2015 MSO ANNUAL SESSION
Co-sponsored by the Minnesota Association of Orthodontists and Missouri Society of Orthodontists

PROGRAM

HISTORIC KAHLER GRAND HOTEL
ROCHESTER, MN
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Refer to the exhibit hall floor plan on page 17 to visit these sponsors and all exhibitors listed on pages 18–21 in this book to thank them for their support!
WELCOME!

On behalf of the Midwestern Society of Orthodontists, welcome to the 2015 MSO Annual Session and “Enhancing Orthodontics through Body, Mind, Heart and Soul.”

A special thank you to our dedicated 2015 Planning Committee listed on page 4 who has planned this unique program offering an opportunity to learn from an extensive array of healthcare and orthodontic issues related to the overall care of your patients, staff and family. We look forward to sharing this unique learning experience highlighting some of Mayo Clinic’s and University of Minnesota specialists.

Enhance your knowledge by networking with industry partners at their table top displays in the lecture foyer and Windsor Room. Tickets are in the name badges of all registered attendees for Friday evening’s exhibit reception. Jazz up your evening by walking to the nearby Rochester Art Center after the exhibit hall reception concludes to enjoy complimentary hot gourmet hors d’oeuvres and the tunes of MSO’s Dr. John and Sue Crawford and Dr. Paul Hermanson… back by popular demand!

Doctors, staff and exhibitors also have tickets in their badge for the Friday and Saturday lunches held in the Windsor Room. No tickets are needed for the continental breakfasts and refreshment breaks also held in the Windsor exhibit area.

All attendees are encouraged to join us at the MSO Annual Business Meeting Saturday morning to honor Dr. John Kanyusik as the 2015 MSO Earl E. Shepard Distinguished Service Award winner. Congratulations John!

My husband Dale and I hope you enjoy the many things the “Land of 10,000 Lakes” and Rochester have to offer. Thanks for enhancing this meeting with your presence!
The Midwestern Society of Orthodontists proudly announces that Dr. John Kanyusik is the recipient of the 2015 MSO Earl E. Shepard Distinguished Service Award. This award recognizes a member of the MSO who exemplifies the ideals of the orthodontic profession, community and family.

Dr. Kanyusik was born in Washington, D.C. and raised in northern Minnesota and California. He received his DDS from the University of Minnesota in 1970 and graduated from Minnesota’s Orthodontic program in 1972. Dr. Robert Isaacson was the program chair at that time and John and his classmates were greatly influenced by Isaacson’s strong leadership and commitment to evidenced-based practice.

Following graduation John served in the USAF in Tachikawa, Japan and was able to travel extensively in the Far East. As his time in Air Force neared completion, his future wife, Carolyn, suggested that they meet in Europe and travel before going back home. Together they spent three months as travel bums and after 40-plus years, they are still enjoying the journey.

While serving in Japan, John was contacted by Drs. Powers and Germundson in Mankato, Minnesota and was offered a position that he accepted in 1975. John and Carolyn have lived in Mankato since and have raised their four children there. He currently practices with Drs. Carlin Wiemers, Tim Swanson and Chris Vaubel at Southern Minnesota Orthodontics.

Early in his career John found Drs. Jim Gjerset, Roger Fredsall and Arnie Hill to be great mentors and examples in finding ways to give back to the orthodontic profession. John has served on the Boards and as president of the Minnesota Association of Orthodontists (MAO) and the MSO. He has served on the MSO delegation to the American Association of Orthodontists (AAO) House since 2005, as chair on the AAO Council on Membership Ethics and Judicial Concerns and on numerous AAO and AAOF committees. He served as staff program co-chair for the 2003 AAO Annual Session in Hawaii and as the general chair and scientific chair at numerous orthodontic meetings. He will serve as general chair of the 2019 AAO meeting in Los Angeles. He has lectured at numerous orthodontic programs and meetings, both nationally and internationally.

John has been active in the College of Diplomates of the
American Board of Orthodontics (CDABO) since receiving his board certification in 1984. His involvement began when he helped develop the early courses offered by the College to encourage American Board of Orthodontics (ABO) certification in 1985. In 1992 John was elected to the CDABO Council and served as CDABO President at the 2001 Sun Valley meeting. He continues to serve on the ABO/CDABO Resident Advocacy Committee as its co-chair and on the CDABO Foundation Board. John was ABO recertified in 2001 and has served as an ABO Phase III Examination Consultant since 2002.

John is a Fellow of the American College of Dentists and has received service awards from the MAO, CDABO and ABO. Since 2002 he has taught part-time at the University of Minnesota’s Department of Orthodontics.

John and Carolyn are involved in many Mankato organizations including ECHO, the area food shelf, Habitat for Humanity, YMCA, United Way, local trail projects and their church.

For several years John has been active with Health Volunteers Overseas (HVO), an organization that places volunteers in schools where one can teach the local educators and then those educators teach their students after the volunteer leaves. John has taught with HVO in Vietnam, Tanzania, Moldova, Nicaragua and, soon, in Nepal. You may occasionally hear his voice as he currently is a reviewer on the AAO Oakstone literature reviews.

For recreation John enjoys running, racquetball, reading, biking and traveling with Carolyn and their four kids. He and Carolyn are excited and busy as first-time grandparents to their grandson, born in January.

Congratulations, John, on receiving this well-deserved honor and for your service to your community, dentistry and orthodontics.
THANKS TO THE 2015 MSO ANNUAL SESSION PLANNING COMMITTEE FOR PUTTING TOGETHER THIS VERY UNIQUE PROGRAM HIGHLIGHTING SOME OF MAYO CLINIC’S AND UNIVERSITY OF MINNESOTA CUTTING-EDGE SPECIALISTS.
THURSDAY, OCTOBER 8

10:00 a.m. – 11:45 a.m. Director’s Room
MSO Executive Committee

Noon – 5:00 p.m. Viking Room
MSO Board Meeting and Lunch

3:00 p.m. – 5:00 p.m. Heritage Foyer
Registration Desk Open

3:00 p.m. – 5:00 p.m. Heritage Foyer/Windsor Hall
Exhibitor Set-up

FRIDAY, OCTOBER 9

7:30 a.m. – 5:00 p.m. Heritage Foyer
Registration Desk Open

7:30 a.m. – 6:15 p.m. Heritage Foyer/Windsor Hall
Exhibits Open

A name badge is required to enter the exhibit hall. Refer to today’s schedule for times for the continental breakfast, refreshment breaks, lunch and reception offered in the exhibit hall. While all registrants have a drink ticket in name badge, only registered doctors, staff, and exhibitors have tickets for complimentary lunch in exhibit hall and access to hall for continental breakfast.

7:30 a.m. – 8:30 a.m. Windsor Hall
Continental Breakfast in Exhibits

7:45 a.m. – 8:15 a.m. Elizabethan Ballroom
All are welcome. You do not need to be a Diplomate to attend this seminar. Pick up continental breakfast in exhibit hall and join us for this “eat and learn” event.

Dr. Patrick F. Foley, ABO Director

Dr. Patrick F. Foley is a representative of the Midwestern Society of Orthodontists on the American Board of Orthodontics. He is in full time practice in Lake Zurich, Illinois and is an Assistant Clinical Professor of Orthodontics at Saint Louis University.

ABO Seminar: Evidence and Standards of Care

In today’s world with these significant differences in orthodontic treatment philosophies among orthodontists and non-orthodontists, can the outcome of care be objectively defined or determined as competent or negligent? If so, who will determine satisfaction: the patient, the courts, or the profession? Certainly the goal of the ABO is to obtain patient satisfaction through careful adherence to the standards of care that have emerged through generations of basic research and clinical trials and adopted by the ABO.
8:25 a.m. – 5:00 p.m.

**DR./STAFF MAYO CLINIC LECTURES**

Morning Moderator: Dr. John Foley

Afternoon Moderator: Dr. James Stork

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8:25 a.m. – 8:45 a.m.

Heritage Hall I/II

**MSO Member Mayo Donation Presentation**

The program starts with a special presentation of a donation from Dr. Frederic Lauder’s estate to Mayo Clinic from MSO member Dr. Robert Lauder.

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**Welcome**

![Dr. Deb Lien, MSO President](image1)

![Lisa Clarke, Executive Director of Economic Development Agency](image2)

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8:45 a.m. – 9:45 a.m.

Heritage Hall I/II

**Amit Sood, M.D., M.Sc**

*Dr. Sood is a professor of medicine at Mayo Clinic College of Medicine, director of research in the Complementary and Integrative Medicine Program, chair of the Mind-Body Medicine Initiative at Mayo Clinic in Rochester, Minnesota, and fellow of the American College of Physicians. His clinical work and research includes improving resiliency and decreasing stress and anxiety.*

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**Stress Management and Resiliency**

In this presentation, Dr. Sood, reveals how the mind’s instinctive restlessness and shortsightedness generate stress and anxiety and presents strategies for living a more peaceful life. The presentation is based on the highly popular stress management program offered at Mayo Clinic that Dr. Sood developed after two decades of work with tens of thousands of people.

Drawing on groundbreaking brain research, Dr. Sood helps you understand the brain’s two modes and how an imbalance between them produces unwanted stress. Learn skills that will help you:

- Develop deep and sustained attention
- Practice gratitude, compassion and acceptance
- Live a meaningful life
- Cultivate nurturing relationships
- Achieve your highest potential.
9:45 a.m. – 10:15 a.m.  
Refreshment Break in Exhibit Hall  
Sponsored by American Orthodontics

10:15 a.m. – 11:00 a.m.  
Heritage Hall I/II  
Ann E. Kearns, M.D., Ph.D.  
Dr. Kearns received her M.D. and Ph.D from the University of Chicago. After completing residency at the University of Chicago, she was a fellow in endocrinology at Massachusetts General Hospital. She has been an Endocrinologist at the Mayo Clinic in Rochester since 1998 and specializes in disorders of bone and mineral metabolism.

Optimizing Bone Health Across the Life Span  
Peak bone mass is achieved in early adulthood and is the culmination of genetic, hormonal and environmental factors. Bone mass changes during adulthood are the consequence of aging and disease. This talk will review the changes in bone mass over the lifespan and the implications for fracture risk. Learning Objectives:  
• Understand the role of diet and exercise in optimizing peak bone mass.  
• Recognize the decline in bone mass as a risk for fracture in aging.

11:00 a.m. – 11:45 a.m.  
Heritage Hall I/II  
Richard Weinshilboum, M.D.  
Dr. Weinshilboum received his B.A. and M.D. degrees from the University of Kansas, followed by residency training in Internal Medicine at the Massachusetts General Hospital. He began his affiliation with the Mayo Medical School and Mayo Clinic in Rochester, Minnesota, in 1972 where he is Professor of Molecular Pharmacology & Experimental Therapeutics and Internal Medicine as well as Professor in Cancer Genomics Research.

Precision Medicine in Drug Use  
“Precision Medicine” involves the application of genomics and other “omic” sciences to make it possible to better individualize the diagnosis, treatment and – ultimately – the prevention of human disease. In his “State of the Union Address” this year, President Obama announced a national “Precision Medicine Initiative”. This presentation will outline the background for that announcement and will describe efforts by the Mayo Clinic to integrate Precision Medicine into all aspects of the clinical practice.

11:45 a.m. – 12:45 p.m.  
Windsor Hall  
Lunch in Exhibits  
Doctors, staff and exhibitor registrants have a ticket in name badge for complimentary box lunch.

Have a question? Each lecture includes a 5-minute Q/A. Submit your question on the index card at your seat.
11:45 a.m. – 12:15 p.m. or 12:15 p.m. – 12:45 p.m.  
**Mayo Orthodontic Dept. Tour**  
Depart Heritage Foyer  
Meet in the foyer at either 11:45 a.m. or 12:15 p.m. for a half hour guided tour of the Mayo Orthodontic Department.

12:15 p.m. – 12:45 p.m.  
**Missouri Society of Orthodontists Meeting**  
Viking Room  
Missouri Society members may pick up their lunch in the exhibit hall prior to going to their annual component meeting.

12:45 p.m. – 1:30 p.m.  
**Nilay Shah, Ph.D.**  
Dr. Shah is a health services researcher in the division of Health Care Policy and Research at Mayo Clinic and Associate Professor of Health Services Research in the Mayo Clinic College of Medicine. He is the co-director of the Translating Comparative Effectiveness Research (TRACER) Unit, a part of the Mayo Center for Translational Science Activities (CTSA). He is also the Scientific Director for the Optum Labs Initiative in the Centers for Science of Health Care Delivery at Mayo Clinic. His research focus is on improving chronic care delivery, especially for patients with multiple chronic conditions.

**The Patient Revolution**  
There is an increasing focus on engaging patients in discussions about their health and healthcare. This is a key premise of developing a patient-centered healthcare delivery system. In this session, examples of developing and testing tools to engage patients in conversations about various healthcare decisions will be discussed. These examples will include discussions related to treatment for chronic conditions, management of acute conditions as well as prevention strategies.

1:30 pm. – 2:15 p.m.  
**R. Scott Wright, M.D.**  
Dr. Wright received his B.A. and M.D. from the University of Kentucky and did his post-medical school training in Internal Medicine, Clinical Investigation and Fellowship in Cardiovascular diseases at the Mayo Clinic in Rochester, Minnesota. He is a Professor of Medicine and a Consultant in Cardiology at the Mayo Clinic in Rochester, Minnesota. His work has focused on Acute Coronary Syndromes, Preventive Cardiology and Clinical Trial design and research.

**Heart Disease – Can We Prevent or Modify It? Heart Valve Replacement Without Heart Surgery: Is the Future Here?**  
New evidence on the prevention of heart disease. Can we do heart valve surgery without an incision now?
FRIDAY, OCTOBER 9 (CONTINUED)

2:15 p.m. – 2:45 p.m. Refreshment Break in Exhibit Hall
Windsor Hall
Sponsored by Dentsply GAC International

2:45 p.m. – 3:30 p.m. Heritage Hall I/II
Cory Ingram, M.D.

Dr. Ingram completed Medical School at Leiden University in Holland, Residency at the University of Nebraska, Geriatric Fellowship at the Maine-Dartmouth Geriatrics Fellowship Program, and Palliative Medicine at Dartmouth Hitchcock Medical Center with Hospice Training at St. Christopher’s Hospice in London, England.

Dr. Ingram is an active practicing palliative care consultant at Mayo Clinic and directs the Palliative Medicine program within Mayo Clinic’s Enterprise Office of Population Health Management. His research throughout his training has culminated in his current focus to improve the care of seriously ill patients and their families with a specific focus in spiritual care and dignity therapy.

In Service of Others: Caring for Seriously Ill People and their Families

Learning Objectives:
• Define four main roles inherent in providing whole person care
• Understand conversational approaches to whole person care
• Identify opportunities to improve individual and team care approaches.

3:30 p.m. – 4:15 p.m. Heritage Hall I/II
Seema Kumar, M.D.

Dr. Kumar is Associate Professor of Pediatrics in the Division of Pediatric Endocrinology and Metabolism at Mayo Clinic in Rochester, Minnesota. She received her M.D. from the All India Institute of Medical Sciences in New Delhi, India. She completed her residency in general pediatrics in 2000 and a fellowship in pediatric endocrinology and metabolism at Mayo Graduate School of Medicine in 2003. Her interests include the treatment of childhood obesity, type 2 diabetes and related cardiometabolic risk factors.

Obesity in Our Children and the Long Term Effects on the Health of These Individuals

The presentation will review the epidemiology of childhood obesity and factors that have contributed to the recent epidemic of childhood obesity. The presentation will include discussion on several morbidities associated with childhood obesity including type 2 diabetes mellitus, hypertension, hyperlipidemia, sleep apnea, orthopedic complications, and psycho-social sequelae. The increased predisposition of obese children, particularly adolescents, to become obese adults will be reviewed. In addition, in obese adolescents, increased risk of multiple comorbidities in adulthood, even if the obesity did not persist will be reviewed. Increased risk of several cancers with obesity will be discussed.
Women at Increased Risk for Breast Cancer: An Individualized Approach – Strategies to Reduce Risk

New research in lifestyle factors such as physical activity, alcohol use and weight management are associated with breast cancer risk and prognosis. Breast cancer risk calculation models and availability to genetic testing has improved the identification of breast cancer risk to guide a personalized approach in the management of high-risk women and those with hereditary predisposition. Surveillance with mammography in conjunction with breast magnetic resonance imaging (MRI) in very high-risk women or those with a breast cancer genetic mutation has been shown to be more sensitive in detection of breast cancer. Pharmacologic therapy also known as chemoprevention with tamoxifen, raloxifene (selective estrogen receptor modulators) and exemestane (aromatase inhibitors) has demonstrated a substantial reduction in breast cancer risk among women with high risk or precancerous breast lesions. Learning Objectives:

• Discuss lifestyle modification options for preventing breast cancer
• Illustrate new breast imaging modalities for surveillance and early detection of breast cancer
• Use breast cancer risk calculation models to aid in the identification of breast cancer risk and tailor appropriate risk reducing strategies.

See the latest products and services at the table top displays while enjoying a complimentary light snack to background music provided by MSO’s Dr. John Crawford. All registrants are invited to use their one beverage ticket for a complimentary soft drink, bottled water, wine or beer at a bar located in the Windsor Room.

After the exhibit hall reception concludes join us at the nearby Rochester Art Center for a reception with heavy hot gourmet hors d’oeuvres. “Jazz up” the evening to the tunes of MSO’s Dr. John and Sue Crawford and Dr. Paul Hermanson…back by popular demand! A trolley shuttle service, beginning at 6:15 p.m. outside the Kahler Grand Lobby, will run a continuous route to/from the Rochester Art Center until the event concludes. Or, if the weather is nice, look for the MSO planning committee members to greet and direct
you for a short walk over to the Rochester Art Center (RAC).

Take time to visit the RAC’s exhibits, included in the reception admission. The main gallery features contemporary filmmaker Akosua Admoa Owusu’s “Existential Crisis.” This presentation includes five films of varying lengths which subtly weave together fiction, parable and autobiographical experiences. The 3rd floor emerging artist exhibit features Eric Frye focusing on the concept of sonic objects, in which the listener must ask questions about the reliability of their own senses and the materiality of sounds. No food or drink allowed in the exhibits area please.

SATURDAY, OCTOBER 10

7:30 a.m. – 4:00 p.m.  Registration Desk Open  Heritage Foyer

7:30 a.m. – 1:00 p.m.  Exhibits Open  Heritage Foyer/Windsor Hall

A name badge is required to enter the exhibit hall. Refer to today’s schedule for times for the continental breakfast, refreshment break and lunch offered in the exhibit hall. Only registered doctors, staff and exhibitors have tickets for complimentary lunch in exhibit hall and access to hall for continental breakfast.

7:30 a.m. – 8:30 a.m.  Continental Breakfast in Exhibits  Windsor Hall

Sponsored by Missouri Society of Orthodontists

7:30 a.m. – 8:15 p.m.  Elizabethan Ballroom

Midwestern Society of Orthodontists
Annual Business Meeting and Continental Breakfast  Sponsored by Missouri Society of Orthodontists

All meeting attendees and their family members are invited to this annual meeting and presentation of MSO 2015 Earl E. Shepard Distinguished Service Award to Dr. John Kanyusik (pictured, see page 2). Continental breakfast items are available in the back of the room to pick-up on your way into the meeting.

STAFF LECTURE PROGRAM

8:30 a.m. – 4:00 p.m.  Heritage Hall III

Moderator: Dr. Nellie Kim-Weroha  Sponsored by American Orthodontics

8:30 a.m. – Noon

Amy Kirsch

Amy Kirsch captivates dental teams with her insights and tactics on how to energize and improve their practices. As a nationally known dental practice management speaker and consultant, Amy provides the spark dental teams need to make positive changes that build teamwork, improve patient satisfaction, and increase revenue. She is currently a Clinical Assistant Professor at the University of Colorado School of Dental Medicine.
Overcoming the Top Five Challenges Facing Successful Orthodontic Practices Today

To achieve practice and professional success in today’s tough economic orthodontic environment, you need to implement winning strategies and direction. To help you “sharpen the saw”, join Amy Kirsch in this highly interactive workshop to uncover your practice’s strengths and weaknesses. Learn how to overcome the challenges in your practice and be able to make positive changes for future growth and stability. The top five challenges facing orthodontic practices include:

- Attracting and retaining quality and committed team members
- Improving team motivation and leadership skills
- The role of PPO’s in dentistry
- Keeping the schedule full and productive
- Evaluating effective internal, external and advertising marketing techniques.

DOCTOR UNIV. OF MINNESOTA LECTURES

8:30 a.m. – 4:00 p.m.
Moderator: Dr. Grant Collins
Sponsored by Ortho2

8:30 a.m. – Noon
Heritage Hall I/II

Brent Larson, DDS. MS

Dr. Larson received his DDS degree from the University of Minnesota and completed his orthodontic training at the University of North Carolina. He has practiced orthodontics in the US Air Force, as a faculty member at Mayo Clinic, and in private practice in Rochester, MN. He currently serves as Associate Professor and as Director of the Division of Orthodontics at the University of Minnesota. Dr. Larson is a past president of the Minnesota Association of Orthodontists, the Midwestern Society of Orthodontists and currently represents the MSO on the AAO Board of Trustees.

Success, Happiness and Why Treatment Planning Matters: An Interactive Experience

This presentation will engage the audience by use of an audience response system (ARS) to get real-time feedback from the participants. This technology allows each attendee to provide opinions or answers to questions that are immediately tabulated and displayed. The study club atmosphere created by this audience participation will generate feedback and discussion about treatment planning and related issues in contemporary practice. Topics will include challenging clinical cases, emerging technology, contemporary treatment planning, and what makes people happy! After completion of this session the participant will be able to:

- Know how their opinions of new technology and treatment approaches compare with their peers
- Participate in group treatment planning discussions and know how their treatment approach may compare to other participants
- See how existing evidence can be used to help answer real clinical questions
- Discover if majority opinion generally reflects current knowledge
- Understand how you, your staff, and your patients can be happier by understanding what really makes them happy.
10:00 a.m. – 10:30 a.m.  
Refreshment Break  
Windsor Hall

Noon – 1:00 p.m.  
Lunch in Exhibits  
Windsor Hall  
Doctors, staff and exhibitor registrants have ticket in name badge for complimentary box lunch.

Noon – 1:00 p.m.  
MSO Past Presidents Lunch  
Lord Essex

1:00 p.m. – 3:00 p.m.  
Council on Orthodontic Education Meeting  
Director’s Room

1:00 p.m. – 3:00 p.m.  
Exhibitor Move-out  
Heritage Foyer/Windsor Hall

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STAFF LECTURE PROGRAM

8:30 a.m. – 4:00 p.m. (continued)  
Moderator: Dr. Nellie Kim-Weroha  
Sponsored by American Orthodontics

1:00 p.m. – 4:00 p.m.  
Amy Kirsch  
Heritage Hall III  
See Saturday morning bio/photo

Improving Patient Relations in Going from Average to Great!

Orthodontists and their team members have a unique opportunity to impact their patients in extraordinary ways. Through the implementation of key patient service techniques and exceptional communication skills, dental professionals can better exceed patients’ expectations. Participants will learn:

- How to make patients feel special
- How to increase treatment acceptance
- Eight key customer service communication skills
- How to improve the new patient telephone call.

Join us in these fast paced workshops designed for your orthodontic team!

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Disclaimer: The Midwestern Society of Orthodontists (MSO) does not review or approve of or necessarily agree with the topics, speakers, and presentations set forth in this program. As such by virtue of your attendance at this program, you acknowledge that any and all actions taken by you based upon such topics, speakers and presentations are undertaken by you at your own risk and further agree to hold the MSO harmless from any and all liability in relations to the same. The MSO encourages you to make your own independent judgment as to the topics, speakers, and presentations, to rely on the advice of professionals, as appropriate, in making decisions in relation hereto.
DOCTOR UNIV. OF MINNESOTA LECTURES
8:30 a.m. – 4:00 p.m. (continued)
Moderator: Dr. Grant Collins

Sponsored by Ortho 2

1:00 p.m. – 1:45 p.m.  
Heritage Hall I/II
Thorsten Gruenheid, DDS, Ph.D.

Dr. Gruenheid is an Assistant Professor in the Division of Orthodontics at the University of Minnesota. He is committed to excellence and is proud to contribute to education and scientific advancement in the field of orthodontics. He is a published author, has served as a reviewer for several scientific journals, and has lectured nationally and internationally on a variety of topics in orthodontics and oral biology.

Personalized Orthodontic Appliances: Where Are We Headed and Why Do We Need Them?
Advances in 3D imaging, digital model technology, CAD/CAM, and robotics have catalyzed the development of personalized appliance systems for orthodontic treatment. These systems allow clinicians to manipulate 3D models of patients’ teeth to simulate orthodontic treatment. Machines then fabricate the appliances with the necessary geometry to complete treatment according to the virtual treatment plan. This session will:

- Review the available scientific literature with regard to treatment time, side effects, treatment outcomes, and effectiveness of personalized appliance systems
- Contemplate future directions of personalized appliance systems that may arise from further advances in technology and from combining imaging data with mathematical models
- Identify the advantages of personalized appliance systems over conventional appliance systems and discuss why their use has the potential to result in better patient care.

1:45 p.m. – 2:30 p.m.  
Heritage Hall I/II
Gary C. Anderson, DDS, MS

Dr. Anderson has been a member of the faculty of the School of Dentistry since 1984. He directed the undergraduate curriculum in occlusion for 25 years and is the Director of the Cleft and Craniofacial Program. His research interests include investigation of clinical measurement of occlusion, occlusal wear, clinical diagnosis of temporomandibular disorders and related headaches, clinical trials in the treatment of temporomandibular disorders and clinical measurement of facial cleft and craniofacial anomalies.

TMD in the Busy Orthodontic Practice
The efficient and validated screening for TMD in an orthodontic practice will be presented, supported by recent research. This will be complemented with background in simple clinical tests to determine whether the jaw pain is related to the temporomandibular joints or
the masticatory muscles. Recent efforts have also provided validated diagnostic criteria for jaw-related headaches. These criteria are being accepted in the medical community as well. Finally, the attendee will also be provided with background for management of TMD pain and dysfunction, which can develop during orthodontic treatment.

2:30 p.m. – 3:15 p.m.  
**Heritage Hall I/II**

**Michael Rohrer, DDS, MS**

Professor Michael Rohrer is Professor of Oral and Maxillofacial Pathology at the University of Minnesota, a Diplomate and past president of the American Board of Oral and Maxillofacial Pathology, and a past president of the American Academy of Oral and Maxillofacial Pathology.

**Oral Pathology for the Orthodontist**

The majority of orthodontic patients are young people and adolescents who are susceptible to a range of head and neck and oral diseases that may be inconsequential or potentially very serious. Many of these diseases are more prominent in this age group and include reactive soft and hard tissue lesions, autoimmune diseases, hereditary conditions, bacterial and viral infections, and benign and malignant tumors. This class will be an overview of various oral diseases in this age group with suggested differential diagnoses and treatment recommendations.

3:15 p.m. – 4:00 p.m.  
**Heritage Hall I/II**

**Heather Whitney Sesma, Ph.D., LP**

Heather Sesma earned her Ph.D. from the University of Minnesota and completed her clinical training in neuropsychology at the Kennedy Krieger Institute at Johns Hopkins University School of Medicine. She was on the faculty at the University of Minnesota Medical School and currently is a neuropsychologist for the Neuroscience Program at Children’s Hospitals and Clinics of Minnesota, where she provides evaluation and treatment planning for individuals with autism spectrum disorders and other neurodevelopmental conditions.

**Enhancing the Patient Experience for Patients with Autism Spectrum and Other Neurodevelopmental Disorders**

This session will review features of autism spectrum disorder (ASD) and highlight the unique oral health care needs of individuals with ASD as well as the barriers that reduce their access to appropriate care. We will discuss behaviors that make clinic visits challenging and review strategies and available tools for welcoming families and improving patient comfort and cooperation with necessary procedures. We also will review behavior management strategies and resources for improving dental hygiene and adherence to home treatment recommendations.
The Midwestern Society of Orthodontists is an ADA CERP Recognized Provider approved by the American Association of Orthodontists. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by board of dentistry. The Midwestern Society of Orthodontists designates this activity for up to 13.5 continuing education credits. Concerns or complaints about a CE provider may be directed to the provider or to the Commission for Continuing Education Provider Recognition at ADA.org/CERP.
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AAO Foundation
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AAO, AAO PAC
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The only orthodontic specialty board recognized by the ADA and sponsored by the AAO.
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<td>Mayo Clinic Executive Health Program</td>
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