# **CURRICULUM VITAE**

## Maxim S Eckmann

# **GENERAL INFORMATION**

PERSONAL DATA: Date of Preparation: 08/19/2015

Address: Department of Anesthesiology

7703 Floyd Curl Drive

MCS: 7838

San Antonio, TX 78229

**Phone Number:** (210) 450-9850

**Fax Number:** (210) 450-6097

Email Address: eckmann@uthscsa.edu

**EDUCATION:** 

Year Degree Discipline Institution/Location

2003 MD Medicine Baylor College of Medicine, Houston, TX

1998 BS Biomedical Engineering Texas A & M University, College Station,

TX

**TRAINING:** 

**Fellowship** 

Year Discipline Institution/Location

2007-2008 Pain Medicine University of Texas Health Science Center, San

Antonio, TX

Internship

Year Discipline Institution/Location

2003-2004 Transitional Baylor College of Medicine, Houston, TX

Residency

Year <u>Discipline</u> <u>Institution/Location</u>

2004-2007 Anesthesiology University of Michigan Health System, Ann Arbor,

MI

**ACADEMIC APPOINTMENTS:** 

09/2014 - Present Associate Professor (cross- University of Texas Health Science Center at

appointment) PM&R San Antonio, Department of Rehab Medicine,

San Antonio, TX

09/2013 - Present Associate Professor / Clinical University of Texas Health Science Centeer,

Department of Anesthesiology, San Antonio, TX

04/2011 - Present Program Director, Pain Medicine Fellowship

University of Texas Health Science Center at San Antonio, Department of Anesthesiology,

San Antonio, TX

Details: For our ACGME-accredited fellowship in Pain Medicine, fullfillment of educational oversight and continuing improvement of the academic curriculum, performance of direct fellow and resident supervision, evaluation of fellows and residents. Preparation of program information form and representation during program review cycle.

04/2011 - Present Director of Pain Medicine for University of Texas Health Science Center, Department of Anesthesiology Department of Anesthesiology, San Antonio, TX

Details: Oversight of both inpatient and outpatient pain services delivered by the Department of Anesthesiology. Includes representing Pain Medicine expertise in matters that involve hospital policies. Oversight of consult triage between the Acute Pain Service and the Chronic Pain Service. Production of the monthly Pain Clinic faculty schedule in coordination with the Acute Pain faculty schedule.

04/2009 - Present Associate Director of Pain University of Texas Health Science Center,
Medicine Research Department of Anesthesiology, San Antonio, TX

Details: Oversight of animal laboratory and rat protocols in neuropathic pain research. Liaison and mentor to multiple multidisciplinary human research projects.

09/2008 - 08/2013 Assistant Professor / Clinical University of Texas Health Science Center at

San Antonio, Department of Anesthesiology,

San Antonio, TX

NON-ACADEMIC APPOINTMENTS:

01/2012 - 01/2014 Attending Physician St. Lukes Baptist, San Antonio, TX
04/2011 - Present Medical Director U.T. Medicine Pain Consultants, San Antonio, TX

**Details:** Medical Director of the University's chronic pain medicine clinic, formerly known as University Center for Pain Medicine, and now organized under the corporate entity of U.T. Medicine Pain Consultants

09/2008 - Present Staff Physician University Health System, San Antonio, TX

08/2008 - Present Director of Acute Pain University Hospital, San Antonio, TX

Service

**Details:** Production of monthly Acute Pain faculty schedule. Coordination of inpatient periperative pain care and acute pain consultation. Oversight of educational curriculum for Anesthesiology residents as relates to the Acute Pain rotation. Coordination and consultation with University Hospital pain nursing staff of policy administration and documentation.

07/2000 - 08/2000 Summer Intern Medtronic, Inc. - Heart Failure Group, Houston, TX

**Details:** Adapted existing ICD and Pacemaker control algorithms into a rapid prototyping computer language/interface for animal and virtual testing.

01/1999 - 02/1999 Co-op Engineer Sulzer Intermedics, Inc., Angleton, TX

\*\*Details: Adapted existing ICD and Pacemaker control algorithms into a rapid prototyping computer\*\*

language/interface for animal and virtual testing.

06/1997 - 08/1997 Clinical Engineering Intern Columbia Doctors Hospital, Sarasota, FL **Details:** Assisted technicians in preventive maintenance checks, medical equipment assembly, medical equipment repiar, and organizatio of equipment inventories.

## **CERTIFICATION AND LICENSURE:**

#### В

Board Certification				
Description/Agency	<u>Status</u>	<u>Date</u> Acquired	<u>Number</u>	Expiration
Pain Medicine - American Board of Anesthesiology	Certified	09/2008	42311	12/2018
Anesthesiology - American Board of Anesthesiology	Certified	04/2008	42311	12/2018
Certification				
Description/Agency	<u>Status</u>	<u>Date</u> <u>Acquired</u>	<u>Number</u>	Expiration
ACLS - American Heart Association	Certified	02/2014	n/a	02/2016
License to Practice				
Description/Agency	<u>Status</u>	<u>Date</u> Acquired	<u>Number</u>	Expiration
Medicine - Texas Medical Board	Certified	08/2007	M7159	08/2015
HONORS AND AWARDS:	Award: Clinical	Evallana Da	ognition A.	ord (7/2014

## <u>H</u>

07/2014	Clinical Excellence Recognition Award: Clinical Excellence Recognition Award (7/2014 –
	For Bilateral TAP catheter + TEA in a difficult trauma ICU pt)

06/2014 Top Ten Teachers (Department of Anesthesiology)

12/2013 Best Doctors 2014, "Scene in SA"

12/2012 Best Doctors 2013, "Scene in SA"

12/2011 Best Doctors 2012, "Scene in SA"

06/2011 Top Ten Teachers (Department of Anesthesiology)

12/2010 Best Doctors 2011, "Scene in SA": Identified by peer selection as one of the best physicians in Anesthesiology in the San Antonio area.

06/2010 Top Ten Teachers (Department of Anesthesiology)

07/2009 Top Ten Teachers (Department of Anesthesiology): Given to the 10 highest rated faculty for teaching measures that academic year.

05/2003 Lawrence F. Schumacher, M.D., Award for Excellence in Anesthesiology: Baylor College of Medicine Department of Anesthesiology

08/1999 Presidental Scholarship: 4 year full tution at Baylor College of Medicine

10/1994 Tau Beta Pi: Engineering Honor Society Texas A&M University

09/1994

Gathright Scholar: of the College of Engineering (top senior undergraduate student)at

Texas A&M

09/1994 Outstanding Junior: College of Engineering (Phi Kappa Phi Award, top junior

undergraduate)at Texas A&M

09/1994 Phi Kappa Phi Honor Society: Texas A&M University

## PROFESSIONAL DEVELOPMENT:

## Administrative

<u>Date</u>	<u>Description</u>	<u>C.E.</u> <u>Units/Hours</u>
04/01/2012 - 12/01/2012	Next Level Leadership Course	0.00 / 0.00
Clinical		
<u>Date</u>	Description	<u>C.E.</u> <u>Units/Hours</u>
10/13/2012 - 10/17/2012	American Society of Anesthesiologists Annual Meeting & Scientific Programs	23.25 / 23.25
07/17/2012 - 07/21/2012	International Spine Intervention Society Annual Meeting	11.75 / 11.75
05/16/2012 - 05/19/2012	American Pain Society Annual Meeting & Scientific Programs	12.00 / 12.00
11/05/2011 - 10/06/2011	Dannemiller Course in Pain Management	12.00 / 12.00
10/15/2011 - 10/19/2011	American Society of Anesthesiologists Annual Meeting	12.50 / 12.50
09/07/2011	Baptist Health System Physician CME	2.00 / 2.00
06/16/2011	AAAP Webcourse: "Buprenorphine in the Treatment of Opioid Dependence	8.00 / 8.00
03/24/2011 - 03/27/2011	American Academy of Pain Medicine Annual Meeting	7.25 / 7.25
11/06/2010 - 11/07/2010	Dannemiller Course in Pain Management	9.50 / 9.50
10/16/2010 - 10/20/2010	American Society of Anesthesiologists Annual Meeting & Scientific Programs	40.00 / 40.00
11/19/2009	American Society of Regional Anesthesia Annual Meeting	11.50 / 11.50
10/17/2009 - 10/21/2009	American Society of Anesthesiologists Annual Meeting & Scientific Programs	10.75 / 10.75
02/28/2009 - 03/04/2009	11th Pain Management Symposium - Cleveland, OH	25.00 / 25.00

# **TEACHING**

# **COURSE BASED TEACHING:**

<u>Date</u>	Course Name	<u>Level</u>	<u>Role</u>
01/2015 - 01/2015	CIRC6013 Musculoskeletal & Dermatology	Undergraduate/Graduate	Lecturer

Preparation Hrs: 10, Student Contact Hrs: 1; Rheumatoid Arthritis Essentials

01/2015 - 01/2015 CIRC6013 Musculoskeletal & Undergraduate/Graduate Lecturer Dermatology

Preparation Hrs: 10, Student Contact Hrs: 1; Osteoarthritis, Fibromyalgia Essentials

07/2008 - Present ANES4005 Pain Management Undergraduate Course Director

Fourth-year medical student elective in Pain Management. Elective is one month in duration and includes didactic lecture and bedside instruction in pain management techniques and procedures. Clerkship is available August through May with approximately 25 students per year.

## **OTHER TEACHING:**

06/2014 - 06/2014 Ultrasound in Pain Medicine

Workshop Faculty, 31th Annual

## **Group Instruction**

<u>Date</u>	Description	Institution	<u>#</u> Students
11/2014 - 11/2014	Workshop Faculty for Practicing Pain Physicians: Workshop 108: Superior Hypogastric Plexus, Lumbar S	American Society of Regional Anesthesia and Pain Medicine, 13th Annual Pain Medicine Meeting	15
Workshop 108	culty for Practicing Pain Specialists, F B: Superior Hypogastric Plexus, Lumb ic Nerve Blocks and Neurolytic Proce	oar Sympathetic, Ganglion Impar, C	
11/2014 - 11/2014	Workshop Faculty for Practicing Pain Physicians, Workshop 305: Head and Neck Blocks.	American Society of Regional Anesthesia and Pain Medicine, 13th Annual Pain Medicine Meeting	15
Mentoring and trigeminal gan	d demonstration of Fluoroscopically G glion.	<u> </u>	e and
11/2014 - 11/2014	Workshop Faculty, Resident and Fellow Program Ultrasound Workshop	American Society of Regional Anesthesia and Pain Medicine, 13th Annual Pain Medicine Meeting	15
Demonstration	n of lower extremity nerve blocks and	muscle injections using ultrasound	
08/2014 - 08/2014	American Academy of Pain Medicine Ultrasonography, Workshop Faculty	American Academy of Pain Medicine	20
Instructed practissue injection	cticing physicians in the use of ultras ns.	ound for peripheral extremity nerve	and soft

Texas Tech University Health

Sciences Center

20

Pain Symposium, Texas Tech University

Demonstration to practicing physicians of ultrasound anatomy and use of ultrasound to practicing pain physicians for head and neck injections, peripheral nerve blocks, joint injections.

06/2013 - 06/2013 Ultrasound in Pain Medicine Workshop Faculty, 30th Annual

Texas Tech University Health Sciences Center

20

Pain Symposium, Texas Tech

University

Demonstration to practicing physicians of ultrasound anatomy and use of ultrasound to practicing pain physicians for head and neck injections, peripheral nerve blocks, joint injections.

03/2013 - 03/2013 Interventional Pain Management Cadaver Workshop

Dannemiller

40

Instructed practicing pain physicians and other interventionalists in advanced percutaneous pain procedures such as stellate ganglion block under ultrasound guidance and relevant anatomy, C0/1 and C1/2 joint injection, and kyphoplasty.

11/2012 - 11/2012 Interventional Pain Management Cadaver Workshop

Dannemiller

Dannemiller

40

10

Instructed practicing pain physicians and other interventionalists in advanced percutaneous pain procedures such as intradiscal access, transforaminal injection, epidural injection.

11/2011 - 11/2011 Interventional Pain Management Cadaver Workshop

Produced web-based lecture on radiofrequency ablation of nerves for the treatment of cervical, thoracic, and lumbar spine pain. Instructed at weekend course in a cadaver lab, supervising performance of epidural and radiofrequency procedures for practicing interventional pain physicians to 10 students per session.

10/2011 - 10/2011 Cadaver Workshop on Lumbar

Discography / Biacuplasty / MILD

American Society of Anesthesiologists 20

Procedure

CME level instruction to practicing Anesthesiologists and Pain Medicine specialists on lumbar intradiscal access, lumbar disc stimulation, and percutaneous disc biacuplasty.

10/2011 - 10/2011 Intradiscal Procedure Cadaver Workshop

American Society of Anesthesiologists 10

Instructed practicing Anesthesiologists on techniques for disc access and transdiscal biacuplasty RF treatment for discogenic low back pain.

11/2010 - 11/2010 Interventional Pain Management

Dannemiller

10

Cadaver Workshop on

Radiofrequency Neurotomy for

Spine Pain

Workshop combined two mornings of didactics in selected topics with two afternoons of practical workshops in interventional procedures on cadaveric specimens.

10/2010 - 10/2010 Intradiscal Procedure Cadaver Workshop

American Society of Anesthesiologists 20

Instructed practicing Anesthesiologists on techniques for disc access and transdiscal biacuplasty RF treatment for discogenic low back pain.

09/2008 - Present Anesthesia Didactics

U.T. Health Science Center at San

55

Antonio

Lecture Topics: Autonomic Nervous System (ANS) and Anesthesia; Basics of Regional Anesthesia; Basic of Spinal and Epidural Anesthesia; Pearls for the Boards - Pain Medicine

## Post Graduate Rotation Supervision

Date Description

# Students

07/2012 - 06/2013 Fellows Supervision

**UTHSCSA** 

Institution

6

Dr's. Samir Patel, Samih El Ahdab, Michael McLeod, Paul Dare, Jay Parekh, Ameet Nagpal

## Post-Doctoral Student Supervision

Date Description

<u>Institution</u>

Students

07/2011 - 06/2012 Fellows Supervision

UTHSCSA

7

Dr's. Rick Alvarado, Wednesday Hall, Tristan Lai, Marte Martinez, Kanisha Monis, Michelle Nguyen and Davida Rixter.

07/2010 - 06/2011 Fellows Supervision

UTHSCSA

6

Dr's. Jamie Cauveren, Narciso Gonzalez, Pankaj Satija, Kaleb Shaw, Joshua Hay and Marc Parker.

09/2008 - 06/2010 Fellows Supervision

**UTHSCSA** 

12

Drs. Troy Gingerich, Jon Vu, Melissa Cady, Scott Stuempfig, Abdul Hayee, Kery Feferman, Aaron Nelson, David Tom, Scott Thompson, Bennett Ezekiel, Sarah Trampota, Trevor Kraus,

## **Rotation Student Supervision**

<u>Date</u> <u>Description</u>

Institution

#

Students

09/2008 - Present Resident Instruction

University of Texas Health Science

Center

Supervises students and residents rotating monthly in Pain Medicine Clinic, on Acute Pain Monthly Rotation, performing regional anesthesia in the perioperative areas, and in the operating rooms for general anesthesia cases. Takes overnight call with the Anesthesiology residents.

# **RESEARCH**

**EXPERTISE**:

## **Pain Management**

## PROJECTS:

#### Clinical Research

12/2010-Present Clinical Research, Non-Invasive End-tidal CO2 Monitoring, Project #: HSC20110105H

A Comparison of Non-Invasive End-tidal CO2 Monitoring in PACU Patients Status-Post Operative Fixation of ankle Fractures Who elect to Obtain Peripheral Nerve blocks for

Post-op Pain Versus Individuals Who do not.

PI: Maxim Eckmann Sub-I: Mario Santini

05/2010-

Clinical Research, Chronic opioid medications and associated comorbidities, Project #:

Present HSC20100329E

Medication Patterns in Chronic Pain patients Presenting to a South Texas Academic

Pain Clinic in 2010.

PI: Maxim Eckmann Sub-I: David Byrne

05/2010-

Clinical Research, Executive function testing in chronic pain patients, Project #:

Present HSC20100378E

Risk Factors for Abnormal CLOX 1 and 2 Test Results in a South Texas Chronic Pain

Population

PI: Maxim Eckmann Sub-I: Lucy Kupersmith

01/2009-01/2011 Clinical Research, Labor Pain and Biomarkers of Stress, Project #: HSC20090464H

The relationship between salivary cortisol and VAS pain scale before and after an

epidural analgesia for labor.

PI: Deena Liles

Co-I: Maxim Eckmann

Co-I: Somayaji Ramamurthy

12/2008-Present Clinical Research, Medial Branch Blocks and Salivary Stress Biomarkers, Project #:

HSC20090193H

Defining the continuum of short and long term responders to diagnostic medial branch blocks and association with salivary cortisol in patients with clinically suspected lumbar

facet pain.

PI: Maxim Eckmann

Co-I: Somayaji Ramamurthy

Co-I: Viktor Bartanusz Sub-I: Narciso Gonzalez Sub-I: Sarah Trampota 02/2008-02/2010 Clinical Trial, Spiritual Healing for Chronic Low Back Pain, Project #: HSC20070196H

NITHYA Spiritual healing as a therapy for chronic low back pain: A randomized, blinded clinical trial

PI: Somayaji Ramamurthy Sub-I: Maxim Eckmann Sub-I: Ramesh Jayarajan

## Departmental Projects

11/2010-	Curriculum Development, Acute Pain Resident Rotation, Reviewed, updated, and re-
11/2010	defined Acute Pain resident physician rotation structure/expectations and defined
	collaboration with chronic pain service.

03/2009- Board exam question development, Reviewed and revised ABA written board exam questions with the department chairman.

#### Research Article

Research Projects

11/2011-Present Original Article Submission, Clinical Journal of Pain, Eckmann MS, Ramamurthy S, Beyer J A, "A Randomized, Placebo Controlled, Double-Blinded Study to Investigate the Effects of Saphenous Nerve Block via the Adductor Canal on Chronic Knee Pain" Submitted for review.

01/2012-	Effect of Intrathecal Administration of Capsaicin on Neuropathic Pain, IACUC Protocol
01/2013	12021x: Effect of Delayed Intrathecal Administration of Capsaicin on Neuropathic Pain
	Induced by Chronic Constriction Injury of Sciatic Nerve in Rats.

01/2011- Use of the TRPV1 Agonist Capsaicin to provide long-term, Project#: 707549/W81XWH-08/2012 11-10-20-0093

Use of the TRVP1 Agonist Capsaicin to provide long-term Analgesia in a rat limb fracture, open repair, internal fixation model.

PI: Maxim Eckmann Co-I: Michael Buys

06/2010-Present Animal Research, Effect of Methylene Blue on Rat Sciatic Nerve Function, Project #:

10083-35-01-B2

Evaluation of the Dose Dependent Effects of Methylene Blue Injection on the Rat Sciatic Nerve Sensory and Motor Function.

PI: Maxim Eckmann

Co-I: Somayaji Ramamurthy

Sub-I: Ajit Naik Sub-I: Nicolas Lee

01/2010- Educational Research, Anxiety in Oral Practice Examinations, Project #: 02/2010 HSC20100210H

One year Follow-Up: Measures of Anxiety in Anesthesiology Resident Cohorts During Oral Board Practice Examinations.

PI: Maxim Eckmann

Co-I: Somayaji Ramamurthy

08/2009- Animal Research, Evaluation of the Effect of Dextrose on Sciatic Nerve, Project #:

Present 09096-35-01-B2

Evaluation of the Dose Dependent Effect of Dextrose Injection on Rat Sciatic Nerve Sensory and Motor Function.

PI: Maxim Eckmann

Co-I: Somayaji Ramamurthy

Sub-I: Ajit Naik Sub-I: Nicolas Lee

01/2009- Educational Research, Anxiety, Biomarkers of Stress, and Simulated Exams, The 02/2009 relationship between Salivary biomarkers and anxiety under stressful anesthesiology

oral examination.

PI: Maxim Eckmann

Co-I: Somayaji Ramamurthy

# **Teaching Projects**

04/2009- Curriculum Development, Acute Pain Pharmacy Student Rotation, Developed new

05/2009 curriculum for rotating pharmacy students on the Acute Pain Service.

# PUBLICATIONS: ('\*' indicates Peer Reviewed)

#### **Abstract**

- Kahn, Asif, Obi, Christiana, Boies, Brian, Nagpal AS, Eckmann MS. Using High Frequency Tonic-Stimulation to Control Paresthesias/Dysesthesias in a Brachial Plexopathy SCS Patient 2014 Oct. (<u>Texas Pain Society 6th Annual Scientific</u> Meeting Abstracts).
- 2. Nagpal AS, Eckmann MS, Mitchell BM. An alternative approach to neurostimulation for isolated foot pain 2013. p. E469-E470. (Pain Physician).
- 3. Martinez M, Hay J, Kubala M, Eckmann MS. Radiofrequency ablation at the bone-muscle interface increases volumetric lesion size compared to ablation performed in muscle alone. (Abstract) APS; 2012 May. (American Pain Society 31st Annual Scientific Meeting).
- 4. Alvarado RA, Eckmann MS. Case Report: Improvement of allodynia and functioning following 8 % capsaicin transdermal therapy in the setting of complex regional pain syndrome stemming from bilateral ankle fractures American Society of Regional Anesthesia and Pain Management; 2012 Mar. (ASRA, 37th Annual Regional Anesthesia Meeting and Workshops, Medically Challenging Case).
  - 5. Eckmann MS. Saphenous Nerve Block Shows Promise for Chronic Knee Pain 2009 Aug. p. 11-11. (Pain Medicine News; vol. 7, no. 8).

## **Book Chapter**

1. Eckmann MS, Ramamurthy S. Chapter 54 "Facet Joint Blocks" In: Pain Medicine and Management: Just the Facts, 2 ed, Wallace M and Staats P (eds), in press. New York, NY: McGraw Hill; 2013.

- 2. Eckmann MS, Ramamurthy S. Chapter 158. Thoracic Epidural Nerve Block In: Waldman Pain Management, 2nd Ed. Philadelphia, Pennsylvania: WB Saunders Publishing Company; 2011.
- 3. Walsh NE, Santa Maria D, Eckmann MS. Treatment of the Patient with Chronic Pain, Chapter 49 In: De Lisa's Physical Medicine and Rehabilitation, Principles and Practice, 5th ed. Lippincott Williams & Wilkins; 2010. p. 1273 - 1318.
- 4. Walsh NE, Eckmann MS. Injection Procedures, Chapter 67 In: De Lisa's Physical Medicine and Rehabilitation, Principles and Practice, 5th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2010. p. 1815 1873.

#### Dissertation/Thesis

1. Eckmann MS. Optimization of Environmental Control to Fit Living Space Requirements. An undergraduate research thesis as a requirement of the Texas A&M University Honors Program in Biomedical Engineering. 1998.

#### Editorial

- 1. Eckmann MS. Managing Risk in Long Term Opioid Prescribing for Persistent Pain Professional Solutions Insurance Company, Inc., Member Publications 2014 Mar
- ★ 2. Eckmann MS. Pain Medicine: Specialty Board Review <u>Anesthesiology</u> 2010 Apr;112 (4):1060-1061.

#### Journal Article

- 1. Eckmann MS. A Novel Use of Regional Anesthesia for Spastic Hemiplegia Evaluation and Treatment: A Case Report. PM & R: the journal of injury, function, and rehabilitation 2015 Jul;15
- 2. Eckmann MS, Martinez MA, Lindauer SL, Khan, Asif, Ramamurthy S. Radiofrequency ablation near the Bone-Muscle Interface Alters Soft Tissue Lesion Dimensions Regional Anesthesia and Pain Medicine 2015 May;40(3):270-275.
- ★ 3. Nagpal A, Eckmann M, Small S, Stevens S, Eckmann MS. Onset of spontaneous lower extremity pain after lumbar sympathetic block. <u>Pain Physician</u> 2015 Jan;18 (1):E89-E91.
- 4. Zang K, Ramamurthy S,Prihoda TJ,Eckmann MS. Effect of Delayed Intrathecal Administration of Capsaicin on Neuropathic Pain Induced by Chronic Constriction Injury of the Sciatic Nerve in Rats <u>Journal of Pain Research</u> 2014 Sep:547-554.
- 5. Parekh J, Eckmann MS, Ramamurthy S. Case series of methylene blue injections for the treatment of zygapophysial and sacroiliac joint pain: Results of 5 cases. <u>Open</u> <u>Journal of Anesthesiology</u> 2013 Jul;3(6):301-303.
- ★ 6. Ramamurthy S, Eckmann MS, Potter JS, Marino EN, Rosen KD, Guiterrez A. Impulsivity but not sensation-seeking is associated with opioid analgesic misuse risk in patients with chronic pain Addictive Behaviours 2013 May;38(5):2154-2157.
- 7. Eckmann MS, Ramamurthy S, Griffin JG. Intravenous Regional Ketorolac in the Treatment of Complex Regional Pain Syndrome of the Lower Extremity: A Randomized, Double-Blinded Study <u>Clinical Journal of Pain</u> 2011 Mar;27(3):203-206.
  - 8. Eckmann MS, Tremper K. Using the circuit elbow to prevent capnometer tube kinking. <u>Anesthesiology</u> 2005 Sep;103(3):670-671.

- 9. Marrelli SP, Eckmann MS, Hunte MS. Role of endothelial intermediate conductance KCa channels in cerebral EDHF-mediated dilations. <u>Am J Physiol Heart Circ Physiol</u> 2003 Oct;285(4):1590-1599.
  - Eckmann MS, Marquez G, Wang L. Clinical Trial of a White Light Oblique Incidence Reflectometry System for the Detection of Skin Cancers through in vivo Measurement of Absorption and Reduced Scattering Spectra <u>Texas A&M University</u> <u>Undergraduate Journal of Science</u>, 1999 Mar;2(2)

#### PRESENTATIONS:

- 12/2014 Choosing Appropriate PRN Pain Medications, Invited lecture to University Hospital Nursing Staff and Physicians, UHS, San Antonio, TX (Invited Speaker)
- 10/2014 Anesthesia and Analgesia of the Shoulder Joint and Surrounding Tissues, Peripheral Nerve and Brachial Plexus Techniques, American Society of Anesthesiologists Annual Meeting, Regional Anesthesia and Acute Pain Track, American Society of Anesthesiologists, New Orleans, LA (Keynote Speaker)

Details: Lead speaker of 90 minute panel

10/2014 <u>Radiofrequency Ablation of the Spine, Sacrum, and Lumbar Disc</u>, American Society of Anesthesiologists Annual Meeting, Pain Track, American Society of Anesthesiologists, New Orleans, LA (Keynote Speaker)

**Details:** Workshop Moderator

10/2014 <u>Using High Frequency Tonic-Stimulation to Control Paresthesias/Dysesthesias in a Brachial Plexopathy SCS Patient</u>, Texas Pain Society 6th Annual Scientific Meeting, TPS, San Antonio, TX (Co-Author)

**Details:** Poster and abstract, case report of salvaging suboptimal spinal cord stimulation therapy with high frequency stimulation in a patient with brachial plexopathy.

- 09/2014 <u>Preoperative Oral Pregabalin Reduces Chronic Pain After Total Knee Arthroplasty</u>, UTHSCSA Anesthesiology Journal Club, Anesthesiology, UTHSCSA, San Antonio, TX (Panel)
- 08/2014 The Role of Interventional Pain Medicine, 32nd Annual American Association of Physicians of Indian Origin invited CME Lecture, Evidence Based Management of Spine Pain, American Association of Physicians of Indian Origin, San Antonio, TX (Invited Speaker)
- 08/2014 <u>Considerations in HIV Related Pain</u>, FFACT UHS clinic physicians and medical staff meeting, FFACT, UHS, San Antonio, TX (Invited Speaker)
- 06/2014 <u>Upper Extremity Blocks</u>, UTHSCSA Anesthesiology Resident Block lecture on Regional/Acute Pain Rotation, Anesthesiology, UTHSCSA, San Antonio, TX (Sole Presenter)
- 05/2014 <u>Upper Extremity Blocks</u>, UTHSCSA Anesthesiology Resident Block lecture on Regional/Acute Pain Rotation, Anesthesiology, UTHSCSA, San Antonio, TX (Sole Presenter)
- 04/2014 Perioperative Opioid Management Safety and Pharmacology, UTHSCSA Anesthesiology Resident Block lecture on Regional/Acute Pain Rotation, Anesthesiology, UTHSCSA, San Antonio, TX (Sole Presenter)
- 03/2014 Intrathecal Pump Therapy for Chronic Pain and Spasticity, UTHSCSA PM&R Grand Rounds, Physical Medicine and Rehabilitation, UTHSCSA, San Antonio, TX (Invited Speaker)

02/2014 <u>Understanding Pain Physiology</u>, UHS Invited Lecture, Lunch and Learn Series for UHS Providers (Hospitalist Physicians),, University Hospital, University Health System, San Antonio, TX (Invited Speaker)

**Details:** Updated practicing hospitalist physicians and surgeons on the latest understanding of pain pathophysiology as pertains to persistent pain and pain adverse effects.

02/2014 <u>Case based learning, Managing Post-Surgical Pain</u>, UTHSCSA Surgery Internship Readiness Elective, UTHSCSA future surgery Interns, UTHSCSA Department of Surgery, San Antonio, TX (Sole Presenter)

**Details:** Surgical subspecialty and individually focused question/answer and case discussion on practical management of post-surgical pain for medical students soon to be surgery interns.

01/2014 <u>Updates in Perioperative Pain Management</u>, UTHSCSA Anesthesiology Department Resident Lecture, Anesthesiology, UTHSCSA, San Antonio, TX (Sole Presenter)

Details: Resident morning conference didactic.

11/2013 Cervical epidural blood patch performed using a fluoroscopically guided high thoracic epidural catheter for treatment of C2 CSF leak: A Case Report, American Society of Regional Anesthesia 12th Annual Pain Medicine Meeting, Pain Medicine, American Society of Regional Anesthesia, Phoenix, AZ (Co-Author)

**Details:** Description of technique and decision making in treating a C2 dural CSF leak with a guided epidural catheter and blood patch.

10/2013 <u>Lesion Dimensions Altered in Radiofrequency Ablation near the Bone-Muscle Interface</u>, American Society of Anesthesiologsts, 2013 Annual Meeting, American Society of Anesthesiologists, San Francisco, CA (Co-Author)

**Details:** Abstract and poster presentation on novel model demonstrating that RF thermocoagulation lesions protrude further when next to bone than when in pure muscle tissue.

09/2013 <u>Understanding Persistent Pain</u>, Pain and Addiction Conference, University Health System, institutional CNE invited lecture for UT/UHS/STVHS, UTHSCSA/UHS/STVHS, San Antonio, TX (Invited Speaker)

**Details:** Updates in understanding of pain pathways and the devlopment of chronic pain syndromes, treatment of chronic pain syndromes, management of pain in opioid tolerant patients, regulation regarding controlled substances, co-management of pain and addiction strategies.

08/2013 <u>Journal Club: Assessing Risk and Monitoring Patients on Long Term Opioid Therapy with Urine Drug Testing</u>, UT Medicine Invited Lecture, Internal Medicine, UTHSCSA, San Antonio, TX (Invited Speaker)

**Details:** Discussion and journal review of risk assessment and urine testing protocols for patients on long term opioid therapy.

08/2013 Pain Beyond Opioids: A Procedural Perspective, Geriatric and Palliative Medicine: Pearls for the Busy Clinician, regional CME invited lecture, UTHSCSA, STVHS sponsored, San Antonio, TX (Invited Speaker)

**Details:** CME lecture given to primary care, palliative care, and geriatric medicine physicians on updates in multimodal pain therapies, minimally invasive surgery, and regulation of controlled substances, as pertains to the geriatric or cancer population.

05/2013 Perioperative Opioid Management Safety and Regulations, UTHSCSA Neurosurgery and Pain Medicine Combined Grand Rounds, San Antonio, TX (Invited Speaker)

- 05/2013 A case of acute neuropathy caused by rapid glycemic control with insulin in a diabetic patient which was treated with lumbar sympathetic blocks, American Pain Society, 32nd Annual Scientific Meeting, New Orleans, LA (Co-Author)
- 05/2013 <u>Unintentional intrathecal placement during attempted caudal epidural steroid injection with</u> <u>directed catheter allows for excellent relief in refractory lumbar radiculopathy: a case report,</u> American Pain Society, 32nd Annual Scientific Meeting, New Orleans, LA (Co-Author)
- 05/2013 Thoracic wall pain from spinal cord stimulator electrode malfunction, American Pain Society, 32nd Annual Scientific Meeting, New Orleans, LA (Co-Author)
- 05/2013 <u>Sural Nerve Pain: Similar Response between Pulsed RF and Methylene Blue Chemoneurolysis,</u> American Society of Regional Anesthesia and Acute Pain, 38th Annual Meeting, ASRA, Boston, MA (Co-Author)

**Details:** Novel case report of use of methylene blue for neurolytic block of the sural nerve, with comparison versus prior pulsed RFA treatment in the same patient.

- 03/2013 <u>Ketamine and Dexmedetomidine Coma in Complex Regional Pain Syndrome</u>, American Academy of Neurology 65th Annual Meeting, San Diego, CA (Co-Author)
- 11/2012 <u>Case Series of Methylene Blue Injections for Treatment of Zygapophyseal and Sacroiliac Joint Pain, ASRA Fall Meeting, Miami, FL (Co-Author)</u>
- 11/2012 Effect of Delayed Intrathecal Administration of Capsaicin on Neuropathic Pain Induced by Chronic Constriction Injury of the Sciatic Nerve in Rats, ASRA Fall Meeting, Miami, FL (Co-Author)
- 10/2012 Pain Injection Procedures, Palliative Care Department, ALMVA/UTHSCSA, San Antonio, TX (Invited Speaker)
- 10/2012 Pain Medicine: Today's Practice and Tomorrow's Future, PIAA (Physician Insurers Association of America) Underwriting Worskhop, PIAA, Austin, TX (Invited Speaker)
  Details: Described to insurance underwriters the current paths to education and certification in Pain Medicine and the current scope of invasive treatments in Pain Medicine.
- 10/2012 <u>Pulsed Radiofrequency for the Treatment of Chronic Pancreatitis associated with Cystic Fibrosis,</u> Texas Pain Society Meeting 10/ 2012, ASRA Meeting 11/2012, Bastrop, TX (Co-Author)
- 08/2012 Pain Management at UHS, Orthopedic Surgery Department, UTHSCSA, San Antonio, TX (Invited Speaker)
- 07/2012 Retrospective study of lumbar medial branch neurolysis with hypertonic dextrose versus radiofrequency ablation, 20th Annual Scientific Meeting, International Spine Intervention Society (ISIS), Interventional Pain Medicine, ISIS, Las Vegas, NV (Co-Author)

**Details:** Retrospective study of lumbar medial branch neurolysis with hypertonic dextrose versus radiofrequency ablation, review of over 200 cases, submitted for poster presentation and abstract at the 20th Annual Scientific Meeting, International Spine Intervention Society (ISIS).

- 07/2012 <u>Pain Management, Orientation</u>, UTHSCSA Surgery Resident Orientation Lecture, San Antonio, TX (Sole Presenter)
- 05/2012 The Relationship Between Age and the Incidence of Chronic Pain Syndromes Developing After Cardiothoracic Surgery: A Retrospective Study at UHS, 2011 UTHSCSA MSTAR Student

Presentations, 6/23/2011; American Geriatrics Society 2012 Annual Scientific Meeting, Seattle WA, 5/2/2012., MSTAR Program, San Antonio, TX (Co-Author)

**Details:** Akriti R, Eckmann MS, Little M, "The Relationship Between Age and the Incidence of Chronic Pain Syndromes Developing After Cardiothoracic Surgery: A Retrospective Study at UHS," 2011 UTHSCSA MSTAR Student Presentations, 6/23/2011. Accepted for presentation at national meeting, American Geriatrics Society 2012 Annual Scientific Meeting, Seattle WA, 5/2/2012.

10/2011 Reduction in Salivary Cortisol and Alpha-Amylase Following Lumbar Epidural Analgesia for Labor Pain, American Society of Anesthesiologists, Annual Meeting, Research Posters, ASA, Chicago, IL (Co-Author)

**Details:** Allen AW, Eckmann MS, Liles DR, Ramamurthy S, "Reduction in Salivary Cortisol and Alpha-Amylase Following Lumbar Epidural Analgesia for Labor Pain," Poster and Abstract, ASA 2011 Annual Meeting, 10/15/2011.

09/2011 <u>Transitioning from Inpatient to Outpatient Pain Care, Journal Article Review and Discussion,</u> CME Lecture, UHS and VA Hospitalists Groups, UTHSCSA, UHS, ALMVA, San Antonio, TX (Invited Speaker)

**Details:** CME lecture on the challenges of transitioning patients from inpatient to outpatient status when they have persistent pain and medical needs.

- 08/2011 <u>Considerations, Pearls in Long Term Opioid Therapy</u>, MARC Family Practice, UTHSCSA, San Antonio, TX (Invited Speaker)
- 06/2011 <u>Analgesic Alternatives for Pain Management</u>, Anesthesiology Grand Rounds, UTHSCSA, San Antonio, TX (Sole Presenter)
- 06/2011 <u>Complications of Long Term Opioid Therapy, Updates in 2011</u>, Anesthesiology Grand Rounds, UTHSCSA, San Antonio, TX (Sole Presenter)
- 05/2011 A Comparison of Non-Invasive End-Tidal CO2 Monitoring in PACU Patients Status-Post ORIF of Ankle Fractures Who Elect to Obtain Peripheral Nerve Blocks for Post-Op Pain Versus Individuals Who do Not (Original Pilot Study), 2011 Senior Research Projects Presentation, Anesthesiology, University of Texas Health Science Center at San Antonio, San Antonio, TX (Co-Author)

Details: Senior Research Resident: Santini M.

05/2011 <u>Dextrose Injection of Sacral Lateral Branches for Chronic Sacroiliac Joint Pain,</u> APS 30th Annual Scientific Meeting, Research Posters, American Pain Society, Austin, TX (Co-Author)

**Details:** Satija P, Parker M, Eckmann M, Ramamurthy S, "Dextrose Injection of Sacral Lateral Branches for Chronic Sacroiliac Joint Pain," Poster and Abstract, APS 30th Annual Scientific Meeting, May 2011, Austin, TX.

05/2011 <u>Inpatient Pain Management</u>, Hospitalist Internal Medicine Group,, University Health System, San Antonio, TX (Invited Speaker)

**Details:** Lectured on specific challenges with IV PCA use and other pain management issues in medical inpatients.

- 05/2011 <u>Updates in Perioperative Pain Management</u>, Combined Anesthesiology and Surgery Grand Rounds, UTHSCSA, San Antonio, TX (Keynote Speaker)
- 04/2011 Continuous Intercostal Perineural Catheter Placement for Pain Control in a Patient with Multiple One-Sided Rib Fractures (Case Report), GAARRC Meeting, Medically Challenging Cases, Gulf Atlantic Anesthesia Residents' Research Conference, Orlando, FL (Co-Author)

**Details:** Clanton D, Lee NC, Eckmann MS, "Continuous Intercostal Perineural Catheter Placement for Pain Control in a Patient with Multiple One-Sided Rib Fractures (Case Report)," Abstract and Poster, GAARRC Meeting, 4/30/2011.

03/2011 Post-operative Pain Management, UTHSCSA Surgery Internship Readiness Elective, Department of Surgery, UTHSCSA, San Antonio, TX (Invited Speaker)

Details: Eckmann MS, "Post-operative Pain Management," UTHSCSA Surgery Internship

Readiness Elective, March 2, 2011.

03/2011 <u>Thoracic Epidural Analgesia: A Review of Effects, Applications, and Outcomes,</u> Drexel University Department of Anesthesiology Grand Rounds, Department of Anesthesiology, Drexel University, Philadelphia, PA (Invited Speaker)

**Details:** Eckmann MS, "Thoracic Epidural Analgesia: A Review of Effects, Applications, and Outcomes," Invited Lecture, Drexel University Department of Anesthesiology Grand Rounds, March 9, 2011.

03/2011 Risk Factors for Abnormal CLOX 1 and 2 Test Results in a South Texas Chronic Pain
Population, American Academy of Pain Medicine 27th Annual Meeting, Scientific Poster Session
1, American Academy of Pain Medicine, National Harbor, MD (Co-Presenter)

**Details:** Kupersmith L, Eckmann MS, "Risk Factors for Abnormal CLOX 1 and 2 Test Results in a South Texas Chronic Pain Population," Poster and Abstract, American Academy of Pain Medicine 27th Annual Meeting, March 25, 2011.

11/2010 Treatment of trigger points with botulinum toxin A injection therapy for cervical myofascial pain syndrome: A randomized double blind study, ASRA Annual Pain Medicine Meeting and Workshops, Scientific Poster Session, American Society of Regional Anesthesia and Pain Medicine, Phoenix, AZ (Co-Author)

**Details:** Satija P, Sudweeks T, Eckmann MS, Ramamurthy S, "Treatment of trigger points with botulinum toxin A injection therapy for cervical myofascial pain syndrome: A randomized double blind study," Poster and Abstract, ASRA Annual Pain Medicine Meeting and Workshops, 11/2010.

11/2010 Low Frequency, High Amplitude Spinal Cord Stimulation as Rescue Therapy for Failed

Neuromodulation, ASRA Annual Pain Medicine Meeting and Workshops, Video Case Contest,
American Society of Regional Anesthesia and Pain Medicine, Phoenix, AZ (Co-Author)

**Details:** Cauveren J, Satija P, Eckmann M, Ramamurthy S, "Low Frequency, High Amplitude Spinal Cord Stimulation as Rescue Therapy for Failed Neuromodulation," Video Case Contest, ASRA Annual Pain Medicine Meeting and Workshops, 11/2010.

10/2010 Patterns in Chronic Pain Patients Presenting to a South Texas Academic Pain Center in 2010, UTHSCSA Medical Student Research Day, UTHSCSA, San Antonio, TX (Co-Author)

\*\*Details: Abstract and Poster presentation\*\*

- 10/2010 Risk Factors for Abnormal CLOX 1 and 2 Test Results in a South Texas Chronic Pain Population, UTHSCSA Medical Student Research Day, UTHSCSA, San Antonio, TX (Co-Author) Details: Abstract and Poster presentation
- 10/2010 Contemporary Pain Management (1 hour CME Lecture), An Educational Event to Promote Safe Use of Patient Controlled Analgesia for Adult Patients, San Antonio Safety Collaborative, Baptist Healthcare System, Methodist Healthcare System, CHRISTUS Santa-Rosa, UT Health Science Center, University Hospital, San Antonio, TX (Invited Speaker)

**Details:** Comprehensive review of pain assessment and full spectrum of evidence based pain therapies, including PCA analgesia and safety considerations.

- 10/2010 Intradiscal Methylene Blue: A novel treatment for discogenic back pain, Texas Pain Society 2nd Annual Scientific Meeting, Scientific Meeting, Texas Pain Society, Austin, TX (Co-Author)
  Details: Pankaj Satija, MD, Narciso Gonzalez, MD, Maxim Eckmann, MD, Somayaji
  Ramamurthy, MD, "Intradiscal Methylene Blue: A novel treatment for discogenic back pain,"
  Poster and Abstract, Texas Pain Society 2nd Annual Scientific Meeting, 10/2010.
- 09/2010 Considerations in Long Term Opioid Therapy, UTHSCSA Pain Medicine Grand Rounds, Pain Medicine, UTHSCSA, San Antonio, TX (Sole Presenter)
- 03/2010 Post Operative Pain Management, UTHSCSA Surgery Internship Readiness Elective, UTHSCSA, San Antonio, TX (Invited Speaker)
- 02/2010 <u>Lower Extremity Nerve Blocks</u>, Grand Rounds, Physical Medicine and Rehabilitation, UTHSCSA, San Antonio, TX (Invited Speaker)
- 01/2010 Considerations in Long Term Opioid Therapy (1 hour CME Lecture), Community Medicine Associates CME lecture series, Community Medicine Associates, University Health System, San Antonio, TX (Invited Speaker)
  - **Details:** Lecture on opioid management given for CME level credit
- 11/2009 <u>Thoracic Epidural Analgesia: Effects, Applications, and Outcomes</u>, Combined Anesthesiology and Surgery Grand Rounds, Surgery and Anesthesiology, UTHSCSA, San Antonio, TX (Invited Speaker)
- 10/2009 Measures of Anxiety in Anesthesiology Residents and Examiners During Mock Oral

  Examinations, ASA Annual Meeting, Poster Discussion, American Society of Anesthesiologists,
  New Orleans, LA (Sole Presenter)
- 10/2009 Effects and Outcomes of Interventional Analgesia for Multiple Rib Fractures: Focus on Thoracic Epidural Analgesia, Seminar, Division of Trauma, UTHSCSA, San Antonio, TX (Invited Speaker)
- 09/2009 Interventional Pain Management, Guest Lecture, CTRC Oncology, UTHSCSA, San Antonio, TX (Invited Speaker)
- 08/2009 <u>Spinal Cord Stimulator Implantation</u>, Workshop, Pain Medicine, UTHSCSA, San Antonio, TX (Panel)
  - **Details:** Faculty facilitator, cadaver workshop for spinal cord stimulator implanatation.
- 06/2009 <u>Virtues of Academic Anesthesiology</u>, Grand Rounds, Anesthesiology, Brooke Army Medical Center Anesthesiology Guest Lecture, San Antonio, TX (Invited Speaker)
- 04/2009 <u>Radiofrequency Ablation, Science and Technical Aspects</u>, Grand Rounds, Pain Medicine, UTHSCSA, San Antonio, TX (Sole Presenter)
- 03/2009 A Randomized Controlled Double-Blinded Study to Investigate the Effect of an Adductor Canal Nerve Block on Knee Pain, IARS 2009 Annual Conference, International Anesthesia Research Society, San Diego, CA (Co-Author)
- 03/2009 <u>Causes, Diagnosis, and Treatment of Low Back Pain</u>, Grand Rounds, Family Medicine, UTHSCSA, San Antonio, TX (Invited Speaker)
- 01/2009 <u>Neurolysis Using a Hyperosmolar Dextrose Solution versus Traditional Treatment Modalities,</u>
  Annual Conference, Department of Anesthesiology, UTHSCA, San Antonio, TX (Co-Presenter)

- 01/2009 Defining the continuum of short and long term responders to diagnostic medial branch blocks and association with salivary cortisol in patients with clinically suspected lumbar facet pain, Annual Conference, Department of Anesthesiology, UTHSCSA, San Antonio, TX (Co-Presenter)

  \*\*Details: Advisor Anesthesiology Residency Senior Project\*\*
- 01/2009 <u>Thoracic Epidurals in Trauma Patient</u>, Annual Conference, Department of Anesthesiology, UTHSCSA, San Antonio, TX (Co-Presenter)

Details: Advisor to Anesthesiology Senior Academic Projects

- 12/2008 Effects and Outcomes of Interventional Analgesia for Multiple Rib Fractures: Focus on Thoracic Epidural Analgesia, Seminar, Division of Trauma, UTHSCSA, San Antonio, TX (Invited Speaker)
- 09/2008 Interventional Pain Management, Guest Lecture, Palliative Care, Audie Murphy VA Hospital, San Antonio, TX (Invited Speaker)
- 08/2008 Intravenous Regional Ketorolac in the Treatment of Complex Regional Pain Syndrome of the Lower Extremity: A Randomized, Double-Blinded Study., Annual Scientific Meeting, Internatinal Association for the Study of Pain (IASP), 12th World Congress, Glasgow, United Kingdom (Keynote Speaker)

**Details:** Double blinded randimized cross-over study performed to evaluate the efficacy of IV regional block performed with lidocaine & doses of ketorolac.

- 08/2008 Impact of Untreated Pain, Conference, Department of Neurosurgery, UTHSCA, San Antonio, TX (Invited Speaker)
- 04/2008 <u>Interventional Pain Management</u>, Grand Rounds, Palliative Care Grand Rounds, Audie Murphy VA Hospital, San Antonio, TX (Invited Speaker)
- 01/2008 Impact of Untreated Pain, Grand Rounds, Podiatry Department, University of Texas Health Science Center at San Antonio, San Antonio, TX (Sole Presenter)
- 01/2008 <u>Airway Workshop, Retrograde Wire Intubation/Cricothyroidotomy/Tracheotomy Station,</u> Seminar, Department of Anesthesiology, UTHSCSA, San Antonio, TX (Invited Speaker) **Details:** Department of Anesthesiology & Tejas Anesthesiology for residents physicians
- 10/2007 Intravascular Volume Management & Post-Operative Complications Following Radical Cystectomy, Annual Conference, American Society of Anesthesiologists, San Francisco, CA (Sole Presenter)
- 10/2007 <u>Intra-operative Volume Management and Post-Operative Complications following Radical</u> Cystectomy, Annual Conference, ASA (Sole Presenter)
- 03/2006 <u>Case report: Methemoglobinemia in a Patient with Sepsis</u>, Conference, Midwest Anesthesia Resident's Conference (MARC), Ann Arbor, MI (Sole Presenter)
- 03/2005 Case Report: Fascia Iliaca & Sacral Plexus Regional Blocks for Emergency Hip Surgery in a Patient with Critical Aortic Stenosis, Conference, Midwest Anesthesia Resident's Conference (MARC), UTHSCSA, Annn Arbor, MI (Sole Presenter)

<u>Design and Manufacture of a Simultaneous Dual Wavelength Fluorescence Detector System for the Measurement of Endothelial Membrane Potential in Intact Cerebral Arteries</u>, Fourth Annual James K. Alexander Research Symposium, Baylor College of Medicine, Houston, TX (Co-Presenter)

## **RESEARCH GRANTS:**

Project #: HSC20090241H Funding Agency: UTHSCSA

Title: Clinical Research: Spine Pain and Biomarkers of Stress

Status: Active

Period: 04/2009 - Present

Role: Principal Investigator % Effort:

**Total Costs:** 

Grant Detail: The correlation between salivary biomarkers of stress and spine related pain in

patients, compared to a normal healthy adult population.

#### Federal

Project #:

Funding Agency: National Institue of Aging

Title: MSTAR (Medical Student Training in Aging Research) Program

Status: Active

Period: 05/2011 - 07/2011

Role: Principal Investigator % Effort:

**Total Costs:** \$3,400.00

**Grant Detail:** Summer research award for junior medical student to investigate the incidence and risk factors for development of chronic pain syndromes and disability in geriatric patients who

undergo major cardiac surgery.

## Private

Project #:

Funding Agency: Medtronic, Inc.

Title: Medtronic Neuromodulation Pain Fellowship Grant AY 2013-2014

Status: Active

Period: 07/2013 - 06/2014

Role: Principal Investigator % Effort:

**Total Costs:** \$25,000.00

Grant Detail: Grant to support fellows' education and research related expenses for the 2013-

2014 academic year.

Project #:

Funding Agency:

Title: Boston Scientific Neuromodulation Pain Fellowship Grant, AY 2013-2014

Status:

Period: 07/2013 - 06/2014

Role: Principal Investigator % Effort:

**Total Costs:** \$25,000.00

Grant Detail: Grant to support fellows' education and research related expenses for the 2013-

2014 academic year.

Project #:

Funding Agency: Medtronic, Inc.

Title: Medtronic Neuromodulation Pain Fellowship Grant

Status: Active

Period: 07/2012 - 06/2013

Role: Principal Investigator % Effort:

Total Costs: \$25,000.00

Grant Detail: Grant to support fellows' education and research related expenses for the 2012-

2013 academic year.

Project #:

Funding Agency: Boston Scientific

Title: Boston Scientific Neuromodulation Pain Fellowship Grant

Status: Active

Period: 07/2012 - 06/2013

Role: Fellowship % Effort:

**Total Costs:** \$30,000.00

Grant Detail: Grant to support fellows' education and research related expenses for the 2012-

2013 academic year.

Project #: 707549 / W81XWH1

Funding Agency: Henry M. Jackson Foundation

Title: Use of the TRPV1 agonist Capsaicin to provide long-term analgesia in a rat limb fracture /

open repair, internal fixation model.

Status: Active

**Period:** 01/2011 - 08/2012

Role: Contributor % Effort:

Total Costs: \$194,855.00

**Grant Detail:** 

#### State

Project #:

Funding Agency: UTHSCSA

Title: Summer Medical Research Program, 4th

Status: Active

Period: 05/2012 - 07/2012

Role: Principal Investigator % Effort:

Total Costs: \$2,000.00

**Grant Detail:** One time grant to support medical student summer research project to study the associations of acute procedural pain and chronic lumbosacral spine pain with salivary biomarkers

of stress.

Project #:

Funding Agency: UTHSCSA

Title: Summer Medical Research Program, 3rd

Status: Active

Period: 05/2011 - 07/2011

Role: Principal Investigator % Effort:

Total Costs: \$2,000.00

Grant Detail: One time grant to support junior medical student to study the associations of acute

procedural pain and chronic pain with salvary biomarkers of stress.

Project #:

Funding Agency: UTHSCSA

Title: Summer Medical Research Program

Status: Complete

Period: 05/2010 - 07/2010 Role: Principal Investigator

Total Costs: \$2,000.00

Grant Detail: Summer research award for junior medical student to investigate opioid precription

% Effort:

patterns in chronic pain patients.

Project #:

Funding Agency: UTHSCSA

Title: Summer Medical Research Program, 2nd

Status: Complete

**Period**: 05/2010 - 07/2010

Role: Principal Investigator % Effort:

Total Costs: \$2,000.00

Grant Detail: Summer research award for junior medical student to investigate risk factors for

executive dysfunction detected with CLOX screening test in a chronic pain population.

# **SERVICE**

## ADMINISTRATIVE RESPONSIBILITIES:

<u>Dates</u> <u>Type</u> <u>Description</u> <u>Role</u>

04/2011-Present Director - Westgate Chronic Pain Clinic Director

General oversight of clinic operations and supervision of medical staff; conduct regular staff

meetings, devise and approve policies, manage workflow.

04/2011-Present Medical Director of UT Medicine Pain Medical

Consultants Director

Medical Director of the University's chronic pain medicine clinic, formerly known as University Center for Pain Medicine, and now organized under the corporate entity of U.T. Medicine Pain Consultants

04/2011-Present Director of Pain Medicine for Department of Director

Anesthesiology

Oversight of both inpatient and outpatient pain services delivered by the Department of Anesthesiology. Includes representing Pain Medicine expertise in matters that involve hospital policies. Oversight of consult triage between the Acute Pain Service and the Chronic Pain Service. Production of the monthly Pain Clinic faculty schedule in coordination with the Acute Pain faculty schedule

08/2008-11/2012 Director of Acute Pain Service for Director

Department of Anesthesiology

Production of monthly Acute Pain faculty schedule. Coordination of inpatient periperative pain care and acute pain consultation. Oversight of educational curriculum for Anesthesiology residents as relates to the Acute Pain rotation. Coordination and consultation with University Hospital pain nursing staff of policy administration and documentation.

04/2008-Present Associate Director of Pain Medicine Associate

Research for Department of Anesthesiology Director

Oversight of animal laboratory and rat protocols in neuropathic pain research. Liaison and mentor to multiple multidisciplinary human research projects.

## PATIENT CARE:

<u>Dates</u> <u>Type</u> <u>Description</u> <u>Role</u>

09/2008-Present Inpatient Patient Care - University Hospital Physician

Anethesia and pain management services in the operating rooms, remote sites, and the Acute Pain

Service (postoperative pain management). Service is 5 days/week and 48 weeks/year.

09/2008-Present Inpatient Patient Care - Audie Murphy Memoral Physician

Veterans Administration Hospital

Anesthesia services in the operating room

09/2008-Present Outpatient Patient Care - U.T. Pain Consultants Chronic Physician

Pain Management Clinic

Provide pain management consultation and care

## SERVICE TO THE INSTITUTION:

<u>Dates</u> <u>Type</u> <u>Description</u> <u>Role</u>

10/2013-10/2013 Department Resident Regional Nerve Block Workshop Faculty

Served as faculty for ultrasound guided transversus abdominis plane, intercostal,

ilioinguinal/iliohypogastric, and paravertebral nerve blocks for UTHSCSA Anesthesiology Resident Physicians, 10/5/2013 for 4 hours.

02/2013-02/2013 School UTHSCSA Medical Student Interest Group Guest Speaker

Meeting

Discussed subspecialty career paths in Anesthesiology, namely Pain Medicine, and pathway to

board certification.

09/2011-Present Hospital University Hospital Pain Committee Chair

05/2010-Present School Medical Student Researcher Mentoring Mentor

Assist in project design and oversight of UTHSCSA School of Medical students participating in the

MSTAR program.

09/2008-Present Department Senior Research Project Mentoring Mentor

Advise and assist anesthesiology senior residents in the development and conduction of a research project for presentation and publication. One - two residents each training year.

## **SERVICE TO THE PROFESSION:**

<u>Dates</u> <u>Type</u> <u>Description</u> <u>Role</u>

05/2015-Present National Oral Examiner, American Board of Faculty

Anesthesiology

American Board of Anesthesiology, Provisional Oral Board Examiner; delivery of oral examination to candidates for board certification in Anesthesiology.

10/2014-11/2014 International Journal of Medicinal Food Reviewer

Peer Reviewer, "JMF-2014-3346;mAnti-allodynic effect of berberine against chronic constriction injury of sciatic nerve in a rat model," Journal of Medicinal Food, 10/30/2014.

02/2014-02/2016 Local President, San Antonio Chapter, Texas Pain President

Society

06/2013-06/2013 International Drug Design, Development and Therapy Reviewer

Peer Reviewer, "Extended release local anesthetic agent compatibility following site-directed nerve

injection."

01/2013-01/2013 International Journal of Pain Research Reviewer

Peer Reviewer, "Comparison of the transport of QX-314 through TRPA1, TRPM8 and TRVP1

channels."

12/2012-12/2012 International Cochrane Pain, Palliative and Supportive Referee

Care (PaPaS)

Peer Referee Assessment, "Interventions for treating pain and disability in adults with complex

regional pain syndrome: Cochrane systematic review (overview)"

12/2012-12/2012 International Saudi Journal of Anaesthesia Reviewer

Peer Reviewer, "Hand Intravenous Regional Anesthesia"

04/2012-04/2012 International Clinical Journal of Pain Reviewer

Peer Reviewer for article entitled, "Subcutaneous Botulinum Toxin Type A For Neuropathic Pain: A

Descriptive Review," for the Clinical Journal of Pain, Lippincott Williams and Wilkins.

10/2011-10/2011 International Journal of Pain Research Reviewer

Peer Reviewer for article entitled, "Therapeutic efficacy of intravenous lidocaine in acute neuropathic

pain conditions: a pilot study" for the Journal of Pain Research, Dovepress

11/2010-11/2011 National Dannemiller Interventional Pain Management Co-Director

Cadaver Workshop

02/2010-11/2010 National Dannemiller Interventional Pain Management Co-Director

Cadaver Workshop

Developed curriculum and invited speakers, in conjunction with the Dannemiller company, to produce a 2 day international CME workshop in pain management, held in the UTHSCSA Medical School Anatomy Lab. Workshop combined two mornings of didactics in selected topics with two afternoons of practical workshops in interventional procedures on cadaveric specimens.

### PROFESSIONAL AFFILIATIONS:

<u>Dates</u> <u>Organization</u>

10/2010-Present Texas Pain Society

Additional Details: Member

05/2010-Present American Pain Society

04/2010-Present Texas Society of Anesthesiologists

09/2009-Present American Society of Regional Anesthesia and Pain Medicine

Additional Details: Member

04/2009-Present International Spine Intervention Society

Additional Details: Member

08/2008-Present American Society of Anesthesiologists

## **COMMITTEES (UTHSCSA Standing Committees):**

#### **DEPARTMENT**

<u>Dates</u> <u>Committee</u> <u>Role</u>

05/2013-Present Research Chair

Oversight of departmental research compliance and research faculty promotion

09/2010-05/2013 Research Co-Chair

01/2010-Present Education Member

## **UNIVERSITY**

<u>Dates</u> <u>Committee</u> <u>Role</u>

07/2012-PresentInstitutional Review BoardMember09/2010-07/2012Institutional Review BoardAlternate

08/2010-Present Parking and Traffic Safety Committee Member

## COMMITTEES (OTHER):

## **DEPARTMENT**

<u>Dates</u> <u>Committee</u> <u>Role</u>

05/2011-Present Leadership Committee, U.T. Health Science Center at San Antonio, Member School of Medicine, Anesthesiology

Committee comprised of division directors and other key faculty to advise and consult with the Chair on clinical, research, and academic matters of the department.

11/2009-08/2010 Acute Pain Management Ad Hoc Subcommittee for the UHS Pharmacy and Therapeutics Committee

Ad hoc sub-committee formed to address standardization of order sets for elastomeric pain infusion pumps.

01/2009-Present UHS Pain Committee, UTHSCSA Chair

### **HOSPITAL**

<u>Dates</u> <u>Committee</u> <u>Role</u>

04/2009-03/2012 Cancer Committee, University Hospital Member

09/2008-Present Medical Staff Committee, UTHSCSA Member

#### **OTHER**

**Dates Committee** Role 10/2014-10/2017 American Society of Anesthesiologists Pain Medicine Workshop Chair Planning Subcommittee, American Society of Anesthesiologists (ASA, national organization) Coordination of the Pain Medicine Ultrasound and Fluoroscopic procedure, educational workshops for the 2014 American Society of Anesthesiologists annual meeting. 02/2014-01/2016 South Texas Pain Society, Local Chapter of the Texas Pain Society President Lead and coordinate recurring educational meetings for the local chapter of the Texas Pain Society. American Society of Anesthesiologists Pain Medicine Workshop 10/2013-10/2014 Co-Chair Planning Subcommittee, American Society of Anesthesiologists (ASA, national) Assist with coordination of the Pain Medicine Ultrasound and Fluoroscopic procedure, educational workshops for the 2014 American Society of Anesthesiologists annual meeting. 07/2013-07/2015 American Society of Anesthesiologists Educational Track Member Subcommittee on Pain Medicine, American Society of Anesthesiologists (ASA, national organization) Review and adjust educational tracks/panels/academic topics for upcomming recurring ASA national meetings. 08/2012-01/2014 South Texas Pain Society Vice President Regional Chapter of Texas Pain Society; serving as Secretary 06/2011-07/2016 American Society of Anesthesiologists Educational Track Member Subcommittee on Regional Anesthesia and Acute Pain, American Society of Anesthesiologists (ASA, national organization) Review and adjust educational tracks/panels/academic topics for upcomming recurring ASA national meetings. 06/2011-10/2012 American Society of Anesthesiologists Abstract Review Member Subcommittee on Regional Anesthesia and Acute Pain, American Society of Anesthesiologists (ASA, national organization) Review and approve scientific submissions for recurring ASA meeting. 06/2011-06/2012 American Society of Anesthesiologists Abstract Review Member Subcommittee on Chronic and Cancer Pain, American Society of Anesthesiologists (ASA, national organization) Review and approve scientific submissions to the recurring annual American Society of Anesthesiologists national meeting. 10/2010-07/2012 South Texas Pain Society Secretary Regional Chapter of Texas Pain Society; serving as Secretary 06/2009-12/2010 Medical Executive Committee, CTRC & HEB SOC Member

## **SCHOOL**

<u>Dates</u> <u>Committee</u> <u>Role</u>

02/2013-Present Graduate Medical Education Committee (GMEC), Milestones Member

Subcommittee, UTHSCSA

Subcommitte charge is to: generate advice for CCC chairs and program directors on upcoming Milestones initiatives

11/2011-Present Graduate Medical Education Committee (GMEC), Duty Hours Member Subcommittee, UTHSCSA

Subcommitte charge is to: Monitor all GME programs' written policies governing resident duty hours and moonlighting, determine actual duty hours, review and make recommendations regarding exemptions and violations.