

MID-AMERICA TRANSPORTATION CENTER

SCHOLARS PROGRAM OCTOBER 27TH - 28TH 2016

LINCOLN, NE

SCHOLARS PROGRAM ORGANIZERS

The goal of the MATC Scholars Program is to encourage Native American students in the STEM fields to transition from attending two-year colleges to four-year degree granting universities.

The program provides specific, targeted seminars to improve the performance, recruitment, and retention of under-represented students in STEM-related fields.



Dr. Laurence Rilett, P.E.

Keith W. Klaasmeyer Chair in Engineering and Technology Distinguished Professor

Director, Mid-America Transportation Center

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Dr. Laurence Rilett is a Distinguished Professor of Civil Engineering at the University of Nebraska-Lincoln (UNL). He also serves as the Director of the UNL Mid-America Transportation Center, which is the U.S. Department of Transportation Region 7 University Transportation Center, and the Nebraska Transportation Center, which is the umbrella organization for all transportation research at the University of Nebraska. Dr. Rilett currently serves as the Associate Director of the University Transportation Center for Railway Safety, a Tier 1 U.S. Department of Transportation University Transportation Center at the University of Texas Rio Grande Valley.

Dr. Rilett received his B.A.Sc. degree and his M.A.Sc. degree from the University of Waterloo and his Ph.D. degree from Queen's University. He has held academic positions of Assistant Professor and an Associate Professor at the University of Alberta, and Assistant Professor, Associate Professor, and Professor at Texas A&M University. Additionally, he is a professional engineer in the state of Texas.

Dr. Rilett has been a principal investigator or co-principal investigator on over 50 research projects. His field of research is transportation system analysis, which may be divided into two main areas: Intelligent Transportation Systems applications and large-scale transportation system modeling. He has authored or co-authored over 60 refereed journal papers and over 90 conference papers based on his research. In 2002 he was awarded the Texas Transportation Institute TTI/Trinity Researcher Award and in 2007 he received the UNL College of Engineering Research Award. Dr. Rilett is an Associate Editor of the ASCE Journal of Transportation Engineering and is on the editorial board of the Journal of Intelligent Transportation Systems: Technology, Planning, and Operations.



Dr. Christopher Cornelius

Associate Dean for Research / Professor Department of Chemical Engineering University of Nebraska-Lincoln

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Dr. Christopher Cornelius is the Associate Dean for Research and a Professor of Chemical and Biomolecular Engineering at the University of Nebraska-Lincoln. He received his master's degree and Ph.D. in Chemical Engineering from Virginia Tech. His work investigates fundamental material interrelationships between structure, physical properties, and transport using synthetic polymers, ionomers, hybrid organic-inorganic materials, and sol-gel glasses. These efforts are related to selective transport (controlled molecule delivery), gel thermodynamics (strength and function), sol-gel chemistry (high temperature glass fibers), energy (batteries, fuel cells, water electrolysis), and water desalination (reverse osmosis and electrodialysis). His teaching experiences encompass transport phenomena (mass and energy), fluid transport, thermodynamics emphasizing fluid-phase equilibria, polymer chemistry and physics, and aspects of chemical engineering unit operations.

Before academia, he was a staff scientist at Sandia National Laboratories developing hydrocarbon ionomers, fuel cells, and gas separations. This work resulted in numerous collaborations with industry (Sharp Corporation, GM, Ford, Ballard, Toyota, Honda, Exxon Mobil, Chevron Texaco, Teledyne, United Technologies), National Laboratories (LANL, PNNL, ONR, Savannah River), and university faculty throughout the world. Dr. Cornelius currently serves as the Editor for the Journal of Materials Science and as a Referee for 13 journals. He is a member of the American Indian Science and Engineering Society, the Society of American Chicanos and Native Americans, and a Minority Affairs Member for the American Chemical Society. Dr. Cornelius has received numerous awards for his contributions to research and education



Ms. Laviania Siva, MBA
Assistant Director of Operations
Mid-America Transportation Center

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Ms. Laviania Siva serves as the Assistant Director of Operations at the Mid-America Transportation Center. She received her B.S. and M.B.A. degrees from the University of Nebraska-Lincoln. Ms. Siva has eight years of experience in research administration and grants management and over four years of experience in overseeing the operations of the center. Moreover, she currently leads the center's educational, workforce development, and technology transfer initiatives, which include the Roads, Rails and Racecars (RRRC) After-School Program at local schools, the MATC Summer Internship Program with public and private employers, and the MATC Scholars Program. In 2014, she was awarded the UNL College of Engineering's College Staff Award for Exemplary Service and Support

SCHOLARS PROGRAM PRESENTERS



Dr. Lance Pérez
Professor, Electrical and Computer Engineering
Interim Dean, College of Engineering
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Dr. Lance Pérez is a Professor of Electrical Engineering at the University of Nebraska-Lincoln. He also serves as the Interim Dean of the College of Engineering. He received his B.S. in Electrical Engineering from the University of Virginia, and his M.S. and Ph.D. in Electrical Engineering from the University of Notre Dame. Dr. Pérez has experience in projects related to coding, real-time localization, smart spaces, stereoscopic image processing, and wireless sensors. He also leads the UNL Academic Knowledge Management Initiative (AKMI), academic program reviews and initiatives for faculty career development, excellence in STEM education, instructional technology, and classroom facilities improvements.



Ms. Judi gaiashkibos Executive Director Nebraska Commission on Indian Affairs Phone: Email: judi.gaiashkibos@nebraska.gov



Ms. Judi gaiashkibos serves as the Executive Director of the Nebraska Commission on Indian Affairs. She earned a Bachelor of Arts degree in Human Relations and a Master's in Management with a Leadership Emphasis from Doane College. In 2006, she was elected President of the Governor's Interstate Indian Council, a national organization dedicated to improving and promoting cooperation between state and tribal governments. She was also appointed to the University of Nebraska's Presidents Advisory Council in 2008. Ms. gaiashibos serves on the Nebraska Minority Justice Committee, the Racial Profiling Advisory Committee, the P-16 Leadership Council, and the Nebraska Partners in Prevention Coalition. She is a Board Member of Interchurch Ministries/Grants to American Indians in Nebraska, the Nebraska Rural Development Commission, and recently completed a 3-year term on United Way.

In 2009, Ms. gaiashkibos was a lecturer and advisor for the first Native Daughters project at the University of Nebraska-Lincoln College of Journalism and Mass Communications. She is currently an adjunct professor at UNL for the second Native Daughters project focusing on Indian women of Oklahoma. Ms. gaiashkibos is a member of the Ponca Tribe of Nebraska and actively involved in non-profit service. She was the recipient of the Douglas County Historical Society 2009 Door Keeper Award in recognition of opening new doorways in the spirit of Unity, Equality, and Understanding. She was also the 2012 recipient of the prestigious Nebraska Humanities Sower Award.



Dr. Otakuye Conroy-Ben
Assistant Professor
Civil, Environmental and Sustainable Engineering
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Dr. Otakuye Conroy-Ben (Oglala Lakota) is an Assistant Professor in the School of Sustainable Engineering and the Build Environment at Arizona State University. Dr. Conroy-Ben received a B.S. in Chemistry from the University of Notre Dame, a M.A. in Analytical Chemistry from the University of Arizona, and a Ph.D. in Environmental Engineering from the University of Arizona. Her research focuses on the biological effects of polluted water. Her research interests include environmental endocrine disruption, metal and antibiotic resistance in bacteria, and wastewater epidemiology. She has previously served on the Board of Directors for the American Indian Science and Engineering Society.



Dr. Stan Atcitty Distinguished Member of Technical Staff Sandia National Laboratories Phone: (505) 284-2701 Email: satcitty@sandia.gov



Dr. Stan Atcitty is a member of the Navajo Tribe. He received his B.S. and M.S. degree in Electrical Engineering from New Mexico State University in 1993 and 1995, respectively. In 2006, he was the first American Indian male to receive a Ph.D. in Electrical and Computer Engineering from Virginia Tech University. He is currently a Distinguish Member of Technical Staff at Sandia National Laboratories in the Energy Storage Technology and Systems department. He leads the power electronics subprogram as part of the DOE Energy Storage Program, which has gained international recognition for its state-of-the-art research and development under his leadership. Five of his projects have won the prestigious R&D 100 award from the Research & Development Magazine. His research interest involves power electronics necessary for integrating energy storage and distributed generation with the electric utility grid. Stan has contributed over 50 publications and holds four patents, with another two pending. In 2007, he received the American Indian Science and Engineering Society Technical Excellence award for his American Indian community involvement and technical achievement. He was recently featured in a middle school level children's book titled Energy Basics - Energized! published by Sally Ride Science in 2012. In 2013, he coauthored a book titled Power Electronics for Renewable and Distributed Energy Systems. In addition, President Barack Obama presented Dr. Atcitty with the Presidential Early Career Award for Scientists and Engineers on July 31, 2012. This is the highest honor bestowed by the U.S. government upon outstanding scientists and engineers who show exceptional leadership at the frontiers of scientific knowledge during the twenty-first



Dr. Nancy Jackson Distinguished Member of Technical Staff Sandia National Laboratories Phone: (505) 845-7191 Email: nbjacks@sandia.gov



Dr. Nancy Jackson has a doctorate in Chemical Engineering from the University of Texas in Austin. Dr. Jackson is a Distinguished Member of Technical Staff at Sandia National Laboratories in Albuquerque, New Mexico. In 2007, she initiated, with the Department of State, the Chemical Security Engagement Program in the Cooperative Threat Reduction Office at Sandia. Her work at Sandia began in energy research, particularly in the area of catalysis. She has been working in chemical security and nonproliferation for over ten years. Since 2008, she has worked with the Organization for the Prohibition of Chemical Weapons quite frequently. Dr. Jackson is a Fellow of American Chemical Society (ACS), the American Association for the Advancement of Science (AAAS), and the International Union of Pure and Applied Chemistry. In 2011, she was president of the ACS, the largest scientific society in the world. In 2013, Dr. Jackson received the Award for Science and Diplomacy from the AAAS. She also received the Professional of the Year Award from the American Indian Science and Engineering Society in 2005.



Ms. Fawn Thompson Team Leader Universities and Grants Programs, FHWA Center for Transportation Workforce Development

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U.S. Department of Transportation Federal Highway Administration Phone: (404) 562-3917

Ms. Fawn Thompson is the Universities and Grants Programs Team Leader at the Federal Highway Administration (FHWA) Center for Transportation Workforce Development, which provides national leadership, coordination, and assistance supporting initiatives to develop and expand the nation's transportation workforce. Ms. Thompson's professional background consists of a blend of transportation workforce development, traffic engineering, transportation planning, tribal transportation, and research. Currently, Ms. Thompson manages both the Dwight David Eisenhower Transportation Fellowship Program, which attracts qualified students to the field of transportation education and research while advancing transportation workforce development, and the Garrett A. Morgan Technology and Transportation Education Program, which improves the preparation of students – particularly women and minorities – in science, technology, engineering, and mathematics through curriculum development and other transportation-related activities. Previously, Ms. Thompson served as Program Manager with the FHWA Technology Partnership Programs where she managed the Tribal Technical Assistance Program Centers, which provides technical assistance, training, and professional development services to tribal governments with road management and safety responsibilities. She has also served as a Transportation Specialist with the FHWA Resource Center where she provided training, technical assistance, and technology deployment in tribal transportation, freight, and transportation planning to FHWA and federal, state, and local partners. Prior to joining FHWA, Ms. Thompson was employed with the Ohio Department of Transportation.

Ms. Thompson has a Bachelor of Science in Civil Engineering from Morgan State University and a Master of Community Planning from the University of Cincinnati. In her spare time, she is active in the community with organizations that focus on women's issues, diversity, and education.



Mr. Kevin Abourezk Night Editor

Lincoln Journal Star Phone: (402) 560-0005

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Mr. Kevin Abourezk received a Bachelor of Arts in English from the University of South Dakota and a Master of Arts in News-Editorial from the University of Nebraska-Lincoln. His master's thesis compared newspaper coverage of the Wounded Knee Massacre of 1890 with coverage of the Wounded Siege of 1973. Mr. Abourezk is currently the Night Editor at the Lincoln Journal Star. Over the years, Mr. Abourezk has been awarded both first and second place in the Great Plains News Contest for his contributions to journalism. In 2006, he was awarded the Casey Medal for Meritorious Journalism for his article, "Standing at the Crossroads." This special report, published in the Lincoln Journal Star, is an examination of the flow of beer from Whiteclay, South Dakota to a nearby Pine Ridge Indian Reservation and its effect on community members, particularly the younger generation. Mr. Abourezk has served as a mentor for Native American middle school, high school, and college students in numerous capacities, including the American Indian Journalism Institute at the University of South Dakota, the Freedom Forum's Crazy Horse Journalism Conference, the Nebraska Commission on Indian Affairs' Native Sovereign Youth Leadership Symposium, and Reznetnews.org, a Native American news website that trained aspiring Native journalists.



Ms. Mary Johnson

Academic Dean Nebraska Indian Community College

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Ms. Mary Johnson serves as the Academic Dean at the Nebraska Indian Community College (NICC). She has worked for NICC in various capacities since 2006. She is also a member of the Santee Sioux Nation (one of the tribal communities that NICC serves) and resides there. Ms. Johnson received her M.A. in English at the University of Nebraska-Lincoln (UNL). She is currently working on her doctorate in Educational Leadership and Higher Education at UNL. She hopes to graduate December 2017.



Ms. Rebekka Schlitting

Adjunct Professor College of Journalism and Mass Communication University of Nebraska-Lincoln Phone: (785) 691-9855

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Ms. Rebekka Schlitting received a B.S. in Journalism at the University of Kansas and an M.A. in Professional Journalism from the University of Nebraska-Lincoln. She currently teaches about Native American social justice, Whiteclay, and reporting at UNL. Her academic interests also include human trafficking, ethics, social justice, and ethnic studies. She has received many awards for her journalism and studious efforts, including both first and second place selection for "Best Feature Story" in TV/Online by the Native American Journalists Association in 2014.

Ms. Schlitting is a member of the loway Tribe in Kansas and Nebraska. She serves as the Director of the Nebraska Indian Commission Sovereign Native Youth Leadership Academy. She has worked with other Native youth groups including the Lincoln Indian Center Youth Program, Haskell Upward Bound, Iowa Summer Youth, and Sac and Fox Diabetes Awareness Program. She is also involved with other projects that fulfill her passion for helping her people. In her free time, she rock climbs, bikes, and attends powwow, ceremonies, and other tribal events.



2016 Mid-America Transportation Center Scholars Program University of Nebraska-Lincoln

Oniversity of Nebrusku-Lincoln			
Date/Time	Meeting/Session	Location/Rm #	
Wednesday Oct 26, 2016	Participants Arrive		
6:00 PM	Arrive & Check-in	The Cornhusker Marriott Yankee Hill 3 3 rd floor	
7:00 PM	Welcome Reception	The Cornhusker Marriott Yankee Hill 3 3 rd floor	
Thursday	Theme: Transitioning from 2-to-4		
Oct 27, 2016			
6:30 AM – 7:15 AM	Breakfast (complimentary for hotel guests)	The Cornhusker Marriott The Café Main Level	
7:15 AM – 7:45 AM	Transition from Hotel to Whittier Research Center	Pick up at Hotel Entrance	
7:45 AM – 8:15 AM	Pre-Conference Assessment Ms. Lindsey Witt-Swanson Assistant Director Bureau of Sociological Research (BOSR) University of Nebraska-Lincoln	Whittier Research Center 344A	
8:15 AM - 8:30 AM	UNL Welcome and MATC Introduction Dr. Larry Rilett, PE Director of MATC & NTC University of Nebraska-Lincoln	Whittier Research Center 344A	
8:30 AM – 8:45 AM	Overview of MATC Scholars Program Dr. Chris Cornelius Associate Dean for Research & Professor College of Engineering University of Nebraska-Lincoln	Whittier Research Center 344A	
8:45 AM – 9:00 AM	BREAK	Whittier Research Center	
9:00 AM – 10:20 AM	Journey from the Navajo Reservation to World-class Research and Development Dr. Stan Atcitty Distinguished Member of Technical Staff Sandia National Laboratories Choosing An Undergraduate Transfer Program Dr. Otakuye Conroy-Ben Assistant Professor Civil, Environmental and Sustainable Engineering Arizona State University	Whittier Research Center 344A	

10:20 AM – 10:30 AM	BREAK	
10.20 AM 10.30 AM	DREAK	Whittier Research Center
10:30 AM – 11:50 AM	Native American Student Experiences Dr. Nancy Jackson Distinguished Member of Technical Staff Sandia National Laboratories	Whittier Research Center 344A
	What's Next after a 4-year Program? Ms. Mary Johnson Academic Dean Nebraska Indian Community College	
12:00 PM - 1:00 PM	Lunch Mr. Kevin Abourezk Night Editor Lincoln Journal Star	Whittier Research Center 251 Atrium
1:00 PM - 1:30 PM	Group Photo	Whittier Research Center
1:30 PM - 2:00 PM	Transferring Credits to a University Mr. Raymond Ramirez Operations Director, Nebraska College Preparatory Academy; Manager, Diversity and Community Outreach Undergraduate Admissions, University of Nebraska-Lincoln	Whittier Research Center 344A
2:00 – 2:30 PM	Planning Your Coursework for Transfer Ms. Maggie Jobs Director of Recruitment College of Engineering University of Nebraska-Lincoln	Whittier Research Center 344A
2:30 PM – 3:30 PM	Eisenhower Fellowship Program and Fellowships/ Scholarships for STEM Disciplines Ms. Fawn Thompson Team Leader, Universities & Grants Program US Department of Transportation Federal Highway Administration (FHWA) Technology Partnership Programs	Whittier Research Center 344A
3:30 PM – 4:30 PM	Focus Group Dialogue and Assessment Ms. Lindsey Witt-Swanson Assistant Director Bureau of Sociological Research (BOSR) University of Nebraska-Lincoln	Whittier Research Center 344A
3:30 PM - 4:45 PM	Adjourn & Students Travel to Hotel	
4:45 PM – 5:30 PM	Explore Downtown Lincoln (optional)	
5:30 PM - 6:00 PM	Meet at Hotel Lobby and Walk to Windsor Stables	
6:00 PM – 8:00 PM	Dinner with Keynote Speaker Ms. Judi gaiashkibos Executive Director Nebraska Commission on Indian Affairs	Windsor Stables Green Gateau 1024 L St

Friday	Theme: Strategies for Succeeding in School	
Oct 28, 2016		
6:30 AM – 7:30 AM	Breakfast (complimentary for hotel guests)	The Cornhusker Marriott
		The Café
		Main Level
8:00 AM – 8:15 AM	Meet & Greet with the Dean	The Cornhusker
	Dr. Lance C. Pérez	Marriott Olive Branch Room
	Interim Dean College of Engineering	Lower Level
	University of Nebraska-Lincoln	
8:15 AM – 9:15 AM	University of Nebraska Inter Tribal	The Cornhusker
	Exchange (UNITE) Student Panel	Marriott
	Discussion	Olive Branch Room Lower Level
	Introduction & Facilitator: Mr. Gabriel Bruguier	LOWEI LEVEI
	Guest speakers: Ms. Rebekka Schlichting, Mr. Sandy Scott, and Ms. Shana LaPointe	
9:15 AM – 9:30 AM	Transition to Memorial Stadium	Memorial Stadium
7.13 AM 7.30 AM	Transmon to Memorial Station	North Entrance
9:30 AM – 10:30 AM	Memorial Stadium and Husker Heritage Tour	Memorial Stadium North Entrance
10:30 AM - 11:30 AM	UNL City Campus Tour	N213, Voelte-Keegan
	Nebraska Center for Materials and Nanoscience Dr. Yong-Rak Kim	Nanoscience Research Center
	Professor	855 N 16th St
	Department of Civil Engineering	
	University of Nebraska-Lincoln	
11:30 AM – 11:45 AM	TRANSITION & BREAK	The Cornhusker Marriott
11:45 AM – 12:15 PM	Post Survey	The Cornhusker
	Ms. Lindsey Witt-Swanson	Marriott Olive Branch Room
	Assistant Director	Lower Level
	Bureau of Sociological Research (BOSR) University of Nebraska-Lincoln	LOTY CI LC Y CI
12:15 PM – 12:30 PM	Closing Remarks	The Cornhusker
	Dr. Larry Rilett, PE	Marriott
	Director of MATC & NTC	Olive Branch Room
12.20 DA4	University of Nebraska-Lincoln	Lower Level
12:30 PM	Days of Lymphos and Adis :	The Cornhusker Marriott
	Boxed Lunches and Adjourn	Olive Branch Room
		Lower Level

NOTES

About the Mid-America Transportation Center

The Mid-America Transportation Center (MATC), designated as the U.S. Department of Transportation Region 7 University Transportation Center in 1995, 2006, and 2011, is an eight-member consortium of the leading universities in Iowa, Kansas, Missouri and Nebraska. MATC's theme is to improve transportation safety and minimize the risks associated with the nation's expanding multi-modal freight transportation network.

The Center has developed and supported research, education, workforce development and technology transfer initiatives that have impacted thousands of students, educators, and professionals across the nation to date. For more information, please visit the MATC website at http://matc.unl.edu.



MATC SCHOLARS PROGRAM 2016

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