



Unmet Research Needs Conference IV

SEPTEMBER 28-29, 2023

Natcher Conference Center, National Institutes of Health
Bethesda, Maryland

SPONDYLOARTHRITIS



National Institute of
Arthritis and Musculoskeletal
and Skin Diseases



Spondylitis
Association
of America™

40th
ANNIVERSARY

Welcome to the **2023 SpondyloArthritis Unmet Research Needs Conference IV**

We have come a long way since our first **Unmet Research Needs Conference** in 1998. Given the changes and challenges that have happened in relatively fast succession since our 2017 conference, it is with great pleasure that we bring together our community of spondyloarthritis researchers to discuss the future of SpA research to address the gaps of knowledge and understanding.

The conference specifically addresses five areas: Endotypes, Pain, Imaging, Disparities, and Therapeutics.

We are grateful to the presenters and our colleagues on the planning committee for devising a thought-provoking and forward-thinking agenda.

We are confident that together, we will address these gaps and directly impact the lives of those living with the disease.



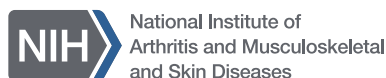
Robert A. Colbert, MD, PhD,
National Institute of Arthritis
and Musculoskeletal and Skin
Diseases (NIAMS)



Kristi A. Kuhn, MD, PhD,
University of Colorado



Cassie Shafer, CEO,
Spondylitis Association
of America (SAA)



AGENDA • Spondyloarthritis Unmet Research Needs Conference IV

Time	Session	Speaker [moderator]
Wednesday, September 27, 2023		
5:30-7:00 PM	Welcome Reception at Bethesda Marriott Hotel	
Thursday, September 28, 2023		
7:00 & 7:20 AM	<i>Buses depart Bethesda Marriott Hotel</i>	
8:00 AM	<i>Registration and Breakfast</i>	
8:30 AM	Welcome	Cassie Shafer, CEO Spondylitis Association of America
	Introductions	Robert A. Colbert, MD, PhD • NIH/NIAMS, Bethesda, Maryland, USA Kristi Kuhn, MD, PhD • University of Colorado, Denver, Colorado, USA
8:35 AM	SESSION I: ENDOTYPES	
	Are there disease endotypes in SpA and how would we define them?	<i>Kristi Kuhn, MD, PhD • University of Colorado, Denver, Colorado, USA</i>
	How are endotypes currently defined in RA and how helpful are those definitions?	Kevin Deane, MD, PhD • University of Colorado, Denver, Colorado, USA
	Are molecular endotypes based on RA synovial characteristics informative?	Laura Donlin, PhD • Weill Cornell Graduate School of Medical Sciences, New York City, New York, USA
	How do we apply precision medicine in psoriatic arthritis?	Christopher Ritchlin, MD, MPH • University of Rochester, Rochester, New York, USA
10:30 AM	<i>Break</i>	
10:45 AM	SESSION II: PAIN	
	How do we better address pain in our patients with axSpA?	<i>Alexis Ogdie, MD, MSCE • University of Pennsylvania, Philadelphia, Pennsylvania, USA</i>
	How should we treat non-inflammatory pain?	Yvonne Lee, MD, MSSc • Northwestern University, Chicago, Illinois, USA
	Novel insights into pain and how do we leverage them?	Anne-Marie Malfait, MD, PhD • Rush University, Chicago, Illinois, USA
12:15 PM	<i>Lunch</i>	
1:15 PM	SESSION III: IMAGING	
	How can we do this better? Where are we going next?	<i>Lianne Gensler, MD • University of California, San Francisco, San Francisco, California, USA</i>
	What is tomorrow's path for advancing structural progression research in axSpA?	Denis Poddubnyy, MD, PhD • Charité University, Berlin, Germany
	Are there innovative imaging technologies that should be applied to SpA for diagnosis? How to get radiologists trained?	Lennart Jans, MD, PhD • Ghent University, Ghent, Belgium
	What role will AI play in the future of SpA imaging?	Sharmila Majumdar, PhD • University of California, San Francisco, San Francisco, California, USA

AGENDA (CONTINUED)

Time	Session	Speaker [<i>moderator</i>]
3:15 PM	Day 1 Concluding Remarks	Nigil Haroon, MD, PhD, MBA • University of Toronto, Toronto, Ontario, Canada
3:30 PM	<i>Depart NIH to hotel</i>	
6:00 PM	Abstract Poster Session Reception at hotel	
7:00 PM	<i>Dinner at hotel</i>	
Friday, September 29, 2023		
7:00 & 7:20 AM	<i>Buses depart Bethesda Marriott hotel</i>	
8:00 AM	<i>Breakfast</i>	
8:30 AM	Welcome	Kristi Kuhn, MD, PhD • University of Colorado, Denver, Colorado, USA
8:35 AM	SESSION IV: BIOLOGIC VARIABLES, SOCIAL CONSTRUCTS, AND HEALTH DISPARITIES	
	How do we address a range of disparities in SpA diagnosis, treatment, and research?	Maureen Dubreuil, MD, MSc • Boston University, Boston, Massachusetts, USA
	What are the racial disparities in care?	Elizabeth Ferucci, MD, MPH • Alaska Native Tribal Health Consortium, Anchorage, Alaska, USA
	How can we engage community in clinical research?	Hani El-Gabalawy, MD, FRCPC, FCAHS • University of Manitoba, Winnipeg, Manitoba, Canada
	What are mitigating disparities in research participation?: lessons from lupus	Sarfraz Hasni, MD • NIH/NIAMS, Bethesda, Maryland, USA
	How can institutional approaches support equity in research?	Edith M. Williams, PhD, MS • University of Rochester Medical Center, Rochester, New York, USA
10:30 AM	<i>Break</i>	
10:45 AM	SESSION V: THERAPEUTICS	
	For what aspects of disease are therapeutic advancements most needed and how can we enhance evaluation of both emerging and existing therapies?	Pam Weiss, MD, MSCE • Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania, USA
	What are emerging therapies and targets & strategies?	Georg Schett, MD • Friedrich-Alexander-Universität, Erlangen, Germany
	Should we reconsider trial design? Do we have the right outcomes?	Laura Coates, MBChB, MRCP, PhD • University of Oxford, Oxford, England
	What is the role of complementary medicine and how do we study it?	Chenchen Wang, MD, MSc • Tufts University, Boston, Massachusetts, USA
	Concluding Remarks	Robert A. Colbert, MD, PhD • NIH/NIAMS, Bethesda, Maryland, USA Kristi Kuhn, MD, PhD • University of Colorado, Denver, Colorado, USA
12:40 PM	<i>Box lunch</i>	
1:00 PM	<i>Depart NIH to hotel or airport</i>	

CONFERENCE COMMITTEE

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Chief, Pediatric Translational Research Branch*

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School of Medicine*

Lianne Gensler, MD

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*Professor of Medicine at UCSF, the Director of the
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Program Director for the Rheumatology Fellowship
Program*

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*Associate Professor of Medicine and Rheumatology
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*Associate Professor of Pediatrics and Epidemiology
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Richard Howard, Chief Mission Delivery Officer

Lisa Spiegel, Conference Planner

ATTENDEES

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Walter Maksymowych, MD, University of Alberta

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†Paula Olsiewski, PhD, SAA Board Member

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Michael Paley, MD, PhD, Washington University in St. Louis

Laura Passalent, PT, MHSc, UHN Toronto

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†Arnold Podolsky, MD, JD (Ret), SAA Board Member

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Shiju Tang, PhD, NIH

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Jinny Van Doorn, BS, NIAMS

Melissa Velez, Spondylitis Association of America

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*Pam Weiss, MD, UPENN/CHOP

Edith Williams, PhD, University of Rochester Medical Center

Matthew Wong-Pack, MD, University Health Network

*MASB (Medical & Science Advisory Board)

†SAA Board Member

Cast your vote



ABSTRACT POSTER SESSION

September 28 • 6:00 - 7:00 PM • Bethesda Marriott Hotel

1. Evelyne Gendron, MD, University of Toronto, Toronto, Canada
Alcohol Consumption in Axial Spondyloarthritis: An Informative Predictor of Radiographic Progression or Merely a Confounding Factor?
2. Sinead Maguire, MB BCh BAO MRCPI, Toronto Western Hospital, Toronto, Canada
Are the BASDAI & ASQoL Capturing the Full Impact of Disease Activity on Quality of Life in Women with Axial Spondyloarthritis?
3. Laura Passalent, BScPT, MHSc, Schroeder Arthritis Institute, University Health Network
Design Thinking Applied to Unmet Needs in Axial Spondyloarthritis – A Novel Model of Care to Address Diagnostic Delay
4. Matthew Wong-Pack, MD, University of Toronto, Toronto, Canada
Towards an Earlier Diagnosis of Axial Spondylarthritis: Performance of clinical variables in a spondylitis screening clinic
5. Courtney Cowan, BS, University of Colorado
Search for new biomarkers reveals altered metabolic signature in plasma of axSpA patients
6. Yongquan Luo, PhD, NIAMS/NIH
Heterozygous de novo WHAMM mutation (c.1662C>T) alters cellular response to TNF in iPSC-derived MSCs from a patient with early onset axial spondyloarthritis
7. Fatemeh Navid, PhD, NIAMS/NIH
Compound heterozygous rare AXL variants in a spondyloarthritis patient with eczematous dermatitis are associated with reduced AXL expression, decreased SOCS1/3 expression, and increased proinflammatory cytokine production
8. Addison Pacheco, HBS, University Health Network
Reduced Frequency of RORyt+ Regulatory T Cells Is Associated with Secukinumab Response in Axial Spondyloarthritis
9. Pankaj Sharma, PhD, NIAMS/NIH
Alteration of JAK-STAT signaling in a patient with TYK2 variants
10. Melissa Lim, MSc, University Health Network
Therapeutic Effect of ICAM-1 Mimic on Experimental Axial Spondyloarthritis
11. Zoya Qaiyum, Masters, Schroeder Arthritis Institute, UHN
Proteomic, transcriptomic, and T-cell receptor (TCR) profiling of synovial integrin-expressing (InEx) T cells in axial spondyloarthritis (axSpA)
12. Archita Srinath, BSc MSc, University Health Network
The Role of the Deubiquitinase ZRANB1/TRABID in Inflammation and Bone Formation in Ankylosing Spondylitis
13. Michael Tang, PhD, Schroeder Arthritis Institute, University Health Network
Multi-omics Immune Profiling of Cytotoxic T cells from Ankylosing Spondylitis Patients Identified a subset of Clonally Expanded CTLs that Evade Immune Exhaustion
14. Fataneh Tavasolian, PhD, University of Toronto, Toronto, Canada
Proteomic and Genomic Profiling of Plasma Exosomes from Ankylosing Spondylitis Patients
15. Jinny Van Doorn, BS, NIAMS/NIH
Rapamycin treatment attenuates HLA-B27 mediated gut inflammation in an experimental model of spondyloarthritis
16. Michael Paley, MD, PhD, Washington University in St. Louis
Single Cell Sequencing Suggests Mucosal Origins of Pathogenic T Cells in HLA-B27-associated Inflammation

SAA GRANT OPPORTUNITIES

Since its inception, SAA has been committed to research, from funding scientific meetings such as the *Unmet Research Needs Conferences*, to launching the first genetic research study in the United States on ankylosing spondylitis and related diseases.

SAA encourages axial spondyloarthritis researchers to apply for funding. SAA accepts funding requests biannually; submitted by August 1st and February 1st.

For further information, see <https://spondylitis.org/research/saa-research/>

Thank you for your continued leadership and research.

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