

## Undergraduate Research Student Achievements David C. Sutherland

### Student Publications:

- Dane Dormio, "Analysis of the Subtangent," *Pi Mu Epsilon Journal*, Vol. 11, No. 9 (2003), 481-486
- David Warren, "Partitions and Young's Lattices," *Pi Mu Epsilon Journal*, Vol. 11, No. 1(1999), 39-44
- Jennifer Powell, "Writing HyperText Laboratory Exercises for Mathematics Classes," *Primus*, Vol. VII, No. 3(1997), 277-288
- Lars Seme, "Automorphisms of Hasse Subgroup Diagrams," *Pi Mu Epsilon Journal*, Vol. 10, No. 3(1995), 215-220
- Scott Wagner, "Group Generators and Subgroup Lattices," *Pi Mu Epsilon Journal*, Vol. 10, No. 2(1995), 106-111
- Carissa Hurst, "Young's Lattices," *Pi Mu Epsilon Journal*, Vol. 10, No. 2(1995), 92-95.
- Jae Lee, "Subgroups of Finite Abelian Groups," *Journal of Undergraduate Mathematics*, Vol. 24, No. 2(1992), 51-57
- Amy Pinegar, "Inversions and Adjacent Transpositions," *Pi Mu Epsilon Journal*, Vol. 9, No. 5(1991), 286-293
- Melanie Butt, "Automorphism Groups of Hasse Subgroup Lattices for Groups of Low Order," *Pi Mu Epsilon Journal*, Vol. 9, No. 1(1989), 2-8

### National Student Awards:

- Scott Wagner - 1995 First Prize, Pi Mu Epsilon Andree National Paper Awards
- Lars Seme - 1995 Second Prize (tie), Pi Mu Epsilon Andree National Paper Awards
- Amy Pinegar - 1991 First Prize, Pi Mu Epsilon Andree National Paper Awards
- Melanie Butt - 1989 Second Prize, Pi Mu Epsilon Andree National Paper Awards

### Student Almost Publications:

- Ben Goodwin, "Graphs of Automorphism Groups of the Bond Lattices of Trees and Forests," accepted by PMEJ with revisions which were never made, 2001
- Dawn Woodard, "Automorphism Groups of the Hasse Subgroup Diagrams for Cyclic Groups with Order Divisible by Exactly One or Two Primes," accepted by PMEJ with revisions which were never made, 1993

### Student Grants

- Jac Cole - SILO [Science Information Liaison Office] SURF [SILO Undergraduate Research Fellowship] Grant, \$1995, 1996-97
- Wade Satterfield - SILO [Science Information Liaison Office] SURF [SILO Undergraduate Research Fellowship] Grant, \$2680, 1994-95

### Student Projects and Presentations:

Calvin Cochran – Hendrix College, mathematics major, 2012  
"Shuffle Posets" (in progress)

Lauren Irby – Hendrix College, mathematics major, 2012  
"Prufer Codes and Trees" (in progress)

Luke Kressin – Hendrix College, mathematics major, graduated 2012

“The Properties of Border Strips on Ferrers Diagrams”

- National Pi Mu Epsilon Conference at MathFest – Madison, Wisconsin 2012
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee 2012

Tony Schraml – Hendrix College, mathematics major, graduated 2007

“Shuffles of Partially Ordered Sets”

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Sewanee, Tennessee 2007

Jeremy Crosmer – Hendrix College, mathematics and music major, 2007

“Counting Mazes”

Erin Doyle – Hendrix College, mathematics and art major, graduated 2004

“The Mathematical History of Perspective in Art”

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee 2004

Tim McKuin – Hendrix College, mathematics and art major, 2004

“Baxter Permutations”

Dane Dormio -- Hendrix College, mathematics and physics major, graduated 2003

"Analysis of the Subtangent"

- Pi Mu Epsilon, Arkansas Beta Chapter – Conway, Arkansas, 2000
- Oklahoma-Arkansas Section MAA Meeting – Oklahoma City, Oklahoma, 2001
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Conway, Arkansas, 2001
- National Conference on Undergraduate Research – Lexington, Kentucky 2001

Greg Webb – Hendrix College, mathematics and physics majors, graduated 2002

“Sum Graphs”

- Oklahoma-Arkansas Section MAA Meeting – Arkadelphia, Arkansas 2002

Sara Pennington – Hendrix College, mathematics major, graduated 2001

“Tournament Digraphs and Reversing Numbers of Acyclic Digraphs”

- Oklahoma-Arkansas Section MAA Meeting – Oklahoma City, Oklahoma, 2001

Daniel Liu -- Hendrix College, chemistry major, graduated 2001

"Graphical Analyses of Autonomous First-Order Polynomial Differential Equations"

- Pi Mu Epsilon, Arkansas Beta Chapter – Conway, Arkansas 2000

Ben Goodwin – Hendrix College, mathematics major and Rhodes Scholar, graduated 2001

"Graphs of Automorphism Groups of the Bond Lattices of Trees and Forests," 2000

- Oklahoma-Arkansas Section MAA Meeting – Russelleville, Arkansas, 2000
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Sewanee, Tennessee, 2000
- National Conference on Undergraduate Research – Bozeman, Montana, 2000

“Bond Lattices,” 1999

- Oklahoma-Arkansas Section MAA Meeting – Little Rock, Arkansas, 1999
- National Conference on Undergraduate Research – Rochester, New York, 1999
- National Pi Mu Epsilon Conference – Providence, Rhode Island, 1999

Ben Andrews - Hendrix College, mathematics & computer science major, graduated 2001

“Perfect Graphs,” 1999

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Sewanee, Tennessee, 1999
- National Conference on Undergraduate Research – Rochester, New York, 1999

Jeff Welch - Hendrix College, mathematics major, graduated 1999

“An Introduction to Genetic Algorithms,” 1999

- Oklahoma-Arkansas Section MAA Meeting – Bethany, Oklahoma, 1999
- National Conference on Undergraduate Research – Rochester, New York, 1999

Chris Atwood - Hendrix College, mathematics major, graduated 1999  
“Probability Analysis of *The Book of Changes*,” 1999

David Warren - Hendrix College, mathematics major, graduated 1998  
“Conjugates and Three-Dimensional Young’s Lattices,” 1998

- Oklahoma-Arkansas Section MAA Meeting – Little Rock, Arkansas, 1998
- National Conference on Undergraduate Research – Salisbury, Maryland, 1998

“Ferrer’s Diagrams and Their Young’s Lattices,” 1997

- Oklahoma-Arkansas Section MAA Meeting - Edmond, Oklahoma, 1997
- National Conference on Undergraduate Research – Austin, Texas, 1997

Shiloh Harder - Hendrix College, mathematics education major, graduated 1998  
“Bond Lattices,” 1998

- National Conference on Undergraduate Research – Salisbury, Maryland, 1998

Jac Cole - Hendrix College, mathematics major, graduated 1997

“Semigroups Determined by the Ranks of G-Graphs,” 1997

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Conway, Arkansas, 1997
- Oklahoma-Arkansas Section MAA Meeting – Edmond, Oklahoma, 1997
- National Conference on Undergraduate Research – Austin, Texas, 1997

“Graphs of Groups and Subgroups,” 1996

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1996
- Oklahoma-Arkansas Section MAA Meeting – Fort Smith, Arkansas, 1996
- National Pi Mu Epsilon Conference - Seattle, Washington, 1996

“An Introduction to Elliptical Curves,” 1995

- Hendrix-Rhodes-Sewanee Mathematics Symposium - Sewanee, Tennessee, 1995
- Oklahoma-Arkansas Section MAA Meeting – Weatherford, Oklahoma, 1995
- Hendrix - Toad Suck Science Symposium – Conway, Arkansas, 1995

David Lee – Hendrix College, mathematics major, graduated 1997

“Perfect Graphs,” 1997

Jennifer Powell - Hendrix College, mathematics & biology major, graduated 1997

“Writing Hypertext Laboratory Exercises for Mathematics Classes,” 1995-96

- National Conference on Undergraduate Research – Asheville, North Carolina, 1996
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1996
- Oklahoma-Arkansas Section MAA Meeting – Fort Smith, Arkansas, 1996
- The Geometry Center – Minneapolis, Minnesota, 1995

Wade Satterfield - Hendrix College, mathematics major, graduated 1996

“Explorations of Graceful Graphs,” 1995-96

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1996
- Oklahoma-Arkansas Section MAA Meeting – Fort Smith, Arkansas, 1996

“Programming With Hasse Subgroup Diagrams,” 1994-95

- Oklahoma-Arkansas Section MAA Meeting – Weatherford, Oklahoma, 1995
- National Conference on Undergraduate Research – Schenectady, New York, 1995
- SILO Undergraduate Research Fellowship Presentations – Conway, Arkansas, 1995

Lars Seme - Hendrix College, mathematics & physics major, graduated 1995

“Automorphism Groups of Hasse Subgroup Diagrams,” 1994

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Sewanee, Tennessee, 1995
- Oklahoma-Arkansas Section MAA Meeting – Weatherford, Oklahoma, 1995

Carissa Hurst - Hendrix College, mathematics major, graduated 1994

“Young’s Lattices,” 1994

“Tableaux and Schensted’s Algorithm,” 1993-94

- National Conference on Undergraduate Research – Lansing, Michigan, 1994

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1994

Scott Wagner - Hendrix College, mathematics major, graduated 1994

“Group Generators and Subgroup Lattices,” 1993-94

- Rose-Hulman Undergraduate Mathematics Conference – Terre Haute, Indiana, 1994

Clint Edwards - Hendrix College, chemistry major, graduated 1996

“Hexagonal Prisms in a Beehive,” 1993

- Hendrix-Rhodes-Sewanee Mathematics Symposium – Conway, Arkansas, 1993

Dawn Woodard - MTSU, mathematics major

“Automorphism Groups of the Hasse Subgroup Diagrams for Cyclic Groups with Order Divisible by Exactly One or Two Primes,” 1992-93

- MTSU Tom Vickrey Mathematics Project Award, First Place, 1992
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1992

Jae Lee - MTSU, mathematics major

“Subgroups of Finite Abelian Groups,” 1991-92

- MTSU Tom Vickrey Mathematics Project Award, First Place, 1991
- National Pi Mu Epsilon Conference – Brono, Maine, 1991
- Tennessee Academy of Science – Murfreesboro, Tennessee, 1991
- Hendrix-Rhodes-Sewanee Mathematics Symposium – Memphis, Tennessee, 1992

Amy Pinegar - MTSU, mathematics education major

“Inversions and Adjacent Transpositions,” 1990-91

- MTSU Tom Vickrey Mathematics Project Award, First Place, 1990
- National Pi Mu Epsilon Conference – Columbus, Ohio, 1990

Franklin Mason - MTSU, mathematics major

“Coxeter Groups and Dynkin Diagrams,” 1989-90

- MTSU Tom Vickrey Mathematics Project Award, Second Place, 1989
- Southeast Section Mathematical Association of America – Knoxville, Tennessee, 1989

Melanie Butt - MTSU, mathematics education major

“Automorphism Groups of Hasse Subgroup Lattices for Groups of Low Order,” 1988-89

- MTSU Tom Vickrey Mathematics Project Award, First Place, 1989
- National Conference on Undergraduate Research – Asheville, North Carolina, 1988
- Southeast Section Mathematical Association of America – Knoxville, Tennessee, 1989
- National Pi Mu Epsilon Conference – Boulder, Colorado, 1989