

BLACK HILLS STATE UNIVERSITY



Women in Science Conference



May 8, 2024

Black Hills State University
Spearfish Campus



BLACK HILLS

STATE UNIVERSITY

Keynote Speaker

Madison Jilek, Ph.D. Student at University of Colorado-Boulder.

Madison grew up in the Black Hills, graduating from Spearfish High School in 2014 before earning her Bachelor's Degree at Black Hills State University (BHSU) in 2018. At BHSU, she studied Physical Science and Chemistry and spent over 2500 hours doing scientific research on campus, at the BHSU Underground Campus at the Sanford Underground Research Facility (Lead, SD), and at Brookhaven National Lab (New York).

She is now working towards her Doctorate in Chemical Physics at the University of Colorado-Boulder where she is funded by the National Science Foundation and the US Air Force Office of Scientific Research. Her Ph.D. research focuses on the fundamental photophysical properties of quantum dots and other nanomaterials, with the ultimate goal of learning how to use novel nano-scale materials for solar energy harvesting. When she is not in the lab, she loves getting outside with her husband, their one-year-old daughter, and their dog.



Welcome to the 5th Annual Women in Science Conference at Black Hills State University!

This conference is a free, one-day event designed to provide young women with hands-on opportunities to learn about careers in science, technology, engineering, and mathematics (STEM). By showcasing exciting careers and positive role models, we hope to encourage you to take math and science courses during middle and high school and consider pursuing a STEM career.

Today, you will attend the keynote address, followed by breakout sessions with women who have successful careers in STEM. You will also receive a free lunch and visit the exhibit hall.

As you go explore different fields of STEM today, be curious and ask lots of questions! Also, please be polite. All of the speakers, exhibitors, organizers, and volunteers are donating their time to make this event possible.

Schools Attending

Belle Fourche, SD Middle School	Newell, SD
Bison, SD	Sage Valley Junior High Gillette, WY
Black Hills Christian Academy - Spearfish, SD	Spearfish, SD Middle School
Cheyenne-Eagle Butte, SD Middle School	Stagebarn Middle School - Summerset, SD
Harding County, SD	Sturgis, SD Williams Middle School
Hulett, WY Middle School	Sundance, WY Middle School
Lead-Deadwood, SD Middle School	Todd County, SD Lakeview Elementary
Meade County, SD Rural Schools	Todd County, SD Middle School
Moorcroft, WY Middle School	Twin Spruce Junior High Gillette, WY
Newcastle, WY Middle School	Upton, WY Middle School



Exhibitors

BH National Forest Service	SD Game, Fish, and Parks
BHSU Admissions	SDSMT - Civil &
BHSU MSIG Program	Environmental Engineering
BHSU WISTEM	SDSMT Museum of Geology
Bird Conservancy of the Rockies	SDSMT Nano-Bio
Bricks, Bots & Beakers	SDSMT WiSE
CAMSE	SDSU Respiratory Care
CCBR Westcore	Solitario
City of Spearfish	South Dakota Mineral
Coeur Wharf	Industries Association
Dakota Gold Corp	(SDMIA)
DC Booth Fish Hatchery	STARBASE Rapid City
Jewel Cave	USD School of Health
Mammoth Site	Sciences
Monument Health - Diabetes	USDA-NRCS
Education	Western Dakota Technical
Monument Health - Nutrition	College
Services	Zonta Club
Monument Health - Labs	
Monument Health - Nursing	
Monument Health - Recruiting	
National Weather Service	
Rapid City Medical Center	
SD DOA Wildland Fire Division	

Organization Committee

Brianna Billington, EdD – Instructor for Education Technology, BHSU
Abigail Domagall, PhD – Associate Professor of Geology, BHSU
Holly Downing, PhD – Emeritus Professor of Biology, BHSU
Liz Fayer, EdD – Adjunct Sustainability Instructor, BHSU
Ella Francis – Administrator-Environmental Biologist, Solitario Resource Corp.
Sara Gottlob, CNP – BHSU & Monument Health
Jessica Graham, PhD – Assistant Professor of Biology, BHSU
Sydney Haugland, EdD – Assistant Professor of Education, BHSU
Katriona Jensen, PhD – Professor of Chemistry, BHSU
Brianna Mount, PhD – Associate Professor of Physics, BHSU
Bethany Reman – Biology and Chemistry Instructor, BHSU
Cara Ronish – Student, South Dakota Mines
Chad Ronish – Science Education Specialist, SURF
Kate Shelton – Graduate Assistant, Sustainability, BHSU
Logan Stone – Senior Principal Regulatory Affairs Specialist, Medtronic
Jill Trimble – Mathematics Lecturer, BHSU

SCHEDULE

8:00 - 8:45 - Parking and Registration
9:00 - 9:30 - Welcome & Keynote
9:45 - 10:15 - Session 1
10:25 - 10:55 - Session 2 (or lunch)
11:05 - 11:35 - Session 3 (or lunch)
11:45 - 12:15 - Session 4 (or lunch)
12:25 - 12:55 - Session 5 (or lunch)
1:05 - 1:35 - Session 6
1:45 - 2:30 - Session 7

Name	Title	Employer	Education	Words of Wisdom
Brianna Billington	Instructor of Education Technology	Black Hills State University	EdD - Doctorate of Education - Educational Leadership & Management, Learning Technologies	“Embrace your curiosity and courage. In STEM, your ideas shape tomorrow’s world. Your unique perspective matters. Dive in, explore, and pave the way. You belong here!”
Tyler Berger	Supervisor of Medical Imaging Services	Monument Health	Associates of Applied Science, Mitchell Technical Institute	“Challenge yourself and set goals. When working toward goals and challenges, it will be tough. That is the point, it’s supposed to be. Press on and be proud of how far you have come and where you will go.”
Olitha Black	Manager Nurse	Monument Health	Master of Science in Nursing from Chamberlain University	“Education is the most powerful weapon which you can use to change the world” - Nelson Mandela
Elizabeth Boos	Associate Veterinarian	Animal Medical Center of Wyoming	BS Animal Science, South Dakota State University Doctor of Veterinary Medicine, University of Minnesota	“You are more capable than you think. Have confidence in what you know, yet humble enough to realize what you don’t, remember that failure is always an option and often the best one for growth.”
Laura Bosworth	State Conservation Forester	USDA Natural Resources Conservation Service	BS Forestry, Colorado State University	“Forestry is like time traveling, connecting us to past, present, and future. Building upon the past forest history, appreciating what we have now, understanding what we will need in the future, and creating a plan to get there.”

Name	Title	Employer	Education	Words of Wisdom
Nan Bradeen	Supervisor Medical Imaging Services	Monument Health Custer Hospital	Certificate in Radiology: Avera McKennan Hospital School of Radiology BS Health Arts: University of St. Francis MS Strategic Leadership, Black Hills State University Professional Certifications: ARRT Radiologic Technologist ARRT Mammography ARRT Quality Management	“Life is a journey, and your educational path will follow. Just remember where you think you want to go may not be where you end up. You will end up where you should be.”
Leacey Brown	Gerontology Field Specialist	South Dakota State University Extension	MS Gerontology, St. Cloud State University BA Psychology & Sociology, Minot State University AAS Electronic Systems, Community College of the Air Force”	“Get to know your grandparents. You will learn amazing things about their life.”
Brittany Brown	B-1 Weapon Systems Officer	United States Air Force	BA Film and Video/ Communication Studies, University of Michigan AA Arabic, Defense Language Institute AA Intelligence Studies and Technology, Community College of the Air Force MS Cyber Security, University of North Dakota, In-progress	“Give people the chance to tell you no. If you don't allow them a chance to say “no”, you'll miss out on all the times they'd say “yes””
Lori Brown	Riparian Health Project Manager	The Nature Conservancy	BS, California Polytechnic State University MS, Texas Tech University	“Education is not the filling of a pail, but the lighting of a fire. The more you learn, the more you will be inspired by the incredible beauty and complexity in the world around you. Always be curious.”
Rachel Byrum, MBA, PharmD	Pharmacist	Monument Health	BS Business Administration, Black Hills State University Master of Business Administration, University of South Dakota Doctor of Pharmacy, South Dakota State University	“When a dream or goal seems too big it helps to break it up into several smaller goals. Before you know it, what may have seemed impossible has been accomplished.”

Name	Title	Employer	Education	Words of Wisdom
Jessica Carlson	Mechanical Engineer	US Army Corps of Engineers	Dual BS/BA Mechanical Engineering, University of San Diego MS Mechanical Engineering, Colorado School of Mines	“Take in the world around you as fully as you can. Explore new places, try new activities, figure out how things work, and find something that excites you. Keep discovering and learning!”
Eva Chase	Sustainability Coordinator	Black Hills State University	BS Geography, Environmental Studies and Sustainability, Slippery Rock University of Pennsylvania MS Environmental Management, Hardin-Simmons University	“The only person that can limit your success is you. Never shy away from an opportunity or what you really want because you’re afraid. Always do your best, never settle, and never underestimate yourself and you’ll get where you want to go!”
Moira “MOTR” Conley	First Lieutenant	United States Air Force/37th Bomb Squadron	AA General Studies, Pensacola State College BA Music & BS Environment and Society, Florida State University	“Be fearless in the pursuit of what sets your soul on fire!”
Julie Dahl	Science Education Specialist	Sanford Underground Research Facility	BS, Elementary and Special Education, Black Hills State University MS, Curriculum and Instruction, Black Hills State University	“Never let someone tell you the sky’s the limit when there are footprints on the moon.”
Deena Davis	Certified Registered Nurse Anesthetist	Monument Health	BS Nursing, South Dakota State University MS Nursing, Mount Marty College	Brigham Young said “You educate a man, you educate a man. You educate a woman, you educate a generation.” Let’s thank the women before us by succeeding, helping each other succeed, and leading the way for future generations.
Julia Delgaudio	Experiment Support Scientist	Sanford Underground Research Facility	BS in Mining and Minerals Engineering, Virginia Tech	“Decide what you want to do. Then do it. Women and girls can do anything they decide they want to do. Anyone who tells you otherwise has a gap in their education. An education gap is an opportunity to learn. Never stop learning, never stop inviting others to learn.”

Name	Title	Employer	Education	Words of Wisdom
Amy DiRienzo	CAMP Director	South Dakota School of Mines & Technology	BS Mechanical Engineering, University of Wyoming MS Mechanical Engineering, University of Wyoming	“Think like a proton, always positive!”
Tara Domkowski	Physical Therapist	Monument Health	Bachelor of Science, Belmont University Doctorate of Physical Therapy, Belmont University	“If you have an interest in a particular career field or area of study, see if you can interview, observe and/or job-shadow a professional in that field. This will give you a better idea if that career would be a good fit for you.”
Sara Gottlob	Certified Nurse Practitioner	Black Hills State University Monument Health	AS Business, Black Hills State University AS Nursing, University of South Dakota BS Nursing, South Dakota State University MS Nursing, South Dakota State University	“Work hard every day to succeed and achieve your goals in life. Your daily sweat and endurance will persevere.”
Liz Fayer	Biology Adjunct Professor	Black Hills State University	BS Biology, Northeastern Illinois University MS Biology, Northeastern Illinois University Teacher Certification, Northern Illinois University Ed.S., C&I, University of South Dakota	“Becoming a ‘Woman in Science’ can change your future, the lives of others, and the world!”
Dustin Fox	Museum Educator	The Journey Museum	BS History, minor in Chemistry, Black Hills State University	“Sometimes life brings you down a different path than the one you planned on taking. Remember that you don’t always need to stick to the original plan.”
Paige Hansen	Respiratory Therapist	Monument Health	AS, Dakota State University	“To know even one life has breathed easier because you have lived. This is to have succeeded.” - Ralph Waldo Emerson
Lindsey Hays	WIC Dietitian Manager	South Dakota Department of Health	BS Nutrition & Dietetics, Seattle Pacific University	
Krista Iverson	Occupational Therapist	Monument Health	Masters in Occupational Therapy	“Don’t be afraid to ask questions and think outside the box.”

Name	Title	Employer	Education	Words of Wisdom
Hope K Jackson, BSDH, RDH, COM	Operations Director, Registered Dental Hygienist, Certified Orofacial Myologist	Jackson Dental	BS University of Minnesota School of Dentistry	“Do something you love. If you have a passion for what you do, it won’t feel like work, you will do it better, and you will love your life.”
Katrina Jensen	Professor of Chemistry	Black Hills State University	BS Chemistry, Black Hills State University PhD Organic Chemistry, University of Utah NIH Postdoctoral Fellow, University of Wisconsin-Madison	“Don’t be afraid of a challenge! We learn and grow when we try hard things.”
Heidi Johnson	Certified Registered Nurse Anesthetist	Monument Health	BAN, University of Mary MSN, University of North Dakota	“There are so many avenues and professions that science can take you. From teaching, to working in an operating room as a nurse or surgeon, to an astronaut flying through space, science is the backbone to all of these interesting and unique professions. A career in a science-related field opens the door for you to change the world.”
Amber Kennedy	Physical Therapist	Monument Health	BS Psychology, minor in Biology, University of South Dakota Doctor of Physical Therapy, University of Puget Sound	“You are capable of anything. Pursue a career that interests you, and take your time figuring it out. Take advantage of opportunities that allow you to learn more about yourself, and what your interests are.”
Kalli Ketel	Chief Metallurgist	Coeur Wharf	BS Metallurgical Engineering, South Dakota School of Mines and Technology	
Raegan Kleinpeter	Museum Educator	South Dakota Discovery Center	AS General Studies, Louisiana State University, Eunice BSEd Elementary Education, University of Louisiana, Lafayette	“Take every opportunity you can, especially the ones outside your comfort zone.”

Name	Title	Employer	Education	Words of Wisdom
Deb Kuehn	Certified Neonatal and Family Nurse Practitioner	Monument Health and Black Hills Pediatrics and Neonatology	BA Nursing and Psychology, Augustana College MSN Perinatal Nursing, Indiana University Certificate - Neonatal Nurse Practitioner, South Dakota State University Certificate – Family Nurse Practitioner, South Dakota State University	“Follow your heart’s desire and shoot for the stars. You can do anything you want, but it usually will take time and perseverance.”
Debbie Liddick	Assistant Director of Facilities and Sustainability	Black Hills State University	BS Mathematics, Wilkes University MS Aeronautical Science, Embry Riddle Aeronautical University MS National Recourse Strategy, National Defense University	“With a STEM degree, you might find yourself working in a mostly male dominated career field but always remember you don’t have to present yourself as “one of the boys” to succeed, you should trust your brain and be a confident woman.”
Samantha Lucas	Chiropractor/ Business Owner	Health Source of Spearfish	Bachelor of Science, Doctorate of Chiropractic, Palmer College of Chiropractic	“Once you’ve made a decision, follow through to the fullest extent and don’t give up when it gets hard. Everyone fails but not everyone keeps trying. Your perseverance must be stronger than failure.”
Christine Mathews, PhD	Lecturer & Primary Adviser for Pre-Professional Health Sciences	SD School of Mines	BS Biology, Wheaton College MPH, University of Texas Health Science Center PhD Epidemiology, University of Texas Health Science Center	“Find your passion in life and follow it, but know you may not find it right away, and that is ok. Don’t be afraid to take risks because you fear failure. Failure can sometimes teach you more than success can.”
Shawna Matthews, PhD	Associate Medical Director	Oxford PharmaGenesis Inc.	BS, University of Wyoming MS, University of Arizona PhD, Colorado State University	“None of us is as smart as all of us.” --Ken Blanchard
Stephanie Mayfield	Executive Director	West River Area Health Education Center	BA Business Administration Minors in English and Spanish, Magna cum Laude, Dickinson State University	“Challenge yourself to try something new—it may be your life’s passion!”
Jasmine McCauley	Maintenance Manager	Coeur Wharf	BS Industrial Engineering, Texas Tech University	

Name	Title	Employer	Education	Words of Wisdom
Kelli McCormick	Senior Lecturer in Mining Engineering and Management	South Dakota School of Mines and Technology	BS Geology, Idaho State University MS Geology, University of New Mexico PhD, MA Earth and Planetary Science, Johns Hopkins University	“Adaptability is important to success. Being a lifelong learner will help you achieve your goals.”
Carly Messner	Occupational Therapist, Owner Whole Child Wellness	Whole Child Wellness	BS Health Sciences, University of Wyoming Masters Occupational Therapy, Pacific University of Oregon	“Don’t forget to slow down and listen to your gut. You are wiser than you know!”
Raeann Mettler, PhD	Science Specialist	Missouri Breaks Industries Research, Inc.	BS Biology, Black Hills State University MS Integrative Genomics, Black Hills State University PhD Natural Sciences, University of Freiburg, Germany	“Science & everyday life cannot and should not be separated.” -Rosalind Franklin
Kristi Miller	Principal Consultant	Indevric Consulting LLC	BS Genetic Engineering, Cedar Crest College PhD Tumor Cell Biology, Northwestern University	“Be curious and challenge yourself. Push yourself out of your comfort zone and the sky’s the limit!”
Natalie Moose-Elkin	Student	Black Hills State University	Exercise Science, Black Hills State University	“You can do anything you set your mind to! It takes perseverance, action and pushing yourself out of the comfort zone, but nothing worth having comes easy.”
Amanda Morrison	Natural Resource Planner	SD Department of Agriculture and Natural Resources	BS Forestry, Colorado State University BS Animal Science, Colorado State University Certificate in Womens Studies, Colorado State University	“Don’t be afraid to push yourself-Go out on a limb; You’ll never know what you’re capable of until you challenge yourself.”
Rebecca Myers	Learning Specialist	BHSSC/TIE	BSE Math and Chemistry Secondary Education, minor in Speech/Theater, Black Hills State University Masters in Curriculum and Instruction Math Specialist, Black Hills State University	

Name	Title	Employer	Education	Words of Wisdom
Tanya Nelsen	Analytical Chemist, Inorganic Lab Manager	Midcontinent Testing Laboratories, Inc.	BS Biology with a Chemistry minor, Black Hills State University	“Don’t be afraid to try things! You never know, it might turn into something you really enjoy and are good at. Go for it! What have you got to lose! Stay in school, and continue to learn everything you can. Your education is your best investment and no one can take knowledge away from you!”
Joanne Noyes	Environmental Scientist, Hydrologist	South Dakota Department of Environment and Natural Resources, Geological Survey Program	BA Geology, University of Minnesota, Morris MS Geology, South Dakota School of Mines and Technology Petroleum Remediator license and Professional Engineering license	“Find your passion, even if it is an outrageous dream and pursue it with all your heart. If you love what you do, you will have fun and make money doing it. Education is also essential. No matter what career you choose, education is not just something you check off once you graduate.”
Jocelyn Olson	Chemical Analyst	Energy Laboratories	BS Chemistry, Black Hills State University BS Math, Black Hills State University	“Don’t limit or be afraid of new opportunities; you never know where they might take you.”
Ashley Pfeiffer, DPT	Physical Therapist and Professor	Physio Performance, Black Hills State University	BS Exercise Science, University of Mary Doctor of Physical Therapy, University of Minnesota	“Each and every one of you are awesome and offer so many wonderful talents and skills to the world. As you continue to learn and grow in school don’t be afraid to continuously explore new ideas. Surround yourself with positive people and always believe in yourself!”
Jane Pierce-McPherson, PAC	Physician Assistant	Monument Health	BS Elementary Education, Reading and Science Concentration, Dickinson State University Master of Physician Assistant Studies, Rocky Mountain College	“Keep an open mind about a future career path. Realize there are many steps you may take to get to your final goal. Focus on your strengths, interests, and values. Maintain a good work ethic and work-life balance. Never stop learning!!”

Name	Title	Employer	Education	Words of Wisdom
Katie Pojorlie	Meteorologist	National Weather Service	BS, Atmospheric Sciences, South Dakota School of Mines and Technology	“Don’t let difficult classes in high school and college deter you from becoming what you want to be.”
Myra Rude	Certified Registered Nurse Anesthetist (CRNA)	Monument Health Spearfish Hospital	Bachelor of Science in Nursing, University of North Dakota Master of Science Nurse Anesthesia, Texas Wesleyan University	“Hard work pays off. When you find something you love to do and are passionate about, it doesn’t feel like work or a job. You can do anything you set your mind to.”
Janiele Schumm		Monument Health		
Maggie Sebert	Geomechanical Engineer	RESPEC	BS Mechanical Engineering, SD Mines MS Engineering Management, SD Mines	“Take all the opportunities you get to try new things! Even experiences you don’t enjoy mean you are one step closer to finding what you do.”
Heidi Sieverding	Research Scientist	South Dakota School of Mines	AA General Studies, Worthington Community College BS Geological Engineering, South Dakota Mines MS Geology and Geological Engineering, South Dakota Mines	“Always ask why.”
Ann Slaughter	Vice President – Strategic Telecommunications Accounts	TEOCO Corporation, retired	BA Mathematics and German, Middlebury College MS Biostatistics, Harvard University	“Be curious and always learning. Do what you love and you will always love what you do!”
Melissa Smith	Service Hydrologist	NOAA National Weather Service	BS Atmospheric Science, Iowa State University	“Take lots of math, science, and computer classes. The more variety, the better since many employers prefer to hire people with diverse backgrounds and training.”
Logan Stone	Principal Regulatory Affairs Specialist	Medtronic, Inc	BS Animal Science, Iowa State University MS Regulatory Affairs for Drugs, Biologics and Medical Devices, Northeastern University	“Ensure you work hard in everything you do and take every opportunity to experience something new. Pursue your passion in STEM and the world will be at your fingertips.”

Name	Title	Employer	Education	Words of Wisdom
Melanie Theile	Certified Public Accountant	Ketel Thorstenson LLP	BS in Business Administration, Accounting, Wayne State College MBA, Wayne State College	“Don’t be afraid to ask questions. Stay curious because you never know where your interest may lead you.”
Clarissa Thompson	Yoga Teacher, Breathwork Facilitator, Sound Healer	Clarissa Mae Yoga	BS Government, Augustana College MS Historical Administration, Eastern Illinois University E-RYT®500 Yoga Teacher Sound Healer, Breathwork Facilitator, Meditation and Mindfulness, Prenatal Yoga	“Keep discovering ALL your passions. Find ways to be involved in as many as you can by weaving them together throughout your life.”
Jill Trimble	Lecturer, Mathematics	Black Hills State University	BS Mathematics, Black Hills State University MS Statistics, Montana State University	“There are no secrets to success. Success is the result of preparation, hard work and learning from failure.” – Colin Powell
Nicole Uhre-Balk	Learning Specialist	TIE (Technology and Innovation in Education)	BA Biology & Environmental Studies, Bethel University MS Curriculum and Instruction with a Science Education Endorsement, Black Hills State University	“Don’t be afraid to: “fail forward,” take credit for your work, ask for help, show your enthusiasm, and say yes to an opportunity you don’t yet know how to do. Following your heart takes time to reflect on your experiences.”



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