Master of Science in Science Education

Twentieth Annual Symposium in Science Education

Bozeman, MT
July 2nd - 6th, 2018
Jabs Hall 311 & 415
History
Master of Science in Science Education Program

In May, 1996, the Montana Board of Regents of Higher Education approved a new degree, the Master of Science Education (MSSE), designed for science educators interested in graduate study while remaining employed. It is unusual in two important ways. First, it is an intercollege, interdisciplinary effort. Four colleges, The Graduate School, and fifteen departments collaborate to offer this innovative degree. Second, about 80% of the courses and credits needed to complete the degree are offered by distance learning in structured interactive courses using asynchronous, computer mediated instruction. The National Teacher Enhancement Network (NTEN) project, a National Science Foundation grant project, funded since 1992, developed and offers many of the distance learning courses for this degree program. While direct oversight of the program was provided by the Graduate School from inception to 2016, the program was moved to the College of Letters and Science July 1, 2016. In addition to completing core courses in education, those seeking the degree develop interdisciplinary combinations of science courses from offerings in biology, chemistry, earth science, ecology, engineering, microbiology, physics, plant science, and other science content areas. All graduates complete a science education capstone project in their final year.

Norm Reed, Coordinator 1996 to 1998, artfully handled admissions for the first two cohorts, oversaw design and development of core classes, and overall implementation of the program. In 1997, 30 teachers enrolled in six classes offered in the first campus summer session. In comparison, this summer, close to 400 teachers are enrolled in approximately 45 campus and distance courses.

Carol Thoresen, Coordinator 1999 to 2007, grew the program from 25 to about 60 students per year. Larger enrollment allowed for a wider variety of science course offerings. Carol worked with leading instructors and researchers to develop over 25 new program courses, some with very innovative modes of delivery.

Peggy Taylor, Director 2007 to 2016, was a graduate of the program’s first cohort and brought a unique perspective to its administration. Contributions included expansion of the program’s targeted populations, strengthening the programs framework through continuous evaluation processes, and increasing course offerings as well as involvement of science MSU faculty.

Gregory Francis is the current MSSE Director as well as a tenured professor in the Physics Department. When the MSSE Program first began in 1996, Greg was one of the original core science faculty in the physics content area. As a true practitioner of “hands on learning”, Greg’s students describe him as the “true” physics educator.

Diana Paterson, Associate Director, joined the program in 2002. She provides critical recruiting and advising support to off-campus graduate students. Diana skillfully manages the MSSE office and staff. Students lovingly refer to her as the “glue” that holds them together through challenging times.

John Graves, Lead Program Faculty and Associate Director, has been a core MSSE instructor since 2003. He assumed his duties as Lead Program Faculty in 2009. In addition to his instructional responsibilities, John provides guidance and mentoring for MSSE faculty, participates in various outreach activities, and serves as liaison between MSSE office and MSSE instructors.
Each Master of Science in Science Education (MSSE) student, with the cooperation of her or his graduate committee, identifies and completes a science education capstone project. Each project is designed to provide experience and information that aids our understanding of science teaching-learning or science curriculum. The capstone project topic is generally identified during the first year of the student’s graduate program. A student begins the project, which generally relates to science education in the MSSE student’s educational setting, in the fall of the final year by submitting a proposal to his/her advisor. The results of each student’s project are summarized in a written professional paper completed and presented in the student’s final summer session. The MSSE Steering Committee, faculty, and staff congratulate these deserving graduate students for their persistence to pursue a graduate degree, while continuing full-time employment as science educators.
MSSE Program, College of Letters and Science

Director: Gregory Francis
Associate Director: John Graves
Associate Director: Diana Paterson
Program Officer: Holly Thompson

MSSE Faculty Steering Committee

David Cherry
Steve Holmgren
Todd Kaiser
Dave Lageson
Karlene Hoo
Jennifer Luebeck
Nicholas Lux
Kim Obbink
Amy Washtak
Angela Weikert
Walt Woolbaugh

Letters & Science
Chemistry/Biochemistry
Electrical & Computer Engineering
Earth Sciences
Graduate School
Mathematics
Education
Academic Technology & Outreach
Bozeman HS, MSSE Graduate
Museum of the Rockies, MSSE Graduate
Science Education

Supporting Colleges & Divisions

Academic Technology & Outreach: Kim Obbink
College of Agriculture: Charles Boyer
College of Engineering: Brett Gunnink
College of Education, Health & Human Development: Alison Harmon
College of Letters & Science: Nicol Rae
The Graduate School: Karlene Hoo

Collaboration Departments

Cell Biology & Neurosciences: Roger Bradley
Chemistry/Biochemistry: Mary Cloninger
Civil Engineering: Jerry Stephens
Computer Science: John Paxton
Earth Science: Mary Hubbard
Ecology: Diane Debinski
Education: Tricia Seifert
Electrical Engineering: Todd Kaiser
Health & Human Development: Deborah Haynes
Land Resources & Environmental Sciences: Tracy Sterling
Microbiology & Immunology: Mark Jutila
Physics: Yves Idzerda
Plant Science & Plant Pathology: Mike Giroux
Political Science: Linda Young
2018 Capstone Project Advisors
Lindsey Albertson, Ecology
Chris Bahn, Chemistry/Biochemistry
Lisa Brown, Academic Technology & Outreach
Eric Brunsell, Science Education
Nick Childs, Physics
Greg Francis, Physics
Candace Goodman, Chemistry/Biochemistry
John Graves, Science Education
Steve Holmgren, Chemistry/Biochemistry
Robyn Klein, Plant Sciences & Plant Pathology
Dan Lawver, Earth Sciences
Nicholas Lux, Education
Bill McLaughlin, Chemistry/Biochemistry
Tom McMahon, Ecology
Terrill Paterson, Ecology
Elinor Pulcini, Microbiology & Immunology
Marci Reuer, Science Education
Dana Skorupa, Chemical & Biological Engineering
Kenneth Taylor, Physics
Jim Vanides, Academic Technology & Outreach
Angie Weikert, Museum of the Rockies
Dave Willey, Ecology
Walt Woolbaugh, Science Education

Off-Campus Advisors
Jessi Anderson, Powell City High School, Anaconda, MT
Callan Bentley, N. Virginia Comm. College, Annandale, NV
Joseph Bradshaw, Bozeman High School, Bozeman, MT
Andrew Jakes, National Wildlife Federation, Missoula, MT
Tom Kaye, Oregon State University, Corvallis, OR
Steve Kristoff, Indiana University, Indianapolis, IN
Louise Mead, Michigan State University, E. Lansing, MI

Marrisa Pedulla, Montana Tech, Butte, MT
Nate Richardson, US Fish/Wildlife Services, Corvallis, OR
Suzanna Soileau, USGS Northern Rocky Mtn. Science Ctr., Bozeman, MT
Cathy Stierman, Clark University, Dubuque, IA
Leanne Lorenz, Sacajawea Middle School, Bozeman, MT
<table>
<thead>
<tr>
<th>Presenter</th>
<th>Room</th>
<th>Date</th>
<th>Time</th>
<th>Presenter</th>
<th>Room</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baimatova, Akylay</td>
<td>Jabs 415</td>
<td>July 6</td>
<td>9 am</td>
<td>Machin, Jena</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>11 am</td>
</tr>
<tr>
<td>Brenner, Cheryl</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>12 pm</td>
<td>Maday-Travis, Lewis</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>9 am</td>
</tr>
<tr>
<td>Brody, Stewart</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>8 am</td>
<td>Miller, David</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>3 pm</td>
</tr>
<tr>
<td>Browning, Linzy</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>11 am</td>
<td>Monroe, Bobbi Lynn</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>11 am</td>
</tr>
<tr>
<td>Buchanan, Tyler</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>2 pm</td>
<td>Montemurro, Alison</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>9 am</td>
</tr>
<tr>
<td>Butler, Dava</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>1 pm</td>
<td>Newman, Timothy</td>
<td>Jabs 415</td>
<td>July 6</td>
<td>8 am</td>
</tr>
<tr>
<td>Calore, Dan</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>2 pm</td>
<td>Pelliccia, Chris</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>11 am</td>
</tr>
<tr>
<td>Carroll, Josh</td>
<td>Jabs 415</td>
<td>July 6</td>
<td>1 pm</td>
<td>Pichette, Claire</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>11 am</td>
</tr>
<tr>
<td>Charbonneau, Alison</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>8 am</td>
<td>Pike, Clint</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>10 am</td>
</tr>
<tr>
<td>Clark, Bruce</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>3 pm</td>
<td>Rahschulte, Scott</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>2 pm</td>
</tr>
<tr>
<td>Cleary, Christine</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>1 pm</td>
<td>Rapone, Marcia</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>1 pm</td>
</tr>
<tr>
<td>Curran, Dan</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>4 pm</td>
<td>Reilly, Brianna</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>10 am</td>
</tr>
<tr>
<td>Curran, Jacquelyn</td>
<td>Jabs 415</td>
<td>July 6</td>
<td>11 am</td>
<td>Rice, Jocelyn</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>8 am</td>
</tr>
<tr>
<td>Dalbey, Leslie</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>9 am</td>
<td>Robbins, Austin</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>12 pm</td>
</tr>
<tr>
<td>Day, Nate</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>9 am</td>
<td>Rost, Linda</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>12 pm</td>
</tr>
<tr>
<td>Doup, Jamie</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>10 am</td>
<td>Sagissor, Phil</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>12 pm</td>
</tr>
<tr>
<td>Eichner, Samantha</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>4 pm</td>
<td>Savage, Laureen</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>4 pm</td>
</tr>
<tr>
<td>Engebretsen, Derek</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>11 am</td>
<td>Schaller, Micaela</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>8 am</td>
</tr>
<tr>
<td>Giannmo, Cheri</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>9 am</td>
<td>Schwalm, Jeffrey</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>8 am</td>
</tr>
<tr>
<td>Harms, Miriam</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>3 pm</td>
<td>Stuart, Kelsey</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>2 pm</td>
</tr>
<tr>
<td>Hollow, Tyler</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>3 pm</td>
<td>Tierney, Kelly</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>2 pm</td>
</tr>
<tr>
<td>Johnson, Erik</td>
<td>Jabs 415</td>
<td>July 6</td>
<td>10 am</td>
<td>Tinder, Cathleen</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>1 pm</td>
</tr>
<tr>
<td>Jones, Cameron</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>4 pm</td>
<td>Tracy, Sue</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>3 pm</td>
</tr>
<tr>
<td>Kessler, Aaron</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>10 am</td>
<td>Tschanz, Chad</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>12 pm</td>
</tr>
<tr>
<td>Kibala, Kevin</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>10 am</td>
<td>Twitchell, Katherine</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>10 am</td>
</tr>
<tr>
<td>Knapik, Kevin</td>
<td>Jabs 415</td>
<td>July 5</td>
<td>11 am</td>
<td>Van Valkenburg, Elise</td>
<td>Jabs 415</td>
<td>July 2</td>
<td>12 pm</td>
</tr>
<tr>
<td>Kremer, Jessica</td>
<td>Jabs 311</td>
<td>July 2</td>
<td>2 pm</td>
<td>Wallace, Ryan</td>
<td>Jabs 311</td>
<td>July 6</td>
<td>1 pm</td>
</tr>
<tr>
<td>Krogh, Beth</td>
<td>Jabs 415</td>
<td>July 3</td>
<td>12 pm</td>
<td>Waller, Jessica</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>10 am</td>
</tr>
<tr>
<td>Larson, David</td>
<td>Jabs 311</td>
<td>July 3</td>
<td>1 pm</td>
<td>Wyman, Tamera</td>
<td>Jabs 311</td>
<td>July 5</td>
<td>9 am</td>
</tr>
</tbody>
</table>
Summer 2018 MSSE Science Education Symposium Presentations

Monday, July 2, 2018

9 am  **Cheri Giammo** - Thornton, CO  
       Erie High School, Erie, CO  
       Facilitator: Claire Pichette

**Front Loading Science-Related Math Skills in High School Chemistry**
Students reviewed and practiced mathematical concepts related to the upcoming chemistry unit before being introduced to specifics of the topic. Pre- and post-math content tests, surveys, summative assessments and interviews were used as data collection instruments. Data were processed using both qualitative and quantitative analysis techniques. The results suggested that students that received the treatment did not show significant gains in achievement compared to those that received traditional lessons, nor did treatment change their attitudes toward math in chemistry.

9 am  **Leslie Dalbey** - Polson, MT  
       Polson Middle School, Polson, Montana  
       Facilitator: Nate Day

**The Impact of the 5E Learning Cycle on 7th Grade Students' Learning and Retention of Science Concepts**
Students participated in four instructional units related to genetics and the human body. Two treatment units were designed using the 5E Learning Cycle whereas two non-treatment units were designed using more traditional science teaching practices. To evaluate students’ learning and retention of the science content the following data collection tools were utilized: pre-, post-, and delayed-post tests, performance assessments, and student generated concept maps. Results suggest that students made gains with both instructional methods.

10 am  **Kevin Joseph Kibala** - Midland Park, NJ  
       Pascack Valley High School, Hillsdale, NJ  
       Facilitator: Alison Charbonneau

**Creating a Science Board Game: Increasing Student Motivation and Achievement in Learning**
Incorporating content into the structure of a board game has shown to be a motivator and reflection of learning. This study asks students to create a board game which models an electric circuit and determine how voltage and current are represented in each other’s board games. Results show that the creativity students found with representing their learning of science content increased motivation and achievement.

10 am  **Jamie Doup** - Galena, OH  
       Horizon Science Academy, Columbus, OH  
       Facilitator: Tyler Buchan

**Bellwork as a Strategy to Increase Student’s Ability to Analyze Graph and Chart Data in the Biology Classroom**
Strategies to improve graph interpretation were performed in an eleventh grade Biology classroom. Results were analyzed using ACT science tests, student interviews, surveys, and science notebook entries. Student results were compared to previous student results from a year-long ACT science prep course. The results show that similar increases were seen in both instructional methods.

11 am  **Derek Engebretsen** - Telluride, CO  
       Telluride Middle/High School, Telluride, CO  
       Facilitator: Lewis Maday-Travis

**Science and Engineering Practices in Secondary Science**
In an effort to improve instruction around the NGSS practices of Designing and Carrying Out Investigations and Engaging in Argument from Evidence, students were asked to scaffold lab-based arguments using the Claim-Evidence-Reasoning framework, and perform a self-assessment using a rubric that was designed around the Investigations practice. Students completed a pre- and post-test, surveys, and conducted interviews to probe the efficacy of the intervention. In general, students reported that this intervention clarified the expectations for their performance during these activities.

11 am  **Jena Machin** - Port Orchard, WA  
       West Hills STEM Academy, Bremerton, WA  
       Facilitator: Jocelyn Rice

**Learning Through Science Field Experiences**
Fourth grade students participated in science-based field trips designed around earth, life, and physical science concepts learned in class. Data collection was done with pre-test and post-tests on content knowledge, student interviews, student journals, teacher journal, observational field notes and student surveys. The data was analyzed using quantitative and qualitative strategies. The final results of the study indicated that students made growth in their content knowledge of a science concept after participating in a science based field trip.
Energy and Work Instructional Strategies in General Physics

Learning gains of students who received adapted energy instruction was compared to students who received traditional instruction. Energy instruction was adapted to include pictorial system diagrams, bar graphs, and live data collection. Pre- and post-content tests, surveys, interviews and teacher observations were used as data collection instruments. Students who participated in the adapted instruction showed slightly greater gains in interpretation of laboratory data. Insignificant differences in gains were noted on traditional assessments of work and energy concepts.

The Impact of Testing Format and Reflection on Student Perceptions of Science

Student content knowledge was assessed using two methods for test question organization, by question type or by topic, and participated in teacher led reflection on their performance. Test feedback, test tracking, observations, surveys, and interviews were used as data collection instruments. Data were processed using both quantitative and qualitative analysis strategies. The results suggested that students prefer tests organized by topic, but have mixed views of reflection.

The Effect of Feedback in Biomedical Science

Students were exposed to various peer and teacher feedback determined by treatment and non-treatment units. Surveys, interviews and pre- and post-content tests were used as instruments for data collection. Data was analyzed in a qualitative and quantitative manner. Results suggested a notable number of students had a positive change in their opinion of feedback. Results also showed student achievement increased during units with feedback. This provided evidence that feedback had a positive influence on student achievement.

Growing Academic Resilience in Students of Science through Mimicry of Forest Resilience

Forests use an underground mychorrhizal network to transmit resources and improve ecosystem resilience. The forest’s method for strengthening connections and opening lines of communication were mimicked in the science classroom to foster a community of information exchange. Pre- and post-assessment of content, pre- and post-study surveys, and tracking of communication methods were used to evaluate student ability to persevere. The degree to which a classroom’s level of networking translated to improvement in individual academic resilience was evaluated.

Shifting To Science and Engineering Practices through Instructional Coaching

Science teachers engaged in a 4-week coaching cycle to increase efficacy and knowledge about the Science and Engineering Practices in the Next Generation Science Standards. Teachers were also observed for longevity of the practices used in their classroom. This treatment also looked at student efficacy in the practices. Data collection instruments included both teachers and students pre- and post- surveys and interviews. Teachers were also observed weekly for S & E practice implementation. Data included both qualitative and quantitative analysis. The results suggested some increase in efficacy and knowledge by teachers but limited gains in student understanding of the practices.

Student Engagement and Attitude in a Project-Based Learning Science Classroom

Students engaged in three different Project-Based Learning classes; Performance Engineering, Forensics, and Scientific Ethics. Surveys, interviews and an engagement observation rubric were used as data collection instruments. Data was processed using both quantitative and qualitative analysis strategies. The results suggested that students were more engaged and had a better attitude in regards to science.
Monday, July 2, 2018

3 pm  **Miriam Harms** - Geneva, NY  
Romulus Central School, Romulus, NY  
Facilitator: Samantha Eichner  
**Claim, Evidence, Reasoning in Middle School Science**  
This study integrated the claim, evidence, reasoning (CER) argumentation technique into seventh and eighth-grade science curriculum. Test scores, surveys, and interviews, were used as data collection instruments in addition to the coding of CER responses to assess their quality. The results suggested that students were able to improve their ability to write evidence-based claims using the claim, evidence, reasoning skill.

3 pm  **Tyler Hollow** - Helena, MT  
Helena High School, Helena, MT  
Facilitator: David Miller  
**Effects of Science Inquiry on Student Engagement and Conceptual Understanding**  
The Action Research compared student engagement and student conceptual understanding of traditional instruction to science inquiry instruction with ninth grade Earth Science students. The treatment unit was Astronomy taught using the 5E instructional learning cycle. The non-treatment unit was Weather and Storms taught using traditional instruction. Data was collected through student questionnaires, interviews, concept attainment techniques and pre- and post- summative assessments. Students had increased student engagement and better conceptual understanding in the science inquiry unit.

4 pm  **Dan Curran** - DeForest, WI  
DeForest Area High School, DeForest, WI  
Facilitator: Brianna Reilly  
**Tracing Matter and Energy in the High School Chemistry Classroom**  
Students received additional energy instruction in a chemical bonding unit, including energy diagrams and energy conservation along with lab activities where students modeled bond energy and observed endothermic and exothermic reactions. Pre- and post-unit surveys and assessments, interviews, and instructor field observations were used for data collection. The results suggest that students are clearly able to distinguish between matter and energy in explaining the effects of chemical reactions, explain how matter and energy are conserved, and explain bond energy.

4 pm  **Laureen Savage** - Spokane, WA  
Lewis and Clark High School, Spokane, WA  
Facilitator: Alison Montemurro  
**Engineering Stewardship for the Inland Northwest**  
Student-created, place-based environmental engineering projects were used for engagement and assessment of ninth graders’ natural resource stewardship. Computer technology and human-centered design, along with localized water and soil science content and concepts, offered a platform for addressing socio-scientific issues and ecological concerns. Periodic surveys, lab journals, written responses, informal interviews, and classroom observations provided student perception and content learning statistics. Prototype development and project presentations supported further qualitative evaluation. Data analysis indicates increased environmental awareness and responsibility for natural resources.

Tuesday, July 3, 2018

8 am  **Micaela Schaller** - Maquoketa, IA  
Dubuque Senior High School, Dubuque, IA  
Facilitator: Tyler Hollow  
**Clickers in the High School Biology Classroom**  
Students were exposed to handheld response clickers as a means aimed to increase engagement and content retention as well as help with metacognition. Data collection tools included a pre- and post-science engagement survey, pre- and post-unit content surveys, a clicker attitude survey, and a qualitative final student interview. Results showed small to negligible normalized gains in treatment versus non-treatment units of study. Similarly, student’s science engagement pre- versus post scores were generally unchanged. The Clicker Attitude Survey and post student interview though, showed that when clickers were used in the classroom, students generally did have a positive opinion of clicker use and were anecdotally more likely to examine their own learning.
Kahoot as a Formative Assessment in a Life Science Classroom

Three different modes of Kahoot were compared as formative assessments. Pre- and post-content tests, surveys, interviews, and observations were used for data collection. There was no statistical difference between the summative assessment scores of the different treatments, but qualitative data showed that outlying student populations were affected differently by repeated use of Kahoot. Distinct populations preferred different modes of Kahoot, and long-term engagement with it changed depending on the students’ abilities.

The Effect of Place-Based Education on Achievement, Attendance, and Environmental Attitudes

Students developed intensive field-based research projects and learned fly fishing skills to tie their in-class environmental science content knowledge to local, real-world situations. The treatment was assessed through two pre- and post-treatment surveys, attendance records, student interviews, state standardized test scores, and student reflection writings. The results suggested a slight increase in the will to attend school, an increase in personal environmental responsibility, and negligible performance gains on state standardized tests compared to other years’ students.

The Nature of Science and Primary Sources

Students engaged in explicit reflection on the elements of the Nature of Science understandings outlined in NGSS during the analysis of historical primary sources. Data was collected through a pre- and post- treatment Likert Scale, student interviews, a primary source analysis count, and student written responses to questions, and was analyzed using quantitative and qualitative strategies. The evidence shows that students made significant gains in several understandings, with more gains in those closely associated with the Crosscutting Concepts.

When Curiosity Drives Scientific Discovery

Through establishing a learning environment that encourages curiosity and enables student discovery through the learning process, students developed their own research and lab investigations. Observational data, student interviews, surveys, and a teacher reflective journal were used to collect data, which was processed using qualitative analysis strategies. The results strongly indicate that allowing students to develop their own learning pathway leads to greater student engagement and increased learning, ultimately improving the learning atmosphere in the classroom.

Graphing and Estimation as Tools to Improve Critical Thinking in High School Chemistry Students

Students engaged in a daily estimation activity to practice mathematical reasoning, argumentation, and visual analysis. Students applied those skills by regularly creating and analyzing graphs using real-world and lab-generated data sets. Self-confidence surveys, performance assessments, and presentations were used as data collection instruments. Data were processed using qualitative analysis strategies. The results suggested that students improved their abilities to create and interpret graphs using mathematical reasoning and visual analysis, key components of critical thinking.

Metacognition and the Next Generation Science and Engineering Practices

Students used a practice tracker to utilize metacognitive strategies at the beginning and end of each meeting time to reflect on the practice or practices used during the lesson, lab, or activity. Pre and post-assessments, surveys, interviews, and the trackers were administered as data collection instruments. Data were analyzed both qualitatively and quantitatively. Results suggest that students made gains in retention and understanding of the science and engineering practices.
Tuesday, July 3, 2018

12 pm  Linda Rost - Baker, MT  Jabs 311
Baker High School, Baker, MT
Facilitator: Tamera Wyman

Analysis of the Role of Iron Uptake Mechanisms and Addition of Iron-Doped Nanoparticles in Phage Infections in Staphylococcus aureus and Mycobacterium smegmatis

Bacterial was grown in various iron treatments and infected with phages to determine the role of iron in phage infection. Bacteria was also treated with iron-doped apatite nanoparticles to determine how they affect plaque counts and size. Bacteria grown in iron treatments showed more plaque counts, but less than when treated with nanoparticles. Nanoparticles also produced larger plaques. The mechanisms for phage infections should be known so they can be used as an alternative to antibiotics in treating bacterial infections.

12 pm  Beth Krogh - Ankeny, IA  Jabs 415
Southeast Polk High School, Pleasant Hill, IA
Facilitator: Laureen Savage

Implementing an Incentive-Based System in an Alternative Program within the Science Classroom

An incentive-based system was used to encourage better attendance and more adult-like behaviors using a color-coded system with various incentives to promote more students earning more science credits at the end of each quarter. Pre and post-Likert surveys with open ended questions, focus groups, individual interviews, behavior and attendance data provided both quantitative and qualitative data. The results suggested the incentive did not impact students.

1 pm  David Larson - Hardwick, MA  Jabs 311
Murdock High School, Winchendon, MA
Facilitator: Cheryl Brenner

Effects of Outdoor Lessons to Enhance Student Achievement, Motivation and Engagement

Students often lack motivation and desire to engage when the learning setting is 100% classroom-based. This study tested student performance when an outside learning environment was added to the curriculum. Pre- and Post-tests, surveys, interviews and performance assessments were utilized as data collection instruments. In addition, student unit grades were used to determine if a combined indoor and outdoor learning environment improved student performance as compared to an indoor learning setting only.

1 pm  Dava Butler – Waco, TX  Jabs 415
La Vega Jr. High and Girl Scout Troop #1587, Waco, TX
Facilitator: Derek Engebretsen

An Analysis of Fossil Identification Guides to Improve Data Reporting in Citizen Science Programs

This study tested three visual guides for identifying fossils from central Florida. Teams of untrained participants each used one guide to identify fossils. Paleontology professionals also identified samples for comparison. Comparing groups revealed which image style produced results most similar to data from professionals.

2 pm  Tyler Buchan - Edmonton, Alberta, Canada  Jabs 311
Salisbury Composite High School, Sherwood Park, Alberta, Canada
Facilitator: Sue Tracy

Laboratory Skills Performance Assessments in Chemistry

Students were given instruction in lab skills and then completed individual performance assessments. The lab skills assessed were using the electronic balance, graduated cylinder, Bunsen burner, pipetting, and titrating. Pre- and post-treatment tests, surveys, self-assessments, skill assessment rubrics, formative quizzes, a summative unit exam, and interviews were used as data collection instruments. The results indicated a positive change in students’ attitudes toward chemistry and the lab, as well as in their lab skills, and academic achievement.

2 pm  Kelly Tierney - Albany, OR  Jabs 415
South Albany High School, Albany OR
Facilitator: Phil Sagissor

A study of the Survival of Broadcast Milkweed Seeds Versus Containerized Plugs in Willamette Valley Restoration Plots

The study looked at prairie restoration sites within the Willamette Valley that included a focus of showy milkweed (Asclepias Speciosa) survival and growth. The two were compared between broadcast seeding or hand planted containerized plugs to determine success. Stems were counted in July and August of 2017, and again in May and June of 2018 to see if any change had happened, and by what prescription including spraying, mowing and burning.
Tuesday, July 3, 2018

3 pm  David Miller Jr. – Media, PA  
        Penncrest High School, Media, PA  
        Facilitator: Kelsey Stuart  
**Determining the Effect of Using Outdoor Instruction within an Environmental Science Class on Increasing Students’ Academic Achievement and Attitudes towards the Environment**  
This purpose of this study is to determine the effectiveness of utilizing outdoor education to increase student achievement in science, and to increase students’ attitudes towards the environment. Several lessons within a unit of study were taught in an outdoor classroom. Students were given pre- and post-test assessments, filled out pre- and post-treatment surveys, and participated in small group interviews. Overall, students demonstrated growth in their learning, and exhibited positive attitudes towards their experience within an outdoor learning environment.

3 pm  Bruce Clark - Rochester, MN  
        Lewiston-Altura High School, Lewiston, MN  
        Facilitator: Jessica Waller  
**The Effects of Competition on Student Engagement in the Conceptual Physics Classroom**  
Labs were assigned to high school juniors and seniors in which they were required to work in a cooperative group to build models testing motion and force concepts in physics. At the completion of the projects, student groups tested their designs against each other in a culminating competition. Pre-tests, post-tests, pre-treatment surveys and post-treatment surveys were administered. The results indicated that students increased their comprehension in physics concepts while feeling more enthusiastic in the science classroom.

Thursday, July 5, 2018

8 am  Jocelyn Rice - Las Vegas, NV  
        Bishop Gorman High School, Las Vegas, NV  
        Facilitator: Daniel Curran  
**An Investigation of Four Remediation Techniques in the Science Classroom**  
Students in need of remediation were assigned to a mid-day remediation period and exposed to one of four remediation strategies. These strategies included science journaling, table manipulatives, flipped classroom, and concept mapping. Pre and post-test scores, a student confidence survey, and post-treatment interviews were used as data collection instruments. A t-test was used to determine if changes in scores from pre to post-test were considered significant. The results showed that the effectiveness of each strategy varied by unit.

8 am  Jeffrey A. Schwalm - Charlottesville, VA  
        Albemarle High School, Charlottesville, VA  
        Facilitator: Linda Rost  
**A Descriptive Study of the Partnership between High School Students and Scientists**  
This study provided three opportunities for students to work alongside scientists in their workplace. Primary sources of data were pre and post surveys and interviews that looked at any impacts the experiences may have had. Results showed the overall impacts of the experiences varied based on the design of the experience. Students who participated in the more extensive, three-day partnership were much more positive in their feedback and had a better understanding of the content than the other two experiences.

9 am  Tamera Wyman - Poplar Grove, IL  
        Huntley High School, Huntley, IL  
        Facilitator: Miriam Harms  
**Increasing Student Knowledge of Zoological Terminology**  
Students participated in retrieval practices through a series of activities focused on learning and using terminology associated with zoology in both blended and traditional format classes. Previous knowledge surveys, formative and summative assessments, and student interviews were used to collect data for quantitative and qualitative analysis. The data suggests that students made positive gains in their use of zoologic terminology.

9 am  Lewis Maday-Travis – Seattle, WA  
        Seattle Academy of Arts and Sciences, Seattle, WA  
        Facilitator: Scott Rahschulte  
**Feedback Promoting Equity and Belonging in a Middle School Human Biology Classroom**  
Providing a sense of belonging is one important step towards sustained participation in STEM fields. This study investigated the relationship between student participation in generating classroom culture and their sense of belonging in the science classroom. Students regularly provided feedback about classroom routines, work structures, and grading. Feedback cycles alone did not have a significant impact on students’ self-reported sense of belonging. However, in classes where feedback was effectively integrated into a positive classroom culture, belonging scores increased over time.
**Thursday, July 5, 2018**

10 am  **Jessica Waller** - Manson, IA  
Manson Northwest Webster High School, Manson IA  
*Facilitator: Kevin Kibala*

**The Effect of the Conceptual Change Model on Misconceptions in 9th grade Physics**

Students engaged in instruction modeled after the Conceptual Change Model on the topic of Motion and Forces, emphasizing Newton’s Laws. Pre- and post-content tests, surveys, and interviews were used as data collection instruments. Data were processed using both quantitative and qualitative analysis strategies. The results suggested that students made noteworthy decreases in in their misconceptions involving Newton’s Laws.

10 am  **Katherine Twitchell** - Telluride, CO  
Telluride High School, Telluride, CO  
*Facilitator: Cheri Giammo*

**The Effects of Explicitly Teaching Bloom’s Taxonomy and Providing Direct Student Practice in the High School Science Classroom to Increase Student Success and Confidence on Higher-Order Thinking**

Ninth grade Biology students were taught the ideas of Bloom’s Taxonomy and questioning levels, then asked to apply these levels numerous times over the course of six weeks in three separate projects related to the units of DNA and Protein Synthesis, Genetics, and Taxonomy. Pre- and post-surveys, interviews, and critical thinking tests were used to collect data. Students report higher understanding both of Bloom’s Taxonomy and in the areas their topics focused on.

11 am  **Linzy Browning** - Bozeman, MT  
Multi-family Homeschool Co-op, Bozeman, MT  
*Facilitator: Micaela Schaller*

**Incorporating Literature into the Science Classroom**

Elementary homeschool students interacted with literature related to the class’s science course work in order to assess effects of its incorporation on student performance and attitudes. Parents reflected on the extent to which the intervention modeled to them assisted them in integrating literature into their science instruction. Qualitative and quantitative data analysis strategies were used to analyze student quizzes, student interviews, and student and parent surveys. Results indicated no quantitative differences but significant positive attitudinal changes associated with the treatment.

11 am  **Kevin Knapik** - Lockport, IL  
Evergreen Park Community High School, Evergreen Park, IL  
*Facilitator: Jamie Doup*

**Impact of Peer Review on Constructing Scientific Arguments Based on the Claim-Evidence-Reasoning Framework**

Students participated in a treatment unit where they developed arguments based on evidence found in a case study about the rise in cases of Lyme disease. During the treatment unit, students engaged in various peer and self-review strategies. After working through the treatment unit, there was a statistically significant increase in student perception of the value of the peer review process and the ability of the students to critique, construct, and defend fictional experiments.

12 pm  **Austin Robbins** - Kalispell, MT  
Glacier High School, Kalispell, MT  
*Facilitator: Dava Butler*

**Effects of Video Lecture on Student’s Mastery of Engineering Design Software**

The effects of video based and live lecture instruction were compared for students learning basic modeling skills in the design software. Mastery was measured by comparing the time required to complete tasks in the software. Likert surveys, student interview responses, and modeling tests were used as data collection instruments. The results suggested that students in the treatment had greater mastery and retention of modeling skills while all students preferred some form of video lecture when learning something new.

12 pm  **Cheryl Brenner** - Breckenridge, CO  
Summit County High School, Breckenridge, CO  
*Facilitator: Marcia Rapone*

**The Effect of Graded Homework in a High School Chemistry Classroom Focused on Students Long-term Retention, Study Skills, and Confidence in the Content**

This study investigated graded versus non-graded homework and its impact on student understanding of content, study skills, and test taking confidence. Students completed homework throughout the semester that was graded every other unit allowing for direct comparison. Test scores, percentage completion, unit surveys, and final assessment scores were used to determine if grading homework improved test scores, independent study skills, and long-term retention. Results showed that students made significant gains in each of these.
Thursday, July 5, 2018

1 pm  Cathleen Tinder - San Francisco, CA  Jabs 311
       Sea Crest School, Half Moon Bay, CA
Facilitator: Timothy Newman

**Place-Based Learning in a Middle School Science Classroom**
This study examined whether place-based learning had more of an impact on science comprehension, curiosity and interest in the environment and local surroundings, or attitude and interest in subject matter. Students actively participated in geology field studies in the Golden Gate Recreation Area with the National Park Service, and learned about plate tectonics, rocks and the rock cycle in the unique context of the San Francisco Bay Area. The treatment included pre-and post-tests, student interviews, work samples, and pre-and post-surveys. Significant gains were measured in meeting learning targets, as well as with student interest in the environment.

2 pm  Kelsey Stuart - Hawthorne, CA  Jabs 311
       Empowered Leaders Academy: Zirobwe, Uganda
Facilitator: Jena Machin

**Improving Primary Science Instruction in Rural Uganda**
A qualitative case study involving two science teachers was conducted in a rural Ugandan primary school to measure the effectiveness of demonstrating hands-on activities and mentoring as a way to encourage teachers to improve their science instruction. Interviews, photos, videos, field notes, and a journal were used as data collection instruments. The results suggested that demonstrating these activities and mentorship can inspire teacher to improve their instruction; however, misconceptions from the pre-service primary teacher education must be addressed first.

2 pm  Scott Rahschulte - Lawrenceburg, IN  Jabs 415
       Ivy Tech Community College, Lawrenceburg, IN
Facilitator: Christine Cleary

**Assessing the Science Faculty Perspective about the Need and Use for Curriculum Mapping of an Anatomy and Physiology Course at a Community College**
This project interviewed faculty at a community college to determine how they developed the content taught within their classrooms, and if the use of a curriculum map would be beneficial. Faculty views about their college’s current learning objectives were assessed through an interview. The faculty then reviewed a curriculum map and nation-wide science standards to determine if these would improve the development of their course content. The results showed that the curriculum map would be beneficial for faculty to incorporate.

3 pm  Sue Tracy - Wrenshall, MN  Jabs 311
       Wrenshall Public High School, Wrenshall, MN
Facilitator: Josh Carroll

**The Frayer Method: 7th Grade Life Science Vocabulary in the Content Area**
Students used of the Frayer Method to enhance and improve their scientific vocabulary acquisition in their science class. Pre- and Post-definition and contextual tests, pre- and post-implementation surveys, vocabulary knowledge scales and student interviews were used as data collection instruments. Data collected during this study was processed using both qualitative and quantitative analytical methods. The data did not reveal any significant or noteworthy gain to establish the Frayer Method was better for vocabulary acquisition than typical vocabulary acquisition techniques.

4 pm  Cameron Jones - Davis, CA  Jabs 311
       Birch Lane Elementary, Davis, CA
Facilitator: Elise Van Valkenburg

**Addressing Misconceptions through Inquiry in First Grade Science**
Students participated in four units using various teaching strategies: demonstrated, structured, 5E guided, and open inquiry. The conceptual change model for repairing misconceptions was incorporated into each unit. Misconception probes were administered at the beginning, end, and one month following each unit. Interviews, analysis of work, and surveys were administered. Results suggested that students made the highest gains using the 5E guided inquiry unit about light. Students’ perceived similar levels of engagement and control over learning regardless of the approach.

4 pm  Samantha Eichner - Boise, ID  Jabs 415
       Willow Creek Elementary, Nampa, ID
Facilitator: Akylay Baimatova

**Improving Measurement Accuracy During Science Experiments with Fourth Grade Students**
Students engaged in length measurement and estimation practice over two months to increase their accuracy during science experiments. Pre- and post- science experiments with long and short distances, performance tasks, surveys, and interviews were used as data collection instruments. The results suggest that with practice students can make notable gains and record fewer unreasonable answers.
**Friday, July 6, 2018**

8 am  **Stewart Brody** - Rogersville, MI  
Branson High School, Branson, MI  
Facilitator: David Larson

**Formative Assessment Effect on Honors Science Students**
Honors student freshmen were studied for the effect of formative assessments upon their communications with the instructor. Pre- and post-content tests, pre- and post-treatment surveys, and interviews were used as data collection. Data were processed using both quantitative and qualitative analysis strategies. The results suggested that communication via formative assessments raised test scores, raised classroom positivity, and eased stress in an honors science course.

8 am  **Timothy Newman** - El Cerrito, CA  
Bishop O’Dowd High School, Oakland, CA  
Facilitator: Cameron Jones

**The Effect of a Science Research Trip Experience on Learning, Motivation, and Future Pathways**
This project investigated how participating on a science research trip impacts student learning, motivation to learn more about science, and influences decisions toward future endeavors. Data were collected from students on current trips as well as former students from past trips using pre- and post-assessments, surveys and interviews. Analysis using both quantitative and qualitative data indicate a notable relationship between participating on a research trip and improvement in student learning, motivation and an overall connection with nature.

9 am  **Alison Montemurro** - Lowell, MA  
Lowell High School Lowell, MA  
Facilitator: Katie Twitchell

**Increasing Mental Muscle with Engaging Bell Ringers in a Science Classroom**
This study utilized bell ringers which required higher order thinking to increase engagement. Gains were measured in pre and post assessments, student surveys, and reflections. Treatment groups were two units using bell ringers, higher order thinking, and a control group that had simple recall of science knowledge. Initial results indicate that the students showed mixed results in both the control and the treatment groups in their post assessments. Engagement in student surveys yielded positive results. Observations included students “talking about science” outside of class and in the hallway with treatment groups.

9 am  **Akylay Baimatova** - Davie, FL  
American Heritage School, Plantation, FL  
Facilitator: Beth Krogh

**The Role of Inquiry in Disproving Misconceptions in High School Chemistry**
Students gathered and interpreted data within a stoichiometry unit on temperature, volume and rate of reaction in a closed system. Pre- and post- content assessments, surveys and inquiry lab rubrics were used as data collection instruments. Both qualitative and quantitative analysis strategies were used. The results suggested that students were able to correct their misconceptions about particular chemistry concepts during inquiry activities.

10 am  **Aaron Kessler** – Buffalo, WY  
Clear Creek Middle School, Buffalo, WY  
Facilitator: Clint Pike

**Classroom Climate in a Rural School Context: Reflection, Modification, and Improvement in the Science Classroom**
Teachers engaged in frequent and nonscheduled observations of their colleagues throughout a semester. The goal and focus of the observations was to stimulate dialogue between teachers regarding unique classroom climates in an attempt to improve personal best practices in their classrooms. Results suggest that in order for personal professional growth to continue in the classroom, one must be willing to listen, reflect and learn from ones’ peers and not teach in isolation. Constructive criticism should be welcomed, not feared.

10 am  **Erik Johnson** - Spring Green, WI  
River Valley High School, Spring Green, WI  
Facilitator: Kevin Knapik

**Flipped Teaching Methods in High School Biology**
Flipped teaching methods were implemented in a high school biology classroom. Student performance and attitudes toward flipped methods were compared with performance and attitudes towards traditional lecture-based teaching methods. Pre- and post- Likert surveys, interviews, observations, and LMS data were used as data collection instruments and data was analyzed both quantitatively and qualitatively. Students were more engaged with the in-class activities during flipped units however they preferred the in-class lectures to videos assigned to be watched at home.
Evidence-Based Argumentation and Scientific Literacy in High School Biology

Students engaged in close reading activities, writing activities and argumentation from evidence specific to the concepts of current ecological and medical problems. Pre- and post-content tests, Leikert surveys, and the district writing assessment argumentation rubric were used as data collection instruments. Data were processed using both quantitative and qualitative analysis strategies. The results suggested that although students had high confidence in their writing abilities, their writing did not improve on a statistically significant level. Continued application of the treatment with certain students did lead to modest improvements.

Using Storylines to Increase Student Performance in the Chemistry Classroom

Students in a treatment group participated in a bonding unit that centered around the story of a girl named, Maria, who suffers from cystic fibrosis. Throughout the unit, students in this group connected content regarding bonding back to Maria’s story in order to explain errors in protein folding. A comparison group received traditional instruction. Pre and post-assessment scores suggest that storyline incorporation has no effect on student performance. Additional information regarding student engagement was collected via student surveys and interviews.

Effects of Increased Frequency Hands-On Activities in Science Classroom

The classroom routines were switched from readings and occasional activities and labs to all readings assigned and classroom time exclusively was concept-reinforcing hands-on activities. Attitudes were assessed using a Test of Science Related Attitudes (TOSRA), pre- and post-interviews and survey, and science journals were used to reflect. Students’ attitudes generally favored the treatment teaching methods and confidence in learning was increased.

Investigating the Impact of Formative Assessments on Student Engagement in a Secondary Science Classroom

The purpose of this research project was to investigate the impact of formative assessments on student engagement, motivation, self-efficacy and overall learning in a chemistry classroom. A variety surveys, questionnaires and exit slips were used to measure student feelings and attitudes about formative assessments throughout the treatment period. The overall result of the research project demonstrated that students increased their overall level of engagement, self-efficacy and learning of chemistry concepts through the use of varied formative assessments and continuous feedback.

Learning with Multiple Representations in High School Physics

Students studied a physics unit on forces with concentrated practice in representing physical situations through word, diagram, graph, and equation. Changes in student attitude, conceptual understanding, and problem-solving ability were assessed after students learned through this representation-focused method. Pre- and Post-tests, interviews, student attitude surveys, and formative quiz results were used for data collection. Data was processed with quantitative and qualitative analysis strategies. Results indicated students gained conceptual understanding along with an increased ability to solve complex physics problems.
### 1999 Graduates
- Paul Andersen, Bozeman, MT
- Edward Barry, Sacramento, CA
- Richard Dees, Billings, MT
- Maureen Driscoll, Butte, MT
- Janet Erickson, Helena, MT
- Beth Farrar, Rapid City, SD
- Kerry Friend, Cayucos, CA
- Jonathan Hanson, Big Fork, MT
- Melissa Henthorn, Turah, MT
- Kevin Klawonn, Lennox SD
- Nancy Males, Mansfield, TX
- Wayne Mangold, Plevna, MT
- David McDonald, Sidney, MT
- Joy-Lyn McDonald, Sidney, MT
- Josey McClean, Great Falls, MT
- John Miller, Billings, MT
- Randall Morgan, Ketchikan, AK
- Kelly Morrow, Kalispell, MT
- Marjorie Robbins, Morton, IL
- Lisa Rubright, Manhattan, MT
- Peggy Taylor, Farmington, NM
- Shannon Walden, Fort Benton, MT
- Martin Wells, Taylor Mill, KY

### 2000 Graduates
- Randall Carmel, Millersburg, OH
- Beverly DeVore, Meeker, CO
- Ivanell George, Houston, TX
- Jeffery Greenfield, Shepherd, MT
- Mark Halvorson, Sidney, MT
- Tom Hennard, Stavanger, Norway
- Steven Lockyer, Conditon, OR
- Ann Lukey, Alberta, Canada
- Lisa Mahony, Bozeman, MT
- Craig Messerman, Missoula, MT
- Kathleen Napp, Scottsdale, AZ
- Sandy Shutey, Butte, MT
- Lisa Snyder, Chetenne, WY
- James Temple, Glendale, MT
- Melanie Vinion, Wooster, OH
- Chrystel Wells, Taylor Mills, KS

### 2001 Graduates
- Robert Beese, Gardiner, MT
- Rodney Benson, East Helena, MT
- Jeffrey Berg, Auburn, MA
- Lawrence Bice, Cottonwood, AZ
- Penny Long Blue, Ellsworth, KS
- Kathy Brown, Taft, CA
- Daniel Campbell, Big Timber, MT
- John Etgen, Belgrade, MT
- Sharon Fox, Great Falls, MT
- Ashton Griffin, Goldsboro, NC
- Taylor Hansen, Bozeman, MT
- Deanna Hill, Alberta, Canada
- Richard Lahti, Fergus Falls, MN
- Sanford MacSparran, Logan, UT
- Bradley Pirote, Belleville, KS
- Rebecca Reno, Havre, MT
- David Robbins, Nairobi, Kenya
- Jack Schoonen, Dillon, MT
- Wendy Sink, Burton, MI
- Clinton Stephens, Escalante, UT
- Kathleen Thorsen, WI

### 2002 Graduates
- Ronald Abarta, Chehalis, WA
- Shannon Bowen, Strasburg, VA
- Peter Bregand, Fullerton, CA
- Pamela Duncan, Woodstock, IL
- Leslie Griffen, Rohnert Park, CA
- Mary Jane Goebel, Rapid City, SD
- Jody Hurd, Helena, MT
- Tom Huston, Vale, OR
- Kevin Kapanka, Kenton, OH
- Lloyd Magnuson, Butte, MT
- Deanna Mazanek, Athena, OR
- Todd Morstein, Lakeside, MT
- Melissa Newman, Dutton, MT
- Chris Ottey, Bozeman, MT
- Robert Pendzick, Canfield, OH
- Mary Slack, Wheaton, IL
- Michelle Snyder, Athena, OR
- Michele Thomas, Bakersfield, CA
- Kerby Winters, Vale, OR

### 2003 Graduates
- Cyndie Beale, Fairbanks, AK
- John Scott Beaver, Talpa, TX
- Amy Berg, Auburn, MA
- Eric Berg, Auburn, MA
- Nikki Bethune, Sapulpa, OK
- Bruce Bourne, Seeley Lake, MT
- Kevin Bowman, Jackson, OH
- Corbin Brace, Waterville, ME
- Kelly Cameron, Ridgefield, WA
- Ralph Carlson, Hilmar, CA
- Corinne Chavern, Pittsburgh, PA
- Susan Choman, E. Wenatchee, WA
- Tom Cubbage, Great Falls, MT
- Sandra DeYonge, Rye, NY
- Sharon Dotger, Raleigh, NC
- Phyllis French, Douglasville, GA
- Michele Geisler, Rutland, VT
- Michael Gregory, Pinedale, WY
- Robin Hahn, Roundup, MT
- Kathy Howe, Houston, TX
- Jack Julian, Cairnbrook, PA
- Linan Kendall, Saunemin, IL
- David Lee, Taylorville, NC
- Brita Lien, Bozeman, MT
- Diane Mayer, Bozeman, MT
- Birgitta Meade, Decorah, IA
- Linda Moule, Claremont, CA
- Susan Olsen, Brownsville, PA
- Ryan Pmrka, Skagway, AK
- Rob Smith, Marengo, IL
- Sonja Steffan-Squires, Lancaster, CA
- Jim Stierbel, Corvallis, MT
- Nicole Trombetta, Duluth, GA
- Melody VanderWeide, Grand Rapids, MI
- Jeffery Wehr, Inverness, MT
- Tim Ziegler, Stowe, VT

### 2004 Graduates
- Kimberly Atkins, Annandale, MN
- Christopher Cox, Buffalo, WY
- Kelley Davis, Monktown, MD
- Kirsten DeHart, Houston, TX
- Patricia DiEduardo, Lewiston, ME
- Terry Edinger, Trabuco Canyon, CA
- Mary Margaret Eraci, Lombard, IL
- Randall Farchmin, Menomonee, WI
- Donna Furrow, Jackson Center, OH
- Larry Gursky, Roy, WA
- Emmylou Harmon, Kremmling, CO
- Penny Juenemann, Two Harbors, MN
- Loren Kane, Natick, MA
- Robin Kent, Missoula, MT
- Dan Kloster, Longmont, CO
- Karen Krieger, Bozeman, MT
- Deanna Meyer, West Jordan, UT
- Lee Moss, Orangeville, UT
- Michael Mulligan, Brazil
- Katharine Murphy, Ogden, KS
- DeAnn Neal, Midvale, UT
- Jeannie Paszek, Reno NV
- Glenn Peterson, Greeley, CO
- Kim Popham, Lolo, MT
- Mary Porter, Melrose, MA
- Gordon Powell, Cortland, OH
- Chuck Shepard, Saltsburg, PA
- Bernie Smith, Colstrip, MT
- Dorothy Smith, Colstrip, MT
- Scotty Stalp, Germany
- Kim Walker, Johnson, KS
- Ericka Wells, Jackson, WY
- Jeff Youker, Placerville, CA
- Brian Zeisler, Elko, NV

### 2005 Graduates
- Marc Afifi, Seaside, CA
- Christine Bergholtz, Kenai, AK
- Matt Bilen, Elgin, IL
- Andy Broyles, Aberdeen, SD
- Brendan Casey, La Mesa, CA
- Peggy Collins, Dudley, MA
- Andrew Conger, New Orleans, LA
- Michelle Cullen, Valdez, AK
- Richard Davis, Frazier, MT
- Eric Dougherty, Newport, NC
- Brian Edlund, Benson, MN
2005 Graduates - Continued
Rachel Endelman, Monroe, WA
Monica French, Salt Lake City, UT
Nelson Fuamayou, Hunan, China
Ricarda Hanson, Ashland, MT
Kelley Hoffman, Beaver Dam, WI
Diane Holloway, Osaka, Japan
Steve Huffman, Honolulu, HI
Cathy James-Springer, West Indies
Roby Johnson, Yuma, CO
Ryan Kapping, Wadena, MN
Nicolle Kirschstein, Newfield, NY
Anita Linder, MT. Zion, IL
Brad Loveday, Alamo NV
Justin Lovrien, Sioux Falls, SD
Leslie McDaniel, Memphis, TN
Carla McFadden, Oroville, WA
Valdine McLean, Lovelock, NV
Chris McNabb, Ganado, AZ
Jojame Mertz, Parker, CO
Eric Miller, Athens, OH
Lelia Mitchell, Brighton, MA
Mark Nevala, Klamath Falls, OR
Kristina Newman, Swanton, OH
Helga Pac, Bozeman, MT
Lori Peterson, Polson, MT
Lander Purvis, Bozeman, MT
Chris Putzler, Kalispell, MT
Margaret Rossignol, Boulder, CO
Matthew Rubin, Saugus, CA
Katherine Saylor, Fall City, WA
Tonya Shepherd, Pineville, LA
Chris Spera, Dixon, IL
Susan Steckel, Winchester, IL
Zachary Stroker, Columbia
Becky Sundin, Baker City, OR
Christine Sundly, Great Falls, MT
Brian Swarthout, Bozeman, MT
Harold Taylor, Bidwell, OH
Neysa Thiele, MT. Zion, IL
Erie Trame, Ann Arbor, MI
Josh Underwood, Tollesboro, KY
Travis Vandenburgh, Independence, MO
Jennifer Werda, Plymouth, NH
LeAnne Yenny, Bozeman, MT

2006 Graduates
Cheryl Abbott, Palmer, AK
Stacie Laducer Blue, Fargo, ND
Larry Boyd, Marysville, WA
Rich Calhoun, Lakeville, CT
Chuck Campbell, Russellville, AR
Dawn Carson, Shepherd, MT
Alicia Cepaitis, Fort Collins, CO
Sue Counterman, Littleton, CO
Randy Daniel, Huntsville, AL
Yvette Deighton, Sparks, NV
Lindsay Forys, White, PA
Greg Gaffey, Beloit, WI
Amanda Gilbreath, Madison, AL
Tara Hall, Golden, CO
Laura Hauswald, Seattle, WA
Lauren Hinchman, Charlevoix, MI
Laura Holmquist, Bigfork, MT
Joanna Hubbard, Anchorage, AK
Margie Huber, Gahanna, OH
Ken Mager, Oak Forest, IL
Michael Magno, Monroe, NY
Steve McCauley, Boulder, MT
Kevin McChesney, Reynoldsburg, OH
Carla McFadden, Oroville, WA
Rebecca Mentzer, Columbus, OH
Kathy Meyer, Apple Valley, CA
Sherry Miller, West Coaxackie, NY
Gina Monteverde, Winthrop, WA
Leslie Morehead, Leslie, TX
Lori Ann Muchmore, Lolo, MT
Troy Nordick, South Jordan, UT
Kenny Peavy, Kuala Lumpur, Malaysia
Rhonda Phillips, Saskatchewan
Vasantha Prasad, Tamladugada, India
Craig Richards, Calusa, CA
Diane Ripollone, Garner, NC
Brad Shuler, Elk Ridge, UT
Brian Sica, Idaho Falls, ID
Chris Straatman, New Holland, SD
Bonnie Streeter, Whitefish, WA
Brian Sullivan, Great Falls, MT
Michael Telling, Boulder, MT
Paul Tinger, Akron, OH
Genevieve Walsh, Bozeman, MT
Molly Ward, Bozeman, MT
Amy Washtak, Bozeman, MT
Deb Williams, Ames, IA
Rick Wyman, Hardin, MT
Besty Youngman, Phoenix, AZ
Jeff Grom, Belgrade, MT
Angela Haas, Gardiner, MT
Marie Akers Hamaker, Cincinnati, OH
Lisa Hawkins, Taejon, South Korea
Kelly Hayden, Bozeman, MT
Shelia Higgins, Bentonville, AR
Bernard Hozcuz, Daytona Beach, FL
Linda Jones, McLaughlin, SD
Julianne Kent, Bradenton, FL
Alexa Knight, Grants Pass, OR
Karla Laubach, Kingston, WA
Catherine Le, San Jose, CA
Rebekah Levine, East Burke, VT
Jean Lewis, Jackson, WY
Cooper Mallozzi, Leadville, CO
Michelle Marci-Spicer, Houston, TX
Jason Martin, Houston, TX
Jeffery Moll, Haverhill, MA
Stephanie Parker, Tucson, AZ
Jacki Pealatere, Willits, CA
Stuart Perez, Redfield, KS
Lisa Pingrey, Custer, SD
Cary Rosillo, Jupiter, FL
Patrick Simmons, Chesterfield City, VA
Michael Sitter, Polson, MT
Brian Stiff, Billings, MT
Rebecca Tolsman, Bozeman, MT
Nina Tyree, Alexandria, VA
Peggy Van Valkenburgh, Peterborough, NH
Michelle Vitko, Norwich, CT
Bryanna Vogt, Craig, CO
Christy Ware, Newtown Square, PA
Sharon Welter, Golden Valley, MN
Jenine Rued Winslow, San Diego, CA
Emily Wrubel, Peterborough, NH

2007 Graduates
Serena Ayers, Springfield, NJ
Jason Barr, Charlotte, FL
Lindsay Bartolone, Chicago, IL
Lesley Chappel Bunch, Mercer, PA
Lisa Carpenter, Shepherd, MT
Mark Calhoun, Tucson, AZ
Jenifer Ceven, Avon, VA
Tanya Chaphweske, Miles City, MT
Stacey Dobrosky Cool, Merced, CA
Victor Dalla Betta, Kalispell, MT
Bradley Deacon, Montoursville, PA
Dale Dennler, Cresco, IA
Bruce Dudek, Ashland, MT
Brooke Durham, Reynoldsburg, OH
Jane Fisher, Kingston, NY
James Flora, Pleasant Hope, MO
Jonathan Frostad, Olympia, WA
Kimberley Garner, Anchorage, AK
Jeffrey Gaston, Anchorage, AK
Kelly R. Gorski, Kelly, WY
2008 Graduates
Steven Alexander, Canton, NY
Jenelle Bailey, Wenatchee, WA
Marlessa Benson, Appleton, WI
Jennifer Brashear, Brunswick, GA
Matthew Bryant, Memphis, TN
Christopher Carucci, Boston, MA
Jennifer Crow, Mundelein, IL
Deborah Dilloway, Fairway, KS
Tracy Durish, Clarion, PA
Andrew Gelman, Westbrook, ME
John Getty, Bozeman, MT
Molly Godar, Rochester, IL
John Gordon, Weidman, MI
Paul Halfpop, Hardin, MT
Martin Hudson, Hannacroix, NY
Jill Hughes-Koszarek, Hartland, WI
Louise Jones, Naperville, IL
Tim King, Glide, OR
Jeffery Kipstein, Estes Park, CO
Sara Koffmanus, Westminster, CO
Jonell Prather, Missoula, MT
Charles Reade, Sacramento, CA

Page 17
### 2008 Graduates - Continued

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura Ritter</td>
<td>Royal Oak, MI</td>
</tr>
<tr>
<td>Franz Ruiz</td>
<td>El Cajon, CA</td>
</tr>
<tr>
<td>Kristina Sappenfield</td>
<td>Eagle, CO</td>
</tr>
<tr>
<td>Eric Sawtelle</td>
<td>Whitefish, MT</td>
</tr>
<tr>
<td>Donald Selusnik</td>
<td>Delavan, WI</td>
</tr>
<tr>
<td>Lisa Skilang</td>
<td>Marion, IA</td>
</tr>
<tr>
<td>Linda Smith</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Kathryn Solberg</td>
<td>Sisseton, SD</td>
</tr>
<tr>
<td>Jennifer Swan</td>
<td>Sherman Oaks, CA</td>
</tr>
<tr>
<td>Angela Swanson</td>
<td>Rockford, IL</td>
</tr>
<tr>
<td>Nathan Whelham</td>
<td>Bothell, WA</td>
</tr>
<tr>
<td>Laura Wick</td>
<td>Palmer, AK</td>
</tr>
<tr>
<td>Kathleen Woldtvedt</td>
<td>Cut Bank, MT</td>
</tr>
<tr>
<td>Jaime Wolfe</td>
<td>Saginaw, MN</td>
</tr>
<tr>
<td>Wendy Worrall</td>
<td>Aberdeen, BC</td>
</tr>
<tr>
<td>June Wozny</td>
<td>Elkhorn, WI</td>
</tr>
</tbody>
</table>

### 2009 Graduates

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phillip Ammann</td>
<td>Wilmot, SD</td>
</tr>
<tr>
<td>Jenni Vee Andersen</td>
<td>Helena, MT</td>
</tr>
<tr>
<td>John Bell</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Callan Bentley</td>
<td>Annandale, VA</td>
</tr>
<tr>
<td>Carolyn Clark Bieler</td>
<td>Dillon, MT</td>
</tr>
<tr>
<td>Terry Carlson</td>
<td>Walla Walla, WA</td>
</tr>
<tr>
<td>Aimee J. Chlebnik</td>
<td>Yellowstone, MT</td>
</tr>
<tr>
<td>Shelly Chrismon</td>
<td>Yoakum, TX</td>
</tr>
<tr>
<td>Christopher Cimino</td>
<td>Citrus Heights, CA</td>
</tr>
<tr>
<td>Brett Dameron</td>
<td>Hutchinson, MN</td>
</tr>
<tr>
<td>Natalie L. Davis</td>
<td>Livingston, MT</td>
</tr>
<tr>
<td>Meg DeAntoni</td>
<td>San Diego, CA</td>
</tr>
<tr>
<td>Jenny Derks-Anderson</td>
<td>Eugene, OR</td>
</tr>
<tr>
<td>Thelma Devlin</td>
<td>Dededo, Guam</td>
</tr>
<tr>
<td>Lillian Edmon</td>
<td>Kamuela, HI</td>
</tr>
<tr>
<td>Ayn Eklund</td>
<td>Webster City, IA</td>
</tr>
<tr>
<td>Steve Eversoll</td>
<td>Kalispell, MT</td>
</tr>
<tr>
<td>Richard Fillerup</td>
<td>Driggs, ID</td>
</tr>
<tr>
<td>Thom Flinders</td>
<td>Holderness, NH</td>
</tr>
<tr>
<td>Elizabeth Fracchia</td>
<td>Glen Falls, NY</td>
</tr>
<tr>
<td>Doug Frost</td>
<td>Salen, NJ</td>
</tr>
<tr>
<td>Stacie Fry</td>
<td>Buenos Aires, Argentina</td>
</tr>
<tr>
<td>Victoria R. Ginsburg</td>
<td>Sandy, UT</td>
</tr>
<tr>
<td>Rob Greenberg</td>
<td>Chapel Hill, SC</td>
</tr>
<tr>
<td>Jenny S. Heckathorn</td>
<td>Valdez, AK</td>
</tr>
<tr>
<td>Patti Jelinek</td>
<td>Memphis, TN</td>
</tr>
<tr>
<td>Suzanna Johnson</td>
<td>Auburn, CA</td>
</tr>
<tr>
<td>Carlie J. Jonas</td>
<td>Renton, WA</td>
</tr>
<tr>
<td>Michael E. Joyce Ill</td>
<td>Oak Bluffs, MA</td>
</tr>
<tr>
<td>Leslie C. Karpiak</td>
<td>Des Plaines, IL</td>
</tr>
<tr>
<td>Daniel Kinsey</td>
<td>Harlem, MT</td>
</tr>
<tr>
<td>Ron Koczaia</td>
<td>Fairbanks, AK</td>
</tr>
<tr>
<td>Lucy C. Karwoski Korpi</td>
<td>Holland, MI</td>
</tr>
<tr>
<td>Anton Kortenkamp</td>
<td>Monticello, MN</td>
</tr>
<tr>
<td>Thomas Kozikowski</td>
<td>Frostburg, MD</td>
</tr>
<tr>
<td>Kelly Kramer</td>
<td>DeForest, WI</td>
</tr>
<tr>
<td>Karen Kuchar</td>
<td>Naperville, IL</td>
</tr>
<tr>
<td>Jason Laducer</td>
<td>Belcourt, ND</td>
</tr>
<tr>
<td>Lon LaGrave</td>
<td>Baumholder, Germany</td>
</tr>
<tr>
<td>Am L. Manhart</td>
<td>Jackson, WY</td>
</tr>
<tr>
<td>Scott D. Masarik</td>
<td>Brussels, WI</td>
</tr>
<tr>
<td>Jean Philip Mathot</td>
<td>Irvine, CA</td>
</tr>
<tr>
<td>Rory Newcomb</td>
<td>Tallinn, Estonia</td>
</tr>
<tr>
<td>Lacy Noble</td>
<td>Three Forks, MT</td>
</tr>
<tr>
<td>Loralyn O’Kief</td>
<td>Valentine, NE</td>
</tr>
<tr>
<td>Lai Olsen</td>
<td>Sao Paulo, Brazil</td>
</tr>
<tr>
<td>Leslie Pierce</td>
<td>Barrow, AK</td>
</tr>
<tr>
<td>Mike Plautz</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Ronald P. Ramsey</td>
<td>Sewanee, TN</td>
</tr>
<tr>
<td>Julie Kallio Robinson</td>
<td>Deerfield, MA</td>
</tr>
<tr>
<td>Laurie K. Rugemer</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Todd M. Samson</td>
<td>East Helena, MT</td>
</tr>
<tr>
<td>Bruce Alexander</td>
<td>Sinclair, Bermuda</td>
</tr>
<tr>
<td>Cathy Steierman</td>
<td>Dubuque, IA</td>
</tr>
<tr>
<td>Steve Sundberg</td>
<td>Moline, IL</td>
</tr>
<tr>
<td>Nathan Talafuse</td>
<td>Billings, MT</td>
</tr>
<tr>
<td>Lucinda Fisher Talsma</td>
<td>Sheldon, IA</td>
</tr>
<tr>
<td>Howard Tenenbaum</td>
<td>La Jolla, CA</td>
</tr>
<tr>
<td>Tana Verzuh</td>
<td>Durango, CO</td>
</tr>
<tr>
<td>Joe Le Weaver</td>
<td>Marion, NC</td>
</tr>
<tr>
<td>Patricia J. Weaver</td>
<td>Halfax, PA</td>
</tr>
<tr>
<td>Lisa M. Weeks</td>
<td>Eagle Lake, FL</td>
</tr>
<tr>
<td>Christine West</td>
<td>Haugan, MT</td>
</tr>
<tr>
<td>Erin Wilson</td>
<td>Honolulu, HI</td>
</tr>
<tr>
<td>Joe Wright</td>
<td>Hollis, NH</td>
</tr>
</tbody>
</table>

### 2010 Graduates

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aimee Flavin Artiques</td>
<td>Crested Butte, CO</td>
</tr>
<tr>
<td>James T. Ausprey</td>
<td>East Machias, MI</td>
</tr>
<tr>
<td>Carol Jane Baker</td>
<td>Billings, MT</td>
</tr>
<tr>
<td>Cheryl A. Barrientos</td>
<td>Denville, NJ</td>
</tr>
<tr>
<td>Susan H. Barton</td>
<td>Big Sky, MT</td>
</tr>
<tr>
<td>Robert David Baughman</td>
<td>Moss Point, MS</td>
</tr>
<tr>
<td>Randall Jay Berndt</td>
<td>Rosholt, WI</td>
</tr>
<tr>
<td>Susan Berrend</td>
<td>Salt Lake City, UT</td>
</tr>
<tr>
<td>Allen R. Bone</td>
<td>Pablo, MT</td>
</tr>
<tr>
<td>Christy Bone</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Larene Bowen</td>
<td>Lame Deer, MT</td>
</tr>
<tr>
<td>Donna Brayfield</td>
<td>Springfield, IL</td>
</tr>
<tr>
<td>Linda Briggeman</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Kelly P. Broderick</td>
<td>Bradenton, FL</td>
</tr>
<tr>
<td>Rebecca B. Burg</td>
<td>Dixon, MT</td>
</tr>
<tr>
<td>Katherine Burke</td>
<td>Helena, MT</td>
</tr>
<tr>
<td>Kara Ann Burrous</td>
<td>Sugar Land, TX</td>
</tr>
<tr>
<td>Anjali Devi Chandran</td>
<td>Napa, CA</td>
</tr>
<tr>
<td>Erika Christianson</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Jann C. Clouse</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Stanley B. Covington</td>
<td>Beijing, China</td>
</tr>
<tr>
<td>Michelle A. Cregger</td>
<td>Chewelah, WA</td>
</tr>
<tr>
<td>Carrie Jo Dagg</td>
<td>Fairfield, IL</td>
</tr>
<tr>
<td>Quinn Michael Daily</td>
<td>Carbondale, CO</td>
</tr>
<tr>
<td>Bonnie E. Daley</td>
<td>San Francisco, CA</td>
</tr>
<tr>
<td>Ann Dannenberg</td>
<td>Newtown, MA</td>
</tr>
<tr>
<td>Tracy Ann Dickerson</td>
<td>Corvallis, MT</td>
</tr>
<tr>
<td>Aaron Eling</td>
<td>Sandy, UT</td>
</tr>
<tr>
<td>Stacey M. Ellis</td>
<td>Polson, MT</td>
</tr>
<tr>
<td>Dawn Nicole Estrella</td>
<td>Union City, CA</td>
</tr>
<tr>
<td>Janet C. Fenker</td>
<td>San Jose, CA</td>
</tr>
<tr>
<td>Devon M. Flamm</td>
<td>Hardin, MT</td>
</tr>
<tr>
<td>Michael J. Flamm</td>
<td>Hardin, MT</td>
</tr>
<tr>
<td>Emily M. Ford</td>
<td>Boyce, VA</td>
</tr>
<tr>
<td>Dennis Fulkerson</td>
<td>Lisbon, IA</td>
</tr>
<tr>
<td>Joshua Gates</td>
<td>Wilmington, DE</td>
</tr>
<tr>
<td>Cherri Gerber</td>
<td>Kelowna, British Columbia</td>
</tr>
<tr>
<td>Tim Germeraad</td>
<td>Flossmoor, IL</td>
</tr>
<tr>
<td>Lisa C. Green</td>
<td>Boyce, VA</td>
</tr>
<tr>
<td>Paula J. Groenveld</td>
<td>Harrisburg, SD</td>
</tr>
<tr>
<td>Jean Marie Kron</td>
<td>Hagler, Savage, MT</td>
</tr>
<tr>
<td>Stephanie A. Hall</td>
<td>Rosebud, MT</td>
</tr>
<tr>
<td>Lisa Dawn Hart</td>
<td>Crested Butte, CO</td>
</tr>
<tr>
<td>Amy L. Haverland</td>
<td>Poesten, IA</td>
</tr>
<tr>
<td>Angie Hewitt</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Kathy Pickens Hirst</td>
<td>Ashland, MT</td>
</tr>
<tr>
<td>Seth A. Hodges</td>
<td>St. Michaels, AZ</td>
</tr>
<tr>
<td>Miranda Hollow</td>
<td>Charlo, MT</td>
</tr>
<tr>
<td>Katie E. Hubbell</td>
<td>Naperville, IL</td>
</tr>
<tr>
<td>Deb L. Hughes</td>
<td>Andalusia, AL</td>
</tr>
<tr>
<td>Dora M. Hugs</td>
<td>Pryor, MT</td>
</tr>
<tr>
<td>Thomas A. Ippolito</td>
<td>Coatsville, PA</td>
</tr>
<tr>
<td>Cathy L. Jamison</td>
<td>Wake Forest, NC</td>
</tr>
<tr>
<td>Sara Elizabeth Jay</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Pamela Kaatz</td>
<td>Sechelt, British Columbia</td>
</tr>
<tr>
<td>Margaret Kane</td>
<td>Prescott, AZ</td>
</tr>
<tr>
<td>Renee Kelch</td>
<td>Ronan, MT</td>
</tr>
<tr>
<td>Bonnie J. Keller</td>
<td>Blacksburg, VA</td>
</tr>
<tr>
<td>Rose Kent</td>
<td>South Royalton, VT</td>
</tr>
<tr>
<td>Lorna Sue Lange</td>
<td>29 Palms, CA</td>
</tr>
<tr>
<td>Erin Kelly Lynch</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Mary L. Maier</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Patrice Malamis</td>
<td>Rochester, IL</td>
</tr>
<tr>
<td>Dan McGee</td>
<td>Belt, MT</td>
</tr>
<tr>
<td>Amanda McGill</td>
<td>Clinton, MT</td>
</tr>
<tr>
<td>Stuart Miles</td>
<td>Asheville, NC</td>
</tr>
<tr>
<td>Tami A. Morrison</td>
<td>Polson, MT</td>
</tr>
<tr>
<td>Mary K. Osman</td>
<td>Newark, DE</td>
</tr>
<tr>
<td>Gerald Ott</td>
<td>Elverson, PA</td>
</tr>
<tr>
<td>Beth Peterson</td>
<td>Highland Park, IL</td>
</tr>
<tr>
<td>Alfred T. Poirier Jr.</td>
<td>Dover, NH</td>
</tr>
<tr>
<td>Sarah S. Poletto</td>
<td>Naperville, IL</td>
</tr>
<tr>
<td>Anne Powers</td>
<td>Kingston, Ontario</td>
</tr>
<tr>
<td>Page-Marie Price</td>
<td>Lolo, MT</td>
</tr>
<tr>
<td>Holly Prull</td>
<td>Bend, OR</td>
</tr>
<tr>
<td>Tina L. Raeder van Strum</td>
<td>Gonzales, CA</td>
</tr>
<tr>
<td>Nancy Farrington Reid</td>
<td>Natick, MA</td>
</tr>
<tr>
<td>Paul E. Robinson</td>
<td>Valhalla, NY</td>
</tr>
<tr>
<td>Susan R. Rolke</td>
<td>Rindge, NH</td>
</tr>
<tr>
<td>Melinda K. Rothschild</td>
<td>Parker, CO</td>
</tr>
<tr>
<td>Jeff Salters</td>
<td>Salt Lake City, UT</td>
</tr>
<tr>
<td>Scott Schafer</td>
<td>Weston, WI</td>
</tr>
<tr>
<td>Michael A. Schoenborn</td>
<td>Seattle, WA</td>
</tr>
<tr>
<td>Catherine Schuck</td>
<td>Missoula, MT</td>
</tr>
<tr>
<td>Debra Lea Schwake</td>
<td>Lodge Grass, MT</td>
</tr>
<tr>
<td>Justin L. Smith</td>
<td>Coatsville, PA</td>
</tr>
<tr>
<td>Karen M. Smith</td>
<td>Lame Deer, MT</td>
</tr>
<tr>
<td>Nichole Spindler</td>
<td>Bradford, PA</td>
</tr>
<tr>
<td>Jennifer Stadum</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>James Stuart</td>
<td>Bozeman, MT</td>
</tr>
<tr>
<td>Bryna Thomson</td>
<td>Dallas, TX</td>
</tr>
</tbody>
</table>
2010 Graduates - Continued

Bill Thornburgh, Carmel, IN
Charlotte Waters, Vancouver, WA
Michelle Weber, Dubuque, IA
Nancy Wells, Saltsburg, PA
Heide Westwood, Hardin, MT
Sue White, Derby, KS
Gail Whiteman, Bozeman, MT
Deanna Rose Zerbe, Lodge Grass, MT

2011 Graduates

Melanie S. Acker, Ulysses, PA
Patti Rae Bartlett, Seeley Lake, MT
Jennifer Moore Bernstein, Portland, OR
Lindsay Paige Bower, Middleburg, VA
Brennan Brockbank, Fairfax, CA
Deborah Brown, Nyssa, OR
Nancy Lee Bryant, Burlington, NC
David Buck, Dickinson, ME
Joel Burgener, Lima, MT
Sandra J. Climenhaga, Albion, NY
Sarah Marie Connor, Kalispell, MT
Joan C. Dayton, Wolfeboro, NH
Joe Deluca, Almere, Netherlands
Joyce Dooley, Bentonville, AR
Katherine Echazaretza, Vienna, VA
Kendra Eneroth, Spokane, WA
Jonathan R. Ernst, Wentzville, MO
Eric Esby, West Hills, CA
Lanee A. Fischman, Antioch, IL
Brandon Fritz, Williamsburg, IA
Jeremy Fuller, Wolfeboro, NH
Sheri Gates, Nagykovaci, Hungary
Ashley Gillespie, East Helena, MT
Tanya Gordon, Boise, ID
Amy M. Graham, Hillsdale, MT
Heather M. Grant, Ojai, CA
Christopher Green, Painesville, OH
Christopher Gunderson, Absarokee, MT
Hadley Hentschel, Carbondale, CO
Susanne L. Hokkanen, Matteson, IL
Megan Hopkins, Naperville, IL
Daryl Allan Holst, Bangkok, Thailand
Jasper Howell, Afton, WY
Cheryl A. Hudson, Tifton, GA
An’rJuli Johnson, Billings, MT
Darren Kellerby, Anchorage, AK
Marty King, Legrand, IA
Shannon Knodel, Belgrade, MT
JoDe Knutson-Person, Bismarck, ND
Jacob L. Lame, Colorado Springs, CO
Maya A. Lampic, Chicago, IL
Karen L. Lund, Huntingdon, England
Kathryn Madden, Beaufort, SC
Margaret K. Magonigle, Hanna, HI
Danny Mattern, El Dorado, KS
Emily McKenna, Belding, MI
Christian R. Mills, Rawlins, WY
Amiee L. Modic, Katy, TX
Christopher G. Monsour, Tiffin, OH
Richard Montoya, Eureka, MT
Erik Nickerson, Boulder, CO
Cameron Novak, Fredericksburg, VA
Aaron Olmansoon, Golden Valley, MN
Bradley Pederson, Belle Plaine, MN
Timothy D. Percoski, Bloomfield, CT
Janet E. Perry, Ashland, ME
Alanna Picillo, Palisade, CO
Paul Pierre, Nassau, Bahamas
Erin Quintia, Columbia Falls, MT
Jonathan C. Reveil, Nashville, TN
Mary Seabrook Ritter, Bethlehem, PA
Seth Robertson, Renton, WA
Peter Rust, Wilmington, DE
Robin Scardino, Hong Kong, China
Jessica F. Schultz, Culdesac, ID
Ralph E. Spraker, Jr., Columbia, SC
Marcie Steen, Mount Vernon, OH
Joyce Strichyn, Terre Haute, IN
Nancy Hoggard Talley, Tarboro, NC
Shaun Terry, Lovelock, NV
Katherine Theobald, Alexandria, VA
Marta Toran, Boone, NC
Jeanne Torske, Broadus, MT
Audrey Urista, Winston, OR
Shari F. Ward, Ashland, ME
Tom Wellnitz, Johns Creeks, GA
Matthew Wigglesworth, Honolulu, HI
Jennifer Williams, Honolulu, HI
Andrea Gissing Yordan, Philadelphia, PA

2012 Graduates

Jessica Anderson, Deer Lodge, MT
Tanya M. Anderson, Hardin, MT
Tom Anderson, Twin Valley, MN
Donald James Asbury, Lame Deer, MT
Kathy Aune, Frenchtown, MT
Kristian Basaraba, Sherwood Park, Alberta
Luke Beall, Fairview, PA
Adam Bobach, Clinton, IA
Jason Boss, Bellflower, CA
Angie Brist, Traer, IA
Jodi L. Brokaw, Hardin, MT
Robin A. Cameron, Jackson, WY
Lori Lynn Chapman, Livingston, MT
Katherine Chesnutt, Boone, NC
Joanna Chierici, East Windsor, NJ
David Chimo, Corvallis, MT
Joanna Chierici, East Windsor, NJ
Kristian Basaraba, Sherwood Park, Alberta
Luke Beall, Fairview, PA
Adam Bobach, Clinton, IA
Jason Boss, Bellflower, CA
Angie Brist, Traer, IA
Jodi L. Brokaw, Hardin, MT
Robin A. Cameron, Jackson, WY
Lori Lynn Chapman, Livingston, MT
Katherine Chesnutt, Boone, NC
Joanna Chierici, East Windsor, NJ
David Chimo, Corvallis, MT
Natasha L. Cleveland, Frederick, MD
Erik Nickerson, Boulder, CO
Cameron Novak, Fredericksburg, VA
Aaron Olmansoon, Golden Valley, MN
Bradley Pederson, Belle Plaine, MN
Timothy D. Percoski, Bloomfield, CT
Janet E. Perry, Ashland, ME
Alanna Picillo, Palisade, CO
Paul Pierre, Nassau, Bahamas
Erin Quintia, Columbia Falls, MT
Jonathan C. Reveil, Nashville, TN
Mary Seabrook Ritter, Bethlehem, PA
Seth Robertson, Renton, WA
Peter Rust, Wilmington, DE
Robin Scardino, Hong Kong, China
Jessica F. Schultz, Culdesac, ID
Ralph E. Spraker, Jr., Columbia, SC
Marcie Steen, Mount Vernon, OH
Joyce Strichyn, Terre Haute, IN
Nancy Hoggard Talley, Tarboro, NC
Shaun Terry, Lovelock, NV
Katherine Theobald, Alexandria, VA
Marta Toran, Boone, NC
Jeanne Torske, Broadus, MT
Audrey Urista, Winston, OR
Shari F. Ward, Ashland, ME
Tom Wellnitz, Johns Creeks, GA
Matthew Wigglesworth, Honolulu, HI
Jennifer Williams, Honolulu, HI
Andrea Gissing Yordan, Philadelphia, PA
Kim Devore, Manhattan, MT
Heather G. S. Deitz, Regina, Canada
Kaye Ebelt, Missoula, MT
Nathan R. Fairchild, Redding, CA
Jessica Felchle, Billings, MT
Amy Flindt, Roseville, CA
Ryan Foley, Great Falls, MT
Rebecca Fulk, Steamboat Springs, CO
Jason Getz, Woodberry Forest, VA
Kellina Gilbreth, Colorado Springs, CO
Vanessa Nashee Green, Lawrenceburg, TN
Lori Hack, Kremmling, CO
Charlotte Hagerman, Edgar, AZ
Shawna Halsey, Billings, MT
Angela J. Hammang, Dillon, MT
Michelle Hammond, Lake Worth, FL
Jeremy Harder, Big Sky, MT
Yvette Strandel Hart, Hastings, NE
Annie Hesterman, Westminster, CO
Brian Holtzhafer, Orefield, PA
Brandon Honzel, Missoula, MT
Angie Hopwood, Superior, MT
Laura Hovland, Bozeman, MT
Jessica Hughes, Arlee, MT
Douglas Martin Janezcko, Goshen, NY
Jennifer Jones, Ogallala, NE
Alan Kalt, Lexington, MA
Mark Kellogg, Camdenton, MO
Batya Kinsberg, Eaglewood, NJ
Leah M. Knickerbocker, Bozeman, MT
Karyn Ann Kretscher, Genoa City, WI
Charla Lake, Ronan, MT
Mary Larson, Polson, MT
Ann Leach, Leavenworth, WA
Candice M. Lommen, Maple Valley, WA
Hilary M. Lozar, Roman, MT
Hermes Lynn, Livingston, MT
Jill D. Mahoney, Fairfax, VA
Sibley A. Malee-Ligas, Arlee, MT
Kasey Marks, Missoula, MT
Cara Marlowe, Dubai, United Arab Emirates
Joy Mayer, Green Bay, WI
Colleen Marie McDaniel, Houston, TX
Miles McGeehan, Manhattan, MT
Randy Metzger, Orwigsburg, PA
Robert Moyer, Bristol, PA
Susannah Spradlin Murphy, Frenchtown, MT
Jennifer Narimatsu, Bremerton, WA
Kimberley Orr, Lethbridge, Alberta
Alisha Pablo, Hot Springs, MT
April Peterson, North Bay, Ontario
Sadie Peterson, Silver Springs, MD
Melinda Reed, Florence, MT
Marcie Reuer, Great Falls, MT
Joe M. Ruffatto, Great Falls, MT
Melinda Reed, Florence, MT
Marcie Reuer, Great Falls, MT
Joe M. Ruffatto, Great Falls, MT
Melinda Reed, Florence, MT
Marcie Reuer, Great Falls, MT
Joe M. Ruffatto, Great Falls, MT
Melinda Reed, Florence, MT
Marcie Reuer, Great Falls, MT
Joe M. Ruffatto, Great Falls, MT
Melinda Reed, Florence, MT

2012 Graduates - Continued
Jennifer Sherburn, Hesperia, MI
Aaron Shotts, Mechanicsburg, PA
Carolyn Slagle, East Helena, MT
LaCee Small, Ashland, MT
Dale Spady, Westlake Village, CA
Stephanie Statema, Park Ridge, IL
Lauren Stepno, Norfolk, VA
Lisa Russell Stevens, Crow Agency, MT
Reba K. Storm, Hardin, MT
Melissa Anne Sullivan, Carlsbad, CA
Clinton Swartz, Middleburg, PA
Robin Tillman, Cranbrook, Canada
Brandy L. Thrasrer, Missoula, MT
Lizbeth A. Townsend, East Helena, MT
Molly Underwood, Redwood City, CA
Jay Walls, British Columbia, Canada
Tylene M. Walters, Manhattan, MT
Paula Wang, Poplar Island, MD
Lee Weldon, Missoula, MT
Rachel M. White, Belgrade, MT
Wendy D. Whitmer, Spokane, WA
Beth Workman, Bainbridge, OH
Rachel Lee Zupke, Seattle, WA

2013 Graduates
Georgia Alvarez, Vancouver, WA
Kelly Arnold, Clarksville, TN
Suzanna Barnhart, La Crosse, WI
David Bates, San Francisco, CA
Charles Benson, Bellevue, NE
John Bishel, Port Allegany, PA
Dana Blomquist, Helena MT
Andrew Bright, Gabrills, MD
Tina Brothers-Tillinger, Helena, MT
Jennifer Bruns, Juliaetta, ID
Joe Clark, Carson City, NV
Carrie Clement, Helena, MT
Judith Coats, Eldorado Del Mar, CA
Crystal Cornwell, Ronan, MT
Brooklyne Coulter, Strasburg, CO
Joe Crider, Helena, MT
Emily Currier, Helena, MT
Janeen Curtis, Darby, MT
Jennifer Curtis, Rockport, ME
James Davies, Ridgefield, WA
Caleb Dorsev, Loyalton, CA
Pamela Dresher, Culver City, CA
Amy Dushane, Yuba City, CA
Lori Egan, Thornton, CO
Holly Faris, Hamilton, MT
Laura Feldkamp, Wichita, KS
Tyler Ferebee, Pawnee City, NE
Jason George, Notus, ID
Dale Glass, Potomac, MD
James Glynn, Chicago, IL
Shannon Greco, Princeton, NJ
Lance Gerow, Riyadh, Saudi Arabia
Rachel Grey, Winnsboro, LA
Taylor Green, Red Lion, PA
Michael Greenhoe, Kandern, Germany
Courtney Harrell, Peyton, CO
Michael Helseth, Yakima, WA
Robin Henrichs, Mc Cook, NE
Benjamin Heyde, British Columbia
Alice Hinck, Broadus, MT
Jennifer Hood, Dayton, TN
Jeanna Jasperson, Montrose, CO
Beverly Jaworski, Burtonsfield, MD
Tamara Jendro, Helena, MT
Susan Johnson, Southbury, CT
Shari Juroszek, Bozeman, MT
Kevin Kenealy, Nevada, IA
Linda Kocian, Elk Grove Village, IL
Amanda Kozak, Ashland, OH
Scott Lannen, Phoenix, AZ
Robert Lee, Shelby, MT
Brett Lehner, APO, CA
Heather Leiberg, Helena, MT
Martha Lord, Hamilton, MT
Doug Lymier, Houston, TX
Dalton McCurdy, Fairfield, CT
Julie McDonnell, Oak Park IL
Heather McWhorter, Las Vegas, NV
Murry Metge, Great Falls, MT
Ashley Milbrandt, Helena, MT
Julie Morris, Peotone, IL
John Nilsen, Dhahran, Saudi Arabia
Laura Patch, Brevard, NC
Brian Phillips, Rabun, GA
Dorcella Plain Bull, Crow Agency, MT
Mary Ragusa, Bloomington, IL
Jayanthi Ramakrishna, Chennai, India
Chris Reidburn, Watertown, SD
Suzanne Wilson, Olympia, WA

2014 Graduates
Joshua Abernethy, Asheboro, NC
Deanna Bailey, Huntington, VT
Mariani Bernard, Escondido, CA
Marcia Blome, Omaha, NE
James P. Bratka, Gahanna, OH
Dean Brown, Medicine Hat, Alberta
Cameron Burns, Spokane, WA
Joshua Caditz, Carpentaria, CA
Irene Catlin, Portland, OR
Matthew Clay, Webb City, MO
Kara Lee Coates, Spring Creek, NV
Justi Crofutt, Pinedale, WY
Hank Davis, Asheville, NC
Coreen Ann Dingler, Lufkin, TX
Rebecca Love, Dobson Kinsman, OH
David Dooling Jr., Alamogordo, NM
Daniel Dubrow, Chicago, IL
Chance Duncun, Dardanelle, AR
Camilla Densberry, Helena, MT
Stephanie Fields, Ocean City, NJ
Shari Generaux, Oakland, CA
Elaine Gibbs, Valrico, FL
Sara Danielle, Grotoho Helena, MT
Lily Guajardo, Cedar Park, TX
Jacquelyn Haas, West Bend, WI
Jennifer Heisler, Kent, OH
Kyle Herdina, Winona, MN
Analea Hronek, Red Lodge, MT
Angie Jenkins, Independence, IA
Heidi Kirsten Jessen, Yuma, AZ
Christine Jones, Vancouver, WA
Alecia Jongewald, Bozeman, MT
Carisa E. Ketchen, Kalispell, MT
Katherine Koessler, Helena, MT
Analea Hronek, Red Lodge, MT
Julie McDonnell, Oak Park IL
Heather McWhorter, Las Vegas, NV
Murry Metge, Great Falls, MT
Ashley Milbrandt, Helena, MT
Julie Morris, Peotone, IL
John Nilsen, Dhahran, Saudi Arabia
Laura Patch, Brevard, NC
Brian Phillips, Rabun, GA
Dorcella Plain Bull, Crow Agency, MT
Mary Ragusa, Bloomington, IL
Jayanthi Ramakrishna, Chennai, India
Chris Reidburn, Watertown, SD
Suzanne Wilson, Olympia, WA
2014 Graduates – Continued
Logan D. Mannix, Helena, MT
Krista Martens, West Glacier, MT
Matthew McClellan, Lake Charles, LA
Doralee McCormick, Cincinnati, OH
Ashley McGrath, Helena, MT
Casey S. McHugh, Missoula, MT
Candace McMullan, Fishers, IN
Dawn Mercer Turner, Huntsville, AL
Mark H. Meredith, Dardanelle, AR
Mary Mingels, Somerset, ME
Heather Mitchell, Houlton, ME
Stephen Mohr, Austintown, OH
Jeffrey Noblejas, Oakland, CA
Eric Tod Ojala, Lolo, MT
Sherry Otruba, Roanoke, VA
Kol Pokley, Port Austin, MI
Michael Poser, Hobson, MT
Lynn Powers, Bozeman, MT
Katie Redmond, Chicago, IL
Randy Zane Rowland, Sheridan, WY
Pamela J. Schaefer, Lake Hiawatha, NJ
Christina Anne Scott, Gold Bar, WA
Kaylee Christine Shaw, Killspell, MT
Ahmed Shawli, Bozeman, MT
Carli Barnes, Vancouver, WA
Jere

2015 Graduates
Kellen Alger, Cut Bank, MT
Jeremy Barcus, Corvallis, MT
Carli Barnes, Vancouver, WA
Daniel Betts, Bankok, Thames, CO
Patricia Brandenburger, Walden, CO
Jerald Brunt, Bozeman, MT
Kyle Casper, New Stuyahok, AK
Pamela Christianson, Great Falls, MT
Kellie Clinger, Freedom, WY
Kristin Combs, Victor, ID
Michelle Davis, Saratoga Springs, UT
Kisha Delaim, Fridley, MN
Alyx Demers, Idaho Falls, ID
Emily Diaz-Chard, Vineland, NJ
Gregory Dyk, Edgerton, MN
Jennifer Edwards, Casper, WY
Ritu Gandhi, Houston, TX
Shifra Gassner, Bettendorf, IA
Tassay Gillespie, Lebanon, OR
Kelly Goodpaster, Fayetteville, AR
Stephanie Guilmet, Blairstown, NJ
Matthew Haack, Bear, DE
Michael Haiderer, Saginaw, MI
Lindsay Hall, San Francisco, CA
Andrew Heller, Wautoma, WI
Sharon Heyer, Forest Lake, MN
Jennifer Hood, Dayton, TN
Carrie Howell, Chattanooga, TN
Jason Hults, Villisca, IA
William Illiff, Sacramento, CA
Thomas Jurczak, Claremont, CA
Kendra Kanduch, Phillipsburg, MT
Jolene Kayser, Black Hawk, SD
Leah Anne Key, Huntersville, NC
Timothy Klawon, Pennsburg, PA
Joshua Koo, Mount Prospect, IL
Brooke Launson, Brooklyn, NY
Martha Lindemann, Manassas, VA
Jennifer Markham, Franklin, MA
Liane McGilven, Washington, DC
Janine Melillo, Cortlandt manor, NY
Stacey Muchow, Newington, CT
Joseph Muise, New Westminster, Canada
Chrispus Mwaapea, Houston, TX
Carol Myers, Pensacola, FL
Spencer Nedved, Vancouver, WA
Thomas O’Leary, Eureka, MO
Jake Otto, Colorado Springs, CO
Dawn Peterson, Gricignano di Aversa, CE, Italy
Mark Pfeifer, North Battlefield, SK, Canada
Caryn Purcell, Ridgefield, CT
Annie Reichelt, Idaho Falls, ID
Heather Renyck, Olean, NY
Brian Staggs, East Grand Rapids, MI
Andrew Stattel, Chestnut Hill, MA
Stephanie Stender, Sheridan, WY
Jennifer Temple, Glenville, MT
Johannes Thum, Ketchum, ID
Jerald Touchstone, Eagle, ID
Amelia Vandezee, Hillsboro, OR
Adam VanZee, Bozeman, MT
D. Matthew White, Cookeville, TN
Lisa Williams, Fairfax, VA
Stacey Zaback, Corvallis, OR
Alyson Darconte, Milpesburg, PA
Allan Dinglasan, Markham, ON
Alexandra Disney, Holderness, NH
Dana Donlon, Blairstown, NJ
Robert Ellenbecker, Missoula, MT
Ana Elliott, Mesa, AZ
Andrew Fiala, Downers Grove, IL
Matthew Fisher, Great Falls, MT
Kimberly Forsythe, Centre Hall, PA
Justine Fox, Madison, WI
Andrew Friedlund, Lancaster, PA
Kathryn Gangel, Jacobstown, NJ
Jason Garver, Bozeman, MT
Richard Good, Leola, PA
Jacqueline Hall, Olympia, WA
Ryan Harvey, Kelowna, BC
Ruth Hutson, Westmoreland, KS
Bryan Idlean, Gilbert, AZ
Angie Jones, Saint George, KS
Patsy Jones, Chandler, AZ
Ann Knight, Katy, TX
Jennifer Konopacki, Twin Bridges, MT
Henry Lacey, Littleton, CO
Renee Lauterbach, New Berlin, WI
Daniel Leavell, San Diego, CA
Joseph Levitt, Newton, NH
Amy Listenik, Jeffersonville, VT
Amber Lloyd, Great Falls, MT
Margaret Lowry-Brock, Russellville, AR
Deborah Mansour, Indianapolis, IN
Angela Marshall, Washington, DC
Alison McClain, Philadelphia, PA
Keith McKinniss, Vinton, OH
Steven Merriman, Chicago Ridge, IL
Leslie Moncur, Atlanta, GA
Mary Noel, Colstrip, MT
Steven O’Neill, Huntingtown, MD
Laura Ouborg, Yosemite, CA
Christina Pavlovich, Livingston, MT
JoAnne Phillips, Stoughton, WI
Jordan Robinson, Victor, ID
Alison Rockwell, Boulder, CO
Tina Rogers, Woodward, OK
Lisa Rossana, Downingtown, PA
Jessica Rowell, Houston, TX
Todd Samet, Petaluma, CA
Rebecca Schumacher, Bourbonsaas, IL
Andrew Senkowski, Portland, OR
Christopher Shaw, Sheridan, WY
Anna Shearer, Townsend, MT
Bridget Sparks, Cincinnati, OH
William Sparks, Syla, NC
William Stockton, Lolo, MT
Taryn Surabian, Foxboro, MA
Charles Swafford, Cleveland, TN
Heather Swanson, Austin, TX
Martin Tawil, Cape Coral, FL
Kristin Tesiny, Valencia, CA
2016 Graduates - Continued
Annie Tete, New Orleans, LA
Alex Tisch, Woodberry Forrest, VA
Jared Torgerson, Duchesne, UT
Linda Townley, Annapolis, MD
Sarah Venturi, Wawaka, IN
Emily Vercoe, Laramie, WY
Kristin Waverka, Flower Mound, TX
Julie Welde (Soulliard), Mount Holly, NJ
John Wilkie, Anchorage, AK
David Wilson, Wibraham, MA
Lynda Wright, Smiths Station, AL
Melissa Yourey, Pottsville, PA

Graduates 2017
Harrison Aakre, Alexandria, MN
Lily Apedaile, Missoula, MT
Meghan Azzaro, West Milford, NJ
Amelia Bagheri, Placentia, CA
Kristina Bandziulis, Palmdale, CA
Samantha Berg, St. Paul, MN
Meridith Berghauer, Milwaukee, WI
James Bertin, Lame Deer, MT
Renora Bostic, Thurman, OH
Katherine Capp, Bozeman, MT
Samantha Carney, Pittsburgh, PA
Derek Chase, Hickory, NC
Jessica Christman, Wyomissing, PA
Jill Cleveland, Columbia, MD
Andrew Cochrane, McCall, ID
Christopher Collins, Morganton, NC
Johnnie Cornett, Davenport, IA
Joseph Day Rider, Richey, MT
Michelle Dodge, Wolfeboro, NH
Joseph L Doherty, Canaan, NH
Alvaro Door, Lima, Peru
Audrey Duncan, Duluth, MN
Alison Dupuis, Lake Arthur, LA
Ana Elliot, Page, AZ
Sandra Essman, Taylor, NE
Anna Farrell, Burns, WY
Janelle George, Notus, ID
Craig Gingerich, Boise, ID
Elizabeth Gottlieb, San Rafael, CA
Bridgette Gunn, Miami, FL
Vanessa Haflich, Missoula, MT
Abigail Helberg-Moffitt, Black Mtn, NC
Isabel Heredia, Wallington, NJ
Bryan Hirschman, Essex, VT
Sara Holloway, McKinney, TX
Rita Hubbs, Franklin, NC
April Idar, Golden, CO
Carla Johns, Fort Collins, CO
David Johnson, Hardwick, VT
Aaron Keller, Brunswick, ME
Rodney Kennedy, Casper, WY
Steven Knowles, Baileyville, ME
Sara Koblika, Tucson, AZ
Veeraiah Kummar, Oberusel, Germany
Zoe Lam, Spring Grove, MN
Samantha Littlejohn, San Francisco, CA
Quinten Loch, Chicago, IL
Robert Lukens, Northwood, ND
Joseph Madsen, Calgary, Alberta
Diane Martin, Dillon, MT
Jenna Morton, Orofino, ID
Jenna Noble, Lakewood, CO
Terri Olix, Mentor, OH
Cindee Parker, Belgrade, MT
Catherine Pascual, Cerritos, CA
Kayla Robinson, Denver, CO
Lisa Rouwenhorst, Sarasota, FL
Guy Savastano, Independence, OH
Catherine Schuman, Ferndale, WA
Nicole Sedgeley, Golden, CO
Michael Shell, Great Falls, MT
Jeretta Shoemaker, Fruitland, ID
Amy Smith, Battle Creek, MI
Hannah Smith, Bellingham, WA
Ryan Soto, San Diego, CA
Benjamin Spicer, Pittsburgh, PA
Lori Stanton, Redmond, WA
Kimberly Stewart, Manteca, CA
Amanda Stone, Cuyahoga Falls, OH
Miranda Suvak, Tulsa, OK
Crista Tiboldo, Teaneck, NJ
Erik Tietjen, Green Bay, WI
Johanna Traut, Bemoseen, VT
Brennan Van Loo, Bow, WA
Allison Weeldreyer, Sioux Falls, SD
Jacob Whalen, Montrose, CA
Elin Wilson, Montrose, CO
Cynthia Wojtaszek, Oak Lawn, IL
Simone Wong, Williamstown, NJ