



**BARÇA
INNOVATION HUB**
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LOWER LIMB TENDINOPATHY

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PROGRAM / 100% online / 2 months

**LEARN FROM THE BEST | ENJOY A UNIQUE EDUCATIONAL EXPERIENCE |
BECOME PART OF A GLOBAL NETWORK**

Tendons of the lower limb predominantly function as springs to allow locomotion as well high level athletic activity. Tendon pain and dysfunction is a common presentation and clinicians must be competent at recognizing the key features of tendon pain, as well as possess an excellent knowledge of evidence-based management. Critical to applying the evidence base is an understanding of the pathoetiology of tendon pain, adaptation, as well as changes that exist at all levels (from tendon to muscle, kinetic chain and brain). These concepts provide the premise for thorough rehabilitation and appropriate use of adjuncts in the management.

Rehabilitation considerations include the current capacity of the individual as well as their goals, co-morbidities and individual factors. The in-season athlete provides an additional challenge and clinicians must understand how and when to apply the current research.

This program will also teach the importance of pain science, use of language when explaining ideas to patients and athletes as well as key stakeholders such as parents of junior athletes and coaches. The latest evidence for how to incorporate neuroscience into rehabilitation will also be covered.

Jill Cook

EXPERT INSTRUCTOR



Physiotherapist. Professor in musculoskeletal health in the La Trobe Sport and Exercise Medicine Research Centre at La Trobe University. Her research areas include sports medicine and tendon injury.

Ebonie Rio

EXPERT INSTRUCTOR



Leading researcher in tendon pain and rehabilitation at La Trobe University.



- **DELIVERY MODE ONLINE**
- **DURATION 2 MONTHS**
- **ACADEMIC DEGREE EXECUTIVE EDUCATION**
- **DELIVERED IN ENGLISH, SPANISH**

OBJECTIVES

To recognise tendinopathy as a clinical presentation and provide evidence-based individualized rehabilitation.

AIMED AT

- Professionals who carry out a process of prevention or rehabilitation of injuries:
 - Traumatologists
 - Team doctors
 - Physiotherapists
 - Physical trainers

LEARN TO

- Describe normal tendon and the changes that occur with pathology
- Understand and explain what is known about nociception and pain in tendons
- Describe the function of lower limb tendons
- Understand the role of imaging in tendon pain
- Conduct a thorough subjective examination
- Increase confidence in differential diagnosis or considering a treatment path following objective assessment
- Provide evidence-based rehabilitation for lower limb tendons
- Adapt management for the in-season athlete

SYLLABUS

COURSE 1: Understanding tendon anatomy, function and adaptation

MODULE 1. Fundamentals of tendon

- Normal tendon structure
- Normal tendon function
- Understanding tendon loads
- Clinical implications of understanding tendon load in presentation
- Changes that occur in tendon pathology
- The clinical relevance of staging
- Adaptation and bioplasticity at a local level
- Implications for clinicians

MODULE 2. Pain and pathology; implications for clinicians

- Understanding pain and nociception
- The biopsychosocial model and tendinopathy
- Language and terminology
- Adaptation and bioplasticity – kinetic chain
- Adaptation and bioplasticity of the whole system – don't forget the brain and spinal cord!
- Putting it all together – relating loads, structure, function and pain (part 1 and 2)
- Clinical examples

MODULE 3. Theory for subjective assessment

- What is the importance of taking a good history?
- Understanding capacity
- What to ask
- Modifiable risk factors
- Non-modifiable risk factors
- Specific outcome measures
- Hallmark features – short and long term (theory) for each tendon
- Differential diagnosis – key points to direct you from the history

MODULE 4 Imaging and other referrals in subjective assessing

- Introduction to imaging
- When to use imaging
- When not to use imaging
- Interpretation of imaging
- When to refer – including red flags
- Language associated with imaging findings
- Putting imaging in context
- Key points from the subjective assessment that guide your objective examination

SYLLABUS

COURSE 2: Assessing and rehabilitating lower limbs tendons

MODULE 1: Introduction to objective assessment and specific tendons

- Basic principles of assessment
- Structure of the assessment
- Patellar tendon classic presentation
- Differential diagnosis anterior knee
- Proximal Hamstring tendon – classic presentation
- Differential diagnosis hamstring
- Adductor tendinopathy and groin pain
- Summary

MODULE 2: Objective assessment for lower limb tendons continued

- Achilles tendon – classic presentation
- Achilles differential diagnosis
- Foot and ankle tendons – including plantar heel pain
- Glut med – classic presentation
- Glut med – differential
- Outcome measures
- Tailoring for sedentary people
- Summary

MODULE 3: Rehabilitation background

- Background
- Setting goals and managing expectations
- How to be a bioplastician: stages
- Education
- Monitoring
- Patellar tendon
- Hamstring tendon
- Achilles tendon

MODULE 4: Rehabilitation completion

- Foot and ankle tendons
- Glut medius
- Rehabilitation of rupture
- In-season considerations – what to do
- In-season what not to do!
- Adjuncts and clinical reasoning
- What to do if it is not working
- Final summary

EXPERIENCE

All your learning experience will take place in an online platform where you will find all the resources you need to study:

LECTURES

which address the main topics.

VIDEOS

that deepen some subjects of the readings.

ACTIVITIES

to apply the content addressed in each module.

RUBRICS

that will evaluate you in each module.

ONLINE EXPERT

In every course, you will have the support and virtual follow-up of a subject-matter expert. This online expert will perform interventions throughout the different modules to ensure your learning, as well as the interaction with the rest of your peers.

In addition, he will be available in the forum and by internal messaging so that you can appeal to him as many times as you need.

FORUMS

where you can interact with your colleagues.

SELF-ASSESSMENTS

which will help you measure your learning progress.



BENEFITS

- **World-class content, designed by experts and sports-industry oriented for an immediate impact.**
- **Round-the-clock access to study material, wherever you want and from any device.**
- **Custom feedback for every individual and teamwork activity.**
- **Spaces of discussion and interaction with industry professionals from all over the world.**
- **Certificate of participation for each course, issued by Barça Innovation Hub - Universitas. If you pass each of the courses that make up the program, and complete and pass the comprehensive final exam, you will also receive a verified certificate of completion for the entire program, with confirmation of identity, issued by Barça Innovation Hub - Universitas.**



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SPORTS PROFESSIONALS**