



The Biomechanics Institute of Valencia (IBV) certifies that:

ALBERT CHIFLIGAROV

has completed the online course

**OSTEOSYNTHESIS FOR SURGICAL MANAGEMENT OF FRACTURES FOR ORTHOPEDIC
SURGEONS AND BIOMEDICAL ENGINEERS**

Held from 26/01/2015 to 31/03/2015 with duration of 40 hours, and in witness whereof, I hereby sign this certificate.

Signed.: **Pedro Vera**
Biomechanics Institute of Valencia
(IBV) Director



INSTITUTO DE
BIOMECÁNICA
DE VALENCIA



Orthopaedic Surgery
& Musculoskeletal Trauma
Faculty of Medicine, University of Thessalia

INDEX

MODULE 1: BIOMECHANICAL ANALYSIS OF BONE IN TERMS OF ITS STRUCTURE

- Session 1: General criteria, applied criteria and experimental tests

MODULE 2: BIOMECHANICAL FRACTURE STUDY

- Session 1: Fracture and consolidation mechanisms
- Session 2: Factors influencing fracture repair and assessment methods

MODULE 3: SKELETAL ADAPTATION TO FUNCTIONAL STIMULI

- Session 1: Introduction and experimental studies
- Session 2: Variables influencing mechanical adaptation

MODULE 4: ORTHOPAEDIC FRACTURE REPAIR SYSTEMS

- Session 1: Treatment of fractures

MODULE 5: SURGICAL FRACTURE REPAIR SYSTEMS

- Session 1: Introduction. Screw fixation
- Session 2: Plate fixation
- Session 3: Intramedullary fixation
- Session 4: External fixation of fractures

MODULE 6: PRINCIPLES OF SURGICAL TREATMENT OF FRACTURES

- Session 1: Anatomic Reduction
- Session 2: Stable Osteosynthesis
- Session 3: Preserving blood supply

MODULE 7: ERRORS IN OSTEOSYNTHESIS

- Session 1: Threats against the principles
- Session 2: Choice of Implant
- Session 3: Biological input
- Session 4: Type of error
- Session 5: The accomplished fact. The patient

MODULE 8: NEW TENDENCIES IN ORTHOPAEDIC SURGERY AND TRAUMATOLOGY

- Session 1: Controversies
- Session 2: Tissue Regeneration Therapy
- Session 3: Good practices, Documentation and Continuous Evaluation of Results in Orthopaedic Surgery and Traumatology

MODULE 9: PRACTICE

- Session 0: Introduction
- Session 1: Biomechanical Prerequisites
- Session 2: Intramedullary Nailing of diaphyseal femur fractures
- Session 3: Osteosynthesis of proximal femur fractures
- Session 4: Plate fixation of distal radius fractures