Annie Wei-en Wang

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EDUCATION

University of Florida
Gainesville, FL
PhD Candidate in Biobehavioral Science
Aug. 2015 - May. 2019 (expected)

National Taiwan University
Taipei, Taiwan
Bachelor of Science in Occupational Therapy
Jun. 2008 - Jun. 2012

WORK EXPERIENCE AND SELECTED PROJECTS

Laboratory for Rehabilitation Neuroscience
2015 - Present

Classifying Pain Perception in healthy Adults

- Managed and cleaned neurophysiological and behavioral data for subsequent analyses.
- Performed analysis using MATLAB-based script, generating figures and yielding accurate results.
- Conducted experiments and organized work flow of data collection, enhancing work efficiency for multiple testings.

Modeling Pain Processing in Chronic Jaw Pain

- Built GLM models used fMRI data and inspected findings for quality control.
- Communicated and partnered with facility staff, completing experiment successfully.
- Instructed and trained short-term volunteering students for assisting projects, creating great teamwork environment.

Investigating Pain Connectome in Chronic Pain

- Programmed in MATLAB and R, performing statistical testings to identify interesting pattern of data.
- Managed projects progress according to timeline and achieve research goal successfully.
- Published research findings in peer-review journal, disseminating knowledge to scientific community and public.

Combing Virtual Reality and Electrophysiological Sensors

- Designed and developed paradigm and modified based on environmental constraints.
- Created data visualizations to promote communication and derived insights.
- Simplified and enhanced data analyses processes by improving configurations and organizing procedures.

REFERENCES

[1] Y.-W. HSIEH, C.-Y. WU, W.-E. WANG, K.-C. LIN, K.-C. CHANG, C.-C. CHEN, AND C.-T. LIU, *Bilateral robotic priming before task-oriented approach in subacute stroke rehabilitation: a pilot randomized controlled trial*, Clinical Rehabilitation, 31 (2017), pp. 225–233.

[2] G. MISRA, W.-E. WANG, D. B. ARCHER, A. ROY, AND S. A. COOMBES, *Automated classification of pain perception using high-density electroencephalography data*, Journal of Neurophysiology, 117 (2017), pp. 786–795.

[3] A. ROY, W.-E. WANG, R. L. M. HO, M. C. RIBEIRO-DASILVA, AND S. A. FILLINGIM, ROGER B. COOMBES, *Functional brain activity during motor control and pain processing in chronic jaw-pain*, Pain, in press (2018).

[4] W.-E. WANG, A. ROY, G. MISRA, D. B. ARCHER, M. C. RIBEIRO-DASILVA, R. B. FILLINGIM, AND S. A. COOMBES, *Motor-Evoked Pain Increases Force Variability in Chronic Jaw Pain*, The Journal of Pain, (2018).

SKILLS

- **Programming languages**: MATLAB, R, Bash, Python, LaTeX
- **Software**: SPSS, Tableau, EEGlab, Fieldtrip, AFNI, FSL, Brainstorm, Inkcape, CorelDraw
- **Hardware**: MotionMonitor, ActiveTwo - Biosemi, Trigno - Delsys, Motion Capture - VICON

RELEVANT COURSEWORK

Statistical Methods, Advanced Statistical Methods, Statistical(Machine) Learning, Biostatistic Computing, Regression Analysis, Multivariate Signal Processing

PRESENTATION

W-E. Wang, Roy A, Misra G, Archer DB, Ribeiro-Dasilva MC, Fillingim RB, Coombes SA. (2018). Chronic Jaw Pain is characterized by Altered Beta Oscillations in Sensorimotor and Prefrontal Cortex. CuttingEEG Conference 4th Symposium on cutting-edge methods for EEG Research. Paris. France.

W-E. Wang, A. Roy, S. Coombes. (2017). Motor-evoked pain increases force variability in chronic jaw pain. Society for Neuroscience. Washington, DC.

G. Misra, **W-E. Wang** , S. Coombes. (2016). High-density electroencephalography and automated classification of pain perception. Society for Neuroscience. San Diego, CA.

AWARDS AND HONORS

Graduate School Fellowship Award, University of Florida
   Received 4-year full-tuition scholarship with stipend awarded to outstanding incoming PhD student
Outstanding International Student Award, University of Florida
   Achieved high academic performance - top 78 of all UF international students
Pain Research & Intervention Center of Excellence (PRICE) Travel Awards, University of Florida
   Received $1000 for covering the costs of attending conference
Graduate Student Council Travel Award, University of Florida
   Received $350 for covering the costs of attending conference
Honored Member of Phi Tau Phi Scholastic Honor Society, Chang Gung University
   High academic achievement - Top 3% of the College of Medicine