



魏群樹老師： 學習、奉獻與創造

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魏群樹教授於 2009 年及 2011 年完成交大電機資訊學士與電控碩士學位，並於 2017 年取得美國加州大學聖地牙哥分校 (UCSD) 生物工程博士學位。為貢獻所學，2019 年魏教授回到母校交大教育所任教，2010 年加入資工系服務。魏群樹教授主要研究方向包括認知工程、計算神經科學、腦機介面、機器學習和生醫資料分析。他擁有深厚的資訊背景，並具生物、教育等跨領域思維，恰好正代表陽明交通合校精神，生醫與資訊領域之結合最佳實踐者。

「小時候就覺得科學家很酷，我寫志願都填科學家。」他笑著說。魏老師帶著科學家夢想進入交大就讀，他選擇進入五年制學碩士制度，升大四暑假時立即找好實驗室，開始研讀論文。魏群樹老師回憶道，當時實驗室的教授和學長姐非常願意帶領新進成員，很快地他就有論文產出，甚至有出席研討會機會。大家做著相同領域的研究，互相討論切磋，這一切讓他初嚐了研究的樂趣，魏群樹教授決定繼續攻讀博士，未來要在學術圈裡工作。

出國深造乃是萌芽自大學時代當交換學生的經驗。魏群樹教授是交大電資學士班畢業，學士班是最早國內以出國交換為特色的科系，提供至國外一流大學進行一學期或一學年之交換學生研讀。2008 年，他至美國伊利諾大學香檳分校作交換學生，短短一個學期開拓不少眼界，也奠定未來出國留學國外發展的想法。魏群樹教授碩士畢業後，延續碩士研究方向生醫訊號分析，他赴美攻讀加州大學聖地牙哥分校生物工程博士，當時研修滿多生物課，對未來從事跨領域研究助益良多。

魏群樹教授跨足電資、生醫領域，完全展現目前最熱門跨域人才的定義。他表示，「跨領域是一項重要的能力，不同背景的人看待事情的角度會有所不同，所以多接觸不同領域，會比別人更快瞭解狀況，套用不同領域的想法與做法也會

產生新的火花。」他也進一步闡釋，其實領域是人為去區分的，實際上研究本身單純就是科學問題。他笑著說，面對跨域首要之務就是把心中的隔閡打掉，回歸到原先內容本質，累積多元經驗及不同看待事情的觀點。

談到教育理念，魏群樹教授把自己定位在「幫助引導學生自主學習的人」。因為現在網路資源豐富，很多開放課程俯拾皆是。課程重點不是在聽講，老師角色在讓學生有互動，引導他們學習，最終目的是讓學生對課程產生興趣，未來可以繼續學習。

魏群樹教授坦言，自己不喜歡去管學生，但會要求學生們認真看待實驗室每件事物。他會盡量去了解每位學生的不同，有些學生適合給他進度壓力，有些學生則需要給他足夠時間。魏老師指出，因材施教讓學生們自主去發展，因此滿期待學生們自主發展出他想像不到的樣子。

「學習、奉獻與創造」魏群樹教授一直奉為人生座右銘，這句話是出於生物醫學與工程領域研究巨擘錢煦院士，近期甫於美國加州大學聖地牙哥分校榮退。魏群樹教授特別崇敬這位師長，所以銘記著他勉勵後進，人生的樂趣在學習；人生的收穫在奉獻；人生的意義在創造。持續學習、奉獻社會、創造未來也是他分享給學生們的處世準則。



Dr. Chun-Chu Wei: Life is Learning, Devoting and Creating

Dr. Chun-Shu Wei earned his bachelor's degree in Electrical Engineering and Computer Science and master's degree in Electrical and Control Engineering at National Yang Ming Chiao Tung University (NYCU). In 2017, he completed a doctoral degree in Bioengineering at the University of California San Diego. Dr. Wei returned to teach at the Institute of Education at NYCU in 2019 to dedicate to his alma mater. By 2020, he joined the Department of Computer Science at NYCU. His research area includes Cognitive Engineering, Computational Neuroscience, Brain-Computer Interface, Machine Learning, and Biomedical Data Analysis.

Dr. Wei has a solid foundation in Computer Science, and also he was well-trained in the areas of biology and education. This diverse background made him a practitioner to be able to critically engage in cross-disciplinary thinking. Also, he can represent the spirit of the merger of Yang Ming (NYMU) and Chiao Tung Universities (NCTU). The former focuses on the field of medicine and biotechnology, the latter is well-known for its development in Electrical Engineering, Computer Science, and Applied Chemistry.

"I wanted to become a scientist when I was little because it sounded really cool.", smiled Dr. Wei. With this dream, he chose the Five-Year Bachelor to Master degree program at National Chiao Tung University. As a hard-working student, Dr. Wei joined a laboratory to start his research at an early stage in his junior year during summer vacation. Within only five years, he completed both his bachelor's and master's degrees. Dr. Wei reflected on his school time, saying that his professor and lab members were very supportive to new members by providing a variety of opportunities. With their help, he finished writing the thesis very soon and even got the chance to attend conference meetings to meet different researchers in his field. He was very keen on discussing and investigating issues with these research enthusiasts. Thus, Dr. Wei decided to further pursue a doctoral degree in order to work in academia in the future. Also, Dr. Chun-Shu Wei's program during that time was well-known as a very special degree by providing exchange opportunities for students to visit top leading universities abroad for one semester or full semester year. In 2008, he had the chance to be an exchange student at the University of Illinois Urbana-Champaign for one short semester. Within a short time, it broadened his horizons completely. This experience urged him to study abroad for his Ph.D. degree. After completing his master's degree, he decided to extend

his profession in Biomedical Data Analysis at the University of California San Diego, America. By taking many biology-related courses, he established the foundation to become a cross-disciplinary researcher.

Dr. Chun-Shu Wei is known for his cross-domain talents in Computer Science, Bioengineering, and education. Nowadays, many students are also trying to develop cross-disciplinary abilities. About this issue, he thinks the concept of different domains is defined and differentiated by people. Dr. Wei further explained that the core value of research is only science. To become a cross-domain researcher, it is important to only consider the core of the question and remove all gaps from different domains. He believes students should try to accumulate as many experiences as possible with different perspectives to cultivate their cross-disciplinary abilities.

Speaking of his teaching philosophy, Dr. Wei considers his role is to guide students to become autonomous learners because nowadays there are many free internet resources, such as Open Courses for students to learn on their own. From his perspective, a professor has to provide interaction opportunities for students and guide them to be interested in learning about the course. He expects students to be inspired by professors and continue to learn more after taking courses. Dr. Wei confessed that he does not like to mind students' businesses all the time. However, he would strongly demand students from his laboratory to take everything seriously. He tries to understand the personality traits of each student. Some students are capable of dealing with stress, but others need more space on their own. He thinks it is important to help students to develop and learn based on their characteristics. It's his goal to guide students to achieve their dreams that they never imagined before.

"Learning, devoting, and creating" was spoken by Dr. Shu Chien, a professor who is respectfully admired in the field of Biomedical Engineering and recently just retired from the University of California San Diego. In addition to that, this quote has always been Dr. Wei's motto. Dr. Wei's teaching philosophy was also profoundly influenced by this high-profile figure. Dr. Wei often encourages students to keep learning, devoting themselves to society, and creating new pathways in the future. After all, learning is fun, and devoting is also a way to have a rewarding life.