**Alan R. Brewer, DDS, MD**

**303-520-8978**

**303-362-2023 (Fax)**

**docarb@gmail.com**

Date of Preparation: 1 March 2012

**Personal Data:**

Citizenship Status: United States of America

Spouse: Yvonne C Brewer

**Education:**

8/85-5/89 MD Creighton University, Omaha, NE

8/75-5/79 DDS Creighton University, Omaha, NE

8/74-8/75 MS (Microbiology) Wichita State University, Wichita, KS

8/70-8/74 BS (Biology, Chemistry) Wichita State University, Wichita, KS

8/69-5/70 Sacred Heart College, Wichita, KS

**Postgraduate Medical Training:**

7/90-7/93 Anesthesiology University of Nebraska, Omaha, NE

7/89-7/90 General Surgery Creighton University, Omaha, NE

**Academic Appointments:**

4/2007- Assistant Professor Chronic Pain Service

3/2010 The Children’s Hospital

Aurora, CO 80045

9/2001- Assistant Professor Interventional Pain Program

3/2010 Department of Anesthesiology,

Univ. Colorado Health Science Center,

Aurora, CO

4/2000- Assistant Professor Director, Pain Management Center

9/2001 Department of Anesthesiology,

University of Kansas Medical Center

Kansas City, KS

**Other Employment:**

9/09-3/10 Brigade Surgeon 96th Sustainment Brigade

Camp Taji, Iraq

3/08-present Partner Spinal Diagnostics and Pain Management

Colorado Springs/Denver, CO

8/08-present Medical Review Officer Army Reserve Medical Command

8/08-present Brigade Surgeon 96th Sustainment Brigade

Salt Lake City, Utah

10/07-present Section Chief Surgery and Medicine

5502 USAH

Aurora, CO

9/04-9/07 Commander 7215th Medical Support Unit

Aurora, CO

3/05-4/06 Commander 7215th Medical Support Unit

Colonel, USAR Soldier Readiness Processing Center

Ft. Bliss, TX

3/05-4/06 Fellowship Director Integrative Medicine Program

William Beaumont Army Medical Center

Ft. Bliss, TX

7/02-11/02 Lieutenant Colonel Director, Peri-operative Services

USAR Southwest Asia

405th Combat Support Hospital

Camp Doha, Kuwait

4/99-01/02 Lieutenant Colonel Division Surgeon,

KSARNG 35th Infantry Division

Ft. Leavenworth, KS

10/97-4/00 Director Pain and Spasticity Management Center

Wesley Rehabilitation Hospital

Wichita, KS

1/95-10-97 President Anesthesia Consulting Services

Wichita, KS

8/93-1/95 Anesthesiologist Critical and Specialty Anesthesia Services

Wichita, KS

1979-1985 Private Practice Alan R. Brewer, DDS

Eagle, CO

**Honors and Awards:**

2007 Membership Southern Clinical Neurologic Society

1. Who’s Who in Medicine Academia

2005 Diplomat in American Academy of Pain Medicine

1. Who’s Who in Anesthesiology

1992/1993 Society for Ambulatory Anesthesia Travel Award

1. AMA/ Burroughs Welcome Award

1988 Roland F. Mueller MD Medical Student Research Grant Award

1987 Nebraska Medical Foundation Student Research Award

1986/1988 Creighton University School of Medicine Research Grant Award

1975 Graduation with Honors Microbiology.

**Professional Affiliations:**

Current Professional and Scientific Organizations and Societies:

2007-present American Academy of Pain Management

2007-present American Academy of Pain Medicine

2006 present Southern Clinical Neurologic Society

2005-present American Board of Pain Medicine

2001-present Colorado Society of Anesthesiologists

2000-present American Society of Regional Anesthesia

2000-present International Anesthesia Research Society

1989-present American Society of Anesthesiologists

1985-present American Medical Association

**Committees**

**University of Colorado Health Sciences Center, Denver Colorado**

### University of Colorado Hospital

2003-2005 Sedation Task Force (Medical Director – 2years)

2003-2004 Anschutz Inpatient Pavilion Development (Committee Member)

2004 Nuclear Medicine Review Committee

University of Colorado Health Sciences Center

2003-2008 Practice Directors Committee

State of Colorado

2004-present Advisory Panel Member, Division of Workman’s Compensation, State of Colorado

**Certification and Licensure:**

Certification:

American Board of Pain Medicine - #09805 2005

American Board Anesthesiology - #31626 1999

National Board Medical Examination (1987-1990)

Central Regional Dental Testing Examination 1979

National Board Dental Examination Part 1/2 1977, 1978

Licensure:

Colorado Medical License - # 40035 2001

Kansas Medical License- 93-01312 1993

Nebraska Medical License- 18607 1989

Nebraska State Dental License – 5267 1979

Kansas State Dental License – 5574 1979

Colorado State Dental License – Hdl-04463 1979

**Other Professional Activities:**

Professional Organizations

2000-2001 Mock Oral Examiner American Society of Anesthesiology

**Invited lectures**

Regional, National

1. Memorial Health Systems, Trauma and Critical Care Symposium, (7/2011) Acute pain management in the critical care and trauma arena
2. Nurse Practitioner Symposium, Keystone, CO (7/12/2007), Advances in the treatment of

Migraine Headaches

1. Florida Academy of Pain Medicine, Kissimmee, FL. New Advances in Neuromodulation for the Treatment of Chronic Pain Syndromes (7/27/2007)
2. American Spine Society, Annual Meeting, Colorado Springs, CO. Spinal Cord Stimulation (5/5/2006)
3. University of Colorado Internal Medicine Symposium, Options in the Treatment of Neuropathic Pain (7/22/2005)
4. Idaho Pain Society Annual Meeting, Treatment of Neuropathic Pain Syndromes,

Sun Valley, Idaho7/24/2004

1. Nurse Practitioner Symposium, Keystone, CO Neuropathic Pain Syndromes: “I Just Need a Little More Pain Medicine Doc” (7/16/2004)
2. CRASH, Vail, CO Headaches and Atypical Facial Pain (3/3/2004)
3. University of Colorado Gastroenterology Symposium New Mechanisms for Pain and Its Treatment (3/10/2003
4. CRASH, Vail, CO Military Anesthesia on the Edge of the World (3/2/2003)
5. Post Graduate Symposium, University of Kansas Medical Center, Department of Anesthesiology, Kansas City, KS Use of Neurotoxins in the Treatment of Chronic Pain Syndromes (4//2001)

International

1. World Congress Anesthesiology. Radiation Reduction in the Outpatient Setting (1/29/2008)
2. Southern Clinical Neurologic Society. Other Options in the Treatment of Intractable Migraine

Headaches, Puerto Vallarta (1/16/2004)

3. Southern Clinical Neurological Society, Headaches and Facial Pain Syndromes, Jaco,

Costa Rica (1/23/08)

**TEACHING** (Since 1/1997)

Classroom:

Date Lecture title Student\* hrs Role\*\*

1-12/2001-2008 Fibromyalgia (Every Month) R 60 hr Lecturer

1-12/2001-2008 Sympathetic Nervous System (Every Month) R 60 hr Lecturer

1-12/2001-2008 Low Back Pain (Every Month) R 60 hr Lecturer

1-12/2001-2008 Headaches and Atypical Facial Pain R 60 hr Lecturer

3/02/2010 Fibromyalgia, The Stone House, Grand F 25 Lecturer

Junction, CO

2/26/2010 Theory and Techniques in Spinal Cord P 50 Course Director

Stimulation And Use of Intrathecal Medications,

Sunnyvale, CA

10/12/2008 Theory and Techniques In Spinal Cord P 16 Course Director

Stimulation, Denver Colorado

10/03/2008 Challenging Cases in Neuromodulation F 1 Lecturer

Destin, FL

9/20/2008 Challenging Cases in Neuromodulation F 9 Lecturer

Las Vegas, NV

8/10/2008 Fibromyalgia, Colorado Osteopathic Medical F 1 Lecturer

Society Annual Meeting, Breckenridge, CO

7/17/2008 Perioperative Care of the Chronic Pain F 1 Lecturer

Patient, The Childrens Hospital, Denver, CO

7/10/2008 New advances in the Treatment of Facial F 1 Lecturer

Pain, University of Colorado Dental School,

Aurora, CO

6/26/2008 Challenging Cases in Neuromodulation, San F 1 Lecturer

Diego, CA

6/11/2008 Fibromyalgia and Central Sensitization,

Southern Atlantic Metabolic Conference F 1 Lecturer

Symposium, Atlantic, GA

6/07/2008 Trial and Management, Denver, CO F 1 Lecturer

5/17/2008 Theory and Techniques in Spinal Cord F 16 Lecturer

Stimulation, Denver, CO

5/16/2008 Fibromyalgia and Central Sensitization, F 1 Lecturer

Detroit Metabolic Conference, Detroit, MI

4/25/2008 Management of Moderate to Severe Acute F 1 Lecturer

Pain, Department of Surgery, University of

New Mexico, Albuquerque, NM

4/25/2008 Neuromodulation in the Treatment of Atypical F 1 Lecturer

Facial Pain, University of New Mexico, Pain

Management Program, Albuquerque, NM

4/19/2008 Spinal Cord Stimulation: Patient Selection and F 6 Course Director

Patient Outcomes, University of Arkansas,

Little Rock, AR

4/17/2008 Interesting Cases in Neuromodulation, F 1 Lecturer

Ontario, CA

2/20/2008 New Concepts in Pain Management, Beauford GR 1 Lecturer

Naval Hospital

2/19/2008 Non Narcotic Treatment for Neuropathic Pain F 1 Lecturer

Warner Robbins Air Force Base

2/19/2008 NEW Treatments In Chronic Pain, Winn F 1 Lecturer

Army Hospital

1/18-19/2008 Challenging Cases in Neuromodulation F 8 Course Director

New Orleans, Louisiana

1/12/2008 Patient and Theory Selection in Spinal F 1 Lecturer

Cord Stimulation, Henderson, NV

10/27/2007 Theory and Techniques in Spinal P 16 Course Director

Cord Stimulation, Denver, CO

8/31/2007 New Treatments in OA and RA, University GR 1 Lecturer

of New Mexico, Dept. of Rheumatology,

Albuquerque, NM

8/22/2007 Neuropathic Pain, University of Texas Sciences GR 1 Lecturer

Center, El Paso, TX

8/23/2007 Non Narcotic Treatments for Chronic Pain

Syndromes, William Beaumont Hospital

Ft. Bliss, TX GR 1 Lecturer

8/18/2007 Challenging Cases in Neuromodulation F 8 Course Director

Dallas, TX

8/14/2007 Treatment of Neuropathic Pain, St. Mary’s GR 1 Lecturer

Hospital, Grand Junction, CO

8/16/2007 Mechanisms in the Treatment of Chronic Pain, GR 1 Lecturer

University of Georgia School of Medicine,

Savannah, GA

6/26/2007 Mechanisms of Pain Management, Poudre GR 1 Lecturer

Valley Hospital, Ft. Collins, CO

4/18/2007 Chronic Pain Management, Physical Medicine GR 1 Lecturer

and Rehabilitation, UCHSC, Denver, CO

3/15/2007` New Approaches in Chronic Pain Management GR 1 Lecturer

University of Texas Health Sciences Center,

El Paso, TX

2/28/2007 New Treatment Options for Neuropathic Pain, GR 1 Lecturer

Bluffton Regional Medical Center, Bluffton, IA

2/21/2007 Chronic Pain Management, University of Arizona GR 1 Lecturer

Orthopedic Dept, Tuscon, AZ

2/8/2007 Atypical Facial Pain, Department of GR 1 Lecturer

Otorhinolaryngology, UCHSC, Denver, CO

12/06/2006 Occipital Nerve Stimulator Research Advisory F 6 Faculty Advisor

Meeting, Las Vegas, NV

12/02/2006 Advance Techniques in Neuromodulation, F 6 Faculty Advisor

Irving, CA

10/28/2006 Neurostimulation Complications and F 16 Course Director

Management, Theory and Techniques,

Denver, CO

10/06/2006 Trial and Implant Options, Irvine, CA F 1 Faculty Advisor

10/05/2006 Non Narcotic Treatment of Chronic Pain GR 1 Lecturer

Syndromes, Luke Air Force Base, Phoenix, AZ

08/31/2006 Evaluation and Management of Cancer Pain, R 1 Lecturer

Department of Anesthesiology Residents,

UCHSC, Denver, CO

08/19/2006 Theory and Techniques Course on P 16 Faculty Advisor

Neuromodulation, Denver, CO

07/18/2006 Neuropathic Pain, Rose Medical Center, GR 1 Lecturer

Denver, CO

07/12/2006 New Concepts in Pain Management, Family F 1 Lecturer

Medicine, Goodfellows AFB, San Angelo, TX

06/08/2006 Neuropathic Pain, Texas Tech University, GR 1 Lecturer

El Paso, TX

5/26/2007 Pathophysiology of Neuropathic Pain Associated GR 1 Lecturer

With Diabetic Peripheral Neuropathy and Post

Herpetic Neuralgia, El Paso Veterans

Administration, El Paso, TX

5/26/2007 Mechanism in the Treatment of Neuropathic GR 1 Lecturer Pain, Texas Tech University, El Paso, TX

5/19/2006 New Concepts in the Treatment of Neuropathic GR 1 Lecturer

Pain, Presbyterian St. Luke’s Hospital, Denver,

CO

5/4/2006 COX-2 Inhibitors, Efficacy and Safety, Scott GR 1 Lecturer

and White Hospital, Temple, TX

5/3/2007 Options for the Treatment of Neuropathic Pain GR 1 Lecturer

In Diabetic Peripheral Neuropathy, Ft. Hood, TX

4/28/2006 Headaches, William Beaumont Army Medical GR 1 Lecturer

Center, Ft. Bliss, TX

4/19/2006 Safety Considerations in the use of NSAIDS. GR 1 Lecturer

University of New Mexico, School of Medicine,

Family Practice Department, Albuquerque, NM

4/13/2006 Use of Cox 2 Inhibitors in the Prevention of GR 1 Lecturer

Neuropathic Pain, Goodfellows Air Force Base,

Department of Family Practice, San Angelo, TX

3/30/2006 Controversies in the Use of Cyclo-oxygenase GR 1 Lecturer

Inhibitors. Luke AFB, TMC, Phoenix, AZ

2/22/2006 Migraines, William Beaumont Hospital, PAMC, GR 1 Lecturer

Ft. Bliss, TX

2/22/2006 Triptans in the treatment of Migraine F 1 Lecturer

Headaches, Something New, Something Old.

El Paso Pharmacy Association Annual Meeting,

Sundland Park, TX

2/22/2006 Headaches, PAMC, Ft. Bliss, TX F 1 Lecturer

2/21/2006 Diabetic Peripheral Neuropathy and the F 1 Lecturer

Treatment of Neuropathic Pain, PAMC, Ft.

Bliss, TX

2/15/2006 Treatment of Diabetic Peripheral Neuropathy, F 1 Lecturer

Department of Family Medicine, Goodfellows

Air Force Base, San Angelo, TX

2/4/2006 Neuropathic Pain, Family Practice Residency, GR 1 Lecturer

Texas Tech University, El Paso, TX

1/27/2006 Treatment Options for Neuropathic Pain, GR 1 Lecturer

Rose Medical Center, Department of Family

Medicine, Denver, CO

1/21/2006 Neurostimulation Complications and F 16 Lecturer

Management Denver, CO

1/12/2006 A literature review of the Treatment of F 1 Faculty Advisor

Neuropathic Pain, Troop Medical Clinic,

Ft. Bliss, TX

1/06/2006 Non Opioid Treatment of Chronic Pain, William GR 1 Lecturer

Beaumont Hospital, Ft Bliss, TX

11/30/2005 COX-2 Inhibitors, Efficacy and Safety, GR 1 Lecturer

Goodfellows Air Force Base, Department of

Family Medicine, Phoenix, AZ

11/9/2005 Non Narcotic Treatment of Neuropathic Pain, GR 1 Lecturer

Midland Community Hospital, Midland, TX

10/8/2005 Theory and Techniques Class in P 16 Faculty Advisor

Neuromodulation, Denver, CO

9/23/2005 Neuromodulation in the Treatment of Chronic F 1 Lecturer

Pain Syndromes, Department of Neurology,

William Beaumont Hospital, Ft. Bliss, TX.

9/20/2005 Pregabelin, A Clinical Overview, Orthopedic GR ` Lecturer

Residents, Texas Tech University, El Paso, TX

8/26/2005 Pain Management, Texas Tech University, GR 1 Lecturer

Internal Medicine Department, El Paso, TX

8/13/2005 Difficult Cases, Minneapolis, MN F 8 Course Director

6/25/2005 Neurostimulation Complications and F 16 Faculty Advisor

Management, Denver, CO

3/12/2005 Atypical Facial Pain, Trigeminal Neuralgia F 2 Lecturer

Association Quarterly Meeting, St. Anthony’s

Hospital, Denver, CO

3/9/2005 Headaches, OB GYN Residents, UCHSC, R 1 Lecturer

Denver, CO

3/1/2005 Headaches, Family Practice Residents, R 1 Lecturer

UCHSC, Denver, CO

1/27/2005 Atypical Facial Pain, Department of GR 1 Lecturer

Otorhinolaryngology, USHSC, Denver, CO

1/8/2005 Theory and Techniques in Neuromodulation F 16 Faculty Advisor

Denver, CO

1/7/2005 New Concepts in Pain Management, F 1 Lecturer

Petersen Air Force Base, TMC 1,

Colorado Springs, CO

12/13/2004 New Concepts in Pain Management R 1 Lecturer

Ortho Residents, UCHSC, Denver, CO

12/4/2004 Occipital Nerve Stimulator Advisory Meeting F 4 Faculty Advisor

Minneapolis, MN

10/30/2004 National Chronic Pain Society Annual Meeting, F 1 Lecturer

SCS and Intrathecal Pumps for the Treatment

Of Chronic Pain

10/21/2004 Other Treatment Options for the Treatment of P 2 Lecturer

Acute and Chronic Pain, Olympic Training

Center, Colorado Springs, CO

10/09/2004 Colorado Society of Nurse Anesthetists, Annual F 2 Lecturer

Meeting, Headaches and Central Sensitization,

Denver, CO

10/06/2004 Denver Physician Assistant Society, Annual F 1 Lecturer

Meeting, Central Sensitization, Denver, CO

10/05/2004 Central Sensitization, Department of Internal R 1 Lecturer

Medicine, UCHSC, Denver, CO

10/02/2004 Theory and Techniques in the Use of Spinal P 16 Faculty Advisor

Cord Stimulation and Pump Placement

9/3/2004 Neuropathic Pain, Buckley Air Force Base, GR 1 Lecturer

Troop Medical Clinic, Aurora, CO

8/20/2004 New Concepts in Pain Management, Aurora GR 1 Lecturer

North Medical Center, Aurora, CO

8/8/2004 New Concepts in the Management of Pain, GR 1 Lecturer

Air Force Academy, Colorado Springs, CO

5/11/2004 National Jewish, Neuropathic Pain, GR 1 Lecturer

Denver, CO

4/28/2004 Neuropathic Pain, Aspen Regional Medical GR 1 Lecturer

Center, Aspen, CO

4/28/2004 Treatment of Chronic Pain Syndromes, GR 1 Lecturer

Glenwood Springs, CO

4/15/2004 Neuromodulation in the Treatment of GR 1 Lecturer

Chronic Pain Syndromes, University of

Nebraska Medical Center, Pain Management

Program, Omaha, NE

3/26/2004 IEEE MTG, Advanced Pain Therapies, F 1 Lecturer

Denver, CO

3/16/2004 Sedation Workshop, UCHSC, Denver, CO R 2.5 Lecturer

3/10/2004 Advances in Cox 2 Inhibition, University of R 1 Lecturer

North Dakota Family Practice Residency, Fargo,

ND

2/2/2004 Headaches, ER Nurses, Denver Health Medical F 1 Lecturer

Center, Denver, CO

1/08/2004 Pain Management Redefined, Physical Medicine GR 1 Lecturer

And Rehabilitation Department, UCHSC,

Denver, CO

11/5/2003 New Mechanisms for Abdominal Pain, R 1 Lecturer

Department of Anesthesiology Residents,

UCHSC, Denver, CO

11/5/2003 Neuropathic Pain and Migraines, Department of R 1 Lecturer

Anesthesiology Residents, UCHSC, Denver, CO

10/13/2003 Doc, I just need a Little more pain medication, GR 1 Lecturer

University of Colorado School of Dentistry

Denver, CO

8/13/2003 Non Opioid Treatment of Chronic Pain, GR 1 Lecturer

7/22/2003 Sedation, Sedation Task Force, UCHSC, R 2 Lecturer

Denver, CO

Orthopedics Residents, UCHSC, Denver, CO

2/13/2003 Headache and Facial Pain Syndromes, F 1 Lecturer

Rocky Mountain Dental Study Club, Denver, CO

4/1/2002 Little Blue People, Depart of Anesthesiology R 1 Moderator

Residents, UCHSC, Denver, CO

3/25/2002 Geriatrics 101, Department of Anesthesiology R 1 Lecturer

Residents, UCHSC, Denver, CO

2/6/2002 Cancer Pain, Department of Anesthesiology R 1 Lecturer

Residents, UCHSC, Denver, CO

10/08/2001 Anaphylaxis, Department of Anesthesiology R 1 Lecturer

Residents, UCHSC, Denver, CO

8/23/2001 Opioid Use in Chronic Pain, University of R 1 Lecturer

Kansas Anesthesiology Residents,

Kansas City, KS

4/7/2001 Use of Neurotoxins in the Treatment of Chronic R 1 Lecturer

Pain Syndromes, University of Kansas

Anesthesiology Residents, Kansas City, KS

3/30/2001 Neurotoxins in the Treatment of Chronic Pain R 1 Lecturer

Syndromes, University of Kansas

Anesthesiology Residents, Kansas City, KS

2/14/2001 Mishaps in the World of Pain Management, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

1/12/2001 Fibromyalgia University of Kansas R 1 Lecturer

Anesthesiology Residents, Kansas City, KS

01/09/2001 Pain Mechanisms and Transmission R 1 Lecturer

University of Kansas Anesthesiology Residents

Kansas City, KS

4/7/2001 Use of Neurotoxins in the Treatment of Chronic R 1 Lecturer

Pain Syndromes, University of Kansas

Anesthesiology Residents, Kansas City, KS

11/21/2000 Pitfalls in Acute Pain Management, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

11/9/2000 Neurotoxins. University of Kansas R 1 Lecturer

Anesthesiology Residents, Kansas City, KS

8/10/2000 Emerging Concepts in Headache Prophylaxis, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

7/24/2000 Local Anesthetics, University of Kansas Anesthesiology Residents,

Kansas City, KS

6/9/2000 Prophylactic Treatment for Headaches, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

5/23/2000 Understanding the Chronic Pain Patient, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

5/23/2000 Living in a World of Hurt, University of Kansas R 1 Lecturer

Anesthesiology Residents, Kansas City, KS

4/13/2000 Sympathetically Maintained Pain, R 1 Lecturer

University of Kansas Anesthesiology Residents,

Kansas City, KS

5/1/2000 Non Opioid Treatment of Chronic Pain, R 1 Lecturer

University of Kansas

Anesthesiology Residents, Kansas City, KS

\*Students: F=Faculty; P=Fellows, R=GME, MS=Medical Students, U=Undergraduate,

GR = Grand Rounds, etc

\*\* Lecturer, Faculty Advisor, Moderator, Discussant, Course Director, Station Leader, etc.

Clinical Teaching:

University of Colorado Hospital Clinic 2 days per week (10-15 procedures per week)

University of Colorado Hospital Operating Room 2 Days per week (3-6 operations per day)

The Children's Hospital Clinic 2 days per month

The Children's Hospital Interventional Radiology 2 days per month (4-8 procedures per day)

Postdoctoral Fellows Supervised:

Supervisor, Fellow Research Project, Assessment of Pain Education in US Pediatric Residency Programs, Heather Davids, MD 2007

Supervisor, Fellow Research Project, Re-assessment of Pain Education in US Medical Residency Programs, Heather Davids, MD 2007

Fellows Trained

2008 Leif Sorenson, MD

2008 Heather Davids, MD

2008 Matthew Langston, MD

2007 Theodore Ford, MD

2007 Andrew Smolenski, MD

2006 Jason Krutch, MD

2005 Douglas, Keehn, DO

2004 Amad Salih, MD

2003 Mark Wilson, MD

Faculty Advisor (Medical/Nursing Students)

Joel Bridgewater

**Research**

Areas of Research Interest

Peripheral nerve stimulation for the treatment of peripheral neuralgia.

Occipital neuralgia for the treatment of intractable migraine and chronic daily headaches.

Thalidomide in the treatment of fibromyalgia and neuropathic pain syndromes.

Botulism toxin in the treatment of migraine and tension type headaches.

Botulism toxin in the treatment of myofascial pain syndromes.

Guaifenesin as a treatment options for fibromyalgia and chronic myofascial pain syndrome.

Radiation reduction in the outpatient setting.

High altitude headaches.

Primary care education in pain assessment and treatment.

Current Projects

Projects in Progress

IRB Approved

COMIRB # 03-1002 A Twelve Week Open Label Trial of Thalidomide to Evaluate Safety and Efficacy for use in Fibromyalgia Syndrome. PI

COMIRB #04-0405 Medtronic Clinical Investigation of Occipital Nerve Stimulation (ONS) for Treatment of Migraine Headache. PI

COMIRB #06-0332 Assessment of Pain Education in US Pediatric Residency Programs. Co I

COMIRB #04-0490 Re-assessment of Pain Education in US Medical Residency Programs. Co I

Applying for IRB

COMIRB # 07-0587 Influence of Reactivity on Patient Self-Monitoring: Pain v. Comfort

COMIRB # 06-0578 Active or Just Busy? Pedometer Recordings of Health Care During Normal Work Weeks CO PI

COMIRB #07- A Randomized, Double Blind, Placebo Controlled Study to Evaluate the Efficacy of Celecoxib and/or Pregabelin in Reducing Post-operative Pain, Narcotic Use and in Preventing Neuropathic Pain in the Long Term in Patients Undergoing Certain Outpatient Surgical Procedures PI

COMIRB #07- Long Term (2-5 Year) Follow-up of Spinal Cord Stimulation Efficacy for Neuropathic Pain. PI

COMIRB #07 Moderate Dose Ketamine Infusions for the Treatment of Intractable Neuropathic Pain: Characteristics of Dosage and Length of Time Needed for Pain Control, PI

Research Support

### National

Source: R21 NIH Grant Submission

Title: Therapeutic massage for management of pain and disability in tension type headache.

Period: 10/07-present

Direct Costs/Current Year/Total: $xxx

Role: Co investigator

Source: Celgene

Title: A twelve week open label trial of thalidomide to evaluate safety and efficacy for use in fibromyalgia syndrome.

Period: mo/yr – present

Direct Costs/Current Year/Total: $xxx

Role: PI

Source: Medtronic’s

Title: Medtronic Clinical Investigation of Occipital Nerve Stimulation (ONS) for Treatment of Migraine Headache

Period: mo/yr – present

Direct Costs/Current Year/Total: $xxx

Role: PI

Departmental

Source: Physical Medicine and Rehabilitation

Title: Pedometer Recordings of Health Care Professionals During Normal Work Weeks

Period: 10/07 – present

**Bibliography**

Books and/or chapters

1. Brewer, A.R. and Nique, T.A.: Preoperative anesthetic evaluation. **Oral Max Clinics North Amer**, Aug, 1992.

Papers published or in press

Brewer, A, Slocumb, J, Davids, HR: Use of spinal cord stimulation in combination with

Peripheral nerve stimulation in the treatment of chronic pelvic pain: A report of two cases

Brewer, A, Davids, HR: Use of the Medtronic Interstim Stimulation Lead for the treatment

of chronic migraine headache: Report of 5 cases.

Brewer, A and Davids HR: A new anchoring technique to prevent migration of both

Spinal cord and peripheral nerve stimulator leads.

4. Brewer, A, Van Dorsten, B and Davids, H: Atypical facial pain: Treatment nomograms

for the use of peripheral nerve stimulation in intractable pain syndromes.

1. Van Dorsten, B, Davids, HR, Dingmann, C, and Brewer, A: A ten year check-up progress in pain education in primary care residencies.
2. Van Dorsten, B, Davids, H, Brewer, A, Dingmann, C; Primary care residents knowledge of adjunctive pain treatment modalities,
3. Brewer, AR, Pierchala, LA, Yanchick, JY, Magelli, M Rovati, S. : Gastrointestinal Safety of Diclofenac Epolamine Topical Patch 1.3%: A Pooled Analysis of 14 Clinical Studies. Postgrad Med, 2011 July 123:168-176.
4. Brewer, AR, McCarberg, W, Argoff, CE: Update on the Use of Topical NSAIDs for the Treatment of Soft Tissue and Musculoskeletal Pain: A Review of Recent Data and Current Treatment Options. **Physician and Sports Medicine** 2010 June 38(2); 62-70.

9. Al Tamimi, M., McCeney, M., Brewer, A., Krutsch, J., Yakovlev, A.: A case series of pulsed radiofrequency treatment of myofascial trigger points and scar neuromas. (In Press) **Pain Medicine**

\* 10. Gunter, J., Brewer, A., Tawfik, O.: Botulinum toxin A for vulvodynia, A case report**. J Pain**. 2004 May 5(4):238-40.

11. Brewer, A.R., Smyrk, T.C., Bailey, R.T., Bonavina, L., Eypasch, E.P., Demeester, T.R.: Drug- induced esophageal injury. Histopathological study in a rabbit model. **Digestive Diseases and Sciences**, 35(10); 1205-1210, 1990.

12. Brewer, A.R., Stromberg, B.V.: In vitro adherence of bacteria to prosthetic grafting materials. **Annals Plastic Surgery**, 24(2); 124-138, 1990.

13. Bailey, R.T., Brewer, A.R., Eypasch, E.P., Jones, J.B., Smyrk, T.C., Demeester, T.R.: A rabbit model to evaluate pill-induced esophageal injury. **Journal of Investigative Surgery** 2; 329-330, 1989

14. Brewer, A.R., Quinn, T.H.: Correlation between the presence of an ossified stylohyoid ligament and myofascial pain dysfunction syndrome. **Clinical Research** 36(6); 920, 1988.

15. Bailey, R.T., Eypasch, E.P., DeMeester, T.R., Nwakama, P.E., Brewer, A.R., Spires, K.J., Hinder, R.A.: Age influences capsule entrapment in the esophagus. **Pharmacotherapy** 8; 127, 1988.

\* 16. Sobieski, R.J., Brewer, A.R.: Toxicity of nalidixic acid on Candida albicans, Saccharomyces cerevisiae, and Kluyveromyces lactis. **Antimicro** **Agents** **Chemo**, Mar. 1976, p 485-492.

(\* peer reviewed, \*\* invited paper)

Abstracts (Published Only)

1. Bailey, R.T. Brewer, A.R., Eypasch, E.P., Smyrk, T.C., Jones, J.B., DeMeester, T.R.: Markers of acute esophageal injury induced by solid oral medication. **Gastroenterology** 96; A22, 1989.

2. Smyrk, T., Brewer, A.R., Bailey, R.T., Eypasch, E., Jones, J., DeMeester, T.R.: Balloon cells are an early marker in pill induced esophageal injury. **Lab Investigation** 60(1); 89A, 1989.

3. Brewer, A.R., Bailey, R.T., Eypasch, E.P., DeMeester, T.R., Nwakama, P.E., Spires, K.J., Hinder, R.A.: Age and gastroesophageal reflux disease influences capsule transit in the esophagus. **Clinical Research** 36(6); 921A, 1988.

4. Eypasch, E.P., Bailey, R.T., DeMeester, T.R., Brewer, A.R., Nwakama, P.E., Spires, K.J., Hinder, R.A.: Age influences capsule entrapment in the esophagus. **Gastroenterology** 94; A120, 1988.

Poster and Oral Presentations

1. American Society of Anesthesiologists, October 2008

Orlando, FL Medically Challenging Case Programs

Brewer, Alan and Davids, Heather: Peripheral nerve stimulation in the treatment of occipital neuralgia: A compilation of 15 case studies.

1. Pain Week 2008, September 2008

Las Vegas, NV

**Brewer, A**, Yanchick, J, Lanzarotti, A, Fuller, C: Time to onset of acute pain relief due to minor ankle sprain with the diclofenac epolamine topical patch.

3. **Brewer, A**, Yanchick, J, Rovati, S, and Fuller, C: The diclofenac epolamine topical patch offers a safe treatment alternative to oral NSAIDS in the treatment of minor soft tissue injuries.

3. American Academy Nurse Practitioners, 23rd National Conference, June 2008

National Harbor, MD

**Brewer, A**, Yanchick, J, Lanzarotti, A, Fuller, C: Evaluation of Treatment of Mild to Moderate Acute Pain of Ankle Sprain with Diclofenac Epolamine Topical Patch

4. American Academy of Pain Medicine, 24th Annual Meeting, Feb 2008

Orlando, FL

**Brewer, A.,** Davids, H., Van Dorsten, B.: Treating atypical facial pain with peripheral nerve stimulation: A collection of ten case reports.

5. American Academy of Pain Medicine, 23rd Annual Meeting Feb 2007

New Orleans, LA

Al Tamimi, M., McCeney, M., **Brewer, A**., Krutsch J., Yakovlev, A.:

A case series of pulsed radiofrequency treatment of myofascial trigger points and scar neuromas.

6. 1993 Eighth Annual Society for Ambulatory Anesthesia

Scottsdale, AZ

**Brewer, A.R.,** Peters, K.R., and Becker, G: Ondansetron: Effects on nausea and vomiting when used in an ambulatory surgery setting.

7. International Trauma Anesthesia and Critical Care Conference Baltimore, MA

**Brewer, AR** and Morgan JR: Posterior fossae hematoma and streptococcal meningitis: a concurrent presentation.

8. 1992 American Society Anesthesiology Annual Meeting

New Orleans, La.

**Brewer, A.R**.: Bacterial adherence to endotracheal tube material.

9. Midwest Anesthesiology Residents Conference

Indianapolis, IN.

**Brewer, Alan**: Bacterial adherence to endotracheal tube material.

10. **Brewer, AR**, and Belatti, RG: Estimating Blood loss: getting back to the basics.

11. 1991 Sixth Annual Society for Ambulatory Surgery Meeting

San Diego, CA.

**Brewer, AR** and Boskovski, NA: Unplanned outpatient admissions.

12. Midwest Anesthesia Conference

Chicago, IL.

**Brewer, AR**, Boskovski, NA, and Landers, DF: Unplanned outpatient admissions.

13. 1989 Academy of Surgical Research, Fifth Annual Scientific Session. Charleston, S.C.

Bailey, RT, **Brewer, AR**, Eypasch, EP, Jones, JB, Smyrk, TC, DeMeester, TR: A rabbit model to evaluate drug-induced esophageal injury.

14. Digestive Disease Week-American Gastroenterological Association Ninetieth Annual Meeting

Bailey, RT, **Brewer, AR**, Eypasch, EP, Smyrk, TC, Jones, JB, DeMeester, TR: Markers of acute esophageal injury by solid oral medication.

1. XX National Student Research Forum

Galveston, Texas

**Brewer, A.R.,** Stromberg, B.V.: In vitro adherence of bacteria to urinary catheter material.

16. **Brewer, A.R**, Bailey, R.T., Eypasch, E., Smyrk, T., Jones, J., DeMeester, T.R.: A study of acute esophageal injury induced by solid oral medication.

17. US and Canadian Academy of Pathology Annual Meeting

San Francisco, California

Smyrk, T.C., **Brewer, A.R.,** Bailey, R.T., Eypasch, E.P., Jones, J.B., DeMeester, T.R.: Balloon cells are an early finding in pill induced esophageal injury.

18. American College of Clinical Pharmacy,

X Annual Meeting

Bailey, R.T., Jones, J.B., **Brewer, A.R.,** Eypasch, E.P., Smyrk, T.C., Demeester, T.R.: Balloon cells are an early marker of drug induced esophageal injury.

19. 1988 American Society for Clinical Pharmacology and Therapeutics

Jones, J.B., Bailey, R.T., **Brewer, A.R**., Eypasch, E.P., Smyrk, J.C., DeMeester, T.R.: Drug-induced esophageal injury

20. XXIX National Student Research Forum,

Galveston, Texas

**Brewer, A.R**., Stromberg, B.V., Knoop, F.: In vitro adherence of bacteria to prosthetic grafting materials

1. XIX Midwest Student Medical Research Forum

Omaha, Nebraska

Brewer, A.R., Quinn, T.H.: "Correlation Between the Presence of an Ossified Stylohyoid Ligament and Myofascial Pain Dysfunction Syndrome" (Poster)

**Brewer, A.R.,** Bailey, R.T., Eypasch, E.P., DeMeester, T.R., Nwakama, P.E., Spires, K.J., Hinder, R.A.: "Age and Gastroesophageal Reflux Disease Influence Capsule Transit in the esophagus."

22. Digestive Disease Week-American Gastroenterological Association

Eighty-ninth Annual Meeting

New Orleans, Louisiana

Eypasch, E.P., Bailey, R.T., DeMeester, T.R., **Brewer, A.R.,** Nwakama, P.E., Spires, K.J., Hinder, R.A.: "Age Influences Capsule Entrapment in the Esophagus."

23. X Annual Meeting, American College of Clinical Pharmacy

Philadelphia, Pennsylvania

Bailey, R.T., Eypasch, E.P., DeMeester, T.R., Nwakama, P.E., **Brewer, A. R.,** Spires, K.J., Hinder, R.A.: "Age Influences Capsule Entrapment in the Esophagus"

Teaching Syllabus Developed

1. **Brewer, AR**: Pain Management Curriculum
2. **Brewer, AR**: Nomograms for the treatment of low back pain, shoulder and arm pain, chronic pelvic pain, headaches
3. **Brewer, AR**: Sedation Course Curriculum and Test

Media and Software Developed:

1.CD-ROM Chronic Pain Management Library

2. Sedation Course On Line Course and Testing and Program