

CURRICULUM VITAE  
STACEY MUIR  
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**Address**

Stacey Muir  
Department of Mathematics  
University of Scranton  
Scranton, PA 18510

Office Phone: (570) 941-6580  
E-mail: [stacey.muir@scranton.edu](mailto:stacey.muir@scranton.edu)  
Web page: [www.scranton.edu/faculty/muir2/](http://www.scranton.edu/faculty/muir2/)

**Current Position**

- Professor at the University of Scranton.

**Education**

- Ph.D. in Mathematics, University of Kentucky, May 2004.
- M.A. in Mathematics, University of Kentucky, December 1999.
- B.S. in Mathematics (summa cum laude, second major: psychology), Rockhurst College, May 1998.

**Honors**

- Awarded Teaching Enhancement Grant, 2014 – 2015, for participating in *AAC&U (Association of American Colleges & Universities) 2015 Network for Academic Renewal STEM Conference Crossing Boundaries: Transforming STEM Education 2015 conference* in Seattle, November 2015.
- The Sheldon I. Rosenberg Union Leadership Development Grant awardee, Spring 2013.
- Named an Exxon Mobil Project NExT Fellow (Mathematical Association of America (MAA) program: New Experiences in Teaching) for 2005-2006 academic year.
- Received the University of Kentucky Commonwealth Research Award, January 2004. This is a nomination only competitive annual award designed to promote the development of graduate students as researchers and scholars.
- Inducted to Alpha Sigma Nu Jesuit Honors Society at Rockhurst College.
- Graduate of the Honors Program at Rockhurst College.
- Recipient of the math department senior award at Rockhurst College.

## Research

- Interests: Geometric function theory of one complex variable.
- Thesis: *Harmonic Mappings and Solutions of a Differential Equation Related to the de la Vallée Poussin Means*
- Publications (all refereed journal articles containing original mathematics research, authors alphabetical is the norm for math research):
  - S. Muir, Convex Combinations of Planar Harmonic Mappings Realized through Convolutions with Half-Strip Mappings. *Bull. Malays. Math. Sci. Soc.* (2016 – online first), 24 pp.
  - M. Dorff and S. Muir, A family of minimal surfaces and univalent planar harmonic mappings. *Abstract and Applied Analysis* (2014), Article ID 476061, 8 pages.
  - S. Muir, Harmonic mappings convex in one or every direction. *Comput. Methods Funct. Theory* **12** (2012), No. 1, pp. 221 – 239.
  - S. Muir, Weak subordination for convex univalent harmonic functions. *J. Math. Anal. Appl.* **348** (2008), No. 2, pp. 862 – 871.
  - S. Muir, Subordinate solutions of a differential equation, *Comput. Methods Funct. Theory* **7** (2007), No. 1, pp. 1 – 11.
- Professional Presentations:
  - *Convex Combinations of Planar Harmonic Mappings Realized through Convolutions with Half-Strip Mappings*, at the national AMS/MAA JMM, Seattle (January 2016).
  - *Connecting Minimal Surfaces and Planar Harmonic Mappings*, Office of Research and Sponsored Programs Seminar Series, University of Scranton (February 2013).
  - *A Family of Minimal Surface Constructed by Lifting Univalent Planar Harmonic Mappings*, at the national AMS/MAA JMM, San Diego (January 2013).
  - *Convolutions of Complex-valued Harmonic Mappings*, at the national AMS/MAA JMM, Boston (January 2012).
  - *Construction of Complex-valued Harmonic Mappings Convex in One or Every Direction*, at the national AMS/MAA JMM, New Orleans (January 2011).
  - *Weak Subordination for Convex Univalent Harmonic Functions*, at the AMS/MAA JMM, Washington, D.C. (January 2009).
  - *Subordination Results from a Differential Equation Related to the de la Vallée Poussin Means*, at the national AMS/MAA JMM, San Antonio (January 2006).
  - *Subordinate Solutions of a Differential Equation* at the national AMS/MAA JMM, Atlanta (January 2005).
  - *Geometric and Subordination Properties of Solutions of a Differential Equation*, in a modern function theory special session at the national AMS/MAA JMM, Phoenix (January 2004).

- *Harmonic de la Vallée Poussin means*, at the national AMS/MAA JMM, Baltimore (January 2003).
- Gave a talk on an extension of convolution properties to harmonic functions on the punctured disk at the national AMS/MAA JMM to participants of the Summer Program for Women in Mathematics in San Diego (January 2002).
- Invited panelist on summer research opportunities for undergraduate mathematics majors at the MAA Kentucky sectional meetings in Richmond (March 2000).

### Professional Development

- Joint Mathematics Meeting Mini-course: Developing Departmental Self-Studies (January 2015)
- Plato reading Clavius seminar participant (2014/15 AY)
- Participant (as Rosenberg grant awardee) in AAUP Summer Institute, University of Washington (July 2013).
- Participant in the NSF ADVANCE grant – ASAP – Advancing the Careers of Women in STEM (Science, Technology, Engineering, and Mathematics) at PUIs (Predominantly Undergraduate Institutions) through Professional Networks (Spring 2012 – Fall 2016).
  - Participate in monthly web conferences with three other mid-career female mathematicians from other universities.
  - Participated in the following meetings/conferences as part of the NSF ADVANCE ASAP grant:
    - \* ADVANCE ASAP Seattle, Meeting in conjunction with *AAC&U Network for Academic Renewal STEM Conference, Crossing Boundaries: Transforming STEM Education* (November 2015).
    - \* ASAP Alliance meeting, San Antonio, preceding AMS/MAA JMM (January 2015). (Responsible for budgeting)
    - \* ADVANCE ASAP Washington, D.C. Meeting in conjunction with CUR (Center for Undergraduate Research) (February 2014).
    - \* ADVANCE ASAP Kansas City Meeting in conjunction with *AAC&U/PKAL Next Generation STEM Learning: Investigate, Innovate, Inspire Network for Academic Renewal Conference* (November 2012).
- Visiting Scholar, Brigham Young University, Provo, UT (Spring 2011).
- Participated in the Planning, Assessment and Institutional Research Office’s Course-Imbedded Assessment Workshop (December 2006).
- Participated in the Project NExT three day workshop, Knoxville (August 2006). Courses taken:
  - Teaching Geometry: An Active Learning Approach

- Getting Tenure without Going Insane: Advice from those that have Gone Before
- Time and Stress Management: Balancing Research, Teaching, and Service in Creative Ways.
- Participated in the Project NExT three day workshop, Albuquerque, NM (August 2005).  
Courses taken:
  - Promoting Diversity in Mathematics
  - Teaching Students to Prove
  - Inquiry Based Learning for your Students
  - Advising in an Undergraduate Setting
  - Getting your Research off to a Good Start/Applying for Research and Education Grants
- Attend Office of Research Services Seminar Series.
- Participated in the year long Office of Research Services First Year Faculty Program (August 2004 - May 2005).
- Participated in a workshop on developing and implementing a web-based homework system as part of a Communicating Mathematics NSF grant at the University of Kentucky (December 2003).
- Participated in a training workshop at the University of Texas for their Emerging Scholars Program in Mathematics (August 1999).
- Participated in a cross-disciplinary college teaching seminar offered by the Learning Services Center at the University of Kentucky for first time teaching assistants (Fall 1998).

## Fellowships

- Supplementary academic fellowship at the University of Kentucky during academic year 1998 – 1999.

## Employment History

- August 2016 – present: Professor, University of Scranton
  - Spring 2017: MATH 384, Linear Optimization; MATH 221 Calculus II
  - Fall 2016: MATH 351, Linear Algebra; MATH 222, Calculus III; MATH 114, Calculus I
- August 2010 – August 2016: Associate Professor, University of Scranton
  - Spring 2016: MATH 341, Differential Equations; MATH 221, Calculus II
  - Fall 2015: MATH 351, Linear Algebra; MATH 222, Calculus III
  - Spring 2015: MATH 447, Real Analysis II; MATH 341, Differential Equations; MATH 388H Mathematical Modelling of Biological Systems

- Fall 2014: MATH 446, Real Analysis I; MATH 114, Calculus I (2 sections)
- Spring 2014: MATH 341, Differential Equations; MATH 106, Quantitative Methods I
- Fall 2013: MATH 446, Real Analysis I; MATH 114, Calculus I (2 sections)
- Spring 2013: MATH 361, Numerical Analysis; MATH 341, Differential Equations;
- Fall 2012: MATH 351, Linear Algebra; MATH 114, Calculus I (2 sections)
- Spring 2012: MATH 461, Complex Variables; MATH 107, Quantitative Methods II (2 sections)
- Fall 2011: MATH 351, Linear Algebra; MATH 106, Quantitative Methods I (2 sections)
- Fall 2010 – Spring 2011: Sabbatical
- August 2004 – August 2010: Assistant Professor, University of Scranton
  - Spring 2010: MATH 461: Complex Variables; MATH 107: Quantitative Methods II (2 sections)
  - Fall 2009: MATH 382, Differential Equations II (independent study), MATH 351, Linear Algebra; MATH 106, Quantitative Methods I (2 sections)
  - Spring 2009: MATH 489H, Elementary Geometric Function Theory (This was work for a Senior Honors Thesis), MATH 341, Differential Equations; MATH 106, Quantitative Methods I.
  - Fall 2008: Math 488H, Elementary Geometric Function Theory (This was for work on a Senior Honors Thesis); MATH 351, Linear Algebra; MATH 103, Pre-Calculus, 2 sections.
  - Spring 2008: MATH 341, Differential Equations; MATH 106, Quantitative Methods I.
  - Fall 2007: MATH 351, Linear Algebra; MATH 221, Calculus II; MATH 114, Calculus I.
  - Spring 2007: MATH 447, Real Analysis II (reader); MATH 341, Differential Equations; MATH 105, Fundamentals of Geometric Mathematics.
  - Fall 2006: MATH 446, Real Analysis I; MATH 222, Analysis III; MATH 114, Analysis I.
  - Spring 2006: MATH 447, Real Analysis II; MATH 105, Fundamentals of Geometric Mathematics, 2 sections.
  - Fall 2005: MATH 446, Real Analysis I; MATH 204, Special Topics in Statistics; MATH 106, Quantitative Methods I.
  - Spring 2005: MATH 108, Quantitative Methods III, 2 sections; MATH 107, Quantitative Methods II
  - Fall 2004: MATH 204, Special Topics in Statistics, 2 sections; MATH 108, Quantitative Methods III
- August 1998 – May 2004: Teaching Assistant, University of Kentucky Department of Mathematics.

**University and Community Service activities:**

The following activities are categorized roughly by contributions to the department, the University, and the community.

- Department

- Drafted Program Learning Outcomes for the B.A. and B.S. in mathematics (Fall 2015).
- Member, Biomathematics Tenure-Track Faculty Search Committee (2011/12)
- Chair, Secretary Search Committee (Fall 2011)
- Chair, Math Outreach Committee (formerly Recruitment Committee) (Fall 2007 – Spring 2012).
- Mentor in the Faculty Student Teaching Mentorship Program with MATH 106 (Spring 2008, Spring 2009, Fall 2009, Fall 2011, Spring 2014) and with MATH 107 (Spring 2012).
- Co-creator and co-organizer of the Math SPIRAL, Students and Professors InteRacting And Learning (Fall 2008 – Spring 2010).
  - \* Article about these activities co-authored with Jennifer Vasquez can be found at <https://maamathclub.pbworks.com/w/page/28608510/SPIRAL>
- Responsible for the math department web page, attended training for the Content Management System in Spring 2011 (Spring 2011 – present).
- Member, Part-time faculty hiring committee (Summer 2011).
- Wrote letters to nearly 40 students tailored to their interests encouraging a math/biomath major or a math minor (Fall 2007 – Spring 2010).
- Represented the department at the Major Fair each fall (except 2010 while on sabbatical) (Fall 2004 – Fall 2011, fair was discontinued).
  - \* Created and updated over the years PowerPoint presentations, brochures, and fliers for the Major Fairs containing details about our recent graduates, summer research opportunities, careers, and the department curriculum including information on a mathematics minor. These have been used at Open Houses and Preview Days as well.
- Brought a senior math major to the AMS/MAA national annual meeting where she presented a poster on research she has done with me as part of her Senior Honors Thesis (January 2009).
- Advisor for mathematics majors (Spring 2005 - present).
- Creator and organizer of the department Senior Send Off gathering to celebrate mathematics and biomathematics graduating seniors (Spring 2005 – Spring 2010).
- Departmental Curriculum Committee member (2007/08).
- Secretary at department meetings (Spring 2006 – Spring 2007).
- Served on textbook and syllabus review committees.
  - \* MATH 103, Pre-Calculus (2008/09).
  - \* MATH 107, 108, Quantitative Methods II and III (Spring 2005).
  - \* MATH 204, Special Topics in Statistics (Spring 2005).
- Committee member for CLEP credit recommendations, (Spring 2007).
- Participated in Preview Day (Spring 2007, 2008, 2009).

- Participated in Welcome Weekend (Fall 2005, 2006, 2007).
- University
  - Elected at-large member of the President Search Committee (2016/17 AY)
  - Elected at-large member of the Provost Search Committee (2013/14 AY, Fall 2016)
  - Participated in planning committee for an S-STEM NSF grant application (Spring 2016).
  - Member of Faculty Senate Ad-Hoc Committee on General Education Goals (2013/14 AY)
  - Co-Chair of Middle States Period Review Report subcommittee on Governance and Leadership, (Summer 2012 – Spring 2013).
  - Invited to write about my research for the Spring 2013 Academic Affairs magazine Ignite featuring women in STEM  
[issuu.com/theuniversityofscranton/docs/ignite\\_spring\\_2013](http://issuu.com/theuniversityofscranton/docs/ignite_spring_2013) (Spring 2013).
  - Faculty moderator of the Habitat for Humanity Campus Chapter (Fall 2006 - present).
  - Assisted with grant application and interview for a State Farm \$10,000 grant with Habitat for Humanity Student Chapter (Fall 2007).
  - University Advisory Committee on Civic Engagement and Academic Mission member (September 2008 – May 2010).
  - Examiner for the Masterworks I course as part of the Special Jesuit Liberal Arts (SJLA) Honors Program (Fall 2008).
  - Supported three Goldwater Scholar applicants (two in 2009, one in 2008).
  - Faculty Senate Alternate, Fall 2007 – Spring 2008, Fall 2011 – Spring 2012 (called upon for one meeting), Fall 2012 – Spring 2013 (called upon for one meeting), Fall 2013 – Spring 2014, Fall 2014 – Spring 2015 (called upon for three meetings).
  - Participated in the planning meetings held by the Office of Research Services (ORS) for a STEM (Science, Technology, Engineering, and Mathematics) majors grant proposal to increase the number of majors in these disciplines (January 2005).
  - Participated in a focus group project conducted for the Education for Justice Presidential Task Force (Fall 2004).
- External Community
  - MAA CUSAC (Committee for Undergraduate Student Activities and Chapters) nominated committee member (January 2016 – present).
  - MAA CUSAC Radical Dash Committee Chair for JMM/MathFest student events (August 2016 – present).
  - Invited as an external program reviewer for the Math Department at St. Francis University in Loretto, PA. (November 2015 – January 2016).
  - MAA CUSAC (Committee for Undergraduate Student Activities and Chapters) invited organizing subcommittee member for the Radical DASH student activity (January 2015 – present)

- \* Inaugural event at national MAA meeting MathFest, August 5 – 8, 2015, in Washington, D.C.
- \* Second event scheduled for national JMM meeting, January 5 – 9, 2016, in Seattle, WA.
- Professional talk *Peer Mentoring Alliances: Supporting Female STEM Faculty at Primarily Undergraduate Institutions*, at the national American Mathematical Society (AMS) and Mathematical Association of America (MAA) joint mathematics meetings (JMM), San Antonio (January 2015).
- Organizer of the Integration Bee (each Spring 2011 – present)
- Professional talk *The Evolution of an Integration Bee at the University of Scranton*, at the national AMS/MAA JMM, Baltimore (January 2014).
- Horizontal (Mid-career, all disciplines) Network Leader for the NSF ADVANCE ASAP grant (Fall 2011 – Spring 2016).
  - \* Led mid-career breakout session on ways of maintaining networks past the conclusion of the grant, Seattle (November 2016).
  - \* Led mid-career breakout session based on the “What works for women at work” workshop by The Center for Worklife Law at UC Hastings College of Law, Washington, D.C. meeting (February 2014).
  - \* Led mid-career breakout session to discuss why participants wanted to be a part of the grant and challenges they have encountered to throughout their careers and to brainstorm on future meeting events, Kansas City meeting (November 2012).
  - \* Participated in a planning meeting at John Carroll University (January 2012).
- Math Alliance leader for the NSF ADVANCE ASAP grant (Spring 2012 – Spring 2016).
- Gave undergraduate research talks on minimal surfaces at Kings College and Moravian College (Fall 2015, Spring 2016).
- Proofreader for *Complex Analysis: A Modern First Course in Function Theory* (2014 – 2015).
- Assisted with writing a grant proposal for the NSF ADVANCE ASAP grant (Award #1107034, \$598,611), (Fall 2010 – Spring 2011).
- Assisted with grant application and interview for a State Farm \$10,000 grant with Habitat for Humanity Student Chapter (Fall 2007).
- Chaperoned and worked with the Habitat for Humanity Campus Chapter spring break service trip to North Carolina (April 2006).
- Co-organizer of the Integration Bee (Spring 2008 – Spring 2010).
- Co-organizer of the *One and Several Complex Variables Conference* held at the University of Kentucky in May 2008 (Fall 2007 – Spring 2008).
- Co-PI on a \$14,600 NSF grant to support the *One and Several Complex Variables Conference* to be held at the University of Kentucky in May 2008 (Fall 2007 – Spring 2008).
- Peer reviewer for *Mathematical Reviews* (Fall 2009 – present).

- Peer referee for *Journal of Mathematical Analysis and Applications* (Spring 2013, Fall 2015), *Abstract and Applied Analysis* (2014), *Bulletin of the Malaysian Mathematical Sciences Society* (Fall 2013), *Rocky Mountain Journal of Mathematics* (2012/13/14), *Czechoslovak Mathematical Journal* (Spring 2010).
- Chaired an AMS session on Complex Variables at the national American Mathematical Society (AMS) and MAA Joint Mathematics Meeting (JMM), New Orleans (January 2011).
- Chaired an AMS session on Complex Variables at the national AMS/MAA JMM, San Antonio (January 2006).
- Judge of a graduate student poster session at the Canadian Mathematical Society and Mathematics of Information Technology and Complex Systems joint annual conference, Winnipeg (May 2007).
- Judge of an undergraduate student poster session at the annual national AMS/MAA JMM, New Orleans (January, 2007).
- Volunteer at Project NExT booth at national AMS/MAA JMM, San Antonio, (January 2006).

### **Other Professional Activities**

- During Summer 2002 and Summer 2003, I was responsible for the recruitment and acceptance of incoming freshmen to the MathExcel program at the University of Kentucky.

### **Professional Organizations**

- Mathematical Association of America