MHA Conference Schedule – Pittsburg, Kansas
May 27-31, 2026
(Draft as of January 30, 2026)

Wednesday, May 27

MHA Council Meeting: 3-5pm, Hampton Inn, Pittsburg, KS

Thursday, May 28

8am-3pm – Field Trip, Coal Country (Meet at Hampton Inn, Pittsburg, by 745am)

Big Brutus & Museum
Heartlands Railroad Museum
Dragline Park
Miners Hall Museum
Frontenac Museum
Coal Fields

430-7pm – Opening Reception – Joplin History & Mineral Museum

430-530pm: Visit to Museum
530-6pm: Food & Drinks
6pm-645pm: Chris Wiseman, Joplin History & Mineral Museum, "Mining, Milling, & Smelting Technology of the Historic Tri-State Lead and Zinc District"

Friday, May 29

730am-3pm, On Site Registration, Lobby Pittsburg State University Ballroom A (outside the ballroom)
****Hereafter, (Ballroom) designates Ballroom A, Overman Student Center at Pittsburg State University**
****(Library) designates Room 014 of the PSU Library**

Session 1 (Ballroom): 8-9am: Welcoming Session:

Chris Childers, Pittsburg State University, Welcome to Pittsburg State University
Blair Schneider, Kansas Geological Survey, University of Kansas—Mining Impact on the Culture of Southeast Kansas

Mike Worsley, Kansas Department of Health and Environment Surface Mining Unit, Abandoned Mine Land Program
David Jenkins, Kansas Department of Wildlife and Parks Habitat Restoration
Chris Wilson, Explore Crawford County, About Pittsburg

Session 2 (Ballroom): 915-1030am: Mining, Minerals, and Men of the Kansas Coal Fields: Chair Sara DeCaro

Blair Schneider, Kansas Geological Survey, University of Kansas, "Coal Exploration in the Tri-State District: Legacies of the Past and New Opportunities in the Future"
Jerry Lomshek, Pittsburg, KS, 'Coal Mining in the Crawford/Cherokee Coal Fields"
Linda O'Nelio Knoll, Pittsburg, KS, "Army of Amazons: Strikes, Struggles, and Solidarity: Unrest in the Kansas Coalfields"

Session 3 (Ballroom): 1045-Noon: Tri-State Mining History, its Geology, and in Photographs

Jarod Roll, University of Missouri, Columbia, "A Modern American Frontier: The Development of the Tri-State Mining District of Kansas, Missouri, and Oklahoma, 1850-1960"
Martin Appold, University of Missouri, Columbia, "Origin of the Mississippi Valley-type Deposits of the Tri-State District"

LUNCH ON YOUR OWN, NOON-125pm

Session 4a (Ballroom): 130-3pm: Coal Melting Pot, Chair Jerry Lomshek

Seth Nutt, Heritage Hall Museum, "An Introduction to the Heritage Hall Museum, Frontenac, KS"
Bob Zagonel, Crawford County Historical Museum, "An Introduction to the Crawford County Historical Museum, Pittsburg, KS"
Phyllis Bitner, Miners Hall Museum, "An Introduction to the Miners Hall Museum, Franklin, KS"
J. T. Knoll, Pittsburg, Kansas, "Digging," "Ballad of Matt Knoll," and "Fishin' with Grandpa"

Session 4b (Library): 130-3pm: Nevada Mining History: Chair Rob McQueen

Mia Leutzinger, University of Nevada, Reno, "Mining for Community: A Social History of Greek Immigration to White Pine County, Nevada from 1900 until 1978"

Laurence P. James, Golden, Colorado, "The Combined Metals Reduction Company, 1912-1976: Discovery, Mill Innovation, and Missouri Smelters' Funding of Nevada's Largest Zinc Mine"

Eric Nystrom, University of Nevada, Reno, "Rare Earth, Desert Mine, Global Market: The Cold War History of the Mountain Pass Mine"

Session 5a (Ballroom): 310-445pm: Miscellaneous Mining Themes: Chair David Baillargeon

Terry Reynolds, Michigan Tech University (emeritus), "From Notoriety to Obscurity: Antimony Mining in Arkansas, 1873-1947"

Mark Hendrickson, University of California, San Diego, "Mining and US History in the Age of Mineral Internationalism, 1970 to Present"

Brian Leech, Augustana College, "The Social Disease of Gold Fever in the Mining Movie Western"

Session 5b (Library): 310-445pm: Women, African Americans, and Indigenous Miners, Chair Erik Nordberg

Kari Thomas, Carnegie Mellon University, "The Solidarity of Politics of Coal Employment Project"

Brent McDowell, Pittsburg State University, "The Southeast Kansas Coal Miners' Strike of 1893 and the Role of Imported Black Labor"

Patrick Allan Pospisek, Grand Valley State University, "'All this, is the work of the Indian': Indigenous Mining in the History of Midwestern Extraction"

Taylor Rose, University of Alaska Southeast, "Boom-Bust in Newe Segobia: Mining, Water, and Indigenous Geographic Knowledge in Nevada, 1860–1930"

630-8pm MHA Awards Banquet – PSU Ballroom

Saturday, May 30

730-8am, Onsight Registration, Lobby PSU Ballroom A (outside the ballroom)

Session 6 (Ballroom): 8-950am: International Mining: Chair Chris Huggard

Klas Swanljung, Outokumpu Mining Museum, "The Outokumpu Mine and the Resources for Modern Mining to Succeed in Finland 1910-1928"

Nic Haygarth, Tasmania, Australia, "The Big Manufacturer and the Refractory Digger: How New York tried to Monopolize Tasmanian Osmiridium Supply—and Lost"

Nic Haygarth, Australasian Mining History Association, "Introduction to the Australasian Mining History Association"

Session 7 (Ballroom): 10-1050am: Keynote Address; Introduction Kelly Woestman

Jarod Roll, University of Missouri, Columbia, "Poor Man's Fortune: What Made Tri-State Miners Notoriously Anti-Union?"

Session 8 (Ballroom): 11-1130am PSU Archival Collections

Sara DeCaro, Pittsburg State University, "Resources for Mining Research in the Pittsburg State University Special Collections and Archives"

Presidential Luncheon & Address: 1145-115pm (Ballroom):

Paul Bartos, MHA President, "The Making of the San Bartolomé Mine, Cerro Rico de Potosi District, Bolivia"

Session 9a (Ballroom): 130-250pm: Quapaw Country Mining & Natural Water Recovery: Chair Bob Nairn

Nick Shepherd, University of Oklahoma, **"**Mapping Picher Field Underground Mine Workings of the Abandoned Tri-State Lead-Zinc Mining District"

Bob Nairn, University of Oklahoma "Working with Mother Nature to Address Legacy Mine Waters: Reversing the Irreversible with Natural Infrastructure"

Deborah White, University of Wyoming, "Revisiting Picher, Oklahoma through Historical Photographs"

Session 9b (Library): 130-250pm: International Mining

Erik Nordberg, University of Tennessee at Martin, "Malcolm Ross, 1920s Mine Labor, and Early Federal Labor Law"
David Baillargeon, University of Texas at Arlington, "Empire of Metals: The Imperial Institute and the Global Mining Industry in the Interwar Years"
Dennis Patrick Halpin, Virginia Tech, "'A decidedly new feature': The Journey of Richard Anderson and the Establishment of Black Labor on Navassa"

MHA Board Meeting: 3-430pm (Ballroom)

Sunday, May 31

8am-5pm—Field Trip, Tri-State District—Oklahoma (Meet at Hampton Inn, Pittsburg, by 745am)

Baxter Springs Museum—**Host Mary Billington**
Quapaw Nation—**Hosts Dana Hummell/Craig Kreman** (Oklahoma Department of Environmental Quality)
Picher/Douthat/Tar Creek—Mine Communities & Land Reclamation
Quapaw Farmer's Market Lunch
Commerce – Mining Remnants & Passive Treatment System (water recovery)—**Host Bob Nairn, Univ. of Oklahoma**
Mickey Mantle Home Site & Statue (Quapaw Museum if time permits)

Pittsburg MHA Presenter Biographies & Abstracts

Martin Appold (martin.appold@missouri.edu) is a professor/chair of the Dept. of Geological Sciences at the University of Missouri—Columbia. He received his PhD from Johns Hopkins University in 1998 and has been on the faculty at the University of Missouri since 2004. His main research interest is in the physical and chemical behavior of fluids in the Earth's crust, particularly the formation of hydrothermal ore deposits. He is originally from Kirksville, MO.

He will discuss the Tri-State District geology, the third largest occurrence of Mississippi Valley-type (MVT) mineralization in the world, originally containing about 500 million tons of ore at average zinc and lead grades of 2.3 and 0.6%, respectively. Tri-State is one of several prominent MVT districts in the central US that originated from a regional groundwater flow set in motion by mountain-building associated with the collision of North America with South America and Africa 250-300 million years ago. This system likely originated in the Arkoma sedimentary basin, scouring heat and metals from rocks as it flowed hundreds of kilometers north to the Tri-State. The groundwater rose through deep-seated faults and a gap in a regional aquitard to reach Mississippian-age limestones of the Warsaw and Keokuk Formations. The groundwater then spread laterally, creating collapse structures of thinned and fractured rock, favorable sites for ore formation. The groundwater was highly saline brine and some of the groundwater was unusually rich in metals. The precipitation of metal sulfide ore minerals was induced by reaction of metals in the regional groundwater with local sulfide in the fractured rock zones, possibly augmented by cooling of the brine. The local sulfide may have been leached from petroleum in the district, or the petroleum may have served as a reductant to convert dissolved sulfate in the brine to sulfide.

David Baillargeon (david.baillargeon@uta.edu) is an Assistant Professor of European History at the University of Texas at Arlington. He specializes in the history of modern Britain and the British Empire. His work has appeared in *Slavery and Abolition*, the *Journal of Imperial and Commonwealth History*, *Enterprise & Society*, and the *Journal of Historical Geography*. His first book, *The Commonwealth of Empire: A History of the Burma Corporation and the Bawdwin Mining Complex in British Colonial Burma* (2026) is a volume of the University of Nevada Press's "Mining and Society" series.

At the turn of the twentieth century, the mining industry was an "globalized" one. With capitalists and experts—many of whom were from Britain, US, Australia, and other locations in the "Anglo" world—traveling across the world discovering, extracting, investing in, and profiting from the production of metalliferous ores, the existence of national borders and boundaries provided few impediments to their activities. World War I transformed this reality. As a matter of national security, powers such as Britain and US looked inward to access critical resources. In UK this led to a new drive in the public and private sectors to meet metal needs when previously commercial agents dominated. Baillargeon examines the Imperial Institute's efforts to promote on a global scale British industrial and commercial products from London's Imperial College.

Paul Bartos (pauljbartos@stanfordalumni.org) earned a BS in geology from Wayne State University, an MS from Stanford University, and a PhD from the Colorado School of Mines (CSM) and is the presiding president of the MHA. He has been involved in the discovery of seven different ore deposits in Latin America and the western US and is the author and co-author of 37 peer-reviewed publications, including five geologic quadrangle maps. He also designed and constructed the new Geology Museum at CSM. He is the recent recipient of the Thayer Lindsley Award for best international discovery.

Cerro Rico de Potosi in Bolivia is among the most historically significant ore deposits on the planet. Silver from this immense deposit (> 1 billion ounces Ag produced) financed the Spanish colonial empire for nearly 300 years and directly underlain the world's financial system. Bartos will share personal stories from the mid to late 1990s when he spent 2.5 years at Cerro Rico helping to create the San Bartolomé Mine, which produced 70.2 million ounces of Ag.

Phyllis Bitner (minershallmuseum@gmail.com) moved to SE Kansas at age of four and grew up in a coal-mining house once owned by her grandparents. A respected local historian, she has long been a trusted resource on the region's mining heritage and community history. She compiled the *Arma Centennial* book and authored *18 Days in Slovenia*. Phyllis chaired the Franklin Centennial Committee and helped organize the group that founded Miners Hall Museum, including securing a Smithsonian Traveling Exhibition for Franklin. She was instrumental in achieving State and National Register designation for the historic Franklin/Arma Sidewalk and, alongside fellow board members, played a key role in bringing the historic Page 618 Walking Dragline to Franklin for public preservation. A

founding member of Miners Hall Museum and the Jefferson Highway Association, Phyllis has served on numerous civic, cultural, and historical boards throughout SE Kansas.

Bitner's presentation offers insight into Miners Hall Museum's three properties and their role in preserving the stories of coal-mining families, industrial heritage, and the extraordinary Page 618 Walking Dragline—the largest walking dragline on public display in US. Miners Hall Museum preserves the history of SE Kansas by sharing coal mining families' stories of immigration, daily life, culture, work, and health and safety concerns. Exhibits include industrial artifacts provided through generous donations from area families that offer a unique museum that is organized to tell the community's mining industry's story and its hardships.

Sara DeCaro (sdecaro@pittstate.edu) is the Curator of Special Collections and University Archivist at Pittsburg State University. She has bachelor's degrees in history and vocal music from Wichita State Univ. and a Master of Library Science and Archives Studies Certificate from Emporia State University. She has worked in archives and special collections for a decade and has previously held positions at the Kansas Historical Society, Baker Univ., and the Missouri Valley Special Collections at the Kansas City Public Library.

DeCaro will introduce the Resources for Mining Research in the Pittsburg State University Special Collections and Archives. The city of Pittsburg was founded in 1876 specifically to support coal mining, and PSU, founded in 1903, became an important repository for mining records, especially due to its proximity to the Tri-State Mining Area. DeCaro will highlight the rich collections of mining-related materials housed in PSU's vast collections and instruct potential researchers on the many ways to utilize and access them.

Dennis Patrick Halpin (dphalpin@vt.edu) is an Associate Professor and Associate Chair for the department of history at Virginia Tech. He published *Black Reconstruction and Its Legacies in Baltimore, 1865-1920* (2019).

In autumn of 1857, Richard Anderson decided to flee Baltimore. Although not enslaved, his freedom was daily threatened because of the Fugitive Slave Law, which had already driven many free Blacks to Canada. He chose a different solution, joining a growing number of Black Baltimoreans to work in the fertilizer trade on far-flung islands in the Pacific and Caribbean. Prior to their arrival, the Chinese provided most of the phosphate mining labor. A *Baltimore Sun* reporter visiting a shipping port noticed a large group of

Black workers disembarking for the guano mining works and learned from some of them that "over a hundred had already gone [abroad] from Baltimore" and were "a decidedly new feature" in the tropical endeavor. Halpin's paper explores the early years of phosphate mining on Navassa Island and how Baltimore entrepreneurs Edward O. and Edward K. Cooper used the Guano Islands Act to steal the uninhabited island from Haiti. They intentionally enticed African American laborers to make Navassa habitable and operational, replicating a profitable strategy from earlier ventures when they exploited Black workers. Making a fortune in previous ventures, the Coopers again used Black workers—who died in droves under prison-like conditions over four decades.

Nic Haygarth (lakelea22@yahoo.com.au) is an Australian freelance historian who works in the heritage sector. He earned a PhD in history from the University of Tasmania and is past president of the Australasian Mining History Association. Nic is a prolific author who investigates mining wherever it occurs in high country and remote places and examines the lives of the people who populate these areas. Among his books is *On the Ossie: Tasmanian Osmiridium and the Fountain Pen Industry* (2017).

In the early 1900s the LE Waterman Pen Company of New York tipped its gold-nibbed fountain pens with iridium, one of the hardest and densest elements on the periodic table. In 1914 two million fountain pens were sold across the globe, but World War I, the Bolshevik Revolution/Civil War, and the emergent Soviet regime ended access to Russia's iridium supply. Tasmania in southern Australia suddenly gained a monopoly on osmiridium, a naturally occurring alloy of iridium and osmium used to tip gold nibs. In 1921 Watermans bought 1620 oz—enough to tip 500,000 fountain pen nibs—of the 1751 oz of osmiridium produced that year in Tasmania. Eager to corner the market and drive down prices, Watermans sent emissary Campbell Brown to Tasmania to deal directly with individual osmiridium miners. Diggers responded aggressively by shutting out Watermans, and the Tasmanian government also interfered in the market. Gaining £10,000 backing from the Australian government, Brown then led what seemed to be a thinly veiled osmiridium reconnaissance expedition to New Guinea which won him nothing but malaria. How Brown, a former Scottish typewriter salesman, gained the trust of a large American industrialist and the Australian prime minister is baffling. Watermans gradually lost its market share to rivals, such as Parker and Sheaffer, who found cheap synthetic substitutes for osmiridium as the era of the ballpoint pen loomed.

Mark Hendrickson (ghendrickson@ucsd.edu) is an Associate Professor and Chair of the history department at the UC, San Diego. He specializes in late 19th and 20th century US history with an emphasis on political economy, mineral supply chains, and capitalism. His recent publications explore how American mining engineers and economic geologists working abroad since the 1880s helped shape the development of 20th-century American capitalism, science, and foreign policy. His book, *Never Alone: Antimony and US Mineral History in the Twentieth and Twenty-First Centuries,* will appear in the History of Science series of Johns Hopkins University Press. Mark recently held an Andrew W. Mellon Foundation New Directions Fellowship allowing him to study mining with scholars at Colorado School of Mines and Michigan Tech.

His presentation begins a new book-length history of the US mining and mineral industry since the 1970s. In the early 20th century, US miners produced an abundant supply of minerals that helped make it the world's largest economy and, historian Gavin Wright asserts, "the world's dominant producer of every one of the major industrial minerals of that era." Since the 1970s, US has embraced a internationalist relationship to mineral supply chains that minimize the importance of domestic supplies. In 1984 the Chair of the Mineral Economics Department at Colorado School of Mines argued, "Countries like Japan and West Germany have very, very strong economies with very low levels of metals self-sufficiency." Hendrickson's paper examines the history of mining in the US in recent decades and deliberates on the significance of these recent changes in supply chains and mineral production. Among other sources, he draws on the work of the Regional Oral History Office's Global Mining Project at UC Berkeley and AIME's Oral History Project.

Laurence P. (Larry) James (jamesgeoa@cs.com) is a geologist and geochemist who holds a PhD in these fields from Pennsylvania State Univ. He has explored for copper, gold, silver, zinc, lead, tungsten, uranium and tellurium in US, Canada, Mexico, South America, Egypt, Eastern Europe, and China. He has been employed by BHP, Utah International, Exxon Minerals, Minera Mt. Isa, WR Grace, and has been a country manager for exploration for metals in Japan and Indonesia; he was chief geologist for overseas exploration, Korea Resources Company, and for an Australian uranium company. He was a manager of underground mining and mill operation for Colorado "junior" company and worked for the US Dept. of Labor, MSHA: safety training and certification, underground mining; he completed work for the USGS and the Utah Geological Survey. He is a mining historian and collector of data on mineral prospects and has focused

on unpublished material on mining in Utah, Nevada, Colorado and Republic of the Philippines. He has also served as an adjunct professor of Economic Geology, UC, Boulder. He has published in *Economic Geology*, in *the Journal of Exploration Geochemistry*, and has published book chapters on mining geology, geochemistry, and history.

James's presentation will emphasize the 20th century revival of two silver mining districts, dead after the silver crash of 1893. Metal deposit exploration and speculation became more intense after the Panic of 1907 faded. Efforts of family members (Willard F. Snyder & Sons) reopened mines at Stockton, Utah, and built the nearby company town of Bauer, CMR's headquarters. Edward Harrison Snyder led development of large, mineralized bodies in the "CM" limestone beds of Pioche, Nevada. Experimental ore upgrading and technology development at Bauer led to pioneer differential flotation processing for multiple variants of CM ores. Midwestern zinc smelters financed a large mill and new mine plant at the new company town of Caselton. Controversially, a paper James co-wrote suggested there was an early-stage deposition of Pioche metal resources. Initial accumulation of zinc and lead in permeable 600 Ma old marine carbonates possibly occurred as early as 400 Ma. Thin igneous dikes, associated with precious metal veins, intruded at ca.100 Ma.

Brian Leech (brianleech@augustana.edu) is Associate Professor and Chair of the history department at Augustana College in Rock Island, IL, where he also directs the college's Austin E. Knowlton Honors Program. His book *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley* (2019) won the MHA's Clark C. Spence Award for the best book in mining history. He is currently completing a book on mining in American popular culture.

In the late 1940s mainstream Westerns increasingly reacted with ambivalence, even hostility, towards the mining industry. Leech argues that Hollywood filmmakers often used an imagined social disease, "gold fever," in this effort. This idea of gold fever became a way to critique post-WWII materialism. If a character caught this fever, they would lose their moral compass. If gold fever sufferers became too invested in their own greed, they could become "evil," in the form of a villainous corporate executive. The figure of the mining baron therefore became a way to highlight Americans' growing distrust of corporate power. Mid-twentieth-century Westerns insisted that gold and silver caused corruption that created broken landscapes and destroyed communities.

J. T. Knoll (jtknoll@swbell.net) is the former co-owner of White Buffalo Café and Emporium. He has twice been awarded first place in column writing by The Kansas Press Association as a columnist for *The Morning Sun.* He has performed original songs and poetry in a myriad of venues across the country and led mindfulness and training workshops throughout the Midwest. His poetry has appeared in journals such as *The Midwest Quarterly, Another Chicago Magazine, Chameleon and The Little Balkans Review.* His published collections include *Paperboy, True Stories, Entry / Exit Point, Chorus Line, Where the Pavement Ends, Counterpart,* and *Fetch Crazy.* He lives with his wife, Linda, and Arlo the Labradorian, on Euclid's curve in Pittsburg, Kansas.

He will be reading poems and songs, like "Digging," "Ballad of Matt Knoll," and "Fishin' with Grandpa," among other titles, for the conference.

Linda O'Nelio Knoll (lindaoknoll@swbell.net) is a founder and current board trustee of the Miners Hall Museum in Franklin, Kansas. For nearly 40 years, she has been a dedicated researcher, writer, and speaker on SE Kansas coal mining and labor history, with emphasis on the 1921 women's march. Her play *Army of Amazons* was the catalyst for the 1999–2000 "Solidarity" mural project, part of which was nominated in 2012 for a PBS Emmy. She has written extensively since 1986 on the Amazon Army, inspired by her grandmother, Maggie O'Nelio, who at 23 did the march. Her collaborations include the mural, "The Spirit of the Little Balkans," a 2021 exhibit at the Miners Hall Museum, which now stands on the ground where the women met each day to organize. Linda is a long-standing member of the Humanities Kansas Speakers Bureau and has presented throughout the state. She also serves on the Historical Advisory Committee of Frontenac's Heritage Hall Museum.

Her presentation will explore the labor unrest in the early 20th century that rocked the coalfields of SE Kansas known as "The Little Balkans." Attendees will learn about the brutal mine working conditions, the miners' unionization, and the famous strikes and protests that erupted in response, especially the historic 1921 women's march known as the "Amazon Army." Combining archival research, oral histories, and visual storytelling, her program provides a vivid look at a chapter of American labor history that is often overlooked.

Mia Leutzinger (mialeutzinger@unr.edu) is a first-year master's student at the Univ. of Nevada, Reno. A fifth-generation Nevadan, her interests focus

on the history of immigration to and the mining communities of the American West.

Her project investigates Greek immigration to White Pine County, NV, with focus on the mining towns of Ely and McGill until 1978 when Kennecott closed the copper mine. Her study seeks to understand how Greek immigrants and succeeding generations shaped (and were shaped by) the spatial, social, and economic landscapes of eastern Nevada. Methodologically, the project combines quantitative and qualitative evidence. She uses census data and varied maps to trace settlement patterns, occupational distribution, and demographic change. Oral histories, newspaper reports, and archival sources further reveal the experiences of Greek immigrant families. She argues that eastern Nevada was distinctive within the American West: its mining booms fostered unusually robust ethnic diversity with structured social relations and community organization that made the two copper towns distinctively diverse in US.

Jerry Lomshek (jdlomshek@hotmail.com) graduated from Mt. Carmel School of Nursing, Pittsburg, KS, in 1972, and worked as a registered nurse in health care for 45 years, in 1988 earning a BGS at PSU. He also cultivated his interest in history, becoming a local historian who has written two manuscripts: a parish history of St. Barbara's Church, Chicopee, Kansas, and a history of the 1888 Frontenac, Kansas, mine explosion. He has given many presentations on coal mining, church, and Civil War history focused on the Pittsburg area.

Lomshek's presentation offers an in-depth review of coal mining in SE Kansas. Beginning with early mining activity, he will examine the development of deep shaft mining as well as strip mining. He will examine the historical and cultural effects of mining, immigration, unionization, and the dangers of mining, and then will compare Pittsburg to other Kansas, Missouri, Arkansas, Oklahoma and Illinois coal mining areas.

Brent McDowell (bmcdowell@pittstate.edu) works as the Special Collections Library Specialist at Pittsburg State University. He holds bachelor's degrees in history and Spanish from PSU and is currently enrolled in PSU's master's in history program, expecting to graduate in May of 2026. He is currently researching the role of Black coal miners in the 1890s coal strikes in SE Kansas.

McDowell will discuss the organized segment of the 1893 strike in Cherokee and Crawford counties, KS, as a response to wage changes set by mine

operators responding to new state laws. When the strike lasted longer than mine operators expected, the companies imported Black coal miners and laborers from the Birmingham, AL, coalfields to replace the Kansas strikers. Other strikes in US resulted in crushed strikes and violence against Black coal miners and their families. But these conditions were not replicated in SE Kansas. In fact, the importation of Black coal miners did not lead to the end of the strike, rather it concluded within a month due to a compromise over wages and screening practices. Unaware of the strike on their arrival, the Black miners instead became a valuable part of the labor force and were welcomed by local UMWA members who adhered to the union's nondiscriminatory rules. Analysis of local newspapers reveals that the people of the region were welcoming, even if paternalistic, but not hostile nor violent toward the Black migrants to SE Kansas.

Robert W. Nairn (nairn@ou.edu) is an environmental scientist with 35+ years of experience who holds BS degrees in environmental science from Juniata College (Huntingdon, PA) and a PhD from The Ohio State University. He serves as the Robert W. Hughes Centennial Professor of Engineering, David L. Boren Professor, and Viersen Family Presidential Professor in the Univ. of Oklahoma School of Civil Engineering and Environmental Science (CEES) and is director of the Center for Restoration of Ecosystems and Watersheds (CREW), and the Water Technologies for Emerging Regions Center. He has been on the CEES faculty since 1997, where his CREW research team emphasizes the understanding of naturally occurring biogeochemical and ecological processes in natural infrastructure applications of water challenges.

Surface and ground waters in the Tar Creek (KS-OK) watershed of the Tri-State Lead-Zinc Mining District were degraded due to "irreversible man-made damages" more than 40 years ago, an administrative decision resulting in minimal efforts to address risk from legacy pollution. Artesian flowing mine waters and substantial tailings pile leachate and runoff contribute elevated ecotoxic metals concentrations to receiving streams. Despite more than four decades as an EPA Superfund site, Tar Creek remains listed on the Oklahoma List of Impaired Waters. Two full-scale, ecologically engineered mine water passive treatment systems (PTS) were installed to address some of these source waters, contaminated by elevated concentrations of iron, zinc, lead, cadmium, arsenic and other constituents. The Mayer Ranch PTS (since 2008) and Southeast Commerce PTS (since 2017) produce circumneutral pH, net alkaline effluents containing metals concentrations meeting in-stream water quality criteria. Each PTS includes multiple process units designed for specific biogeochemical functions. Iron is

primarily retained via oxidative mechanisms in aerobic ponds and wetlands. Resulting iron oxyhydroxide solids retain trace metals via sorption. Primary removal of lead, zinc, and cadmium occurs in sulfate-reducing vertical flow bioreactors. Annually, MRPTS and SECPTS collectively retain approximately 84,000 kg of iron, 5,500 kg of zinc, 30 kg of lead, 27 kg of arsenic, and 12 kg of cadmium. The receiving stream has demonstrated substantial water quality improvement and ecological recovery, with documented increases in fish species richness and abundance, as well as the return of beaver and river otter.

Erik Nordberg (enordber@utm.edu) is Dean of Libraries at the University of Tennessee at Martin. He earned his PhD in industrial heritage and archaeology from Michigan Tech in 2017. An archivist by training, he managed the Michigan Tech Archives and Copper Country Historical Collections from 1994 to 2013, curating mining records relating to the historic Keweenaw native copper district. A past president of the MHA, he and his wife, Jane, hosted the 1997 conference in Houghton, MI, and the 2008 one in the Mesabi Iron Range.

Malcolm Ross graduated from Yale University in 1919 and entered an expected track in the bond market alongside hundreds of privileged Ivy League graduates. Disheartened with work in finance, he became a temporary staffer for a New York newspaper, introducing him to the growing divide over the industrial working class. Focusing on working men, Ross covered news in Kentucky mines and the Texas oil fields, submitting his reports to various news outlets. In 1933, he became a staff observer for the new National Labor Board, precursor of the National Labor Relations Board. Promoted to the position of public information officer of the NLRB, his work led to FDR later appointing him to head the federal Fair Employment Practice Commission. While in these roles Ross documented his observations, which he published in two memoirs. Nordberg's presentation offers an overview of Ross' documentation of working and living conditions in several American mining locales, including the Tri-State Lead and Zinc District. Ross's compassionate and nuanced commentary from his own observations countered uncritical publicity that celebrated industrial growth and ignored its dangers despite new debates on the roles of immigrants and unions in American society.

Seth Nutt (sethn@frontenacks.net) is the Library Director, Heritage Hall Museum in Frontenac Kansas.

Seth will take the audience on a step back in time to uncover the spirit of SE Kansas at the Heritage Hall Museum in downtown Frontenac. He will introduce the train depot that, like the first European immigrants of the bustling coal town, offered hope with hardship. He will guide the audience through exhibits that bring Frontenac's past to life—with the colorful history of bootlegging, wine making, and even whispers (yells?) of mafia ties. And he will give you a sense of the deep shaft mining with its coal seams and crawl spaces, and inform the attendees of the resilience of the 1921 Amazon Army—courageous women who marched to protect their families—and visit the story of the tragic 1888 mining disaster, the worst in Kansas history, as well as unique stories told through donated artifacts, photographs, and oral histories.

Eric C. Nystrom (enystrom@unr.edu) is Associate Professor of History at the University of Nevada, Reno. He founded and is current editor of the Mining and Society book series with the University of Nevada Press. A longtime MHA member, he has served in many roles for the organization, including a term as president in 2021-2022. Nystrom's first book, *Seeing Underground: Maps, Models, and Mining Engineering in America* (2016) won the MHA's Clark Spence Award. He is scheduled to publish his study on Smithsonian Institution mining displays with the University of Massachusetts Press in 2026-2027.

Nystrom's talk will focus on the history of the Mountain Pass Mine, located in the Mojave Desert near the California-Nevada border. Mountain Pass embodies the tangled relationships of strategic minerals, nuclear culture, rapidly advancing high-tech manufacturing, Cold War and post-Cold War resource politics, popular media, ecological conservation, and globalization. Discovered in 1949 by local prospectors wielding a Geiger counter, the bastnaesite deposit of Mountain Pass was soon analyzed by government geologists and emissaries from established mining firms, hoping to capitalize on the federal government's secure market for radioactive materials. What they found instead was the world's largest known deposit of rare earths, a stew of elements in ores never mined before. From its opening in the early 1950s to the end of the century, Mountain Pass==owned and operated by the Molybdenum Corporation of American—endured mining, milling, and market uncertainties. The mine's future seemed secure in the late 1960s when its rare earth element europium was developed for the red in color TV. However, a shift from CRT tubes to LCD screens depressed the market for europium in the 1990s-2000s. Environmental, technical, and global market factors ended demands for the element, and the mine closed. Mountain Pass is again in the news, however, because supply chain and

national security concerns have prompted a frantic search for US sources of now-vital rare earth elements.

Patrick Allan Pospisek (pospisep@gvsu.edu**)** teaches history at Grand Valley State University in Allendale, Michigan. His current project is a monograph charting the rise and fall of federal mining policy on public lands from 1787 to 1847. His work has appeared in the *Journal of the Illinois State Historical Society*, *Historical Geography*, and *Buildings & Landscapes*.

When did mining begin in the Midwest? Since Henry Rowe Schoolcraft recorded the work of Indigenous miners as early as the 1820s in the vicinity of modern Dubuque, Iowa, this simple question requires more than casual analysis. Traditional regional histories too often begin with the first White prospector, who strangely finds himself among the area's Indigenous inhabitants whose knowledge, ironically, he relies on to find and work the ores. Industrial histories compound this problem by glossing over, or even completely dismissing, Indigenous practices, and jump to early—invariably White—capitalists. On the other hand, contemporaries do note proto-industrial activities or, "primitive works." In his paper, Pospisek surveys numerous sources—period documents, historical archaeology, and ethnographic materials—to argue that historians need to better incorporate Indigenous peoples into the Midwestern mining narrative. Pre-contact copper mining on Isle Royale and on the southern shore of Lake Superior illustrates technical savvy and extensive knowledge of mineral deposits. Comparisons of Indigenous practices of the Upper Mississippi Lead Region with early European mining in Missouri's Old Lead Belt justify making a place for Native American miners in mining history. Pospisek argues that Indigenous extractive practices in Missouri, Wisconsin, and Michigan deserve recognition in American mining historiography along with well-covered Euro-American developments to work toward eliminating the Eurocentric narrative that disregards pre-Columbian and post-contact people's contributions.

Terry Reynolds (treynold@mtu.edu) is Professor Emeritus of History at Michigan Tech Univ. and a past president of the Society for the History of Technology. Raised in South Arkansas, he secured his BS in history at Southern Arkansas Univ. (1966), followed by an M.A. (1968) and Ph.D. (1973) in history, specializing in the history of science and technology, at the Univ. of Kansas. At the Univ. of Wisconsin, Madison from 1973 to 1983, he moved to Michigan Tech in 1983, retiring in 2012 to Arkansas. He has published many essays on the history of the Lake Superior Iron District.

Among his published books are *Iron Will: Cleveland-Cliffs and the Mining of Iron Ore, 1847-2006* (2011) and *The Metal of a Thousand Uses: Mercury Mining in Arkansas, 1930-1946* (2026).

In 1873, shortly after several geologists had proclaimed that Arkansas was destined to become one of the leading mineral states in the union, Bob Wolf discovered a deposit of antimony in Sevier County, Arkansas. Antimony was a key ingredient in several alloys then finding expanded use in industrial economies. Wolf's discovery gave Arkansas the only significant known deposit of antimony in the US east of the Rockies. Newspapers across the country reported the discovery; prospectors flocked to the area seeking gold and silver in addition to antimony; and Arkansas boosters used the antimony deposits as an example of the outstanding mineral wealth just waiting to be tapped in the state. However, attempts to commercialize antimony production failed on multiple occasions. Production was intermittent and short lived, occurring only when prices for the metal were abnormally high, such as in World War I, and after the war. With production over, boosters still promoted Arkansas's marginal antimony deposits as one of the state's key features until the mid-20th century.

Jarod Roll (jroll@missouri.edu) is Professor of History in the Kinder Institute on Constitutional Democracy and the Department of History at the University of Missouri, Columbia. He specializes in modern labor and working-class history of the US, with an emphasis on rural agricultural and industrial workers. Roll is the author of *Spirit of Rebellion: Labor and Religion in the New Cotton South* (2010) and *Poor Man's Fortune: White Working-Class Conservatism in American Metal Mining, 1850–1950* (2020), and coauthor of *The Gospel of the Working Class: Labor's Southern Prophets in New Deal America* (2011), among other works. His books have won prizes from the Labor and Working-Class History Association, the Southern Historical Association, the Mining History Association, the Working-Class Studies Association, and the State Historical Society of Missouri.

With "A Modern American Frontier: The Development of the Tri-State Mining District of Kansas, Missouri, and Oklahoma, 1850-1960," Roll will offer a concise historical overview of the development of the Tri-State Mining District of KS, MO and OK, from its 1850s origins to its 1960s decline. The Tri-State began as a principal lead producer before the 1890s when it became the nation's largest zinc producer. His presentation will highlight patterns of discovery and expansion in relation to the district's geology; methods of mining and milling; and accompanying smelting

industries, and connections to domestic markets. Roll will explain how the rudimentary nature of the district's origins in the 1850s continued to define its operations well into the 20th century when Tri-State zinc and lead became vital components of modern American capitalism.

Roll's keynote speech, "Poor Man's Fortune: What Made Tri-State Miners Notoriously Anti-Union?" draws from his most recent published book. For sixty years, from the 1880s to the 1940s, miners in the Tri-State District aggressively rejected labor unions. He explains the reasons for the perplexing pattern of anti-unionism especially since coal and metals miners elsewhere embraced and shaped the labor movement. Tri-State miners' lack of organization perpetuated low wages, limited their say on their own work, and poorly addressed health and safety concerns, resulting in high injury rates and endemic silicosis cases. Tri-State miner's decisions to become strikebreakers elsewhere also led to the spread of anti-unionism in other mining districts and a campaign against the Western Federation of Miners, which was nationally the most successful metals mines union. Rather than dismiss the miners as dupes or deviants, however, Roll interprets their anti-unionism as a reflection of long-held beliefs and traditions in the Tri-State District.

Taylor Rose (terose@alaska.edu) is an Assistant Professor of History, University of Alaska Southeast. He specializes in US and Native North America from the 1840s to the present with a focus on public lands, natural resource extraction, militarization, and environmental justice. His current book project, *Battle Born: Nevada and the Militarized West*, examines the enduring relationship between national defense initiatives, extractive infrastructure development, the dispossession of Native lands, and the transformation of arid environments in the Great Basin and Mojave Desert.

Across North America's Great Basin Desert, or "Newe Segobia" to the Indigenous Western Shoshone people of central Nevada, water has always sustained life. Across the homelands of the Shoshones—from Pahrump to Tonopah, NV—water, or "pah" dominated their lexicon reflective of the central place of the precious liquid in their culture. With the arrival of prospectors in the 1860s, though, a new settler political economy transformed water consumption of the desert for mineral extraction. Historians, Rose contends, must put Indigenous water and resource knowledge at the center of their analysis to better interpret the historical geography of modern mining in the region. This presentation compiles details from mining business archives, federal public land laws, Numic

ethnographies, and Interior West popular culture to map "pah" onto Nevada's built landscape of extractive hubs and ghost towns. He will show how Shoshone, Paiute, and Washoe watering holes were crucial to early silver- and gold-mining operations; how Native guides were instrumental into the 20th century in locating new sources of water and mineral deposits; and how state and federal legal codes emerged to channel Native-owned natural resources toward industrial extraction. Although the story of Nevada's boom and bust period—roughly from 1860 to 1930—is well-trodden, Rose's presentation suggests that the historical lens of "pah" will give scholars a better understanding of the environmental history of Great Basin mining and its relationship to the larger forces and structures of settler colonialism.

Blair Benson Schneider (blair.schneider@ku.edu) is an Associate Researcher and Education Outreach Manager for the Kansas Geological Survey at the University of Kansas. She earned her PhD and master's degrees in Geophysics from KU, and her BS in geology from James Madison University. She served as co-Principal Investigator of the Department of Energy funded CORE-CM project, which is focused on addressing the upstream and midstream critical mineral supply chain and downstream manufacturing of high-value, non-fuel, carbon-based products, to accelerate the realization of full potential for carbon ores and critical minerals in the US. Her presentation highlights this work's results for coal deposits in the Tri-State region.

Schneider will discuss the "Great Coal Age" of Kansas. Hundreds of millions of years ago, during the Pennsylvanian Period, the landscapes in Kansas looked very different from today. This period is often referred to as the "Great Coal Age" because the eastern half of the state was covered with freshwater swamps. Over time, these swamps were covered and buried under mud and sand, transforming them into large deposits of bituminous coal that are now underneath much of SE Kansas today. Euro-American immigrants discovered these deposits when they moved into Kansas in the 19th century. The first coal mine in the region opened in the 1870s, with peak production occurring in 1917-1918. The results of this mining left behind serious environmental hazards to the region and by 2017 all coal mines in the state had closed. However, new research has shown that these coal seams are associated with critical mineral enrichment, potentially sparking new interest for future coal mining.

Nicholas L. Shepherd (nick.shepherd@ou.edu) is an Environmental Engineer with Civil and Environmental Consultants, Inc. He also serves as a

Research Associate with the University of Oklahoma Center for Restoration of Ecosystems and Watersheds (CREW), where he completed his BS, MS, and PhD degrees. He has conducted research in both environmental engineering and environmental science. His current primary responsibilities include field data collection, data management, statistical analyses, and preparing technical documents. He has technical expertise in abandoned mine projects, including stream and biological assessments, groundwater and mine pool monitoring, surface water and mine drainage characterization, sediment characterization, highwall and hazardous water body remediation, closure of construction and demolition solid waste facilities, and industrial stormwater design.

Underground room and pillar mining began in the Picher Field, the Oklahoma and Kansas portions of the Tri-State Lead-Zinc Mining District, in the early 1900s and ceased in the 1970s, producing an estimated 1.5 million metric tons (m-tons) of lead and eight million m-tons of zinc. In 1927, nearly 250 individual mills processed ores from the Picher Field made up of a complex network of underground workings. During peak production, Oklahoma was the leading producer of zinc in US. Production began to decline in the mid-1950s due to orebody depletion, and by the late 1960s had ended altogether. At the time, the Picher Field contained about 1,500 mine shafts and 100,000 boreholes. Shepherd has compiled more than 400 historical maps into a single, easily editable underground mine map. His objective is to utilize historical map repositories to create a complete map in a readily accessible and easily updateable digital format; to determine the areal extent and void volume of the mine workings using AutoCAD Civil 3D and ArcMap; and to quantify uncertainties of historical mining maps that were not updated before mining operations ceased. The workings have an estimated volume of 9,870 hectare-meters (80,000 ac-ft), covering an area of 1,440 hectares (3,560 acres). The map and subsequent calculations should be based on the minimum extent of the mining field due to the likelihood that many historical maps were lost or destroyed. Shephard's formatting allows for continuous map updates as new information emerges. He will introduce and interpret his maps in his talk.

Klas Swanljung (Klas.swanljung@outokummunkaupunki.fi) has a master's in history from Åbo Akademi University in Finland and has worked in the museum field since 2018. Klas has been the curator of the Outokumpu Mining Museum since 2019. He manages museum collections, exhibits, and pedagogy with his main responsibility being the development of the Outokumpu Mining Museum. Swanlljung's interests span from worker

safety and rights in 20th century Finnish mining to the development of water processing during the 21st century.

The Outokumpu orebody was founded in 1910 and from there grew into a worldwide conglomerate. The site is in eastern Finland, in the region of Northern Karelia. The mine went through many owners and technical upgrades during its first 20 years. His presentation is being worked into an essay on how the Outokumpu company became a world-wide conglomerate that developed a variety of metal mines and processing plants. The mine from its inception faced major problems with management, processing, transportation, isolation, and multiple ownerships. In 1921 when the Norwegian company A/S Norsk Elektrolytisk Kobberextraktion went bankrupt, the mine was acquired by the city of Outokumpu, giving the site long-term stability. Swanljung will describe the physical resources developed up until 1921 as well as how the problems with the infrastructure were solved by 1928. The advancement of technology and permission to develop the mine was key in making the failing operation a giant in copper production and lead to its ability to challenge larger mining conglomerates of the time. After closing, the site was transformed into a museum that annually hosts 14,000 visitors. Deemed by the city of Outokumpu to be a culturally valuable industrial and architectural site, the museum and its grounds are legally protected heritage resources, managed by Swanljung and another museum professional.

Kari Thomas (ket1@alumni.cmu.eduis) is a PhD candidate in history at Carnegie Mellon University. Her dissertation is a multidisciplinary project that blends labor history, memory studies, and digital humanities. The project focuses on how the silencing and intermittent commemoration of the 1921 Battle of Blair Mountain shaped its legacy and its political usefulness as a historical narrative for activists, both online and in the material world.

Thomas's talk will examine the history of the Coal Employment Project. In contrast to the identity politics that shaped early Appalachian studies in the 1970s, the Coal Employment Project (CEP) organized around solidarity politics and coalition-building. In 1978, the CEP sued the largest coal companies in the US for sex discrimination in hiring and won; coal companies had to start hiring women. Appalachian women became miners to take advantage of the best-paying jobs in the region. Predictably, company management, male miners, and even miners' wives opposed their employment. Thomas argues that because the CEP was born from an equal employment lawsuit and because women miners were often isolated in their workplaces, the CEP did not tap into union history to make sense of

women's experiences in the mines. Instead, they turned to the Suffrage and the Civil Rights movements even though there was union history to draw on. Not only were women actively forming UMWA Ladies' Auxiliaries in the 1920s and 1930s, but they considered themselves to be full-fledged labor organizers on equal footing with the men. But starting in WWII, within the rhetorical space of the *United Mine Workers Journal*, editors transformed women from community organizers to housewives and then to widows whose relationship to the union was fully mediated by men. The CEP and the women workers that they represented, most of whom were card-carrying members of the UMWA, disrupted this paradigm. Women could now be directly part of the union without mediation, becoming organizers again and incorporating the solidarity politics they had learned from other movements. They reinvigorated the union at a time when the mining industry was irrevocably shrinking.

Deborah White (dwhite38@uwyo.edu) is the Digital Collections Librarian at the University of Wyoming. She has been a digital librarian for 13 years, five of those years being at Pittsburg State University as the Digital Resource Manager. During her time at PSU, White took an interest in the mining industry and the effects on Picher, Oklahoma. Throughout her career she has worked at universities where mining was a primary industry in the history of the region. Currently, her research is examining the Chinese Massacre of 1885 in Rock Springs, Wyoming, and how the othering of the Chinese instigated the riots and labor disputes. She recently joined faculty of various disciplines in a research cluster through the Wyoming Institute of Humanities Research at the University of Wyoming to share interests and research regarding Mining Humanities.

In the winter of 1913 Missouri prospector Harry Crawfish became stuck in the muddy fields of NE Oklahoma on Quapaw land. After randomly sampling for ore, Crawfish discovered lead and zinc deposits in the ground and the boomtown of Picher was born. Picher became incorporated just five years later and became one of the largest lead and zinc ore-producing mining operations in the country—until the mines closed in 1967. Picher's demise, and its fate as a ghost town, was gradual but marked by severe environmental destruction. By 1983, it was designated as the top EPA Superfund site. White's presentation will use photography to show Picher's evolution from boom town to ghost town through the lives of its residents, the Eagle-Picher Mining Company, and local media bias. She will talk about the humanistic relationship between residents, miners, and the mining company to the land, and the environmental consequences of mine flooding and seepage into the local aquifer. White will conclude by exploring the

community's relationship with the abandoned mines and chat piles that have surrounded Picher for decades.

Bob Zagonel (https://www.crawfordcountymuseum.com/), Board Member of the Crawford County Historical Museum, will introduce you to the museum in his talk that will include information on SE Kansas when it was the "Coal Capital of the country." Zagonel's great grandparents immigrated to the area for the dream of a better future that the coal mines offered. With the rise of mining, the flourishing coal camps became centers for the miners and their families. Reflecting his family story, the museum tells of coal mining and the immigrant's experiences through tools of the trade and other artifacts like picks, drills, and carbide lamps on display at the museum. Museum exhibits include an average room that the miners would have worked among the coal seams that were up to three-foot thick. With the advent of deep mining and dangers in the industrial age of machinery, strip mining became the new standard. The museum also displays a restored 1918 Marion Steam Shovel used to remove overburden. Additional exhibits include a one-room school and a one-room grocery store that were typical in the many mine camps of the area.