**Special Topics in Musculoskeletal Anatomy**

**Module Lead:**  Peter Bazira; Paul O'Higgins  
**Term:**  Spring  
**Level / Credits:**  Level 7 / 20 Credits  
**Module status:**  Elective Module

This module comprises weekly seminars on each of three key areas: Limbs, Spine and Head.

Weekly topics include:

Introduction to Module. General limb anatomy, the evolution of limbs, their common organisation and different functions. The shoulder and arm.

How and why limbs differ and what they share; limb evolution and development.

Walking and running – limb biomechanics and gait.

Growth and function

Hands, feet and the spine; serial homology, modularity and integration.

Skull form and variation: evolution, development and function.

**Learning Outcomes**

By the end of this module, you should be able to show that you can:

1. Identify and name bony features, muscles and muscle groups in the region of special interest giving details of attachment, orientation and innervation of muscles.
2. Critically assess and give an account of the function of major muscle groups and muscles in the region of interest.
3. Critically relate details of musculoskeletal form and function to evolutionary and developmental history using comparative material to illustrate these details where relevant.
4. Critically appraise the extent to which skeletal and muscular features reflect functional vs genetic signals.

**Module Aims**

To increase understanding and knowledge of musculoskeletal anatomy in relation to a specific anatomical topic.
**Module Workload / Assessments**

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<th>Hours</th>
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<tr>
<td>Lectures:</td>
<td>0 hours</td>
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<tr>
<td>Practicals:</td>
<td>24 hours (tutor supported)</td>
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<td>Seminars:</td>
<td>12 hours</td>
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<td>Self-Directed Learning:</td>
<td>156 hours (including 100 hours of dissection)</td>
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<td>Formal presentation in a seminar 50%</td>
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<td>Assessment:</td>
<td>Viva Dissection (comprising oral examination and dissection) 50%</td>
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