John W. Snow Associate Professor of Mathematics Department of Mathematics and Statistics College of Arts and Sciences

Degrees Earned

Ph.D. in Mathematics, Vanderbilt University, 1998 M.A. in Mathematics, Vanderbilt University, 1996 B.A. in Mathematics, Concordia University, 1994

Professional Licensure and Certifications Peer-Review Publications and Artistic Performances/Exhibitions Articles

- Composition series for Maltsev algebras. In preparation (copies available).
- Reflexive relations on algebras with Boolean lattice reducts. Submitted.
- Interpolation in small lattices. (With E. Martin). Submitted.
- **Primitive Positive Clones of Groupoids**. *Algebra Universalis*. To Appear.
- **OPC Lattices and Congruence Heredity**. *Algebra Universalis*. To Appear.
- Almost distributive sublattices and Congruence Heredity. *Algebra Universalis* . 57:3-14, 2007.
- A genetic algorithm for drawing ordered sets . (With B. Loft). Texas College Mathematics Journal. 3:10-26, 2006.
- Subdirect Products of Hereditary Congruence Lattices . *Algebra Universalis* . 54:65-71, 2005.
- Relations Compatible with Near Unanimity Operations . *Algebra Universalis* . 52:279-288, 2004.
- Every Finite lattice in V(M 3) is representable. Algebra Universalis. 50:75-81, 2003.
- Generating Primitive Positive Clones . Algebra Universalis . 44:169-185, 2000.
- A Constructive Approach to the Finite Congruence Lattice Representation Problem. *Algebra Universalis* . 43:279-293, 2000.

Books Chapters Proceedings

• Congruence modular varieties: commutator theory and its uses . (With R. McKenzie). Structural Theory of Automata, Semigroups and Universal Algebra, proceedings of the NATO ASI, Montreal, 2003.

Artistic Performances

Artistic Exhibitions

Research Monographs and Technical Reports

Funded External Grants

Peer-Review Presentations/Posters

SAM HOUSTON STATE UNIVERSITY

• Workshop on Universal Algebra and the Constraint Satisfaction Problem

Vanderbilt University, Nashville, TN

June 17-20, 2007

• International Conference on Order, Algebra, and Logics

Vanderbilt University, Nashville, TN

June 12-16, 2007

Talk Presented: Primitive positive clones of groupoids

• Department Colloquium

Sam Houston State University, Huntsville, TX

April 18, 2007

Talk Presented: Interpolation in Universal Algebra

Special Session on Universal Algebra and Order

AMS/MAA Joint Meetings,

New Orleans, LA

January 5-8, 2007

Talk Presented: Characterizing lattice terms

Session Organizer

• Texas Undergraduate Mathematics Conference

Sam Houston State University, Huntsville, TX

October 21, 2006

Talk Presented: Physics animations with constraints

Colloquium

SUNY New Paltz

New Paltz, NY

July 21, 2006

Talk Presented: Interpolation and congruence lattices

Seminar

Bard College,

Annondale on the Hudson, NY

July 19, 2006

Talk Presented: Constrained Dynamics

• Special Session on Universal Algebra and Order

AMS/MAA Joint Meetings,

San Antonio, TX

January 12-15, 2006

Talk Presented: M4 and congruence heredity

Session Organizer

Special Session on Universal Algebra and Order

AMS section meeting,

University of Nebraska, Lincoln

October 21-23, 2005

Talk Presented: Almost distributive sublattices and congruence heredity Session Organizer

• Texas Undergraduate Mathematics Conference

Sam Houston State University, Huntsville, TX

October 15, 2005

Talk Presented: The Hough Transform

• 35th Biannual National KME Conference

Schreiner University, Kerrville, TX

April 15, 2005

Keynote Address: A Genetic Algorithm for Drawing Ordered Sets

Universal Algebra and Logic Seminar

Vanderbilt University, Nashville, TN

March 16, 2005

Talk Presented: Hereditary Congruence Lattices

• Department Colloquium

Sam Houston State University, Huntsville, TX

March 9, 2005

Talk Presented: Two Element Algebras

• Special Section on Universal Algebra and Lattice Theory

AMS section meeting,

Vanderbilt University, Nashville, TN

October 16-17, 2004

Talk Presented: Relations on Algebras

Algebras, Lattices, Varieties, A Conference in Honor of Walter Taylor

University of Colorado, Boulder, Colorado

August 15-18, 2004

CONCORDIA UNIVERSITY, NEBRASKA

Special Section on Algebras, Lattices, and Varieties

AMS section meeting,

University of Colorado, Boulder, Colorado

October 2-4, 2003

Talk Presented: Congruence Lattices of Finite Algebras

NATO Advanced Studies Institute on Structural Theory of Automata

Semigroups, and Universal Algebra

University of Montreal, Quebec

July 7-18, 2003

Groups, Topology, and Semigroups Seminar

University of Nebraska, Lincoln, Nebraska

April 16, 2002

Talk presented: Constructing Congruence Lattices of Finite Algebras

• Groups, Topology, and Semigroups Seminar

University of Nebraska, Lincoln, Nebraska

January 29, 2002

Talk presented: Algebras, Relations, Compatibility, and Majority

• Third Annual Regional Workshop in the Mathematical Sciences

University of Nebraska, Lincoln, Nebraska

October, 2000

Talk presented: Consequences of Algebraic Identities

SCHREINER UNIVERSITY

First Annual Thomasina Coverly Memorial Workshop on Algebra and Order

Vanderbilt University, Nashville, Tennessee May 24-27, 2000

• Workshop on Universal Algebra

Vanderbilt University, Nashville, Tennessee July 12-16, 1999

Talk presented: Congruence Lattices of Finite Algebras

• Twenty-Third Holiday Mathematics Symposium

New Mexico State University, Las Cruces, New Mexico January 8-12, 1999

VANDERBILT UNIVERSITY

Special Session on Semigroups, Algorithms, and Universal Algebra

AMS section meeting
University of Louisville, Kentucky
March 20-21, 1998

Talk presented: A New Look at Maltsev Conditions

NATO Advanced Institute on Algebraic Model Theory

The Fields Institute, Toronto, Canada August 19-30, 1996

• International Conference on Modern Algebra and its Applications

Vanderbilt University, Nashville, Tennessee May 14-18, 1996

Work or Professional Experiences

SAM HOUSTON STATE UNIVERSITY, Huntsville, Texas

Associate Professor of Mathematics (with tenure)

Teach, research, committee work August 2007 - Present

Assistant Professor of Mathematics

Teach, research, committee work

August 2004 - August 2007

CONCORDIA UNIVERSITY, Seward, Nebraska

Assistant Professor of Mathematics

Teach 24+ hours per year, advising, committee work June 2000 - June 2004

SCHREINER UNIVERSITY, Kerrville, Texas

Assistant Professor of Mathematics

Teach 24+ hours per year, advising, committee work August 1998 - May 2000

VANDERBILT UNIVERSITY, Nashville, Tennessee

Research Assistant

Independent research in Universal Algebra Summer 1997, Summer 1998

Graduate Teaching Assistant

Teach one to two courses per semester, research August 1995 - May 1998 Instructor (Differential Equations) Summer 1996

UNIVERSITY OF NEBRASKA, Lincoln, Nebraska

The Institute for Visual Information Processing
Research on shape recognition algorithms in NSF sponsored REU
Summer 1993

Honors and Awards

BJARNI JÓNSSON PRIZE FOR RESEARCH, Vanderbilt, 1998 B.F. BRYANT PRIZE FOR EXCELLENCE IN TEACHING, Vanderbilt, 1998

Other Competencies