



【校級神經醫學研究中心 109 年 10 月份月會】

會議紀錄

時間：109年10月28日(星期三) 12:10-13:30

地點：現場會議-醫綜後棟15樓第二會議室

同步視訊會議-Google Meet

主席：蔣永孝 主任

主持人：林建和 醫師

TMU Neuroscience Research Center Monthly Meeting Record for October, 2020

Chair: Director Y. C. Chiang

Recorded by: Professor J. Y. Wang,

Host: Dr. Jian-He Lin

Secretary C. N. Huang

Time: 2020/10/28 (Wednesday) 12:10-13:30

Place: 2nd Conference room at 15th Floor, United Medical Building (Back Building), Taipei Medical University (and net meeting via Google Meet held simultaneously).

Meeting Agenda (議程):

1. Opening by Director Chiang
2. Forum hosted by Dr. Jian-He Lin

1. Opening

Director Chiang introduced Dr. Jian-He Lin, who graduated from the Ph.D. Program for Neural Regenerative Medicine in TMU and now is a neurosurgeon in the TMU hospital. Dr. Lin was going to talk about his research on pain, especially soreness. There are not so many people studying on this issue. Dr. Lin's group even generated the new terminology, "sng", to describe this sensation. Director Chiang also invited Dr. Lin not only to talk about his research but also to talk about his problem of research, and hope he may get some feedback in the forum. As with the previous meeting, we also hold this meeting simultaneously with the in-person and the net meeting.

蔣主任介紹今天的主持人-林建和醫師。林醫師畢業於臺北醫學大學的神經再生醫學博士學位學程，目前為北醫附設醫院的神經外科醫師。林醫師在痠痛的研究是一個新的領域，目前較少團隊在研究，他們團隊也以閩南語的痠(sng)創造了形容這種感覺的詞彙。蔣主任鼓勵林醫師除了介紹他的研究外，也將他目前遇到問題或困難在論壇上與大家討論，希望大家可以多多回饋。本次月會除現場會議外，也同時舉辦視訊會議供不能到場的成員參加。



The opening of Director Chiang in the in-person meeting.

2. Forum

1) Introduction

Dr. Lin first introduced “sng” which should be considered as a unique symptom differing from pain because current treatment for soreness is unsatisfied and a different underlying mechanism underpinning “sng” development has been suggested. However, “sng” is largely ignored because “sng” may be treated as a mild form of pain when it commonly coexists with pain. In Chinese society, pain is often described as a compound word “sng(acid)-pain” (痠痛), in which “sng” (pronounced as sə-ng) is a Taiwanese word that represents the state of feeling sore (or tissue acidosis). In pain clinic, soreness (or “sng”) is not only a characteristic sensory phenotype of various acute and chronic pain syndromes (e.g., delayed onset muscle soreness, fibromyalgia, and radicular pain), but also a sign of successful analgesia for acupuncture and many forms of physical therapy. Thus, the nature of soreness (“sng”) is not always nociceptive and should be defined as a way to distinguish it from pain. However, in English dictionary, soreness means the quality of being painful and uncomfortable because of injury or too much use. To facilitate the investigation of molecular and neurobiological mechanism of soreness sensation and its clinical impact, we have proposed a novel theory of “sngception (sng- ception)” to describe the response of the somatosensory nervous system to sense tissue acidosis and distinguish it from nociception

Our long-range goal is to establish a new concept in treating chronic “sng-pain” associated with tissue acidosis. The objective is to probe the molecular determinants and sensory neuron subtypes involved in sngception and distinguish it from nociception. Our central hypothesis is that sngception is distinguishable from nociception; and proprioceptors are one of the neuron subtypes involved in sngception. The hypothesis is based on our preliminary data that showed conditional knockout ASIC3 in proprioceptors but not nociceptors abolished the acid-induced chronic “sng-pain” and proprioceptors play an important role in pain chronicity. Also, we have found the segregation of sngception from nociception in a spine-injury patient who lost most somatosensory function in his right leg, but maintained proprioception and motor function; whereas the patient felt “sng” of right leg after a long-distance walking. In addition, “Sng” has differential impacts from pain on functional brain networks and health-related quality of life in Taiwanese chronic low back pain patients.



The forum hosted by Dr. Jian-He Lin.

2) Discussion

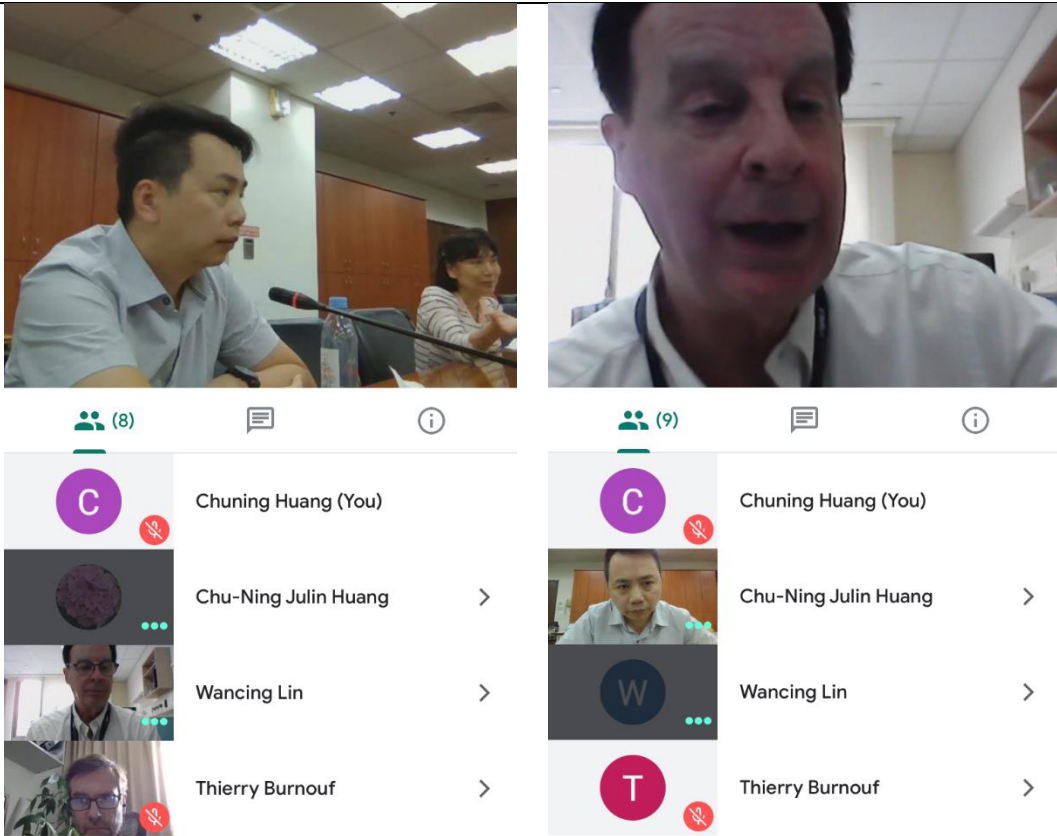
Prof. Tim Lane also asked the “sng” concept via net meeting. Dr. Lin answered that the “sng” concept is a universal sensation, but they surveyed 15 countries and found that only Korean and Chinese Mandarin have specific words to describe the soreness. In the in-person meeting, Prof. Wang shared her experience with “sng” in seeing the dentist or delivering the baby. She also asked about the mechanism of “sng” but Dr. Lin said they still need more clinical trials to clarify the mechanism. Dr. Chueh-Ho Lin (林珪赫主任), who is the director of the Master Program in Long-Term Care of the College of Nursing, also studies the pain. He also shared that they have a pressure sensor that can measure the pain level of the patients. Dr. Jian-He Lin was very interested in that and he hopes to have the opportunity to cooperate in the future.

藍亭教授於視訊會議上提問，並與林醫師討論痠的概念。在現場會議上，王家儀執行長分享了他曾在牙痛及生產時所產生的痠感經驗，並詢問了痠的機制，但林醫師解釋目前還需要更多的臨床試驗才能確定其機制。同時護理學院長期照護碩士學位學程林珪赫主任目前也有進行關於疼痛的研究，並有壓力儀器可測量病人的疼痛程度，林建和醫師對此十分感興趣，並希望未來能有機會可以進行研究合作。

會後，林建和醫師也反映他們近期申請臨床試驗計畫未取得衛服部核准，雖然能再次提出申復，但因為需要補交以下文件：

- (1)依照「藥品臨床試驗計畫-技術性文件指引」分別提供試驗用藥(偏酸性磷酸緩衝溶液, pH 2.5)與對照藥(中性磷酸緩衝溶液, pH 7.3)之成品 CMC 技術性資料，如：成品性狀及配方組成、製造廠、製程描述、賦形劑管制、成品管制、容器封蓋系統及安定性等。
- (2)提供試驗用藥及對照藥之標籤，標籤內容應包含試驗委託者、受託研究機構或試驗主持人之資訊、藥品劑型、給藥途徑、藥品批號、使用說明、「僅供臨床試驗使用」或相似措辭、儲存條件、注意事項等內容。

林醫師坦承這並非他的專業，因此希望學校是否有相關單位或是老師可提供協助。



Prof. Tim Lane asked the question via Google Meet.



Discussion between Dr. Chueh-Ho Lin, Prof Wang, and Dr. Jian-He Lin.

會議結束時間為 13:30。