# Morning Session, Thursday, September 19, 2024

#### OSTEOPOROSIS AND BONE REPAIR

# **Session Chairpersons:**

**Ted Mikuls**, MD, MSPH, Stokes-Shackleford Professor of Rheumatology, Division of Rheumatology and Immunology, Department of Internal Medicine, College of Medicine, UNMC

**Laura Bilek**, PT, PhD, Professor, Associate Dean for Research, College of Allied Health Professions, UNMC

	nealth Professions, UNIVIC	
7:30-8:00 a.m.	Check-in and Breakfast	
8:00-8:10	Welcome and Introduction of the Symposium	
	Aaron Mohs, PhD, Associate Dean for Research, College of Pharmacy, UNMC	
	Dong Wang, PhD, Professor of Pharmaceutical Sciences, UNMC. Coorganizer of BRDS 2024	
8:10-8:55	Therapeutic Adventures and Misadventures in Osteoporosis Drug Development: Why is There so Much Unmet Need?	
	Kenneth Saag, MD, MSc, Professor, <i>Anna Lois Waters</i> Endowed Chair, Division Clinical Immunology and Rheumatology, Department of Medicine, The University of Alabama at Birmingham.	
8:55-9:40	Wnt Signaling and New Drug Discovery for Bone Diseases	
	Hua Zhu (David) Ke, MD, Founder and CEO, Angitia Biopharmaceuticals	
9:45-10:30	Tanshinones as Ectosteric Inhibitors: Their Dual Activity as Anti-	
	resorptive and Anti-inflammatory Drugs	
	Dieter Brömme, PhD, Professor, Oral and Biological Sciences,	
	Canada Research Chair in Proteases and Diseases, University of British Columbia	
10:30-10:40	Break	
10:40-11:25	Electrospun Nanofibers as Drug Carriers for Inhibiting	
	Heterogeneous Ossification	

	Jingwei Xi, PhD, Professor, <i>Mary &amp; Dick Holland</i> Regenerative Medicine Program, Division of Transplant Surgery, Department of Surgery, UNMC
11:25-11:45	Case Report from the OR  Sarah Putnam, MD, Assistant Professor, Vice Chair of Diversity, Department Orthopaedics Surgery and Rehabilitation, UNMC
11:45-12:00	Group Photo at Ice Rink
12:00-1:00	Lunch Break

Afternoon Session, Thursday, September 19, 2024

# **ORTHOPAEDIC IMPLANT, INFECTION**

# **Session Chairpersons:**

**Hani Harder**, PhD, Professor, Director, Orthopaedic Biomechanics and Advanced Surgical Technologies Laboratory, Department of Orthopaedic Surgery and Rehabilitation, UNMC

**Tammy Kielian**, PhD, *Choudari Kommineni, DVM,* Professor of Pathology Department of Pathology, Microbiology and Immunology, UNMC

1:00-1:45	Engineering Joint Replacement Bearing Surfaces
	Ebru Oral, PhD, Associate Professor of Orthopedic Surgery, Harvard Medical School
1:45-2:30	Host-pathogen interactions during Staphylococcus aureus osteomyelitis: From model systems to new treatment strategies  James Cassat, MD, PhD, Associate Professor of Pediatrics, Biomedical Engineering, Pathology, Microbiology and Immunology, Division of Infectious Diseases, Vanderbilt University
2:30-3:15	The Antimicrobial Potential of Self-Assembling Peptide Amphiphiles  Martin Conda-Sheridan, PhD, Associate Professor of Pharmaceutical Sciences, UNMC. Co-organizer of BRDS 2024.
3:15-3:25	Break
3:25-4:10	Immune-mediated approaches to treat Staphylococcus aureus prosthetic joint infection

	Tammy Kielian, PhD, <i>Choudari Kommineni, DVM</i> , Professor of Pathology, Department of Pathology, Microbiology and Immunology, UNMC
4:10-4:30	Case Report from the OR  Curtis Hartman, MD, Professor, Department of Orthopaedic Surgery and Rehabilitation, UNMC
4:30-6:00	Students/postdoc poster viewing
6:30	Welcome dinner for speakers and guests, to be hosted by Keith Olsen, PharmD, FCCP, FCCM, Professor, <i>Joseph D. Williams</i> Endowed Dean, College of Pharmacy, UNMC

Morning Session, Friday, September 20, 2024

# **OSTEOARTHRITIS AND PAIN**

# **Session Chairpersons:**

**Edward V. Fehringer,** MD, Professor and Vice Chair for Research and Wellness, Department of Orthopaedic Surgery and Rehabilitation, UNMC **Amar Natarajan**, PhD, *Ruth Branham* Professor, UNMC Eppley Institute for Research in Cancer and Allied Diseases, UNMC

8:00-8:30 a.m.	Check-in and Breakfast
8:30-9:15	TBD
	Anne-Marie Malfait, MD, PhD, <i>The Klaus E. Kuettner, PhD</i> , Chair of Osteoarthritis Research, Department of Internal Medicine, Rush University
9:15-10:00	Albumin Hitchhiking siRNA Conjugates for Next Gen DMOADs
	Craig L. Duvall, PhD, <i>Cornelius Vanderbilt</i> Professor, Department of Bioengineering, Vanderbilt University
10:00-10:45	The Development of ProGel for Arthritis Pain
	Dong Wang, PhD, Professor of Pharmaceutical Sciences and Orthopaedics (Courtesy), UNMC
10:45-10:55	Break
10:55-11:40	Neural Mechanisms underlying Chronic Muscle Afferent Sensitization in PAD

	Hanjun Wang, MD, <i>Margaret R. Larson</i> Professor, The Department of Anesthesiology, UNMC
11:40-12:00	Case Report from the OR
	Chris Deans, MD, Assistant Professor, Department of Orthopaedic Surgery and Rehabilitation, UNMC
12:00-12:15	Closing remarks and awards for students/postdoc poster presentation
	Ram Mahato, PhD, <i>Parke-Davis</i> Professor and Chair, Department of Pharmaceutical Sciences, UNMC
12:15 p.m.	Meeting Adjourn. Sack lunch will be provided.