

ROBIN COCHRAN DIRKSEN

EDUCATION

WASHINGTON UNIVERSITY IN ST. LOUIS, ST. LOUIS, MO.

M.S. BIOLOGY

2009

COLLEGE OF ST. SCHOLASTICA, DULUTH, MN

M.S. EDUCATION

CURRICULUM AND INSTRUCTION

2000

BLACK HILLS STATE UNIVERSITY, SPEARFISH, SD

B.S. BIOLOGY, SECONDARY EDUCATION

1994

FELLOWSHIPS & HONORS

LIFE SCIENCES FOR A GLOBAL COMMUNITY INSTITUTE FELLOW

2007-2012

WASHINGTON UNIVERSITY IN ST. LOUIS

ROBERT NOYCE MASTER TEACHING FELLOW

Two-time Recipient

An NSF award given to prior NSF award winners in graduate programs, "to continue implementation on specific innovative areas of their work where evidence of the potential for significant positive impact is clearly documented", by the University at which they are a fellow.

2011 and 2012

LEAD-DEADWOOD HIGH SCHOOL TEACHER OF THE YEAR

2010-11

SOUTH DAKOTA MASTER TEACHER ACADEMY

March 2011

MEMBER OF DELTA KAPPA GAMMA: IOTA CHAPTER

October 2010

A society that promotes personal and professional growth of its members and excellence in education.

RECIPIENT OF THE NABT OUTSTANDING BIOLOGY TEACHER OF THE YEAR

Spring 2010

AWARD FOR SOUTH DAKOTA

NATIONAL SCIENCE TEACHERS ASSOCIATION'S TOYOTA TAPESTRY LARGE GRANT (Whitewood Creek/BOSCO Uganda Project)

Spring 2010

DNA LEARNING CENTER, COLD SPRING HARBOR LABORATORY. COLD SPRING HARBOR, N.Y.

Summer 2009

Recipient of one of five NIH fellowships to write curriculum for the InsideCancer.org website at the DNALC, Cold Spring Harbor, NY.

STATE WINNER OF THE SAMSUNG SOLVE FOR TOMORROW CONTEST The award recognizes programs that use STEM technologies to solve problems of local concern. The State Award brought \$20,000 in technology grants to the Lead-Deadwood School District	March 2015
NOMINEE FOR THE PRESIDENTIAL AWARD FOR THE TEACHING OF MATH AND SCIENCE	March 2015

TEACHING EXPERIENCE

SECONDARY SCIENCE TEACHER, LEAD-DEADWOOD HIGH SCHOOL <i>Subjects taught:</i> General Biology, Advanced Biology, Physical Science, Anatomy & Physiology, Chemistry, AP Chemistry, STEM Research (in Collaboration with the Sanford Underground Research Facility, Lead, SD)	2000-Present
ADJUNCT INSTRUCTOR WASHINGTON UNIVERSITY IN ST. LOUIS Co-teacher for Case Studies in Science Teaching (Online)	Spring 2013
ADJUNCT INSTRUCTOR, BLACK HILLS STATE UNIVERSITY, SPEARFISH, SD Biology	2011-Present
SECONDARY SCIENCE TEACHER RAPID CITY CENTRAL HIGH SCHOOL, RAPID CITY, SD <i>Subjects taught:</i> General Biology, Physical Science	1994-2000
LEARNING POWER AP CHEMISTRY INSTRUCTOR FOR THE SOUTH DAKOTA VIRTUAL SCHOOL Learning Power supports and develops on-line AP math and science programs in states served by the Technology in Education offices, Rapid City, South Dakota.	2010-2011

RELATED EXPERIENCE

PRESENTER TECHNOLOGY AND INNOVATION IN EDUCATION CONFERENCE, RAPID CITY, SD Co-Presenter: Betty Fink, Mathematics Teacher, Lead-Deadwood High School A unit to teach algebraic functions using CDC Situation Report data from the 2014-15 Ebola outbreak in 3 African Countries, and to examine the media claims that the outbreak grew exponentially in the early months of the outbreak	April 2015
PRESENTER SOUTH DAKOTA INDIAN EDUCATION SUMMIT, PIERRE, SD Culturally Relevant Biochemistry: Medicinal Plants of the Sicangu Lakota	October 2014
HOWARD HUGHES MEDICAL INSTITUTE, CHEVY CHASE, MD WRITING TEAM MEMBER FOR THE 2013 HOLIDAY LECTURES	December 2013
INSTRUCTOR/FACILITATOR FOR THE HIGH SCHOOL SCIENCE ACADEMY NGSS TRAINING FOR THE SD DOE	July 2013

<p>PRESENTER ISP LEADERSHIP CONFERENCE, WASHINGTON UNIVERISTY IN ST. LOUIS, ST. LOUIS, MO.</p> <p>HTTP://SCHOOLPARTNERSHIP.WUSTL.EDU/2012/08/ISP-LEADERSHIP-CONFERENCE/</p>	2012
<p>MODERATOR, LIFE SCIENCE GROUP, FLIPPED LEARNING NETWORK</p> <p>HTTP://FLIPPEDCLASSROOM.ORG/GROUP/LIFESCIENCE</p>	2012-Present
<p>BOSCO, GULU, UGANDA</p> <p>Ongoing collaborative classroom projects with BOSCO, and NGO in the former Internally Displaced Persons Camps IDP in N. Uganda.</p>	2009-Present
<p>AP BIOLOGY TEACHERS INSTITUTE, ATTENDEE, UNIVERSITY OF NORTHERN COLORADO, GREELEY, CO.</p>	June 2010
<p>TEACHER TO TEACHER SUPPORT NETWORK, MENTOR EDUCATOR</p> <p>A professional learning community that mentors new educators, encouraging best practices in the classroom. It is maintained by the state of South Dakota and facilitated by Technology in Education offices in Rapid City, SD.</p>	2009-Present
<p>PRESENTER, GLOBAL EDUCATIONAL CONFERENCE Developing Authentic Global Collaborative Science Projects, Co-Presenters: Sam Shaw (Science Specialist for the State of South Dakota DOE OCCTE), Thomas Loughran (BOSCO BOD, Notre Dame University, I2U2 Program Director).</p> <p>Recording Link: https://sas.illuminate.com/site/external/recording/playback/link/dropin.inlp?sid=2008350&suid=D.D42CE7B7DCB621216B7BC70C56B428</p>	Nov 18, 2011
<p>PRESENTER, SOUTH DAKOTA SCIENCE AND MATH TEACHERS CONFERENCE, HURON, SD (two sessions). Sessions were repeated at the TECHNOLOGY AND INNOVATION IN EDUCATION CONFERENCE, RAPID CITY, SD , in April 2011</p> <ol style="list-style-type: none"> Teaching Cell Cycle and Cancer Biology using InsideCancer.org Resources InsideCancer.org is a component of the DNA Learning Center at Cold Spring Harbor Labs. Contextualizing life science standards within a relevant context stimulates an increase in interest in the content. Learn to apply 21st c. skills to your life science lessons. Critical Resources: Using technology to create water quality curricula that develops citizen science projects to increase STEM interest among students and to create a global perspective. Reflections on a one and a half, year-long journey to create a curricular model using a strategic global resource within a local model of one of earth's most important watersheds. Beginning with the award of the NSTA Toyota Tapestry's large grant to the recruitment of local educational and civic groups, to support key national educational objectives. 	February, 2011
<p>PRESENTER, NATIONAL ASSOCIATION OF BIOLOGY TEACHERS NATIONAL CONFERENCE, DENVER, CO (<i>This session was also presented at the South Dakota Science and Math Teachers Conference, Huron, South Dakota in February 2010</i>)</p> <p><u>Breeding <i>Drosophila</i> to Teach Homeobox Genetics and the History and Importance of Model Organisms in Research</u></p>	November, 2009

PRESENTER NATIONAL ASSOCIATION OF BIOLOGY TEACHERS NATIONAL CONFERENCE, MEMPHIS, TN October, 2008

Teaching Phylogeny and Making It Culturally Relevant with Native American Plants

A unit on phytochemicals called Medicinal Plants of the Sicangu Lakota, published on the Tree of Life website, University of Arizona. Site address- <http://www.tol.org/tree/phylogeny.html>

Project address

http://www.tolweb.org/treehouses/?treehouse_id=4571 Received letter of recognition from South Dakota Governor Mike Rounds.

PRESENTER, TECHNOLOGY AND INNOVATION IN EDUCATION CONFERENCE, SIOUX FALLS, , SD April 2008
Power Up!

Power Up! And Power Up Plus Projects, focused on professional development supported with Web 2.0 technologies to impact instruction, student motivation and student achievement in high school math and science. 2007-2009
October 2014

RESEARCH EXPERIENCE

Summers 1993, 1994

Field Biologist: Rocky Mountain Forest and Range Experiment Station, Rapid City, South Dakota
Duties: collected data on the vegetation of the Thunder Basin National Grasslands, identification of species and densities of those species within given habitats. (Served as crew leader the second season.)

Action Research for M.A., Education:

An Examination of the Performance of Females in the Science Classroom

Action Research for M.S, Biology:

How Will the Implementation of Project-based, Globally and Locally Relevant Curricula Increase Engagement in Content Standards and the Sciences Beyond Secondary School?

COMMITTEES

PAST

Rapid City Area School District: Science Curriculum

Lead-Deadwood School District: Advanced Degree; Strategic Planning; Wellness; Principal's Advisory
Community: Board Member of the University of South Dakota Extension Service for Lawrence County, State of South Dakota; DOE Life Science Standards Draft Review Group, for the Next Generation Science Standards (NGSS); Committee to write the South Dakota Environmental Literacy Plan

CURRENT

Curriculum and Instruction K-12 Chairperson; Technology
