國立台灣大學物理治療學研究所 疼痛理論與治療(選修)

#### Theory and Management of Pain

課程編號:428 D0110 授課老師:王淑芬老師(主授)、徐百川老師、孫維仁醫師、謝松蒼醫師、陳志成老師 授課對象:博士班學生 授課時間:每週五下午 2:30 - 4:20 pm 授課地點:物理治療學系大討論室 (台北市徐州路十七號公衛大樓三樓) 主授老師辦公室:王淑芬老師辦公室 Room 310,33228139

### Theory and management of pain

Lecturers: Drs. S-F Wang, B-C Shyu, C-C Chen, S-T Hsieh, W-Z Sun Students: graduate students Time: Friday 3:30-5:20pm Place: Seminar Room I in school of physical therapy Office: room 310, 3221-8139

#### Aim:

- A. Orchestrating different experimental approaches form molecular to behavior level in pain science.
- B. Integrating and interacting with basic and clinical pain science.
  - 1. to design translational researches in applying the findings from basic cellular and molecular mechanism of chronic muscle pain to the treatment of patients with chronic and diffused muscle pain.
  - 2. to identify clinical significance and issues for the design and aims with experimental approaches.

Grading: Journal report 40%; Final paper: 60%

## Journal report:

The students need to give an oral and written report of a current paper in pain science. Final report:

The students are required to write a research proposal that integrating and interacting with basic and clinical pain science (pilot study is preferred), following the NSF format.

Topics			
date	no.	topic	speaker
9/17	1	Introduction and prevalence of musculoskeletal pain	Dr. Wang
9/24	2	Receptor and nociceptive neurons and circuits in the spinal cord	Dr. Wang
10/01	3	The process of nociceptive information by higher brain centers	Dr. Wang
10/08	4	Mechanical hyperalgesia	Dr. Wang
10/15	5	Peripheral and central sensitization	Dr. Sun
10/22	6	Cancer pain	Dr. Sun
10/29	7	Nerve injury and neuropathic pain	Dr. Hsieh
11/05	8	Molecular mechanism of pain sensation	Dr. Chen
11/12	9	Animal model for pain research	Dr. Chen
11/19	10	Mid-term report	Dr. Wang
11/26	11	Central sensitivity: adaptive and maladaptive change	Dr. Wang
12/03	12	Research methodology in study of pain	Dr. Shyu
12/10	13	Possible role of anterior cingulated cortex in pain	Dr. Shyu
		sensation and the associated emotional component	
12/17	14	Possible interactions between motor and pain control	Dr. Wang
12/24	15	Bio-psycho-social model of pain	Dr. Wang
12/31	16	Descending control of pain	Dr. Wang
01/07	17	Functional image of pain	Dr. Wang
01/14	18	Final report	Dr. Wang

# Textbooks:

1. Wall P.D. and Melzack R. Textbook of pain. 4<sup>rd</sup>. W.B. Saundars, 1999

2. Strong J, Unruh AM, Wright A, Baxter D. Pain: a textbook for therapists. Edinburgh: Churchill Livingstone, 2002.