

**Committee on Energy and Commerce**  
**U.S. House of Representatives**  
Witness Disclosure Requirement - "Truth in Testimony"  
Required by House Rule XI, Clause 2(g)(5)

|   |     |   |
|---|-----|---|
| 1. <b>Your Name:</b> Steven Koop, M.D.  |     |   |
| 2. <b>Your Title:</b> Medical Director  |     |   |
| 3. <b>The Entity(ies) You are Representing:</b> Gillette Children's Specialty Healthcare  |     |   |
| 4. <b>Are you testifying on behalf of the Federal, or a State or local government entity?</b>   | Yes | No<br><input checked="" type="checkbox"/> |
| 5. <b>Please list any Federal grants or contracts, or contracts or payments originating with a foreign government, that you or the entity(ies) you represent have received on or after January 1, 2013. Only grants, contracts, or payments related to the subject matter of the hearing must be listed.</b><br><br>Attached. |     |   |
| 6. <b>Please attach your curriculum vitae to your completed disclosure form.</b><br><br>Attached.   |     |   |

Signature: \_\_\_\_\_



Date: 7/5/2016

| Grant ID                            | Project Title   | Amount       | Awarding Agency |
|-------------------------------------|---|--------------|-----------------|
| <b><u>DIRECT FEDERAL GRANTS</u></b> |   |              |                 |
| 1U01DD001074-01                     | Comp B-Participation of Gillette Children's Specialty Healthcare in the NSBPR   | \$ 60,090.00 | CDC             |
| 1U01DD001074-01                     | Comp B-Participation of Gillette Children's Specialty Healthcare in the NSBPR   | \$ 67,090.00 | CDC             |
| <b><u>SUBRECIPIENT GRANTS</u></b>   |   |              |                 |
| 5R01HD073126                        | Intrathecal Baclofen and Pain Outcomes in Cerebral Palsy                        | \$125,691.00 | NIH             |
| 5R01HD073126                        | Intrathecal Baclofen and Pain Outcomes in Cerebral Palsy                        | \$136,021.00 | NIH             |
| 5R01HD073126                        | Intrathecal Baclofen and Pain Outcomes in Cerebral Palsy                        | \$118,138.00 | NIH             |
| 1R2DE023519-01                      | Speech Outcome of Children with Cleft Palate: The Americleft Project            | \$ 6,762.00  | NIH             |
| 1R21HD084213-01                     | Impact of Crouch Gait and Surgical Treatment on Knee Mechanics and Function     | \$ 22,070.00 | NIH             |
| 1R01NS091056-01A1                   | Quantifying patient-specific changes in neuromuscular control in cerebral palsy | \$ 95,169.00 | NIH             |
| 5R43HD080241-02                     | At Home Gait Monitoring of Cerebral Palsy to Improve Orthotic Treatment         | \$ 35,000.00 | NIH             |

## Steven E. Koop

### Professional Address

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

### Home Address

[REDACTED]  
[REDACTED]

### E-Mail Addresses

[REDACTED]  
[REDACTED]

### Education

| <u>Degree</u>                          | <u>Institution</u>   | <u>Dates</u> |
|--|--|--------------|
| B.A. (Mathematics)                     | St. John's University<br>Collegeville, MN  | 1975         |
| M.D.                                   | University of Minnesota<br>Medical School  | 1979         |
| Internship (Surgery)                   | St. Paul-Ramsey Medical<br>Center  | 1979-80      |
| Residency (Orthopaedics)               | University of Minnesota-<br>Minneapolis Veterans<br>Administration Combined<br>Orthopaedic Surgery Program | 1980-84      |
| Fellowship (Pediatric<br>Orthopaedics) | Newington Children's Hospital<br>(Connecticut)   | 1984-85      |

## **Certification and Licensure**

American Board of Orthopaedic Surgery, 2008 (recertification through 12/31/17)  
American Board of Orthopaedic Surgery, 1998 (recertification)  
American Board of Orthopaedic Surgery, 1987  
State of Minnesota, Board of Medical Practitioners, #26064 - April 3, 1981  
National Board of Medical Examiners #210594 - July 1, 1980

## **Academic Appointments**

University of Minnesota Medical School (Minneapolis, Minnesota)  
Adjunct Associate Professor of Orthopaedic Surgery (2009-date)  
Associate Professor of Orthopaedic Surgery (1997-2009)  
Assistant Professor of Orthopaedic Surgery (1985-1997)

## **Professional Appointments**

### **Gillette Children's Specialty Healthcare (St. Paul, Minnesota)**

Attending Staff Physician (Orthopedic Surgery) 1985 to date  
Chief of Medical Staff (election, two year term) 1991-1992 and 1997-1998  
Director - Motion Analysis Laboratory Director (appointment) 1986-92  
Director - Medical Education and Research (appointment) 1987-2000  
Medical Director - (appointment) 2001-date  
Responsible for medical programs of the organization  
Board of Directors - 1989-2016

### **Shriners Hospital for Children (Minneapolis, Minnesota)**

Active Medical Staff (Orthopedic Surgery) 1985-2005  
Consulting Medical Staff (Orthopedic Surgery) 2007-date  
Assistant Chief of Staff (appointment) 1990-2000

### **Regions Medical Center (St. Paul, Minnesota)**

Active Medical Staff (Orthopedic Surgery) 1985 to date  
Chair (Interim) - Department of Orthopedic Surgery February 1994-June 1999

## **Children's Hospital and Clinics of Minnesota**

Active Medical Staff (Orthopedic Surgery) 1991 to date

### **Professional Societies**

Ramsey County Medical Society 1983 to date  
Minnesota Medical Association 1985 to date  
American Medical Association 1985 to date  
Minnesota Orthopaedic Society 1985 to date  
    Treasurer 1996-97  
    President 1999-2000  
American Academy for Cerebral Palsy and Developmental Medicine 1985 to date  
    Regional Instructional Course Chair 1987-88  
    Annual Meeting Program Committee 1988  
    Board of Directors 1991-1994  
Pediatric Orthopaedic Society of North America 1988 to date  
    Exhibits Committee 1991-92  
    Membership Committee 1994-1999 (Chair 1998-99)  
    Publications Committee 2003-04  
    Archives and History Committee 2011-15 (Chair 2014-15)  
    Bylaws Committee 2014-17  
    Development Committee 2014-17  
American Academy of Orthopaedic Surgeons 1989 to date  
Scoliosis Research Society 1992 to date  
Wallace Cole Orthopaedic Society 1993 to date  
North American Society of Gait and Clinical Movement Analysis 1995 to date  
The American Orthopaedic Association 2000 to date  
    Critical Issues Committee 2003-06

### **Community Service Activity**

St. John's Preparatory School  
Board of Overseers (1976-1989 )

Minnesota State Board of Medical Practice  
Physical Therapy Advisory Council (1992-1995) **Appointed by Governor**

Spina Bifida Association of Minnesota  
Advisory Council, 1996

Minnesota's Private Colleges  
Board member (2003-2006)

Archdiocese of St. Paul and Minneapolis  
Deacon (1992-date)

Hospital Voz Andes, Quito, Ecuador (2000-date)  
2 to 3 weeks of volunteer medical care each year

St. John's University School of Theology  
Board Member 2010-2016

## **Awards**

Am. Acad. for Cerebral Palsy and Developmental Medicine Fred P. Sage Award (1993)  
For "Normal Walking: An Interactive Instructional CD"  
American Academy for Cerebral Palsy and Developmental Medicine. Coauthors:  
Koop, SE, Stout, J, Gage, JR, Novacheck, TF.  
University of Minnesota, Department of Orthopedic Surgery (1997)  
For resident teaching  
Midwest Publishers Award (1998)  
For *We Hold This Treasure: The Story of Gillette Children's Hospital*  
Koop, SE  
Afton Historical Society Press 1998  
The Catholic Spirit "Leading with Faith" Award (2012)  
For community service  
University of Minnesota Medical School 2016 Distinguished Alumnus Award

## **Clinical Focus**

My work has been dedicated to the care of children and adolescents who have conditions that affect the musculoskeletal system, from brief event to lifelong childhood-onset disability.

## **Scholarship and Research**

### **Grants**

United Cerebral Palsy Foundation 1995-96

Principal Investigators:  
Lisa Schutte, PhD  
Steven E. Koop, M.D.  
James R. Gage M.D.

A one-year \$15,000 grant supporting the development of a gait deviation index based on three dimensional gait analysis, for the purpose of assessing clinical outcomes of surgical procedures in cerebral palsy.

### **Editorial Work**

*Gait and Posture Journal* (Butterworth-Heinemann, now Elsevier Science)  
Associate Editor  
International Editorial Board  
1991-2003

### **Peer-Reviewed Publications**

(as of 1/1/2016; h-index: Scopus 13, Google Scholar 16)

Braddock, M.E., Leutgeb, V., Zhang, L., Koop, S.E.  
Factors influencing recurrent admissions among children with disabilities in a specialty children's hospital  
(2015) *Journal of Pediatric Rehabilitation Medicine*, 8 (2), pp. 131-139.

Lonstein, J.E., Koop, S.E., Novachek, T.F., Perra, J.H.  
Results and complications after spinal fusion for neuromuscular scoliosis in cerebral palsy and static encephalopathy using Luque-Galveston instrumentation: Experience in 93 patients  
(2012) *Spine*, 37 (7), pp. 583-591.

Koop, S.E.  
Scoliosis and Rett syndrome  
(2011) *Developmental Medicine and Child Neurology*, 53 (7), pp. 582-583.

Koop, S.E.  
Scoliosis in cerebral palsy  
(2009) *Developmental Medicine and Child Neurology*, 51 (SUPPL. 4), pp. 92-98.

Schwartz, M.H., Koop, S.E., Bourke, J.L., Baker, R.  
A nondimensional normalization scheme for oxygen utilization data  
(2006) *Gait and Posture*, 24 (1), pp. 14-22.

Kiang, K.M., Ogunmodede, F., Juni, B.A., Boxrud, D.J., Glennen, A., Bartkus, J.M., Cebelinski, E.A., Harriman, K., Koop, S., Faville, R., Danila, R., Lynfield, R.  
Outbreak of osteomyelitis/septic arthritis caused by *Kingella kingae* among child care center attendees  
(2005) *Pediatrics*, 116 (2), pp. e206-e213.

Facanha-Filho, F.A.M., Winter, R.B., Lonstein, J.E., Koop, S., Novacheck, T., L'Heureux E.A., Jr., Noren, C.A.

Measurement accuracy in congenital scoliosis

(2001) *Journal of Bone and Joint Surgery - Series A*, 83 (1), pp. 42-45.

Boseker, E.H., Moe, J.H., Winter, R.B., Koop, S.E.

Determination of 'normal' thoracic kyphosis: A roentgenographic study of 121 'normal' children

(2000) *Journal of Pediatric Orthopaedics*, 20 (6), pp. 796-798.

Klemme, W.R., Denis, F., Winter, R.B., Lonstein, J.W., Koop, S.E.

Spinal instrumentation without fusion for progressive scoliosis in young children

(1997) *Journal of Pediatric Orthopaedics*, 17 (6), pp. 734-742.

Charry, O., Koop, S., Winter, R., Lonstein, J., Denis, F., Bailey, W.

Syringomyelia and scoliosis: A review of twenty-five pediatric patients

(1994) *Journal of Pediatric Orthopaedics*, 14 (3), pp. 309-317.

Koop, S.E., Gage, J.R.

Treatment of deformities of the locomotor apparatus in hemiplegia [Die Behandlung der Deformaten am Bewegungsapparat bei Hemiplegie]

(1992) *Orthopäde*, 21 (5), pp. 293-300.

Gau, Y.-L., Lonstein, J.E., Winter, R.B., Koop, S., Denis, F.

Luque-galveston procedure for correction and stabilization of neuromuscular scoliosis and pelvic obliquity: A review of 68 patients

(1991) *Journal of Spinal Disorders*, 4 (4), pp. 399-410.

Boachie-Adjei, O., Lonstein, J.E., Winter, R.B., Koop, S., VanDen Brink, K., Denis, F.

Management of neuromuscular spinal deformities with Luque segmental instrumentation

(1989) *Journal of Bone and Joint Surgery - Series A*, 71 (4), pp. 548-562.

Koop, S.E.

Infantile and juvenile idiopathic scoliosis

(1988) *Orthopedic Clinics of North America*, 19 (2), pp. 331-337.

Gage, J.R., Perry, J., Hicks, R.R., Koop, S., Werntz, J.R.

Rectus femoris transfer to improve knee function of children with cerebral palsy

(1987) *Developmental Medicine and Child Neurology*, 29 (2), pp. 159-166.

Koop, S.E., Winter, R.B., Lonstein, J.E.

The surgical treatment of instability of the upper part of the cervical spine in

children and adolescents  
(1984) *Journal of Bone and Joint Surgery - Series A*, 66 (3), pp. 403-411.

### **Books (sole author)**

*We Hold This Treasure: The Story of Gillette Children's Hospital*  
Koop, SE  
Afton Historical Society Press 1998

### **Books (co-editor)**

*The Identification and Treatment of Gait Problems in Cerebral Palsy*  
Gage, JR, Schwartz, MH, Koop, SE, and Novacheck, TF (editors)  
MacKeith Press 2009

### **Book Chapters**

Koop, SE, Quanbeck DS: "Three Common Problems of Childhood Hip Pain"  
*The Pediatric Clinics of North America* 43(5)  
W.B. Saunders 1996

Koop, SE: "Orthopedic Aspects of Static Encephalopathies"  
*Static Encephalopathies of Infancy and Childhood*  
Raven Press 1992

Koop, SE: "Adolescent Hallux Valgus"  
*The Child's Foot and Ankle*  
Raven Press 1992

Koop, SE, Gage, JR: "Clinical Gait Analysis: Application to the Management of Cerebral Palsy"  
*Three Dimensional Movement*  
Human Kinetics Publishers 1994

Koop, SE: "Myelomeningocele"  
*Moe's Textbook of Scoliosis and Other Spinal Deformities*  
Saunders 1994

Koop, SE: "Scheuermann's Disorder"  
*Orthopaedic Knowledge Update*  
American Academy of Orthopaedic Surgeons 2002

Koop, SE: "Musculoskeletal Growth and Development"  
*The Identification and Treatment of Gait Problems in Cerebral Palsy*

MacKeith Press 2009

Koop, SE: "Natural History of Ambulation with Cerebral Palsy"  
*The Identification and Treatment of Gait Problems in Cerebral Palsy*  
MacKeith Press 2009

Koop, SE, Murr, S: "Postoperative Care and Rehabilitation"  
*The Identification and Treatment of Gait Problems in Cerebral Palsy*  
MacKeith Press 2009

### **Peer-Reviewed Oral Presentations at Professional Meetings**

Koop, SE, Winter, RB, Lonstein, JE: The surgical treatment of instability of the upper cervical spine in children and adolescents.  
Scoliosis Research Society, New Orleans, September, 1983.

Koop, SE, Winter, RB: Occipital periosteal flap technique for occipital cervical arthrodesis.  
Pediatric Orthopaedic Society of North America Annual Meeting,  
Vancouver, British Columbia, Canada, May, 1984.

Koop, SE, Gage, J, Hicks, R, Werntz, J: Rectus femoris transfer to improve knee function of children with cerebral palsy.  
Pediatric Orthopaedic Society of North America Annual Meeting, Boston, Massachusetts, May, 1986.

Koop, SE, Behrens, AF, Welch, J: Use of external fixation in childhood lower extremity fractures.  
American Academy of Orthopaedic Surgeons Annual Meeting, San Francisco, California, January 1987.

SICOT International Meeting, Germany, August 1987.

Boachie Adjei, O., Lonstein, JE, Winter, RB, Koop, SE, and Vanden Brink, KD: The management of neuromuscular spine deformities with segmental spinal instrumentation.  
Scoliosis Research Society, Vancouver, British Columbia, Canada, September 1987.

Lonstein, JE, Winter, RB, Denis, F., Koop, SE, Klassen, R: The results of stimulator treatment of 332 cases of adolescent idiopathic scoliosis.  
Scoliosis Research Society, Baltimore, Maryland, September 1988.

Koop, SE: Spinal instrumentation without fusion in progressive spinal deformity.

Pediatric Orthopaedic Society of North America Annual Meeting,  
Colorado Springs, Colorado, May 1988.

American Academy of Orthopaedic Surgeons, Las Vegas, Nevada,  
February 1989.

Scoliosis Research Society Annual Meeting, Portland, Oregon, September  
1994.

Behrens, F., Johnson, J., Guntzburger, T., Comfort, T., Gaither, D., and Koop, SE:  
Distal nail impaction vs. locking for unstable femoral fractures. A randomized  
trial.

Orthopaedic Trauma Association Annual Meeting, Baltimore, Maryland,  
1987.

Koop, SE, Stout, J., Starr, R., Drinken, W: Oxygen consumption during walking  
in children with cerebral palsy

Pediatric Orthopaedic Society of North America Annual Meeting, Hilton  
Head, South Carolina, May 1989.

American Academy for Cerebral Palsy & Developmental Medicine  
Annual Meeting, San Francisco, California, October 1989.

Gage, JR, Perry, J., Koop, SE: Fundamentals of Human Walking and Its  
Pathophysiology in Cerebral Palsy.

American Academy for Cerebral Palsy & Developmental Medicine  
Annual Meeting, Orlando, Florida, October 3-6, 1990.

Gage, JR, DeLuca, P., Koop, SE, Ounpuu, MS, Stout, J: Utilization of Gait  
Analysis for Clinical Decision-Making in Cerebral Palsy.

Scoliosis Research Society Annual Meeting, Minneapolis, Minnesota  
September 27, 1991.

American Academy for Cerebral Palsy & Developmental Medicine  
Annual Meeting, Louisville, Kentucky, October 10, 1991.

Koop, SE, Winter, RB, Lonstein, JE, Denis, F: Prevalence of Spinal Cord or  
Canal Abnormalities in Idiopathic, Congenital, and Neuromuscular Scoliosis.

Scoliosis Research Society Annual Meeting, Minneapolis, Minnesota,  
September 25, 1991.

Charry, O., Koop, SE, Winter, RB, Lonstein, JE, Denis, F., Bailey, W:  
Syringomyelia and Scoliosis: A Review of Twenty-five Pediatric Patients.

Scoliosis Research Society Annual Meeting, Minneapolis, Minnesota,  
September 27, 1991,

Stout, J., Gormley, M., Koop, SE, Quanbeck DS, Krach, LE, Abramowitz, A.,  
Dunn, M: The Effects of Selective Dorsal Rhizotomy on Oxygen Consumption  
and Gait Velocity in Children with Cerebral Palsy.

American Academy for Cerebral Palsy & Developmental Medicine 51st  
Annual Meeting, September 18, 1997.

Schwartz, M, Koop, SE, Bourke, J, Baker, R.: A New Normalization Scheme for  
Oxygen Consumption Data Using Non-Dimensional Gait Variabilities.  
Gait and Clinical Movement Analysis Society Annual Meeting,  
Lexington, Kentucky, April 21-24, 2004.

Koop, SE, Braddock, M, Zhang, Lei, Leutgeb, Ginny, Salmanowicz, C, Trost, J:  
Factors Influencing Recurrent Readmissions Among Children With Disabilities in  
a Specialty Children's Hospital.  
American Academy of Cerebral Palsy & Developmental Medicine Annual  
Meeting, Milwaukee, Wisconsin, October 18,

### **Invited Oral Presentations at Local and Regional Meetings**

Koop, SE: Spinal instrumentation without fusion in progressive spinal deformity.  
Alumni Days,  
Newington Children's Hospital, Newington, Connecticut, October 1987.

Koop, SE, Stout, J., Starr, R., Drinken, W: Oxygen consumption during walking  
in children with cerebral palsy.  
26th Annual Orthopaedic Meeting, Newington Children's Hospital,  
Newington, Connecticut, October 1988.

Minnesota Orthopaedic Society Annual Meeting, April 1989.

Gage, JR, DeLuca, P., Koop, SE, Ounpuu, MS, Stout, J: Utilization of Gait  
Analysis for Clinical Decision-Making in Cerebral Palsy.  
Shriners Hospital for Crippled Children Annual Chief of Staff Meeting,  
Spokane, Washington, September 1991.

Koop, SE: The Limping Child.  
Twenty-Fourth Annual Fall Clinics, Montrose Memorial Hospital,  
Montrose, Colorado, September 29, 1995.

Koop, SE: Outcomes After Prematurity: Risks of CP

Twenty-Fourth Annual Fall Clinics, Montrose Memorial Hospital,  
Montrose, Colorado, September 29, 1995.

Koop, SE: Hip Pain in Cerebral Palsy Patients Undergoing Spine Fusion.  
Thirty-Fourth Annual Children's Orthopaedic Conference, Connecticut  
Children's Medical Center, November 16, 1996.

Koop, SE: Hip Pain in Children and Adolescents.  
Western Orthopaedic Association Annual Meeting, Aspen, Colorado,  
September 7-10, 1998.

Koop, SE: Femoral Osteotomy in the Treatment of Slipped Capital Femoral  
Epiphysis.  
Wallace H. Cole Orthopaedic Society Annual Meeting, Telluride,  
Colorado, September 23-27, 1998.

Koop, SE: Factor Leiden.  
Wallace H. Cole Orthopaedic Society Annual Meeting, Williamsburg,  
Virginia, April 26-30, 2000.

Koop, SE: When Should You Worry About the Spinal Canal in Children?  
Wallace H. Cole Orthopaedic Society Annual Meeting, San Antonio,  
Texas March 29 – April 1, 2001.

Koop, SE: The Energy Expenditure of Normal and Pathologic Gait.  
39<sup>th</sup> Annual Orthopaedics Conference, Connecticut Children's Medical  
Center, November 2001.

Koop, SE: Kinematic, Kinetics, & EMG.  
Twelfth Annual Conference of Clinical Gait Analysis: A Focus on  
Interpretation. Minneapolis, Minnesota, March 21, 2002.

Koop, SE: Treatment Options in Myelomeningocele.  
Twelfth Annual Conference of Clinical Gait Analysis: A Focus on  
Interpretation. Minneapolis, Minnesota, March 21, 2002.

Koop, SE: Lever Arm Dysfunction: To Treat or Not to Treat.  
Twelfth Annual Conference of Clinical Gait Analysis: A Focus on  
Interpretation. Minneapolis, Minnesota, March 21, 2002.

Koop, SE: Treatment of Crouch Gait.  
Twelfth Annual Conference of Clinical Gait Analysis: A Focus on  
Interpretation. Minneapolis, Minnesota, March 21, 2002.

- Koop, SE: Supracondylar Humerus Fractures.  
Wallace H. Cole Orthopaedic Society Annual Meeting, Palm Desert, California, November 6-10, 2002.
- Koop, SE: Current Uses of Energy Assessment in the Gillette Motion Lab.  
Wallace H. Cole Orthopaedic Society Annual Meeting, New York, July 22-26, 2009.
- Koop, SE: Scoliosis in Cerebral Palsy.  
Sixteenth Annual Conference Management Strategies for Functional Impairments in Children with Neuromuscular Conditions. Kluge Children's Rehabilitation & Research Institute at the University of Virginia, Charlottesville, Virginia, December 3-4, 2010.
- Koop, SE: Building Multidisciplinary Care at Gillette Children's.  
Sixteenth Annual Conference Management Strategies for Functional Impairments in Children with Neuromuscular Conditions. Kluge Children's Rehabilitation & Research Institute at the University of Virginia, Charlottesville, Virginia, December 3-4, 2010.
- Koop, SE: Spine Surgery in Cerebral Palsy.  
Minnesota Memorial Pediatric Orthopaedic Symposium, Crowne Plaza Riverfront Hotel, sponsored by Gillette Children's Specialty Healthcare, Mayo Clinic, and Shriners Hospitals for Children, September 22, 2011.
- Koop, SE: Upper Extremity/Spine Session Discussion/Case Presentation.  
Minnesota Memorial Pediatric Orthopaedic Symposium, Crowne Plaza Riverfront Hotel, sponsored by Gillette Children's Specialty Healthcare, Mayo Clinic, and Shriners Hospitals for Children, September 22, 2011.
- Koop, SE: Providing Orthopedic Care in Challenging Settings.  
Minnesota Memorial Pediatric Orthopaedic Symposium, Crowne Plaza Riverfront Hotel, September 22, 2011.
- Koop, SE: The Limping Child, Emergency Room Work-up.  
Pediatric Trauma Summit, Crowne Plaza Riverfront Hotel, sponsored by the University of Minnesota Medical School and HealthPartners, September 22-23, 2011.
- Koop, SE: Septic Arthritis and Osteomyelitis in Children.  
Management of Musculoskeletal Conditions in Children and Adolescents, The Westin Edina Galleria, sponsored by Gillette Children's Specialty Healthcare, December 2, 2011.

Koop, SE: Surgical Treatment of Crouch Gait in Myelomeningocele.  
Minnesota Memorial Pediatric Orthopaedic Symposium, Crowne Plaza  
Riverfront Hotel, September, 2012.

Koop, SE: Supracondylar Fractures in Children.  
Wallace H. Cole Orthopedic Society 46<sup>TH</sup> Annual Meeting, August 6-10,  
2014, held at the Grandview Lodge, Nisswa, Minnesota.

## **Teaching**

### **Visiting Professor Invitations**

Carrie Tingley Children's Hospital  
Albuquerque, New Mexico  
December 1988

Maimonides Medical Center  
Brooklyn, New York  
November 1989

Our Lady's Hospital  
Dublin, Ireland  
September 27-28, 1993

Scottish Rite Children's Medical Center  
Atlanta, Georgia  
March 18-19, 1995

European Society for Motion Analysis in Children  
European Academy for Children with Disabilities (combined meeting)  
Keynote speaker  
Dublin, Ireland  
September 14-15, 1996

European Society for Motion Analysis in Children  
Belfast, Northern Ireland  
September 21-23, 1998

Annual Leslie C. Meyer Visiting Lectureship  
Shriners Hospital for Children  
Greenville, South Carolina  
July 27, 2000

Presentations:

Energetics: Applications to Children with CP  
Spinal Cord/Canal Abnormalities in Children with Spinal Deformities:  
Incidence, Diagnosis, & Treatment.

Paediatric Orthopaedic Society of New Zealand Annual Meeting  
Bay of Islands, New Zealand  
October 15, 2000

Presentations:  
Scoliosis and Spinal Cord and Canal Pathology  
Back Pain in Children and Adolescents  
Perthes Condition

New Zealand Orthopaedic Association  
Waitangi, New Zealand  
October 16-18, 2000

Presentations:  
Growth Plate Injuries

Kluge Children's Rehabilitation & Research Institute  
University of Virginia  
Charlottesville, Virginia  
September 22, 2011

Oritel International Congress  
Santiago, Chile  
July 18-20, 2012

Presentations:  
Multilevel Surgery in Cerebral Palsy  
Spine Management in Cerebral Palsy  
Sagittal Balance: Spine Surgery – Multilevel Surgery: What To Do First?  
Multilevel Surgery in Myelomeningocele – Is It Useful?  
Different Aspects of Surgical Treatments in Neuromuscular Patients  
Selective Dorsal Rhizotomy in Cerebral Palsy – The Gillette Experience  
Keynote Address: The Care of Children with Disabilities

### **University of Minnesota Medical School**

Second year curriculum on musculoskeletal conditions (1986-2016)

Multiple lectures, varying from 1-3/year, with emphasis on basic fracture healing physiology and treatment principles, and pediatric musculoskeletal conditions

**University of Minnesota Medical School  
Department of Orthopaedic Surgery**

Orthopedic Resident Core Curriculum Presentations

October 23, 1998 – Growth Principles  
October 30, 1998 - Perthes & Slipped Capital Femoral Epiphysis.  
November 13, 1998 - Spina Bifida.  
December 4, 1998 - Motor Unit Disorders: Spinal Muscle Atrophy, Charcot-Marie-Tooth, & Duchenne's Muscular Dystrophy.  
January 15, 1999 - Selected Short Stature – Neurofibromatosis  
June 11, 1999 - Infections  
November 17, 2000 – Growth Principles  
December 22, 2000 – Short Stature Syndrome and Cerebral Palsy  
December 29, 2000 – Motor Unit Disorders: Spinal Muscle Atrophy, Charcot-Marie-Tooth, and Duchenne Muscular Dystrophy  
November 15, 2002 – Myelomeningocele  
January 10, 2003 – Motor Unit Disorders: Spinal Muscle Atrophy, Charcot-Marie-Tooth, and Duchenne Muscular Dystrophy  
April 18, 2003 – Infections (Osteomyelitis and Septic Arthritis) w/Drs. Swiontkowski & Tsukyama  
October 15, 2004 – Motor Unit Disorders  
December 3, 2004 – Myelomeningocele  
June 10, 2005 - Infections  
December 29, 2006 – Motor Unit Disorders  
June 29, 2007 – Infections (Osteomyelitis & Septic Arthritis) w/Drs. Swiontkowski & Tsukyama)  
January 30, 2008 – Motor Unit Disorders  
July 31, 2009 – Infections w/Dr. Swiontkowski  
March 11, 2011 – Motor Unit Disorders  
March 8, 2013 – Motor Unit Disorders

Pediatric orthopedic resident curriculum (1985-2016)

Participation in the education of 2<sup>nd</sup> and 4<sup>th</sup> year residents (daily conferences and instruction in the care of patients in clinic, surgery and while hospitalized) while at Gillette Children's.

Initial development of Pediatric Orthopaedic Fellowship (1990) and subsequent participation in fellow's education.

## **Department of Pediatrics**

Pediatric resident curriculum (2000-2016)

At the request of Dr. Julie Hauer developed a 'one day' curriculum on essential pediatric musculoskeletal conditions and their management, including a practical session on casting and splinting as well as radiograph interpretation. This is provided to each successive class of G1 residents in April and is hosted by Gillette Children's.

## **Community Educational Presentations**

February 1987, "Gait Analysis", Grand Rounds, St. Paul Ramsey Medical Center, St. Paul, Minnesota.

September 1987, "Pediatric Orthopaedic Problems", Grand Rounds, St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

November 1987, "Osteomyelitis", Grand Rounds, St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

April 1988, "Gait Techniques" at the University of Minnesota, Minneapolis, Minnesota.

April 1988, "Childhood and Adolescent Back Pain", Grand Rounds, Minneapolis Children's Medical Center, Minneapolis, Minnesota.

May 1988, "Uses of Gait Laboratory", Shriners Hospitals for Children, Twin Cities Unit, Minneapolis, Minnesota.

June 1988, "Gait Analysis of Lower Extremity", Orthopaedic Surgery and Rehabilitation Course, Minneapolis, Minnesota.

May 1989, Grand Rounds, St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

May 9, 1989, "Function of the Motion Laboratory", National Association of Orthopaedic Nurses Meeting, Minneapolis, Minnesota.

January 4, 1990, "Current Management of Congenital Pseudarthrosis of the Tibia", Twin City Orthopaedic Society Meeting, St. Paul, Minnesota.

June 1, 1990, "Slipped Capital Femoral Epiphysis", Cole-Chatterton Memorial Society Annual Meeting, Minneapolis, Minnesota.

September 14, 1990, "Musculoskeletal Changes in the Developing Female", Women's Sports Medicine Update, Minneapolis, Minnesota.

April 5, 1991, "The Natural History of Spine Disorders in Cerebral Palsy", Grand Rounds, Gillette Children's Hospital, St. Paul, Minnesota.

May 2, 1991, "Slipped Capital Femoral Epiphysis/Today", Cole-Chatterton Memorial Pediatric Orthopaedic Seminar, Shriners Hospitals for Crippled Children, Minneapolis, Minnesota.

May 7, 1991, "MRI Findings in Scoliosis", Twin Cities Spine Surgeons Meeting at Shriners Hospital for Crippled Children, Minneapolis, Minnesota.

August 8, 1991, "Common Pediatric Orthopaedic Problems", Grand Rounds, Children's Hospital of St. Paul, St. Paul, Minnesota.

September 19, 1991, "History of Gillette and Who We Are", St. Paul Rotary Group, Sheraton Midway, St. Paul, Minnesota.

February 19, 1992, "Slipped Capital Femoral Epiphysis", Grand Rounds, University of Minnesota, Department of Pediatrics, Minneapolis, Minnesota.

March 13, 1992, "Adolescent Idiopathic Scoliosis: One Orthopaedic Surgeon's Thought Process", Family Practice Today Course, Holiday Inn East, St. Paul, Minnesota.

September 11, 1992, "Slipped Capital Femoral Epiphysis", Practical Pediatric Course for the Primary Care Physician, sponsored by Children's Hospital of St. Paul, St. Paul, Minnesota.

September 11, 1992, "Slipped Capital Femoral Epiphysis", Practical Pediatric Course for the Primary Care Physician, sponsored by Children's Hospital of St. Paul, St. Paul, Minnesota.

January 22, 1993, "Orthopaedics and Spina Bifida". Partnership in Spina Bifida: Addressing the Multiple Needs of Individuals with Spina Bifida, sponsored by St. Cloud State University, St. Cloud, Minnesota.

August 12, 1993, "Torsional Problems (Toe-In & Toe-Out) in Children", Grand Rounds, Children's Hospital of St. Paul, St. Paul, Minnesota.

August 27, 1993, "Cerebral Palsy Gait Analysis", Minnesota Chapter of the American Academy of Orthotists and Prosthetists, Continuing Education Seminar, Northeast Metro Technical College, White Bear Lake, Minnesota.

September 10, 1993, “Problems of Childhood Hip Fractures” and “Pediatric Orthopaedics 1900 to 1950: Were These Really the “Good Old Days?” presented at the Wallace Cole Society Meeting, Shriners Hospital for Children, Minneapolis, Minnesota.

August 2, 1994, “Common Pediatric Orthopaedic Problems”, Grand Rounds, Family Practice, St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

October 12, 1994, “Scoliosis Overview”, presented to St. Cloud Medical Group, St. Cloud, Minnesota.

October 14, 1994, “Common Problems in Pediatric Orthopaedics”, Grand Rounds, St. Cloud Hospital, St. Cloud, Minnesota.

October 28, 1994, “Pediatric Fracture Management”, Grand Rounds, St. Paul-Ramsey Medical Center, Holiday Inn East, St. Paul, Minnesota.

November 11, 1994, “Scoliosis Overview”, Pediatric Orthopaedic Update for Primary Care Physicians, Gillette Children’s Hospital, St. Paul, Minnesota.

December 2, 1994, “Gillette Children’s Hospital: That Was Then, This is Now”, Grand Rounds, Gillette Children’s Hospital, St. Paul, Minnesota.

March 9, 1995, “The Limping Child”, Family Medicine Today, St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

May 27, 1995, “Orthopaedic Aspects of Rett Syndrome”, International Rett Syndrome Association 11th Annual Conference, Bloomington, Minnesota.

May 30, 1995, “Children’s Musculoskeletal Development: What’s Normal and When to Worry”, North Memorial Medical Center Medical Staff, Robbinsdale, Minnesota.

November 14, 1995, “On the panel for National Health Policy Forum site visit, “Perspectives on Managed Care”, held at the Landmark Center, St. Paul, Minnesota.

December 1, 1995, “Adolescent Back Pain”, Pediatric Orthopaedic Update for Primary Physicians, at Gillette Children’s Hospital and St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

March 28, 1996, “Normal Kinematics” and “Energy Expenditure in Normal and Pathological Gait”, Clinical Gait Analysis: A Focus on Interpretation, held at Gillette Children’s Hospital, St. Paul, Minnesota.

Thursday, April 11, 1996, “Kinetics” and “Energy (02) Analysis”, POSNA Gait Tutorial, Gillette Children’s Hospital, St. Paul, Minnesota.

May 10, 1996, “Screening for DDH”, Cole-Chatterton Memorial Pediatric Orthopaedic Seminar, Shriners Hospitals for Children, Twin Cities Unit, Minneapolis, Minnesota.

September 20, 1996, “The Child with Back Pain: A Primary Care Approach”, Sixth Annual Practical Pediatrics for the Primary Care Physicians, sponsored by Children’s Health Care, St. Paul, Minnesota.

September 21, 1996, “Orthopaedic Update”, Spina Bifida Association of Minnesota Fall Conference, Golden Valley, Minnesota.

October 18, 1996, “Pediatric Fractures of the Femur: Current Treatment”, Hennepin County Medical Center Orthopaedic and Trauma Seminar, Minneapolis, Minnesota.

November 8, 1996, Community Access to Child Health Planning for Special Needs Children, Holiday Inn, St. Cloud, Minnesota.

December 6, 1996, “Idiopathic Scoliosis”, Pediatric Orthopaedic Update for Primary Care Physicians, at Gillette Children’s Specialty Healthcare and St. Paul-Ramsey Medical Center, St. Paul, Minnesota.

April 16, 1997, “Children with Neuromotor Differences: Orthopaedic Concerns and Intervention” at Children with Neuromotor Delays: Current Approaches and Models of Intervention sponsored by Gillette Children’s Specialty Healthcare and St. David’s School for Child Development and Family Services, Holiday Inn, Minneapolis, West.

June 10, 1997, “Decision Making in Idiopathic Scoliosis”, presented to NAON, Gillette Children’s Specialty Healthcare, Saint Paul, Minnesota.

August 15, 1997, “Dysplasia of the Hips”, Grand Rounds, Regions Medical Center, St. Paul, Minnesota.

September 5, 1997, “Gillette’s Early Physicians”, Cole Memorial Pediatric Orthopaedic Seminar, held at the former site of Gillette Children’s Hospital, the Minnesota Humanities Commission Education Center, St. Paul, Minnesota.

December 5, 1997, “Back Pain in Children”, Pediatric Orthopaedic Update for Primary Care Physicians, Nurse Practitioners, and Physician Assistants at Gillette Children’s Specialty Healthcare and Regions Hospital, St. Paul, Minnesota.

April 2, 1998, “Gait Analysis in the Treatment of Neuromuscular Scoliosis” and “Energy Analysis” (with Jean Stout, PT), POSNA Gait Tutorial, Gillette Children’s Specialty Healthcare, St. Paul, Minnesota.

April 3, 1998, “How We Manage Post-Operative Pain”, and “How We Do Early Post-Operative Care and Rehabilitation”, POSNA Gait Tutorial, Gillette Children’s Specialty Healthcare, St. Paul, Minnesota.

October 2, 1998, “Energy Consumption in the CP Patient”, Cole Memorial Pediatric Orthopaedic Seminar, Shriners Hospitals for Children, Twin Cities Unit, Minneapolis, Minnesota.

December 4, 1998, “Idiopathic Scoliosis: Current Approaches”, Pediatric Orthopaedic Update for Primary Care Physicians, at Minneapolis Marriott Southwest and Gillette Children’s West Clinic, Minnetonka, Minnesota.

February 1, 1999, “The Limping Child - What Could Be Wrong?” telemedicine presentation from the University of Minnesota to Tri-County Hospital, Wadena, Minnesota.

April 14, 1999, “Children with Cerebral Palsy: Orthopaedic Concerns and Interventions”, presented at Children with Cerebral Palsy: Interventions at Ages and Stages, in New Ulm, Minnesota.

September 16, 1999, “Disorders of the Hip in Infants and Children”, presented at Practical Pediatrics for the Primary Care Physician, Children’s Hospitals and Clinics, St. Paul, Minnesota.

October 8, 1999, “Physeal Fractures”, presented at the Cole Memorial Pediatric Orthopaedic Seminar, St. Paul, Minnesota, sponsored by Gillette Children’s Specialty Healthcare, Shriners Hospitals for Children (Twin Cities Unit), and HealthPartners.

March 29, 2000, “Gillette Children’s Hospital and the Care of Children with Disabilities”, presented to Minneapolis City of Lakes Rotary, Minneapolis, Minnesota.

December 1, 2000 Casting/Splinting Techniques at the Pediatric Orthopaedic Update for Primary Care Physicians, at Minneapolis Marriott Southwest and Gillette Children's West Clinic, Minnetonka, Minnesota.

November 2, 2001 History of Dr. Cole at Gillette Children's and Shriners Hospitals, Cole Memorial Pediatric Orthopaedic Seminar at Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

December 7, 2001, "Back Pain/Scoliosis", Pediatric Orthopaedic Update for Primary Care Physicians, Nurse Practitioners, and Physician Assistants, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

October 17, 2002, "Supracondylar Fractures in Children: What's New" presented to Hennepin County Medical Center Orthopaedic and Trauma Seminar, Minneapolis, Minnesota.

November 1, 2002, Discussion of Issues Surrounding Authorship, presented to Research Education Day, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

December 13, 2002, "Torsion and Angular Malalignment", 10<sup>th</sup> Annual Pediatric Orthopaedic Update for Primary Care Physicians, Nurse Practitioners, and Physician Assistants, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

April 25 2003, "Scoliosis" & "Things You Can See On an X-Ray" presented to University of Minnesota pediatric residents at Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

November 14, 2003, "Strategic Planning Views of Research", presented to Research Education Day, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

May 13-15, 2004, Kinematics, Kinetics, & EMG, Energy Expenditure in Normal and Pathologic Gait, and Malalignment Syndrome presented at the Fourteenth Annual Clinical Gait Analysis: A Focus on Interpretation, sponsored by Gillette Children's Specialty Healthcare and Connecticut Children's Medical Center.

September 14, 2004, "Who We Are and What We Do at Gillette Children's Specialty Healthcare: Our Place in the Community" presented to Rotary Club of St. Paul, Radisson Hotel.

February 4, 2005, Evidence Based Practice: Research to Practice with Chris Milbrath presented to Research Education Day, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

September 30, 2005, "Update on Legg-Calve-Perthes Disease Management", Cole Memorial Pediatric Orthopaedic Seminar, Science Museum of Minnesota, St. Paul, Minnesota.

December 2, 2005, "The Adolescent Back", 13<sup>th</sup> Annual Pediatric Orthopaedic Update for Primary Care Physicians, Nurse Practitioners, and Physician Assistants, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

April 11, 2006 – "Spine Deformity: How it Affects Children & How Treatment differs from Adults" presented at the sixteenth annual Minnesota Twin Cities Chapter of National Association of Orthopaedic Nurses, Maple Grove Community Center, Maple Grove, Minnesota.

May 18-20, 2006, "Energy Expenditure in Normal and Pathologic Gait" (Interpretation Guides) and Case Study "Torsional Malalignment" at Clinical Gait Analysis: A Focus on Interpretation, sponsored by Gillette Children's Specialty Healthcare and Connecticut Children's Medical Center, held at the Crowne Plaza Northstar Hotel, Minneapolis, Minnesota.

October 13, 2006, "People of Ecuador", Cole Memorial Pediatric Orthopaedic Seminar, Shriners Hospitals for Children, Minneapolis, Minnesota (co-sponsored by Gillette Children's Specialty Healthcare).

December 1, 2006, "Pediatric Hip Disorders" presented at Management of Musculoskeletal Concerns in Children and Adolescents, held at the Minnesota History Center, St. Paul, Minnesota.

March 2, 2007, "Authorship and the Process Involved in Publication of Research Findings" presented to Research Education Day, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

April 17, 2007, "Fractures Through Bone Cysts" presented to Regions Orthopaedics/Gillette Combined Trauma meeting.

November 16, 2007, "Perthes Panel Discussion" at the Minnesota Memorial Pediatric Orthopedic Symposium, Geffen Auditorium, Mayo Clinic, Rochester Minnesota. In collaboration with Gillette Children's Specialty Healthcare, St. Paul, Minnesota and Shriner's Hospital for Children – Twin Cities Unit, Minneapolis, Minnesota.

November 30, 2007– “Fractures/Fracture Healing” presented to Year II lecture series (Bones, Joints, & Connective Tissue Course) at the University of Minnesota Medical School for medical students.

December 7, 2007, “Intoeing” presented at Management of Pediatric Musculoskeletal Concerns in Children and Adolescents sponsored by Gillette Children’s Specialty Healthcare, St. Paul, Minnesota, at St. Paul RiverCentre.

April 18, 2008, “Scoliosis and How It Affects Children” presented to Minnesota Academy of Family Physicians at RiverCentre, St. Paul, Minnesota.

May 16, 2008, “Correction of Growth Deformities and Reduction Spasticity: Not Just Two Different Roads To The Same Destination” sponsored by Gillette Children’s Specialty Healthcare and presented with Dr. James Gage at Moving Forward in the Treatment of Pediatric Neurological Disorders (a conference honoring James R. Gage, MD) at the Minneapolis Convention Center, Minneapolis, Minnesota.

November 14, 2008, Course director for the Minnesota Pediatric Orthopaedic Conference sponsored by Gillette Children’s Specialty Healthcare, Shriners Hospitals for Children Twin Cities, and the Mayo Clinic at the Science Museum of Minnesota, St. Paul, Minnesota.

December 2, 2008 – Spoke to audience of the Minnesota Academy of Medicine on “We Hold This Treasure” (story of Gillette Children’s Hospital) at Town & Country Club, St. Paul, Minnesota.

December 5, 2008, “Pediatric and Adolescent Spine Issues: Low-Back Pain and Scoliosis” presented at Pediatric Orthopaedic Problems in Primary Care: Assessment, Evaluation, and Treatment sponsored by Gillette Children’s Specialty Healthcare, St. Paul, Minnesota.

December 16, 2008, “Fractures through Bone Cysts” presented at the Gillette Children’s Specialty Healthcare and Regions Hospital Combined Trauma lecture series.

March 24, 2009 – “Orthopaedics: SEMLS Procedures”: Presented to RN Residency Day at Gillette Children’s Specialty Healthcare, St. Paul, Minnesota.

June 24-26, 2009 – “Energy Expenditure in Normal & Pathologic Gait” (Interpretation Guides) and Case Study “Torsional Malalignment” at Clinical Gait Analysis: A Focus on Interpretation, sponsored by Gillette Children’s Specialty Healthcare, Connecticut Children’s Medical Center, and University Hospital

Pellenberg, Leuven, Belgium held at the Crowne Plaza Northstar Hotel, Minneapolis, Minnesota.

September 11, 2009 – Moderator for Pediatric Trauma Dilemma at Pediatric Trauma Summit, sponsored by Regions Hospital & HealthPartners in partnership with Gillette Children's Specialty Healthcare and the University of Minnesota Medical School. Held at the Science Museum of Minnesota, St. Paul, Minnesota.

October 2, 2009 – “The History and Future Direction of Gillette Children's Specialty Healthcare” presented to the Interurban Orthopaedic Society Annual Meeting at the University of Minnesota, Department of Orthopaedic Surgery, and Minneapolis, Minnesota.

October 2, 2009 – Moderator for Innovative Techniques at the Minnesota Pediatric Orthopaedic Conference, sponsored by Shriners Hospitals for Children and Gillette Children's Specialty Healthcare in collaboration with Mayo Clinic. Held at Shriners Hospital for Children, Minneapolis, Minnesota.

September 10, 2010 – “Quality of Life in Treatment Decisions” moderator at the Quality of Life: Perspectives on Ethics, Disability, and Treatment Decisions Conference sponsored by Gillette Children's Specialty Healthcare at the Wilder Center, St. Paul, Minnesota.

November 29, 2010 – “Fractures” presented to the Year II medical students at the University of Minnesota Medical School.

May 20, 2011 - Research Education Day, Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

June 1, 2011 – “Gillette's Mission and What Distinguishes Our Care at Gillette” presented to the Minneapolis City of Lakes Rotary Club at Gillette Children's Specialty Healthcare.

November 7, 2011 – “Preventing Surgical Site Infections: It's Everybody's Business” with Drs. Mike Healy and Ralph Faville. Presented to staff at Gillette Children's Specialty Healthcare, St. Paul, Minnesota.

May 21-23, 2012 - Case study on SEML's at Clinical Gait Analysis: A Focus on Interpretation, sponsored by Gillette Children's Specialty Healthcare and Connecticut Children's Medical Center, held at the Crowne Plaza Northstar Hotel, Minneapolis, MN.

June 20, 2012 – Three breakout sessions on orthopaedic care of the spinal muscle atrophy patient sponsored by Gillette Children’s Specialty Healthcare and Families of SMA, held at the Doubletree Hotel, Bloomington, MN.

October 5, 2012 – Introduction to Gillette’s Mission at “Changing Children’s Lives: The Role of Technology in the Treatment of Cerebral Palsy” sponsored by Gillette Children’s Specialty Healthcare, held at Gillette Children’s Specialty Healthcare.

October 23, 2012 – Gillette History Presentation to the Daughters of the American Revolution at Arlington Hills Presbyterian Church, St. Paul, MN.

November 1, 2012 – Pain and Developmental Disabilities Across the Lifespan sponsored by Gillette Children’s Specialty Healthcare, held at the Wilder Center, St. Paul, MN.

November 30, 2012 – Breakout Sessions “Put Me In, Coach: Return to Play After a Concussion”, “Pediatric Fractures”, “Treatment and Prevention of Lower Extremity Injuries”, “Examining Child Who Has Painful Joints”, and “Treating Cervical Injuries in Children” at the Musculoskeletal Conditions in Children and Adolescents Conference sponsored by Gillette Children’s Specialty Healthcare held at the Westin Edina Galleria, Edina, MN.

April 19, 2013 – “Scoliosis Principles”, “Intoeing, Torsion, and Angulation”, and “A Few Key Things You Need to Know About” presented to University of Minnesota pediatric residents at Gillette Children’s Specialty Healthcare, St. Paul, Minnesota.

May 10, 2013 – “Arthur Gillette: Founding of the American Orthopaedic Association” presented for the history talk segment at the Minnesota Orthopaedic Society Annual meeting held at the Crowne Plaza, St. Paul, Minnesota.

May 30, 2013 – “Overview of Cerebral Palsy – Legacy of Gillette” presented to visitors from United Cerebral Palsy at Gillette Children’s Specialty Healthcare.

November 2, 2013 – “Arguments and Indications for Non-Operative Management” (clavicle section) and moderator for Forearm and Wrist section presented to Pediatric Trauma Summit 2013, sponsored by Regions Hospital and the University of Minnesota held at the Crowne Plaza Riverfront, St. Paul, Minnesota.

November 22, 2013 – “Scoliosis Curve Progression: When to Monitor...When to Intervene” and “Overview of the Day: Pearls for Your Practice at the Musculoskeletal Conditions in Children and Adolescents Conference sponsored

by Gillette Children's Specialty Healthcare held at the Westin Edina Galleria, Edina, Minnesota.

March 12, 2014 – “Trends in Healthcare” Presented at the Minnesota Catholic Conference and the Catholic Health Association of Minnesota. Event was held at the University of St. Thomas, St. Paul, Minnesota.

September 26, 2014, “Current Treatment Protocol in the Management of Scoliosis” presented at the Northern Plains Chapter of the American Academy of Orthotists and Prosthetists (Annual Fall Seminar) at Jimmy's Conference & Catering Center, Vadnais Heights, Minnesota.

November 8, 2014 – “Service Leadership & the Physician's Role” presented to Medical Academy Day at Gillette Children's Specialty Healthcare.

May 13-15, 2015 – SEMLS Case Study at the 25<sup>th</sup> Annual Clinical Gait Analysis: A Focus on Interpretation, sponsored by Gillette Children's Specialty Healthcare, Connecticut Children's Medical Center, and University Hospital Pellenberg, Leuven, Belgium. Held at the Crowne Plaza Northstar Hotel, Minneapolis, Minnesota.

December 4, 2015 – Breakout sessions (x3) for X-Ray, Diagnosis, and Splinting presented at the Musculoskeletal Management in Pediatrics sponsored by Gillette Children's Specialty Healthcare at St. Paul RiverCentre, St. Paul, Minnesota.