Robert Hooke Prize for Achievement in Mathematics (Spring 1998)

Awarded Membership to Phi Beta Kappa (Spring 1997)