Curriculum Vitae

JILL K. SINGER

Department of Earth Sciences & Science Education and Office of Undergraduate Research
SUNY – Buffalo State, 1300 Elmwood Avenue, Buffalo, New York 14222
Telephone: (716) 878-4724; Fax: (716) 878-4524
Email: singerjk@buffalostate.edu
Faculty website: faculty.buffalostate.edu/singerjk
Undergraduate research website: http://undergraduateresearch.buffalostate.edu/

PROFESSIONAL PREPARATION

1987 Ph.D. in Geology, Rice University
Dissertation Title: *Terrigenous, Biogenic, and Volcaniclastic Sedimentation Patterns of the Bransfield Strait and Bays of the Northern Antarctic Peninsula*

1983 M.A. in Geology, Rice University
Thesis Title: *A Study in the Hydrodynamics of Sediment Transport*

1979 B.A. (Summa Cum Laude) in Geology, SUNY-College at Buffalo

SCHOLARSHIPS AND AWARDS

2008 SUNY Chancellor's Award for Scholarship and Creative Activities

2007 Buffalo State President's Award for Excellence as an Undergraduate Research Mentor (*inaugural year*)

2003-2006 National Association of Geoscience Teachers, Distinguished Lecturer

2003 The Research Foundation of SUNY at Buffalo State College, Recognition Award

2003 Council on Undergraduate Research, Volunteer of the Year

1997 Erie County Environmental Management Council, environmental service award

1986 Houston Geological Society, Outstanding Graduate Award, Department of Geology and Geophysics, Rice University

1984-1986 Academic Reward for College Scientists Scholarship, Rice University

1983 L.C. Gibbon Award for Outstanding Teaching of Undergraduates, Department of Geology and Geophysics, Rice University

1979 Robert A. Welch Fellow, Department of Geology and Geophysics, Rice University

APPOINTMENTS

SUNY

12/2013 – 1/2014 Research Foundation Presidential Fellow

2013 – present STEM Undergraduate Research Steering Committee

Buffalo State

Office of Undergraduate Research

2003 – present Director

1999 – 2003 Acting Director

Department of Earth Sciences and Science Education

1993 – 1998 Chair

1998 – present Professor

1992 – 1998 Associate Professor

1986 – 1992 Assistant Professor

Courses taught: GES101, Introductory Geology; GES111, Oceanography[1]; GES223, Environmental Earth Science[1]; GES300, Sedimentology[2]; GES 306, Sedimentology and Stratigraphy[2] (new course for Fall 2015); GES310, Great Lakes Environmental Issues[2]; GES314, Geological Oceanography[2]; GES315, Marine Environments[2]; SCI231, Pollution/Environment/Society; ENS 100, The Urban Environment[2]; ENS300, Environmental Studies[2]**;** HON102, Environmental Science (focusing on water issues)[2]

(Note: [1] substantially revised; [2] new course developed to meet student and program needs)

National Science Foundation, Arlington, VA

2007 – 2009 Program Director, Division of Undergraduate Education

2001 – 2003 Program Director, Division of Undergraduate Education

[On academic leave from Buffalo State through Intergovernmental Personnel Act (IPA) Assignment]

Rice University, Houston, TX

1979 – 1986 Graduate Fellow, Department of Geology and Geophysics

Lunar and Planetary Institute, Houston, TX

1979 Undergraduate Research Intern, Comparative study of lunar and planetary impact craters

FIELD EXPERIENCES

1989 – present *R/V Seiche, R/V Seneca, R/V Aquarius, R/V Hutchinson,* and Boston Whalers
Sediment transport dynamics, mapping surveys (side-scan sonar, remotely operated vehicles), hydrodynamics (Acoustic Doppler Current Profilers) of the Buffalo River

1994, 1997 *R/V William and Hobart Smith Explorer*
Observations (using geophysical techniques and remotely operated vehicle) in Seneca Lake, New York

1989, 1990 Yellowstone Lake, Yellowstone National Park, Wyoming
Impacts of 1988 fires on ecology of Yellowstone Lake, water column sampling and sediment coring

1988 *R/V William and Hobart Smith Explorer*
Water Column Structure and Lakefloor Study of Lake Ontario

1981 – 1985 United States Antarctic Research Program and the Rice University Marine Geology Program, *USCGC Glacier*, Marine Geologic and Geophysical Surveys of the Continental Margin of Antarctica

Amundsen and Bellingshausen Seas, 1981

Bransfield Strait and Antarctic Peninsula Bays, 1982

Ross Sea and Bay of Whales, 1983

Bransfield Strait and South Orkney Plateau, 1985

LEADERSHIP (ELECTED and/or APPOINTED)

Council on Undergraduate Research (CUR)
Emeritus Councilor, Undergraduate Research Directors/Geosciences, 2004 – present
Executive Board Member, 1998 – 2005
Immediate Past President, 2004 – 2005
President, 2003 – 2004
President-elect, 2002 – 2003
Geoscience Division Chair, 1998 – 2002
Geoscience Division Councilor, 1992 – 2004

National Conferences on Undergraduate Research (NCUR)
Board of Governors, 2004 – 2007

National Association of Geoscience Teachers (NAGT)
Executive Committee, Councilor-at-Large, 2005 – 2008 (*resigned from board in 2007 while at the NSF*)

Digital Library for Earth Systems Education (DLESE)
Steering Committee member, 2003 – 2006

United States Environmental Protection Agency (USEPA)
Assessment and Remediation of Contaminated Sediments Program (ARCS)
Risk Analysis and Modeling Work Group, 1991 – 1993
Public Communication Work Group, 1990 – 1991

PROFESSIONAL/INTEGRATIVE ACTIVITIES

National Science Foundation, Committee of Visitors (COV)
Programs administered by the Geoscience Directorate (OEDG, Geoscience Education), 2007, 2010
Programs administered by the Division of Undergraduate Education (ILI, UFE, CCLI), 1997, 2000

National Science Foundation, Reviewer (*all listed are panels held at NSF or off-site***)**
IUSE (Improving Undergraduate STEM Education), 2015
Urban Sustainability Research Networks, 2014
Large Facility (IRIS/SAGE and UNAVCO/GAGE), 2012
IRES (International Research in Engineering and Science), 2010, 2011
TUES (Transforming Undergraduate Education in STEM): Type 2, 2011, 2012; Type 1, 2010, 2011
SMP (Science Master's Program), 2010
CCE (Climate Change Education), 2010
REU (Research Experiences for Undergraduates), 2003, 2010, 2011, 2012
Robert Noyce Teacher Scholarship Program, 2010, 2011
S-STEM (Scholarships in Science, Technology, Engineering, and Mathematics), 2010, 2013
PIRE (Partnerships in International Research and Education), 2006, 2007

STEP (STEM Talent Expansion Program), 2005, 2006

ATE (Advanced Technological Education), 2003, 2004, 2006, 2009, 2010, 2011, 2012, 2013, 2014

CAREER, 2003, 2004

Geoscience Education, 2002, 2006

NSDL (National STEM Digital Library), 2003, 2004, 2005

CCLI (Course, Curriculum, and Laboratory Improvement), 1999, 2000, 2005, 2006, 2007

CCD (Course and Curriculum Development), 1999, 1997

ILI (Instrumentation and Laboratory Improvement), 1990, 1991, 1994, 1995

National Science Foundation, Site Visits

Spatial Intelligence and Learning Center (SILC), Science of Learning Center, Temple University, Philadelphia, PA, 2010

Coastal Margin Observation and Prediction (CMOP), Science and Technology Center, Oregon Health and Science University, Hillsboro, OR, 2010

Cutting Edge Embedded Assessment Project

Research project to pilot the use of embedded assessments in classrooms across the US, 2011 - present

Penrose Conference

Geological Society of America, Google Earth: Visualizing the Possibilities for Geoscience Education and Research, Google Headquarters, Mountain View, CA, 2011

Department and Institutional Reviews

University of Northern Colorado, Department of Earth Sciences, Greeley, CO, 2011

Bates College, Department of Geology, Lewiston, ME, 2011

Winona State University, Department of Geology, Winona, MN, 2007

SUNY-Geneseo, Department of Geology, Geneseo, NY, 2006

College of William and Mary, Commission on Colleges SACS (Southern Association of Colleges Accreditation), QEP (Quality Enhancement Plan), Williamsburg, VA, 2006

Central Michigan University, Department of Geology, Mount Pleasant, MI, 2005

Hope College, Department of Geology and Environmental Science, Holland, MI, 2004

Susquehanna University, Middle States Accreditation Team, Selinsgrove, PA, 2004

University of Wisconsin-Eau Claire, Department of Geology, Eau Clair, WI, 2003

Campus Visits – Faculty Development/Undergraduate Research Programs

Fort Hays State University, Fort Hays, KS, 2012

California State University Channel Islands, Camarillo, CA; organized by CSU Office of the Chancellor, hosted by CSU-Channel Islands and attended by 22 CSU campuses, 2011

Eastern Michigan University, Ypsilanti, MI, 2010

University of West Florida, Pensacola, FL, 2010

Siena College, Loudonville, NY, 2010

**All included talks/plenary presentations and meetings with administrators and faculty*

Advisory Committees for National Science Foundation Projects

Institute for Broadening Participation (IBP), STEM Program Specialist, 2014 – present

Monterey Peninsula College, MATE Center (Marine Technology Education), Monterey, CA, 2003 – present

Affinity Research Group (ARG), CCLI National Dissemination, University of Texas at El Paso, TX, 2006 – 2007

Digital Oceanography Resources (Dr. William Prothero), CCLI Educational Matieral Development, Univeristy of California, Santa Barbara, CA, 2004 – 2006

Sandstone Tutoriday (Dr. Kitty Milliken), CCLI Educational Materials Development, University of Texas-Austin, TX, 2004 – 2006

Other Advisory Committees

Buffalo River Remedial Advisory Committee, 2003 – present; 1990 – 2001; Co-chair, 1990 – 1995

Buffalo River Remedial Action Plan Technical Subcommittee, 1988 – 1989

New York State Department of Transportation Upstate Advisory Committee for ISTEA (Intermodal Surface Transportation Efficiency Act) Enhancement Program, 1993 – 1996

Riverkeepers (formerly Friends of the Buffalo Niagara Rivers), board member, 1995 – 2001, 2002 – 2006; Treasurer, 1996 – 1998

Erie County Environmental Education Institute Board, 1992 – 1998; Treasurer, 1993 – 1996

Erie County Environmental Management Council, 1990 – 1996; Chair, 1992 – 1996

Erie County Radon Program Advisory Council, 1993 – 1994

Erie County Pollution Prevention Advisory Committee; served on the Waste Reduction Innovative Technologies Evaluation Program Subcommittee, 1990 – 1993

United States Coast Guard Contingency Plan, Niagara Geographic Sub-Committee, 1993 – 1994

Erie County International Environmental Dredging Symposium Steering Committee, 1991 – 1992

Buffalo River Environmental Research Association, 1990 – 1993

Erie County Earth Day 1990 Coalition, 1989 – 1990

New York State Department of Environmental Conservation Administrative Law Hearings, 1988

PRESENTATIONS AND WORKSHOPS/INSTITUTES

Council on Undergraduate Research

Institutionalizing Undergraduate Research, co-organizer and presenter for workshops held between 2004 and 2009; facilitator and presenter for workshops held between 1998 and 2003 (3 days each)

Stetson University, Deland, FL, 2011

Concordia College, Morehead, MN, 2009

Hope College, Holland, MI, 2008

Buffalo State College, Buffalo, NY, 2008

Lewis and Clark College, Portland, OR, 2008

Cal State Northridge, Northridge, CA, 2008

University of Texas at El Paso, El Paso, TX, 2008

Harvey Mudd College, Claremont, CA, 2006

Harvey Mudd College, Claremont, CA, 2005

The College of New Jersey, Ewing, NJ, 2004

The College of New Jersey, Ewing, NJ, 2003

The College of New Jersey, Ewing, NJ, 2002

Coastal Carolina University, Conway, SC, 2001

Coastal Carolina University, Conway, SC, 2000

University of Wisconsin at La Crosse, La Crosse, WI, 1999

University of Wisconsin at La Crosse, La Crosse, WI, 1998

Advisory committee member, Advanced Technological Education (ATE), NSF Award #0603119; 2-year planning grant, 2007 – 2008

National Conferences

2014 - Washington, D.C.

Workshop presenter: Community Building and Adoption of an Evidence-based Teaching and Learning Model for Evaluating Undergraduate Research and NSF-IUSE Program: Supporting Improvements in Undergraduate STEM Education

2012 - The College of New Jersey, Ewing, NJ

Workshop presenter: The Impact of Undergraduate Research: Buffalo State's Evaluation Program (with Bridget Zimmerman, Buffalo State) and Resources to Transform Undergraduate Geoscience Education: A New Faculty Development Opportunity

2010 - Weber State University, Ogden, UT

Workshop presenter: Serving as a Rotator at the NSF and Evaluating Undergraduate Research: Measuring Student Outcomes

2008 - College of Saint Benedict, St Joseph, MN

Workshop presenter: National Science Foundation, Geoscience Programs that Support Undergraduate Research

2006 - DePauw University, Greencastle, IN

Workshop presenter: Integrating Research into the Geoscience Curriculum, A Roundtable Discussion for Women: Transcending Barriers to Leadership, So You're Thinking About Establishing a Campus Undergraduate Research Program, and The CCLI (Course, Curriculum and Laboratory Improvement Program): Changes and Suggestions for Preparing Proposals

2002 - Connecticut College, New London, CT

Plenary: The NSF CCLI Program (with Duncan McBride)

Workshop presenter: Serving as an NSF Rotator; Funding Opportunities in the Geosciences; and Proposal Writing in the Geosciences

2000 - The College of Wooster, Wooster, OH

Workshop presenter: Renovating/Building Geological and Environmental Field Stations and Funding Opportunities in the Geosciences

1998 - Occidental College, Los Angeles, CA

Workshop presenter: Opportunities in Environmental Science Research and Research and the Non-Traditional Student

1996 - North Carolina Central University, Durham, NC
Workshop presenter: Establishing Geology Internships with the Business Community and Government

1994 - Bates College, Lewiston, ME
Workshop presenter: Mentoring and the Peer Assistance Networks of CUR

CUR/April Dialogues
2005 - Sheraton National Hotel, Arlington, VA
Workshop presenter: The NCUR/Lancy Initiative and Mock Panel Review for the NSF-CCLI Program

2003 - George Mason University, Fairfax, VA
Panel member: Overview of the NSF Proposal Review Process

1999 - Arlington, VA
Panel member: NSF's Course, Curriculum, and Laboratory Improvement (CCLI) Program

1995 - Washington D.C.
Workshop presenter: How To Develop Undergraduate Research in the Geological Sciences

Facilitator Training, Co-leader
DePauw University, Greencastle, IN, 2006
Wabash College, Indianapolis, IN, 2005

Council on Undergraduate Research - Geosciences Division

American Geophysical Union annual fall meeting, How to Get a Research Program Started at a Primarily Undergraduate Institution (PUI) and NSF Funding Opportunities

San Francisco, CA, 2000
San Francisco, CA, 2001
San Francisco, CA, 2002
San Francisco, CA, 2003
San Francisco, CA, 2004
San Francisco, CA, 2010
San Francisco, CA, 2011

Geological Society of America annual meetings, Developing Undergraduate Research Programs--Strategies for Success

Toronto, Canada, 1998
Denver, CO, 1999
Reno, NV, 2000
Boston, MA, 2001
Seattle, WA, 2003
Denver, CO, 2004
Salt Lake City, UT, 2005
Minneapolis, MN, 2011

Invited Talks

Wellesley College, Wellesely, MA, Geosciences Department and Environmental Studies Program, Understanding Sediment Dynamics in the Buffalo River: Contributing to the Restoration of a

Great Lakes Area of Concern, 2012

Fort Lewis College, Durango, CO, Annual Student Research Symposium, From Student Researcher to Faculty Mentor: The Value of Undergraduate Research, 2010

University at Buffalo, Buffalo, NY, Department of Geology, Pegrum Lecture Series, Understanding Sediment Dynamics Using Geological and Engineering Approaches: A Case Study of the Buffalo River Area of Concern, 2007

Alfred University, Alfred, NY, Penn-York Research Conference plenary, From Student Researcher to Faculty Mentor: The Value of Undergraduate Research, 2005

Rochester Institute of Technology, Rochester, NY, Follies of Lotus Bay, 2004

National Association of Geoscience Teachers Distinguished Lecture Series, Follies of Lotus Bay
Cal Poly Pomona, Pomona, CA, 2005
Middlebury College, Middlebury, VT, 2004
Appalachian State University, Boone, NC, 2004
Vassar College, Poughkeepsie, NY, 2004
DePauw University, Greencastle, IN, 2003

Alfred University, Alfred, NY, Follies of Lotus Bay, 2003

University of South Dakota, Vermillion, SD, Undergraduate Research at Buffalo State and Strategies for Institutionalizing Undergraduate Research, 2002

US-Icelandic Science Day: North Atlantic Science Connections, Digital Libraries: Opportunities for Collaboration in Education and Research, Reykjavik, Iceland, 2002

International Environmental Dredging Symposium, Plenary, The Buffalo River-Setting the Stage, Buffalo, NY, 1992

Middlebury College, Geology Department, The Buffalo River: Its Past, Present, and Future: An Environmental Case Study, 1992

University at Buffalo, Department of Geology, Continental Margin and Fjord Deposits of the Northern Antarctic Peninsula: Key to the Quaternary Climatic and Glacial Record, 1987

Workshops - Multiple Day

RTUGeoEd: Writing More Effective TUES Proposals, co-organizer/leader with Jeffrey Ryan, University of South Florida - Tampa, 2013, 2015 (*scheduled for May*)

Writing Retreat for Women Geoscience Faculty, Dover, MA, 2011 (invited presenter)

TUESTYC (Transforming Undergraduate Education in STEM at Two Year Colleges), a NSF-CCLI funded proposal preparation workshop, presenter and facilitator, Reno, NV, 2010

Morehead State University, Institutionalizing Undergraduate Research, Scholarly and Creative Work, Morehead, MI, 2006

Murray State University, Institutionalizing Undergraduate Research, Murray, KY, 2005

National Association of Geoscience Teachers On the Cutting Edge, co-organizer for three-day workshop, Geoscience and Human Health, Chico Hot Springs, MT, 2004

Workshops - Single Day

National Association of Geoscience Teachers, Early Career Faculty Workshop: Teaching, research and managing your career, multiple sessions on NSF programs (CCLI and REU), National Science Foundation, Arlington, VA, 2002, 2003

PKAL Assembly, Building Vital Undergraduate STEM Departments and Programs, plenary session on institutionalizing undergraduate research, Agnes Scott College, Decatur, GA, 2003

American Colleges and Universities, NSF CCLI Program, Washington, D.C., 2002

National Science Foundation, Division of Undergraduate Education, Undergraduate Research: Benefits, Opportunities, and Challenges, Arlington, VA, 2000

New York State Geological Association annual meeting, Exploring Oceanography Resources on CD-ROM and the World Wide Web, Hamilton College, Clinton, NY, 1997

Technical Sessions - Co-organizer

Theme Session: Transformative Innovations in Earth, Oceans, and Atmospheric Science Education for Undergraduates Supported by the NSF TUES and CCLI Programs

American Geophysical Union, San Francisco, CA, 2012, 2103, 2014

Geological Society of America Annual meeting, Baltimore (*scheduled November 2015*), Vancouver, British Columbia, Canada, 2014, Denver, CO, 2013

Information Sessions about NSF-TUES/IUSE Programs - Co-leader

American Geophysical Union Ocean Sciences Meeting, Honolulu, HI, 2014

American Geophysical Union, San Francisco, CA, 2011, 2012, 2013

Geological Society of America Annual meeting, Vancouver, British Columbia, 2014, Charlotte, NC, 2012, Minneapolis, MN, 2011

Association of American Geographers, Los Angeles, CA, 2013, NYC, 2012

Geological Society of America, Rocky Mountain Sectional meeting, 2012

Geological Society of America, Northeastern Sectional meeting, 2012

Geological Society of American, Southeastern Sectional meeting, 2012

SPECIALIZED TRAINING

Remotely Operated Vehicle, *Orpheus*, Hydrobotics Engineering, Inc., Ajax, Ontario, Canada, 1992

Remotely Operated Vehicle, *Phantom 300*, National Undersea Research Center, Pt. Avery, CT, 1991

Malvern Laser Particle Sizer, Department of Earth Sciences, Cambridge University, Cambridge, England, 1991

Water Column Profiler (SBE25), SeaBird Electronics, Bellevue, WA, 1990

RESEARCH GRANTS AND CONTRACTS RECEIVED

Funded and Served/Serving as Principal Investigator

National Science Foundation, WIDER: Collaborative: Improving Undergraduate Education Through Community Building and Adoption of an Evidence-based Practice to Evaluate Undergraduate Research, PI on Collaborative: Elizabeth Ambos/Council on Undergraduate Research, $659,046 (Buffalo State portion of budget; total award including CUR's budget: $787,146), 2015 – 2017

U.S. Department of Justice, Environment and Natural Resources Division, Expert Contracting Unit, Case Name: U.S. et al. V. NCR Corporation, Appleton Papers, CBC Coating, Georgia-Pacific Consumer Products, et al., $91,700, 2012 (included report, deposition, and testimony during trial)

National Science Foundation, TUES (Transforming Undergraduate Education in STEM) Type 1 Program, Collaborative: Faculty Development to Support High Impact Activities That Transform Undergraduate Geoscience Education, $249,445, 2011 – 2014

National Science Foundation, NSDL (National STEM Education Distributed Learning) Program, Outreach and Evaluation Efforts to Extend the Impact of the NSDL Program, $19,201, 2009 – 2011

National Science Foundation, MRI (Major Research Instrumentation) Program, Acquisition of Hydrodynamic Equipment and a Laser Grain Size Analyzer to Investigate the Lake Erie Seiche and its Impact on Sedimentation in the Buffalo River, Co-Investigators: Patricia Manley and Thomas Manley (Middlebury College), $324,980, 2007 – 2011

National Science Foundation, S-STEM (Scholarships in Science, Technology, Engineering and Mathematics) Program, Connect with 'Science': Opportunities in Science, Technology, Engineering and Mathematics, Co-Investigators at Buffalo State: Dan MacIsaac, David Kukulka, and Valentin Brimkov, $500,000, 2007 – 2013

National Science Foundation, CCLI (Course, Curriculum and Laboratory Improvement) Phase II Program, Collaborative: A Workshop Initiative by the Council on Undergraduate Research to Establish, Enhance and Institutionalize Undergraduate Research, $24,510, 2007 – 2009

National Science Foundation, STEP (STEM Talent Expansion Program) Program, Creating Opportunities for Success Through Recruitment, Retention, and Faculty Development, Co-Investigators at Buffalo State: David Wilson, Robin Sanders, and Kerran Sanger, $1,000,000, 2005 – 2009

Environmental Protection Agency, Great Lakes National Program Office, A Sediment Trend Analysis of the Buffalo River Area of Concern, Co-Investigators: Patrick McLaren (GeoSea Consulting), Joseph Atkinson (University at Buffalo) and Patricia Manley (Middlebury College), $126,753, 2004 – 2006

National Conference on Undergraduate Research)/Lancy Foundation Program, The Centennial Celebration of the Pan-American Exposition: A Research Opportunity, Co-Investigators at Buffalo State: Ken Mernitz, Carol Beckley, and Eric Krieg (1999-2000), Amitra Hodge (2000-2001), $73,000, 1999 – 2001

The Petroleum Research Fund, An Investigation of Furrow Formation in the Buffalo River, Co-Investigator: Patricia Manley (Middlebury College), $25,000, 1993

United States Army Corps of Engineers, Support for the Buffalo River Environmental Dredging Demonstration Project, $49,950, 1992

Environmental Protection Agency, Great Lakes National Program Office, Fish and Wildlife Habitat Assessment of the Buffalo River Area of Concern and Watershed, Co-Investigators at Buffalo State: Kim Irvine and Randal Snyder, $127,962, 1991

Environmental Protection Agency, Great Lakes National Program Office, Seasonal and Short-term Changes in Water Column Structure of the Buffalo River, $23,786, 1991

National Science Foundation, ILI Program, Equipment to Measure Fine-scale Water Column Structure of Lakes, Co-Inverstigators: Howard Riessen (Buffalo State) and Brian Shero (Medaille College), $16,182, 1990

National Science Foundation, Division of Earth Sciences, Collaborative: A Model for Turbidite Deposition in the Catskill Sea: Implications for Submarine Fans/Clastic Ramps and Sea Level Fluctuations, $19,442, 1989

Funded Between NSF and Buffalo State, Intergovernmental Personnel Act (IPA) Agreement

National Science Foundation, IPA Agreement for academic leave of absence, $261,319 (not including IR/D research support), 2007 – 2009

National Science Foundation, IPA Agreement for academic leave of absence, $161,726, 2001 – 2003

Funded and Served as Co-Investigator

New York State/United University Professions, Joint Labor Management Committees, Grantsmanship: Enhancement of Mid-Career Faculty and Staff Expertise, (Project Director: Howard Reid and Additional Co-Investigator: Karen O'Quin), $30,000, 2000

National Science Foundation, Research Experiences for Undergraduates (REU), Summer Undergraduate Research Experience Fellowships in the Geosciences, (Principal Investigator: John Stevens, University of North Carolina at Asheville and Additional Co-Investigator: Donald Woodrow, Hobart and William Smith Colleges), $113,250, 1997 – 2001

Environmental Protection Agency, Great Lakes National Program Office, Event Sampling of the Buffalo River, (Principal Investigator: Harish Sikka and Additional Co-Inverstigator: Kim Irvine), $123,882, 1992

Environmental Protection Agency, Great Lakes National Program Office, Field, Laboratory, and Engineering Support Buffalo River Mass Balance Project, (Principal Investigators: Harish Sikka (Buffalo State) and Stephen Taylor (University of Buffalo) and Additional Co-Investigators: Kim Irvine (Buffalo State) and Joseph Atkinson (University of Buffalo), $280,134, 1990

University of Wyoming-National Park Service Research Center, Fire Effects on the Biological and Geological Characteristics of Sediments in Yellowstone Lake: A Basis for Improved Fire Management Policy (Principle Investigator: Brian Shero, Medaille College), $4937, 1990

National Science Foundation, ILI, Improving an Undergraduate Interdisciplinary Aquatic Science Program on Lake Erie (Principal Investigator: James Spotila), $46,872, 1986

Funded and Serving as Consultant (with Bridget Zimmerman, Buffalo State Research Foundation)

National Science Foundation, STEP (STEM Talent Expansion) Program, Graduate and Transfer STEM Talent Expansion Program (GT STEP), Principal Investigator: Michael Chase,

Montgomery College, Rockville, MD, $2,000,000 (consulting salary $20,500 over 60 months), 2012 – 2017

Funded by Buffalo State/Research Foundation

Design and Construction of a Wave Tank to Demonstrate Wave Dynamics, other faculty: David Kukulka and James Shea, $3000, 1999

An Earth Systems Model for Teaching Oceanography and Introductory Geology, other faculty: John Grant, $1800, 1997

Acquisition of an ROV (Remotely Operated Vehicle), $16,500, 1992

Side-Scan Sonar Survey and Depth Profiles of the Buffalo River, $5950, 1991

ROV Mapping Survey of the Buffalo River, $3040, 1990

Effects of Fire on the Ecology of Yellowstone Lake Yellowstone National Park, $2563, 1989

Assessment of Pollutant Pathways to the Buffalo River, other faculty: Kim Irvine, $13,000, 1989

Short-term and Depth-dependent Variations in Water Column Structure, Eastern Lake Erie, $3000, 1988

Sedimentological Investigation of Lake Erie, $3450, 1986

PUBLISHED ABSTRACTS

(*underline denotes undergraduate author/co-author)*

Clayton, K., Singer, J., and Manley, T.O., 2015, The Nature and Behavior of Oscillations in the Buffalo River, Buffalo, NY, USA, 36th IAHR World Congress, Netherlands, 4 p. extended abstract

Kraft, M., Singer, J., Manley, T.O., and Manley, P., 2015, Hydrodynamics of a River Undergoing Environmental Restoration: Buffalo River, Buffalo, NY, USA, 36th IAHR World Congress, Netherlands, 4 p. extended abstract

Franks, B. and Singer, J., 2015, Water Elevation Changes in the Fox River, Green Bay, Wisconsin, International Association of Great Lakes Research, Burlington, VT

Singer, J. and Ryan, J., 2014, Geoscience Education Programs in the NSF Division of Undergraduate Education: Different Acronyms with Similar Intent, American Geophysical Union, San Francisco, CA

Kraft, M., Singer, J., and Manley, T.O., 2014, Buffalo River Hydrodynamics Using ADCPs, Geological Society of America annual meeting, Vancouver, BC, Canada

Ryan, J., and Singer, J., 2014, NSF IUSE Program Opportunities for the Geoscience Education Community, Geological Society of America annual meeting, Vancouver, BC, Canada

Singer, J., and McLaren, P., 2014, Sediment Trend Analysis (STA) to Understand Patterns of Erosion and Deposition in the Lower Fox River, Green Bay, Wisconsin in Support of Contaminant Liability Assessment, Geological Society of America annual meeting, Vancouver, BC, Canada

Singer, J., Zimmerman, B., and Weiler, D., 2014, The Impact of Undergraduate Research: Buffalo State's Evaluation Program, Geological Society of America annual meeting, Vancouver, BC, Canada (invited)

Viskupic, K., Steer, D., Kortz, K., Perkins, D., Wirth, K., Herbert, B., Singer, J., and Manduca, C., 2014, Monitoring Undergraduate Growth Through the Major Using Embedded Assessment Questions, Geological Society of America annual meeting, Vancouver, BC, Canada

Clayton, K. and Singer, J., 2013, An Investigation of Causes and Characteristics of Water Elevation Changes in the Buffalo River, Buffalo, NY, American Geophysical Union Ocean Sciences Meeting, Honolulu, HI

Kraft, M., Manley, P., Singer, J., and Manley, T.O., 2013, Application of Sediment Trend Analysis in the Examination of Sediment Transport Dynamics of Missisquoi Bay, American Geophysical Union, San Francisco, CA

Perez, A., Sabato, J., Singer, J., and Manley, T.O., 2013, Characteristics and Behavior of a Two-Hour Oscillation in the Buffalo River, Buffalo, New York, American Geophysical Union, San Francisco, CA

Singer, J., Ryan, R., Lea, P., Matty, D., Mogk, D., Ridky, R., Stout, D., and Sverdrup, K., 2013, This Was Then...This is Now: Where Have We Come From and Where Are We Going in Geoscience Education? Geological Society of America annual meeting, Denver, CO

Singer, J. and Ryan, J., 2012, Facilitating Classroom Innovation in the Geosciences Through the NSF Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) Program, American Geophysical Union, San Francisco, CA

Singer, J., and Mogk, D., 2012, Assessing undergraduate research as pedagogy, Geological Society of America annual meeting, Charlotte, NC

Singer, J. and Ryan, J., 2012, Excellence in undergraduate chemistry education: NSF Division of Undergraduate Education TUES program, 38th Northeast Regional Meeting, Rochester, NY

Singer, J. and Ryan, J., 2012, Resources to transform undergraduate geoscience education: A new faculty development opportunity, Council on Undergraduate Research Conference 2012, The College of New Jersey, Ewing, NJ

Singer, J. and Zimmerman, B., 2012, The impact of undergraduate research: Buffalo State's evaluation program, Council on Undergraduate Research Conference 2012, The College of New Jersey, Ewing, NJ

Carter, C., Ryan, J., and Singer, J., 2011, NSF programs that support research in the two-year college classroom, American Geophysical Union, San Francisco, CA

Singer, J., Manley, T.O., McLaren, P., Manley, P., Atkinson, J.F., Hughes, W., and Klawinski, A., 2011, Lake Erie seiches and their impact on hydrodynamics and sediment transport in the Buffalo River, Buffalo, New York, American Geophysical Union, San Francisco, CA

Singer, J., Manley, T.O., Manley, P., McLaren, P., and Hughes, W., 2011, Understanding sediment dynamics in the Buffalo River: Contributing to the restoration of a Great Lakes Area of Concern, Geological Society of America annual meeting, Abstracts with Program, Minneapolis, MN

Roehm, C., Anderson, E., Beletsky, D., Perrelli, M., Singer, J., and Vermette, S., 2011, Observing and monitoring systems in nearshore Lake Erie, International Association of Great Lakes Research, Duluth, MN

McLaren, P., Singer, J., Manley, P., and Manley, T.O., 2010, Using geological tools to understand hydrodynamics and sedimentation processes in the Buffalo River and Outer Harbor: A case study

for urban river restoration, International Association of Great Lakes Research, Toronto, Ontario, Canada

Singer, J., Manley, T.O., Hughes, W., and Manley, P., 2010, Hydrodynamics and sedimentation processes in the Buffalo River, International Association of Great Lakes Research, Toronto, Ontario, Canada

Singer, J., McLaren, P., Manley, P., and Manley, T.O., 2009, Sediment Trend Analysis in the Lower Buffalo River and Outer Harbor: Evidence supporting upriver transport of sediment by the Lake Erie seiche, Geological Society of America annual meeting, Abstracts with Program, Portland, OR

Singer, J., McLaren, P., Atkinson, J., and Manley, P., 2009, A combined geological and engineering approach to support remedial design and river restoration, Fourth International Symposium on Contaminated Sediments: Sustainable Management and Remediation, Dublin, Ireland

Singer, J. and McLaren, J. 2009, Using sediment trend analysis (STA) to support remediation and restoration efforts in the Buffalo River (NY) Area of Concern, 5th International Conference on Remediation of Contaminated Sediments, Jacksonville, FL

Farthing, D., Singer, J., and Over, J.D., 2007, Freshmen seminars, learning communities, and inter-campus collaborations: Ideas, goals, and justifications for early career research, Geological Society of American annual meeting, Abstracts with Program, Denver, CO

Singer, J., McLaren, P., Atkinson, J., Manley, P., and Manley, T., 2007, Understanding sediment dynamics in the Buffalo River Area of Concern using geological and engineering approaches, International Association of Great Lakes Research, College Park, PA

Singer, J., Farthing, D., Mernitz, K., MacKenzie, M., Johnson, S., and Petty, J., 2007, Characterization of slag deposited in the banks of the Buffalo River, International Association of Great Lakes Research, College Park, PA

Singer, J., and Marshall, J., 2006, The Los Angeles and Buffalo Rivers: Restoration of urban river systems and opportunities for student learning, Geological Society of America annual meeting, Philadelphia, PA

Singer, J., Manley, P., and Miller, W., 2006, Geoscientists as historians: Using geophysical techniques to reveal history, CUR National Conference, DePauw University, Greencastle, IN

Singer, J., 2006, Establishing and directing Buffalo State's Office of Undergraduate Research, CUR National Conference, DePauw University, Greencastle, IN

Atkinson, J., Singer, J., and McLaren, P., 2006, Modeling for sediment remediation in the Buffalo River, International Association of Great Lakes Research, Windsor, Ontario, Canada

Manley, P., Singer, J., and Manley, T., 2006, Spatial and temporal evolution of sedimentary bedforms using side-scan sonar: Case studies in Lake Champlain and Buffalo River, International Association of Great Lakes Research, Windsor, Ontario, Canada

McLaren, P., Singer, J., and Atkinson, J., 2006, Sediment transport in the Buffalo River AoC, International Association of Great Lakes Research, Windsor, Ontario, Canada

Singer, J. McLaren, P., Atkinson, J., and Manley, P., 2006, The Buffalo River Area of Concern: A case study for combining geological and engineering approaches to understanding sediment dynamics, International Association of Great Lakes Research, Windsor, Ontario, Canada

Singer, J., 2006, Creating opportunities for success through recruitment, retention and faculty development, NSF STEP project Grantee Meeting, Washington, D.C.

Fox, L, Singer, J., Woodrow, D., and Ryan, J., 2005, Summer Undergraduate Research Experiences Fellowships in Geosciences: Outcomes from NSF-REU support to the Council on Undergraduate Research, American Geophysical Union, San Francisco, CA

Singer, J., 2005, Buffalo State's Earth Science Department: At the intersection of opportunity and obstacles to change *in* Geoscience Departments: Developing Pathways to Strong Programs for the Future, Teach the Earth, SERC portal for Geoscience Faculty, http://serc.Carleton.edu/departments/workshop/participants.html and http://serc.carleton.edu/images/departments/Singer_poster.jpg (invited)

Singer, J., 2004, Crossing disciplinary boundaries: Opportunities for undergraduate research and fun for faculty, Geological Society of America, Denver, CO (invited)

Singer, J. and Fox, L., 2004, Council on Undergraduate Research (CUR): Faculty development and models of successful undergraduate research programs, AGU, San Francisco, CA

Singer, J. and Boyer, B., 2004, The restoration of the Buffalo River Area of Concern: A case study for building partnerships to address local environmental problems, Geoscience and Human Health, a workshop sponsored through the Cutting Edge workshop series, Chico Hot Springs, MT (invited)

Singer, J., Bettison-Varga, L., and Hoagland, E., 2004, The CCLI Program: Its impact on CUR members and recommendations for improvement, invention and impact: Building excellence in undergraduate science, technology, engineering and mathematics education, A Conference of the Course, Curriculum and Laboratory Improvement (CCLI) Program, Crystal City, VA (invited)

Singer, J. and Hoagland, E., 2004, Successful models of Interdisciplinary research with undergraduates: Strategies from Predominantly Undergraduate Institutions (PUIs), Convocation on Facilitating Interdisciplinary Research, National Academy of Science, Washington, D.C.

Singer, J., 2003, Integrating undergraduate research into the curriculum: Approaches, models, and thoughts on what works and what doesn't work, American Geophysical Union, San Francisco, CA

Singer, J., 2003, It's happening in Buffalo backyards: Undergraduate research opportunities, Geological Society of America, Program with Abstracts, Seattle, WA

Singer, J., 2003, NSF-CCLI program and other programs that support education, American Society of Limnology and Oceanography Aquatic Sciences Meeting, Abstracts with Program, Salt Lake City, UT (invited)

Singer, J., 2002, The Course, Curriculum, and Laboratory Improvement (CCLI) program: Program overview, proposal preparation, and suggestions for faculty, Botany 2002: Botany in the Curriculum, Abstracts with Programs, University of Wisconsin, Madison, WI (invited)

Singer, J., 2002, NSF programs that support undergraduate research in the geosciences, Geological Society of American annual meeting, Abstracts with Program, Denver, CO

Singer, J., 2002, NSF programs that support faculty development: An overview of opportunities in the geosciences, American Geophysical Union Fall meeting, Abstracts with Program, San Francisco, CA (invited)

Singer, J., 2002, NSF programs that support undergraduate research in the geosciences, Geological Society of America annual meeting, Abstracts with Program, Denver, CO

Singer, J., 2001, Undergraduate research: Opportunities, challenges, and benefits, American Geophysical Union, Abstracts with Program, Boston, MA

Singer, J., Mernitz, K., Beckley, C., and Hodge, A., 2001, An interdisciplinary undergraduate research program at Buffalo State, Geological Society of America annual meeting, Abstracts with Program, Boston, MA

Townsend, C., Safit, J., Smaic, J., and Singer, J., 2000, There's something fishy here: Oceanography inspires design, Geological Society of America annual meeting, Abstracts with Program, Reno, NV

Singer, J., Hughes, W., Miller, K., Moll, S., Comstock, T, Braymiller, T., Rabideau, D., Shea, J., and Kukulka, D., 2000, Designing and constructing a wave tank and recirculating flume: Research opportunities for undergraduate students at Buffalo State College, Geological Society of America annual meeting, Abstracts with Program, Reno, NV

Woodrow, D.L., Ahrnsbrak, W.F., McClennan, C.E., Halfman, J., and Singer, J., 2000, Eastern Lake Ontario Sand Transport Study: Further developments 1999/2000, International Association of Great Lakes Research annual meeting, Abstracts with Program, Cornwall, Ontario, Canada

Singer, J. and Woodrow, D., 1999, Council on Undergraduate Research: Initiatives and opportunities for promoting and supporting undergraduate research, Geological Society of America annual meeting, Abstracts with Program, Denver, CO

Singer, J., and Haynes, J., 1999, Undergraduate research initiatives and opportunities at Buffalo State College, Reshaping Undergraduate Science and Engineering Education: Tools for Better Learning, Sigma Xi Forum Program, Minneapolis, MN

Woodrow, D.L., Ahrnsbrak, W.F., McClennan, C.E., Rukavina, N.A., Singer, J., and Halfman, J., 1999, Eastern Lake Ontario Sand Transport Study: Initial results and interpretation, International Association of Great Lakes Research annual meeting, Abstracts with Program, Cleveland, OH

Domack, C. and Singer, J., 1998, Supplements for teaching introductory oceanography, Abstracts with Programs, Geological Society America annual meeting, Toronto, Ontario, Canada

Singer, J., Grant, J.A., Jeziorski, E.C., 1997, Use of ground penetrating radar to study the origin of sedimentary furrows in the Buffalo River, Abstracts with Programs, International Association of Great Lakes Research, Buffalo, NY

Skeen, B. and Singer, J.K. 1996, Changes in sedimentary furrow morphology: Buffalo River, Buffalo, NY, Abstracts with Program, Geological Society of America Northeast Sectional Meeting, Buffalo, NY

Sault, M. and Singer, J.K., 1996, Erosional history of Strawberry Island, Niagara River, Abstracts with Program, Geological Society of America Northeast Sectional Meeting, Buffalo, NY

Singer, J., Manley, P., Grant, J.A., and Pepe. W.J.,1996, Sediment dynamics and bottom morphology in the Buffalo River area of concern, Buffalo, NY, Abstracts with Programs, Geological Society of America Northeast Sectional Meeting, Buffalo, NY

Woodrow, D.L. and Singer, J.K., 1996, Visual reconnaissance by ROV of shallow-water sediment surfaces, Seneca Lake, NY, Abstracts with Program, Geological Society of America Northeast Sectional Meeting, Buffalo, NY

Kanfoush, S.L., Shero, B., Singer, J., and Vermette, S., 1995, Recent diatom succession in Lake Erie sediments, Abstracts with Programs, International Association of Great Lakes Research, Lansing, MI

Singer, J. and Morris, B.A., 1995, Activities in sedimentology: integrating problem solving, team-work, and observation, Abstracts with Programs, Geological Society of America annual meeting, New Orleans, LA

Steckler. D. and Singer, J., 1994, Classroom use of a Darcy Flow Tube to demonstrate concepts in hydrogeology, Abstracts with Programs, Geological Society of America Northeast Sectional Meeting, Binghamton, NY

Sweet. J. and Singer, J., 1994, Bathymetric changes in sedimentary furrow morphology: Buffalo River, Buffalo NY, Abstracts with Programs, Geological Society of America Northeast Sectional Meeting, Binghamton, NY

Torok, D.M., Irvine, K.N., and Singer J., 1993, Laboratory scale investigations in artificial armoring as a remediation measure for contaminated riverbed sediment, Association of American Geographers Middle States Division, 26th annual conference, Newark, DE

Raab, M. and Singer, J., 1993, The Erie County Environmental Education Institute: A model for increasing citizen awareness and action, Abstracts with Programs, Geological Society of America annual meeting, Boston, MA

Manley, P. and Singer, J., 1993, Potential for sediment resuspension of contaminated sediments: Buffalo River, Buffalo NY, Abstracts with Programs, Geological Society of America annual meeting, Boston, MA

Manley, P.L., Fuller. L., and Singer, J., 1992, Bottom morphology and environmental implications for the Buffalo River: Evidence from side-scan sonar, Abstracts with Programs, International Association for Great Lakes Research, Windsor, Ontario, Canada

Torok, D.M., Irvine, K.N., and Singer, J., 1992, Artificial armoring of contaminated Buffalo River sediments, Abstracts with Programs, International Assoc. for Great Lakes Research, Windsor, Ontario, Canada

Singer, J. and Manley, P., 1991, A side-scan sonar survey of the Buffalo River, Abstracts with Programs, International Association for Great Lakes Research, Buffalo, NY

Singer, J., 1991, An ROV survey on the Buffalo River, Abstracts with Programs, International Association for Great Lakes Research, Buffalo, NY

Irvine, K., Singer, J. Torok, D., and Vermette, S., 1990, Assessing combined sewer overflows to the Buffalo River: A Progress report, Abstracts with Programs, International Association for Great Lakes Research, Windsor, Ontario, Canada

Torok, D.M., Irvine, K., and Singer, J., 1990, Contaminated sediment remediation technologies: A review of USEPA strategies for the Buffalo River Area of Concern, Canadian Association of Geographers Ontario Division/Eastern Lakes Division Association American Geographers, Toronto, Ontario, Canada

Singer, J., Anderson, J.B., DeMaster, D., Nelson, T., and Nittrouer, C., 1987, Holocene history of glacial and sea ice conditions on the northern Antarctic Peninsula margin, Abstracts with Programs, 12th International Union for Quaternary Research Congress, Ottawa, Ontario, Canada

Anderson, J.B., Griffith, T., Smith, M., and Singer, J., 1987, Sedimentation in Antarctic fjords and bays, Abstr. with Programs, 12th International Union for Quaternary Research Congress, Ottawa, Ontario, Canada

Singer, J., 1986, Recent siliceous and terrigenous sedimentation patterns in the Bransfield Strait, Antarctica, Abstr. with Programs, American Geophysical Union Ocean Sciences, New Orleans, LA

Griffith, T., Singer, J., and Anderson, J.B., 1986, Fjord sedimentation in the Antarctic Peninsula, Abstracts with Programs, Geological Society of America annual meeting, San Antonio, TX

Anderson, J.B., Bartek, L., Griffith, T., Herron, M., Kennedy, D., Singer, J., and Smith, M., 1985, Preliminary results of the Deep Freeze 85 marine geologic and geophysical survey of the Antarctic Peninsula continental shelf and South Orkney Plateau, Abstr. with Programs, Geological Society of America annual meeting, Orlando, FL

MacDonald, S.E., Anderson, J.B., Singer, J., and Clifford, M.A., 1984, Application of total grain size distributions to identify sediment transport modes and current velocities within the benthic boundary layer: A case study on the Maurice Ewing Bank, SW Atlantic Ocean, Society of Economic Paleontologists and Mineralogists Research Conference, San Jose, CA

Anderson, J.B., Singer, J., Taylor, R., and Ledbetter, M., 1984, A comparison of electronic grain size analysis methods, Society Economic Paleontologists and Mineralogists Research Conference, San Jose, CA

Singer, J., and Anderson, J.B., 1982, The role of bioturbation in erosion and transport of marine sediments, Abstracts with Programs, Geological Society of America annual meeting, Orlando, FL

Anderson, J.B., Brake, C., Domack, E., Singer, J., and Wright, R., 1982, Sediment dynamics on the Antarctic continental shelf, 11th International Congress on Sedimentology, Abstracts of Papers, Hamilton, Ontario, Canada

Singer, J., and Schultz, P.H., 1980, Secondary impact craters around lunar, Mercurian, and Martian craters, Proc. 11th Lunar and Planetary Science Conference, Houston, TX

PEER-REVIEWED PUBLICATIONS

(*underline denotes undergraduate co-author)*

Singer, J. and Zimmerman, B., 2012, Evaluating a Summer Undergraduate Research Program: Measuring Student Outcomes and Program Impact**,** CUR *Quarterly*, v.32, no. 3., p.40-47.

Singer, J. and Weiler, D., 2009, A Longitudinal Student Outcomes Evaluation of the Buffalo State College Summer Undergraduate Research Program", CUR *Quarterly*, v.29, no. 3., p. 20-25.

Singer, J., 2009, Commentary: The Course, Curriculum, and Laboratory Improvement (CCLI) Program: What's New About the Current Solicitation and Suggestions for the Geosciences' Community", Journal Geoscience Education, v.57, no. 2., March, p. 96-98.

Manley, P. and Singer, J., 2008, Assessment of sedimentation processes determined from side-scan sonar surveys in the Buffalo River, New York, USA, Environmental Geology, v.55, p.1587-1599.

McLaren, P. and Singer, J., 2008, Sediment transport and contaminant behavior in the Buffalo River, New York: Implications for river management, Journal of Coastal Research, v.24, no.4, p.954-968.

Singer, J., Atkinson, J., Manley, P., and McLaren, P., 2008, Understanding sediment dynamics using geological and engineering approaches: A case study of the Buffalo River area of concern, Buffalo, New York, International Journal River Basin Management, v.6, no.1, p. 31-40.

Singer, J. and Fox, L., 2006, Bio2010: What's Missing? CUR *Quarterly*, June, p.151-152.

Ronco, S, Werner, T., and Singer, J., 2004, Results from the NCUR/Lancy Program, CUR *Quarterly*, v.25, no. 2, p.86-92.

Singer, J., Mayhew, M., Rom, E., Eisenstein, K., Kuczkowski, R., and L. Douglas, 2003, The Research Experience for Undergraduates (REU) Sites Program: Program Overview and Suggestions for Faculty, CUR *Quarterly*, v.23, no.4, p. 158-161.

McBride, D. and Singer, J., 2002, The Course, Curriculum, and Laboratory Improvement (CCLI) Program: Program Overview, Changes for 2002, and Suggestions for Faculty, CUR *Quarterly*, v.22, no. 3, p.110-115.

Singer, J., Mernitz, K., Beckley, C., and Krieg, E., 2000, The Centennial Celebration of the Pan-American Exposition: A Research Opportunity for Undergraduates at Buffalo State College, CUR *Quarterly*, September, v. 21, no. 1, p. 12-16.

Sault, M., Matthies, L., Whitney, J., and Singer, J, 1997, A temporal analysis of Strawberry Island, Niagara River, Tonawanda, New York, Middle States Geographer, p.29-34.

Woodrow, D. and Singer, J.K., 1996, Collaborations in support of research, CUR *Quarterly*, v. 17, no.2, p.64-65;100.

Singer, J., 1995, Global environmental issue: Restoration of Polluted Waterways, CUR *Quarterly*, v. 16, no. 2, p.93-95.

Torok, D., Irvine, K. and Singer, J., 1993, Laboratory scale investigations in artificial armoring as a remediation measure for contaminated riverbed sediment, Journal of Middle States Geographer, v. 26, p. 7-15.

Singer, J., Anderson, J.B., Jones, K.P.N., Ledbetter, M., McCave, I.N., and Wright, R., 1988, An evaluation of instruments used in the size analysis of fine-grained sediment, Journal of Sedimentary Petrology, v.58, p.534-543.

Singer, J., and Anderson, J.B., 1984, Use of total grain-size distributions to define erosion and transport for poorly sorted sediment undergoing simulated bioturbation, Marine Geology, v.57, p. 335-359.

Anderson, J.B., Brake, C., Domack, E., Myers, N., and Singer, J., 1983, Sedimentary dynamics on the Antarctic continental shelf, *in*: R.L. Oliver, P.R. James, and J.B. Jago (eds.)., Antarctic Earth Science, Australian Academy of Science, Canberra, p. 387-389.

Singer, J., 1982, Role of benthic organisms in sediment erosion and entrainment, Antarctic Journal of United States, v. 17, no. 5, p.118-119.

Schultz, P.H., and Singer, J., 1980, A comparison of secondary craters on the moon, Mercury, and Mars, *in*: Proc. 11th Lunar and Planetary Science Conf., Geochimica et Cosmochimica Acta, Suppl. 14, v. 3, p. 2243-2260.

BOOK CHAPTER/ESSAY

Singer, J., 2007, Integrating Undergraduate Research into the Curriculum – SUNY, College at Buffalo, *in*: K. Karukstis and T. Elgren (editors), Developing and Sustaing a Research-Supportive Curriculum: A Compendium of Successful Practices, Council on Undergraduate Research, p. 391-394.

Singer, J., 2003, The Follies of Lotus Bay, *in*: J. Schneiderman (editor), The Earth Around Us: Maintaining a Livable Planet, Perseus Books Group, p.221-231. (Paperback edition)

Singer, J., 2000, The Follies of Lotus Bay, *in*: J. Schneiderman (editor), The Earth Around Us: Maintaining a Livable Planet, W.H. Freeman and Company, p.221-231. (Hardcover edition).

PROCEEDINGS/TECHNICAL REPORTS - Peer Reviewed

Singer, J. and McLaren, P., 2015, Using Sediment Trend Analysis (STA) to Understand Patterns of Erosion and Deposition in the Fox and Buffalo Rivers, 36th IAHR World Congress, Netherlands, 9 p.

Singer, J., 2012, Sediment transport in the Lower Fox River (OU 4), Prepared for United States of America, *United States, et al. v. NCR Corp., et al.*, No. 10-c-910 (E.D. Wis.), 30 p. plus Appendices.

Singer, J., Manley, T.O., Manley, P., McLaren, P., and Atkinson, J., 2009, A combined geological and engineering approach to support remedial design and restoration of the Buffalo River, Proceedings ASTM 4ISCS 2009, Dublin, Ireland.

Singer, J., McLaren, P., Atkinson, J., and Manley, P., 2006, A Sediment Trend Analysis of the Buffalo River AOC, report prepared for the EPA Great Lakes National Program Office, 148 p. Report available at: <faculty.buffalostate.edu/singerjk/>

Singer, J., 1996, Appendix I, Sealogger Water Column Data and Observations, I1-I40; Appendix L, Side-Scan Sonar Interpretation for the Buffalo River Dredging Demonstration, L1-L4, *in* Buffalo River Dredging Demonstration (eds. D.E. Averett, et. al.), U.S. Army Corps of Engineers, Waterways Experiment Station, Technical Report EL-96-2.

Singer, J., Irvine, K., and Snyder, R., 1995, Habitat assessment of the Buffalo River Area of Concern and Watershed, submitted to the US Environmental Protection Agency, 199 p.

Singer, J., 1986, An intercalibration experiment to evaluate the reproducibility of data generated from instruments used in grain size analysis, Rice University Sedimentology Report, 60 p.

WEB PAGES/GUIDEBOOK/BROCHURE

Singer, J. and Mogk, D., 2012, Assessment of undergraduate research: Undergraduate Research as Teaching Practice, On the Cutting Edge, NAGT, serc.carleton.edu/NAGTWorkshops/undergraduate_research/assessment_pedagogy.html

Singer, J., 2007, Oceanography: Preparing Teachers to Teach Earth Science, NAGT, serc.carleton.edu/teacherprep/courses/BSC-oceanography.html

Singer, J., 2006, Using a flume to demonstrate fluid properties and sediment transport: Teaching Sedimentary Geology in the 21st Century, On the Cutting Edge, NAGT, serc.carleton.edu/NAGTWorkshops/sedimentary/activities/14116.html

Lalley, C. and Singer, J., 1997, Natural Places of Erie County, Erie County Environmental Management Council, Buffalo, NY.

Irvine, K., Stein, G.P., and Singer J., 1991, An environmental guidebook to the Buffalo River, Center for Environmental Research and Education, Buffalo State College, Buffalo, NY., 30 p.

Jacobi, R., Gutmann, M., Piechocki, A., Frank, S., O'Connell, S., Singer, J., and Mitchell, C., 1990, Upper Devonian turbidites *in* Western New York: Characteristics and implication for submarine fan depositional models, NYS Geological Assoc. 62 Fieldtrip Guidebook, SUNY Fredonia, p. SAT El-E25.

EDITOR

Buffalo State's Student Research and Creativity Celebration, Program with Schedule

2015: Seventeenth Annual, 377 abstracts, 131 p.

2014: Sixteenth Annual, 339 abstracts, 113 p.

2013: Fifteenth Annual, 345 abstracts, 115 p.

2012: Fourteenth Annual, 375 abstracts, 124 p.

2011: Thirteenth Annual, 254 abstracts, 95 p.

2010: Twelfth Annual, 279 abstracts, 92 p.

2009: Eleventh Annual, 260 abstracts, 90 p.

2008: Tenth Annual, 224 abstracts, 81 p.

2007: Ninth Annual, 227 abstracts, 83 p.

2006: Eighth Annual, 227 abstracts, 78 p.

2005: Seventh Annual, 207 abstracts, 65 p.

2004: Sixth Annual, 153 abstracts, 49 p.

2003: Fifth Annual, 153 abstracts, 49 p.

2002: Fourth Annual, 148 abstracts, 47 p.

2001: Third Annual, 131 abstracts, 30 p.

2000: Second Annual - 116 abstracts, 34 p.

1999: First - 85 abstracts, 20 p.

STUDENT PRESENTATIONS

(*undergraduate except where noted; Singer primary mentor except where noted)*

Student Research and Creativity Celebration (at Buffalo State)**:**

2015

Clayton, K., The Nature and Behavior of Oscillations in the Buffalo River, Buffalo, NY

Franks, B., Water Elevation Changes in the Fox River, Green Bay, Wisconsin

Kraft, M., Hydrodynamics of a River Undergoing Environmental Restoration: Buffalo River, NY

Legeza, M., (Interdisciplinary graduate student), Evaluation of Changes in Channel Geometry Following Environmental Dredging in the Buffalo River

2014

Clayton, K., An investigation of causes and characteristics of water elevation changes in the Buffalo River, Buffalo, NY

Franks, B., What does the fox say? An investigation of the behavior of the Lower Fox River

Kraft, M., Acoustic doppler current profilers in the Buffalo River: Processing the data to support the study of river hydrodynamics

Kraft, M., Application of sediment trend analysis in the examination of sediment transport dynamics in Missisquoi Bay

2011

Klawinski, A., Using water level loggers to identify the propagation of seiches in the Buffalo River

2010

Hughes, W., (Physics Education (7-12) graduate student), Taming the seiche: A study of current flow and sedimentary transport in the Buffalo River

Mayer, A., A study of water level changes in the Buffalo River to understand the behavior of the Lake Erie seiche

2007

Petty, J., McKenzie, M., Ryndak, J., and Dawson, B., Slag rocks!

2005

Collins, D., Hamel, A., and Rodriguez, A., Debris flow dynamics: Design and construction for demonstrating debris flows (primary mentor: D. Kulkulka)

Hamel, A., Hendershot, R., Walker, D., Coram, M., and Lash, P., Wave tank extension (primary mentor: D. Kukulka)

2002

Agwa, A., Amato, B., Cena, S., Imiola, T., Kaczorowski, E., Nastevski, A., and Rasmus, P., Analysis and construction of a settling tube

Boccolucci, R., Donadlson, E., Edwards, A., Jessie, R., Howard, R., Klick, B., Kramer, B., Kucserik, A., Speier, K., Sperry, A., Tatarski, C., and Tillman, A., The centennial celebration of the 1901 Pan-American Exposition: Buffalo State's NCUR/Lancy Program

Cobb, D., (Earth science Education (7-12) graduate student), Outdoor learning environment

Stamos, K. and Clinch, E., (Earth science secondary education graduate students), Inquiry learning with the Internet in middle school geology

2001

Bombria, D., Winter, S., Gay, M., Brodzinski, D., Sliwoswki, A., and Phillips, G., Wave tank extension (primary mentor: D. Kukulka)

GES 315, Marine Environments class research project (19 students), Coastal policies: Examples from US coastal states

Klauk, E., Wilde, E., Gibbons, C., Moeller, N., Creamer, P., Stoyle, T., Webber, C., Privitera, A., Kalsuga, J., Wardell, M., and Weber, C., The centennial celebration of the Pan-American Exposition: A century of environmental change in Buffalo, New York

2000

GES 310: Great Lakes Environmental Issues class research project (17 students), Environmental exposure histories for Western New York residents

Michaud, M., Creating a classroom of "little scientists"

Miller, K., Moll, S., and Rabideau, D., Rebuilding the recirculating flume

1999

Bakowski, P., Internships: The experience one gains

Garlapo, W., Resuspension conditions of Whitewater Lake, Manitoba (primary mentor: K. Irvine)

Hughes, W., Braymiller, T., and Comstock, T., Design, construction, and educational uses of a wave tank (primary mentor: D. Kukulka)

SUNY Undergraduate Research Conference (SURC)**:**

2015 (inaugural year; at SUNY Brockport)

Franks, B., Water Elevation Changes in the Fox River, Green Bay, Wisconsin

Kraft, M., Hydrodynamics of a River Undergoing Environmental Restoration: Buffalo River, Buffalo, NY

Keck Research Symposium in Geology - faculty sponsor at students' home institution:

1998 (at Amherst College)

Brown, Z., (co-author with Halle Morrison, The College of Wooster, faculty sponsor: Lori Bettison-Varga), Interrelationships between molar volume and composition in garnet, p. 28-31

1997 (at The College of Wooster)

Givens, L. (primary faculty sponsors: Mark Wilson and Richard Batt), Substrate controls in the development of molluscan communities of the Nicosia Formation (Pliocene) of central Cyprus, p. 89-92

1995 (at Pomona College)

Sault, M., (co-author with Rebecca Thomas, Williams College; primary faculty sponsors: Glenn Kroeger, William Fox, and Richard Stenstrom), Shoreline changes of San Luis Pass, Texas from 1930-1990, p. 148-151

National Conference on Undergraduate Research (NCUR):

2002 (at University of Wisconsin, Whitewater)**:**

The Centennial Celebration of the 1901 Pan-American Exposition: Buffalo State College's NCUR/Lancy Initiative (12 parts); co-mentored with Ken Mernitz, Carol Beckley, and Amitra Hodge

Bocculucci, R., Adaptive reuse of industrial facilities

Donaldson, E., The Italian West Side of Buffalo

Edwards, A., Water diversion and the Niagara River: Should the Falls whisper or roar?

Jessie, R., Water quality and community environmental activism

Howard, R., A history of Buffalo's orphans and orphanages

Klick, B., A history of the Buffalo Harbor

Kramer, B., The Arts and Crafts movement in Western New York

Kucserik, A., A history of the Buffalo Psychiatric Center

Speier, K., The history of Buffalo's Polish East Side

Sperry, A., Physical changes of the Buffalo River: A river transformed

Tatarski, C., School days of Buffalo

Tillman, A., Buffalo's African American community

2001 (at University of Kentucky, Lexington, KY)**:**
Klauk, E., Wilde, E., Gibbons, C., Moeller, N., Creamer, P., Stoyle, T., Webber, C., Privitera, A., Kalsuga, J., Weber, C., and Wardell, M.., The Centennial celebration of the Pan-American Exposition: A century of environmental change in Buffalo, NY (co-mentored with: Ken Mernitz, Carol Beckley, and Eric Krieg)
Note: NCUR/Lancy Inititative; presentation represented the integration of 12 research projects

COLLEGE SERVICE

(*available upon request)*

updated June 2015