

Critical Care Research Academy

Improving patient care through research

PROGRAM DESCRIPTION

The Critical Care Research Academy is an 18-month multi-disciplinary capacity-building program supported by the World Federation of Intensive and Critical Care (WFICC). It aims to increase the research knowledge and skills of critical care practitioners. The participants will learn how to develop, conduct, and publish their own research. The program will involve webinars, workshops, group discussions, and 1:1 meetings, which will be conducted virtually. The participants will learn how to conduct their own research project, as well as complete a research abstract and manuscript. Each participant will be matched with a mentor to gain guidance throughout the research journey.

LEARNING OBJECTIVES

During the program, participants will be able to:

- 1. Develop a focused research question.
- 2. Complete a research plan/proposal to submit to the local ethics board committee.
- 3. Conduct the clinical research project at their institution.
- 4. Analyze and interpret the findings of the research project.
- 5. Complete a research abstract and poster that meet the standards for conference submission.
- 6. Deliver an oral abstract presentation.
- 7. Understand the requirements for writing a manuscript.
- 8. Complete a research manuscript for publication.

PROGRAM LOCATION

The program will be conducted virtually. Participants who complete all requirements of the program will be invited to an in-person workshop to present their research and to complete their manuscripts. The workshop will be at the hosting institutions, King Hussein Cancer Center in Jordan. The participants' travel and accommodation expenses will be covered by a grant from the WFICC.

ELGIBILITY CRITERIA

The following are the eligibility criteria:

- Critical care health-care professional.
- Practicing in an institution in Africa.
- With strong motivation to develop their knowledge and skills in conducting clinical research.

APPLICATION

Applicants are required to complete the application form, in which they describe their interest in research as well as provide a brief outline of a research project that they plan to conduct during the training program.

In addition, applicants are required to submit a letter of support from the applicant's institution.

Please email all application requirements to: **WFICCResearchAcademy@gmail.com**. The deadline for accepting applications is **June 1, 2023.**

No more than 20 participants will be accepted. A selection will be made based on the:

- Personal motivation, demonstrated in the application form.
- Research idea, as described in the application form.
- Institutional support to the participant, based on the submitted letter of support.
- Critical care clinical experience.

REGISTRATION FEES

The registration fees for participating in the Critical Care Research Academy will be covered by a grant from the WFICC, as well as through the volunteer work of researchers who are dedicated to the mission of promoting research and capacity building.

PROGRAM SCHEDULE & EXPECTATIONS

Attendance of all online sessions and the requirements is required for the completion of this program. At the start, we will have group meetings scheduled almost weekly. The frequency of the group meetings will then be reduced to monthly and each participant would meet 1:1 with the mentor, based on the needs of the participant and the research project.

PROGRAM FACULTY



Lama Nazer, PharmD, BCPS, FCCM Research Academy Program Director King Hussein Cancer Center/ Jordan

Dr Nazer is Clinical Affairs Manager and Critical Care Clinical Pharmacy Specialist at King Hussein Cancer Center in Amman, Jordan. She has over 20 years of experience in critical care at various institutions within the US and Jordan. She is actively involved with various local and international societies, and served as the vice president and president of the Middle East Critical Care Association. She is a clinician, researcher, and educator, with a passion for capacity building. Her areas of research interest include sepsis, pharmacokinetics, and prediction models.



Kwame Asante Akuamoah-Boateng, DNP, ACNP-BC, MSN, FCCM Mary Baldwin University School of Nursing/ USA

Dr. Akuamoah-Boateng is a DNP-prepared nurse practitioner and an American College of Critical Care Medicine Fellow. He is assistant professor at Mary Baldwin University School of Nursing Adult-Gerontology Acute Care Nurse Practitioner Program. In 2021 he served as co-founder of the Global Outreach Knowledge Education Group with the SCCM and has led international initiatives to train nurses and physicians in critical care medicine in Low Middle-Income Countries. Dr. Akuamoah-Boateng's research interests include addressing burnout among clinicians in critical care medicine, prevalence of frailty in the non-geriatric patient population and evaluating mitigating measures to decrease adverse patient outcomes in this population.



Gary L. Cochran, PharmD, SM University of Nebraska Medical Center/ USA

Dr. Cochran is an associate professor at the University of Nebraska Medical Center. (UNMC) He received a B.S. degree in business administration from the University of Nebraska in 1991, Pharm.D. from UNMC, and M.S. degree in epidemiology from the Harvard School of Public Health. He completed a pharmacy practice residency and pharmacoeconomics and outcomes research fellowship at UNMC. Dr. Cochran's research goals are to improve the safety and quality of health care through advancing and disseminating knowledge that will affect clinical care and health policy. His current research evaluates the effectiveness of medication use systems and health information technologies to improve safety and quality.



Ognjen Gajic, MD MSc FCCM FCCP

Mayo Clinic/ USA

Dr. Gajic practices and teaches critical care medicine at Mayo Clinic in Rochester, Minnesota. Dr Gajic has published more than 400 peer-reviewed articles and book chapters related to critical care medicine. He has served as a chair of the Discovery Research Network of the Society of Critical Care Medicine. Dr Gajic's research team pioneered the concepts of improving critical care and outcomes with intelligent ICU environments. Dr Gajic and his team designed and implemented one of the largest international quality improvement projects in critical care, the CERTAIN (Checklist for Early Recognition And Treatment of Acute Illness & iNjury) which can be found on: www.icertain.org



Bhargavi Gali, MBBS, FANZCA, FJFICM, EMBA, GAICD

Mayo Clinic/ USA

Dr. Gali is an associate professor at Mayo Clinic in Rochester in Rochester, Minnesota. She is an anesthesiologist and intensivist caring for both medical and surgical ICU patients. She has a background in both critical care education and quality. Her areas of focus include inpatient quality and safety, perioperative complications, and risk mitigation.



Rahul Kashyap, MBBS, MBA Mayo Clinic/ USA

Dr. Kashyap is the medical director for research for WellSpan Health at York, PA. He most recently held the roles of division director of research for TriStar Division at HCA Healthcare in Nashville and assistant professor of Anesthesiology and Critical Care Medicine, and research scientist at Mayo Clinic in Rochester, Minnesota. Dr. Kashyap has over 15 years of clinical research and quality improvement experience, with more than 200 cited publications. He has led several national and international research projects, most notably, one of the largest registries called VIRUS: COVID-19 Registry.



Donald Mlombwa, RN Zomba Central Hospital/ Malawi

Mr. Donald Mlombwa is a Nursing Officer incharge for Intensive Care Unit at Zomba Central Hospital, Malawi. He is an uprising researcher and has experience working as a research assistant in both clinical and social research. He holds certificates in the following areas: Research methodology from Africa Center of Excellence in Public Health and Herbal Medicine (ACEPHEM, 2018) and Introduction to clinical research, research question and data quality management obtained online from Global Health Network (2018-2022). Donald Mlombwa is also a collaborating author in two published articles "Essential Emergency in Critical Care; a consensus among global expert and Promoting Parental engagement in comprehensive cleft care in LMIC.



John Marshall, MD, FRCSC University of Toronto/ Canada

Dr. Marshall is a Professor of Surgery at the University of Toronto, an intensivist at St. Michael's Hospital, and a Senior Investigator in the Keenan Research Centre for Biomedical Science. He has published over 400 manuscripts and book chapters. He is the founding chair of the International Forum of Acute Care Trialists (InFACT), a global network of 37 investigator-led critical care clinical research groups and vice-chair of the International Severe Acute Respiratory and Emerging Infections Consortium. He has given more than 1000 invited lectures at more than 500 meetings around the world, and is an Associate Editor of the journals Critical Care Medicine and Critical Care.



Brenda Morrow, University of Cape Town, South Africa

Dr. Morrow is a Physiotherapist and Full Professor in the Department of Paediatrics, University of Cape Town (UCT), South Africa. She is an active clinician-scientist with a special interests in interdisciplinary paediatric critical care practice and research; cardiopulmonary rehabilitation; palliative care; and medical ethics. Dr. Morrow has over 115 peer reviewed publications, 13 book chapters, and numerous national and international congress presentations. She is currently President of the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS) and President-Elect of the Critical Care Society of Southern African Journal of Critical Care and Senior Associate Editor of Pediatric Critical Care Medicine



Keith M Olsen, PharmD, FCP, FCCM University of Nebraska Medical Center/ USA

Dr. Olsen is the Dean and Professor of Pharmacy in the College of Pharmacy and a Critical Care Specialist, at the University of Nebraska Medical Center, Omaha, Nebraska. Previously he served for three years in the same role at the University of Arkansas for Medical Sciences, Little Rock, Arkansas. He earned his PharmD and completed a residency at the University of Nebraska Medical Center. He is recognized as a fellow of the American College of Clinical Pharmacy and the American College of Critical Care Medicine. He has published over 350 peer-reviewed publications, abstracts, and book chapters in the areas of critical care pharmacotherapy and infectious diseases. He is one of the co-developers of an Infectious Diseases Rapid Diagnostic Certification Program for Pharmacists.



Sonal Pannu, MD Ohio State University/ USA

Dr. Pannu is an Associate Professor in Pulmonary and Critical Care Medicine at The Ohio State University in Columbus, Ohio. She completed Pulmonary and Critical Care training at the Mayo clinic as well as a M.S. degree in Clinical Research. She is an NIH funded investigator and has served as the chair of the Research Education and Training Workgroup, Discovery Network with Society of Care Medicine. She is passionate about critical care research; her research interest focuses on improving outcomes of mechanically ventilated critically ill patients with a focus on oxygenation.



Rachel Parke, RN, PhD Auckland City Hospital/ New Zealand

Dr. Parke is Nurse Senior Research Fellow in the Cardiothoracic and Vascular Intensive Care Unit, Auckland City Hospital and Associate Head of Postgraduate Research in the School of Nursing, University of Auckland. Dr Parke's research addresses areas of importance to clinicians, patients, and families. She designs novel interventions to improve patient-centered outcomes for cardiothoracic surgical and intensive care patients, including programs of research into oxygen therapy, acute kidney injury, and fluid management. She has published over 140 articles. She is passionate about establishing the next generation of clinician researchers and leads two research courses (BASIC Clinical Research and BASIC Research Coordination).



Luis Felipe Reyes Velasco, MDThe University of La Sabana/ Colombia

Dr. Reyes Velasco is a renowned Critical Care physician with a PhD in Translational Science. He is recognized as an expert in various fields such as pneumonia, invasive pneumococcal disease, vaccines, sepsis, and antibiotic resistance. He has extensive experience in leading, designing, and conducting large multinational, randomized clinical trials for Vaccines, Antibiotics, and other treatments for infectious diseases and severely ill patients.



Hagir Sulieman, MD University of Khartoum/ Sudan

Dr. Suleiman is assistant professor at the University of Khartoum, faculty of medicine (department of internal medicine). She is head of the department of ICU at Soba University hospital and member of the adult ICU board at Sudan Medicinal Specialization board (SMSB). She is also member of the research committee at the medicine board of SMSB.



Ayat Taqash, BS Biostat King Hussein Cancer Center/ Jordan

Ms Ayat is a highly experienced biostatistician with a strong passion for datadriven decision-making. She has the ability to develop and implement clinical study designs, analyze data, and provide actionable insights. She has around 12 years' experience in data analysis, interpretation and research and contributed to more than 20 medical publications in peer-reviewed journals. She has a keen eye for details, and always ensure that the work is delivered on time with high standards.



Wasswa William, Eng. Mbarara University of Science and Technology/ Uganda

Dr Wasswa William is a biomedical engineer, researcher and AI leader. He is a senior lecturer and head of the Department of Biomedical Sciences and Engineering at Mbarara University of Science and Technology. He leads the Advanced Medical Imaging and Artificial Intelligence Lab. Dr William is the chair of the African Union Artificial Intelligence Continental Strategy (AUAICS); CEO and Co-founder of Global Auto Systems LTD Uganda. He is interested in digital health innovations that provide universal health coverage, especially reaching the unreached.



Janice Zimmerman, MD, FCCM Critical Care Consulting/ USA

Dr. Janice L. Zimmerman is immediate Past President of the World Federation of Intensive and Critical Care. She is a Master of the American College of Physicians and Society of Critical Care Medicine and a Fellow of the Royal College of Physicians. She has been a member of the Surviving Sepsis Campaign Guidelines Committee since its inception and was one of the originators of the Fundamental Critical Care Support course for SCCM. She regularly teaches at regional, national and international critical care meetings and board review courses and publishes peer-reviewed articles and book chapters.