

Wisconsin Rheumatology Association 2019 Annual Meeting March 8 - 9, 2019

The American Club Resort | Kohler, Wisconsin

PROGRAM BOOK



WFICOME



Dear Wisconsin rheumatology trainees, providers, and staff,

We are pleased to welcome you to the Wisconsin Rheumatology Association 2019 Annual Meeting, March 8 - 9, 2019. We hope you enjoy this weekend at the best resort in the state, The American Club Resort, in Kohler, Wisconsin. As always, we have provided discounted hotel room rates and a sumptuous Friday evening dinner at no extra charge.

This year, you will be provided with an outstanding scientific and clinical curriculum. You will also have the chance to learn new and developing therapies, lab tests, and medical services and equipment in the exhibit hall.

We will feature a new approach to the increasingly important issue of advocacy this year. The Friday evening session preceding the dinner is dedicated to educating our legislators about the struggles we face in providing patients with what we deem to be the appropriate treatment.

During the session, a series of patients will present their stories in person about how they were unable to receive what their provider prescribed, how they were denied a service their provider thought necessary, and how they were forced to change medications during successful treatment. We all hear stories like these from our patients frequently.

This session will be unique because for each patient story, there will be federal and state legislators in attendance, along with advocacy experts and authorities who know why such struggles occur. The idea is to include our lawmakers in frank discussions on how to enact laws to fix these barriers to proper medical care.

On Saturday, experts will tell us about the latest advances in diagnosis and treatment of gout, RA, SLE, Lyme disease, and Psoriatic arthritis.

Mother Nature, the universe's greatest engineer, has built into us sophisticated systems for tissue renewal and repair, so you do not want to miss the discussion on how we are beginning to learn to take advantage of her design genius. The rapidly developing field of "regenerative" or "ortho-biologic" treatments (the study of therapies involving mesenchymal stem cells), desiccated amniotic membrane preparations, platelet rich plasma, and others, will be covered by a leading scientific expert in this field.

In addition, there will be stimulating sessions on the newly recognized rheumatic disorders that result from anticancer immunotherapy treatments, on the issues of osteoporosis with anti-TNF therapies, and on new, fascinating techniques of studying immunocompetent lymphocyte trafficking.

Program directors, as you can see, this meeting will be replete with intellectual stimulation for trainees, so please encourage your residents and fellows to attend this meeting. Perhaps even consider giving them these 24 hours off so they can attend. Going back to your fellowship days for a short time might be good for you!

We look forward to seeing everyone at the meeting, which promises to be a great learning experience for virtually everyone interested in the diagnosis and treatment of rheumatic disorders.

Sincerely,

Daniel G. Malone, MD, RMSK, FACR WRA President

IN MEMORIAM



It is with a heavy heart that we mention the passing of Dr. Gregory A. Shove, who served as the WRA President from 2009 to 2011. Dr. Shove, age 65, passed away, Sunday, February 10, 2019. He will be dearly missed.

After receiving his Bachelor of Sciences in Liberal Arts and Sciences in 1975, Dr. Shove attended the University of Illinois at the Medical Center, where he was admitted to the Degree of Doctor of Medicine in 1979. Dr. Shove accepted an internship at the University of Illinois, where he received his graduate education degree in internal medicine in 1982. He then went on to accept a fellowship in rheumatology at the University of Illinois and completed it in 1984.

Immediately following completion of his fellowship, Dr. Shove, his wife Sandra, and their 18-month-old daughter, Andrea Natalie, moved to Racine, Wisconsin, where he proudly joined and worked at the Racine Medical Center as Southeast Wisconsin's first rheumatologist. Among other organizations, Dr. Shove was a member of the

American Board of Internal Medicine, a board member of the Wisconsin Medical Society Foundation, and past President of the Racine County Medical Society.

Dr. Shove enjoyed many the intellectual pursuits, first tutoring high school students and then becoming an adjunct professor after he ended his career in clinical medicine. Outside of medicine and teaching, Dr. Shove loved to run, play tennis, travel the world, and cruise his Harley. He will be best remembered for his zest for life, intellectual curiosity, sense of humor, and enormous love for his family.

TABLE OF CONTENTS



Welcome Message	Inside Front Cover
In Memoriam	Inside Front Cover
WRA 2019 Committee Listing	1
General Meeting Information	2
CME Information	3
Program	4
Faculty Disclosure Report	5
Speaker Biosketches	8
Industry Satellite Symposia	11
Exhibit Hall Floor Plan	12
Notes	14
Industry Support	16

WRA 2019 COMMITTEE LISTING

PRESIDENT

Daniel G. Malone, MD, RMSK, FACR

VICE PRESIDENT

Alvin Wells, MD, PhD

TREASURER

Kurt Oelke, MD

2019 PROGRAM COMMITTEE

Daniel G. Malone, MD, RMSK, FACR Kurt Oelke, MD Alvin Wells, MD, PhD

HEADQUARTER OFFICE

1100 E. Woodfield Road, Suite 350 Schaumburg, IL 60173

EXECUTIVE DIRECTOR

Donna Rostamian, MBA

GENERAL MEETING INFO

REGISTRATION/INFORMATION DESK HOURS

Location: Great Lakes Foyer

Friday, March 8, 2019 3:00 p.m. - 8:00 p.m. Saturday, March 9, 2019 7:00 a.m. - 4:30 p.m.

EXHIBIT HALL HOURS

Location: Lake Michigan, Erie & Ontario

Friday, March 8, 2019 6:00 p.m. - 8:00 p.m. Saturday, March 9, 2019 7:30 a.m. - 11:00 a.m.

Mission Statement

The Wisconsin Rheumatology Association (WRA) is an association of physicians, health professionals, and scientists who advance the practice of rheumatology through programs of education, research, advocacy and practice support. WRA fosters excellence in the care of people with or at risk for arthritis and rheumatic and musculoskeletal diseases.

Disclaimer Statement

Statements, opinions and results of studies contained in the program are those of the presenters/authors and do not reflect the policy or position of the WRA nor does the WRA provide any warranty as to their accuracy or reliability.

EVENING FUNCTIONS

WELCOME RECEPTION

Date: Friday, March 8, 2019 **Time:** 6:30 p.m. - 8:00 p.m.

Location: Lake Michigan, Erie & Ontario

WRA ANNUAL DINNER

Date: Friday, March 8, 2019 **Time:** 8:00 p.m. - 9:30 p.m.

Location: Wisconsin Room - Lobby Level *Advanced RSVP required to attend.*

Copyright Notice

Individuals may print out single copies of abstracts or slides contained in this publication for personal, non-commercial use without obtaining permission from the author or the WRA. Permission from both the WRA and the author must be obtained when making multiple copies for personal or educational use, for reproduction for advertising or promotional purposes, for creating new collective works, for resale or for all other uses.

Filming/Photography Statement

No attendee/visitor at the WRA 2019 Annual Meeting may record, film, tape, photograph, interview, or use any other such media during any presentation, display, or exhibit without the express, advance approval of the WRA Executive Director. This policy applies to all WRA members, non-members, guests, and exhibitors, as well as members of the print, online or broadcast media.



CME INFORMATION

EDUCATIONAL NEEDS:

The scientific program of the 2019 meeting of the Wisconsin Rheumatology Association is intended to educate our members on recent scientific advances in rheumatologic disorders. These scientific lectures include updates on Gout, Lyme Disease, Rheumatoid Arthritis, Psoriatic Arthritis, Systemic Lupus, mesenchymal stem cells, rheumatic disorders caused by cancer immunotherapy, sessions on advocacy, and alternative medicine methods.

These sessions will cover several areas of ongoing scientific advancement in the field of rheumatology. They are intended to educate our members and give them more updated knowledge so that they can deliver state-of-the-art care to their patients. Advances in these areas in rheumatology are moving quickly, and it is difficult for practicing rheumatologists to keep up with the latest science. These sessions will serve to provide the needed updates in these arenas.

EDUCATIONAL OBJECTIVES:

At the conclusion of the WRA 2019 Annual Meeting attendees will be able to:

- Describe the classification criteria for: Rheumatoid arthritis, SLE, Lyme Disease, Psoriatic Arthritis, Gout, and be able to apply them to patients with both clinical and imaging findings suggestive of this diagnosis.
- Identify the treatment options available for patients with the several rheumatic disorders caused by cancer immunotherapy, and explain how to select appropriate therapy for specific patients.
- 3. Explain the basic science of mesenchymal stem cells, and how they relate to treatment of osteoarthritis.
- 4. Describe the current state of knowledge regarding identification labeling and characterization of lymphoid cells and their trafficking, using the latest advanced methods.
- 5. Identify the various types of orthobiologic therapies.
- Explain what a Pharmacy Benefit Manager is and its role in the drug supply chain.
- Recognize why we have step-edits and non-medical switching, and the role played by various participants in the American Health Care system that create difficulties for patients to get the treatments their doctors prescribe for them.
- 8. Describe the rebate system and its affect on patient access to the correct medicine at an affordable price.
- Identify the system of parameters and treatments of patients with rheumatic disorders using alternative and non-traditional methods.

ACCREDITATION:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of VCU Health Continuing Medical Education and the Wisconsin Rheumatology Association. VCU Health Continuing Medical Education is accredited by the ACCME to provide continuing medical education for physicians.

VCU Health Continuing Medical Education designates this live activity for a maximum of **7.50** *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ABIM MOC

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to **7.50 MOC** points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

By registering for this activity and providing your ABIM number and birth date (mm/dd), you grant permission for the Wisconsin Rheumatology Association and VCU Health Continuing Medical Education to share the MOC completion information with ACCME and transmit the completion information to ACCME and ABIM.

General Disclaimer

The statements and opinions contained in this program are solely those of the individual authors and contributors and not of the Wisconsin Rheumatology Association. The appearance of the advertisements is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality, or safety. The content of this publication may contain discussion of off-label uses of some of the agents mentioned. Please consult the prescribing information for full disclosure of approved uses. The Wisconsin Rheumatology Association disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in the abstracts or advertisements.

Special Assistance

We encourage participation by all individuals. If you have a disability, advance notification of any special needs will help us better serve you. Call (847) 517- 7225 if you require special assistance to fully participate in the meeting.

PROGRAM

All sessions will be located in Lake Superior unless otherwise noted. Speakers and times are subject to change.

FRIDAY, MARCH 8, 2019

	-
3:00 p.m 8:00 p.m.	Registration/Information Desk Open Location: Great Lakes Foyer
6:00 p.m 8:00 p.m.	Exhibit Hall Open Location: Lake Michigan, Erie & Ontario
6:30 p.m 8:00 p.m.	Welcome Reception in Exhibit Hall Location: Lake Michigan, Erie & Ontario
8: 00 p.m 9:30 p.m.	WRA Annual Dinner Location: Wisconsin Room - Lobby Level
5:00 p.m 5:15 p.m.	Opening Remarks Daniel G. Malone, MD, RMSK, FACR WRA President
5:15 p.m 6:15 p.m.	Rheumatology Legislative Patient/ Physician Prospective Open Forum
	Panelists:
	Tim Bartholow, MD WEA Trust Insurance Corporation
	Nilsa Cruz Milwaukee Rheumatology Center
	Madelaine A. Feldman, MD, FACR The Rheumatology Group
	Dan Feyen <i>Wisconsin State Senator</i>
	Mike Rohrkaste Wisconsin State Representative
	Jessica Schwoerer, MD Clinical Biochemical Geneticist
	Patrick Testin Wisconsin State Senator
	Paul Tittl Wisconsin State Representative
	Tyler Vorpagel Wisconsin State Representative
	Patient Participants:
	Kenny Judd
	Tina Judd
	Jeremy Christian

SATURDAY, MARCH 9, 2019

7:00 a.m 4:30 p.m.	Registration/Information Desk Open Location: Great Lakes Foyer		
7:00 a.m 8:00 a.m.	Industry Satellite Symposium Breakfast Location: Lake Huron		
7:30 a.m 11:00 a.m.	Exhibit Hall Open Location: Lake Michigan, Erie & Ontario		
8:00 a.m 8:15 a.m.	Opening Remarks Daniel G. Malone, MD, RMSK, FACR WRA President		
8:15 a.m 10:30 a.m.	WHAT'S NEW IN RHEUMATOLOGY CLINICAL TREATMENT PANEL		
8:15 a.m 8:45 a.m.	Update on New Treatments in Rheumatoid Arthritis Alvin Wells, MD, PhD Rheumatology and Immunotherapy Center		
8:45 a.m 9:15 a.m.	Recent Advances in Treatment of Systemic Lupus Michelle Petri, MD, MPH Johns Hopkins University School of Medicine		
9:15 a.m 9:45 a.m.	Psoriatic Arthritis (PsA) News and Research Alvin Wells, MD, PhD Rheumatology and Immunotherapy Center		
9:45 a.m 10:15 a.m.	Novel Therapies for Treatment of Gout N. Lawrence Edwards, MD, MACP, MACR University of Florida		
10:15 a.m 10:30 a.m.	Q&A Session		
10:15 a.m 10:30 a.m. 10:30 a.m 11:00 a.m.	Q&A Session Break & Networking in Exhibit Hall		
10:30 a.m 11:00 a.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD		
10:30 a.m 11:00 a.m. 11:00 a.m 11:45 a.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD Vanderbuilt University Medical Center Rheumatologic Toxicities Associated with Novel Immunotherapies for Cancer Uma Thanarajasingam, MD, PhD		
10:30 a.m 11:00 a.m. 11:00 a.m 11:45 a.m. 11:45 a.m 12:30 p.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD Vanderbuilt University Medical Center Rheumatologic Toxicities Associated with Novel Immunotherapies for Cancer Uma Thanarajasingam, MD, PhD Mayo Clinic College of Medicine and Science Industry Satellite Symposium Lunch		
10:30 a.m 11:00 a.m. 11:00 a.m 11:45 a.m. 11:45 a.m 12:30 p.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD Vanderbuilt University Medical Center Rheumatologic Toxicities Associated with Novel Immunotherapies for Cancer Uma Thanarajasingam, MD, PhD Mayo Clinic College of Medicine and Science Industry Satellite Symposium Lunch Location: Lake Huron Molecular Structure of the ECM Provides Insights into Rheumatoid Arthritis and Technologies to Repair and Regenerate Joints Joseph Orgel, PhD		
10:30 a.m 11:00 a.m. 11:00 a.m 11:45 a.m. 11:45 a.m 12:30 p.m. 12:30 p.m 1:30 p.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD Vanderbuilt University Medical Center Rheumatologic Toxicities Associated with Novel Immunotherapies for Cancer Uma Thanarajasingam, MD, PhD Mayo Clinic College of Medicine and Science Industry Satellite Symposium Lunch Location: Lake Huron Molecular Structure of the ECM Provides Insights into Rheumatoid Arthritis and Technologies to Repair and Regenerate Joints Joseph Orgel, PhD Illinois Institute of Technology Lyme Disease Robert T. Schoen, MD		
10:30 a.m 11:00 a.m. 11:00 a.m 11:45 a.m. 11:45 a.m 12:30 p.m. 12:30 p.m 1:30 p.m. 1:30 p.m 2:15 p.m.	Break & Networking in Exhibit Hall Anti-TNF and Osteoporosis S. Bobo Tanner, MD Vanderbuilt University Medical Center Rheumatologic Toxicities Associated with Novel Immunotherapies for Cancer Uma Thanarajasingam, MD, PhD Mayo Clinic College of Medicine and Science Industry Satellite Symposium Lunch Location: Lake Huron Molecular Structure of the ECM Provides Insights into Rheumatoid Arthritis and Technologies to Repair and Regenerate Joints Joseph Orgel, PhD Illinois Institute of Technology Lyme Disease Robert T. Schoen, MD New Haven Rheumatology PC Intravital Microscopy for Leukocyte Trafficking Klaus Ley, MD		

FACULTY DISCLOSURE REPORT

FACULTY DISCLOSURE REPORT WRA 2019 Annual Meeting

March 8 - 9, 2019
The American Club Resort
Kohler, Wisconsin

In compliance with the ACCME Standards for Commercial Support of Continuing Medical Education, it is the policy of UHS Professional Education Programs/VCU Health CME to ensure balance, independence, objectivity, and scientific rigor in all sponsored activities. All persons involved in the planning, and all faculty presenters (including moderators, authors and editors) are expected to disclose relevant financial relationships described below. Failure or refusal to disclose will prohibit participation in the planning of and/or presenting during the activity.

PLANNING COMMITTEE /	DISCLOSURE		
CME ORGANIZERS	Company	Role with Commercial Interest	Nature of Relationship
MALONE, MD, RMSK, FACR, Daniel President, CME Organizer	Abbvie, Alexion, Mallinckrodt, Radius Pharmaceuticals	Honorarium	Speaker
OELKE, MD, Kurt	Amgen, AbbVie, BMS, UCB	Honorarium	Speaker
CME Organizer	Pfizer	Honorarium	Speaker: Consultant
WELLS, MD, PhD, Alvin CME Organizer, Speaker	AbbVie, Amgen, BMS, Celgene, Lily, Novartis, UCB	Honorarium	Speaker

SPEAKERS / MODERATORS /	DISCLOSURE		
PANELISTS / DISCUSSANTS / CO-AUTHORS	Company	Role with Commercial Interest	Nature of Relationship
BARTHOLOW, MD, Tim Panelist	WEA Trust	Employee of a Commercial Interest Organization	VP / Chief Medical Officer
CHRISTIAN, Jeremy Panelist	Nothing to disclose		
	UNITED HEALTHCARE	Consultant	Membership Advisory Committee
CRUZ, Nilsa Panelist	UNITED RHEUMATOLOGY	Stock Shareholder (Directly Purchased)	Member
	GSK	Stock Shareholder (Directly Purchased)	Former Employee
EDWARDS, MD, MACP, MACR, N. Lawrence Speaker	Horizon Pharma, Ironwood Pharma, Takeda PharmaceuticalsUS	Consultant	Consultant
FELDMAN, MD, FACR, Madelaine Panelist	Lilly	Consultant	Advisory Board

FACULTY DISCLOSURE REPORT

SPEAKERS / MODERATORS /	DISCLOSURE		
PANELISTS / DISCUSSANTS / CO-AUTHORS	Company	Role with Commercial Interest	Nature of Relationship
FEYEN, Dan Panelist	Nothing to disclose		
JUDD, Tina Panelist	Nothing to disclose		
LEY, MD, Klaus Speaker	United Biomedical, Inc.	Grants/Research Support	Research Grant
MALONE, MD, RMSK, FACR, Daniel President, CME Organizer	Abbvie, Alexion, Mallinckrodt, Radius Pharmaceuticals	Honorarium	Speaker
ORGEL, PhD, Joseph Speaker	Cerapedics	Consultant	Consultant
	GlaxoSmithKline	Grants/Research Support	Member of Pregnancy Registry DSMB
	EMD Serono	Consultant	Member DSMB
	Exagen	Grants/Research Support	Participant in Clinical Trial
PETRI, MD, MPH, Michelle Speaker	Axdev	Consultant	Faculty Board
	Amgen, Eli Lilly, Bristol Myer Squibb, Janssen, United Rheumatology	Consultant	Advisory Board
	Astellas, Ablynx, INOVA Diagnostics, Novartis, Momenta Pharmaceuticals, Blackrock Pharmaceuticals	Consultant	Consulting
ROHRKASTE, Mike Panelist	Nothing to disclose		
SCHOEN, MD, Robert Speaker	Nothing to disclose		
SCHWOERER, MD, Jessica Panelist	Nothing to disclose		
TANNER, MD, S. Bobo Speaker	Radius	Grants/Research Support	Investigator
	Astra Zeneca, UCB	Consultant	Advisory Board
	Amgen	Consultant	Data Safety Monitoring Board
	Pfizer	Honorarium	Speakers Bureau

FACULTY DISCLOSURE REPORT

SPEAKERS / MODERATORS /			
PANELISTS / DISCUSSANTS / CO-AUTHORS	Company	Role with Commercial Interest	Nature of Relationship
TESTIN, Patrick Panelist	Nothing to disclose		
THANARAJASINGAM, MD, PhD, Uma Speaker	Nothing to disclose		
TITTL, Paul Panelist	Nothing to disclose		
VORPAGEL, Tyler Panelist	Nothing to disclose		
WELLS, MD, PhD, Alvin CME Organizer, Speaker	AbbVie, Amgen, BMS, Celgene, Lily, Novartis, UCB	Honorarium	Speaker

SPEAKER BIOSKETCHES

Daniel G. Malone, MD, RMSK, FACR WRA President

Dr. Malone started his college education at Cornell University in Ithaca, New York, earning a Bachelor of Arts in Physics and later earning his Medical Degree from the University of Illinois, Abraham Lincoln School of Medicine, Chicago, Illinois in 1976. He is currently the Clinical Associate Professor of Medicine—Rheumatology, Medical College of Wisconsin in Milwaukee, Wisconsin.

In addition to being the President and member of the Wisconsin Rheumatology Association, he is also a member of the American College of Rheumatology, the American Institute for Ultrasound in Medicine, the International Society for Clinical Densitometry and the American Registry of Diagnostic Medical Sonosgrahpers

Tim Bartholow, MD

Dr. Bartholow is the VP and first Chief Medical Officer at WEA Trust. Before joining the Trust, Dr. Bartholow served as the Wisconsin Medical Society's Chief Medical Officer for five years. In this role, he focused on physician and community engagement to promote change in the delivery and payment of health care. Prior to joining the Society staff in November 2008, Dr. Bartholow spent 16 years caring for patients at the Prairie Clinic in Sauk City, Wisconsin, where he was one of 12 clinical owners. He believes that organized and carefully articulated physician feedback is essential for systems to serve the goal of best care. In the late 1990s, he served as medical director for an independent physician association with 2-sided risk with more than 400 primary care providers, a precursor to ACOs.

Nilsa Cruz

Nilsa Cruz is an advocate for rheumatology patients and a practice administrator with over 15 years of experience. She was recently certified as a rheumatology coder. Prior to this, she was a pharmaceutical sales consultant for over 10 years.

She is a committed long-term volunteer on many levels, having volunteered since 2009 in Wisconsin and since 2010 on the national level. She is recognized in the rheumatology community as "a woman of action" and having "limitless energy", as well as for energetically engaging people with a positive attitude. With this positive attitude she aims to effectively advocate for people through recruitment and motivating them to take action. As a volunteer with the American College of Rheumatology, she has served on multiple committees, including insurance, rheumatologic care, and political action.

In her spare time, Cruz continues to serve as a practice administrator to leverage her knowledge to work with local, state and national payers and rheumatology societies.

N. Lawrence Edwards, MD, MACP, MACR

Dr. Edwards is Professor of Medicine, Division of Rheumatology and Clinical Immunology, as well as Program Director and Vice Chairman of the Department of Medicine at the University of Florida in Gainesville. Dr. Edwards obtained his undergraduate training at the University of Notre Dame and his medical degree from the University of Miami School of Medicine. He completed his training in rheumatology at the Rackham Arthritis Research Center and the Clinical Research Center, University of Michigan in Ann Arbor, where he remained on the faculty as Director of Education and Training in the Division of Rheumatology. In 1983 he moved to the University of Florida where he is the former Chief of the Division of Rheumatology and Clinical Immunology and former Rheumatology Program Director for 15 years. For the past 15 years he has been Vice Chairman of the Department of Medicine and Program Director of the Medicine Residency Training Program at the University of Florida.

Dr. Edwards is an active member of many professional organizations including the American College of Rheumatology, the American College of

Physicians, and the Association of Program Directors in Internal Medicine and is Past-President of the National Society of Clinical Rheumatologists. He is on the Executive Board of the Florida Chapter of ACP, the Co-chair of the Gout Interest Group for OMERACT since 2005 and has been the Chairman and CEO of the Gout and Uric Acid Education Society – a non-profit, patient education organization – for the past 12 years. He has authored over one hundred and fifty scientific articles, book chapters and reviews on the topics of hyperuricemia, gout, and purine metabolism. He is a Master of both the American College of Physicians and the American College of Rheumatologists.

Madelaine A. Feldman, MD, FACR

Dr. Feldman is the founding member and past president of the Rheumatology Alliance of Louisiana, President of the Coalition of State Rheumatology Organizations (CSRO), and has served on the insurance subcommittee for the ACR. She is the Chair of the Alliance for Safe Biologic Medicines. She has served on the board of the Institute for Patient access and biologic working group for AfPA. A Clinical Associate Professor of Medicine at Tulane University School of Medicine, she has been named one of the Top Doctors in New Orleans for over 10 years. She was awarded the Distinguished Service Award in 2018 by the Tulane Medical Alumni association and named one of the 2017 top 50 women in New Orleans by New Orleans City Business.

Senator Dan Feyen

Senator Dan Feyen was born in New Holstein Wisconsin where he graduated from high school and went on to earn a diploma in printing at Fox Valley Technical College. After Technical College Senator Feyen was hired by a local printing company and was employed by that same Fond du Lac printing company for over 30 years, most recently serving as their Press and Bindery Coordinator.

Serving the community was something that Dan learned from his parents early in life. Serving his community as a member of the Fond du Lac Jaycees and past Jaycees President, Senator Feyen learned the importance of quality leadership and the significance of giving back to his community.

He has been involved in politics at the grassroots level since 2004. He started out as a volunteer at the local GOP office in Fond du Lac, making phone calls after work. In 2007, he was elected Chairman of the Republican Party of Fond du Lac County, and in 2010 was elected chairman of the Sixth District Republican Party. During that time he has led the party though some of the busiest and most consequential times in Wisconsin's political history.

Senator Feyen begins his second session being elected by his peer's to serve as Assistant Majority Leader of the Senate. He is also the Chairman of the Senate Committee on Economic Development, Commerce and Trade and continues to serve on the Wisconsin Economic Development Corporation's Board of Directors. This session he will also serve as Vice Chairman of the Senate Committee on Utilities and Housing. In addition, he has been appointed a member of the Committee on Financial Services, Constitution and Federalism and as Assistant Majority Leader he will serve on the Committee on Senate Organization and the Joint Committee on Legislative Organization.

Elected in 2016, Senator Feyen serves the constituents of the 18th State Senate District, which includes portions of Fond du Lac, Winnebago, and Dodge Counties.

Klaus Ley, MD

Dr. Ley joined the La Jolla Institute for Immunology in 2007 as the founding Division Head of the Division of Inflammation Biology. Dr. Ley received his BS from Altkönigschule-Gymnasium, Kronberg, Germany in 1976. In 1982, he received his MD from the Julius-Maximilians-Universität, Würzburg, Germany. Dr. Ley began his postdoctoral training from 1983 to 1987 at the Freie Universität Berlin, Germany. From 1987 to 1989, Dr. Ley was a

SPEAKER BIOSKETCHES

visiting research scientist at the University of California, San Diego and returned to Freie Universität Berlin until 1994, when he joined the faculty of the University of Virginia. From 2001-2007, he was director of the Robert M. Berne Cardiovascular Research Center at the University of Virginia.

Kurt R. Oelke, MD

Dr. Oelke, a rheumatologist with the Rheumatic Disease Center in Glendale, Wisconsin, has dedicated much of his career to studying and treating rheumatic diseases. In 1997 Dr. Oelke received his M.D. from the University of Wisconsin - Madison. In 2000, after finishing his Residency at Vanderbilt University Medical Center in Nashville, Tennessee, Dr. Oelke went on to complete a Fellowship with the University Of Michigan Department Of Rheumatology in Ann Arbor two years later. He was a junior faculty member at the University of Michigan prior to moving to Milwaukee, Wisconsin where he served as the president of the Wisconsin Rheumatology Association for two years. Since 2004 he has been the clinical research director at the Rheumatic Disease Center.

Dr. Oelke has contributed to several publications including Arthritis and Rheumatism, International Reviews of Immunology, and Investigational Drugs Journal. In addition, Dr. Oelke has been the principal investigator of over 15 clinical trials assessing the efficacy of various treatments for rheumatic conditions and frequently lectures to physicians on rheumatic disease treatment.

Joseph Orgel, PhD

Dr. Orgel is a British American scientist and full professor based at the Illinois Institute of Technology with past and present appointments in Biology, Physics and Biomedical Engineering and Applied Health Sciences at UIC as visiting faculty. His research interests are concerned with fundamental structural biochemistry problems that have direct links to the understanding and treatment of disease. Using unique techniques developed by Orgel, his group has been able to visualize the molecular organization of connective and neurological tissues to a resolution of less than one billionth of a meter. In collaboration with the US Army, Dr. Orgel leads investigations of brain pathological diseases such as Alzheimers and Traumatic Brain Injury. As Associate Director at the National Institutes of Health Biotechnology Research Resource, BioCAT, he leads investigations about connective tissue conditions including heart disease and arthritis.

An awardee of the United States National Science Foundation's CAREER award, he has been Biochemistry Section Editor of the Public Library of Science Journal, PLoS ONE, since 2008 and joined the board of directors of the National Museum of Health and Medicine (Chicago) in December of 2012. He is also the past-Chair of the Faculty Council of IIT.

Michelle Petri, MD, MPH

Dr. Petri is a Professor of Medicine in the Division of Rheumatology and Director of the Lupus Center at the Johns Hopkins University School of Medicine and Johns Hopkins Hospital in Baltimore, Maryland. She earned her medical degree from Harvard Medical School in Boston, Massachusetts, and completed her internship and residency in Internal medicine at Massachusetts General Hospital. Thereafter, Dr. Petri completed her Postdoctoral Fellowship in Allergy, Immunology, and Rheumatology at the University of California, San Francisco. She subsequently earned her master's in Public Health and Epidemiology from Johns Hopkins University Bloomberg School of Public Health.

Dr. Petri's research focuses on several aspects of systemic lupus erythematosus (SLE), including atherosclerosis, antiphospholipid syndrome (APS), lupus nephritis, and pregnancy. The Hopkins Lupus Cohort, started by Dr. Petri in 1987, is a longitudinal study of the incidence and pathogenesis of thrombotic events and coronary artery disease in SLE. Its serum and plasma bank is a useful resource for other SLE-related research. The Hopkins Lupus Pregnancy Center, of which Dr. Petri is a Co-Director, has a database of over 400 pregnant patients, providing information on lupus activity, antiphospholipid tests, and pregnancy outcomes. As part of the Systemic Lupus International Collaborating Clinics, Hopkins participates in studies of atherosclerosis, malignancy, and neuropsychiatric lupus. Dr. Petri has served as study Chair or Principal Investigator for several of these studies on the SLE patient population.

Dr. Petri has authored over 400 papers and chapters on SLE and APS. She is on the editorial board of Arthritis and Rheumatism, The Journal of Rheumatology, and Journal of Clinical Rheumatology. Dr. Petri serves as an ad hoc reviewer for Annals of Internal Medicine, The American Journal of Medicine, Medicine, Lancet, JAMA, Southern Medical Journal, and Fertility and Sterility. She served on the Medical Advisory Board of the Lupus Foundation of America, is a member of the American College of Rheumatology, and was Chair of the Lupus Now Education Program.

Representative Mike Rohrkaste

Representative Rohrkaste was born and raised in Dayton, Ohio. He attended Michigan State University as an undergraduate student and graduated in 1980 with a bachelor's degree in social science. He also attended Michigan State University for his graduate degree, earning a master's degree in labor and industrial relations in 1982.

Representative Rohrkaste worked in several places early in his human resources career, but in 1994 he settled with his family in Neenah, Wisconsin, where he began a new job at Menasha Corporation. He spent the next decade working through various human resources roles at Menasha Corporation before accepting a job with Oshkosh Corporation. In 2014, he retired as Oshkosh Corporation's Chief Human Resources

Representative Rohrkaste was elected to the Wisconsin State Assembly in 2014. In his first term (2015-2016), he chaired the Speaker's Task Force on Alzheimer's and Dementia and served as Vice Chair of the Assembly Committee on Health. Beginning in his second term (2017-2018), he has served on the Legislature's Joint Finance Committee, which works on the state budget, and he continues to work on health-related legislation. He also serves on the board of directors of the Samaritan Counseling Center of the Fox Valley.

Robert T. Schoen, MD

Dr. Schoen is a member of New Haven Rheumatology, PC and is also a Clinical Professor of Medicine, Yale School of Medicine. Dr. Schoen graduated from Columbia University College of Physicians and Surgeons and completed his residency in internal medicine at Yale New Haven Hospital. He then completed a Research Fellowship in Rheumatology/ Immunology at Brigham and Women's Hospital/Harvard Medical School. Dr. Schoen has had a longstanding research interest in infectious arthritis, including Lyme disease and more recently chikungunya. Dr Schoen is the current President of the Connecticut Rheumatology Association.

Jessica Schwoerer, MD

Dr. Schwoerer received her undergraduate degree in Biochemistry and Molecular Biology at the University of Wisconsin-Eau Claire. She graduated from the University of Wisconsin School of Medicine and Public Health. She completed residency in pediatrics and fellowship in medical genetics at the University of Wisconsin.

Currently, Dr. Schwoerer is an Assistant Professor in the Department of Pediatrics - Medical Genetics at the University of Wisconsin School of Medicine and Public Health. She is director of the Biochemical Genetics Clinic and a member of the Wisconsin Metabolic Newborn Screen subcommittee.

SPEAKER BIOSKETCHES

S. Bobo Tanner, MD, CCD

Dr. Tanner is an Assistant Professor of Medicine at Vanderbilt University Medical Center in Nashville, Tennessee in the Divisions of Rheumatology, Allergy and Immunology and the Director of the Vanderbilt Osteoporosis Clinic.

He graduated cum laude from Harvard University in Cambridge, Massachusetts, with a BA in History and Science, and received his medical degree from Bowman Gray Medical School of Wake Forest University, Winston-Salem, North Carolina. He pursued his internship and residency at the Vanderbilt University Medical Center in Nashville, Tennessee, and completed fellowships and board certification in Rheumatology and in Allergy/Immunology with further post graduate training in the Department of Rheumatology at the Royal Free Hospital, London, England.

Dr. Tanner has been a member of the International Society for Clinical Densitometry (ISCD) since 1996 and is a Past–President of the ISCD. He is an Osteoporosis Essentials Bone Density Course instructor and serves on the OE Course Update Committee and the Facility Accreditation Committee. He was awarded Clinical Densitometrist of the year in 2007 by the ISCD and was Co-Chair of the ISCD Annual Meeting in 2006. He is on the editorial board for the Journal of Clinical Densitometry as well as Therapeutic Advances in Musculoskeletal Disease.

Senator Patrick Testin

At 30 years old, Senator Testin is the youngest State Senator in Wisconsin. He represents the 24th Senate District, which includes parts of Wood, Jackson, Adams, Waushara, and Monroe counties, as well as all of Portage County. A lifelong Wisconsinite, Senator Testin grew up near the Michigan border in Marinette, where he learned the value of hard work at a young age. After graduating from the University of Wisconsin-Stevens Point in 2011, he remained in Portage County and took a job as a sales professional, working for a local wine distributor. He was elected to the State Senate in 2016. In August of 2017, he married Hannah Henderson. The couple lives in the Portage County Town of Hull with their dog Reilly. Sentator Testin serves as Chairman of the Senate Health and Human Services Committee.

Uma Thanarajasingam, MD, PhD

Dr. Thanarajasingam is a Senior Associate Consultant in the Division of Rheumatology at the Mayo Clinic in Rochester, MN. She holds the academic rank of Assistant Professor. She completed her MD/PhD, as well as residency and Rheumatology fellowship training, at the Mayo Clinic College of Medicine and Science. She served the Internal Medicine Residency Program as a Chief Resident. Her PhD training was in immunology and her current research interests include immunophenotyping in human SLE and the translational study of rheumatologic consequences of novel cancer therapies.

Representative Paul Tittl

Serving the 25th Assembly District, Rep. Tittl is the chairman of the Mental Health Committee, where he works to improve mental health care, expand access, and decrease stigma in the State of Wisconsin. In addition to the Mental Health Committee, Rep. Tittl is part of the Committees on Consumer Protection, Jobs and the Economy, Sports Heritage, International Affairs and Commerce, and Veterans and Military Affairs.

Before he was elected to Wisconsin's 25th Assembly District in 2012, Rep. Tittl was involved in local politics as well as his community, serving on numerous boards and councils. His service includes participation on the Manitowoc City Council from 2004-2008, including a term as City Council President from 2006-2007. He joined the Manitowoc County Board of Supervisors in 2006, and served as Chairman from 2010 to 2012 when he left the board. He was a member of the Wisconsin Utility Tax Association from 2009-2013. He served on the Manitowoc Crime Prevention Committee, Community Development Authority, and the WCA Taxation and Finance Steering Committee.

Tyler Vorpagel

Mr. Vorpagel is a state representative who represents portions of Sheboygan and Manitowoc counties. He is the Chairman of the Federalism and Interstate Relations Committee.

Representative Vorpagel graduated from Plymouth High School and attended the University of Wisconsin–Green Bay where he received Bachelor's Degrees in Public Administration and Political Science.

He has been happily married to his college sweetheart, Jenny, since 2009 and together they have one son, Landon, born in April 2016, and a family dog named Teddy.

Representative Vorpagel has served, most recently, as District Director for Congressman Tom Petri. Tyler is proud to have worked with numerous state, county, and community leaders across Wisconsin and throughout Sheboygan and Manitowoc Counties to solve problems and make our state a great place to live and raise a family.

Representative Vorpagel is a member of the B.P.O. Elks, Rotary International, and the National Association of Parliamentarians. He also has served on the Republican Party of Wisconsin State Executive Committee as the 6th Congressional District Vice-Chairman.

Alvin F. Wells, MD, PhD

Dr. Wells is currently a practicing rheumatologist at the Rheumatology and Immunotherapy Center in Franklin, Wisconsin, where he serves as the Director. He is a Visiting Foreign Professor at the Karolinska Institute in Stockholm, Sweden. He also maintains his clinical affiliation with Duke University Medical Center in Durham, NC where he is an Adjunct Assistant Professor. Prior to returning to private practice, Dr. Wells was an Associate Medical Director at Abbott Laboratories where he played a central role in the launch of HUMIRA.

Dr. Wells received his MD from the University of South Florida, Tampa and trained in internal medicine and in rheumatology at Duke University, where he was a faculty member before joining Abbott. He received his PhD in Immunology from the University of South Carolina, where he developed an animal model for Reiter's Syndrome. He was a recipient of the prestigious Fogarty Biomedical Research Award from the National Institutes of Health, which allowed him to undertake a two-year postdoctoral fellowship at Uppsala University, Sweden, with Dr. Lars Klareskog.

A member of the American Institute of Ultrasound in Medicine and of the American College of Rheumatology, Dr. Wells has over 25 years of research experience, focusing on chronic inflammatory diseases, such as rheumatoid arthritis and psoriatic arthritis, with an emphasis on connective tissue components, inflammatory mediators, and cytokines. He is the recipient of the 2003 Abbott President's Award. In 2001, he was honored with the Merck Young Investigator Award, and in 1999 he received the University of South Carolina School of Medicine Distinguished Alumni Award. Dr. Wells is fluent in Swedish and is an internationally renowned speaker and researcher and has had research support from the Arthritis Foundation and from the Robert Wood Johnson Foundation.

INDUSTRY SATELLITE SYMPOSIA

SATURDAY, MARCH 8, 2019

7:00 a.m. - 8:00 a.m.

Industry Satellite Symposium Breakfast

Location: Lake Huron
Sponsored by: Novartis

"Going Deeper Into the Body of Evidence: COSENTYX® for

the Treatment of Patients with AS, PsA, and PsO"

Asim Khan, MD

Maple Grove, MN

SATURDAY, MARCH 8, 2019

12:30 p.m. - 1:30 p.m.

Industry Satellite Symposium Lunch

Location: Lake Huron

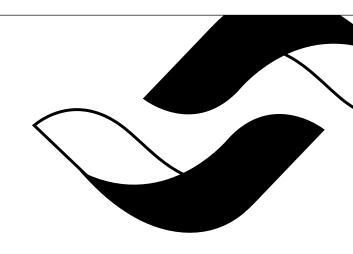
Sponsored by: Sanofi Genzyme Regeneron

"Combination and Monotherapy with Kevzara: Expert Perspectives"

Alan Epstein, MD Cherry Hill, NJ



COME FOR THE DATA STAY FOR THE RESULTS



MEET TALTZ AT BOOTH LOCATION

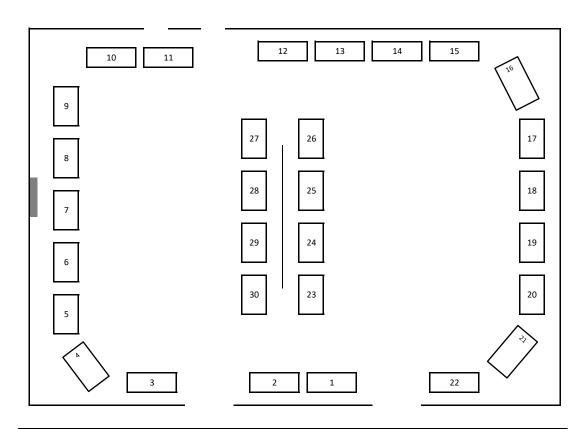
Learn about the Taltz Savings Card Program at taltz.com/hcp

If you are a US medical doctor with an active state license number, the value of the food, beverage, and/or educational item that you receive when attending this program may be disclosed on Eli Lilly and Company's Physician Payment Registry and/or the National Physician Payment Transparency Program (NPPTP) Open Payments report under the federal Sunshine Act as a transfer of value made to you by Lilly. As a result of enacted state regulations, food and beverages will not be provided to healthcare professionals licensed in the states of Minnesota, Massachusetts, and Vermont. Additionally, educational items will not be provided to healthcare professionals licensed in Minnesota. Federal Veterans Affairs (VA) regulations and several states also prohibit state/government employees from receiving or being provided gift items, which may include educational materials and meals. Please consult your state regulations and ethics laws to see if such prohibition would apply to you. This medical presentation is intended only for invited healthcare professionals for whom the information to be presented is relevant to their practice. We regret that spouses or other guests cannot be accommodated. This is a promotional program and no continuing medical education (CME) credits are offered.

Taltz is a registered trademark of Eli Lilly and Company. PP-IX-US-1020 11/2016 ©2016, LILLY USA, LLC. ALL RIGHTS RESERVED. PRINTED IN USA ON POST-CONSUMER RECYCLED PAPER 💲



EXHIBIT HALL FLOOR PLAN



Company Name	Booth #	Company Name	Booth #
AbbVie	21	Horizon Pharma, Inc.	26
Alexion Pharmaceuticals	24	Janssen Biotech, Inc.	25
Amgen, Inc.	5, 6	Lilly	16, 17, 18
Bristol-Myers Squibb	3	Mallinckrodt Pharmaceuticals	4
Celgene	9	Myriad Vectra	7
CSRO	30	Novartis	1, 2
Exagen Diagnostics, Inc.	29	Pfizer	14, 15
Ferring Pharmaceuticals	27	Radius	13
Flexion Therapeutics	20	Sanofi Genzyme Regeneron	22
Genentech	19	Sobi, Inc.	28
Gilead Sciences, Inc.	8	TheraTest Laboratories, Inc	11
GlaxoSmithKline	10	UCB, Inc.	23
Healix, LLC	12		

Genentech

A Member of the Roche Group



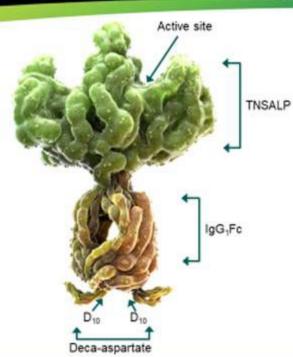


LEARN MORE AT ZILRETTA.COM/HCP





Strensiq[®] Is an Enzyme Replacement Therapy That Treats the Underlying Cause of HPP¹



- Human recombinant tissuenonspecific alkaline phosphatase (TNSALP)¹
- A first-in-class, enzyme-replacement therapy for the treatment of HPP²
- Fusion protein¹
 - Catalytic domain of TNSALP
 - ▶ Human IgG₁Fc domain
 - Deca-aspartate peptide used as a bone-targeting domain
- Administered by subcutaneous (SC) injection¹

Patients with HPP are at increased risk for developing ectopic calcifications. In clinical trials, 14 cases (14%) of ectopic calcification of the eye including the cornea and conjunctiva, and the kidneys (nephrocalcinosis) were reported. There was insufficient information to determine whether or not the reported events were consistent with the disease or due to STRENSIQ. Please see additional safety information on slides 22-23. Please see accompanying Full Prescribing Information.

References: 1. Strensiq [package insert]. 2016. 2. Scott LJ. 2016.



DUSTRY SUPPOR

THANK YOU TO OUR 2019 PROMOTIONAL PARTNERS

PLATINUM LEVEL







GOLD LEVEL

abbyie



SILVER LEVEL















THANK YOU TO OUR 2019 EXHIBITORS

AbbVie

Alexion Pharmaceuticals

Amgen, Inc.

Bristol-Myers Squibb

Celgene

Exagen Diagnostics, Inc.

Ferring Pharmaceuticals

Flexion Therapeutics

Genentech

Gilead Sciences, Inc.

GlaxoSmithKline

Healix, LLC

Horizon Pharma, Inc.

Janssen Biotech, Inc.

Lilly

Mallinckrodt Pharmaceuticals

Myriad Vectra

Novartis

Pfizer

Radius

Sanofi Genzyme Regeneron

Sobi, Inc.

TheraTest Laboratories, Inc

UCB, Inc.





MEET TALTZ AT BOOTH LOCATION

> Learn about the Taltz Savings Card Program at **taltz.com/hcp**

If you are a US medical doctor with an active state license number, the value of the food, beverage, and/or educational item that you receive when attending this program may be disclosed on Eli Lilly and Company's Physician Payment Registry and/or the National Physician Payment Transparency Program (NPPTP) Open Payments report under the federal Sunshine Act as a transfer of value made to you by Lilly. As a result of enacted state regulations, food and beverages will not be provided to healthcare professionals licensed in the states of Minnesota, Massachusetts, and Vermont. Additionally, educational items will not be provided to healthcare professionals licensed in Minnesota. Federal Veterans Affairs (VA) regulations and several states also prohibit state/government employees from receiving or being provided gift items, which may include educational materials and meals. Please consult your state regulations and ethics laws to see if such prohibition would apply to you. This medical presentation is intended only for invited healthcare professionals for whom the information to be presented is relevant to their practice. We regret that spouses or other guests cannot be accommodated. This is a promotional program and no continuing medical education (CME) credits are offered.







WISCONSIN RHEUMATOLOGY ASSOCIATION

1100 E Woodfield Rd, Suite 350, Schaumburg, IL 60173 Phone: (847) 517-7225 | Email: info@wi-rheum.org Website: wi-rheum.org