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現職 光電與通訊學系 助理教授

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專長1 醫學工程

專長3 人機介面與人機互動

專長5 核磁共振影像

專長2 生醫光電

專長4 嵌入式系統

專長6 雷射針灸

### 教師研究成果資料明細

#### 研究計畫

##### 1. 謝長倭 校內計畫 2009.08.1 ~2010.07.31

腦科學跨領域實驗室建置計畫-子計畫二:調變雷射針灸刺激頻率所引發人類大腦的腦波反應之初探

##### 2. 謝長倭 其他單位 2010.01.1 ~2010.12.31

側接式主動脈泵大動物活體實驗 子計畫：血泵微機電壓力感應器研發

##### 3. 謝長倭 校內計畫 2010.08.1 ~2011.07.31

調變雷射針灸刺激頻率所引發人類大腦皮質的活化之初探

##### 4. 謝長倭 國科會 2011.08.1 ~2012.07.31

調變低功率紅外線雷射照射特定穴位造成不同的大腦區域反應之研究

#### SCI、SSCI、A&HCI、EI、TSSCI期刊論文

##### 1.(In-Tsang Lin)、(Hong-Chang Yang)\*、謝長倭(Chang-Wei Hsieh)、(Tun Jao)、(Jyh-Horng Chen)\* ,2010-, (已刊登)

JOURNAL OF APPLIED PHYSICS 107卷期:頁~頁

Human hand imaging using a 20 cm high-temperature superconducting coil in a 3T magnetic resonance imaging system

##### 2. 劉劍輝(Chien-Hui Liou)、謝長倭(Chang-Wei Hsieh)、謝昭賢(Chao-Hsien Hsieh;)、陳德祐(Der-Yow Chen)、王志宏(Chi-Hong Wang)、陳

志宏(Jyh-Horng Chen)、李嗣涔(Si-Chen Lee)\* ,2010-10, (已刊登)

JOURNAL OF THE FORMOSAN MEDICAL ASSOCIATION

109卷10期:694頁~701頁

Detection of nighttime melatonin level on meditation practice

##### 3. 謝長倭(Chang-Wei Hsieh)、吳季華(Jih-Huah Wu)、謝昭賢(Chao-Hsien Hsieh)\*、王貴芳(Qwa-Fun Wan)、陳志宏(Jyh-Horng Chen) ,2011-, (已

刊登)

Evidence-based Complementary and Alternative Medicine 卷期:頁~頁

Different Brain Network Activations Induced by Modulation and Nonmodulation

Laser Acupuncture

#### 非SCI、SSCI、A&HCI、EI、TSSCI...等具審查機制論文

##### 1. 謝長倭(Chang-Wei Hsieh)、(Jih-huah Wu)、(Chao-hsien

HSIEH)、(Qwa-fun WANG)、(Jyh-horng CHEN)\* ,2010-09, (已刊登)

Chinese Journal of Magnetic Resonance 27卷3期:369頁~378頁

The Preliminary Investigation of 10-Hz Modulation Laser Acupuncture Induced Cerebral Cortical Activation in Human by Using fMRI

## 研討會論文

**1. 謝長倭(Chang-Wei Hsieh) 2011.06.26~2011.06.30**

2-Hz Modulation Laser Acupuncture Induced Limbic system and Brainstem Activations

17th Annual Meeting of the Organization for Human Brain Mapping 2011(HBM 2011)

**2. 謝長倭(Chang-Wei Hsieh) 2010.06.6 ~2010.06.10**

100-Hz Modulation Laser Acupuncture Induced Specific Cerebral Cortical Activations

16th Annual Meeting of the Organization for Human Brain Mapping 2010(HBM 2010)

**3. 謝長倭(Chang-Wei Hsieh) 2011.05.10~2011.05.12**

Effects of Regular Respiration and Title Angle Altering on the Cardiovascular System

The 5th International Conference on Bioinformatics and Biomedical Engineering (iCBBE 2011)

**4. 謝長倭(Chang-Wei Hsieh) 2009.09.1 ~2009.09.7**

Low Level Laser Stimulation of K1 Acupoint Induced Precuneus Activations

World Congress on Medical Physics and Biomedical Engineering

**5. 謝長倭(Chang-Wei Hsieh) 2009.06.18~2009.06.23**

10-Hz Modulation Laser Acupuncture Induced Specific Cerebral Cortical Activations

15th Annual Meeting of the Organization for Human Brain mapping

**6. 謝長倭(Chang-Wei Hsieh) 2009.06.18~2009.06.23**

The Exploring of Buddhist Meditation by Using fMRI

15th Annual Meeting of the Organization for Human Brain mapping

**7. 謝長倭(Chang-Wei Hsieh) 2009.06.18~2009.06.23**

Brain Functional Mapping on Physiological Regulating Phenomena during Meditation Exercise

15th Annual Meeting of the Organization for Human Brain mapping

**8. 謝長倭(Chang-Wei Hsieh) 2008.06. ~ .**

The Comparison of Buddhist Meditation with Different Phrases by Using fMRI

14th Annual Meeting of the Organization for Human Brain mapping

**9. 謝長倭(Chang-Wei Hsieh) 2007.08.23~2007.08.26**

Ultra-fast Brain MR Imaging Using Simultaneous Multi-slice Acquisition (SMA) Technique

Proceedings of IEEE-EMBS Conference on Biomedical Engineering

**10. 謝長倭(Chang-Wei Hsieh) 2007.06. ~ .**

Buddhist Meditation: An fMRI Study

13th Annual Meeting of the Organization for Human Brain mapping

**11. 謝長倭(Chang-Wei Hsieh) 2006.08.27~2006.09.1**

Study of Human Affective Response on Multimedia Contents

World Congress on Medical Physics and Biomedical Engineering

**12.謝長倭(Chang-Wei Hsieh) 2008.12.12~2008.12.13**

探討雷射針灸刺激神門穴的脈搏變化  
中華民國九十七年醫學工程科技研討會

**13.謝長倭(Chang-Wei Hsieh) 2006.08.27~2006.09.1**

Electric Magnetic Analysis of Micro-Fabricated Magnetic Resonance Imaging Coils  
World Congress on Medical Physics and Biomedical Engineering

**14.謝長倭(Chang-Wei Hsieh) 2006.12.15~2006.12.16**

多媒體使用者生理訊號偵測與其情緒變化之評估  
中華民國九十五年醫學工程科技研討會

**15.謝長倭(Chang-Wei Hsieh) 2010.10.10~2010.10.11**

探索100-Hz調變低功率雷射照射湧泉穴之大腦皮層反應  
中華民國九十九年醫學工程科技研討會

**16.謝長倭(Chang-Wei Hsieh) 2006.12.15~2006.12.16**

微製程磁振造影線圈之電磁分析  
中華民國九十五年醫學工程科技研討會

**17.謝長倭(Chang-Wei Hsieh) 2006.08.27~2006.09.1**

Design of a High-Temperature Superconducting RF Coil Platform for Rat on 3T MRI System  
World Congress on Medical Physics and Biomedical Engineering

**18.謝長倭(Chang-Wei Hsieh) 2006.12.15~2006.12.16**

應用功能性磁振造影技術探索有為法及無為法靜坐之大腦反應  
中華民國九十五年醫學工程科技研討會

**19.謝長倭(Chang-Wei Hsieh) 2006.08.27~2006.09.1**

Forced and Non-forced Chinese Meditation Studies  
World Congress on Medical Physics and Biomedical Engineering

**20.謝長倭(Chang-Wei Hsieh) 2006.12.15~2006.12.16**

高溫超導射頻線圈平台使用在3T磁振造影系統  
中華民國九十五年醫學工程科技研討會

**21.謝長倭(Chang-Wei Hsieh) 2010.10.10~2010.10.11**

探討雷射針灸照射湧泉穴的脈搏變化  
中華民國九十九年醫學工程科技研討會

**22.謝長倭(Chang-Wei Hsieh) 2006.04.26~2006.04.28**

Study of Micro-Fabricated Radio Frequency Coils for Magnetic Resonance Image  
2006 奈米元件研討會

**23.謝長倭(Chang-Wei Hsieh) 2005.12.17~2005.12.18**

應用功能性磁振造影技術探索無為法靜坐引?中松果體之反應  
中華民國九十四年醫學工程科技研討會

**24.謝長倭(Chang-Wei Hsieh) 2010.10.10~2010.10.11**

規律呼吸與仰臥角度變動對血管的影響  
中華民國九十九年醫學工程科技研討會

**25.謝長倭(Chang-Wei Hsieh) 2005.12.17~2005.12.18**

生理訊號情緒辨識系統  
中華民國九十四年醫學工程科技研討會

**26.謝長倭(Chang-Wei Hsieh) 2005.04.12~2005.04.12**

中國正宗靜坐的大腦反應現象及生理意義研究

2005年「身、心、靈科學」學術研討會論文集

**27.謝長倭(Chang-Wei Hsieh) 2009.10.11~2009.10.12**

利用功能性磁振照影技術探索低功率雷射照射湧泉穴的反應

中華民國九十八年醫學工程科技研討會

**28.謝長倭(Chang-Wei Hsieh) 2004.12.17~2004.12.18**

同調性分析於功能性磁振造影之研究

中華民國九十三年醫學工程科技研討會

**29.謝長倭(Chang-Wei Hsieh) 2004.04.10~2004.04.10**

應用功能性磁共振影像技術探索中國正宗靜坐之大腦反應現象

2004年「身、心、靈科學」學術研討會論文集

**30.謝長倭(Chang-Wei Hsieh) 2009.10.11~2009.10.12**

探討雷射針灸刺激血海穴的脈搏變化

中華民國九十八年醫學工程科技研討會

**31.謝長倭(Chang-Wei Hsieh) 2003.12.12~2003.12.13**

以脈搏頻譜分析的方式評估副交感神經對血管的作用

中華民國九十二年醫學工程科技研討會

**32.謝長倭(Chang-Wei Hsieh) 2006.06. ~ .**

Studies of Chinese Original Quiet Sitting by Using Functional Magnetic Resonance Imaging :Exploring the Brain Activation Area of "Allow its Natural Workings" Stage  
12th Annual Meeting of the Organization for Human Brain mapping

**33.謝長倭(Chang-Wei Hsieh) 2005.09.7 ~2005.09.10**

Diffusion Tensor MRI Using Bi-2223 Tape RF coil

Proc 4th Annual Meeting of The Society for Molecular Imaging

**34.謝長倭(Chang-Wei Hsieh) 2004.06.13~2004.06.17**

Studies of Forced and Non-forced Chinese Meditation by Using Functional Magnetic Resonance Imaging

10th Annual Meeting of the Organization for Human Brain mapping

**35.謝長倭(Chang-Wei Hsieh) 2005.09.1 ~2005.09.4**

Implementation of High-Temperature Superconducting tapes RF coils for 3T MRI system

Proceedings of IEEE-EMBS Conference on Biomedical Engineering

**36.謝長倭(Chang-Wei Hsieh) 2006.10. ~ .**

Buddhist Meditation fMRI: A Preliminary Study

12th Annual Meeting of the Organization for Human Brain mapping

**37.謝長倭(Chang-Wei Hsieh) 2005.09.1 ~ .09.4**

Comparison of fMRI BOLD Effect and Arterial Pulsation Harmonic Distribution among Different Breathing Rate

27th Annual International Conference of IEEE Engineering in Medicine and Biology Society (EMBS)

**38.謝長倭(Chang-Wei Hsieh) 2005.09.1 ~2005.09.4**

Non-invasive Fiber Tracking on Diffusion Tensor MRI Using High-Temperature Superconducting Tape RF coi

Proceedings of IEEE-EMBS Conference on Biomedical Engineering

**39.謝長倭(Chang-Wei Hsieh) 2005.09.1 ~2005.09.4**

Studies of Chinese Original Quiet Sitting By Using Functional Magnetic Resonance Imaging

27th Annual International Conference of IEEE Engineering in Medicine and Biology Society (EMBS)

**40.謝長倭(Chang-Wei Hsieh) 2005.11.21~2005.11.24**

Implementation of Bi-2223 HTS tapes as RF Coils for 3T MRI System

Tencon 2005-2005 IEEE Region 10

**41.謝長倭(Chang-Wei Hsieh) 2005.09.1 ~2005.09.4**

Preliminary study of planar RF coils for Magnetic Resonance Microscopy

Proceedings of IEEE-EMBS Conference on Biomedical Engineering

**42.謝長倭(Chang-Wei Hsieh) 2005.11.21~2005.11.24**

Use of High-Tc Superconducting Tape RF Coils for Non-invasive Fiber Tracking on Diffusion Tensor MRI application

Tencon 2005-2005 IEEE Region 10

**43.謝長倭(Chang-Wei Hsieh) 2005.05.7 ~2005.05.13**

Diffusion Tensor MRI Using High-Temperature Superconducting Tape RF coil

Proc. 13th ISMRM Ann Meeting

**44.謝長倭(Chang-Wei Hsieh) 2005.06.16~ . .**

Studies of Chinese Original Quiting sitting by Using Functional Magnetic Resonance

Imaging: Exploring the Brain Activation Area of

11th Annual Meeting of the Organization for Human Brain mapping

**45.謝長倭(Chang-Wei Hsieh) 2006.08.27~2006.09.1**

World Congress on Medical Physics and Biomedical Engineering 2006

## 獲獎

**1.謝長倭(Chang-Wei Hsieh) 2005-12-17**

2005年生物醫學工程研討會論文競賽佳作

**2.謝長倭(Chang-Wei Hsieh) 2006-04-28**

2006年奈米元件研討會壁報論文競賽銀牌獎

**3.謝長倭(Chang-Wei Hsieh) 2006-12-16**

2006年生物醫學工程研討會論文競賽特優

**4.謝長倭(Chang-Wei Hsieh) 2006-12-20**

2006第四屆國家新創獎學生組第三名

**5.謝長倭(Chang-Wei Hsieh) 2011-03-19**

積極從事學術研究於期刊論文類表現卓越

## 指導碩士論文

**1.謝長倭 2011**

規律呼吸與仰臥角度變動對自主神經系統的影響

鍾明峰

## 參與展演

**1.謝長倭 2010-07-25~2010-07-25**

脈與脈輪 臺南市立文化中心「新時代文化藝術養生」系列講座

**2. 謝長倭 2011-08-21~2011-08-21**

靜坐與身心健康 臺南市立文化中心 「新時代文化藝術養生」系列講座

**參與研討會**

**1. 謝長倭 2009-12-09~**

台灣大學7T 動物用核磁共振造影核心揭幕暨3T 核磁共振造影十周年研討會

**2. 謝長倭 2006-08-27~2006-09-01**

World Congress on Medical Physics and Biomedical Engineering 2006

**3. 謝長倭 2009-11-6~**

Workshop of Consumer Electronics 2009

**4. 謝長倭 2011-04-21~**

2011資訊科技國際研討會

**5. 謝長倭 ~**

IEEE Wireless Communications and Networking Conference2007

**參與期刊編輯**

**1. 謝長倭 ~**

Evidence Based Complementary and Alternative Medicine.

**2. 謝長倭 ~**

IEEE Transactions on Biomedical Engineering

**3. 謝長倭 2011-04-15~2011-05-15**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE