

2017 Annual Scientific and
Business Meeting
February 3 – 4, 2017

Franklin Marriott Cool Springs
Franklin, Tennessee



PROGRAM BOOK



Dear Colleagues and TRS Supporters,

It is my privilege to welcome you to the 2017 Tennessee Rheumatology Society Annual Scientific and Business Meeting.

The planning committee is excited to share this year's program with you. We will launch our CME program on Friday evening with a welcome dinner lecture on infectious diseases in the immunosuppressed patient.

Saturday's meeting agenda will cover pertinent topics in rheumatology, including: systemic lupus erythematosus, rheumatoid arthritis, biosimilars, scleroderma and osteoarthritis. Fellows from UT Memphis and Vanderbilt will present intriguing rheumatology cases in the afternoon. Our annual business meeting will occur over lunch on Saturday.

I hope that you find the program informative and of high educational value. Thank you for attending, and for your support of the Tennessee Rheumatology Society.

Best regards,

Suzan House, MD
President, Tennessee Rheumatology Society

TRs 2017 Committee Listing

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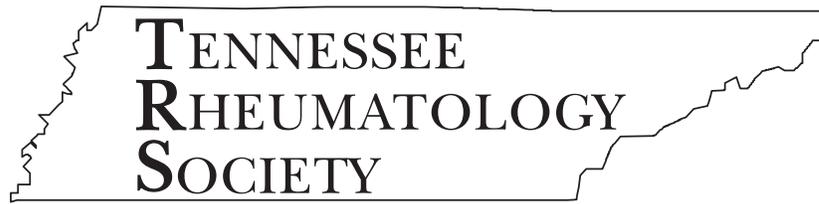
TRs Business Office

1100 E. Woodfield Road, Suite 350

Schaumburg, IL 60173

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Donna Rostamian, MBA



**2017 Annual Scientific & Business Meeting
February 3 – 4, 2017
Franklin, Tennessee**

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EDUCATIONAL NEEDS

The Tennessee Rheumatology Society (TRs) meeting aims to educate physicians preparing for the American Board of Internal Medicine Maintenance of Certification exam in rheumatology and participating in the ABIM Maintenance of Certification Program.

Time constraints, rapid advances in the knowledge of rheumatic diseases, immune function, therapeutic development, and biologic agents may all limit a rheumatologist's ability to address patient disease as thoroughly as desired. The wide medical knowledge base expected of the specialty creates significant educational requirements for TRs members.

Systemic lupus erythematosus (SLE), biologic therapy and biosimilars, immunology and immune-mediated inflammatory disorders, systemic sclerosis and osteoarthritis are some of the topics in which competency is needed.

EDUCATIONAL OBJECTIVES

1. Describe the clinical heterogeneity of SLE.
2. Identify mechanisms of tissue injury in SLE.
3. Report current efforts to treat SLE-concepts of targeted delivery of drugs.
4. Design concepts leading to precision medicine in SLE.
5. Define biologic and biosimilar pharmaceuticals.
6. Review the structure and method of production of biologic and biosimilar agents.
7. Review the FDA guidance on demonstrating biosimilarity.
8. Describe extrapolation of indications and interchangeability.
9. Cite potential complications that may occur as biosimilar medications enter the therapeutic realm.
10. Report how through the study of the molecular events in immune cells novel treatment targets for SLE can be identified.
11. Demonstrate successful delivery of drugs to specific cells in order to correct their function.
12. Review the innate immune system.
13. Examine acute gout as an example of a disease driven by aberrant innate immune function.
14. Review the adaptive immune system.
15. Review the details of T-cell function.
16. Analyze the immunopathogenesis of rheumatoid arthritis.
17. Describe the interplay and interconnections of the innate and adaptive immune systems and the vasculature with fibrogenesis in systemic sclerosis.
18. Identify the origins and characteristics and initiators/facilitators of the scleroderma myofibroblast.
19. Review what has been learned from genome-wide gene expression of the skin in systemic sclerosis.
20. Review the etiologic factors in osteoarthritis.
21. Identify therapeutic targets in the treatment of degenerative joint disease.
22. Examine osteoarthritis treatments in current use, those in development, and therapy that has not shown benefit.
23. Review clinical features, differential diagnosis, diagnosis and therapy of rheumatologic diseases.

Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American College of Surgeons and Tennessee Rheumatology Society. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™

The American College of Surgeons designates this live activity for a maximum of **6.75 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



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General Disclaimer

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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.

DISCLOSURE REPORT

In compliance with the ACCME Accreditation Criteria, the American College of Surgeons, as the accredited provider of this activity, must ensure that anyone in a position to control the content of the educational activity has disclosed all relevant financial relationships with any commercial interest. All reported conflicts are managed by a designated official to ensure a bias-free presentation. The disclosure report for this meeting can be found in the materials provided to you at registration.

All sessions will be located in **Champion Ballroom Salon 7 - 10**, unless otherwise noted.
Speaker and times are subject to change.

FRIDAY, FEBRUARY 3, 2017

8:30 a.m. - 6:00 p.m. **Registration/Information Desk Open**
Location: Champion Ballroom Pre-Function

3:00 p.m. - 5:00 p.m. **Board of Directors Meeting**
Location: Appaloosa

6:30 p.m. - 9:00 p.m. **Annual Dinner Program**
Offsite Location: Sperry Restaurant
Private Dining Room 1 & 2
650 Frazier Drive, Franklin, TN 37067

7:00 p.m. - 8:00 p.m. **Infectious Diseases in Immunosuppressed Patients**
Lora Thomas, MD, MPH
Vanderbilt University Medical Center
Transplant Infectious Diseases

10:00 a.m. - 10:30 a.m.

***Poster Viewing**
Location: Champion Ballroom Pre-Function
***Not CME Accredited**

10:30 a.m. - 11:30 a.m.

A Kinase Represents a Link Between Immune and Kidney Cells in SLE-Targeted Delivery of Drugs in SLE
George C. Tsokos, MD
Beth Israel Deaconess Medical Center

11:30 a.m. - 12:30 p.m.

The Science of Biologics and Biosimilars
Alan L. Epstein, MD
Pennsylvania Rheumatology Associates, PC

12:30 p.m. - 2:00 p.m.

Buffet Luncheon in Exhibit Hall

12:30 p.m. - 1:00 p.m.

***Poster Viewing**
Location: Champion Ballroom Pre-Function
***Not CME Accredited**

SATURDAY, FEBRUARY 4, 2017

7:00 a.m. - 4:15 p.m. **Registration/Information Desk Open**
Location: Champion Ballroom Pre-Function

7:00 a.m. - 3:30 p.m. ***Poster Session**
Location: Champion Ballroom Pre-Function
***Not CME Accredited**

7:00 a.m. - 3:30 p.m. **Exhibit Hall Open**
Location: Champion Ballroom Salon 6

7:00 a.m. - 8:00 a.m. **Continental Breakfast in Exhibit Hall**

8:00 a.m. - 8:05 a.m. **Welcome Address**
TRS President: Suzan E. House, MD

8:05 a.m. - 9:05 a.m. **Immunology for the Rheumatologist**
Alan L. Epstein, MD
Pennsylvania Rheumatology Associates, PC

9:05 a.m. - 10:00 a.m. **Novel Clinical and Basic Concepts in SLE**
George C. Tsokos, MD
Beth Israel Deaconess Medical Center

10:00 a.m. - 10:30 a.m. **Break and Networking Session in Exhibit Hall**
Location: Champion Ballroom Salon 6

1:00 p.m. - 2:00 p.m.

Annual Business Meeting
TRS Members Only

2:00 p.m. - 2:30 p.m.

Pathophysiology of Fibrosis in Systemic Sclerosis
Arnold E. Postlethwaite, MD
University of Tennessee Memphis

2:30 p.m. - 3:00 p.m.

Osteoarthritis Therapy Update
John Stuart, MD
University of Tennessee Memphis

3:00 p.m. - 3:30 p.m.

Break and Networking Session in Exhibit Hall

3:00 p.m. - 3:30 p.m.

***Poster Viewing**
Location: Champion Ballroom Pre-Function
***Not CME Accredited**

3:30 p.m. - 4:15 p.m.

Fellow Case Presentations

3:30 p.m. - 3:50 p.m.

Case One - Vanderbilt
Wenlu Xiong, MD
Vanderbilt University

3:50 p.m. - 4:10 p.m.

Case Two - UT Memphis
Joseph L. Green, DO
University of Tennessee
Memphis

4:10 p.m. - 4:15 p.m.

Q&A Session

4:20 p.m.

Closing Remarks

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Alan L. Epstein, MD

Dr. Epstein is a clinical professor of medicine at the University of Pennsylvania School of Medicine. He is an attending physician and rheumatologist at Pennsylvania Hospital in Philadelphia, where he has a private practice in clinical rheumatology.

Dr. Epstein received his undergraduate degree from Wesleyan University in Connecticut and his medical degree from Tufts University School of Medicine. He did an internship, medical residency, and chief medical residency at Montefiore Medical Center in New York. Dr. Epstein did his rheumatology fellowship at Montefiore Medical Center and the Albert Einstein College of Medicine.

Dr. Epstein is a past president of the Philadelphia Rheumatism Society. He is a fellow of the American College of Physicians and the American College of Rheumatology. Dr. Epstein served on the Professional Development Committee of the ACR and serves on the Affiliate Society Council of the ACR. He received the 2010 Joseph Hollander award from the Pennsylvania chapter of the Arthritis Foundation for excellence in rheumatology.

Dr. Epstein's past research interests have included drug-induced lupus, systemic lupus, and osteoporosis. He lectures widely in the areas of immunology, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, gout, osteoporosis, and anti-inflammatory therapy.

Joseph L. Green, DO

Dr. Joseph Green is a first year rheumatology fellow at The University of Tennessee where he also completed an internal medicine/pediatrics residency. He attended medical school in Kansas City, MO. Although he misses living in the Razorback territory of Arkansas where he grew up, he is enjoying learning the complex and ever expanding field of rheumatology in the volunteer state. He is happily married to a family physician from Minnesota and loves playing with their new dog Wilson.

Arnold E. Postlethwaite, MD

Dr. Postlethwaite obtained his MD degree from Cornell University Medical College, did a residency in internal medicine at Tulane University School of Medicine and Duke University Medical Center and a rheumatology fellowship at Duke University Medical Center. During the first year of the rheumatology fellowship at Duke, Dr. Postlethwaite performed clinical research under the mentorship of William N. Kelley, MD on identification of medications that previously were not known to induce uricosuria or hyperuricemia. During the second year of the rheumatology fellowship at Duke, Dr. Postlethwaite completed the NIH sponsored Research Training Program and did basic immunology research under the mentorship of Ralph Snyderman, MD. Dr. Postlethwaite was recruited to the University of Tennessee Health Science Center and the Veterans Administration Medical Center in Memphis, TN in 1973 by Dr. Andrew H. Kang, MD. His research has focused on basic and translational research relative to the interaction of the immune system and inflammatory mediators with connective tissue cells and matrix, and most recently on modulation immune system and fibroblasts by vitamin D analogs. Dr. Postlethwaite has published over 150 articles and book chapters related to these topics. His research has been funded by VA career development awards, Merit awards and a VA Program Project and by R01, R21, U01 and P50 and P30 grants from the NIH. Dr. Postlethwaite is presently director of the Division of Connective Tissue Diseases and Goodman Chair of Excellence Professor of Medicine at the University of Tennessee Health Science Center and staff rheumatologist at the Memphis VAMC. Dr. Postlethwaite is a Master of the American College of Rheumatology and a member of the American Society for Clinical Investigation.

John Stuart, MD

Dr. Stuart received his medical degree from the University of Tennessee in 1970. After graduation, he completed an internal medicine residency with the City of Memphis Hospitals as well as a rheumatology fellowship with the University of Tennessee. Dr. Stuart's career has encompassed a range of activities including patient care, research into the basic mechanisms and pathogenesis of arthritis, teaching of medical students and post-graduate physicians at all levels of development, and fulfilling the administrative responsibilities of an active research program as an associate chief of staff for research in the Department of Veterans Affairs.

Lora Thomas, MD, MPH

Dr. Thomas is an assistant professor with the Department of Medicine at Vanderbilt University Medical Center. She also serves as the Center's subdivision chief for Transplant/Malignant Hematology Infectious Diseases with the Department of Medicine. She received her Doctor of Medicine from the Medical College of Ohio in 2000 and subsequently completed a residency in internal medicine at Kettering Medical Center, as well as a clinical fellowship in infectious disease and a research fellowship at Vanderbilt University Medical Center.

George C. Tsokos, MD

Dr. Tsokos was born in Greece and received his Medical Degree and a Doctorate in Sciences from the University of Athens. He trained in internal medicine at the University of Athens and Georgetown University/VA Medical Center in Washington DC and completed immunology and rheumatology fellowships at the National Institutes of Health. Between 1987 and 2007 he was a member of the Uniformed Services/Walter Reed community where he served in various positions including vice chair for research in the Department of Medicine and Chief of the Department of Cell Injury. In 2007 he joined the Beth Israel Medical Center as chief of rheumatology and Harvard Medical School as professor of medicine.

Dr. Tsokos and his colleagues have defined the molecular and biochemical abnormalities in T cells and other immune cells from patients with systemic lupus erythematosus (SLE) that have led to the identification of novel therapeutic targets, which are in various phases of clinical development. Dr. Tsokos has combined human and murine studies in a unique manner which involves the generation of new mice based on molecular abnormalities he identifies in patients with SLE. He uses these mice to define the relative contribution of each molecule in the expression of SLE and to perform intense mechanistic studies and pre-clinical therapeutic trials. His work over the years has brought our understanding of lupus to new levels, elucidating critical steps in the signaling networks and transcriptional events that underlie the pathogenesis of this debilitating disease.

Dr. Tsokos is a past president of the Clinical Immunology Society and has served as member or chair of multiple federal study sections. He has served or serves editorial boards of dozens of scientific journals including consulting editor of the *Journal of Clinical Investigation*, section editor of the *Journal of Immunology* and editor-in-chief of *Clinical Immunology*. He has served or chaired numerous committees of the American College of Rheumatology and currently he serves as the basic sub-chair of the Annual Meeting Planning Committee and the international task force. He directs a T32 training program on Systemic Autoimmunity. As of 2015, Dr. Tsokos is the chair of the Council of the University of Athens.

Dr. Tsokos has been elected to the Association of American Physicians, Fellow of the American Association for the Advancement of Sciences and Master of the American College of Physicians. He holds a Master of Arts (honorary) from Harvard University and honorary degrees from three more universities. He has received several awards including the Philip Hench Award, the Mary Kirkland Award, the Lee C. Howley Jr. Arthritis Research Prize, the Evelyn Hess award from the Lupus Foundation of America and the Distinguished Basic Investigator Award from the American College of Rheumatology. He is the 2015 recipient of the Lupus Insight Award and the 2016 Howard and Martha Holley from the University of Alabama and the 2016 Carol Nachman international prize in rheumatology. He holds a MERIT award from the National Institutes of Health.

Wenlu Xiong, MD

Dr. Xiong received her Doctor of Medicine from Vanderbilt University in 2009. After graduation, she was a clinical resident in the Internal Medicine Residency Program at Loyola University Medical Center until 2016. She is currently a clinical fellow in the Division of Rheumatology and Immunology Fellowship Program at Vanderbilt University.

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EXHIBIT GUIDE



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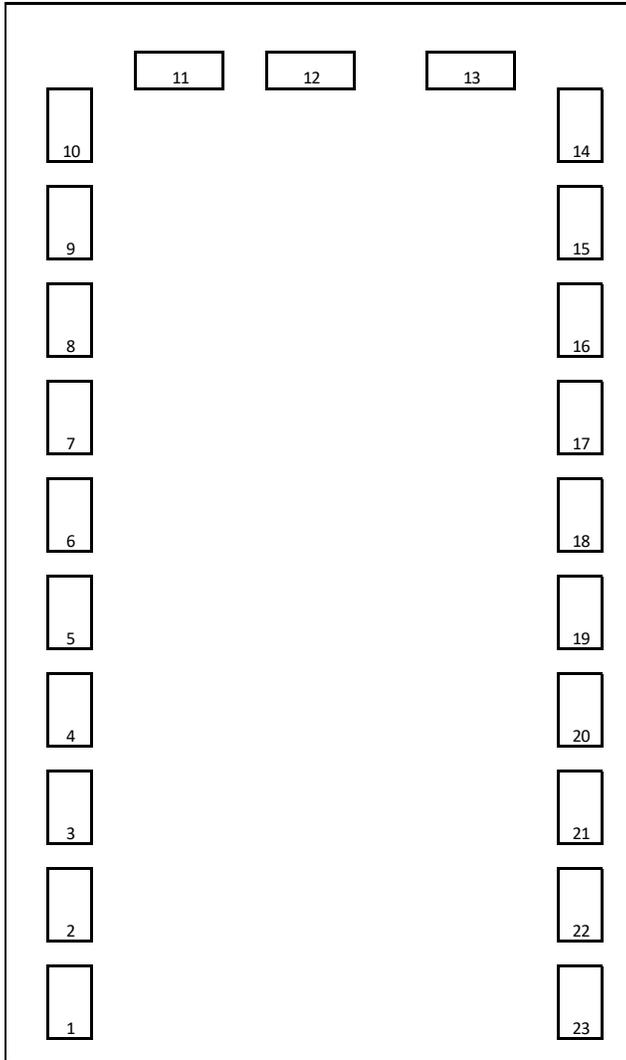
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Exhibit Hall Hours

Location: *Champion Ballroom Salon 6*

Saturday, February 4, 2017

7:00 a.m. – 3:30 p.m.



Company Name	Booth #
AbbVie	21
Altus Infusion	20
Amgen	1
Antares Pharma	7
Bristol-Myers Squibb	3
Crescendo Bio	17
Exagen Diagnostics	10
Genentech	22
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Horizon Pharma	12
intraFUSION	6
Janssen Biotech	18
Lilly	2, 9
Mallinckrodt Pharmaceuticals	5
Medac Pharma	13
Metro Medical	19
Novartis	14
Pfizer	23
Quest Diagnostics	15
Sobi, Inc	4
The Arthritis Foundation	11
UCB, Inc	16

Company/Product Descriptions

Crescendo Bioscience - Crescendo Bioscience focuses on enabling more effective management of autoimmune and inflammatory diseases by providing quantitative, objective molecular tests (such as Vectra® DA) and disease information services to rheumatologists and patients. Vectra® DA is the only multi-biomarker blood test for rheumatoid arthritis (RA) disease activity. www.Vectra-DA.com

IntraFUSION - Intrafusion is a national healthcare management company specializing in the management of physician-owned, office based infusion centers. The company provides physicians turnkey solutions that create new revenue, improve cash collections, strengthens practice operations and enhances the patient experience.

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