曾意儒教授：勇敢踏出舒適圈，投身醫學與資訊跨領域

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　　本次專訪非常榮幸能夠邀請到本院資訊工程學系的曾意儒教授，他在資料科學、機器學習、生醫資訊和臨床決策支援系統等領域具有專業知識。曾意儒教授不僅帶領著本校數位健康實驗室，在跨領域研究上也表現出了非凡的熱情。此次將深入探討曾副教授在醫學與資訊工程跨領域上的學習和職涯規劃，同時探討他的研究背景以及對於教學的想法和經驗。在當今社會對於斜槓人才和多元能力的需求日益增長的背景下，我們希望曾意儒教授的故事可以為資工系學生提供新的思路和啟示。

跨越學門界限追尋夢想，為社會帶來更大的價值

　　曾意儒副教授的背景與資訊院裡資訊工程出身的教授不同，他大學畢業於醫學檢驗暨生物技術學系。該學系培養學生成為於醫院服務的醫檢師或生物科技相關研究人員。然而，在他實習的過程中，曾教授注意到醫院內部的系統過於陳舊，與時代潮流背道而馳。於是，曾教授開始思考醫院與資訊工作者是否能合作並改變醫院現況。因此，在考慮要攻讀研究所時，他決定轉往生醫資訊領域，橫跨兩個專業領域語言的壁壘尋找結合的可能性。曾副教授就此踏上了學習生醫資訊相關知識的旅程，也逐漸在這個領域裡找到人生的志向，基於對持續學習的渴望最後他決定攻讀博士學位，持續研究工作到今日。

　　在問到曾副教授在哈佛醫學院的經驗時，他認為這段經歷帶給自己許多新奇的體驗以及在台灣接觸不到的機會，拓展了自己的眼界。「我個人過去的經驗比較少遇到這樣的人，就是會支持你想要做的事，他也會適時的跟你說他覺得比較對的方向，大家也都滿熱烈的在討論研究的內容，然後做到一半的事情也都不怕分享，也不會怕會被批評，反正大家都是希望把事情做到最好。」曾副教授很欣賞這種鼓勵探索的態度，而這段經歷也讓他認識了很多志同道合的人，之後也保持著合作關係。此外，生醫資訊領域較有名的期刊其實對美國的資料都比較有興趣，透過這個管道他也可以一直分析美國比較有興趣的資料，這為他提供了更多的發表和發展機會。在國外的這段時間，除了學術上的成長外，他還培養了一種截然不同的工作態度，並為未來的發展鋪平了道路。

培養自學能力：創新教學方法的突破

　　回國後，走向教職的曾副教授對於教學模式有一番領悟。身為教授，但他其實並未受過教師培訓，卻需要負責了學生們的教育。他坦言過去上課時，只是模仿自己老師教學的方式來教學生，不知道其他人的上學經驗如何。後來曾副教授輾轉換了幾所學校，他漸漸體認到不同的學生需要不同的教學方法。有些學生對讀書並不熱愛，也不擅長考試，如果繼續用傳統的教學方式，那也只會將他們推向絕境。

　　因此，曾副教授試圖讓那些對考試和學習感到不自在的人對學習產生興趣。在後來的課堂上，他嘗試使用了創新的教學方法，例如翻轉教室。對曾副教授來講，他關注的是如何培養他們的自學能力，引導他們自主學習，並且與學生站在同一陣線。

You've got nothing to lose！給自己多一點時間

　　「每當我與跨領域的學生交談時，我總會告訴他們：你在第一年可能會感到有些失落，覺得自己好像什麼都不會，而別人卻已掌握得滾瓜爛熟。給自己多一點時間。如果一年後你仍然感到痛苦，那我們再討論是否轉換跑道，但我認為你需要給自己一年的時間來嘗試。」在跨領域方面，他認為 "無所懼失"（Nothing to lose）這句話很重要。他也希望學生能理解，如果你想做某件事，就去追求它，並不會有什麼損失。

　　於訪談結束之際，曾副教授也提到，對從事醫學資訊的人來說，他保持樂觀的態度期待未來有更多生醫資訊的跨域合作機會。他認為現在機會變得更多，但仍然需要自己去爭取，醫學和資訊領域仍然存在差異，因此期許能夠理解兩者對話的人增加，為社會進步盡一份力。對於當今追求斜槓與多面能力的社會而言，曾意儒副教授的故事充滿啟發性。他的經歷向我們展示了專業知識和創新思維的結合，並告訴我們只要有足夠的準備，我們可以超越學科界限，追尋自己的夢想，為社會帶來更大的價值。在曾意儒教授的鼓勵與分享後，相信資工系的學子們將開啟一條通往未來的新道路，為自己的將來思考更多的可能性。

Professor Yi-Ju Tseng: Be Brave and Step outside of Your Comfort Zone to Engage Yourself in the Interdisciplinarity of Medical and Information

In this interview, we are honored to welcome Associate Professor Yi-Ju Tseng from the Department of Computer Science at our college. His areas of expertise encompass data science, machine learning, biomedical informatics, and clinical decision support systems. Professor Tseng not only heads our university's Digital Health Laboratory but also exhibits a remarkable passion for interdisciplinary research. On this occasion, we will explore his academic journey and career development, spanning the interdisciplinary fields of medicine and information. Furthermore, we will delve into his research background and gain insights into his perspectives and experiences related to teaching. Given the increasing demand for individuals with versatile abilities and a wide range of skills in modern society, we hope that Professor Tseng's story can offer fresh perspectives and inspiration to students in the Department of Computer Science.

Pursuing dreams beyond the boundaries of academic disciplines in order to contribute enhanced value to society.

Professor Tseng's academic background differs from that of the faculty members in the College of Computer Science, as he earned his degree from the Department of Clinical Laboratory Sciences and Medical Biotechnology. This department specializes in equipping students for careers as clinical laboratory scientists in hospitals or as researchers in the biotechnology field. During his internship, Professor Tseng noticed that the hospital's internal systems were outdated, lagging far behind contemporary standards. Consequently, he began contemplating the possibility of collaborating with IT experts to improve the hospital's current situation. Therefore, when considering pursuing graduate studies, he made the decision to transition into the field of biomedical informatics, seeking the potential of combining two different professional domains. Professor Tseng set out on a quest to gain expertise in biomedical informatics and slowly discovered his true calling in this field. Motivated by a strong desire for continuous learning, he ultimately decided to pursue a doctoral degree, carrying forward his research work to the present day.

When inquired about his experience at Harvard Medical School, he expressed that this phase of his life brought him numerous unique experiences and opportunities that were unavailable in Taiwan, thus broadening his horizons. "In my prior experiences, I encountered fewer individuals that not only offered unwavering support for my work but also provided timely guidance towards what they believed could be a more favorable direction. Furthermore, there was a palpable enthusiasm among the team for discussing research topics, and no one hesitated to share their work even if it was still in progress. Critique was also embraced, as everyone held the same faith of striving for excellence." Professor Tseng sincerely appreciates this spirit of exploration. Moreover, this experience has facilitated his connection with numerous individuals with similar goals, with whom he has maintained collaborative relationships. Furthermore, due to the heightened interest of prestigious biomedical informatics journals in U.S. data, this channel helps him delve into more captivating datasets from the U.S., opening up additional prospects for publication and career advancement. While abroad, he not only experienced academic development but also cultivated an entirely new work attitude, laying the foundation for his future progress.

Nurturing Self-Learning Skills: An Innovation in Teaching Methods

Upon returning to Taiwan, Professor Tseng gleaned valuable insights into the teaching model as he transitioned into the role of an educator. Although he held the position of a professor, he had never undergone formal teacher training, yet he carried the responsibility of instructing students. He readily admitted that in his prior teaching experiences, he had simply replicated the teaching methods of his own instructors without fully understanding others' perspectives. Subsequently, he switched the teaching positions among schools several times and gradually recognized the need for various teaching approaches tailored to different students. Certain students lacked enthusiasm for studying and struggled to perform well in exams. If the instructor persisted with traditional teaching methods, it would only lead them further into a sense of hopelessness.

Therefore, Professor Tseng attempted to ignite a passion for learning in students who were uneasy about exams and studying. In subsequent classes, he explored innovative teaching approaches such as flipped classrooms. His primary emphasis revolved around cultivating students' self-directed learning skills, steering them towards independent learning, and aligning himself with the students.

You've got nothing to lose! Give yourself a little more time.

"Whenever I speak with students pursuing interdisciplinary studies, I consistently offer them this advice. During your first year, it's quite common to experience a sense of confusion, feeling like you lack knowledge while others seem to have it all together. My suggestion is to give yourself some additional time. If, after a year, you still find yourself in distress, we can then investigate the strategy of altering your route. However, I firmly believe that allowing yourself a year to explore is essential." Regarding interdisciplinary studies, he emphasizes the significance of the phrase 'Nothing to lose.' He hopes that students can realize that if they want to pursue something, they should go for it, and there won't be much to lose.

At the end of the interview, Professor Tseng also mentioned his optimism and anticipation for increased interdisciplinary collaboration opportunities in the field of biomedical informatics, particularly for those who are engaged in Medical Informatics. He maintains the belief that while there may be more opportunities available currently, one must still actively strive for them. Recognizing the existing disparities between the fields of medicine and information, he hopes that a greater number of individuals will bridge the gap between the two fields to actively contribute to social advancement. In today's society which highly esteems adaptability and diverse skill sets, Professor Tseng's story indeed inspires all of us. His experience illustrates the synergy of expertise and innovative thinking, validating the notion that through meticulous preparation, we can transcend the boundaries of our respective fields, pursue our ambitions, and create greater value for society. Motivated by Professor Yi-Ju Tseng's guidance and wisdom, we have faith that students in the Department of Computer Science will chart a new course and explore a multitude of possibilities for their futures.