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長庚大學 醫學院 早期療育所
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主要學歷

- 長庚大學機械工程博士，醫學工程專長 2004.8 – 2008.5
專長領域:
輔具設計/製作/臨床評估 Design/manufacture/clinical evaluation of assistive devices
電腦化生物力學模擬分析 Computer-simulated biomechanical analyses
- 美國匹茲堡大學動作控制與學習碩士 1996.8 – 1999.7
專長領域:
動作控制與學習相關研究分析 Motor control and learning related research and analysis
典型發展及特殊需求兒童復健運動計畫教案設計 Rehabilitation exercise design & training
for typically-developed & special-need children
平衡與姿勢控制 Balance and postural control
- 台灣大學物理治療學士 1989.8 – 1993.4
專長領域:
物理治療評估與介入 Physical therapy evaluation and intervention

相關證照

- 台灣物理治療師執照
美國賓州物理治療師執照/美國紐約州物理治療師執照
桃園縣政府輔具資源中心特教專業團隊
International College of Biomechanics lower limb biomechanics module certificate

教學研究經驗

- 長庚大學早期療育研究所教授 2017.8 – present
長庚大學早期療育研究所副教授 2013.8 – 2017.7
長庚大學早期療育研究所助理教授 2008.8 – 2013.7
主要教授課程:
科技輔具特論 Special topics on assistive technology
動作控制與學習 Motor control & learning
實證療育與科技論文寫作 Evidence-based early intervention and scientific writing (全英文授課)
王詹樣基金會早期療育學分班課程
科技輔具 assistive technology
- 長庚大學醫學設計學院副教授 2016.8 - present
主要教授課程:
創新產品設計與開發實務 Innovative Product Design and Development Practice

國立體育大學適應體育系兼任副教授	2013.8 – present
長庚大學物理治療系兼任講師	2005.11 – 2008.7
<u>主要教授課程:</u>	
肌動學 Kinesiology	
生物力學 Biomechanics	
急救概論與運動防護 First Aid & Sport Care	
美國匹茲堡大學教學助教	1996.8 – 1998.4
<u>主要教授課程:</u>	
體適能 Personal Fitness	
初級/進階游泳 Beginning/Intermediate Swimming	
美國匹茲堡大學典型發展與特殊需求兒童運動訓練課程教師	1996.8 – 2000.4
<u>主要教授課程:</u>	
典型發展兒童與特殊需求兒童感覺動作評估 Sensory and motor assessment for typically-developed and special-need children	
典型發展兒童與特殊需求兒童復健計畫 Rehabilitation program for typically-developed and special-need children	

臨床經驗

美國匹茲堡 Pittsburgh Specialty Hospital 物理治療組長	2000.7 – 2002.6
美國匹茲堡 South Hills Health System 物理治療師	1999.7 – 2000.6
美國匹茲堡 NovaPro 兼職物理治療師	1999.6 – 2002.6
國立藝專特聘物理治療師	1995.4 – 1995.9
台北新光吳火獅紀念醫院物理治療師	1993.5 – 1996.4

學術專長

輔具評估與開發 Assistive device evaluation and development
特教需求評估 Needs assessment for special education
職務再設計及無障礙環境評量 Job redesign & Barrier-free environment
復健工程 Rehabilitation Engineering
生物力學 Biomechanics
物理治療 Physical Therapy

校外受邀教學及講座

- 國內外研討會及大專院校專題演講/講座主持:
- ❖ 2022 World Congress of Biomechanics (WCB 2022) master of ceremony and session moderator (session: Biomechanics of Assistive Technology) (2022.7)
 - ❖ 2020 International Conference on Rehabilitation Engineering and Assistive Technology (iCreate 2020) plenary speaker
 - ❖ 2019 The 10th Asian-Pacific Conference on Biomechanics (AP Biomech) 分場主持人 (2019.11 張榮發紀念館)

- ❖ 2017 台灣生物力學學會年度學術研討會暨科技部成果發表會論壇主持人(2017.10 台科大)
- ❖ 2017 國際生物力學與復健工程暨輔具科技學術研討會主辦(2017.4 澎科大)
- ❖ 上海中醫藥大學(民 103.6 迄今)/同濟大學(民 104.7 迄今)康復醫學院海外師資
- ❖ 2016 Symposium on Engineering, Medicine, and Biology Applications 生醫工程應用研討會產學媒合主席 (2016 Jan22-24)
- ❖ 國立體育大學適應體育系兼任教師(民 103.2 迄今)
- ❖ 台中教育大學幼教系早期療育組碩士班
- ❖ 元培科技大學醫學工程學系等

大專校院身心障礙學生鑑定需求評估、特教推行委員會專家：

- ❖ 輔仁大學
- ❖ 長庚大學
- ❖ 逢甲大學
- ❖ 黎明科技大學
- ❖ 萬能科技大學
- ❖ 醒吾科技大學
- ❖ 銘傳大學
- ❖ 國立體育大學 等

早療機構及幼教單位兒童發展與復健等進修課程講師：

- ❖ 桃園市/台北市政府社會局
- ❖ 桃園市北區特教資源中心
- ❖ 桃園市學前特教資源中心
- ❖ 中華民國晴天社會福利協會
- ❖ 中國文化大學專案研訓部
- ❖ 中華民國體育運動總會
- ❖ 高雄博正兒童發展早療中心
- ❖ 嘉義聖心教養院敏道家園
- ❖ 雲林若瑟醫院附設早療中心
- ❖ 新北市板橋家扶發展學園
- ❖ 屏東基督教醫院
- ❖ 發展遲緩兒早期療育協會等

國中小及特教學校輔具進修課程講師：

- ❖ 桃園市北區特教資源中心
- ❖ 台北啟智學校
- ❖ 桃園啟智學校
- ❖ 桃園縣興南國中
- ❖ 桃園縣東門國小
- ❖ 新竹縣特教系統 等

國中小及特教學校適應體育進修課程講師：

- ❖ 桃園縣東門國小
- ❖ 桃園中壢萬能科技大學 等

早療機構職業傷害防護復健講師：

- ❖ 桃園縣康福智能發展中心
- ❖ 育成基金會北市永明發展中心
- 身心障礙機構/單位體適能訓練特聘復健師：**
- ❖ 桃園縣路得啟智學園
- ❖ 桃園縣美好社會福利基金會恆愛托育中心
- ❖ 桃園中壢萬能科技大學
- 國際特奧會東亞區特聘講師：**
- ❖ 2012年特殊奧林匹克幼兒運動員研習
- 桃園市政府身心障礙職務再設計講座專家/評估專員：**
- ❖ 桃園市勞動局/桃園市政府人事處身心障礙職務再設計講座專家講員
- ❖ 桃園市勞動局身心障礙職務再設計評估專員

專業學協會、公私立機關及委員會等專業服務

專業學協會及專業服務

- ❖ Board director, Global Alliance of Assistive Technology Organization (GAATO). (民 109.6 迄今)
- ❖ 台灣復健工程暨輔具科技學會常務理事(民 107.1 迄今)
- ❖ 台灣復健工程暨輔具科技學會政策推動委員會主委(民 107.1 迄今)
- ❖ 台灣生物力學學會理事(民 107.1-108.12; 110.10-迄今)
- ❖ 台灣地板滾球運動聯盟常務理事(民 107.1 迄今)
- ❖ 台灣生物力學學會副秘書長(民 105.3-106.12)
- ❖ 台灣復健工程暨輔具科技學會理事(民 103.9 迄今)
- ❖ 台灣復健工程暨輔具科技學會產官學/學術教育/資訊與傳播委員會副主委(民 103.12 迄今)
- ❖ 台灣復健工程暨輔具科技學會秘書處學術教育組組長(民 102.2-103.8)
- ❖ 科技部輔具兩岸交流共識會代表(105.7)
- ❖ 國家考試典試人力-小兒物理治療(民 103.4)
- ❖ Pediatric Physical Therapy Journal 中文版各期翻譯(民 101 迄今)
- ❖ 發展遲緩兒早期療育協會會員代表(民 100.1-102.12)
- ❖ 台灣運動傷害防護學會行政院國家運動傷害防護員檢定考試(民 97)
- ❖ 中華民國生物醫學工程永久會員
- ❖ 台灣復健工程暨輔具科技學會永久會員
- ❖ 台灣生物力學學會永久會員

公私立機關學校及各類委員會服務

- ❖ 教育部 112 至 114 年公費留學審議會諮詢委員(民 112.1 迄今)
- ❖ 桃園學前特教中心諮詢專線專家(民 110.11 迄今)
- ❖ 長庚大學學生申訴評議委員會(民 110.2 迄今)
- ❖ 長庚大學特教推行委員會(民 107.8 迄今)
- ❖ 長庚大學創新育成中心主任(民 103.8-109.2)
- ❖ 長庚大學創新育成中心進駐審查委員(民 109.6 迄今)

- ❖ 桃園市政府經發局績優企業/金牌企業卓越獎審查委員(民 108.7 迄今)
- ❖ 桃園市青年事務局青年職涯發展及創業主題活動計畫外聘審查委員(民 105.3 迄今)
- ❖ 國立體育大學創新育成中心進駐審查會委員(民 104.3 迄今)
- ❖ 桃園市身心障礙特殊教育服務方案審查委員(民 105.7 迄今)
- ❖ 大專院校特教推行委員會委員(長庚大學、體育大學)
- ❖ 桃縣身心障礙學生學習輔具評估專業團隊治療師(民 102.9 迄今)
- ❖ 竹縣身心障礙學生學習輔具評估專業團隊治療師(民 105.1 迄今)
- ❖ 輔仁大學特教推行委員會委員(民 109.11 迄今)
- ❖ 長庚大學學生申訴委員會委員(民 110.2 迄今)
- ❖ 萬能科技大學特教專業團隊身心障礙學生鑑定需求評估審查委員(民 108.10 迄今)
- ❖ 醒吾科技大學特教專業團隊身心障礙學生鑑定需求評估審查委員(民 106.10 迄今)
- ❖ 黎明技術學院特教專業團隊身心障礙學生鑑定需求評估審查委員(民 104.12 迄今)
- ❖ 銘傳大學身心障礙學生輔導工作視導自評委員(民 105.3 迄今)
- ❖ 臺灣體育學術研究期刊編輯委員(民 103.1 迄今)
- ❖ 第七屆國際華文暨教育盃電子書創作大賽評審委員(民 106.3)
- ❖ 職務再設計評估與審查委員:桃園市政府勞動局&勞動部勞動力發展署桃竹苗分署(106.3 迄今)

榮譽

- ❖ 104 年度科技部工程司醫學工程學門優秀年輕學者研究計畫獎勵

期刊論文

- ❖ Shieh WY, Wang CM, Ju YY, Cheng HYK*: Multi-Sensor Respiratory–Swallow Telecare System for Safe Feeding in Different Trunk Inclinations: System Development and Clinical Application. *Sensors* 2023, 23(2), 642. <https://doi.org/10.3390/s23020642> (SCI: 3.847; instruments & instrumentation, Q2: 19/64) (通訊作者) 2023Jan
- ❖ Cheng HYK, Shieh WY, Yu YC, Li PW, Ju YY: Video-based Behaviorally Coded Movement Assessment for Adolescents with Intellectual Disabilities: Application in Leg Dribbling Performance. *Sensors* 2023, 23, 179. <https://doi.org/10.3390/s23010179> (SCI: 3.847; instruments & instrumentation, Q2: 19/64) (第一作者) 2022Dec
- ❖ Ju YY, Chu WT, Shieh WY, Cheng HYK*: Sensors for wheelchair tennis: measuring trunk and shoulder biomechanics and upper extremity vibration during backhand stroke. *Sensors*, 21(19):6576, 2021. DOI: 10.3390/s21196576 (SCI: 3.576; instruments & instrumentation, Q1: 14/64) (通訊作者) 2021Sep
- ❖ Shieh WY, Wang CM, Cheng HYK, Imbang TI: Noninvasive Measurement of Tongue Pressure and its Correlation with Swallowing and Respiration. *Sensors*, 21(8):2603, 2021. DOI: 10.3390/s21082603 (SCI: 3.576; instruments & instrumentation, Q1: 14/64) 2021 Apr

- ❖ Ju YY, Chu WT, Shieh WY, Cheng HYK*: Elbow, wrist kinematics and shock transmission of backhand stroke in wheelchair tennis players. Sports Biomechanics. DOI: 10.1080/14763141.2020.1862903 (**SCI: 2.832**; Sports Science, Q2:42/88) (通訊作者) 2021Feb
- ❖ Shieh WY, Ju YY, Yu YC, Pandelaki S, Cheng HYK*: Development of a Smart Ball to Evaluate Locomotor Performance: Application in Adolescents with Intellectual Disabilities. Sensors, 20(18):5444, 2020. DOI:10.3390/s20185444 (**SCI: 3.576**; instruments & instrumentation, Q1: 14/64) (通訊作者) 2020Sep
- ❖ Shieh WY, Wang CM, Cheng HYK, Wang CH: Using Wearable and Non-Invasive Sensors to Measure Swallowing Function: Detection, Verification, and Clinical Application. Sensors, 19:2624, 2019. (**SCI: 3.576**; instruments & instrumentation, Q1: 14/61) 2019Jun
- ❖ 朱彥穎、許家瑜、謝萬雲、程欣儀 (2018)。滾球遊戲教學於智能障礙成人之成效。身心障礙研究 **Journal of Disability Research** , 16(2): 107-120。
- ❖ Ju YY, Liu YH, Cheng CH, Lee YL, Chang ST, Sun CC, Cheng HYK*: Effects of combat training on visuomotor performance in children aged 9 to 12 years - an eye-tracking study. BMC Pediatrics, 18:39, 2018. DOI: 10.1186/s12887-018-1038-6 (**SCI: 2.042**; pediatrics Q2:48/124) (通訊作者) **2018 Feb**
- ❖ 程欣儀、俞雨春(2017)。坐姿擺位與舒適學習-探討擺位輔具對特殊需求孩童學習的重要性。輔具之友, 41: 45-52。(第一作者)
- ❖ 程欣儀、俞雨春、朱彥穎、王雅秋、王錦滿 (2017)。輔具與生活參與-學習輔具申請配置之問題與現況調查。身心障礙研究 **Journal of Disability Research** , 15(4): 235-250。(第一作者)
- ❖ Cheng HYK, Chang HT, Huang PH, Ju YY, Chen LY, Tseng KC: The Design and Validation of a Child Developmental e-Screening System. Journal of Medical Systems,41(4):67,2017. DOI 10.1007/s10916-017-0701-z. Epub 2017 Mar 10 (**SCI: 2.456**; medical informatics, Q2: 7/24) (第一作者) (CMRPD 1E0511)
- ❖ Cheng HYK, Chen LY, Cheng CH, Ju YY, Chen CL, Tseng KC: A Multimedia Child Developmental Screening Checklist-Design and Validation. Journal of Medical Internet Research (Oct 24), 18(10):e277, 2016. DOI: 10.2196/jmir.6249 (**SCI: 4.532**; health care sciences & services, Q1: 5/87) (第一作者) (CMRPD 1E0511, GMRPD1C0071)
- ❖ Shieh WY, Ju YY, Yu YC, Lin CK, Lin YT, Cheng HYK*: Stair-Walking Performance in Adolescents with Intellectual Disabilities. Sensors, 16: 1066, 2016. DOI:10.3390/s16071066 (**SCI: 2.245**; instruments & instrumentation, Q1: 10/56) (通訊作者)

- ❖ Tseng KC, Tseng SH, Cheng HYK*: Design, development and clinical validation of therapeutic toys for autistic children. *Journal of Physical Therapy Science*, 28(7): 1972-1980, 2016. **(SCI: 0.392; rehabilitation Q4: 61/64)** (通訊作者)
- ❖ Lin YC, Tsai LC, Cheng HYK, Lin YH, Cheng CH: Postural steadiness after prolonged standing on different sloped surface in young health adults. *Biomedical Engineering-Applications Basis and Communications*, 28: 1650007, 2016. DOI: 10.4015/S1016237216500071. **(SCI: 0.233; biomedical engineering, Q4: 75/79)**
- ❖ Cheng CH, Chien A, Hsu WL, Chen CPC, Cheng HYK*: Investigation of the differential contributions of superficial and deep muscles on cervical spinal loads with changing head postures. *PLoS One*, 11(3): e0150608. DOI: 10.1371/journal.pone.0150608, 2016. Correction in: *PLoS One*. 2016; 11(4): e0153541. **(SCI: 3.234; multidisciplinary sciences, Q1: 9/57)** (通訊作者)
- ❖ Cheng HYK, Wong MT, Yu YC, Ju YY: Work-related musculoskeletal disorders and ergonomic risk factors in special education teachers and teacher's aides. *BMC Public Health*, 16(1): 137, 2016. DOI: 10.1186/s12889-016-2777-7. **(SCI: 2.264; public, environmental & occupational health, Q2: 53/165)** (第一作者) (CMRPD1D0131, BMRPA68)
- ❖ Fang CY, Hsu MJ, Chen CC, Cheng HYK, Chou CC, Chang YJ: Robot-assisted passive exercise for ankle hypertonia in individuals with chronic spinal cord injury. *Journal of Medical and Biological Engineering*, 35(4):464-472, 2015. DOI 10.1007/s40846-015-0059-y. **(SCI: 0.971; biomedical engineering, Q4: 62/76)**
- ❖ Cheng CH, Su HT, Yen LW, Liu WY, Cheng HYK*: Long-term effects of therapeutic exercise on nonspecific chronic neck pain: a literature review. *Journal of Physical Therapy Science*, 27:1271-1276, 2015. **(SCI: 0.392; rehabilitation Q4: 61/64)** (通訊作者)
- ❖ Cheng CH, Chien A, Hsu WL, Yen LW, Lin YH, Cheng HYK*: Changes of postural control and muscle activation pattern in response to external perturbations after neck flexor fatigue in young subjects with and without chronic neck pain. *Gait & Posture*, 41: 801-807, 2015. <http://dx.doi.org/10.1016/j.gaitpost.2015.02.007>. **(SCI: 2.752; sports sciences Q1: 12/81)** (通訊作者)
- ❖ Cheng HYK, Yu YC, Wong AMK, Tsai YS, Ju YY: Effects of an eight-week whole body vibration on lower extremity muscle tone and function in children with cerebral palsy. *Research in Developmental Disabilities*, 38: 256-261, 2015. **(SSCI: 1.887; rehabilitation Q1: 11/70; special education Q1: 6/39)** (第一作者) (MOST 103-2221-E-182-048, CMRPD1D0131)
- ❖ Cheng HYK, Ju YY, Chen CL, Chuang LL, Cheng CH: Effects of whole body vibration on spasticity and lower extremity function in children with cerebral palsy. *Human Movement Science*, 39:65-72, 2015. <http://dx.doi.org/10.1016/j.humov.2014.11.003>. **(SCI: 1.598; sport sciences Q2: 38/81)** (第一作者) (MOST 101-2410-H-179-015, CMRPD1D0131)

- ❖ Tsai YS, Yu YC, Huang PC, Cheng HYK: Seat surface inclination may affect postural stability during bocchia ball throwing in children with cerebral palsy. *Research in Developmental Disabilities*, 35: 3568-3573, 2014. **(SSCI: 2.735; rehabilitation Q1: 2/68; special education Q1: 1/37)**
- ❖ Cheng CH, Ju YY, Chang HW, Chen CL, Pei YC, Tseng KC, Cheng HYK*: Motor impairments screened by the Movement Assessment Battery for Children-2 are related to the visual-perceptual deficits in children with Developmental Coordination Disorder. *Research in Developmental Disabilities*, 35: 2172-2179, 2014. DOI: 10.1016/j.ridd.2014.05.009. **(SSCI: 2.735; rehabilitation Q1: 2/68; special education Q1: 1/37) (通訊作者) (CMRPD 1A0691, 1A0692)**
- ❖ Cheng CH, Cheng HYK, Chen CPC, Lin KW, Liu WY, Wang SF, Hsu WL, Chuang YF: Altered co-contraction of cervical muscles in young adults with chronic neck pain during voluntary neck motions. *Journal of Physical Therapy Science*, 26(4): 587-590, 2014. **(SCI: 0.175; rehabilitation Q4: 62/64)**
- ❖ Hwang AW, Wu IC, Chen CN, Cheng HYK, Chen CL: The correlates of body mass index and risk factors for being overweight among preschoolers with motor delay. *Adapted Physical Activity Quarterly*, 31: 125-143, 2014. **(SCI: 1.125; rehabilitation Q3: 39/64)**
- ❖ 張世聰、劉妍秀、劉雅甄、程欣儀、史麗珠、朱彥穎(2014): 青少年軟式網球選手配戴框架眼鏡矯正對運動視覺之影響。 *運動教練科學*, 35(9), 59-73。
- ❖ Ju YY, Lin JK, Cheng HYK*, Cheng CH, Wong AMK: Rapid repetitive passive movement promotes knee proprioception in the elderly. *European Review of Aging and Physical Activity*, 10: 133-139, 2013. **(SCI: 0.947; geriatrics & gerontology Q4: 37/45) (通訊作者)**
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- ❖ Shieh WY, Wang CM, Ju YY, Li TY, FU YC, Chien YH, Cheng HYK*: Monitoring Respiratory-Swallow Coordination during Feeding: The Influence of Trunk Positions and Food Textures. Poster presentation at 5th Global Conference on Biomedical Engineering 2022 (GCBME 2022), Taipei, Taiwan, 2022Dec.

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專利

- ❖ 程欣儀、謝萬雲、朱彥穎、俞雨春: "地板滾球比賽專用顯示裝置", 中華民國發明專利 (Patent No.: TW I676496 號)
- ❖ 謝萬雲、程欣儀、朱彥穎、俞雨春: "地板滾球比賽專用電子計分與賽況廣播系統及其方法", 中華民國發明專利 (Patent No.: TW I696153 號)
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- ❖ 程欣儀、謝萬雲、朱彥穎、俞雨春: "肢體功能評估方法", 中華民國發明專利 (Patent No.: TW I664548 號)
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- ❖ 曾俊儒、李雨芹、程欣儀、俞雨春: 導球裝置. 2016/11/11 (Patent No.: TW I556860)
- ❖ 程欣儀、陳立穎、陳彥博: "肌電訊號處理系統及處理方法". 2016/8/11-2035/6/24 (Patent No.: TW I544944).
- ❖ Lin CL, Cheng HYK, Liu HL, Kuo CH, "Range-of-motion adjustable dynamic joint stretch splint", Taiwan invention patent. 2011/06/11 (Patent No.: I343252).

技轉

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研究計畫

計畫名稱	補助或委託機構	起訖年月	計畫內擔任的工作	核定經費
NSTC 111-2221-E-182-022-MY3 發展自動化「咳嗽量測平台與吞嚥聲音-呼吸量測平台」來評估巴金森病之居家吸氣堆積訓練對咳嗽與吞嚥呼吸協調之療效與追蹤	國科會	2022/8/1 至 2025/7/31	共同主持人	3,143,000
NSTC 110-2221-E-182-012-MY3 建構數位化多元組合式之智能動作評估與訓練系統—特教族群需求評估、功能指標分析與決策樹發展、組合式輔具模組設計及特教場域實測	國科會	2021/8/1 至 2024/7/31	主持人 (整合型計畫 總主持人)	5,151,000
NSTC 110-2221-E-182-013-MY3 數位化多元組合式之智能動作評估與訓練系統研發—AIoT 技術導入與驗證、感測輔具連網建構、機器學習模型應用及特教場域佈建	國科會	2021/8/1 至 2024/7/31	共同主持人	4,033,000
NSTC 110-2221-E-179-001-MY3 數位化多元組合式之智能動作評估與訓練系統研發—適應體育教學需求 評估、動作特徵解析與辨識、	國科會	2021/8/1 至 2024/7/31	共同主持人	3,093,000

共融復健訓練規劃及特教場域推廣				
MOST109-2410-H-182 -010 -SS2 發展自閉症者認知固著行為處理方案 --認知固著行為基模再建構之策略探究	科技部	2020/8/1 至 2022/7/31	共同主持人	1,495,000
MOST108-2221-E-182-016-MY3 開發下頷張開力量與速度量測儀器與自動化分析系統: (1)控制組不同年齡層與腦中風吞嚥分組之量測(2)與前舌壓及吞嚥呼吸協調之相關分析	科技部	2019/8/1 至 2022/7/31	共同主持人	3,055,000
MOST107-2221-E-182-049-MY3 科技化滾球輔具及智能化教練系統之開發驗證暨特教族群健康休閒促進及動作指標分析之應用--總計畫兼子計畫一:科技化滾球輔具及智能化教練系統研發之使用者需求評估、輔具設計驗證、功能訓練策略與特教場域實測 (3 年期)	科技部	2018/8/1 至 2021/7/31	主持人 (整合型計畫 總主持人)	4,254,000
MOST107-2221-E-182-050-MY3 科技化滾球輔具及智能化教練系統之開發驗證暨特教族群健康休閒促進及動作指標分析之應用--子計畫二:科技化滾球輔具與智能化教練系統之影像分析技術導入、深度學習模型建構、與特教場域實測 (3 年期)	科技部	2018/8/1 至 2021/7/31	共同主持人	2,838,000
MOST107-2221-E-179-001-MY3 科技化滾球輔具及智能化教練系統之開發驗證暨特教族群健康休閒促進及動作指標分析之應用--子計畫三:科技化滾球輔具及智能化教練系統之賽事規則與情境策略程式邏輯研發、力學特徵解析、與場域推廣實測 (3 年期)	科技部	2018/8/1 至 2021/7/31	共同主持人	2,334,000

MOST104-2628-E-182-003-MY3 特教族群動作評估與訓練用之 智慧型足球輔具設計開發及特 教場域應用推廣(3/3)	科技部 (科技部優秀年輕學者研 究計畫獎)	2017/8/1 至 2018/7/31	主持人	1,059,000
MOST104-2628-E-182-003-MY3 特教族群動作評估與訓練用之 智慧型足球輔具設計開發及特 教場域應用推廣(2/3)	科技部 (科技部優秀年輕學者研 究計畫獎)	2016/8/1 至 2017/7/31	主持人	1,076,000
MOST104-2628-E-182-003-MY3 特教族群動作評估與訓練用之 智慧型足球輔具設計開發及特 教場域應用推廣(1/3)	科技部 (科技部優秀年輕學者研 究計畫獎)	2015/8/1 至 2016/7/31	主持人	1,192,000
MOST104-2221-E-182 - MY3 頸椎脊髓神經病變之手術選 擇、心理諮詢介入、神經肌肉 代償、復健運動療效與生物力 學之研究--子計畫四:頸椎脊髓 神經病變患者的居家運動訓練 感測器之開發並應用於身體控 制機制與訓練療效之探討	科技部	2015/8/1 至 2018/7/31 (3 年期)	共同主持人	936,000
MOST103-2221-E-182-048 身心障礙者功能需求導向之輔 具檢索系統設計開發	科技部	2014/8/1 至 2015/7/31	主持人	769,000
MOST103-2410-H-179-002- 輪椅防後傾桿之優化與其於輪 椅網球發球之效能探討	科技部	2014/08/01 至 2015/12/31	共同主持人	508,000
MOST103-2410-H-182-021- 專項空手道訓練對孩童視知覺 -立體空間與廣度空間之探討	科技部	2014/8/1 至 2015/7/31	共同主持人	400,000
NSC102-2218-E-002 -010 - 患者自控式下肢癱瘓者交替式 助動步行矯具(1/3)	行政院國家科學委員會	2013/8/1 至 2014/7/31	共同主持人	2,750,000

NSC102-2410-H-182 -020 – 空手道與視知覺綜合訓練對孩 童視知覺動作之探討	行政院國家科學委員會	2013/8/1 至 2014/7/31	共同主持人	498,000
NSC102-2622-E-182-004-CC2 NCRPD1CP021 “The development & application of sustained drug release elastic tape” 長效藥物釋放機能貼布之開發 與應用(1/3)	行政院國家科學委員會	2013/6/1 至 2014/8/31	主持人	1,124,000
NSC102-2622-E-182-004-CC2 NCRPD1CS021 “The development & application of sustained drug release elastic tape” 長效藥物釋放機能貼布之開發 與應用(1/3)	行政院國家科學委員會	2013/6/1 至 2014/8/31	主持人	284,724
NSC101-2410-H-179-015: ” Role and function of the anti- tipping device during serving in wheelchair tennis” 防傾裝置於輪椅網球發球動作 中的角色與功能	行政院國家科學委員會	2012/8/1 至 2013/7/31	共同主持人	669,000
NSC99-2314-B-182-008-MY2: ”Effects of repetitive passive movement on lower extremity muscle tone and function in children with cerebral palsy” 重複性被動動作對於腦性麻痺 兒童下肢張力及功能之效應	行政院國家科學委員會	2010/8/1 至 2012/7/31 (2 年期)	主持人	1,494,000
NSC97-2314-B-182-038-MY2: ”Development and clinical evaluation of a second- generation dynamic foot stretch splint” 第二代足部動態拉伸副木之開 發測試與臨床評估	行政院國家科學委員會	2008/11/1 至 2010/8/31 (2 年期)	主持人	1,292,000

桃園縣身心障礙者生活需求調查實施計畫	桃園縣社會局	2014/6/12 至 2014/12/31	共同主持人	836,000
GMRPD1C0071 臺北市兒童發展篩檢宣導多媒體資訊系統	臺北市衛生局	2013/6/28 至 2013/12/24	主持人	1,998,000
SCRPD1C0021 運動指導影片驗證設計與常模收集	工業研究院	2013/3/20 至 2013/12/31	主持人	310,000
運動建議系統之運動指導示範影片拍攝	工業研究院	2013/3/12 至 2013/12/31	共同主持人	380,000
運動建議與傷害防護考慮因子資訊化模組	工業研究院	2012/10/1 至 2012/12/31	共同主持人	234,000
CMRPD1K0431: 智能障礙者功能檢測暨運動策略系統開發	長庚醫院	2020/8/1 至 2021/7/31	主持人	585,000
CMRPD1F0602: 擺位角度對吞嚥及呼吸協調功能之影響暨智慧型擺位角度調節輔具開發 (2/2)	長庚醫院	2017/12/1 至 2019/6/30	主持人	645,810
CMRPD1F0601: 擺位角度對吞嚥及呼吸協調功能之影響暨智慧型擺位角度調節輔具開發 (1/2)	長庚醫院	2016/12/1 至 2017/11/30	主持人	682,005
CMRPD1E0511: 功能需求導向之輔具檢索系統應用程式開發及身心障礙族群之推廣應用	長庚醫院	2015/12/1 至 2016/11/30	主持人	545,255

CMRPD1D0131: 人因工程危險因子對機構特教人員職業性肌肉骨骼傷害的影響	長庚醫院	2014/1/1 至 2015/8/31	主持人	504,200
CMRPD1A0692: 視知覺電腦程式設計於發展性協調障礙兒童之初步成效探討	長庚醫院	2013/7/1 至 2014/6/30	主持人	662,755
CMRPD1A0691: 視知覺電腦程式設計於發展性協調障礙兒童之初步成效探討	長庚醫院	2012/7/1 至 2013/6/30	主持人	670,000
CMRPD190292: Effects of biaxial pen on writing biomechanics among preschool and early elementary school children	長庚醫院	2011/6/1 至 2012/5/31	主持人	209,000
UMRPD5B0031: 技擊視覺感應打擊測量系統開發及應用：課程設計與評估	長庚大學	2012/1/1 至 2012/12/31	共同主持人	493,050
教育部高教深耕計畫-教師教學成長社群-大專適應體育促進	教育部	2022/7 至 2022/12	主持人	19,100
大學社會責任實踐計畫(USR)正式期	教育部	2018/4/1 至 2019/12/31	共同主持人	
大學社會責任實踐計畫(USR)試辦期 ECRPD1G0011	教育部	2017/8/1 至 2018/3/31	共同主持人	3,400,000
智慧生活創新創業特色大學推動計畫(106 年度) EMRPD1F0682	教育部	2017/2/1 至 2018/1/31	共同主持人	

智慧生活創新創業特色大學推動計畫(105 年度)	教育部	2016/2/1 至 2017/1/31	共同主持人	4,500,000
EZRPD180311: 第二代足部動態拉伸副木之開發測試與臨床評估	教育部	2009/8/1 至 2010/7/31	主持人	408,712
107 年度長庚大學中小企業創新育成計畫	經濟部	2018/1/1 2018/12/31	主持人	1,500,000
106 年度長庚大學中小企業創新育成計畫	經濟部	2017/1/1 2017/12/31	主持人	3,000,000
105 年度長庚大學中小企業創新育成計畫	經濟部	2016/1/1 2016/12/31	主持人	2,500,000
104 年度長庚大學中小企業創新育成計畫	經濟部	2015/1/1 2015/12/31	主持人	2,500,000
GCRPD3D0031: 103 年度長庚大學中小企業創新育成計畫	經濟部	2014/1/1 至 2014/12/31	主持人	2,000,000
早療多媒體篩檢系統信效度及使用經驗測試	易隨設計股份有限公司	2014/9/1 至 2015/8/31	主持人	672,068