## Pradeep Chopra, MD

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### **Education and Qualifications**

January 2005 - Current	<b>Assistant Professor</b>	of Medicine	(Clinical),
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Brown Medical School, Department of Medicine,

Division of Biology and Medicine

2021 to 2023 Member Committee on Selected Heritable Connective Tissue

Disorders and Disability, The National Academies of Sciences,

Engineering, Medicine.

2019 to present Member, Medical- Scientific Advisor Board, Deutscher Ehlers-

Danlos Initiaive e.V., Germany

2024 to present Medical Advisory Board, Ehlers Danlos Syndrome Organisation,

Germany and European Union.

2019 Peer Reviewer for AHRQ (Agency for Healthcare Research

And Quality) Effective Health Care (EHC) for Prevention,

Diagnosis and Management of Opioids, Opioid Misuse and Opioid

Use Disorder in Older Adults.

2019 to present Honorary President

GERSED (Groupe d'Etude et de Recherche du syndrome d'Ehlers-

Danlos), Belgium

International group for research in EDS and its associated

conditions.

www.gersedbelgique.com (GERSED Belgique)

2019 to present Medical Advisory Board, Dysautonomia Support Network

2015-2017 Chairman, Pain Working Group. The EDS (Ehlers Danlos

Syndrome) Society International Symposium. This resulted in publication of new guidelines in the diagnosis and management for

EDS(Hypermobile) for the first time in 2 decades.

2017-Current Medical Advisory Board, EDS Wellness. A non-profit

organization to promote health education, public health initiatives, integrative healthcare, and wellness strategies for living well with Hypermobility Spectrum Disorders (HSD), such as Ehlers-Danlos

syndromes (EDS) and their comorbid conditions.

2016-Current Medical Advisory Board, Rare New England, organization

established to provide support and awareness for rare and complex

disorders.

2016 – 2024 Editorial Board, Pain Physician journal. The official

publication of the American Society of Interventional Pain

Physicians. A peer reviewed, multi-disciplinary journal written by and directed to an audience of interventional pain physicians, clinicians and basic scientists with an interest in interventional pain

management and pain medicine. Impact Factor 3.542 (2015)

July 2006 to June 2008 Masters in Health Care Management,

Harvard School of Public Health.

A masters program for physicians in Organizational behaviour, Operations Management, Public health Policy, Financial accounting, Competitive Strategy, Negotiations and conflict resolution, Provider payment systems.

June 2012 - current Member of Medical Advisory Board, The Coalition Against

Paediatric Pain (TCAPP). A not for profit organization advocating for chronic pain in children and support for their families. At present member of the Medical Advisory Board since 2014.

April 2005 – 2008 Consultant advisor to Social Security Administration Disability

Determination services.

November 2005-2010 Board of Directors of the American Board of Interventional Pain

Physicians for Board Certification.

October 2005-current Member of the Rhode Island Medical Reserve Corp, Rhode Island-

1 Disaster Medical Assistance Team. Responsible for responding

to emergency efforts at the local, State and Federal levels.

Aug. 2001-Current Assistant Professor of Anesthesiology (Adjunct),

Boston University School of Medicine

Director

Centre for Complex Conditions, RI

November 2005-2010 Editorial Board for Journal of Cancer Pain and Symptom

Palliation. ISSN: 1543-7671. The Haworth Press Inc.

November 2005-2010 Editorial Board Reviewer for Pain Physician. ISSN: 1533-3159

Participate in the process of blinded peer-review of submitted manuscripts of original research, case reports and review articles to

maintain the highest standards of scientific research.

Aug. 2001-July 2006 Staff Anesthesiologist and Pain Management Specialist

Roger Williams Medical Center, Providence, RI

Aug 2000 – July 2001 Fellowship in Pain Management

Beth Israel Deaconess Medical Center, Boston, MA

**Harvard Medical School** 

Aug 1997-July 2000 Anesthesiology and Critical Care

Beth Israel Deaconess Medical Center, Boston, MA

**Harvard Medical School** 

Aug 1996 – July 1997 Internship with rotations through Internal Medicine, Surgery, ICU,

**CCU** 

The Carney Hospital (now known as Caritas Carney Hospital),

Boston, MA. Affiliated with Boston University.

1993 – 1996 Senior Resident (Anesthesiology)

1990-1992 MD (Anesthesia and Critical Care)

A 2-year postgraduate clinical training program in Anesthesiology

and Critical Care.

J.N.Medical College, Aligarh, India.

1989-1990 **DA (Anesthesia)** 

A 1 year post graduate clinical training program in Anesthesiology.

J.N.Medical College, Aligarh, India.

1988-1989 Emergency Medical Officer,

B.L. Kapur Memorial Hospital, New Delhi, India

March 1986 - Oct. 1987 House Officer

Department of Surgery and Orthopedics

R.G.Kar Medical College, University of Calcutta.

**MBBS.** A 5 ½ -year degree program in Medicine including a 1

year internship.

R.G.Kar Medical College, University of Calcutta

#### **Board Certification**

Board Certified in **Anesthesiology** by the American Board of Anesthesiology 26 April 2002. (First attempt). Certificate number: 34681

Subspecialty Board Certification in **Pain Medicine** by the American Boards of Anesthesiology, September 2002 (First attempt). Certificate number: 34681

Board Certified by the **American Board of Independent Medical Examiners**, January 2005.

#### **Honors and Awards**

Lifetime Achievement by the Dysautonomia Support Network. The award is given to the health care provider who has spent a lifetime of distinguished service to the development of their speciality, contributed significantly to the development of the field and has served above and beyond the requirements of their job.

2018 Honor awarded for contribution to CRPS community by CRPS Forum, an International non-profit organization for CRPS

Humanitarian Award, Dysautonomia Support Network. The award was created to recognize outstanding physicians who's practice of medicine and sense of altruism has made the world a better place. Someone who has dedicated to improving the quality of patients lives and inspired others to greater heights.

Trailblazer award, Dysautonomia Support Network. The award is give annually to the physician, from any speciality, who demonstrate creative initiative, identify new, creative solution to problems, embody strong work ethics, honesty and integrity, works collaboratively with others to achieve goals and establish long-term vision and strategy.

2015 Honoree for significant contributions to medical care, awareness and support for Complex Regional Pain Syndrome by the Reflex Sympathetic Dystrophy Association

#### The Schwartz Center Compassionate Caregiver Award 2013

http://www.youtube.com/watch?v=SGGBzxeeSrA

Each year since 1999, the Schwartz Center for Healthcare has honored one extraordinary healthcare provider with the Schwartz Compassionate Center Compassionate Caregiver Award. The award is one of the region's most prestigious Honors in healthcare The award recognizes those who embody characteristics of compassionate care, including:

- Communicating sensitively with patients and loved ones;
- Listening carefully, showing empathy and instilling hope;
- Respecting patients' values, culture, choices and decisions;
- Understanding the significance of patients' families and communities.

## Nominated to the 2012 Arnold P. Gold Foundation Humanism in Medicine Award.

The award is administered through the Organization of Student Representatives (OSR) annually honours a medical school faculty who exemplifies the qualities of a caring and compassionate mentor in the teaching and advising of medical students. The nominee must also possess the desirable personal qualities necessary to the practice of patients-centered medicine by teaching ethics, empathy, and service by example. a testament to contribution to the educational programs and is chosen by peers and students.

# Teaching Recognition Citation by the Warren Alpert Medical School of Brown University, 2011

The award is a testament to contribution to the educational programs and is chosen by peers and students.

# Teaching Recognition Citation by the Warren Alpert Medical School of Brown University, 2008.

The award is a testament to contribution to the educational programs and is chosen by peers and students.

# John Hedley-Whyte Prize in Critical Care Medicine, 2000. Beth Israel Deaconess Medical Center, Harvard Medical School

This award is presented every year to a resident who has rotated through the ICU who exemplifies superlative performance in the science, art and practice of multidisciplinary critical care medicine and demonstrates excellent interpersonal relationships, leadership and intellectual curiosity.

## Nancy E. Oriol Prize in Obstetric Anesthesia, 2000. Beth Israel Deaconess Medical Center, Harvard Medical School.

This award is given each year to a resident who demonstrates initiative, enthusiasm and compassion while caring for the parturient. The recipient will have impressed the faculty with his/her knowledge base and continual quest to further it. Also sought are leadership qualities and an ability to build bridges with other healthcare providers involved in the care of the pregnant woman and her unborn child.

The only resident in the history of Harvard Medical School to have been awarded both awards in the same year.

Certificate of Honors in Ophthalmology

Certificate of Honors for original research paper by a Resident presented at the XII Annual Conference of the Indian Society of Anesthetists, 1989

Television program feature telecast on WJAR-NBC10, November 13, 2005 as 'Choices'.

Voted by peers as one of the 2 top doctors in RI for Pain Management 2006, 2008, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 (RI Monthly Magazine)

Featured on WJAR TV-NBC 10, February 15, 2007 on Health check Report

### **Committee Appointments**

2016 Medical Advisory Board, Rare New England (RNE). Not for profit

organization to offer educational opportunities to improve patients

with rare and complex diseases quality of life.

March 16, 2016 Member of Brain storming committee on Ehlers Danlos Syndrome,

Paris, France.

January 2012 to Present Medical Advisory Board, The Coalition Against Paediatric

Pain (TCAPP)

January 2012 to 2013 Board Member, Reflex Sympathetic Dystrophy Association

August, 2005 Committee for promoting the NASPER (National All Schedules

Prescription Electronic Reporting Act of 2005 H.R. 1132 and S.518). Helped develop and promote the passage of the bill. It was signed in to law on 11 August 2005. The law allows for monitoring

of prescription drug abuse. www.nasper.org

March 2005 Faculty – A Comprehensive Advanced Interventional Cadaver

Workshop, organized by the American Society of Interventional Pain Physicians, Medical Education and Research Institute, Memphis, TN. Teaching advanced fluoroscopically guided interventional techniques to other physicians from around the

USA.

October 2004 Committee Member – Evidence Based Practice Guidelines for

Interventional Techniques in the Management of Chronic Spinal Pain for the National Guidelines Clearing House, Agency for

Healthcare Research and Quality (AHRQ).

June 2004 Faculty – A Comprehensive Lumbar Interventional Cadaver

Workshop, organized by the American Society of Interventional Pain Physicians, Medical Education and Research Institute, Memphis, TN. Teaching fluoroscopically guided interventional

techniques to other physicians from around the USA.

September, 2003	Chairman, round table discussion on 'Perioperative pain management techniques' at The 9 <sup>th</sup> Annual Newport Anaesthesia Conference presented by Brown Medical School.
2003 to 2012	President, American Society for Interventional Pain Physicians (ASIPP), Rhode Island branch
2002-2003	Pharmacy and Therapeutics Committee, Roger Williams Medical Center, RI.
2002-2004	Cancer Committee, Roger Williams Medical Center, RI.

#### Courses

Acupuncture certified course, Harvard Medical School, Advanced Trauma Life Support Advanced Certificate in Life Support Certified in Percutaneous Electrothermal treatment of Discogenic pain therapy.

### **Professional Experience**

### Senior Resident (Anesthesiology), June 1993 to 1996

DDU Hospital, New Delhi.

This is the only major hospital serving the whole of west New Delhi. Had independent responsibility for the management of surgical patients, both elective and emergency, and ICU. Have handled various types of trauma, General Surgery, Obstetrics and Gynecology, Ambulatory, and Neurosurgery cases independently.

Was also involved very actively in the training program in the hospital.

Casualty Medical Officer, July 1988 - July 1989 Dr.B.L.Kapur Memorial Hospital, New Delhi Organisation and management of Casualty services and the ICCU. Actively involved in the teaching program of the hospital.

#### **Publications:**

Lee C, Chopra P. Outcome of joint surgeries in patient with Ehlers Danlos Syndrome. Accepted and presented at the American Society of Anesthesiologists. 10-2024

Lee C, Getson P, Mehta N, Joshi J, Chopra P. Retrospective analysis of liver function after intravenous ketamine. Accepted and presented at the American Society of Anesthesiologists. 10-2024

Borsch N, Mucke Martin, Maier A, Conrad R, Pantel JT, Selin, Mani Kyros, Chopra, P. Treating pain in patients with Ehlers Danlos Syndrome – multidisciplinary management of a multisystemic disease. Awaiting publication.

Brock I, Chopra P, Maitland A, Mills S, Francomano CA. Frequency and Cooccurrence of Comorbities in the Ehlers Danlos Syndrome. Poster presentation at the Annual American College of Medical Genetics and Genomics Conference, April 13-15, 2021

Zullo AR, Danko KJ, Moyo Patience, **Chopra P (advisor)**. Prevention, Diagnosis, and Management of Opioids, Opioid Misuse, and Opioid Use Disorder in Older Adults. Technical Brief No.37 (Prepared by the Brown Evidence-based Practice Center under contract No. 290-2015-00002-I). Agency for Healthcare Research and Quality (AHRQ) Publication No.21-EHC005, Rockville, MD: Agency for Healthcare Research and Quality. November 2020. DOI:10.23970/AHRQEPCTB37.

Feldman CH Estee, Hivick P Daniel, Slepian Maxwell P, Tran T. Susan, **Chopra Pradeep**, Greenley Neff Rachel. Pain Symptomatology and Management in Pediatric Ehlers-Danlos Syndrome: A Review. Children. 2020, 7. 146; doi:10.3390/children7090146

**Chopra, P.** and Bluestein, L. (2020) Perioperative Care in Patients with Ehlers Danlos Syndromes. *Open Journal of Anesthesiology*, **10**, 13-29. doi: 10.4236/ojanes.2020.101002.

Bakios L, Cancian M, Klinge, P, Chopra, P, Santos-Cortes J. Voiding symptoms and urodynamic findings in adult diagnosed tethered cord. 2018. Poster presentation at the SUFU (Society of Urodynamics, female pelvic, & urogenital reconstruction) conference 2018

**Chopra P.** Understanding Complex Regional Pain Syndrome (CRPS) – the worst pain known to mankind. Scientific American. 2017.

**Chopra P**, Connective tissue disorders, Ehlers Danlos Syndrome – a common missed diagnosis in pain medicine. 2017. Scientific American.

**Chopra P**, Tinkle B, Hamonet C, Brock I, Gompel A, Bulbena A, Francomano C. 2017. Pain management in Ehlers Danlos syndrome. Am J Med Genet Part C

Bulbena A, Baeza-Velasco C, Bulbena-Cabré, Pailhez G, Critchley H, **Chopra P**, Mallorquí-Bagué, Frank C, Porges S. 2017. Psychiatric and psychological aspects in the Ehlers-Danlos syndromes. Am J Med Genet Part C

Leonard B. Weinstock, MD, FACG, Trisha L. Myers, PA-C, Arthur S. Walters, MD, Oscar A. Schwartz, MD, Jarred W. Younger, PhD, **Pradeep Chopra, MD,** and Anthony H. Guarino, MD. Identification and Treatment of New Inflammatory Triggers for Complex Regional Pain Syndrome: Small Intestinal Bacterial Overgrowth and Obstructive Sleep Apnea. A&A Case Reports. 2015;XXX:00–00. Accepted for publication October 28, 2015.

**Chopra P**, Cooper M: Treatment of Complex Regional Pain Syndrome (CRPS) using Low Dose Naltrexone (LDN). *J Neuroimmune Pharmacol* DOI 10.1007/s 11481-013-9451-y, March 2013

Hill RJ, **Chopra P**, and Richardi <sup>T</sup> Rethinking the Psychogenic Model of Complex Regional Pain Syndrome: Somatoform Disorders and Complex Regional Pain Syndrome Anesth Pain Med. 2012 Autumn; 2(2): 54–59. Published online 2012 Sep 13. doi: 10.5812/aapm.7282

Helm S, Deer T, <u>Chopra P</u> et al. Effectiveness of Thermal Annular Procedures in treating Discogenic low back pain. *Pain Physician* 2012;15: ISSN 1533-3159

Aghion D, <u>Chopra P</u>, Oyelese A: Failed Back Syndrome. RI Medical Society Journal, 2012

Book: Pain Medicine and Interventional Pain Management Board Review Self-Assessment: ASIPP publication. ISBN 978-0-9719951-4-7; 2011. Contributing author

Apple iPhone and iPad app: iMCQ on Pain Medicine. Published 2011

Bajwa Z, <u>Chopra P</u> et al: Low and Therapeutic doses of antidepressants are associated with similar response in the context of multimodal treatment of pain. *Pain Physician* 2009;12:893-900. ISSN 1533-3159

Smith H, <u>Chopra P</u>, Patel V, Frey M, Rastogi R: Systematic review of the role of sedation in Diagnostic spinal interventional techniques. *Pain Physician* 2009; 12:195-206. ISSN 1533-3159

<u>Chopra, P:</u> Thoracic Pain. Current Therapy in Pain, Smith, H. Saunders Elsevier. Chapter 26, Page 194-201. ISBN 978-1-4160-4836-7

<u>Chopra, P</u>: Organizational Ethics in a Health care organization – critical review. Harvard School of Public Health, September 2007

<u>Chopra P</u>, Berger G, Daly I, Khawaja W: Detailed analysis and critique of a financial bond issue by a not for profit health institution. Harvard School of Public Health, August 2007.

<u>Chopra P,</u> Nelis J, Hunt S, Branovan D: Analysis and development of a detailed marketing proposal for an Ambulatory Surgery Center. Harvard School of Public Health, April 2007

<u>Chopra P:</u> Public Health Policy and the Ethics of Medical Marijuana. Harvard School of Public Health, December 2006

<u>Chopra P:</u> Skills and methods of Healthcare Negotiation and Conflict Resolution: An Interest based negotiation methodology applied to the functioning of an Operating Room complex. Harvard School of Public Health, October 2006

<u>Chopra P</u>: Focused operations management in a procedure oriented medical office. Harvard School of Public Health, August 2006

<u>Chopra P:</u> Focused Operations Management and analysis of process flow in a fast delivery organization. Harvard School of Public Health, July 2006

<u>Chopra P,</u> Brown B, Parekh M, Scalzone M: Analysis and critique of the Organizational Behaviour of a Department of Obstetrics. Harvard School of Public Health, July 2006

Trescot AM, **Chopra P**, Abdi S, Datta S, Schultz DM. Systematic review of effectiveness and complications of adhesiolysis in the management of chronic spinal pain: An update. *Pain Physician* 2007; 10: 129-146. <a href="http://www.painphysicianjournal.com/2007/january/2007;10;129-146.pdf">http://www.painphysicianjournal.com/2007/january/2007;10;129-146.pdf</a>

**Chopra P**, Smith HS, Deer TR, Bowman RD. Role of Adhesiolysis in the Management of Chronic Spinal Pain: A Systematic Review of Effectiveness and Complications. *PainPhysician* 2005;8:87-100. http://www.painphysicianjournal.com/2005/january/2005;8:87-100.pdf

<u>Chopra P</u>, et al: Interventional Techniques in the Management of Chronic Spinal Pain: Evidence-Based Practice Guideline. *Pain Physician*, 2005;8:15-61. Accepted by the National Guideline Clearinghouse and Agency for Healthcare Research and Quality

(http://www.guideline.gov/summary/summary.aspx?view\_id=1&doc\_id=6629)

<u>Chopra P</u>, Smith HS: Use of Radiopaque contrast agents for the Interventional Pain Physician: A topical review. *Pain Physician*, 2004;7:459-463

**Book:** <u>Chopra P</u>, Smith HS: Acetaminophen for the elderly Clinical Management of the Elderly Patient in Pain. The Haworth Press, Chapter 4, Pages 29-34. ISBN:978-0-7890-2619-4

**Book:** Chopra P, Smith HS: Tramadol for the elderly Clinical Management of the Elderly Patient in Pain. The Haworth Press, Chapter 7, Pages 69-73. ISBN:978-0-7890-2619-4

**Book:** Chopra P, Smith HS: Acute and Chronic pain in the Elderly; Clinical Management of the Elderly Patient in Pain. The Haworth Press, Chapter 2, Pages 11-22. ISBN:978-0-7890-2619-4

**Book:** <u>Chopra P</u>, Smith, HS, Bajwa Z: Clinical Pharmacotherapeutic of Headache. In Smith, HS, ed. Drugs for Pain. Hanley & Belfus, Inc., Philadelphia. Chapter 37, pages 475 to 487. 1st Edition 2003. ISBN: 1-56053-511-3

Cohen, R I, <u>Chopra P</u>, Upshur C: Low Back pain, part I: Primary Care Work-up of acute and chronic symptoms. *Geriatrics*, November 2001, 26 to 37

Cohen, R I, <u>Chopra P</u>, Upshur C: Low Back pain, part II: Guide to conservative, medical, and procedural therapies. *Geriatrics*, November 2001, 38 to 47

Design for a stuck expiratory valve. Center for Medical Simulation, Harvard Medical School

<u>Chopra P.</u> Dang A: Aluminium phosphide poisoning – a management protocol in the ICU. *Asian Archives of Anesthesiology and Resuscitation* accepted for publication

<u>Chopra P</u>, Asghar M: A Comparative Evaluation of Continuous Epidural Bupivacaine and Morphine for postoperative analgesia. *Ind. J. Anaesth.*, 1994; (42), 57,

<u>Chopra P</u>, Asghar M: Evaluation of awareness in patients undergoing surgery with different techniques of general anesthesia. MD Dissertation, 1992

<u>Chopra P</u>, Khan R M, et al: Attenuation of blood pressure and pulse response to laryngoscopy and tracheal intubation with Nifedipine by three different routes. *Asian Archives of Anesthesiology and Resuscitation*. 1992; XXXVI, 1, 35-40

<u>Chopra P</u>, Asghar M: Positive intraoperative suggestions under general anesthesia reduce postoperative analgesic requirements. Accepted for publication by the Indian Journal of Anesthesia.

<u>Chopra P</u>, Asghar M, Agarwal R D: Hyperglycemic responses to different anaesthetic techniques- a comparison of general Anesthesia, Epidural and spinal analgesia. *Asian Archives of Anesthesiology and Resuscitation*. 1992; XXXVI, 1, 61-64

<u>Chopra P</u>, Khan R M: Metabolic changes following tourniquet release-a pilot study. *Indian Journal of Physiology and Pharmacology*. 1989. 33 (5).

### **Presentations and Lectures**

- Keynote speaker on Pain Management, Opioids and Addiction, Paris, France. August 2024
- Keynote Speaker: Ehlers Danlos Syndrome and its co-morbidities Neurological, Dysautonomia, Mast Cell Activation Syndrome and Pain. Deutsche Ehlers-Danlos Initiative e.V, Hannover, Germany. March 2024
- Keynote Speaker on Ehlers Danlos Syndrome Connecting the dots, Psychiatric issues in EDS at the Deutsche Ehlers-Danlos Initiative e.V, Munich, Germany. April 2023
- Grand Rounds: Pain management in Ehlers Danlos Syndrome,
   Dysautonomia and Mast Cell Activation Syndrome. Children's Hospital,
   Los Angeles, March 2022
- Overview of Pain Management options in Primary Care. Series of lectures for Primary Care physicians. November 2021.
- Chronic Pain Management for Primary Care. Series of lectures for Primary Care physicians. November 2021.
- Neuropathic Pain for Primary Care Physicians. Series of lectures for Primary Care physicians. November 2021.
- Co-morbid conditions associated with CRPS. Annual Conference, RSDSA. October 2021
- Ehlers Danlos Syndromes, March 2021. Israel
- Opioids Management for Primary Care Physician. Series of lectures for Primary Care physicians. November 2021.
- Management of Long Covid. Series of lectures for Primary Care physicians. November 2021.
- Central Sensitization. November 2021 Korean Pain Society annual meeting
- Musculoskeletal pain in Ehlers Danlos Syndromes. June 2020. Project ECHO EDS program. A televideo project with international participants. The ECHO program is a hub-and-spoke knowledge sharing networks, led by expert specialist teams.

- Keynote speaker: Linking hypermobility pain disorders with their multisystemic comorbidities, Faculty of Medicine, University of Toronto, The ILC Foundation, SicKids. November 2019
- Chronic Pain in Children Faculty of Medicine, University of Toronto, The ILC Foundation, SicKids. November 2019
- Chronic Pain in Children, Grand Rounds, The Toronto General Hospital., November 2019
- Low Dose Naltrexone in the management of pain. Grand Rounds. October 2019. Massachusetts College of Pharmacy and Health Sciences.
- Musculoskeletal pain in Ehlers Danlos Syndromes. October 2019. Project ECHO EDS program. A telemonitoring project with international participants. The ECHO program is a hub-and-spoke knowledge sharing networks, led by expert specialist teams.
- Connecting the dots in complex pain, September 2019. Children's Mercy Kansa City and University of Kansas Medical Center, September 2019
- Management of Chronic pain in Ehlers Danlos Syndromes, The EDS Society, Nashville, TN, August 2018
- Neuropathic Pain in Dysautonomia, Neuro Connect Summit, Washington, DC. May 2019. The Neuro Connect Alliance is a meeting of The Dysautonomia Support Network, Ehlers Danlos Society, Bobby Jones Chiari and Syringomyelia Foundation and National Organization of Rare Diseases (NORD).
- Musculoskeletal pain in Ehlers Danlos Syndromes. May 2019. Project ECHO EDS program. A telemonitoring project with international participants. The ECHO program is a hub-and-spoke knowledge sharing networks, led by expert specialist teams.
- Connecting the dots in our understanding of Ehlers Danlos Syndrome, 2018 Ehlers-Danlos Society Global Learning Conference, Baltimore, MD.
- Pain Management in Connective Tissue Disorders with Special consideration of Neurological Manifestations, 3<sup>rd</sup> Annual CSF Disorder Symposium, Connective Tissue Syndromes and Manifestations of Cerebrospinal Fluid Disorders (CSF) of the Brain and Spine. Warren Alpert Medical School, Rhode Island, June 16, 2018
- Presentation on Complex Regional Pain Syndrome at the American Associate of Justice, 2017 Annual Convention, Boston, MA. July 2017

- Managing Complex pain conditions at the Physicians Learning conference at 'Integrative Healthcare Strategies for patients with chronic pain and Multisystemic chronic Illness, June 10 and June 11, 2017
- Keynote speaker 'Complex chronic pain in adults and children'
  (Komplexe chronische Schemerzen bei Kindern und Erwachsenen) at the
  Ehlers-Danlos Syndrome (EDS), Joint hypermobility (JHS) and Complex
  Regional Pain Syndrome (CRPS) conference. Universitaksklinikum
  Frankfurt, Theodor-Stern-Kai 7, Frankfurt Main, Germany. 27 March
  2017
- Updates in management of pain in Ehlers Danlos Syndrome ("Prise en charge me'dicamenteuse de la douleur dans le SED, Colloque international Syndroem d'Ehlers-Danlos, 3e'me Edition, Univsite'Paris Descrartes, Paris France. 25 March 2017...
- Brainstorming meeting of international experts on treatments for Ehlers
  Danlos Syndrome at Universite Rene Descrates, Paris with de Groupe
  d'e'tudes et de recherches sur le syndrome d'Ehlers-Danlos (GERSED) et
  le soutien de la Foundatin ELLAsante, Troisie'me colloque international
  Ehlers-Danlos. Paris, France. 24 March 2017
- Chronic Diagnosis and Management of Common Pain Conditions in Children. 2016. Grand Rounds. Miller Children's and Women's Hospital, Long Beach, CA.
- Chronic Pain Conditions and Management. 2016. Connecting the dots between Ehlers Danlos syndrome (EDS), Postural Orthostatic Tachycardia Syndrome (POTS), Chronic pain and Mast Cell Activation Disorder. CHOC Children's Hospital, Orange County, CA.
- Chronic Pain Conditions and Management in Children. December 2016.
   Children and Adolescents with Medical Complexity. Meeting on
   Connective Tissue disorders, chronic pain syndromes, Postural Orthostatic
   Tachycardia Syndrome (POTS) and Dysautonomia and Mast Cell
   Activation Syndrome. CHOC Children's Hospital, Orange County, CA.
- Update on treatment and management of Complex Regional Pain Syndrome (CRPS). February, 2016. CRPS / RSD educational conference, Long Beach, California.

- Pain in Ehlers Danlos Syndrome. 2<sup>nd</sup> Ehlers-Danlos Syndrome French Conference, March 2016. Faculté de Médecine, Université Paris-Est Créteil
- Mechanism of action of Low Dose Naltrexone (LDN). The LDN 2016
   AIIC Conference, International conference on Auto-immune and Immuno-modulated conditions. February 2016.
- Chronic pain and LDN. The LDN 2016 AIIC Conference, International conference on Auto-immune and Immuno-modulated conditions. February 2016.
- Management of chronic pain with LDN. The LDN 2016 AIIC Conference, International conference on Auto-immune and Immuno-modulated conditions. February 2016.
- Connecting the dots in Pediatric Complex pain Children's Hospital of Orange County, California. September 2015.
- Grand Rounds, Pediatric Complex Regional Pain Syndrome, Ehlers Danlos Syndrome, Children's Hospital of Orange County, California. September 2015.
- Pain Management in Ehlers Danlos Syndrome, EDNF learning conference, Baltimore, MD. August 2015
- Update on Complex Regional Pain Syndrome, RSDSA, Denver, CO. June 2015
- Chronic pain in Ehlers Danlos Syndrome, Dysautonomia International, Washington DC, July 2014
- Complex Regional Pain Syndrome in Children, Dysautonomia International, Washington DC, July 2014
- Keynote speaker Complex Regional Pain Syndrome updates and treatments, RSDSA, Lafayette, LA, January 2014
- Keynote speaker Complex Regional Pain Syndrome updates and treatments, RSDSA, San Francisco, CA, June 2013
- Keynote speaker Complex Regional Pain Syndrome updates and treatments, RSDSA, Fort Lauderdale, FL, September 2013
- Managing pain in Ehlers Danlos Syndrome, Ehlers Danlos National Foundation, RI, August 2013
- Managing pain in Dysautonomia, Dysautonomia International, Washington DC, September 2103

- Anaesthesia for Dysautonomia, Dysautonomia International, Washington DC, September 2103
- Keynote speech 'Managing Arthritis Pain in the 21st Century'/ Arthritis Expo organized by the Arthritis Foundation. October 2012
- The Thirteenth Annual New England Workers' Compensation Educational Conference sponsored by The International Workers' Compensation Foundation and The Rhode Island Workers' Compensation Court Invited Speaker on 'Alternative Pain Management'. September 30, 2010.
- 'Management options for Chronic Pain' Keynote speaker for American Pain Foundation. Miriam Hospital. August 2010
- 'Options for treatment of Chronic Pain' Keynote speaker for American Pain Foundation, Miriam Hospital, September 2010
- 'Update in Pain Management 2010' Grand Round presentation on behalf of the France Foundation at Roger Williams Medical Center, RI. May 2010.
- 'Managing Chronic Pain' Presentation for the American Pain Foundation, September 2009
- Boston University Medical Centre Lecture on 'Theory of Dynamic Decision making and Crisis Management in Critical care Medicine'. March 24, 2003. Attended by Internal Medicine Residents, Attendings and Pain Medicine Specialists
- Boston University Medical Centre Lecture on Low Back pain. February 28, 2003. Attended by Internal Medicine Residents, Attendings and Pain Medicine Specialists.
- The Ninth Annual New England Workers' Compensation Educational Conference on November 2, 2006, sponsored by The International Workers' Compensation Foundation and The Rhode Island Workers' Compensation Court Invited Speaker on 'Understanding Spinal Pain'. Attended by Judges, Attorney's Case Managers, Adjusters, Physicians.

## **Professional Organizations**

- International Spinal Injection Society elected member
- President of American Society for Interventional Pain Physicians, Rhode Island Division
- American Society of Anesthesiology

• International Anesthesia Research Society