

MARY ANTONIETTE AMBACH M.D.

Specializing in regenerative medicine, non surgical orthopedics and sports medicine, and interventional pain management

WORK EXPERIENCE

Regenerative Medicine, Sports Medicine and Non Surgical Orthopedics

San Diego Orthobiologics Medical Group - San Diego, California
May 2019 to present

- Providing innovative and evidenced based therapies in a highly specialized leading facility with recognized experts in regenerative medicine

Orthohealing Center - Los Angeles, California
September 2014 to April 2019

- Contributed to a team of Internationally recognized experts and facility in regenerative medicine and non surgical orthopedics

Interventional Spine, Musculoskeletal and Pain Medicine

Kaiser Permanente - San Diego, California
October 2011 to August 2014

- Provided comprehensive treatment program for chronic pain patients with medication management, interventional procedures and multidisciplinary management. Led a team of pain psychologist, pain psychiatrist, pain physical therapy, pain pharmacist, and nurse case managers in the chronic pain program with focus on cognitive behavioral therapy.

Pain Care of San Diego - San Diego, California
August 2010 to October 2011

- Provided acute and chronic pain management including advanced interventional procedures
- Started a satellite clinic providing care in Chula Vista, CA
- Practiced occupational medicine in an independent relationship with Concentra Medical Center in San Marcos, CA.

Orthopedic Center of Florida - Fort Myers, Florida
October 2007 to June 2010

- Established a non surgical musculoskeletal and interventional pain practice within an orthopedic surgical group.
- Developed internal processes and training for staff in relation to non surgical musculoskeletal medicine, interventional pain management procedures, and diagnostic testing procedures

AWARDS

- **Top Physiatrist** in Los Angeles, CA by the International Association of Healthcare Professionals
- Los Angeles 2018 **Orthopedic Honoree** by the Arthritis Foundation

PUBLICATIONS

- Bone Marrow Concentrate for treatment of knee osteoarthritis: a mini review. Journal of Orthopedic Research and Therapy. April 2018.
- Biologics for Lumbar Discogenic Pain: 18 month follow up for Safety and Efficacy Interventional Pain Management Reports. Vol 2 Num 3, pp 111-118. 2018. American Society of Interventional Pain Physicians.
- Book Chapter Co-author. Education and Standardization of Orthobiologics: past , Present and Future. In Platelet Rich Plasma in Orthopaedics and Sports Medicine. May 2018.
- Orthobiologics: Where are we now? Mini-review. Novel Techniques in Arthritis and Bone Research. Vol 2. Issue 1. Sept 2017.
- Book Chapter Co-author. Education and Understanding Orthobiologics: Then and Now. In Bio-orthopaedics A New Approach. May 2017.
- Biologic Therapies for Intervertebral Degenerative Disc Disease: A Review of Novel Applications. Journal of Stem Cells Research, Reviews & Reports. March 2017.
- Randomized Controlled Trial Comparing Hyaluronic Acid, Platelet Rich Plasma and the combination of both in the treatment of mild to moderate osteoarthritis of the knee. Journal of Stem Cells and Regenerative Medicine. August 2016.
- Contributing Editor, Rehab in Review, the Surveillance Journal for Rehabilitation Professionals . 2005 - 2006.
- Peer Review Journals:
 - Intra-articular Injection of Two Different Doses of Autologous Bone Marrow Mesenchymal Stem Cells versus Hyaluronic Acid in the Treatment of Knee Osteoarthritis: Multicenter Randomized Controlled Clinical Trial (Phase I/II). Journal of Translational Medicine. July 2016
 - Enhancement of Atrophic Non Union Fracture Healing Using Autologous Progenitor Cell Rich Bone Marrow. Journal of Stem Cells Research, Development and Therapy. March 2016.
 - Evolution of a Therapeutic Innovation for Osteoarthritis: a pilot study in 6 patients. Indian Journal Of Medical Research. February 2016.
 - Therapeutic Efficacy of Platelet Rich Plasma Injections in Treating Chronic High Hamstring Tendinopathy. Clinical Medical Reviews and Case Reports. Dec 2015.
 - In vitro study of the role of thrombin in platelet rich plasma (PRP) preparation: utility for gel formation and impact in growth factors release. Journal of Stem Cells and Regenerative Medicine. October 2015.
 - The use of mesenchymal stem cells (MSCs) for cartilage regeneration in knee osteoarthritis. Progress in Orthopedic Science. April 2015.
 - Regenerative Injection Treatment in the Spine : Review and Case series with Platelet Rich Plasma. Journal of Stem Cells Research, Reviews and Reports. Mar 2015.
 - Ongoing studies of cell-based therapies for articular cartilage defects in Japan. Orthopedic Research and Reviews. Sept 2014.

- Platelet Rich Plasma Compared to other common injection Therapies in the treatment of chronic lateral epicondylitis. The Journal of Sport Rehabilitation. Nov 2014.

LECTURES

- Speaker and Lab Faculty, Interventional Spine/Pain Management Biologics Workshop and Lab. 8th Annual PRP and Regenerative Medicine Symposium and Cadaver Lab. Las Vegas. June 2017
- Speaker. American Academy of Physical Medicine and Rehabilitation Regenerative Medicine Precourse: Regenerative Medicine: Current Concepts and Brave New Paradigms in the Treatment of Musculoskeletal Conditions. New Orleans. October 2016.
- International Guest Speaker. ORTHOREGEN 2016: International Conference in Stem Cells and Cell Therapy. Sao Paolo, Brazil. September 2016.
- International Guest Speaker. Regenerative Conference :Jornada de Terapias Regenerativas en Traumatologia. Buenos Aires, Argentina. September 2106.
- Speaker, Spine Expert Panel Discussion: Regenerative Injections for the Spine. 7th Annual PRP and Regenerative Medicine Symposium and Cadaver Lab. June 2016.
- Lab Faculty, Cadaver Lab Ultrasound Guided Injection and Bone Marrow Aspiration. 7th Annual PRP and Regenerative Medicine Symposium and Cadaver Lab. June 2016.
- Faculty, Cadaver Lab Ultrasound Guided Injection and Bone Marrow Aspiration. 6th Annual PRP and Regenerative Medicine Symposium and Cadaver Lab. Las Vegas. June 2015.
- Speaker, Bone Marrow Concentrate Procedure Demonstration and Discussion. 6th Annual PRP and Regenerative Medicine Symposium and Cadaver Lab. Las Vegas. June 2015.
- Television appearances on NBC News Fort Myers Health Matters to discuss Office Posture (September 2008) and Disc Pain (October 2008)
- Speaker, Educational lecture series: Non Surgical Treatment Options for Painful Conditions of the Spine. Fort Myers community and local National Asian American Association of Professionals. October 2007 to June 2010.

CERTIFICATIONS/LICENSES

- Board Certified by the American Board of Physical Medicine and Rehabilitation, 2007
- Board Certified by the American Board of Pain Medicine, 2009
- Active State License, Medical Board of California
- Fluoroscopy License and Permit/ X-ray Supervisor and Operator

UNIVERSITY AFFILIATIONS

- Clinical Instructor of Medicine, David Geffen School of Medicine at UCLA. January 2016
- Clinical Assistant Professor of Physical Medicine & Rehabilitation, Western University of Health Sciences. November 2014.
- Associate Professor at the Southern California University Sports Medicine Program. February 2019.

HOSPITAL AFFILIATIONS

- Staff Privileges at St John's Health Center , Santa Monica CA. Aug 2017-Aug 2019

PROFESSIONAL MEMBERSHIPS

- American Academy of Physical Medicine and Rehabilitation
- American College of Sports Medicine
- American Society of Interventional Pain Physicians

FELLOWSHIP TRAINING

Orthobiologic and Regenerative Medicine Fellowship

The Orthohealing Center - Los Angeles, California

September 2014 to August 2015

- Training with internationally recognized experts and facility in regenerative medicine and alternative procedures in the spine and extremities.
- Performance of Cutting edge procedures like platelet rich plasma and stem cell harvesting and injection using musculoskeletal ultrasound and fluoroscopy.
- Interpret diagnostic musculoskeletal ultrasound studies

Spine, Musculoskeletal and Interventional Pain Management Fellowship

Portner Orthopedic Rehabilitation Incorporated - Honolulu, Hawaii

September 2006 to September 2007

- Trained by a specialist who was taught by Dr James Cyriax, the father of Orthopedic Medicine.

RESIDENCY TRAINING

Physical Medicine and Rehabilitation

Louisiana State University Health Science Center - New Orleans, Louisiana

August 2002 to August 2006

- Awarded an **Academic Achievement Certificate** for scoring in the top 25% of Residents nationally.

MEDICAL EDUCATION

Doctor of Medicine

University of Santo Tomas School of Medicine and Surgery

Manila, Philippines

April 1996 to April 2000

- Member of Medical Missions Incorporated. Conducted medical missions, provided medical care and performed minor procedures in underserved areas of the Philippines.

UNDERGRADUATE EDUCATION

Bachelor of Science in Psychology

University of the Philippines - Quezon City, Philippines

June 1992 to April 1996

- Graduated **Cum Laude**
- Achieved **University and College Academic Scholar Honors**
- Member of the Phi Kappa Phi Honor Society

SUPPLEMENTAL TRAINING

- International Spine Intervention Society: Phase III Cervical Hands-On Spine Intervention Workshop. Phoenix, Arizona. February 2008
Program Directors: Richard Derby MD, Charles Aprill MD
- International Spine Intervention Society: Phase IV Discography Hands-On Spine Intervention Workshop. Orlando, Florida. March 2008
Program Directors: Richard Derby MD, Charles Aprill MD, Milton Landers MD
- International Spine Intervention Society: Radiofrequency Procedures Hands-On Spine Intervention Workshop. Plano, Texas. April 2008
Program Directors: Richard Derby MD, Charles Aprill MD
- North American Spine Society: Lumbar Spinal Injections Hands-On Training. Memphis, Tennessee. February 2006
Program Directors: Gregory Powell MD and Conor O'Neill MD
- Advances Neuromodulation Systems: Spinal Cord Stimulator Cadaver Workshop. Duke University Medical Center, Durham, NC. March 2008
Program Director: Abraham Rivera MD
- Medtronic Trial and Manage Workshop for Implantable Pain Therapies. Minneapolis, MN. July 2008.
Program Director: John Huffman MD
- Boston Scientific. Spinal Cord Stimulator Physician Workshop. Savannah, GA. October 2008.
Program Director: Marshall Bedder MD