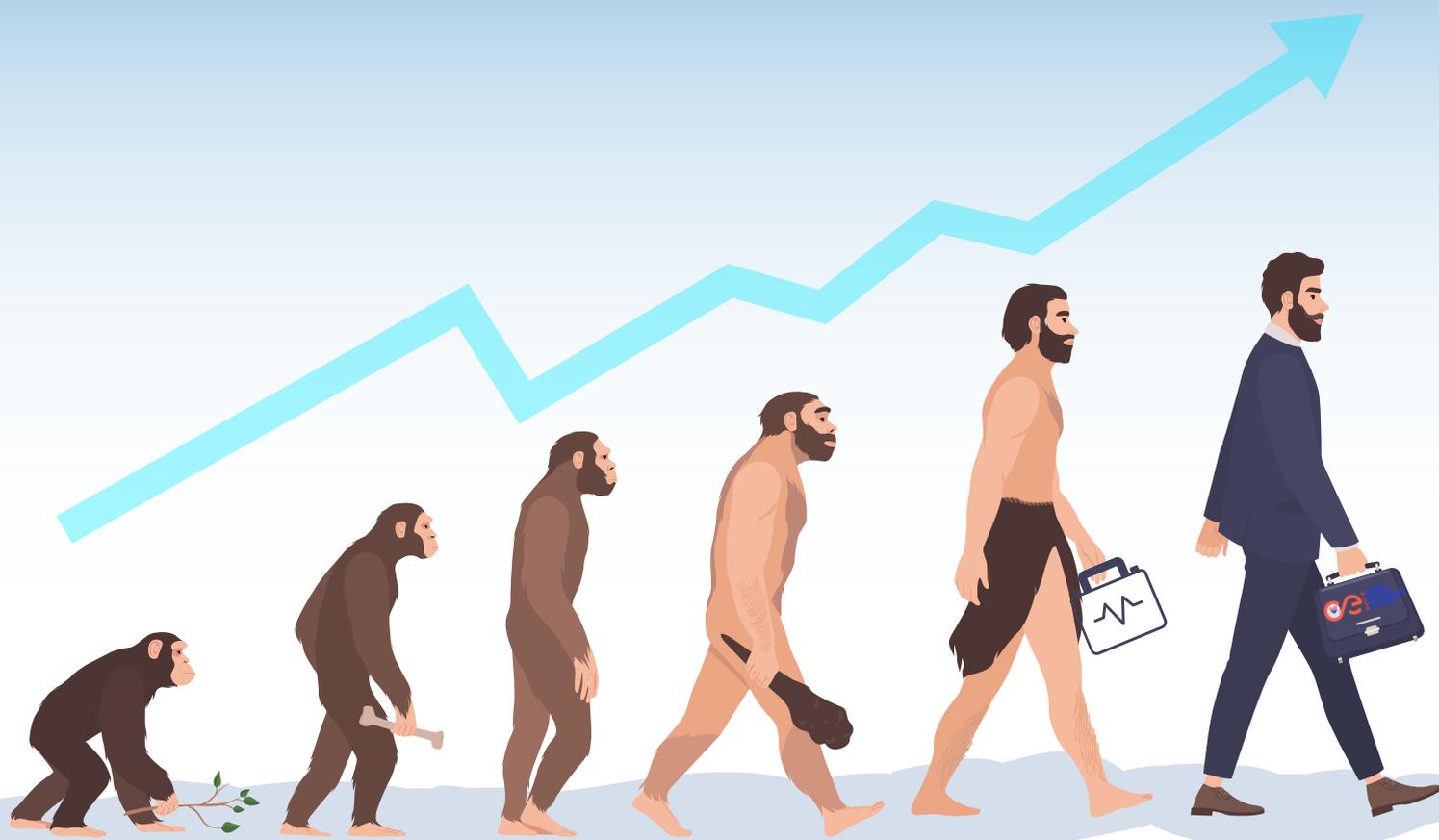




STATE OF THE ALLIANCE

Uniting The Clinical Engineering Profession Across the Globe

www.globalcea.org



STATE OF THE ALLIANCE

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PRESIDENT LETTER

Written by Yadin David



Dear Members, Partners, Colleagues, Volunteers, and Friends,

It is with great pride and deep gratitude that I present the **Global Clinical Engineering Alliance (GCEA) State of the Alliance Report** for this year. Our journey has been marked by remarkable progress, resilience, and a shared commitment to advancing the field of clinical engineering on a global scale.

This year, we have taken a significant step in evolving our organization's framework. To support GCEA continued growth, we updated our Constitution and Bylaws, ensuring that our administrative functions are fully aligned with our future needs. This transition from a temporary administration to a robust and effective structure enhances our ability to engage members globally and stay focused on our overarching vision.

Since our last annual membership hybrid (in-person and virtual) event that was held in Visakhapatnam, India, the GCEA has successfully navigated challenges and reached highly significant milestones. Our collective efforts have fostered new international collaborations, strengthened existing partnerships, raised awareness of the Clinical Engineering contributions, driven innovation, promoted best practices in clinical engineering, and introduced new recognitions of excellence. These collective efforts have profound impact on access, safety, efficiency, and quality of patientcare and helped improve healthcare systems worldwide.

Key Highlights of Our Achievements include:

- **Global Outreach and Partnerships:** GCEA expanded its international network, collaborating with key stakeholders across regions to ensure the continuous exchange of knowledge and best practices. This network, now surpassing 45,000 members from over 59 countries across every continent, has facilitated several impactful projects, helping communities address healthcare challenges more effectively.
- **Capacity Building and Training Initiatives:** Through our International Clinical Engineering & healthcare Technology Management Congress , workshops, webinars, and training sessions, we have empowered clinical engineers around the world, particularly in underserved regions. These initiatives have focused on enhancing technical skills, leadership capabilities, and the integrating of emerging technologies within the clinical environments.
- **Innovation and Research:** GCEA has been at the forefront of promoting innovative solutions to meet the evolving needs of healthcare systems. From members serving on key committees (WHO MedDevIS, FDA Good Manufacturing Practices, World Health Innovation Forum, need couple more links...) supporting harmonization of engineering initiatives to encourage the adoption of cutting-edge technologies, and disseminating studies in our affiliated Scopus indexed Global Clinical Engineering Journal we are making strides in transforming healthcare delivery.

- **Advocacy and Global Influence:** This year, we have continued to unite similar stake-holder advocacies for the recognition and integration of clinical engineering professionals as a vital component of the healthcare systems team. Our presence in global forums, policy discussions, and collaborative efforts with international health organizations has amplified our voice and the importance of the engaging of clinical engineering professionals in every phase of the technology life cycle from innovation to deployment and reallocation thus improving healthcare outcomes and equity.
- **Pandemic Response and Preparedness:** In the face of ongoing global health challenges, GCEA has played a critical role in supporting healthcare systems in their pandemic response. By providing technical expertise, facilitating equipment donations, and sharing knowledge on crisis management, we have contributed to the resilience of healthcare infrastructure worldwide.

"Next year, GCEA will build robust member alliances to elevate healthcare outcomes by driving technological innovation, promoting knowledge sharing, and strengthening clinical engineering programs. Our focus will be on empowering every clinical engineering practitioner to become the trusted, go-to professional, leading the way in delivering safe, sustainable, and cutting-edge healthcare solutions worldwide!"

As we look to the future, our collaborative work remains more crucial than ever. The global healthcare landscape is evolving rapidly, and clinical engineering will continue to play a key role in navigating the complexities of modern healthcare systems. I am confident that, through our united efforts, we will meet these challenges head-on—building more resilient, equitable, and efficient healthcare environments that advance both the careers of our members and the well-being of communities worldwide. On behalf of the Global Clinical Engineering Alliance, I extend my heartfelt gratitude to all our members, partners, volunteers, and supporters. Your dedication and passion have been the driving force behind our achievements, and I eagerly anticipate what we can accomplish together in the coming year. Let's continue this journey because "Together, we will make it better." Our shared commitment will ensure a lasting impact on clinical engineering and healthcare across the globe.

Respectfully,

Yadin David

President | www.globalcea.org



E: president@globalcea.org

A: GCEA, Global Clinical Engineering Alliance





VISION & MISSION

GCEA MISSION

To serve as a global hub, uniting national Clinical Engineering associations and healthcare stakeholders to harness Clinical Engineering expertise and healthcare technologies. Our mission is to maximize the benefits for patients and care providers from Clinical Engineering expertise and healthcare technology, while minimizing technology-related risks and costs.



GCEA VISION

To Optimize the development and deployment of safe, connected, and efficient healthcare technologies by fostering global collaboration and aligning clinical engineering expertise and competencies.



- INCITE
- CONNECT
- EDUCATE
- ADVOCATE

GCEA GOVERNANCE

Following dedicated and methodological work by the Advisory Council team Led by Calil Saide, Mladen Poluta and Nicolas Pallikarakis, the Constitution and Bylaws articles guiding the governance of GCEA were updated and submitted for membership approval in the 2024 annual meeting at the GCEA website.

ESTABLISHING GOVERNANCE FOR OUR FUTURE

Advisorys' Council Declaration

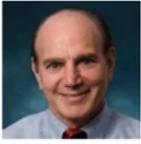
The Global Clinical Engineering Alliance has established a new Advisory Council to offer essential guidance, expertise, and support to the President and the organization's operations. President and the organization's operations. By carefully selecting members with specialized expertise, a commitment to the GCEA mission, and diverse perspectives, the Advisory Council (AC) strengthens the organization's strategic direction, governance, credibility, integrity, and impact. The AC plays a vital role in advising and supporting the GCEA President by providing insights, expert recommendations, and informed guidance.

'AC members are senior leaders, recognized for their expertise and volunteering service, who serve alongside the officers elected in November 2023.'



Stefano Bergamasco – Italy
Professor Saide Calil – Brazil
Professor Daniel Clark – UK
Dr. Yadin David – USA
Prof. Nicolas Pallikarakis – Greece
Mladen Poluta – South Africa
Dr. James Wear – USA
Nata Zaman – UK
Professor Elliot Sloan – USA
Pedro Moreira – Portugal
Professor Li Bin – China
Keiko Fukuta – Japan
Thomas Judd – USA
Wayne Morse – USA
Shauna Mullally – Canada

GCEA GOVERNANCE



Yadin David
USA / President



Mladen Poluta
ZAF / President Elect



Calil Saide
BRA / Past President



Nata Zaman
UK / Secretary General



Pedro de Britto Moreira Neto
BRA / TREASURER



Kallirroi Stavrianou
UK / Manager



Keiko Fukuta
JAP / ADVISORY COUNCIL MEMBER



Tom Judd
USA / ADVISORY COUNCIL MEMBER



Shauna Mullally
CAN / ADVISORY COUNCIL MEMBER



Stefano Bergamasco
ITA / ADVISORY COUNCIL MEMBER



Daniel Clark
UK / ADVISORY COUNCIL MEMBER



Li Bin
CHI / ADVISORY COUNCIL MEMBER



Nicolas Pallikarakis
GRE / ADVISORY COUNCIL MEMBER



Wayne Morse
USA / ADVISORY COUNCIL MEMBER



James Wear
USA / ADVISORY COUNCIL MEMBER



Elliot Sloane
USA / ADVISORY COUNCIL MEMBER

"Clinical Engineering professionals around the world are inspired by the remarkable dedication this Board has demonstrated to the profession."



THE SECOND ELECTION OF THE OFFICERS FOR THE GLOBAL CLINICAL ENGINEERING ALLIANCE WILL TAKE PLACE ON NOVEMBER 2025

GCEA MEMBERSHIP



Membership at GCEA can be pursued through one of the application categories available online [GCEA | Memberships \(globalcea.org\)](https://globalcea.org).

Priority is placed on organizational membership, however, in recognition of the reality that many countries around the world are still without national clinical engineering association, or have associations that are dormant/inactive, individuals from such locations can elect to join as well. The categories of membership are followed on next page.

Capability Statement

With the collective experience of so many professionals working in every aspect of healthcare delivery and related support, GCEA has a wealth of knowledge of healthcare technology management and operation from around the world. Holding respect borne of its frontline members in hospitals and health settings, GCEA has the credibility to educate and promote technology-related governance regionally, nationally, and internationally.

Our stated **aim** is to have **“one voice internationally”** to represent the interests of Clinical Engineering and Health Technology Management professionals by promoting education and training, best practice, practical research, collaboration, professional competency, and innovation – all with the express goal of building cross-disciplinary alliances and thus increasing access to safe, integrated, and efficient healthcare system while improving patient experience, outcomes, resource utilization and community wellness throughout the various global settings.

At the end of 2024, under the leadership of James Wear and the membership committee, GCEA has increased **national association membership to fifty nine (59) countries** from all **6 continents**, with a **total member count of over 45,818** individuals. This membership straddles the European, Asian, Australian, American, and African regions. Next year larger focus will be placed on further growth of the GCEA membership village. In addition, there is also the opportunity to engage with GCEA around specific topics, projects, or goals that will be served better through wider collaboration.

Partners

The Alliance recognizes that there are also many organizations active in this or related fields who might wish to collaborate with GCEA on specific projects or in ongoing relationships to benefit patient care, but without wishing to become full members. These **partner collaborations are also encouraged**.

Membership Categories

MEMBERSHIP ORGANIZATIONS (MO)

- This is our primary membership category and is open to national and transnational societies and organizations representing clinical engineering partitioners (where this is interpreted in the broad sense to reflect local terminologies and structures).
- These societies and organizations -might- represent staff working in the field of clinical engineering in any employment setting: hospitals and other-healthcare settings, universities, industry, private practice and governmental and non-governmental organizations.
- Organizational members have full voting rights, their members can stand for elected office within GCEA, they have full rights to join working groups and committees, and they have full access to all GCEA resources.

INDUSTRY BASED ORGANIZATIONS AND ASSOCIATIONS (IBO)

- Individual companies and trade associations working in the field of healthcare technology.
- These members have restricted voting rights, can join working groups and committees, and have full access to all GCEA resources.

OTHER RELATED PROFESSIONAL ORGANIZATIONS (PO)

- Healthcare-related professional bodies, including those for medical, nursing, scientific, allied health, social care, healthcare engineering, administration and medical physics practitioners.
- Professional Organizations have restricted voting rights, can join working groups and committees, and have full access to all GCEA resources.

INDIVIDUAL MEMBERSHIP (IM)

- Individual membership is generally reserved for individuals working in countries of the world that are not represented by an Organizational Member.
- GCEA encourages the formation of national and transnational membership associations/societies and will support individual members in their efforts to establish these.
- Individual Members have full rights to join working groups and committees and have full access to all GCEA resources.

INTERNATIONAL OR REGIONAL PHILANTHROPICALLY, POLICY THINK TANK, FOUNDATIONS (IPF)

- Active in the field of healthcare including charities, non-governmental organizations and not-for-profit groups
- These members have restricted voting rights, can join working groups and committees, and have full access to all GCEA resources.

ASSOCIATES

- An Associate is a member who accepted the invitation or recommendation to join and to support the mission and objectives of the Global Community of GCEA by offering their professional expertise, training, and time.
- All Associate members must meet the requirements set by the Membership Committee and comply with the criteria outlined in Appendix A of GCEA Bylaw addressing Professional Experience, Commitment to GCEA Mission, Availability, Reputation and Integrity.

GCEA MEMBERS



Hellenic Society of Biomedical Technology
GREECE



INBIT - Institute of Biomedical Technology
GREECE



AIIC - L'Associazione Italiana Ingegneri Clinici
ITALY



JACE - Japan Association for Clinical Engineers
JAPAN



ABECLIN - Brazilian Association of Clinical Engineering
BRAZIL



CMBES - Canadian Medical and Biological Engineering
CANADA



IPEM - Institute for Physics and Engineering in Medicine
UNITED KINGDOM



BEAI - Biomedical / Clinical Engineering Association of Ireland
IRELAND



CEASA - The Clinical Engineering Association of South Africa
SOUTH AFRICA



APBIO - Peruvian Association for Bioengineering
PERU



CIB Mexican College for Biomedical Engineering
MEXICO



TBIO - Tanzania Bio-Electronics Information Organization
TANZANIA



TNBMEA - Tamilnadu Biomedical Engineers Association
INDIA



AMTZ - Andhra Pradesh MedTech Zone Limited
INDIA



Verlab Research Institute for biomedical engineering, medical devices and AI
BOSNIA & HERZEGOVINA



AFIB - French Association of Clinical Engineering
FRANCE



SEEIC - Spanish Society of Electromedicine and Clinical Engineering
SPAIN



FLWH - Foundation for Living, Wellness, and Health
USA



BWITA - Beijing Wise Innovation Technology Alliance
CHINA



ACHPS - Afghanistan Center for Health and Peace Studies
AFGHANISTAN



EBMES - Egyptian Biomedical Engineering Society
EGYPT



KIMSHEALTH
INDIA



NIMHANS
INDIA



Association for the Advancement of Medical Instrumentation
SAUDI ARABIA



NSBCE
NIGERIA



MEEMPA
SAUDI ARABIA

GCEA MEMBERS

INDIVIDUALS

Individuals from countries without an Association Member at GCEA

Pedro Galván (Paraguay) PY	Mohamed M. Omer (Sudan) SO	Victor Makwinja (Malawi) MW
Jean Ngoie (UK) GB	Christopher Nowak (USA) US	Freddy Matamoros Espinoza (Ecuador) EC
Manish Kohli MD (USA) US	Michael Walton (UK) GB	Fred Walter Hosea (Ecuador) EC
Barun Kumar Rauniyar (Nepal) NP	Zurab Sanididze (Georgia) GE	Huma Abdul Rauf (Afghanistan) AF
Bashir Ahmad (Kenya) KE	Rawia Abed Awed Ali (Sudan) SO	Sadeq Ameen Khaled Mohammed Almahmodi (Yemen) YE
Ashenafi Hussein Ababu (Ethiopia) ET	Saed Nuh (Somalia) SO	Paul D. R. Taylor (Trinidad and Tobago) TT
Ledina Picari (Albania) AL	Elisha Sanoussi (Niger) NE	Greg Cabral (Belize) BZ
Millicent Alooh (Kenya) KE	Francine Umutesi (Rwanda) RW	Deborah Aloyo (Uganda) UG
Abel Solomon (Ethiopia) ET	Evenel Osias (Haiti) HT	Tazeen Saeed Bukhari (Pakistan) PK

Associates / Partners



Pul Alliance for Digital Health and Equity, Inc.
USA



ACHPS - Afghanistan Center for Health and Peace Studies
AFGHANISTAN



Association for the Advancement of Medical Instrumentation
USA



International HealthTechScan
Europe



Global Membership

- **59** countries across every continent
- Over **45,818** members

EQUITY, DIVERSITY, ETHICS AND INCLUSION

Members: Dan Clark, UK; Shauna Mullally, Canada

GCEA is committed to promoting equality, diversity, inclusion, and ethics in our profession. Our core mission is to represent clinical engineering professionals worldwide as we work together to improve patient experiences, health outcomes, and the wellness of our communities. We believe that a foundation of ethical integrity and inclusiveness is essential to achieving these goals.

One of the strengths of our profession is our global and cultural diversity. This has been particularly evident over the past four years as we have emerged from the SARS COVID-19 pandemic together. However, we recognize that ethical challenges and inequalities still exist within our profession, as well as barriers that prevent some individuals from fully participating and shaping it in meaningful ways.

We are actively working towards a future that is more diverse, inclusive, and ethically driven for traditionally underrepresented voices, including women, people of color, individuals of all ages and abilities, those with diverse gender and sexual identities, those from low-resource settings, and those with varied levels of professional qualifications.

A more equal and ethical profession is better equipped to recruit and retain a workforce that reflects the full spectrum of patients, families, and communities we serve. This benefits everyone, as research consistently shows that diverse and ethically sound organizations experience enhanced collaboration, decision-making, creativity, and performance.

GCEA is dedicated to advancing equality, diversity, inclusion, and ethics by educating ourselves and others, assessing our work through these lenses, listening to voices traditionally not at the table, and encouraging our members and partners to do the same. Together, we can create a profession that not only serves but also exemplifies integrity, respect, and fairness in all its practices. Because **together we can make it better!**

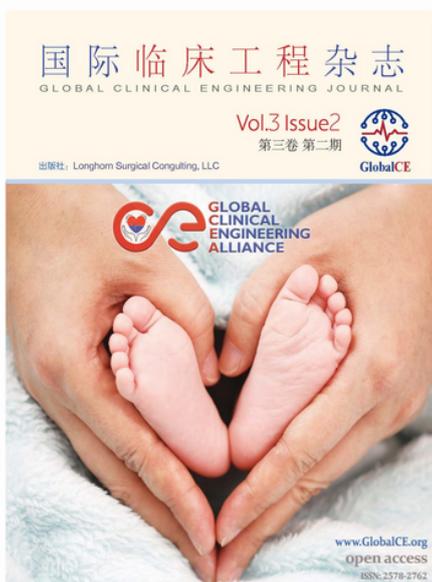
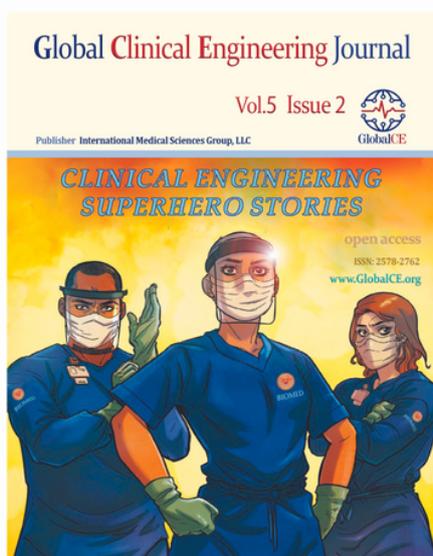
EVERYONE BELONGS HERE





GLOBAL CE JOURNAL

The Global Clinical Engineering Journal (www.GlobalCE.org) is an online, free, independently governed, quarterly publication that is affiliated with GCEA and serves as its scientific publication outlet. **It is the only international Clinical Engineering Journal uniquely focused on clinical engineering and health technology management topics.** Of the several new features the Journal is publishing **simultaneous version in Chinese.** Clinical Engineering and health professionals are members of the distinguished Editorial Board. The community of volunteer reviewers is growing, standing now at over 400 and readership has grown steadily.



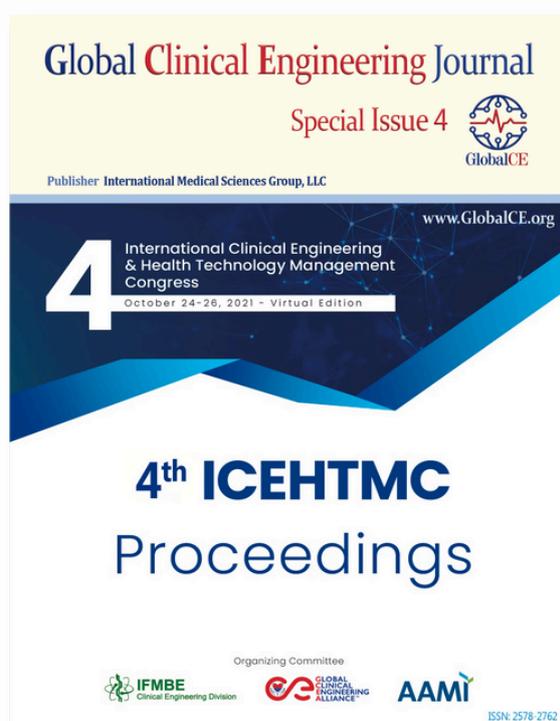


GLOBAL CE JOURNAL

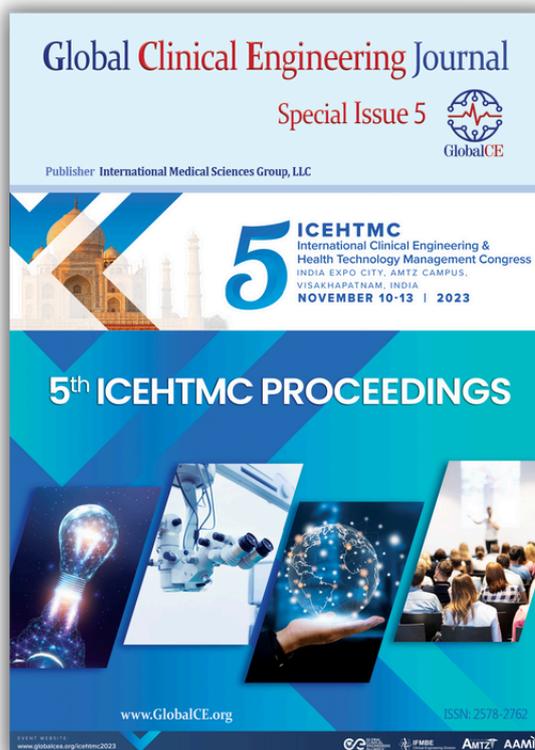
The Journal has undertaken the major work of collecting, formatting, and publishing the abstracts, keynote speeches, and short courses from the 3rd, 4th and 5th International Clinical Engineering & Health Technology Management Congress.



DOI: <https://doi.org/10.31354/globalce.v2i0>



DOI: <https://doi.org/10.31354/globalce.v4iS4>



DOI: <https://doi.org/10.31354/globalce.v5iS15>



GLOBAL CE JOURNAL

Major milestones for Global Clinical Engineering Journal!

Our journal is now indexed by **Scopus**, making our research articles discoverable by a vast audience of researchers and academics worldwide. This is a significant step in increasing the visibility of the only journal dedicated to Clinical Engineering and providing a wider platform for our authors.

While our initial **Scopus Citescore** is naturally low, we view this as an exciting starting point. With your continued support, we're confident that Global Clinical Engineering Journal will publish high-quality research that will be widely cited and influential in the field.



We are thrilled to announce that our **Global Clinical Engineering journal** has also been added to the prestigious **International Committee of Medical Journal Editors (ICMJE)** database on September 5, 2024! This recognizes that "Global Clinical Engineering Journal follows ICMJE Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals."

Don't miss out on the latest updates and breakthroughs in clinical engineering!

Stay Connected: <https://www.globalce.org/index.php/GlobalCE>

ICMJE: <https://www.icmje.org/journals-following-the-icmje-recommendations/>



Now, more than ever, you have all the reasons to publish your work in Global CE Journal!

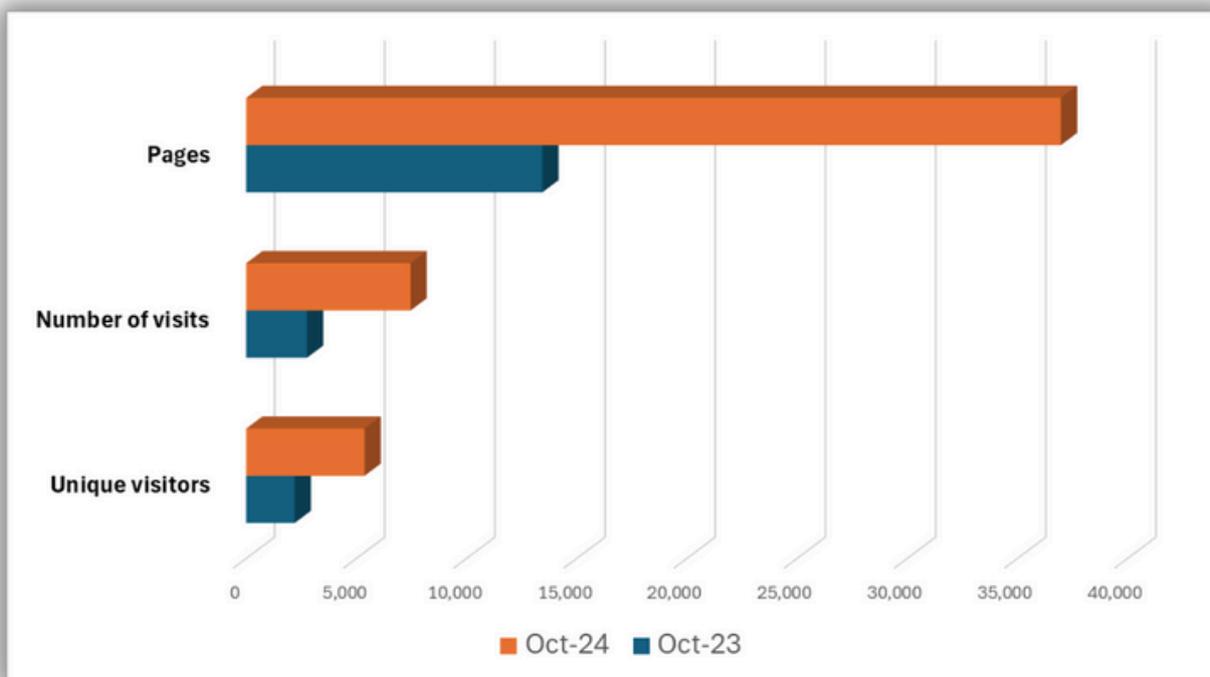


GLOBAL CE JOURNAL

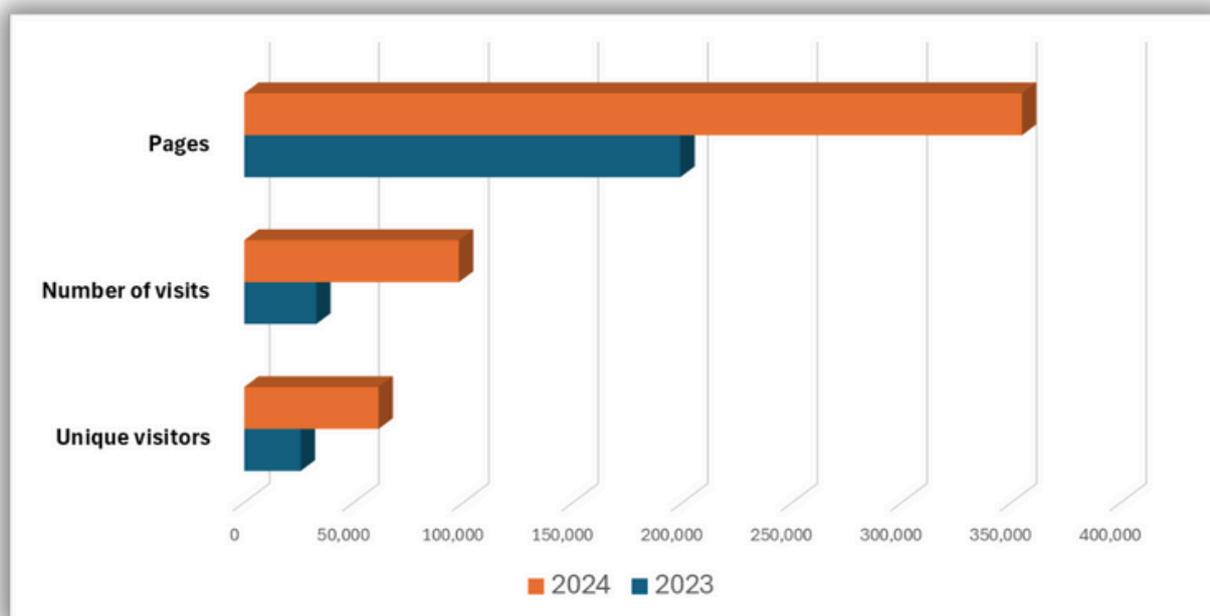
Visits have doubled in Oct 2024 compared to Oct 2023!

Reported period	Month Oct 2023				
First visit	01 Oct 2023 - 00:04				
Last visit	31 Oct 2023 - 23:54				
	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Viewed traffic *	2,200	2,764 (1.25 visits/visitor)	13,441 (4.86 Pages/Visit)	80,014 (28.94 Hits/Visit)	9.65 GB (3659.95 KB/Visit)

Reported period	Month Oct 2024				
First visit	01 Oct 2024 - 00:08				
Last visit	31 Oct 2024 - 23:19				
	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Viewed traffic *	5,373	7,460 (1.38 visits/visitor)	36,978 (4.95 Pages/Visit)	171,278 (22.95 Hits/Visit)	19.24 GB (2704.49 KB/Visit)



Visits almost tripled in 2024 compared to 2023!



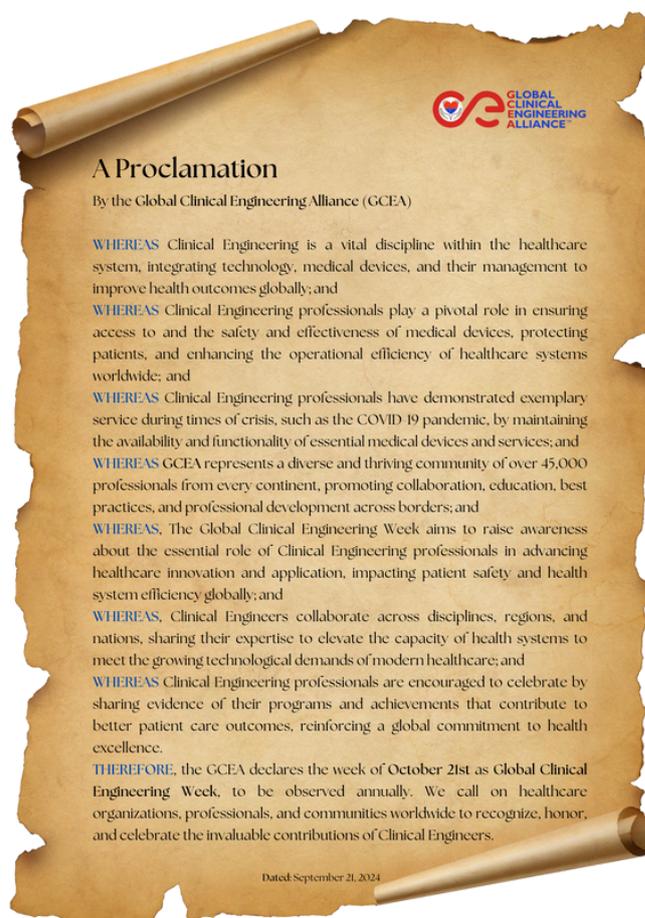
GLOBAL CLINICAL ENGINEERING WEEK CELEBRATION



In commemorating the date of the first International Clinical Engineering & Health Technology Management Congress (ICEHTMC) in 2015, viz. October 21, every year since has seen the clinical engineering global village celebrate contributions made **by clinical engineering professionals** around the world **towards** the improvement of patient care outcomes. The reasons for celebrating are evident and are listed in the publication that highlighted 400 such achievements: "Impact Analysis: CE Success Stories (Clinical Engineering Handbook, 2nd edition, Academic Press, Chapter 39, pp. 243-252, 2020). The number of countries participating has been grown from the first year to presently include every continent. Visitors have been educated and enjoy reading and watch videos archived at [GCEA | Global CE Day/Week \(globalcea.org\)](https://www.globalcea.org). Due to the large volume of submitted content and that October 21 may fall on weekends, we have expanded the celebration to a week, renaming the recognition event to **"Global Clinical Engineering Week Celebration"**.



Over 1,500,000 touches during the
2023 Global CE Day celebration
livestreamed from China



A Proclamation

By the Global Clinical Engineering Alliance (GCEA)

WHEREAS Clinical Engineering is a vital discipline within the healthcare system, integrating technology, medical devices, and their management to improve health outcomes globally; and

WHEREAS Clinical Engineering professionals play a pivotal role in ensuring access to and the safety and effectiveness of medical devices, protecting patients, and enhancing the operational efficiency of healthcare systems worldwide; and

WHEREAS Clinical Engineering professionals have demonstrated exemplary service during times of crisis, such as the COVID-19 pandemic, by maintaining the availability and functionality of essential medical devices and services; and

WHEREAS GCEA represents a diverse and thriving community of over 45,000 professionals from every continent, promoting collaboration, education, best practices, and professional development across borders; and

WHEREAS The Global Clinical Engineering Week aims to raise awareness about the essential role of Clinical Engineering professionals in advancing healthcare innovation and application, impacting patient safety and health system efficiency globally; and

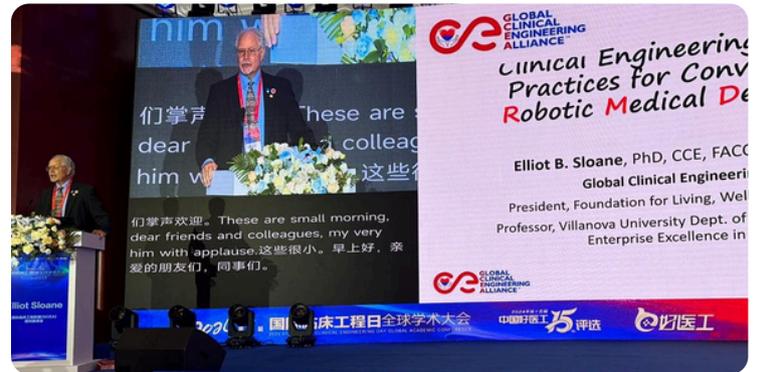
WHEREAS Clinical Engineers collaborate across disciplines, regions, and nations, sharing their expertise to elevate the capacity of health systems to meet the growing technological demands of modern healthcare; and

WHEREAS Clinical Engineering professionals are encouraged to celebrate by sharing evidence of their programs and achievements that contribute to better patient care outcomes, reinforcing a global commitment to health excellence.

THEREFORE, the GCEA declares the week of October 21st as Global Clinical Engineering Week, to be observed annually. We call on healthcare organizations, professionals, and communities worldwide to recognize, honor, and celebrate the invaluable contributions of Clinical Engineers.

Dated: September 21, 2024

Global CE Day/Week



The main scope of this annual celebration is to gather our international community for an event that will **focus on sharing international CE milestones** that will inspire others to keep pushing our profession into a new horizon.

We're thrilled to share that the 2024 9th Global Clinical Engineering Week, Global Academic Conference has been a resounding success!

Clinical Engineers from around the world have contributed their valuable insights and expertise, showcasing the incredible impact they have on patient care. Thank you to all international societies and colleagues who shared their accomplishments!



BREAKING NEWS

2024 THE 9TH GLOBAL CLINICAL ENGINEERING WEEK

GLOBAL CLINICAL ENGINEERING ALLIANCE

GLOBAL ACADEMIC CONFERENCE

ZHENGZHOU HENAN PROVINCE CHINA

Record breaking for the Online Streaming views

Main Forum:	657,497
Sub-forum 01:	129,363
Sub-forum 02:	128,105
Sub-forum 03:	144,997
Sub-forum 04:	118,023
Sub-forum 05:	73,901
Sub-forum 06:	76,055

GLOBAL CLINICAL ENGINEERING ALLIANCE DAY10.21

GLOBAL CLINICAL ENGINEERING ALLIANCE

YouTube Live Streaming on YouTube

GLOBAL CLINICAL ENGINEERING SUMMIT



The international community of clinical engineering professionals has historically lacked opportunities to identify whether common international challenges exist, and when possible to rank order their significance. This changed during the 1st ICEHTMC held in Hangzhou, China in October 2015.



30 experts from around the world convened, including representatives from WHO, and debated and articulated a list of common challenges. They proposed an action plan that resulted in collection of evidence-based achievements towards improvement of patient care outcomes made by clinical engineering professionals. This manuscript was published and presented at the World Health Assembly noting that **Together, we can make it Better.**

Every two years the Global CE Summit is convened as part of an ICEHTM Congress and the list of challenges is updated, ranked, and the next action plan drafted. From the modest start in Hangzhou the Summit has grown to a much larger event, the most recent being the 5th ICEHTMC hybrid congress held in November 2023 (5th ICEHTMC).

GCEA will continue to facilitate opportunities for recognizing the most important challenges to the CE village and together with other key stakeholders such as WHO will work to address them.



"Knowing that our service is meaningful makes my mission easier and myself the happiest person"

A quote from GCEA member



Promoting the discipline to other healthcare organizations

During the past year GCEA's vision, mission and purpose were presented and contributed to building professional consensus with other healthcare national Clinical Engineering conferences in Brazil, China, Italy, and Japan as well as with other healthcare disciplines through engagement at the 44th and 46th Congresses of the International Hospital Federation (IHF).

GCEA participation in the IHF

GCEA presented Clinical Engineering posters at the IHF International Congresses in Barcelona, Spain (2022) and Rio de Janeiro, Brazil (2024).




Clinical Engineering Accelerating Global Health System Digital Health Implementation

Thomas Judd, MS, PE, CCE-E, CPHQ, CPHIMS, FACCE, FHIMSS, FAIMBE
International Federation of Medical and Biological Engineering/Clinical Engineering Division Board Chair
Email: judd.tom@gmail.com

Via my national Clinical Engineering and Quality roles with Kaiser Permanente, global Health Technology roles with the World Health Organization, global HIMSS Digital Health leadership roles, and global professional federation board chair position – IFMBE CED, I note the full breadth of how our profession with its key alliances can accelerate deployment of digital health in developing countries. We see more LMIC adopting digital health strategies. Examples:




- 1. Meeting government Electronic Health Record (EHR) requirements**
 - ✓ eg, USA Meaningful Use-As a result, using EHR and medical device data to improve clinical outcomes
- 2. Developing the EHR CPOE (Computerized Practitioner Order Entry)**
 - ✓ Where best practice alerts and alarms drive evidence-based care
- 3. Social media interfaces driving Patient Engagement**
 - ✓ The rise of remote patient monitoring assists rapid and timely patient feedback
- 4. Interactive patient care at Point of Care (POC)**
 - ✓ As well as POC testing and measurement devices; POC in hospitals, clinics and at home
- 5. Data mining for Clinical Decision Support (CDS) tools**
 - Obtained from device information flowing into the EHR
- 6. Medical Device Integration (MDI) into EHR in hospitals and clinics**
 - ✓ There are 20 different device systems where MDI has helped Kaiser Permanente care delivery
- 7. Patient data from mobile device applications for chronic disease management**
 - ✓ Again the wireless transmission of remote patient monitoring assists timely diagnoses and treatment
- 8. Wireless infrastructure/RTLS**
 - ✓ Enabling real time location systems & RFID improving clinical workflows
- 9. Emerging Genomic patient evaluation**
 - ✓ Enabling several of the diverse sources, eg, panarome, metagenome, phenome, socialome, exposome, personal sensoromes
- 10. Facilitating Telehealth for improved access and e-Consult**
 - ✓ Using mobile medical device tools




Management of Health Technology – Lessons Learned from COVID-19

Towards an integrated concept of health and care services model: Value driven transformations

Yadin David¹, Thomas Judd²
Interim President, Global Clinical Engineering Alliance, ¹IFMBE/CED Chairman
Contact Details: David@BiomedEng.com

Background
Dependence of provisioning of healthcare services on health technology (HT) tools is at all-time high and expected to grow further. It's critical, therefore, that plans are adopted to optimally sustain capacity to manage such needed resources to meet the challenges experienced over the pandemic era. WHO reports that only 34% of member countries have HT national policy that is part of the national health program for [Medical devices \(who.int\)](https://www.who.int/)¹. These conditions suggest reasons that the world was ill-prepared, neither equipped with plans/programs, focusing on resilient technological capacity to meet healthcare services' needs as experienced during global devastation from COVID-19. Severe shortages of; temporary isolated care spaces, of staff protection supplies <https://www.who.int/news/2020/09/who-still-has-a-severe-shortage-of-medical-supplies>²; of mechanical ventilators³ and oxygen^{4,5} to support patient's airway, of vital monitoring and telehealth support, and poor supply chain of needed replacement parts – at local/regional/national/global levels all negatively impact patient's care outcomes⁶ and expectations.

Accomplished
In response to WHO request, in March 2020, GCEA⁷ and IFMBE⁸ developed rapid communication platform to network, educate, and timely exchange of best practices supporting clinical engineering practitioners facing technology issues at the point-of-care, created a COVID-19 Resources website, initiated hacking COVID-19 website for vetted technology-related publications that is updated daily, ramped up WhatsApp that reaches >200 members in nearly 70 countries. In addition, we initiated two virtual training programs, engaging multidisciplinary stake holders, on critical technology management topics^{9,10}, on Oxygen delivery, Ventilators, PPE, Cybersecurity, Vaccines, and pulse oximetry.

Each technical training session covered the following:

1. Clinical needs/requirements
2. Supply of necessary equipment & accessories, and operation / support
3. Availability of support/maintenance materials, eg, Operator and Service Manual in correct language.
4. Specific training for safe/effective operation, integration, and support
5. Coordination of related Critical Topic activities at local care delivery & national levels
6. Decontamination and Disinfection, sterilization protocol
7. Systems approach and safety management for all of the above

Lessons learned

- Need to address better policies and coordination to optimally manage all phases of technology life-cycle from innovation, to manufacturing, commissioning, servicing and use.
- HT assets registry assessment, that is continuously updated, clinically and technically ranked, and its management sourced at each level local/regional/national/global lead to more efficient allocation of limited resources and system resiliency.
- Promotion of open system support of local engineers to timely access international supply chains that facilitate procurement critical medical products, replacement parts, accessories, and service data.
- Provisioning of virtual training in multiple linguistics to increase local capacity of engineers/technicians to maintain performance of medical product/systems in patient-ready state.
- Benefits from international alliance that focuses on management of point-of-care technologies, and its life-cycle, will facilitate promotion of local production, adoption of best practices, and expediting resolution by sharing of "problem already solved elsewhere". Launching of dedicated Global Clinical Engineering Alliance during the pandemic already delivered results by engaging clinical engineering expertise from point-of-care to assess innovative technologies submitted to WHO to address COVID-19 needs in low resources regions¹¹.
- Critical need for healthcare decision-makers to engage the expertise of clinical engineering practitioners in the development and implementation of disaster preparedness plans thus improving system resiliency and predictable care outcomes.
- Call to engage healthcare decision-makers and clinical engineering capacity in joint programs improving resources utilization and outcomes.



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World Health Organization (WHO)

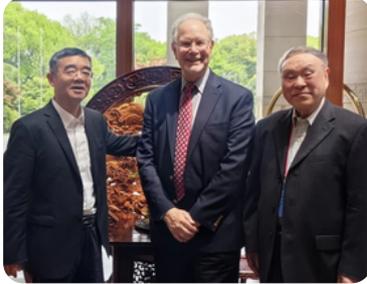
GCEA's expertise was recognized by the WHO through three significant contracts that included contributions to the development of the 2021 and 2022 Compendiums. AC members Thomas Judd and Yadin David, along with many GCEA and CED members, collaborated with WHO counterparts to conduct field evaluations of healthcare innovations within a tight timeline. These projects required over 1,000 hours of volunteer work and contributed \$62,000 to the GCEA treasury. Appreciation is extended to all involved in these essential COVID-19 related efforts.

Following these successful initiatives, GCEA AC member Stefano Bergamasco and MedTech Projects completed another WHO project last year, supporting the development and revision of content for the WHO Priority Medical Device Packages Information System (MeDevPacks). Now, GCEA has applied to become a Non-State Actor member of WHO—a status that, if granted, would give GCEA a unique international platform to collaborate directly with Ministries of Health worldwide.





Promoting the discipline to Member Organizations



Healths - Station 2

GLOBAL CLINICAL ENGINEERING ALLIANCE

A Sustainable Health Technologies Innovation Model To Improve Low Resource Settings (LRS) Clinical Outcomes

Presenter: Stefano Bergamasco, GCEA Advisory Council, WHO Consultant
Co-Author: Trade David (GCEA President) & Tom Judd (GCEA Liaison Director)

Introduction

- Access to innovations in health technologies and the capacity to implement them locally is a pillar identified by the World Health Organization's (WHO) healthcare delivery strategy.
- Health innovation aims to develop and deliver new/enhanced policies, systems, products, technologies, services, and delivery methods to improve health and clinical outcomes.
- Medical devices, oxygen sources, digital health tools, and personalized medicine are defined as health technologies (HT) that have the potential to improve health outcomes and improve efficiency.
- However, access to high quality, safe, appropriate, and affordable health technologies is severely limited in low resource settings (LRS).

Method

- The authors participated in two rapid WHO evidence-based assessments (EBAs) with a team that addressed the following assessment dimensions:
 - clinical
 - specification comparison
 - regulatory compliance
 - technology evidence, health technologies and engineering innovation
 - and intellectual property and potential of local production.
- resulting in two WHO Innovation Compendia published in 2022.
- Our global professional organization GCEA contracted with WHO to conduct these assessments and voluntarily engaged 100 reviewers to conduct on-the-ground evaluation of the various products for the EBAs.
- The 2022 Compendium presents manufacturers/developers' multi-disciplinary assessment results of 15 Health Technologies (HT) commercially available (7), or prototypes (8).
- The Compendium sheds light on advanced technologies that are not yet available in LRS and can be used to inform adoption decisions.
- It also aims to foster greater collaboration between donors, technology developers, and health systems to increase investment in health technologies.

Health technologies



Online Presence



The GCEA is an international not-for-profit organization that represents

the Clinical Engineering field worldwide and guides its evolution.



26 Projects Delivered

EHTMC, Global CE Summit, Global CE Journal, WHO Innovation, and more!

6 Volumes Published

in the only global journal dedicated to Clinical Engineering.

15 Council Members

International experts that represent every continent in the world.

6 International Recognition Awards

For Clinical Engineering Outstanding Contributions and Discoveries.

In a world fundamentally transformed by the Covid pandemic, where rapid communication and online networking have become the norm, individuals and organizations now live, interact, learn, work, socialize, and entertain themselves primarily through digital channels.

Consequently, GCEA has created a vibrant presence within the 'internet of things' by launching a dedicated website, engaging in social media outreach, offering a streaming video channel, and implementing electronic email campaigns. The GCEA website (www.GlobalCEA.org) serves as a valuable resource for current information.



GCEA Social media recorded more than **3,130 Touches** and Mailing Campaigns recorded more than **280K Touches** in 2023-2024.

In total GCEA website reached more than **3,500,000 Touches** in 2023-2024 and **10,500 views** in YouTube.

Secretary General's report

It has been an honour to serve as Secretary General in my first year with the Global Clinical Engineering Alliance (GCEA). Working alongside such an inspiring leadership team and getting to know our amazing members has been both a privilege and a learning experience. I am deeply grateful for the support and commitment of everyone in this organization, which has driven our shared vision to elevate clinical engineering on a global scale.

My focus this year has been on strengthening our committees, enhancing partnerships with member organizations, and ensuring our operational resources provide maximum value. These initiatives are critical to GCEA's continued growth and the delivery of high-impact resources for our members.

KEY ACHIEVEMENTS

a. Enhancing Members Engagement and Coverage

Recognizing the importance of active and well-staffed committees for GCEA's success, a call was initiated to all members for recruitment of volunteers to serve on our committees. This outreach aimed to bring fresh perspectives into our working groups, increase member engagement, and ensure committees had sufficient capacity to operate effectively. Through the recruitment of enthusiastic members, we've bolstered the work of our committees, allowing us to expand our initiatives and enhance the quality of resources and support provided to our membership.

b. Strengthening Partnerships with Member Organizations

To amplify GCEA's reach and impact, an initiative to reach out to member organizations with a proposal for closer collaboration. The goal was to create a more integrated approach where GCEA's materials—such as reports, guidelines, and training resources—are actively shared with the members of these organizations. These discussions also focused on advocating for a more collaborative partnership model, ensuring that GCEA's work aligns with the priorities of our member organizations and provides tangible benefits to their members. This strategy has not only expanded our audience but has also deepened our relationships with key stakeholders in the clinical engineering field and at the same time provided them with international exposure

c. Reviewing and Ensuring Value for Resources Across Platforms

As part of a broader operational review, I conducted an evaluation of all platforms and tools currently used by GCEA. This included assessing the functionality, cost-effectiveness, and overall impact of each paid platform to ensure that we are cost effective. Through this review, opportunities were identified to streamline our technology stack and reallocate resources to platforms that offer greater benefit to our members. This exercise has helped GCEA become more financially sustainable and operationally efficient, freeing up funds that can be redirected toward high-priority initiatives.

Secretary General's report

GOALS FOR THE COMING YEAR

- Expanding **Collaborative Partnerships** to ensure GCEA's resources reach an even broader audience, enhancing our impact on the clinical engineering profession.
- Introducing a **Monthly Newsletter** to keep members informed with the latest news, updates, new initiatives, and resources from GCEA. This initiative will improve communication and engagement across our community, providing valuable insights on industry trends and organizational updates. It will also strengthen regional collaborations as members become better informed about opportunities in their region. A sample newsletter is attached to this report for reference.
- **Continuous Operational Review** to ensure resources are aligned with strategic objectives and deliver maximum value, as well as exploring innovative tools that could support GCEA's mission more effectively.
- **Forge partnerships with academic institutions** to promote clinical engineering as a field of study, offer internships, and collaborate on research projects.
- **Host joint events and workshops with industry and academic partners** to foster innovation, training, and knowledge-sharing.
- **Recruit new members from the healthcare technology industry**, including companies that manufacture, distribute, and manage medical devices.

This year has been a remarkable journey of organizational growth, collaboration, and impact for the Global Clinical Engineering Alliance. We are incredibly proud of what have been accomplished together and inspired by the dedication of our members, partners, volunteers, and leadership team. As we move forward, I am excited to build on this foundation and continue advancing clinical Engineering globally. Thank you for the opportunity to serve as your Secretary General — I look forward to another successful year ahead.



GCEA Members Newsletter


GCEA Quarterly News Letter
Issue 01 | January 2025



GCEA Longterm Strategy

The Global Clinical Engineering Alliance (GCEA) is steadfast in its commitment to advancing the field of clinical engineering, fostering collaboration, and setting a path for future growth that embraces innovation, education, and global standards. As we step into a new year, we outline our comprehensive long-term strategy designed to address the evolving landscape of healthcare technology and clinical practice. This strategy focuses on five key pillars:

[Read more](#)

- In This Issue:
- GCEA Journal: Building Better Healthcare
- Updates from the GCEA
- Member Spotlight

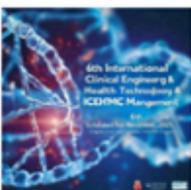
- Global Clinical Engineering News
- Research & Innovation Corner: AI in Healthcare
- Upcoming Events & Conferences
- Professional Development
- Member News



AAMI Signs MOU with GCEA

The Association for the Advancement of Medical Instrumentation (AAMI) and the Global Clinical Engineering Alliance (GCEA) have signed a Memorandum of Understanding (MOU) to collaborate on global healthcare technology management (HTM) and clinical engineering (CE) efforts. This partnership aims to enhance standards, best practices, and educational programs worldwide. AAMI and GCEA will co-market events, create educational resources, and expand international networks for HTM professionals. This agreement highlights the commitment of both organizations to improving healthcare delivery through innovation, safety, and technology management.

[Read more](#)



Save the Date! Novemb 2025
6th ICEHTMC
A new opportunity for CE Development & Networking
The most important Clinical Engineering event worldwide!

[Read more](#)



GCEA Technician/ Technologist Leadership Award

[Read more](#)



GCEA Jang YH/WH Global Academic Award for outstanding contributions to the Clinical Engineering discipline

[Read more](#)



Update from Annual member's meeting

[Read more](#)



Member's Section

[Read more](#)



Global Clinical Engineering Alliance, 8271 SE 57th St, Mercer Island, WA 98040 United States
[Website](#) [Contact us](#)

Call for Content: Contribute to the GCEA April 2025 Newsletter!

We invite all GCEA members to share news, insights, and announcements for inclusion in our upcoming April 2025 newsletter. This is an excellent opportunity to showcase your work, highlight recent projects, or share advancements and updates from your organization with the broader clinical engineering community. Please submit your content by March 20th to ensure your contributions are included in the next issue. Articles, event announcements, research summaries, and thought leadership pieces are all welcome.

Let's make the April edition a true reflection of the vibrant, global GCEA community! Send your contributions or inquiries to:



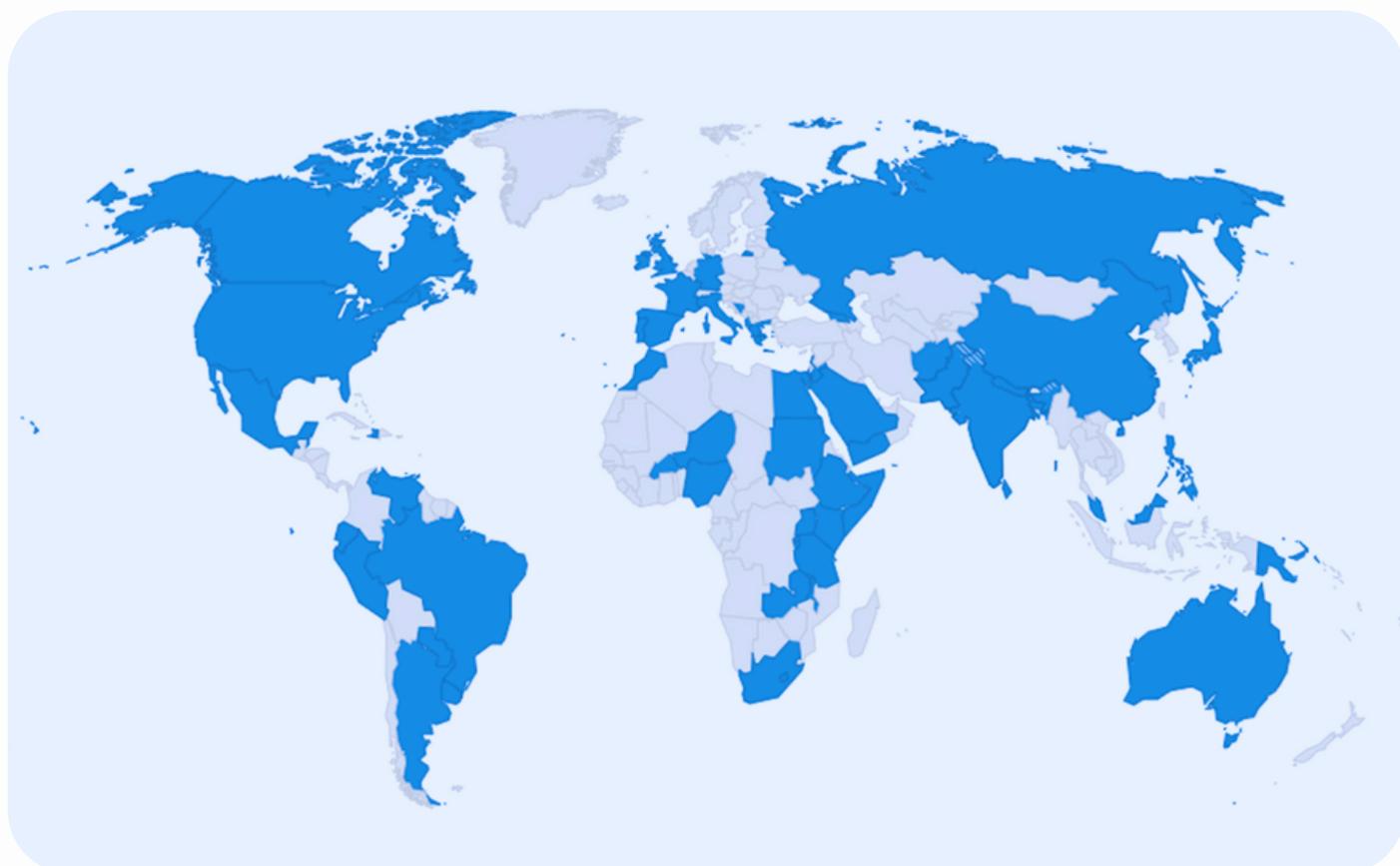
Membership benefits

NETWORKING & SUPPORT FOR SOCIETIES & INDIVIDUALS

Join a global network of colleagues and create professional relationships.

- a. Become a recognized partner of the global Clinical (CE) community.
- b. Lend your advice to the largest CE dedicated organization.
- c. Gain an opportunity to expand your horizon and even more importantly to influence the direction that CE field is evolving.
- d. Opportunity to join conferences, and opinion generating focus groups developing professional knowledge, policies, and recommendations.
- e. Demonstrated by the key program 5th ICEHTMC with 110 countries submitting, November 2023.
- f. Create and increase collaboration among CE practitioners as well as between CE-BME and other stakeholders in the healthcare delivery system.
 - i. GCEA presented at IHE (September) and ISQua (September) in 2024.
 - ii. GCEA presented and was represented in many international meetings & events.
- g. Opportunity to promote your country/region to the international community as part of “Country Focus” program to be featured monthly on GCEA website and newsletter.
- h. Gain access to participate in the global CE Research through GCEA’ Healthcare Technology Foundation.

59 MEMBER COUNTRIES



Membership benefits

STRENGTHENING THE INTERESTS OF THE GLOBAL CE COMMUNITY

- a. **Engage** with projects sharing knowledge and seeking solutions to shared work challenges.
- b. **Voice opinion** about international proclamations and best practices.
- c. **Contribute** evidence for the relationship between healthcare technology management (HTM) and patient outcomes.
- d. **Participate** in the development, application, and advocacy for an international professional credentialing program. Receive GCEA support for developing local programs, including credentialing.
- e. Participate in the development and further adoption of CE undergraduate and graduate academic programs around the world.
- f. Join opportunity to represent CE-BME-HT content to Ministries of Health through WHO Medical Devices Unit, and GCEA application for becoming a WHO Non-State Actor.

SOCIETIES

1. **Access** to resources for assisting creation and administrating of new professional CE organization.
2. **Receive** invitations to participate in the GCEA professional development and training programs.
3. Invited to **participate** in GCEA annual meeting and tell your career story.
4. **Transform** your initiatives to global stage.

COMMITTEES

Volunteer in one of the many Committees works of GCEA.

- Professional development/Education committee
- Membership committee
- Awards Committee
- Publications: Global CE Journal reviewers and contributed authors



Educational Program



RESOURCES FOR THE CE PROFESSIONALS, PUBLIC, AND STUDENTS!

In 2023-2024 GCEA conducted **9 WEBINARS** and **14 Technology Snapshots** engaging more than **65 experts** in CE fields and an immense interest from the audience worldwide: **>3000 registrants** and **>1500 live participants**

WEBINAR
Digital Health in LMICs
Wednesday **SEP 11** | 2:00pm UTC | 10am NY
Register for free: <https://tinyurl.com/Digital-Health-LMICs>

WEBINAR
2024 World Health Innovation Fellowship
Wednesday **MAY 29** | 6:30pm IST | 9am NY
Register for free: <https://tinyurl.com/WHI-fellowship>

TECHNOLOGY SNAPSHOTS
JOANNE PHILLIPS
DNP, RN, CPPS, NEA-BC, FCHS
Vanderbilt University, USA
www.GlobalCEA.org

TECHNOLOGY SNAPSHOTS
NATA ZAMAN
Transformation Director Team New Hospital Programme NHS England
www.GlobalCEA.org

Nurses and Engineers: Partnering for Patient Safety

Live on YouTube: **May 15, 2024** | 2 pm Universal Time | 10 am Eastern Time

Building Better Healthcare: The Vital Role of Clinical Engineering in Hospital Construction

Live on YouTube: **March 27, 2024** | 2 pm Universal Time | 10 am Eastern Time

WEBINAR
Imaging Equipment: PET Scanner
Now enjoy the new **LIVE translated captions**
Wednesday **MARCH 1** | 3pm UTC | 10am NY
Register for free: <https://tinyurl.com/gceaaom>

WEBINAR
Risk Management for Medical Technology in Home Healthcare
With **LIVE translated captions**
Wednesday **SEPTEMBER 6** | 2pm UTC | 10am NY
Register for free: <https://tinyurl.com/GCEA-HomeMDs>

TECHNOLOGY SNAPSHOTS
JORGE PEREIRA
Regional Director of ABECLIN
www.GlobalCEA.org

TECHNOLOGY SNAPSHOTS
GERALD ZION
Consulting Biomedical Engineer
www.GlobalCEA.org

Water management for hospitals environment

Live on YouTube: **February 21, 2024** | 3 pm Universal Time | 10 am Eastern Time

Introduction to MEQA and International Electrical Safety Standards

Live on YouTube: **August 14, 2024** | 2 pm Universal Time | 10 am Eastern Time

Educational Program



COMMITTEE MEMBERS

Saide Calil – Brazil	Richard Gonzales - USA	Ricardo Silva - USA
Panagiotis Bamidis - Greece	Jorge Pereira- Brazil	Stefanie Warren - UK
Nicolas Pallikarakis - Greece	Frank Painter - USA	Zurab Sanikidze - Georgia
James Wear - USA	Fred Hosea - Equator	Raquel Canovas - Spain
Mladen Poluta – South Africa	Jangadesh Kumar - India	Stefano Bergamasco - Italy

**TOTAL NUMBER OF EDUCATIONAL HOURS
POSTED: AROUND 450 HOURS**

Under the leadership of Past-President Saide Calil, the **Educational Program Committee (EPC)** was created and overcame barriers by maintaining laser sharp focus on addressing the needs for internationally delivered educational capacity building programs. In general, the EPC pursues both online and in-person activities and capacity-building opportunities. These includes online webinars, technology snapshots, and short courses.

Other activities under development during **2024**:

- a) **Short Courses Project**; with the objective to produce courses (around 6 hours each) about medical devices imaging principles, operation and safety
- b) **International Health Technology Management course Project**; with the objective to produce a HTM training course of about 36 hours lectures.
- c) Development of a book about “**Disaster preparedness**”
- d) Development of a book about “**Hospital safety**”

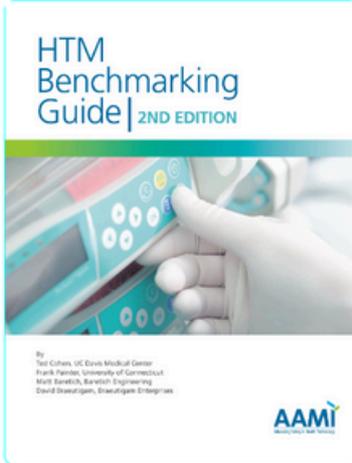
The strategy used by GCEA to call for more volunteers and get additional help for its Committees resulted was quite successful for the EPC and it admitted 9 more volunteers that started to work after August 2024.

HTM Benchmarking Guide | 2ND EDITION

Generously translated by



ENGLISH



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SPANISH



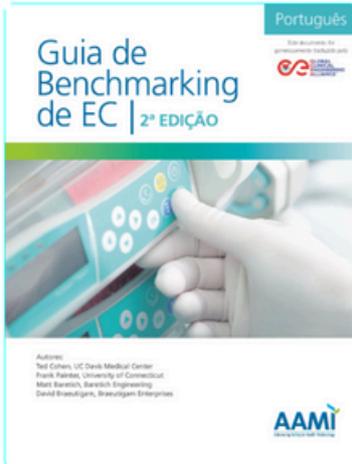
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JAPANESE



ARABIC



RUSSIAN



TÜRKIYE



GCEA HTF Foundation



The HTF transitioned into the GCEA structure created the opportunity for the amazing work of the last 22 years to be expanded and developed to support the needs of the global clinical engineering community. The vast experience and expertise developed over many years was now available to be focused on the GCEA mission to maximize the benefits for patients and their care providers from Clinical Engineering expertise and healthcare technology, while minimizing technology risks and costs. This year has been one of transition – an internal review of governance, process and structure has resulted in a new look HTF; flexible, ambitious and enthusiastically anticipating making a genuine impact on the international stage.

Armed with a renewed constitution, with a mix of new and experienced members and with the support of the GCEA leadership team, HTF has set about establishing the groundwork necessary to launch an exciting program for 2025.

Our core function, include new calls for funding, is to provide funding and management support for education and research projects that lead to safe, effective, patient-centred, timely, efficient and equitable application of healthcare technology. We have now established the mechanisms needed to run a number of calls for funding each year, including: Open Calls (small grants to support projects anywhere within the GCEA scope); Collaborative calls (in partnership with other organisations, charities and professional bodies); Responsive calls (targeted to meet the needs of specific themes) and Sponsored Calls (on behalf of external third parties where this aligns with GCEA goals). look out for these calls early next year and do contact us directly if you have suggestions for themes or specific projects areas that HTF might support in the future.

Supporting such projects and programs requires money, of course. HTF has reserves 'in the bank' to manage the initial batch of projects but needs to encourage further donations if we are to continue to support projects in the future. We have therefore reviewed and renewed our fundraising strategy and a new campaign to generate donations is being implemented. With a strong record of success and an ambitious plan, we are confident of generating the funds we need. **You are welcome to help us meet our goal.**

A major achievement from HTF's past is the **Alarms Survey**. The first survey was in 2006, followed up with a second survey in 2011, and a third in 2016. This year, GCEA HTF formed a subgroup to review the survey, to bring it up to date and consider how best to make it more appropriate for the international stage. This work is nearing completion and GCEA HTF expect to launch the latest version of the Alarms Survey early in 2025.

Building on the success of the past and taking now advantage of the GCEA structures and huge global reach, HTF looks forward to 2025 with confidence to continue to support improving healthcare through technology.

RECOGNIZING EXCELLENCE

To promote models for excellence in international cooperation, GCEA established a recognition program. This program aims to honor, share and promote exemplary models for organizations and individuals whose expertise, passion and practice made outstanding contributions that impact the field of clinical engineering and/or healthcare outcomes. This recognition program has been created and led by the Awards Committee under Ms. Keiko Fukuta's leadership in accordance with the GCEA Bylaws. Candidates for future awards can be proposed by submitting information online at [GCEA Awards](#).

A new Global Clinical Engineering Alliance Award was added in 2024



Global Academic Award for Outstanding Contributions to the Clinical Engineering Discipline



GCEA Collaborative Capacity Building Award



GCEA Technician/Technologist Leadership Award



GCEA Jiang Yuanhai & William Hyman Global Academic Award for outstanding contributions to the Clinical Engineering discipline

Congratulations to all winners!

ANNUAL MEMBERSHIP COMMITTEE REPORT

Chair: James O. Wear, USA; **Committee Members:** Saide Calil, Brazil; Tom Judd, USA; Nicolas Pallikarakis, Greece; Mladen Poluta, South Africa; Keiko Fukuta, Japan; Payal Mandot, Canada; Freddy Matamoros Espinoza, Ecuador.

The GCEA Membership Committee is responsible for managing applications from organizations and individuals seeking membership in the Global Clinical Engineering Alliance (GCEA). Our mission is to assess applications, ensure compliance with GCEA standards, and maintain a strong and qualified membership base.

APPLICATION REVIEW PROCESS

All applications undergo a thorough review process to confirm that:

1. Required information is fully provided and submitted in English.
2. Organizational applications align with the appropriate membership category and meet GCEA criteria.

Individual applications, in cases where no member organization exists in the applicant's country, are vetted to ensure applicants meet the GCEA Bylaw requirements and are active clinical engineering practitioners. The Committee's recommendations are then submitted to the GCEA Advisory Council for approval.

NEW MEMBER ORGANIZATIONS FOR 2024

We are pleased to welcome the following organizations as GCEA Member Organizations this year:

- **NIMHANS** - National Institute of Mental Health and Neurosciences, India (1,500 members)
- **BWITA** - Beijing Wise Innovation Technology Alliance, China (34 members)
- **ACHPS** - Afghanistan Center for Health and Peace Studies, Afghanistan
- **EBMES** - Egyptian Biomedical Engineering Society, Egypt (80 members)
- **CED** - Clinical Engineering Department, Kimshealth, India (32 members)
- **NSBCE** - Nigerian Society for Biomedical & Clinical Engineering, Nigeria (60 members)
- **MEEMPA** - Medical Electrical Equipment Maintenance Professionals Association, Saudi Arabia (300 members)
- **CEAB** - Clinical Engineering Association of Bangladesh (84 members)

INDIVIDUAL MEMBERSHIPS

When an individual application is received, the Chair ensures there is no existing member organization (MO) in the applicant's country. If there is an MO, the applicant is encouraged to join that organization. Non-rejected applications are then submitted to the Committee for review and, if approved, a recommendation is forwarded to the Advisory Council.

In 2024, we received 30 individual membership applications, of which 27 were approved. Upon payment of their membership fees, new members are added to the GCEA website, and receive a welcome package, along with guidance on establishing local organizations in their regions to further strengthen GCEA's global network.

CLOSING REMARKS

Through our membership efforts, we are building a vibrant and collaborative global community, with a commitment to advancing clinical engineering practices worldwide. We thank our Committee members for their diligent work and look forward to continued growth and engagement in 2025. E Pluribus Unum = From many, comes one!

Global Clinical Engineering Alliance (GCEA) is a not-for-profit international organization, registered in the State of Washington, USA.

GCEA BUDGET HIGHLIGHTS ON OCTOBER 31, 2024

GCEA BANK ACCOUNTS

CASH BALANCE	\$90,685.10 US
DEBT BALANCE	\$82.66 US
<hr/>	
TOTAL CASH BALANCE	\$90,602.44 US



DONATIONS

\$16,000 US



IN KIND CONTRIBUTIONS



AC, OFFICERS, LIAISON, AND VOLUNTEERS' ACTIVITIES **7,108 HOURS**

October 31, 2024

BALANCE

\$90,602.44 US



FUTURE GOALS

Universal Clinical Engineering Federation (UCEF)

GCEA International CE Corps (ICEC) has merged with **Universal Clinical Engineering Federation (UCEF)** and was elected to serve as the first **UCEF Chairperson of the Board**.

Preparing for a resuscitation response to mass disasters, such as major earthquakes or industrial disasters, requires revisions of present local, regional, and national disaster plans.

This new initiative is a highly specialized, multidisciplinary team that supports healthcare infrastructure and medical technology systems in the preparations for, during, and aftermath of a disaster. Clinical engineers, technologists, technicians, together with other healthcare groups will be mobilized to strengthen, restore, repair, and optimize medical equipment and facilities, ensuring that critical healthcare services are maintained or restored. They work in coordination with other disaster response units, international organizations, and local authorities to ensure rapid deployment and effective intervention.

UCEF leverages a network of skilled volunteers who play a vital role in promoting peace and development by supporting healthcare systems worldwide. By deploying qualified, highly skilled, and motivated individuals, the group aligns its efforts with the 2030 Agenda for Sustainable Development Goals, addressing health and resilience needs on a global scale.

The group's volunteers are administered by the **UCEF Executive Board** and are dedicated to delivering the highest standards of medical device services. In their assignments, volunteers embody commitment, expertise, and a code of conduct focused on effective support for communities in need. Through their actions, **UCEF volunteers** foster sustainability and resilience in healthcare systems, making an impactful contribution to global health stability and emergency preparedness. Its key functions and responsibilities include:

1. **Pre disaster preparation**
2. **Deployment administration**
3. **Assessment and Rapid Response**
4. **Technical Support and Repair**
5. **Infrastructure Restoration**
6. **Training and Capacity Building**
7. **Coordination with Other Humanitarian Agencies**
8. **Post-Deployment Evaluation and Reporting**



Would you like to join and become a volunteer?

Please contact us at secretary@globalcea.org

FUTURE GOALS

Global Clinical Engineering Program Accreditation

A new international collaboration for unifying the CE body of practice, professional competence, and recognition for our discipline

The development and sustainability of accessible, safe, and high-quality healthcare services rely heavily on effective, competent, and innovative clinical engineering and health technology management programs. This Global Clinical Engineering Program Accreditation (GCEPA) is designed to meet these needs by setting standards based on widely accepted guide, benchmarks, and leveraging the expertise of evaluators with extensive experience in clinical engineering.

The GCEPA framework is anchored in a robust Standard of Practice that systematically enhances program outcomes. This initiative stems from a collaborative effort between the Global Clinical Engineering Alliance ([GCEA](#)) and its member association, the Canadian National Medical and Biological Society ([CMBES](#)). Together, a specialized working group of clinical engineering experts will transform Canada's Clinical Engineering Standards of Practice into an internationally recognized, standards-based assessment tool. This tool provides specific benchmarks for evaluating programs at healthcare institutions, such as hospitals, surgical centers, and clinics, as well as service providers within the healthcare industry.

Further strengthening its credibility, GCEA has explored partnership with the International Society for Quality in Health Care ([ISQua](#)) to jointly develop educational programs and is engaging with the ISQua External Evaluation Association ([IEEA](#)) to pursue global recognition under the International Accreditation Programme ([IAP](#)). As the first clinical engineering accreditation program developed and managed by clinical engineers, GCEPA is in the final stages of development and aims to launch in late 2025. Multiple hospital-based programs have already expressed interest in being evaluated by this pioneering GCEPA initiative.



Would you like to join and become an evaluator?

Please contact us at secretary@globalcea.org



GLOBAL CE JOURNAL

Announcing New Enhancements to the Global Clinical Engineering Journal

We are excited to unveil that in 2025 new enhancements to the Global Clinical Engineering Journal, including an expanded editorial team and additional new Editorial Board members with clinical medicine and engineering expertise from around the world. Our goal is to solidify our position as the leading international journal dedicated solely to the field of Clinical Engineering, managed by clinical engineers for clinical engineers.

With new features like Special Issue format, Research and Review articles, the Journal aims to be the premier source for cutting-edge research, knowledge, and practical applications in the discipline. We are committed to elevating the Journal's recognition, working towards indexing, and achieving the impact factor it deserves.

Our partnerships with scientific and engineering events will establish the Journal as the “go-to” publication for sharing advances in clinical engineering. We offer both experienced and emerging authors a unique platform to publish and disseminate their work.

To achieve these goals, we invite all clinical engineering professionals to get involved—read the Journal, volunteer as reviewers, and submit your manuscripts to your Journal. **Together, we can advance the field and make it better!**

