



## 1. Gastroesophageal Reflux Disease (GERD)

- 20 years of professional nursing experience caring for hundreds of patients with GERD
- 11 years of clinical anesthesia delivery, customized for scores of patients with GERD and/or having surgical correction of pathologies contributing to GERD
- 7 years of doctoral studies, with 3 months focus on gastroenterology, enteric and myogenic and ion-channel control of gastrointestinal tract, and pharmacological management with prokinetics, H<sub>2</sub> receptor antagonists, proton pump inhibitors, antacids, and gastric-specific cytoprotective prostaglandins
- 7 years of teaching pharmacology (including gastrointestinal) to undergraduate/graduate students at CSU

## 2. Evidentiary Breath Alcohol Testing

- Certified Evidentiary Breath Alcohol Technician for Intoxilyzer models 5000, S-D2, S-D5, and 400
- Provided from Industrial Training and Design, Ltd, in accordance with U.S. DOT CFR 49, Part 40
- Hands-on experience administering intoxilyzer tests; “gutting” and reassembling machine
- Over 3 years of experience reviewing Evidentiary Results from Intoxilyzer 5000EN, Datamaster, EC/IR
- Over 3 years of experience writing scientific affidavits specific for clients with GI anomalies and other conditions that interfere with accuracy of BrAC analyses

## 3. Absorption Spectrometry

- 7 years of experience with spectral analysis, measuring biological samples and interpreting data for both ultraviolet (DNA, RNA) and infrared (plasma volumes, ethanol, other chemicals) wavelengths of absorption

## 4. Toxicology of Ethanol Instruction

- Taught undergraduate, graduate, and veterinary students pharmacology & toxicology of ethanol for 7 years after completing PhD; included pharmacokinetics, pharmacodynamics, physiology, psychological and pathophysiological effects

## PROFESSIONAL SOCIETIES:

Advanced Practice Registry of the Colorado Board of Nursing, American Association of Nurse Anesthetists; American Physiological Society, Society of Forensic Toxicologists

## HONORS AND AWARDS:

1974-1977 Alpha Lambda Delta Honor Society, Georgia Baptist Hospital School of Nursing.  
1974-1977 Honor Society, Georgia Baptist Hospital School of Nursing.  
1977 Outstanding Service Award, Georgia Baptist Hospital School of Nursing.  
1978-1980 Presidential Scholar, University of South Alabama.  
1980 Honor Society of Nursing, University of South Alabama.  
1994 Passed Comprehensive Preliminary Examination for Ph.D. with Distinction. Colorado State Un.  
1997 Summa Cum Laude, Ph.D. in Physiology.

## INVITED SEMINARS:

<u>Date</u>	<u>Institution</u>	<u>Title</u>
1990	American Assoc. of Nurse Anesthetists	The Presence of Fentanyl in Colostrum after an Analgesic Dose
1991	Mosby Yearbook, Inc.	Pharmacology Update

### **INVITED SEMINARS (continued):**

<b><u>Date</u></b>	<b><u>Institution</u></b>	<b><u>Title</u></b>
1991	Centennial Area Health Education	Perioperative Pharmacology Update
2005	Lorman Education	Driving Under the Influence of Drugs; DREs
2006	CO Bar: CLE Seminar, Denver	Drug Metabolism: Psychoactive Drugs
2008	Texas Criminal Defense Lawyer's Association; "Mastering Scientific Evidence"	Drugs and Conditions that Influence Ethanol Metabolism; Top Ten Gems in Medical Records for Ethanol and Drug Issues

### **POSTER PRESENTATIONS:**

1995	Experimental Biology	Isolated Unilateral Renal Transfection Via Direct Renal Artery Injection
1996	American Society of Nephrology	Intrarenal Expression of Angiotensinogen cDNA Initiates Hypertension in Unilaterally Nephrectomized Rats

### **GRANTS RECEIVED OR SUBMITTED:**

Intrarenal expression of the M235T variant for angiotensinogen: A key link to essential hypertension? American Heart Association of Colorado. 1995. Ratings: Above average, not funded.

Uteroplacental expression of the M235T variant for angiotensinogen: A key link to preeclamptic hypertension? American Heart Association of Colorado. 1996. Ratings: Above average, not funded.

Contribution of Angiotensinogen to Abdominal-Fat Related Hypertension and Nephropathy. American Heart Association. Desert Mountain Affiliate. 2001-2003. Role: PI. Not funded.

Intrarenal angiotensinogen and urinary sodium excretion. Colorado State University College Research Council. 1992-1996. Funded.

Modulation of the renin-angiotensin system and orthostatic tolerance. NASA. 1993-1995. Not funded.

Hypertension in rats with kidneys containing angiotensinogen transgenes. American Heart Association of Colorado. 1996-1997. Role: Research Associate. Funded.

### **JOURNAL PUBLICATIONS:**

Marley, W. 1991. AANA Journal Course: New technologies in anesthesia: Clonidine: An established drug with futuristic implications. AANA Journal 59(2):161-170.

Steer P.L., Biddle C., Marley W.S., Lantz R.K., Sulik P.L. 1992. Concentration of fentanyl in colostrum after an analgesic dose. Can. J. Anaesth. 39(3):231-235.

Marley, W. 1993. AANA Journal Course: Update for nurse anesthetists-Essential hypertension, anesthesia, and the kidney. AANA Journal 61(6):597-604.

Wilke W.L., Marley W.S. 1994. Dietary sodium and urinary renin and angiotensinogen in rats. J. Am. Soc. Nephrol. 5:597 (Abstract).

Wilke W.L., Marley W.S., Gotshall R.W. 1994. Preconditioning with sodium deficits to improve orthostatic tolerance in rats. Aviat. Space Environ. Med. 66(8):757-762.

- Marley W., Wilke L., Bowen R. 1995. Isolated unilateral renal transfection via direct renal artery injection. FASEB 9(3):597 (Abstract).
- Marley W.S., Wilke W.L., Bowen R., Gotshall R. 1996. Hypertension in rats induced by single kidney transfection with angiotensinogen cDNA. J. Am. Soc. Nephrol. 7(9):1537 (Abstract).
- Marley W.S., Wilke W.L., Bowen R.A. 1999. Selective gene transfer into cortical proximal tubules via direct renal artery injection. Res. Comm. Molec. Path. Pharm. 103:29-36.
- Marley W.S., Wilke W.L., Bowen R.A. 2000. Hypertension in unilaterally nephrectomized rats induced by single kidney transfection with angiotensinogen cDNA. Kid. Blood Press. Res. 23:42-48.
- Dewit M., Marley W.S., Graham J.K. 2000. Fertilizing potential of mouse spermatozoa cryopreserved in a medium containing whole eggs. Cryobiology 40:36-45.
- Marley W.S., Dewit, M., Graham J.K. 2000. Comparison of sperm motility and fertilization capacity among six mouse strains before and after cryopreservation. J. Reprod. Fert. Accepted.
- Schoenfeld-Tacher, R.; Bright J.M., McConnell S.; Marley W.S., Kogan L.R.. 2005. The effect of web-based technology on small group "Problem-based learning" in a professional veterinary medical program-a case study. J. Veterinary Med. Education. 32(1):86-91.

#### **CONTINUING EDUCATION:**

Audio-Digest Anesthesiology: An Affiliate of the California Medical Association. Monthly issues of relevant topics relating to pharmacology, toxicology, physiology, anesthesiology, and medical issues. Tests for each issue faxed to Audio Digest Foundation monthly for continuing education units for CRNA re-licensure requirements.

Texas Criminal Defense Lawyers Association, March 26-28, 2008. Dallas, Texas. Mastering Scientific Evidence. Presented and attended seminar.

Wyoming Trial Lawyers Association, June 5-7, 2008. Laramie, Wyoming. Understanding the Intricacies of a DWUI Case. R. Michael Vang, Program Chair. National College for DUI Defense, Inc. Approved Seminar.