

## 馬偕醫學院高齡福祉科技研究所

### 2023 高齡福祉科技研討會

一、時 間：2023 年 3 月 17 日(星期五)09:30-16:10

二、地 點：馬偕醫學院(新北市三芝區中正路三段 46 號)

三、主辦單位：馬偕醫學院高齡福祉科技研究所

四、議 程：

時間	分	項目	場地
9:30-9:50	20	報到	國際會議廳
9:50-10:00	10	開場歡迎詞及大合照	國際會議廳
10:00-11:00	60	專題演講(公開直播)	國際會議廳
11:00-11:10	10	茶點時間	
11:10-12:00	50	論文發表 A1 (公開直播) (國際英文發表專場，不列入競賽)	國際會議廳
12:00-13:00	60	午餐時間	
13:00-14:00	60	論文發表 A2	國際會議廳
		論文發表 B2	遠距暨示範教學中心
14:00-14:10	20	茶點時間	
14:20-15:20	60	論文發表 A3	國際會議廳
		論文發表 B3	遠距暨示範教學中心
15:20-15:30	10	休息時間	
15:30-15:50	20	綜合結論座談 (統計分數)	國際會議廳
15:50-16:10	20	頒獎及大合照	國際會議廳
16:10-		領餐盒	

※僅於線上參與公開直播者毋須報名亦不核發研習證明。

# 馬偕醫學院高齡福祉科技研究所

## 「2023 高齡福祉科技研討會」徵稿說明

### 壹、研討會緣起與目的

人類社會正面臨歷史上人口結構快速老化及科技快速發展二個重大轉變過程，人類老化所伴隨著能力、健康的衰退以及經濟和社會地位與資源的喪失，科技的應用將有相當的潛力提升高齡者心智與生理的能力、健康與生活品質，而高齡福祉科技(Gerontechnology)此一跨領域整合的新興科技，即在此需求下順勢發展而成。荷蘭 Eindhoven 科技大學 Graafmans 與 Bouma 兩位教授(1993)，正式為高齡福祉科技定義為：「老人福祉科技基於對老化現象的知識，從事技術和科技產品的研究開發，希望能為高齡者提供較佳的生活與工作環境，以及配合的醫療照護。」自 1993 年第一次高齡福祉科技國際研討會起始迄今已有 29 年時間，全世界高齡議題倍受現今各國政府重視，各學術及研究機構對此領域之研究方興未艾。本次研討會之舉辦目的即在呼應國際潮流，並配合我國政府衛福部長照 2.0 政策全面推動之需，邀請高齡福祉科技領域相關之學者專家共聚一堂，交流研究與發展心得，以提升國內研究風氣與研發水平。

### 貳、研討會子主題(含一場國際英文發表專場)

#### 一、高齡暨代間創新

科技應用於高齡心理與社會之議題、科技促進代間互動與學習之議題，以及其他高齡者與代間學習相關之創新設計之議題。

#### 二、肢體與行動支援

輔助科技、生物力學、復健工程、人因工程、通用設計、動作科學、穿戴式裝置、智慧輔具、醫療器材、生醫系統等議題。

#### 三、溝通與資訊互動

資訊科技於高齡者之健康與照護上之應用，包括影音多媒體、聽語科技等的軟、硬體開發與設計。

#### 四、智慧與友善空間

智慧化環境空間、物聯網於高齡環境應用、高齡與失智友善環境設計。

#### 五、高齡服務與管理

科技於長期照顧與服務管理上之應用。

#### 六、其他相關之領域

### 參、研討會網站

<https://sites.google.com/mmc.edu.tw/2023gerontechnology>

### 肆、徵稿說明

一、本次大會提供一個英文 Section : A1，其餘為中文。徵稿論文內容包含摘要、研究背景與目的、研究系統與架構方法、研究分析與成果、結論、參考文獻，以 3 至 6 頁為原則。

二、請依研討會子主題與議題，自訂題目範圍，以 PDF 格式存檔，論文格式請參閱（附件一），請於截稿日前(2023 年 3 月 1 日)至投稿網址：

<https://forms.gle/3Jk9L3JDuMnNxGfCA> 填寫投稿者基本資料及上傳論文 PDF 檔。

三、論文審稿：

(一)論文徵稿日期：2023 年 1 月 1 日(日)至 2023 年 3 月 1 日（三）23:59 時止。

(二)論文審查結果通知：2023 年 3 月 10 日（五）。

(三)若投稿人於 2023 年 3 月 10 日（五）17:00 前未收到審稿結果通知，請來訊洽詢，  
**通過審查發表人請於 2023 年 3 月 15 日(日)前報名參加研討會**，每篇論文至少一位報名  
參加並出席研討會口頭發表，方可核發發表證明、研習證書及審查證明，倘若於截止前  
未報名者將撤銷發表資格、刪文。

四、相關注意事項如下：

(一) 本次研討會論文僅公開摘要，全文不公開。

(二) 投稿文章請遵守學術倫理相關規定。

(三) 所有投稿之論文將依據不同題目分送兩位相關領域之專家學者進行匿名審查。

伍、評選方式：

一、論文書面審查佔總分 30%

二、論文口頭報告及詢答佔總分 70%

**※備註：A1 場為國際英文發表組，不列入競賽評選。**

陸、擇優獎勵

優良論文獎：頒發獎金及獎狀，採不分組評選。

佳作：頒發獎狀，採不分組評選。

柒、研討會日程

一、活動日期：2023 年 3 月 17 日（五）實體研討會議。

二、活動地點：馬偕醫學院第二教研大樓 2 樓國際會議廳(備捷運接駁專車)

三、主辦單位：馬偕醫學院高齡福祉科技研究所

四、報名日期：2023 年 2 月 15 日(三)至 2023 年 3 月 15 日（三）23：59 止。

五、報名方式：請上網填寫參加報名表，完成報名程序。網址：

<https://forms.gle/neM8QA44NfDA54T96>。

六、報名費用：全程免費，並提供資料、文具、點心、飲品、午餐、會後餐盒及精美提袋。

捌、聯絡資訊：

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聯絡人：鄧心怡小姐 (02) 2636-0303 分機 1573

# 高齡福祉科技研討會論文標題(標楷粗體 18 置中)

作者 1 姓名 機構 Email(標楷 10 置中)

作者 2 姓名 機構 Email

## 摘要(標楷粗體 16 置中)

本論文樣板內容為虛擬並兼作為研討會訊息傳遞，請作者自行套用自己之研究發表內容。人類社會正面臨歷史上人口結構快速老化及科技快速發展二個重大轉變過程，人類老化所伴隨著能力、健康的衰退以及經濟和社會地位與資源的喪失，科技的應用將有相當的潛力提升高齡者心智與生理的能力、健康與生活品質，而高齡福祉科技(Gerontechnology)此一跨領域整合的新興科技，即在此需求下順勢發展而成。本次研討會之舉辦目的即在呼應國際潮流，並配合我國政府衛福部長照 2.0 政策全面推動之需，邀請高齡福祉科技領域相關之學者專家共聚一堂，交流研究與發展心得，以提升國內研究風氣與研發水平。(標楷 12 左右對齊)

關鍵詞：高齡福祉科技、長照、高齡醫療。(標楷 11 靠左對齊)

## 1. 研究背景與目的(第一層標題，標楷粗體 16 靠左對齊)

請在此節綜合性描述您論文研究目的或重要性，同時也探討研究背景，例如此論文的學術目前研究狀況等。(標楷 12 左右對齊)

### 1.1 研究背景與文獻探討(第二層標題，標楷粗體 14 靠左對齊)

請在此小節進行文獻回顧，參考他人相關類似之研究，簡單描述這些研究的背景，需要時做一些圖表來比較各研究之優缺點比較，並適當地加以引註，引註時請利用 EndNote 等類似文獻參考工具應用程式，請適當的參考外文文獻或中文文獻。例如，下列描述包含兩個引註：自 1993 年第一次高齡福祉科技國際研討會起始迄今已有 29 年時間[1]，全世界高齡議題倍受現今各國政府重視，各學術及研究機構對此領域之研究方興未艾[2]。(標楷 12 左右對齊)

### 1.2 研究目的與重要性

您為何想要獨立創新此計畫研究並在此會議發表？您可以在此小節清楚地描述您的研究初衷、您想要達到的目的或是應用上的目的，同時描述您的研究應用於高齡被照顧者或是照顧者有何重要性，可以改善那些高齡環境等等。(標楷 12 左右對齊)

## 2. 研究系統與架構方法

請在此節綜合性描述您論文研究系統與架構，您的研究可能基於某一系統、平台軟體或硬體，或者多種兼具等工具，請在此節描述。架構則探討您的策略的設計架構方法等。(標楷 12 左右對齊)

## 2.1 研究對象與系統工具

您的研究可能基於某一系統、平台軟體或硬體，或者多種兼具等工具，請在此小節描述。只要您的研究所使用到的各種工具或儀器設備，例如分析軟體、控制硬體等，均應在此小節向讀者說明清楚。這些軟體或硬體或是儀器設備均有它的規格或是使用環境條件，這些您均可描述讓讀者知道，讀者可以借鏡您的系統應用經驗。(標楷 12 左右對齊)

## 2.2 架構方法或研究策略

您的獨立創作研究一定有一系統性方法或是架構。請將您的研究的結構詳細描述，您可善用圖形，包含說明實體圖或是流程圖等，您的圖形應該自行繪製，不應有直接擷取他人圖形的狀況，這是會違反智慧財產權及學術倫理。您的創作架構圖非常重要，例如流程圖等，因為符合邏輯且清楚的架構圖，可以很快且清楚的讓讀者了解您的研究。

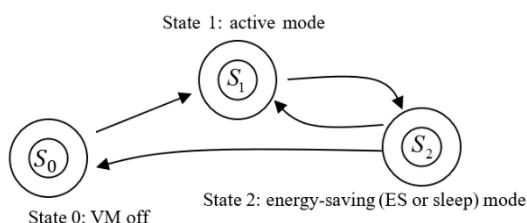


圖 1. 研究策略架構圖(標楷 11 置中)

## 3. 研究分析與成果

請在此節綜合性描述您論文研究初步成果，同時也探討分析數據，並適當加入量化及質化分析等。(標楷 12 左右對齊)

### 3.1 量化或質化結果分析

您的獨立創新研究成果貢獻在上一小節已經詳細描述，在本小節您可以實驗或驗證您的初步成果，可以透過實驗室設備分析或是到機構場域進行實地驗證。量化的分析及質化的統計分析都非常重要且有必要提出給讀者了解，這樣讀者才能知道您的獨立創新研究有那些程度水準的貢獻。量化的分析可以透過適當的科學工具儀器設備或是軟硬體平台服務來進行，質化的分析可以透過問卷、訪問等，後續並進行統計及科學化歸納分析。所有量化及質化成果最好有表格、統計圖形等表達。表格格式可以參考下面例子：

表 1. 時間與品質的分析表. (標楷 11 置中)

$V$	$Time=4$	$Time=8$	$Time=12$	$Time=16$
$qos=60$	53	80	67	53
$qos=70$	54	81	68	54
$qos=80$	55	82	69	55

### 3.2 研究成果與貢獻

本小節為最重要的一節論述，因為您的獨立創新成果貢獻可以在此節詳細描述給讀者了解。獨立創新是作者獨立研究非抄襲的研究成果，可能是全新的策略也可能與他人類似的方法，但無論如何，都不能是抄襲的研究論文，否則違反學術倫理。您可以盡量將自己的獨立創新研究與他人的研究做一些比較，各種方法總是會有優缺點。您可以盡量強調您的獨立創新研究初步成果的優點及貢獻，讓讀者能了解您的貢獻，後續可能參考或引用您的論文。(標楷 12 左右對齊)

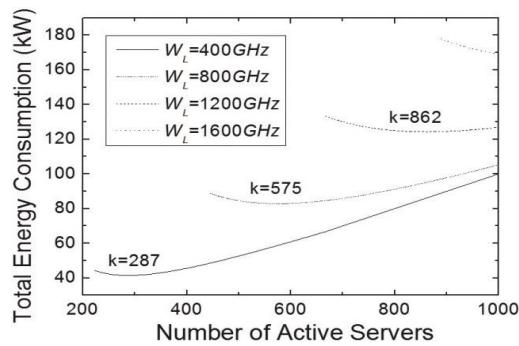


圖 2. 本研究與其他產品比較成效貢獻(標楷 11 置中)

### 4. 結論

請在此結總結您論文的結論，例如您的獨立創新研究貢獻、優點、效率等，您亦可描述您的研究未來發展。順便提醒您下列重要訊息。論文審稿：(一)論文徵稿日期：2023 年 1 月 1 日(日)至 2023 年 3 月 1 日(三) 23:59 時止。(二)論文審查結果通知：2023 年 3 月 10 日(五)。(三)若投稿人於 2023 年 3 月 10 日(五) 17:00 前未收到審稿結果通知，請來訊洽詢，通過審查發表人請於 2023 年 3 月 15 日(日)前報名參加研討會，全程免費，每篇論文至少一位報名參加並出席研討會口頭發表，方可核發發表證明、研習證書及審查證明，倘若於截止前未報名者將撤銷發表資格、刪文。(標楷 12 左右對齊)

### 參考文獻

- [1] H. Marc, P. Sebastiaan Theodorus Michaël, and L. Katrien Ger, "Matching gerontechnologies to independent-living seniors' individual needs: development of the GTM tool," *BMC Health Services Research*, article vol. 19, no. 1, pp. 1–13, 01/01/ 2019, doi: 10.1186/s12913-018-3848-5.
  - [2] 徐業良 and 白麗, "智慧科技於高齡者生活與照護應用之前瞻發展建議," *福祉科技與服務管理學刊 / Journal of Gerontechnology and Service Management*, Article no. 3, p. 325, 2018, doi: 10.6283/JOCSCG.201809\_6(3).325.
- (請使用文獻編輯軟體引註參考文獻，可使用 IEEE 或 APA 文獻格式，標楷體 11)

# **Call for Submission**

*to the 2023 Conference on Gerontechnology, March 17 2023, Taiwan,  
organized by Institute of Geriatric Welfare Technology and Science, MacKay Medical  
College.*

**Please note all date/time below are in the UTC+8 time zone.**

## **1. BACKGROUND**

Human society is facing two major changes in history: the unprecedented growth of the aging population and the rapid pace of technological development.

Gerontechnology, a cross-disciplinary emerging technology field, has evolved in response to this demand. Professors Graafmans and Bouma (1993) of Eindhoven University of Technology in the Netherlands formally defined Gerontechnology as: "Gerontechnology includes the research and development of techniques and technological products, based on the knowledge of aging processes, for the benefit of a preferred living and working environment and adapted medical care for the elderly."(Graafmans & Bouma, 1993) It has been 31 years since the first World Congress of Gerontechnology in 1991, and the issue of aging is receiving much attention from governments around the world, and research in this field is growing in various academic and research institutions. The purpose of this conference is to echo the international trend and the Long-Term Care Policy 2.0 by the Taiwanese government's Health and Welfare Ministry, and to invite scholars and experts in the field of gerontechnology to come together to exchange their research and practical experience, and to promote the research culture and R&D level in Taiwan.

## **2. CATEGORIES**

### **2.1 Aging and Intergenerational Innovation**

Issues on the application of technology to the psychological and social aspects of aging, issues on technology for intergenerational interaction and learning, and other innovative design issues related to aging and intergenerational learning.

### **2.2 Limbs and Action Supporting Technology**

Assistive Technology, Biomechanics, Rehabilitation Engineering, Human Factors Engineering, Universal Design, Motion Science, Wearable Devices, Smart Aids, Medical Devices, Biomedical Systems, and other related topics.

### **2.3 Communication and Information Interaction**

Information technology applied to the health and care of the older adults, including the development and design of software and hardware for audio-visual multimedia and audiovisual technology.

#### **2.4 Intelligent and Friendly Environment**

Intelligent environmental space, IoT applied to senior environmental design, and senior and dementia friendly environment design.

#### **2.5 Elderly Services and Management**

Application of technology in long-term care and service management.

#### **2.6 Other Related Fields**

### **3. OFFICIAL WEBSITE**

<https://sites.google.com/mmc.edu.tw/2023gerontechnology>

### **4. SUBMISSION GUIDELINES**

4.1 Except for Conference Section A1 which is in English, all other sections are in Chinese. Submitted presentation papers should be structured to include Abstract, Background and Purpose, Methodology, Results and Discussion, Conclusions, and References, and not more than 3 to 5 pages (A4-size) long.

4.2 Title of the paper should be set according to the theme and categories of the Conference. The submission should be in PDF format. For formatting and style please refer to Attachment 2. Deadline for submission is March 1, 2023. Submit online to <https://forms.gle/3Jk9L3JDuMnNxGfCA>. Fill in basic information and upload the PDF.

#### **4.3 Review of conference paper**

4.3.1 Submission is open from Sunday Jan 1, 2023 to Wednesday March 1, 2023 (23:59).

4.3.2 Notification of acceptance will be sent on Friday March 10, 2023.

4.3.3 If no result has been received by 17:00 on Friday March 10, 2023, please contact us ASAP. **Those whose submission is accepted please complete conference registration by Wed March 15, 2023.** Each accepted paper should have at least one author register for and present at the conference in order to receive official certificates for presentation, attendance, and submission acceptance. If conference registration is not completed by Sunday March 15, 2023, acceptance will be withdrawn and presentation qualification revoked.

4.3.4 Other notes

4.3.4.1 Only abstract of the submitted papers will be published. No full text will be made public.

4.3.4.2 All submissions should follow research ethics and guidelines.

4.3.4.3 Each submitted paper will be evaluated by 2 experts/scholars in the related field. The identity of reviewers remains confidential to all parties except the Organizer.

**5. PRESENTATION EVALUATION: Section A1 is the International English Presentation Section which is excluded from Conference competition.**

**6. IMPORTANT DATES/INFO**

6.1 Conference Date: Friday March 17, 2023.

6.2 Location: International Conference Hall located in Research & Teaching Building #2, MacKay Medical College. (Shuttle available from MRT stations)

6.3 Organizer: Institute of Geriatric Welfare Technology and Science, MacKay Medical College.

6.4 Registration Open: From Wednesday Feb 15, 2023 to Wednesday Mar 15, 2023 (23:59).

6.5 How to Register: Please register online at  
<https://forms.gle/neM8QA44NfDA54T96>.

6.6 Fees: Free. In addition, an eco-friendly brief-style information-pack including conference program and stationary, along with snacks and meal boxes, will all be provided free of charge to each participant.

**7. CONTACT INFORMATION**

Organizer: Institute of Geriatric Welfare Technology and Science, MacKay Medical College

Address: 46 Zhong-Zheng Road Section 3, Sanzhi District, New Taipei City, Taiwan (R.O.C.).

LINE: @714gfjvb

Tel: +886-2-2636-0303 ext.1573

Email: [P00771-006@mmc.edu.tw](mailto:P00771-006@mmc.edu.tw)

Contact Person: Miss Deng, Xin-Yi

# **Title of Paper to be submitted to the Conference on Gerontechnology (Arial, bold, 18pt, centered)**

Author 1's name, affiliation, Email (Arial, 10pt, centered)

Author 2's name, affiliation, Email

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## **ABSTRACT (Arial, bold, 16pt, centered)**

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Keywords: gerontechnology, long-term care, geriatrics. (Arial, 11pt, justified)

## **1. BACKGROUND & PURPOSE (Heading 1, Arial, bold, 16pt, left-aligned)**

Overall background and purpose of your research. Overall background and purpose of your research. Overall background and purpose of your research. (Arial, 12pt, justified)

### **1.1 Research Background and Literature Review (Heading 2, Arial, bold, 14pt, left-aligned)**

In this section, please review the literature, refer to similar studies by others, briefly describe the background of these studies, and make graphs/charts to compare the strengths and weaknesses of each study if needed. For example, It has been 31 years since the first World Congress of Gerontechnology in 1991, and the issue of aging is receiving much attention from governments around the world (Bouma et al., 2007). Use proper citations where necessary, in IEEE or APA 7<sup>th</sup> format. (Arial, 12pt, justified)

### **1.2 Research Purpose and Importance**

Why do you want to innovate this research and present it at this conference? In this section, you can clearly describe the purpose of your research, what you

are trying to achieve or how you want to apply it, and how it is important to apply your research to elderly care recipients or caregivers, to improve the environments for the elderly, etc. (Arial, 12pt, justified)

## 2. METHODOLOGY

Your research may be based on a particular system, platform software or hardware, or a combination of tools, etc. Please describe in this section your research system and framework in a comprehensive manner. Also please describe your research design. (Arial, 12pt, justified)

### 2.1 Targets and Tools

Please describe how you've conducted recruiting. Any tools or instruments used in your research, such as analysis software, control hardware, etc., should be clearly described to the reader in this section. These software or hardware or instrumentation have their own specifications, which you can describe for the reader to know, and the reader can learn from your experience with the system. (Arial, 12pt, justified)

### 2.2 Framework or Strategy

There must be a systematic approach or structure to your independent creative research. Please describe the structure of your research in detail. You can make good use of graphics, including illustrative diagrams or flowcharts, etc. Your graphics should be original and should not be taken directly from others, as this would violate intellectual property rights and academic ethics. It is important that you create your own structure, such as a flowchart, because a logical and clear structure will allow the reader to understand your research quickly and clearly.

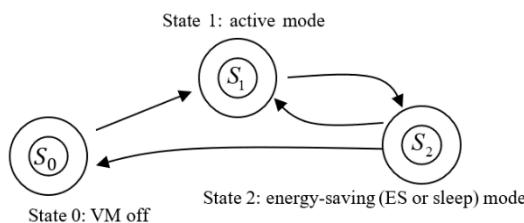


Figure 1. Research Strategy Framework Diagram (Arial, 11pt, centered)

## 3. ANALYSIS AND RESULTS

Please describe the preliminary results of your research in a

comprehensive manner, and also explore the statistics including quantitative and qualitative analysis where appropriate. (Arial, 12pt, justified)

### 3.1 Quantitative or Qualitative Analysis

In this section you can experiment or validate your preliminary results, either through laboratory equipment analysis or on-site validation at an institution. Both quantitative analysis and qualitative statistical analysis are important and necessary to present to the reader so that the reader knows what level of contribution your research has made. Quantitative analysis can be conducted with appropriate scientific tools and software platform services, while qualitative analysis can be conducted through questionnaires, interviews, etc., followed by statistical analysis. All quantitative and qualitative results should be presented in tables and statistical graphs. The table format can be referred to the following example:

Table 1. Time vs Quality Analysis (Arial, 11pt, centered)

<i>V</i>	<i>Time=4</i>	<i>Time=8</i>	<i>Time=12</i>	<i>Time=16</i>
<i>qos</i> =60	53	80	67	53
<i>qos</i> =70	54	81	68	54
<i>qos</i> =80	55	82	69	55

### 3.2 Results and Discussion

This section is probably the most important section because the result of your research can be described in detail here for the reader to understand. An independent innovation is an author's independent research that is not plagiarized. It may be a completely new strategy or a similar approach to others, but in any case, it cannot be a plagiarized research paper, otherwise it is against academic ethics. You can try to compare your own research with that of others, as there are always advantages and disadvantages to various approaches. You can try to emphasize the merits and contributions of the initial results of your research, so that readers can understand your contribution and may refer to or cite your paper later. (Arial, 12pt, justified)

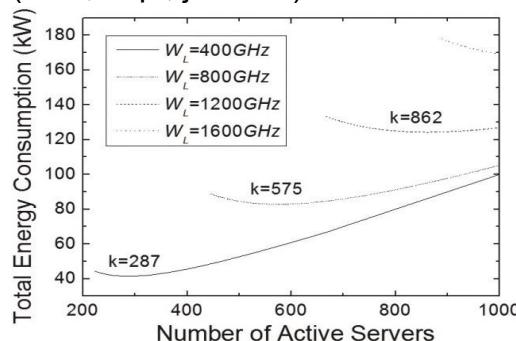


Figure 2. Research Results Compared to Others (Arial, 11pt, centered)

## 4. CONCLUSIONS

Please summarize here the conclusions of your paper, such as your research contribution, merits, efficiency, etc. You may also describe the potential of future development of your research. Please be reminded of the following important dates: (1) Submission is open from Sunday Jan 1, 2023 to Wednesday March 1, 2023 (23:59). (2) Submission results will be notified by email on Friday March 10, 2023. (3) If you have not received any result notification by 17:00 Friday March 10, 2023, please contact us ASAP. (4) Those whose submission is accepted must complete conference registration by Wed March 15, 2023. Each accepted paper should have at least one author register for and present at the conference in order to receive official certificates for presentation, attendance, and submission acceptance. If conference registration is not completed by Wed March 15, 2023, acceptance will be withdrawn and presentation qualification revoked. (Arial, 12pt, justified)

## REFERENCES

Bouma, H., Fozard, J. L., Bouwhuis, D. G., & Taipale, V. (2007). Gerontechnology in perspective. *Gerontechnology*, 6, 190-216.

<https://doi.org/10.4017/gt.2007.06.04.003.00>

Graafmans, J. A. M., & Bouma, H. (1993). Gerontechnology®, Fitting Task and Environment to the Elderly. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 37(2), 182-186.

<https://doi.org/10.1177/154193129303700205>

(Please use reference citation software, in IEEE or APA 7<sup>th</sup> format. Arial 11pt)

THE 2023  
CONFERENCE ON  
GERONTECHNOLOGY

# 2023 高齡福祉科技研討會

The 2023 Conference on Gerontechnology

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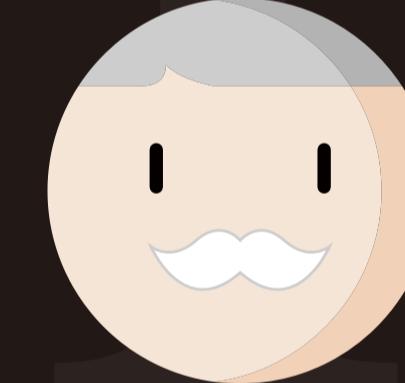
馬偕醫學院  
國際會議廳

高齡服務與管理

雙  
互  
惠  
惠  
惠  
惠

智慧與友善空間

高齡暨代間創新



投稿日程

1/1~3/1  
線上徵稿

研討會報名

2/15~3/15  
稿件審查結果公告

3/10  
研討會相關時程通知

3/13  
研討會



報名連結



投稿連結



研討會首頁

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