

國立清華大學 生醫工程與環境科學系

王廷瑋老師（生醫電子實驗室）

誠徵博士後研究員 1 名

【職缺名稱】

博士後研究員

【徵才單位】

王廷瑋老師生醫電子實驗室國立清華大學 生醫工程與環境科學系

【工作地點】

國立清華大學（新竹市）

【研究領域】

本實驗室主要致力於創新生醫電子元件、電路與智慧醫療系統之開發與整合。

目前研究方向包括：

- 生醫電子
- 穿戴式裝置
- AIoT
- 植入式裝置
- 軟性電子
- 智慧機器人
- 邊緣運算
- 電子電路設計

本實驗室整合電機工程、資訊工程、醫療科技與材料科學，開發可回應臨床與使用者未被滿足需求之創新生醫裝置與系統。

【工作內容】

1. 執行國家科學及技術委員會（國科會）補助研究計畫之相關研究工作
2. 規劃並執行生醫電子、穿戴式裝置、植入式裝置及智慧醫療系統相關實驗
3. 開發生醫感測器、電子電路、資料擷取系統、嵌入式系統及整合式原型
4. 依所分配之研究計畫，設計印刷電路板、類比與數位電路、無線通訊系統或電磁感測系統
5. 擷取與分析生理訊號，並開發訊號處理或人工智慧演算法
6. 執行裝置特性量測、系統驗證及實驗性能評估
7. 與臨床醫師、學術研究人員、產業夥伴及跨領域研究團隊合作

9. 撰寫並投稿國際同儕審查期刊論文
10. 協助撰寫研究計畫書及計畫報告
11. 配合計畫主持人交辦之其他研究相關工作

【徵才條件】

- 具教育主管機關認可之國內外大學博士學位。
 - 具生醫工程、電機工程、電子工程、資訊工程、醫學工程、機械工程、材料科學或相近領域博士學位
 - 具獨立規劃與執行研究計畫之能力
 - 具良好之科學研究、技術開發或同儕審查論文發表紀錄
 - 具良好科學寫作、溝通、團隊合作及問題解決能力
 - 對跨領域研究，以及與臨床及產業夥伴合作具高度熱忱
- 具下列一項或多項經驗者尤佳：
- 穿戴式或柔性電子
 - 生醫感測器與生理訊號量測
 - 植入式或無電池感測裝置
 - 類比前端電路與低雜訊電路設計
 - 印刷電路板設計與系統整合
 - 微控制器、嵌入式系統、FPGA 或硬體加速
 - 無線通訊、無線電力傳輸、RFID 或電磁感測
 - 生醫訊號處理、機器學習或人工智慧
 - AIoT、邊緣運算或醫療物聯網應用
 - COMSOL Multiphysics、電磁模擬、電路模擬、有限元素分析或相關建模工具
 - MATLAB、Python、LabVIEW、C/C++ 或相關程式語言
 - 依核准研究計畫執行之人體研究、臨床研究或前臨床研究
- 申請者無須具備上述所有領域之經驗。具一項或多項相關專長，且有意投入跨領域生醫裝置開發者，均歡迎申請。

【聘期】

依國科會計畫聘任，實際聘期依計畫執行期間及相關規定辦理，可視研究表現續聘。

【薪資待遇】

依據國立清華大學專題計畫人員博士後研究支薪標準，月薪 60,000 元起(可面議)(符合經常性薪資達 4 萬元以上法規)。
本職缺後續實際薪資待遇將依應徵者學經歷、著作價值等，並以國科會最終審查核定之金額為準。

【應徵方式】

請將以下資料合併為一份 PDF 檔：

1. 個人履歷（含照片、聯絡方式及研究專長）
2. 自傳
3. 博士學位證明文件
4. 著作列表（Publication List）。5. 代表著作（如有）。6. 其他有助審查之資料

請將應徵資料寄至

聯絡人：王廷瑋老師

E-mail：wangtw@mx.nthu.edu.tw

信件主旨請註明：「應徵博士後研究員－姓名」

符合資格者將另行通知面試，不符合資格者恕不另行通知。

【聯絡資訊】

聯絡人：王廷瑋 副教授

國立清華大學 生醫工程與環境科學系

E-mail：wangtw@mx.nthu.edu.tw

實驗室網站：<https://wangtw.wixsite.com/nthu-bioelectronics>



National Tsing Hua University (NTHU)
Department of Biomedical Engineering and Environmental Sciences
Prof. Ting-Wei Wang's Bioelectronics Laboratory
Postdoctoral Researcher Position (1 Opening)

Position

Postdoctoral Researcher

Institution

Prof. Ting-Wei Wang's Bioelectronics Laboratory
Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University (NTHU)

Location

National Tsing Hua University, Hsinchu, Taiwan

Research Areas

Our laboratory is dedicated to the development and integration of innovative biomedical electronic components, circuits, and intelligent healthcare systems. Our current research areas include:

- Biomedical electronics
- Wearable devices
- Artificial Intelligence of Things (AIoT)
- Implantable devices
- Flexible electronics
- Intelligent robotics
- Edge computing
- Electronic circuit design

By integrating expertise in electrical engineering, computer science, medical technology, and materials science, our laboratory develops innovative biomedical devices and systems that address unmet clinical and user needs.

Responsibilities

The successful candidate will be expected to:

1. Conduct research under projects funded by the National Science and Technology Council (NSTC), Taiwan.
2. Design and perform experiments related to biomedical electronics, wearable devices, implantable devices, and intelligent healthcare systems.
3. Develop biomedical sensors, electronic circuits, data-acquisition systems, embedded systems, and integrated prototypes.
4. Design printed circuit boards, analog and digital circuits, wireless communication systems, or electromagnetic sensing systems, depending on the assigned research project.
5. Acquire and analyze physiological signals and develop signal-processing or artificial-intelligence algorithms.
6. Conduct device characterization, system validation, and experimental performance evaluation.
7. Collaborate with clinicians, academic researchers, industry partners, and interdisciplinary research teams.
8. Assist in supervising graduate and undergraduate students and supporting laboratory research activities.
9. Prepare manuscripts for publication in international peer-reviewed journals.
10. Assist in writing research proposals, technical documents, patents, and project reports.
11. Perform other research-related duties assigned by the Principal Investigator.

Qualifications

Applicants should meet the following qualifications:

- A Ph.D. degree from an accredited university.
- A doctoral degree in Biomedical Engineering, Electrical Engineering, Electronics Engineering, Computer Science, Medical Engineering, Mechanical Engineering, Materials Science, or a closely related field.
- Demonstrated ability to independently design and conduct research projects.
- A strong record of scientific research, technical development, or peer-reviewed publication.
- Good scientific writing, communication, teamwork, and problem-solving skills.

- Enthusiasm for interdisciplinary research and collaboration with clinicians and industry partners.

Experience in one or more of the following areas is preferred:

- Wearable or flexible electronics
- Biomedical sensors and physiological signal measurement
- Implantable or battery-free sensing devices
- Analog front-end circuits and low-noise circuit design
- Printed circuit board design and system integration
- Microcontrollers, embedded systems, FPGA, or hardware acceleration
- Wireless communication, wireless power transfer, RFID, or electromagnetic sensing
- Biomedical signal processing, machine learning, or artificial intelligence
- AIoT, edge computing, or Internet of Medical Things applications
- COMSOL Multiphysics, electromagnetic simulation, circuit simulation, finite-element analysis, or related modeling tools
- MATLAB, Python, LabVIEW, C/C++, or related programming languages
- Human-subject, clinical, or preclinical research conducted under approved research protocols

Applicants are not expected to possess experience in every area listed above.

Candidates with strong expertise in one or more relevant fields and an interest in interdisciplinary biomedical device development are encouraged to apply.

Appointment

Funding for this postdoctoral position has been secured for a three-year period:

August 1, 2026, to July 31, 2029

The formal appointment and employment procedures will be handled in accordance with the regulations of National Tsing Hua University and the National Science and Technology Council.

The expected starting date is **August 1, 2026**, although the actual starting date may be discussed based on administrative processing and the successful candidate's availability.

Salary

The salary will be provided in accordance with the National Tsing Hua University Salary Scale for Postdoctoral Researchers under Project-Based Employment.

The monthly salary will start from:

NT\$60,000 per month, negotiable

The final salary will be determined based on the applicant's academic qualifications, research experience, publication record, technical expertise, and other relevant achievements, subject to the approved project budget and applicable university and NSTC regulations.

Application Materials

Please combine the following documents into **one PDF file**:

1. Curriculum Vitae, including contact information, educational background, research experience, technical expertise, and a publication list
2. Personal statement or cover letter describing your research background and interest in this position
3. Ph.D. degree certificate or official documentation indicating the expected degree-conferral date
4. Complete publication list
5. Representative publications, if applicable
6. A brief description of relevant technical skills and proposed research interests
7. Any additional supporting documents

A recent photograph may be included in the Curriculum Vitae but is optional.

Application Procedure

Please send the complete application PDF to:

Prof. Ting-Wei Wang

E-mail: wangtw@mx.nthu.edu.tw

Please use the following subject line:

Application for Postdoctoral Researcher – [Applicant's Full Name]

Applications will be reviewed upon receipt. Only shortlisted candidates will be contacted for an interview. Applicants who are not selected will not receive individual notifications.

Contact Information

Prof. Ting-Wei Wang

Associate Professor

Department of Biomedical Engineering and Environmental Sciences

National Tsing Hua University

E-mail: wangtw@mx.nthu.edu.tw

Laboratory Website: <https://wangtw.wixsite.com/nthu-bioelectronics>

