



Autologous Biologics Training Series

Advanced Orthobiology and Sports Medicine for Upper & Lower Extremity Disorders

September 20-22, 2019

Didactic-Ultrasound- Hands-On Cadaver Training Program
Basics of MSK Ultrasound Pre-Conference
Gulf Coast Biologics, 4331 Veronica S. Shoemaker Blvd
Fort Myers FL, 33916
15.75 AMA PRA Category 1 Credits™



LEARNING OBJECTIVES

- Enhance the knowledge of regenerative medicine using a detailed course agenda
- Review the latest technology in advanced autologous biologics, to include Clinical PurePRP, Pure BMC bone marrow stem cells, and Adipose Tissue Concentrate
- Outline differences in biological validation results
- Review the principles of MSK ultrasound and sonographic artifacts
- Outline appropriate transducer selection, presets and system optimization features
- Demonstrate and practice Hip, Knee, Elbow, and Achilles tendon sonography techniques via Hands-On Scanning,
- Identify normal anatomy in lower and upper extremity
- State scanning protocols for elbow-shoulder-knee-hip
- Demonstrate Scanning for guided intra-articular and intra-tendinous biological injections on upper & lower extremity cadaver specimen

PROFICIENCY OBJECTIVES

- Perform safe PurePRP and PureBMC procedures in MSK sports medicine applications
- Review the benefits of platelet concentrate in the PurePRP milieu
- Identify differences between BMA vs BMC injectates regarding RBC's-Hemolysis-Growth Factors
- Assess the potential of Adipose Tissue Biology in sports medicine
- Review the advantages of dual spin vs. single spin devices and the differences in bio-formulations
- Evaluating the potential of viable platelets towards clinical PRP definition
- Evaluate tendon disorders and treatment options with (biological) injections
- Assess the advantages of using guided ultrasound for PRP injection procedures in upper and lower extremity
- Examine the difference in protocols and biological activities of BMC components, and the gap in standardization
- Review evidence-based outcomes in biological cell therapeutics



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FRIDAY SEPTEMBER 20 th — ULTRASOUND PROGRAM		
2:00pm	Welcome and introductions	Peter A. Everts, PhD.
2:15pm	Basis Ultrasound Physics and System Optimization: <ul style="list-style-type: none"> ▪ Device Settings & options ▪ Probe choices ▪ Technique of scanning ▪ Needle Guidance Techniques & Considerations 	Todd Stitik, MD.
3:30pm	Upper Extremity Anatomy Normal <ul style="list-style-type: none"> ▪ Shoulder ▪ Elbow ▪ Hands-On 	Todd Stitik, MD, RMSK. Instructors
4:30pm	Break	
4:45pm	Lower Extremity Anatomy Normal <ul style="list-style-type: none"> ▪ Hip ▪ Knee ▪ Achilles tendon ▪ Hamstring ▪ Hands-On 	Todd Stitik, MD, RMSK. Instructors
6:00pm	Q&A and Recommendations	
6:15pm	Adjourn	



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SATURDAY SEPTEMBER 21st — MORNING PROGRAM

7.30am	Breakfast	
8:30am	Welcome and introductions.	Peter A. Everts, PhD.
8:45am	General introduction to Platelet-Rich Plasma: Introducing the new PurePRP Supra Physiologic. <ul style="list-style-type: none"> ▪ Anti-coagulation, proper blood draw, PRP concentrations. ▪ Roles and functions of platelets and white blood cells; defining Clinical PRP ▪ Effects of erythrocytes, eryptosis, plasma free hemoglobin, MIF in biological cell preparations 	Peter A. Everts, PhD.
9:45am	Break	
10:00am	General introduction to Bone Marrow Aspirate and Concentration: <ul style="list-style-type: none"> ▪ Introducing minimal invasive bone marrow aspiration needle system, cell concentrations ▪ Stem cell niches, CFU/F, role of platelets and PRP, concentration effects. ▪ Convincing evidence on BMA centrifugation/concentration and literature references ▪ Bio-Cellular Validation and case report data evaluations ▪ Differences between BMA vs BMC Injectates ▪ Q&A 	Peter A. Everts, PhD.
10:45am	Break	
11:00am	Sonography: <ul style="list-style-type: none"> ▪ Key Features and Techniques of using ultrasound in ortho-biology. ▪ Ultrasound of Upper & Lower extremity: intra-articular and intra-tendinous. ▪ Ultrasound protocol in BMA PSIS aspiration ▪ Case studies & Q&A 	Josh B. Rothenberg, DO.





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SATURDAY SEPTEMBER 21st — AFTERNOON PROGRAM

1:00pm	Lunch	
1:30pm	<p>PLENARY Conference Room: PRP & BMC preparation techniques; RBC effects on patients PRP: Blood draw, Single vs Dual Spin Protocols; Laboratory Data analysis. BMC: Preparing for perfect BMA – BMA needle differences Validation BMA vs BMC injectates: RBC-Hemolysis-Growth Factors</p>	<p>Marcia James, CRNN. Ewa Profiruk</p> <p>Peter A. Everts, PhD.</p>
2:30pm	<p>WORKSTATION SESSIONS:</p> <p>Station 1: Hands-On: Conference Room</p> <ul style="list-style-type: none"> ▪ Ultrasound Imaging live model ▪ US Scanning Lower & Upper Extremity <p>Station 2: Hands-On: LOWER EXTR. Precision guided <u>intra-tendinous biologic</u> injection of</p> <ul style="list-style-type: none"> ▪ Achilles tendon Injection ▪ Hamstring <p>Station 3: Hands-on: UPPER EXTR. Precision guided <u>intra-tendinous & articular biologic</u> injection of</p> <ul style="list-style-type: none"> ▪ Median and lateral elbow ▪ Wrist <p>Station 4: Hands-On: Precision guided BMA aspiration PSIS on cadaver specimen</p> <ul style="list-style-type: none"> ▪ Landmarking technique ▪ Needle placement ▪ Aspiration technique 	<p>Alfredo Ferreyra, RDMS, RMSK's, ASAR</p> <p>Moises Irizarry, MD.</p> <p>Todd Stitik, MD, RMSK.</p> <p>Josh B. Rothenberg, DO.</p>
5:15pm	<p>Panel discussion: Autologous Biological Protocols: Intra Articular Biological Injections; BMA Aspiration; Biological Formulations, Fluoroscopy vs. Ultrasound.</p>	<p>Peter Everts, PhD. Moises Irizarry, MD, MBA Josh Rothenberg, DO. Todd Stitik, MD.</p>
5:45pm	Adjourn	



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SUNDAY SEPTEMBER 22nd — MORNING PROGRAM

7:00am	Breakfast	
8:00am	WORKSTATION SESSIONS: Station 1: Hands-On Station UPPER EXT.: Precision guided <u>intra-tendinous biologic</u> injection of <ul style="list-style-type: none"> ▪ Rotator cuff Injection ▪ Shoulder impingement Station 2: Hands-On Station SACRUM-MID FEMUR: Precision guided <u>intra-articular biologic</u> injection of <ul style="list-style-type: none"> ▪ Hip joint Station 3: Hands-On Station LOWER EXT. Precision guided <u>intra-articular biologic</u> injection of <ul style="list-style-type: none"> ▪ Knee joint ▪ Meniscus ▪ Patella tendon 	 Moises Irizarry-Roman, MD. Todd Stitik, MD, RMSK. Todd Stitik, MD, RMSK. Alfredo Ferreyra, RDMS, RMSK's, ASAR
10:30am	Break	
11:00am	Intra tendinous autologous Ortho-Biological injections: <ul style="list-style-type: none"> ▪ Short intro Patella – Ankle – Tennis/Golf Elbow. ▪ Specifically: "A shoulder you can lean on". (Deconstructing and simplifying shoulder anatomy). ▪ Case studies & Q&A 	Moises Irizarry-Roman, MD.
12:00pm	General introduction to Adipose Tissue Concentrate in Orthobiology: <ul style="list-style-type: none"> ▪ Introducing adipose tissue concentration: ▪ Cellular Activity in Adipose Tissue ▪ Enzymatic and Mechanical Manipulation. ▪ Role of platelets and PRP in adipose tissue. ▪ Evidence on adipose orthobiology application for extremities ▪ Q&A 	Peter A. Everts, PhD.
1:00pm	<ul style="list-style-type: none"> ▪ Define the role of Ultra Sound imaging in intra tendinous and intra articular ortho-biological applications. ▪ Case Reports ▪ Q&A 	Moises Irizarry-Roman, MD. Alfredo Ferreyra, RDMS, RMSK's, ASAR
1:30pm	Evaluation of Didactics & Workshops	
2:00pm	Adjourn	



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Program Director

Peter A. Everts, PhD, FRSM.

Chief Scientific Officer Program Director
EmCyte Corporation
Fort Myers FL.

Faculty

Joshua B. Rothenberg, DO.

Director of Regenerative Medicine
Boca Raton Regional Hospital, Boca Raton, FL

Moises Irizarry-Roman, MD.

Founder and Director
No Mercy Sports Medicine
Miami, FL

Todd Stitik, MD, RMSK.

Professor of Physical Medicine and Rehabilitation
Rutgers University- New Jersey Medical School,
Newark, NJ

Alfredo Ferreyra, RDMS, RMSK's, ASAR.

Rigenera Muskuloskeletal Solutions
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Registration: www.gulfcoastbiologics.com

3 Day-Course Fee for physicians, PA's, NP's: \$ 1,150.00

A discount code might be available, please call your distributor or Marissa.

3 Day-Course Fee for RN's, MA, Supportive staff: \$ 600.00

Breakfast and lunches included.

Location:

Gulf Coast Biologics,
4331 Veronica S. Shoemaker Blvd, Suite 2,
Fort Myers FL, 33916

P: 239-478-2284.

CME Certificate issued by Albert Einstein College of Medicine.



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Albert Einstein College of Medicine

Accreditation Statement:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Albert Einstein College of Medicine and Gulf Coast Biologics. The Albert Einstein College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation:

Albert Einstein College of Medicine designates this live activity for a maximum of **15.75 AMA PRA Category 1 Credits™**.

Physicians should claim only the credit commensurate with the extent of their participation in this activity.

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