Osman Yürekli
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Education

- **University of California at Santa Barbara** — Santa Barbara, CA
  Ph.D. Mathematics — *1988*
  - Ph.D. Thesis: Identities, Inequalities and Parseval Type Relations on Integral Transforms and Fractional Integrals
  - Ph.D. Advisor: Thomas K. Boehme
- **University of Istanbul** — Istanbul, Turkey
  M.Sc. Mathematics — *1982*
  - M.Sc. Thesis: On Operators which Attain their Norms
  - M.Sc. Advisor: Yusuf Avcı and Suzan Kahramaner
- **University of Istanbul** — Istanbul, Turkey
  B.Sc. Mathematics — *1979*

Academic Appointments

- **Full Professor** — Sep. 2004 – Present
  Ithaca College
- **Visiting Professor** — Jan. 2018 – May 2018
  Ithaca College London Center, London, England
- **Visiting Professor** — Sep. 2004 – June 2005
  Bilkent University, Ankara, Turkey
- **Associate Professor** — Sep. 1995 – Sep. 2004
  Ithaca College
- **Assistant Professor** — Sep. 1989 – Sep. 1995
  Ithaca College
- **Visitor** — Jan. 1996 – June. 1996
  Emory University, Atlanta GA
- **Visitor** — June. 1992 – Aug. 1992
  University of Marmara, Istanbul, Turkey
- **Visiting Assistant Professor** — Sep. 1988 – Sep. 1989
  University of North Carolina at Wilmington
- **Lecturer** — Sep. 1987 – June. 1988
  University of California at Santa Barbara
- **Teaching Associate** — Sep. 1986 – June. 1987
  University of California at Santa Barbara
- **Teaching Assistant** — Sep. 1985 – June. 1986
  University of California at Santa Barbara
- **Teaching Assistant** — Sep. 1979 – June. 1982
  University of Istanbul, Turkey

Research Interest

Integral transforms, special functions, operational calculus, differential equations, control theory, undergraduate reseach in mathematics, and mathematics in non-western societies.

Curriculum Development

- Ethnomathematics a sophomore level mathematics course with minimal math prerequisite.
- Multicultural Mathematics as replacement for Math and Society course of Department of Mathematics.
- Mathematics of Money, 1 credit H&S Honors course.
- Mathematics in Art and Architecture, an intermediate H&S Honors Seminar.
- Multicultural Approaches to Mathematics, an intermediate H&S Honors Seminar.
- Math from Africa, a course on math in non-western societies as first year seminar.
- New Business Calculus Course with other members of the department.
- Mathematical Explorations, a junior level undergraduate research experience course.
- Mathematics Problem Solving with Technology with D. Schwartz.
- Mathematica with C. Elson and S. Seltzer
- Applied Calculus, a follow up course for Calculus for Decision Making
- Power Algebra and Dynamic Functions with D. Novak and M. Sternstein
  - Introduce technology and modeling in Intermediate Algebra and College Algebra Courses. Included new ideas for general education.

Publications in refereed math journals

Student names are in red faces.
IC Faculty names are in blue faces.

[1] Integral Transforms and Parseval–Goldstein-Type Relationships.
Book Chapter in Recent Advances in Mathematics for Engineering, Edited By Mangey Ram *CRC Press*, **2020**.

[2] A Generalization of the Krätzel Function and Its Applications, with Ahmet Dernek and Neşe Dernek. *Journal of Mathematics*, **(2016)**.

[3] Divination: Using Excel to explore ethnomathematics with **Cristina Gomez** and **Hannah Oppenheim**. *Spreadsheets in Education*, 8, **(2014)**.

[4] Identities for the Glasser transform and their applications, with Ahmet Dernek and Neşe Dernek. *Contemporary Analysis and Applied Mathematics*, **2**, **(2014)**, 146–160.

[5] A generalization of the Widder potential transform and applications, with Neşe Dernek, Veli Kurt and Yilmaz Şimşek. *Integral Transforms and Special. Functions*, **22**, **(2011)**, 391–401.

[6] Identities for the Widder transform and transforms with Bessel function kernels, with Faruk Uçar. *Journal of Applied Mathematics and Computation*, **218**, **(2011)**, 1096–1101.

[7] Identities for the Hankel transform and their applications, with Ahmet Dernek, and Neşe Dernek. *Journal of Mathematical Analysis and Applications*, **354**, **(2009)**, 165–176.

[8] Identities and Parseval type relations for the $\mathscr{L}_2$-transform, with **David Brown**, and **John Maceli**. *Journal of Applied Mathematics and Computation*, **196**, **(2008)**, 426–432.

[9] Some Parseval-Goldstein type identities involving the $\mathscr{F}_{S,2}$-transform, the $\mathscr{F}_{C,2}$-transform and the $\mathscr{P}_4$-transform and their applications, with Neşe Dernek, and Hari M. Srivastava. *Applied Mathematics and Computation*, **202**, 327–337, (2008).

[10] Identities on fractional integrals and various integral transforms, with **Scott Herman**, **John Maceli**, and **Matt Rogala**. *International Journal of Mathematical Education in Science and Technology*, **39**, **(2008)**, 109–115.

[11] Parseval-Goldstein type identities involving the $\mathscr{L}_4$-transform and the $\mathscr{P}_4$-transform and their applications, with Neşe Dernek, and Hari M. Srivastava. *Integral Transforms and Special Functions*, **18**, **(2007)**, 397–408.

[12] Identities for the $\mathscr{E}_{2,1}$-transform and their applications, with **David Brown**, and Neşe Dernek. *Applied Mathematics and Computation*, **187**, **(2007)**, 1557–1566.

[13] Identities on fractional integrals and various integral transforms. *Applied Mathematics and Computation*, **187**, 559–566, (2007).

[14] On interpolation functions of the twisted generalized Frobenius-Euler numbers with Veli Kurt and Yılmaz Şimşek. *Advanced Studies in Contemporary Mathematics*, **15**, 187–194, (2007).

[15] Undergraduate research in mathematics as a curricular option, with **David Brown**. *International Journal of Mathematical Education in Science and Technology*, **38**, **(2007)**, 187–194.

[16] Identities for the exponential integral and the complementary error transforms, with **David Brown** and Neşe Dernek. *Applied Mathematics and Computation*, **182**, **(2006)**, 1377–1384.

[17] Undergraduate research experience at Ithaca College, with **David Brown**. *Proceedings of the Third International Conference on the Teaching of Mathematics*, **ICTM 3**, **2006**.

[18] Integrating inquiry/discovery based activities into the mathematics curriculum, with **David Brown**. *Mathematicians and Education Reform Forum*, **19**, **2006**, 4–10.

[19] An operator method for evaluating Laplace transforms with **Brian G. Lanoue**. *International Journal of Mathematical Education in Science and Technology*, **36**, **(2005)**, 553–559.

[20] Summation formulas involving m-Bonacci numbers with **Joel Chamberlain** and **Nataniel Higgins**. *International Journal of Mathematical Education in Science and Technology*, **35**, **(2003)**, 935–940.

[21] A new method of solving Hermite's differential equation using the $\mathscr{L}_2$-transform with **Scott O. Wilson**. *Applied Mathematics and Computation*, **145**, **(2003)**, 495–500.

[22] A new method of solving Bessel's differential equation using the $\mathscr{L}_2$-transform with **Scott O. Wilson**. *Applied Mathematics and Computation*, **130**, **(2002)**, 587–591.

[23] Theorems on $\mathscr{L}_2$-transform and its applications. *Complex Variables Theory and Applications*, **38**, **(1999)**, 95–107.

[24] New identities involving the Laplace and the $\mathscr{L}_2$-transforms and their applications. *Applied Mathematics and Computation*, **99**, **(1999)**, 141–151.

[25] A theorem on a Laplace-type integral transform and its applications with **Özgen Saygınsoy**. *International Journal of Mathematical Education in Science and Technology*, **(1998)**, **26**, 561–567.

[26] A theorem on the Laplace transform and its applications with **Christine Graziadio**. *International Journal of Mathematical Education in Science and Technology*, **28**, **(1997)**, 616–621.

[27] A theorem on the Glasser transform and its applications, with Yasemin Kahramaner and Hari M. Srivastava. *Complex Variables Theory and Applications*, **27**, 7–15, **(1995)**.

[28] A theorem on a Stieltjes-type integral transform and its applications, with Hari M. Srivastava. *Complex Variables Theory and Applications*, **28**, **(1995)** 159–168.

[29] Optimal open/closed-loop control for systems with distributed parameter, with Ibrahim Sadek. *Journal of the Franklin Institute*, **332**, **(1995)**, 5–19

[30] A theorem on a Stieltjes-type integral transform and its applications. *Journal of Mathematical Analysis and Applications*, **168**, **(1992)**, 63–71.

[31] An inversion formula for the Widder potential transform *International Journal of Mathematics Education in Science and Technology*, **23**, **(1992)**, 152–154.

[32] A Parseval-Goldstein type theorem on the Widder potential transform and its applications, with Ibrahim Sadek. *International Journal of Mathematics and Mathematical Sciences*, **14**, **(1991)**, 517–524.

[33] A theorem on Widder's potential transform and its applications, with Hari M. Srivastava. *Journal of Mathematical Analysis and Applications*, **154**, **(1991)**, 585–593.

[34] A Parseval-type theorem applied to certain integral transforms. *IMA Journal of Applied Mathematics*, **42**, 241–249, **(1989)**.

[35] Identities, inequalities, Parseval type relations for integral transforms and fractional integrals. *ProQuest LLC, Ann Arbor, MI*, Ph. D. Thesis, 134 pages, University of California, Santa Barbara **(1988)**.

Miscellaneous Publications

- Over 120 Reviews published in Mathematical Reviews
- Over 40 reviews published in Zentralblatt for Mathematics
- Redesigning intermediate algebra and pre-calculus using graphing calculators, with Dani Novak and Marty Sternstein *Exemplary Programs in Introductory College Mathematics, Innovative Mathematics Programs Using Technology*, Suzan Lenker, Editor, MAA Notes 47 (1998), 95 - 99.

Presentations

[1] Unlocking the Secrets of Babylonian Numbers and Arithmetic: Exploring Ancient Mathematics, in Math Day at Ithaca College, April, **2024**.

[2] Ethnomathematics: A Multicultural View of Mathematics, Presentation to high school teacher in Math Day at Ithaca College, April, **2019**.

[3] Ethnomathematics: A Multicultural View of Mathematics, Provost's Post-Sabbatical Colloquium, Ithaca College Ithaca, NY. April, **2019**.

[4] A new integral transform involving Dawson's integral and its applications, The Fourth International Conference on Analysis and Applied Mathematics, Near East State University, Lefkosa, CYPRUS. September **2018**.

[5] Some Parseval-Goldstein type identities for the generalized Macdonald and Hankel transforms The Fourth International Conference on Analysis and Applied Mathematics Near East State University, Lefkosa, CYPRUS. September 6, **2018**.

[6] A Pascal-like Triangle From a Special Function, The Eighteenth International Conference on Fibonacci Numbers and Their Applications, Dalhousie University, Halifax, Canada July 1, **2018**.

[7] Divination Process to Explore Ethnomathematics, Seaway Section Mathematics Meeting, Broome County Community College, Binghamton, NY. October 21, **2017**

[8] Invitation to Mathematics in Multicultural Settings, Colloquium Talk, Department of Mathematics, Ithaca College April 24, **2017**

[9] Empirical Origin of the Design Concepts and the Euclidean Geometry with Fatma Mete, AMS-MAA-SIAM Joint Mathematics Meeting, San Francisco, January 13 - 17, **2010**.

[10] Digital roots, Vedic multiplication and Fibonacci numbers with Fatma Mete AMS-MAA-SIAM Joint Mathematics Meeting, San Francisco, January 13 - 17, **2010**.

[11] Hardy Littlewood and Polya inequalities and their applications to various integral transforms, 20th International Congress of Jangjeon Mathematical Society Uludağ University, Bursa, Turkey, August 21-23, (45 minutes) Invited Lecture, **2008**.

[12] Digital Roots, Vedic Multiplications and Fibonacci Numbers, 20th International Congress of Jangjeon Mathematical Society, Uludağ University, Bursa, Turkey, August 21-23, **2008**.

[13] Multicultural Approaches to Mathematics - H & S Honors Course at Ithaca College, Department of Fiber Science & Apparel Design, Cornell University, October **2008** (60 minutes) Invited Lecture.

[14] Digital Roots, Vedic Multiplications and Fibonacci Numbers, The Thirteenth International Conference on Fibonacci Numbers and Their Applications University of Patras, Patras, Greece, July 7 - July 11, **2008**.

[15] Parseval identities involving the Hankel transform and the $\mathscr{Y}$-transform and their applications. Fourth International Conference of Applied Mathematics and Computing, Plovdiv, Bulgaria, August 12 - 18, **2007**, invited talk.

[16] Parseval-Goldstein type identities involving the $\mathscr{F}_{S,2}$-transform, the $\mathscr{F}_{C,2}$-transform, and the P4-transform and their applications. International Symposium on Geometric Function Theory and Applications. Kültür University, Istanbul, Turkey, August 20 - 24, **2007**, invited talk.

[17] Operational properties of various integral transforms and their applications, Department of Mathematics Colloquium, University of Marmara, Istanbul, Turkey, August 3, **2007**, Invited talk.

[18] Iteration of integral transforms and their applications, Department of Mathematics Colloquium, University of Marmara, Istanbul, Turkey, August 8, **2007**, Invited talk.

[19] Multicultural approaches to mathematics, International Conference on Technology in Collegiate Mathematics (ICTCM), Orlando, Florida, March **2006**.

[20] Undergraduate Research Experience in Mathematics at Ithaca College with D. Brown, Third International Conference on the Teaching of Mathematics Istanbul, Turkey, June/July **2006**.

[21] Identities on fractional Integrals and various integral transforms, International Symposium on Analytic Function Theory, Fractional Calculus and their Applications, University of Victoria, Victoria, Canada, August **2005**, invited lecture.

[22] Transforming student learning through an Exploration/Research Curricular Approach with D. Brown, Mathematicians and Education Reform (MER) Forum Workshop on Excellence in Undergraduate Mathematics, Invited Workshop Leader Arizona State Universtiy, December **2005**

[23] Getting students involved in undergraduate research in mathematics. Recent developments in USA and in particular at Ithaca College General Mathematics Seminar, Bilkent University, Turkey, December **2004**.

[24] Parseval's Type Theorems and Their Applications. Applied Mathematics Seminar, Bilkent University, Turkey, November **2004**.

[25] Undergraduate research in math at IC. REU seminar at Ithaca College in July, **2004**.

[26] A Curious Relationship Between Bessel Functions and Fibonacci Numbers. MAA Seaway Section Meeting, SUNY at Cortland, April, **2004**.

[27] Math in non-western societies using Geometer's Sketchpad. International Conference on Technology in Collegiate Mathematics, Chicago IL, November **2003**.

[28] Undergraduate Research in Mathematics at Ithaca College. MAA-AMS Joint Meeting in Baltimore, January, **2003**.

[29] A new method of solving Bessel's differential equation using the $\mathscr{L}_2$-transform, with Scott Wilson, MAA Seaway Section Meeting, SUNY at Potsdam, November, 2002.

[30] M-bonacci numbers and their finite sums, with Jeff Chamberlein and Nate Higgins, the Tenth International Conference on Fibonacci Numbers and Their Applications, University of Northern Arizona, Flagstaff, Arizona, May **2002**.

[31] Mathematical Explorations Course, with David Brown, Ithaca College Mathematics Colloquium, November **2002**.

[32] An Undergraduate Research Experience with Technology, with David Brown, presented at International Conference on Technology in Collegiate Mathematics, Baltimore MD, November **2001**.

[33] Fractal Geometry as Curriculum Enhancement, with David Brown, presented at the AMS/MAA Joint Meeting, New Orleans LA, January **2001**.

[34] Fractal Geometry as Curriculum Enhancement, with David Brown, presented at the Seaway Section Meeting of the Mathematical Association of America at SUNY at Fredonia in November **2000**.

[35] Attended a workshop on teaching of Business Calculus at Villanova University in June **2000**.

[36] Thoughts on the Teaching of Precalculus, with Marty Sternstein, presented at Seaway section meeting of MAA at SUNY at Oswega in April **2000**.

[37] Technology integrated into pre-calculus and calculus classes, with Marty Sternstein. Presented at International Conference on Technology in Collegiate Mathematics in San Francisco in November **1999**.

[38] Mathematical Explorations Using the Computer, with Marty Sternstein. International Conference on Technology in Collegiate Mathematics (ICTCM) New Orleans, November **1998**.

[39] Distributional Integral Transforms, University of Marmara, Summer **1992**.

[40] A theorem on a Stieltjes-type integral transform and its applications, Ithaca College Mathematics Colloquium, Fall **1991**.

[41] On generalization of certain types of integral transforms, AMS-MAA summer meeting at University of Maine, August **1991**.

[42] A theorem on the generalized Stieltjes transform and its applications," AMS-MAA annual meeting in Liouville, Kentucky, January **1990**.

[43] An operational method for certain integrals involving Bessel functions and its applications, with M. Kambule. AMS-MAA annual meeting in Liouville, Kentucky, January **1990**.

[44] A Parseval-type theorem applied to certain integral transforms, AMS meeting at Michigan State University on March 18, **1988**.

Undergraduate Research Supervision

Kian Broderick: Fibonacci-Related Recursive Sequences

- **April 2024**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2024**, MAA Seaway Section Meeting, SUNY Fredonia.

Brianna Bownas: Exploring Properties and Patterns of Digital Roots

- **April 2024**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2024**, MAA Seaway Section Meeting, SUNY Fredonia.

Earth Sonrod: Some Results on Integral Transforms of Dawson's Integral

- **April 2024**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2024**, MAA Seaway Section Meeting, SUNY Fredonia.

Sara Wrzos: An Exploration of Magic Squares

- **April 2024**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2024**, MAA Seaway Section Meeting, SUNY Fredonia.

Earth Sonrod, Kate Tanner, and Colin Leyner: Some Properties of the Fibonacci-Pascal Triangle

- **April 2022**, James J. Whalen Academic Symposium, Ithaca College.
- **July 2022** The 20th International Conference on Fibonacci Numbers and Their Applications, University of Sarajevo, Bosnia.
- **October 2022**, MAA Seaway Section Meeting, Siena College.
- **January 2023** Published in Proceedings of the 20th International Conference on Fibonacci Numbers and Their Applications.

Britney Mazzetta: Predicting U.S. Child Obesity through Mathematical Modeling

- **Summer 2017**, H& S Summer Scholar Program, Ithaca College.
- **August 2017**, MathFest, Chicago, Illinois.
- **August 2017**, Pi Mu Epsilon Student Speaker Award at the National Math Conference in Chicago.
- **August 2017**, Travel support from Pi Mu Epsilon and Ithaca College.
- **January 2018**, The 20th Annual Nebraska Conference for Undergraduate Women in Mathematics at the University of Nebraska.
- **April 2018**, National Conference on Undergraduate Research at the University of Central Oklahoma.

Ryan Bianconi: Riemann Hypothesis.

- **Summer 2016**, Dana Internship, Ithaca College.

Ryan Bianconi: Applications of the $\mathscr{L}_2$ transform to Dawson's Integral..

- **August 2016**, MathFest, Columbus, Ohio.

A Generalized Pascal's Triangle and Fibonacci type Sequences

Britney Mazzetta: Egyptian numbers and Hexagonal numbers.

- **April 2015**, James J. Whalen Academic Symposium, Ithaca College.

Sam Lloyd: A Combinatoric Approach to n-dimensional Figurate Numbers.

- **April 2014**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2014**, MAA Seaway Section Meeting, Rochester Institute of Technology.

Iancu Dima: Applying the Laplace Transform on Special Functions.

- **April 2014**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2014**, MAA Seaway Section Meeting, Buffalo State College, NY.

Iancu Dima: A Generalized Pascal's Triangle and Fibonacci-type Sequences.

- **April 2013**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2013**, Hudson River Undergraduate Mathematics Conference, Union College, NY.

Delani Cele and Jihyun Lee: An Alternative Definition for Fractional Derivatives.

- **April 2013**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2013**, Hudson River Undergraduate Mathematics Conference, Williams College, NY.

Sam Lloyd: A Generalized Pascal's Triangle and its Applications.

- **April 2013**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2013**, Hudson River Undergraduate Mathematics Conference, Williams College, NY.

Nick Ommen and Katharina Carella: Finite Sums of Fibonacci-Based Sequences.

- **April 2009**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2009**, Hudson River Undergraduate Mathematics Conference, Union College, NY.

Nick Ommen and Katharina Carella: Finite Sums of Fibonacci-Based Sequences.

- **April 2009**, James J. Whalen Academic Symposium, Ithaca College
- **April 2009**, Hudson River Undergraduate Mathematics Conference, Union College, NY.

Thomas Yee: Characteristics of Modular Sequences.

- **April 2009**, James J. Whalen Academic Symposium, Ithaca College

Krasimir Kehayov: Solving Second Order Differential Equations Using the $\mathscr{L}_2$-transform.

- **April 2009**, National Conference of Undergraduate Reseach, University of Wisconsin.
- **2009**, Published in Proceedings of the National Conference of Undergradute Research.

Matthew Rogala ('08): q-Analogues of the Genocchi Numbers.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Megan Groll ('09) and Kyle Rogers ('09): Convolution, Parseval Relations, and Laplace Transforms.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Tamara Niquette ('09): Brunes Star Trek: The Geometric Generation.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Krasimir Kehayov ('10): An Operator Method for Evaluating $\mathscr{L}_2$ Transforms.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Matthew Mastroeni ('10): Developing a Convolution Analogue for the $\mathscr{L}_2$ Transforms.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Sarah Jabon: Islamic Contribution to Math: Al Khwarizimis Completing the Square.

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Simi Landau, Heike Domine, and Stacey Sauppe: Quintessential Quipus

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Denise Dyer and Jesse Hooper: Visual Representations of Modular Arithmetic; Coloring your Digital Roots Blonde

- **April 2008**, James J. Whalen Academic Symposium, Ithaca College
- **April 2008**, Hudson River Undergraduate Mathematics Conference, St. Lawrence University in Canton, NY.

Jill Cavanna ('07) and Brett Hotchkiss ('07): Geometry in culture: Mathematical Explorations of Infinite Patterns.

- **April 2007**, James J. Whalen Academic Symposium, Ithaca College
- **February 2007**, Nebraska Conference for Undergraduate Women in Mathematics, University of Nebraska, NE.

Matthew R. Rogala ('08): An Alternative Method to Find Integral Transforms.

- **April 2007**, James J. Whalen Academic Symposium, Ithaca College

Nick Ommen '09: Integration through recurrence relations and its applications to calculus, supervised with Ali Erkan.

- **April 2007**, James J. Whalen Academic Symposium, Ithaca College
- **April 2007**, Hudson River Undergraduate Mathematics Conference, Siena College, NY.

Matthew R. Rogala ('08): Transforming Bessel Functions

- **March 2006**, James J. Whalen Academic Symposium, Ithaca College
- **April 2006**, Hudson River Undergraduate Mathematics Conference, Westfield State College, MA.
- **August 2006**, Young Mathematicians Conference, Ohio State University, OH.
- **January 2007**, Joint Mathematics Meeting, San Diego, CA, travel expenses supported by Sigma Xi, The Scientific Research Society.

Melissa Latore ('05) and Renee Malcolm ('04): Some Identities and Geometrical Proofs for Generalized Fibonacci Numbers

- **March 2003**, James J. Whalen Academic Symposium, Ithaca College
- **April 2003**, Hudson River Undergraduate Mathematics Conference, Union College, Schenectady, NY.

Carly O'Brien ('03) and Kylie Yerka ('02): Folded Paper and Hidden Dragon

- **March 2002**, James J. Whalen Academic Symposium, Ithaca College
- **April 2002**, Hudson River Undergraduate Mathematics Conference, Hamilton College, Clinton, NY.

Nate Higgins ('01) and Joel Chamberlin ('01): Tribonacci, Tetranacci, and M-bonacci Sequences

- **March 2001**, James J. Whalen Academic Symposium, Ithaca College
- **April 2001**, Hudson River Undergraduate Mathematics Conference, Skidmore College, Saratoga Springs, NY.
- Published joint paper listed in Publications.

Amelia O'Hanlon ('02) and Sean Tully ('03): Trig of a Square

- **March 2001**, James J. Whalen Academic Symposium, Ithaca College
- **April 2001**, Hudson River Undergraduate Mathematics Conference, Skidmore College, Saratoga Springs, NY.

Miguel Diaz ('01) and Sean Tully ('03): Looking at Trigonometric Functions from Another Point of View

- **March 2000**, James J. Whalen Academic Symposium, Ithaca College
- **April 2000**, Hudson River Undergraduate Mathematics Conference, Vassar College, Poughkeepsie, NY.

Bryan Godfrey-Lanoue ('00): Evaluating Laplace Transforms without Integration

- **March 2000**, James J. Whalen Academic Symposium, Ithaca College
- **April 2000**, Hudson River Undergraduate Mathematics Conference, Vassar College, Poughkeepsie, NY.
- Published joint paper listed in Publications.

Scott Wilson ('00) : Solving Hermite's Equation Using the $\mathscr{L}_{22}$-transform

- **March 2000**, James J. Whalen Academic Symposium, Ithaca College.
- **April 2000**, Hudson River Undergraduate Mathematics Conference, Vassar College, Poughkeepsie, NY.
- Published joint paper listed in Publications.

Scott Wilson ('00): Another Method of Solving Bessel's Equation

- **March 1999**, James J. Whalen Academic Symposium, Ithaca College
- **April 1999**, Hudson River Undergraduate Mathematics Conference, Siena College, Loudonville, NY.
- Published joint paper listed in Publications.

Lorraine Burke ('99): Finding the General Formula for Computing the Sum $\sum_{i=1}^{n} i^n$

- **March 1999**, James J. Whalen Academic Symposium, Ithaca College
- **April 1999**, Hudson River Undergraduate Mathematics Conference, Siena College, Loudonville, NY.
- Published joint paper listed in Publications.

Scott Wilson ('00): A Simplified Method of Integrating $tan^n x$

- **March 1998**, James J. Whalen Academic Symposium, Ithaca College
- **April 1998**, Hudson River Undergraduate Mathematics Conference, Union College, Schenectady, NY.
- - April 1998, ECSC, Niagara Falls, NY.

Erin Cassidy ('99) and Brad Pesarek ('99): Finding Laplace Transforms of Functions Without Integration

- **March 1998**, James J. Whalen Academic Symposium, Ithaca College
- **April 1998**, Hudson River Undergraduate Mathematics Conference, Union College, Schenectady, NY.

Mary Spisak ('99) and Dheeraj Verma ('99): Exploring Pi

- **March 1998**, James J. Whalen Academic Symposium, Ithaca College.

Özgen Saygınsoy ('97): A new method of solving Bessel's differential equation using the $\mathscr{L}_2$-transform.

- **Summer 1995:** Awarded a Dana Internship in by the Ithaca College to work on the project.
- **April 1996:** The Seaway Section Meeting of the Mathematical Association of America, Elmira College, Elmira, NY.
- **April 1997:** he National Conference on Undergraduate Research, University of Texas at Austin, Austin, TX.
- Published joint paper listed in Publications.

Özgen Saygınsoy ('97): A theorem on the Laplace-type transform and its applications.

- **March 1995:** The Seaway Section Meeting of the Mathematical Association of America, Elmira College, Elmira, NY.

- **April 1997:** he National Conference on Undergraduate Research, University of Texas at Austin, Austin, TX.
- Published joint paper listed in Publications.

David Brown ('95): A generalized Mellin transform applied to Cauchy-Euler differential equations.

- **November 1994**the Seaway Section Meeting of the Mathematical Association of America, Rochester Institute of Technology, Rochester, NY, .
- **April 1995:** Presented at the National Conference on Undergraduate Research, Union College, Schenectady, NY, .

Christine Graziadio ('93): A theorem on the Laplace transform and its applications.

- **April 1991:** The Seaway Section Meeting of the Mathematical Association of America, SUNY Oneonta, Oneonta, NY.
- Published joint paper listed in Publications.

Awards and Grants

- Department Merit Award 2005, 2006, and 2007.
- “Particularly Meritorious Faculty" of School of Humanities and Sciences 1997 and 2001.
- Travel grants from Ithaca College provost office to deliver invited presentations or workshops, 2005, 2006, 2007. Travel grants from Ithaca College provost office to deliver students presentation in various conferences, 1998, 1999, 2000, 2001, and 2002.
- Phi Beta Delta, Honor Society for International Scholars, Ithaca College, 2001.
- Summer research grant from Ithaca College for the project titled “New identities involving Laplace-type and Fourier type integral transforms and its applications," Summer 1999.
- Summer research grant from Ithaca College for the project titled “Fractional Derivatives and Integral Transforms," Summer 1997.
- Input Award with Dani Novak and Marty Sternstein from Central Michigan University for developing the courses 13-131 Power Algebra and 13-132 Dynamic Functions. The competition sponsored by the Annenberg/CPB Project, NSF and Central Michigan University, 1997.
- Dana Internship with Scott Wilson, a math major, in Summer 1997 and 1998.
- Dana Internship with Özgen Saygınsoy, a math-econ major, in Summer 1995 and 1996.
- Instructional Development and Lodestar award with Dani Novak, John Confer and Marty Sternstein from Ithaca College for the project titled “Geographical Information Systems,” Summer 1994
- Instructional Development and Lodestar award with Connie Elson and Stan Seltzer from Ithaca College for the project titled “Introduction to Mathematica and Unix," Summer 1991.
- Summer research grant from Ithaca College for the project titled “New Identities on Integral Transforms," Summer 1991.
- Pi Mu Epsilon, Mathematical Honor Society, Ithaca College, 1990.
- Travel grant from UCSB to deliver a paper in Michigan State University in 1988.
- Scholarship for Ph.D. study at University of California at Santa Barabara from NATO 1982–1986.
- Scholarship for MS. study at University of Istanbul from TUBITAK (Turkish Science Foundation) 1979–1981.
- Scholarship for BS. study at University of Istanbul from TUBITAK (Turkish Science Foundation) 1976–1979.

Courses

Ethnomathematics

Multicultural Mathematics

Math from Africa (Honors Sophomore Course)

Math in Art and Architecture (Honors Sophomore Course)

Math of Money (Honors Course)

Intermediate Algebra

Power Algebra

Dynamic Functions

Statistics

Calculus I

Calculus II

Calculus III

Calculus IV

History of Mathematics

Abstract Algebra

Math For Decision Making

Calc For Decision Making

Applied Calculus

Advanced Engineering Mathematics

Linear Algebra

Mathematica

Number Theory

Discrete Mathematics

Differential Equations

Mathematical Explorations

Analysis I

Analysis II

Operational Calculus

Partial Differential Equations

Complex Analysis

Honors Courses

Fourier Series and Wavelets

Mathematical Problem Solving with Technology

Differential Equation

Linear Algebra and Differential Equations

Independent Study Courses (more than 20, undergraduate research experience)

Service to College

- Department Committees
  - Assistant Chair of Math/CS 2002–2004
  - Personnel Committee 1995–1999
  - Curriculum Committee 1991–1994, 2002–2004, 2007–2008
  - Sophomore Seminar 1990–1991,1995–1996,1998–2002, 2007–2009
  - Pi Mu Epsilon 1997–98
  - Colloquium Committee 1989–1991,2002–2004, 2005–2007, 2015–2017
  - Department Publicity Committe 1994–1998
  - Math/CS Club Advisor 1993–1996
  - Service Courses Committee 2002–2003
  - Major/Minor Courses Committee 2002–2003
  - Department Merit Committee 2002–2004
  - Department Hiring Committee 2002–2003, 2006–2007
  - Department Library Committee 2007–2010
  - Diversity Committee 2019–2021
  - Math Club 2022–Present
- School Committees
  - H& S Curriculum Committee 1999-2001
  - H& S curriculum general education subcommittee 1999-2001
- All College Committees
  - Faculty Development Committee 1999–2002
  - Review committee for IC Awards: teaching excellence, scholarship, and service 2000, 2001, and 2002.
  - Web master for Faculty Development Committee 1999–2002
  - Review committee for the Summer Research Grant proposal, Spring 2000.
  - Faculty Council 2002–2004, 2007–2009
  - Web master for James J. Whalen Academic Symposium 2001–2004
  - Faculty advisor for Turkish Student Association 2001–2003
  - Academic Policy Committee 2020–2022. 2020–2021
  - Academic Policy Curriculum Subcommittee 2020–2022.

Service to Math Community

- Department Liason for MAA 1996–1998
- Faculty representative for Hudson River Undergraduate Mathematics Conference 1998-2002.
- Reviewed the following books.
  - “College Algebra in Context" by Harshbarger/Yocco. Addison-Wesley Publishing Company.
  - “Mathematics, A Human Endevor" by Harold R. Jacobs. W. H. Freeman and Company.
- Editor of the journal
  - Montes Taurus Journal of Pure and Applied Mathematics
- Refereed articles over 25 mathematics research journals including the following:
  - Arabian Journal of Science and Engineering
  - Journal of Franklin Institute
  - Journal of Pi Mu Epsilon
  - Journal of Vibration and Control
  - International Journal of Mathematical Education in Science and Technology
  - IMA Journal of Applied Mathematics
  - Applied Math Letters
  - International Journal of Mathematics and Mathematical Sciences
  - Journal of Applied Mathematics
  - Journal of Mathematical Analysis and Applications
  - Korean Journal of Applied Mathematics
  - Applied Mathematical Modeling
  - Acta Scientiarum Mathematicarum
  - Proceedings of International Conference of Numerical Analysis and Applied Mathematics 2008
  - Novi Sad Journal of Mathematics
  - Montes Taurus Journal of Pure and Applied Mathematics
- Reviewer
  - Mathematical Reviews of American Mathematical Society: 2000-Present
  - Zentralblatt fur Math: 2001-Present

Membership

- American Mathematical Society (AMS)
- Mathematical Society of America (MAA)
- Society for Industrial and Applied Mathematics (SIAM)
- National Council of Teachers of Mathematics (NCTM)
- Fibonacci Association
- Turkish Mathematical Society
- Pi Mu Epsilon (Mathematics Honor Society)
- Pi Beta Delta (Honor Society for International Scholars)