EFNR MASTER PROJECT

• Over the last decades neurorehabilitation has emerged as a specific branch of the rehabilitation medicine.

• So far limited knowledge and training is provided during undergraduate programmes.

• Many emerging topics need to be deepened from both a theoretical and practice point of view (e.g. neuroscience of human movement and dysfunction, innovative technologies, etc)

• It seems to be essential to offer
  
  o advanced theoretical knowledge

  o specialised and scientific training

  o a deeper understanding of research and the ability to critically appraise scientific litterature

• A proposal for postgraduate training realized in the “Curriculum for residency training in Neurorehabilitation” has been endorsed by the main European Societies for Neurorehabilitation.
European core curriculum in neurorehabilitation

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Summary

To date, medical education lacks Europe-wide standards on neurorehabilitation. To address this, the European Federation of NeuroRehabilitation Societies (EFNR) here proposes a postgraduate neurorehabilitation training scheme. In particular, the European medical core curriculum in neurorehabilitation should include a two-year residency in a neurorehabilitation setting where trainees can gain practical experience. Furthermore, it should comprise six modules of classroom training organized as weekend seminars or summer/winter schools. In conclusion, after defining the European medical core curriculum in neurorehabilitation, the next activities of the EFNR will be to try and reach the largest possible consensus on its content among all national societies across Europe in order to further validate it and try to extend it to the other, non-medical, professionals on the neurorehabilitation team in line with their core curricula defined by each professional association.

KEY WORDS: curriculum, medical doctor, neurorehabilitation

Introduction

Neurological damage is the underlying problem in about 40% of the most severe disabilities (an umbrella term, covering impairments, activity limitations, and participation restrictions), and in the majority of people with complex disabilities resulting from a combination of physical, cognitive and behavioral impairments (Greenwood, 2001). Rehabilitation medicine pursues restoration of function as well as facilitation of compensatory or adaptive strategies in any type of disability deriving from any kind of pathological condition (Greenwood, 2001; American Academy of Neurology, 2009). It is a process involving a multidisciplinary and multiprofessional team, and it is highly dependent on the interaction of multiple treatment agents and factors (Greenwood, 2001; American Acad-
# Master programme in neurorehabilitation

<table>
<thead>
<tr>
<th>Title</th>
<th>Institution/Place</th>
<th>Award</th>
<th>Study mode</th>
<th>Duration (years)</th>
<th>Credits</th>
<th>Entry requirements</th>
<th>Start month</th>
<th>Structured program</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurological rehabilitation</td>
<td>Teesside University (UK)/Middlesbrough (UK)</td>
<td>MSc</td>
<td>Part-time</td>
<td>3</td>
<td>3</td>
<td>Postgraduates PT, OT, Experience in practice and must currently working in the field of neurological rehabilitation.</td>
<td>Sept.</td>
<td>PGCert (60 credits); PGDip (60 credits); research project (60 credits);</td>
<td></td>
</tr>
<tr>
<td>MSc Neurological rehabilitation</td>
<td>Plymouth University (UK)</td>
<td>MSc</td>
<td>Part-time</td>
<td>3</td>
<td>180</td>
<td>A relevant first degree or equivalent. Any potential student will be assessed individually for their ability to study at this level.</td>
<td>Sept.</td>
<td>PGCert (60 credits); PGDip (60 credits);</td>
<td></td>
</tr>
<tr>
<td>Neurorehabilitation MSc</td>
<td>Brunel University-London (UK)</td>
<td>MSc</td>
<td>Full-time/Part-time</td>
<td>3</td>
<td></td>
<td>PT, OT, Any other rehabilitation sciences, professions allied to medicine</td>
<td>Sept.</td>
<td>7 core modules (15-30 credits); dissertation (60 credits);</td>
<td>UK/EU students: £5,800 full-time; £2,900 part-time; International students: £15,000 full-time; £7,500 part-time.</td>
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<tr>
<td>Neurorehabilitation</td>
<td>Cardiff (UK)</td>
<td>MSc/Diploma</td>
<td></td>
<td>120</td>
<td></td>
<td>OT, PT, With at least 2 years clinical experience in neurorehabilitation. Some of the modules are stand alone and suitable for Nurses and other Allied Healthcare Professionals.</td>
<td></td>
<td>1 generic module Research Methods in Health and Social Care (30 credits); 1 module in Neuroscience of human movement (30 credits); 1 module in dysfunction and Neurological rehabilitation (20 credits); Other optional modules (40 credits)</td>
<td></td>
</tr>
<tr>
<td>Physiotherapy (Neurorehabilitation) MSc</td>
<td>Nottingham City Hospital (UK)</td>
<td>MSc</td>
<td>Full-Time/Part-time</td>
<td>1/2-4</td>
<td>180</td>
<td>A first degree in PT or a related Health Care subject of at least a 2.2 classification or equivalent, with a minimum 2 years of clinical experience</td>
<td>Sept.</td>
<td>PGCert (60 credits); PGDip (120 credits); MSc (180 credits);</td>
<td></td>
</tr>
<tr>
<td>University Master’s degree Neurorehabilitation</td>
<td>Barcelona</td>
<td>MSc</td>
<td>2</td>
<td>120</td>
<td></td>
<td>Any health and life science professionals interested in expanding their knowledge and improving their skills in neurological rehabilitation and with an interest in commencing research into rehabilitation.</td>
<td></td>
<td>EU citizens and non-EU citizens who hold a Spanish residence permit: 3.600 euros; Non-EU citizens who do not hold a Spanish residence: 6.780 euros;</td>
<td></td>
</tr>
</tbody>
</table>
Outlines

• Name: European joint master in Neurorehabilitation

• Level (Bachelor/Master/PhD): Master

• Aims:
  - to offer advanced theoretical knowledge, specialised and scientific training, and a deeper understanding of research and the ability to critically appraise scientific literature in the fields of neurorehabilitation.
  - To lead to the award of a Master degree

• Disciplines involved: Medical doctor, PT, OT

• Entrance requirements: a relevant first degree with professional clinical experience in rehabilitation.

• Duration (in years/in ECTS credits): 2 years/120 ECTS

• Full time/part time: part time

• Institutions offering elements of the joint degree: network of institutions!
European joint master in Neurorehabilitation
2 years/120 ECTS

First year (60 credits)
- Didactics (50 credits)
  - Lectures (30 credits)
  - E-Learning (20 credits)
- 5 Modules (basic sciences, motor rehabilitation, cognitive rehabilitation)

Second year (60 credits)
- Didactics (30 credits)
  - Lectures (20 credits)
  - E-Learning (10 credits)
- Practice/training (10 credits)
- 5 Modules (specific neurorehabilitation aspects)
- Project work and dissertation (20 credits)
E-LEARNING: THE EDUCATION IN THE FUTURE?

- **Online Master**
  *(Post degree professional courses)*
  Complete development – online resources and LMS platforms

- **LEARNING SPACES**
  *(Re-adjustable rooms - tables/chairs with wheels – touch screens – mobile devs – WiFi - BYOD. For interactive sessions and project works)*

- **Empowering 20 traditional rooms**
  Special big screens and projectors / WiFi /BYOD to foster Peer to Peer interaction