



THE AGA KHAN UNIVERSITY

VIRTUAL SYMPOSIUM



5th Annual Early-Career Health Researchers' Symposium

Theme: Integrating ethical research into practice and policy

NOVEMBER 25 & 26, 2021

#AKUResearchDay
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MESSAGE FROM *Dean, School Of Nursing & Midwifery*



Welcome to the 5th Annual Early-Career Researchers' Symposium. This event could not have come at a better time, particularly as we begin to embrace the possibility of a different, post-pandemic reality while still dealing with everyday challenges and demands for healthcare. I am glad that as scientists, researchers, academicians, problem-solvers, innovators and students, we can meet to discuss solutions to the problems facing the communities we serve.

The Early-Career Health Researchers' Symposium is happening at a time when researchers globally have been working together to develop vaccines and other interventions to prevent and alleviate the worst effects of the COVID-19 pandemic. It is also happening at a time when the International Council of Nurses (ICN) code of ethics has put a spotlight on the role of nurses in global health and the ethical dilemmas the profession faces. This is why the theme this year, "Integrating ethical research into practice and policy" is very significant. The questions that we all have to face on a daily basis in practice, education and policy require that we come together, drawing on our respective expertise with the common goal of integrating ethical research in what we do.

This collaborative event between the School of Nursing and Midwifery and Medical College echoes the significance of an inter-professional approach to healthcare, research, practice, policy and education. Nurses and midwives form up to 59% of the world's healthcare workforce and account for more than 80% of healthcare workers in East Africa. This means that from a healthcare workforce perspective, they are impacted the most by the outcomes of healthcare research and the policies put in place as a result. I wish to challenge nurses and midwives today to engage in knowledge generation and translation as there is hardly a more effective way to grow our profession's scope of knowledge. I am happy to note that our students from the School of Nursing and Midwifery and particularly our inaugural Masters in Advanced Practice Nursing students have taken up the challenge and are an active part of the Symposium.

In this time and age, any health concern worldwide has the potential to spread rapidly across the globe. What remains for us to do is to grow the body of indigenous evidence by growing a critical mass of researchers in our part of the world supported by infrastructure that facilitates the development, dissemination and utilization of research for the region and beyond. I call on all participants to think critically and creatively on how we can jointly, as members of the healthcare team, deal with a myriad of challenges within the realities of our healthcare system in a bid to make the Sustainable Development Goals and Universal Health Coverage a reality.

We look forward to engaging with you, learning from you and sharing with you throughout the conference. Remember that the pandemic is not past us yet. Vaccinate. Vaccinate. Vaccinate and stay safe!

Dr Eunice Ndirangu
Associate Professor and Dean, School of Nursing and Midwifery, East Africa

MESSAGE FROM *Dean, Medical College, East Africa*



The Aga Khan University (AKU) Medical College, East Africa welcomes you to the 5th Annual Early-Career Health Researchers' Symposium, 2021. For the second year running, the Symposium will be blended which is a reflection of our resilience as an institution as we continue to leverage on technology due to the threat posed by the COVID-19 pandemic.

This year's theme, "Integrating ethical research into practice and policy," is in line with AKU's vision to become a global research university through engaging in clinical practice, teaching and enhancing of our research programmes across our campuses. As an institution, we want to focus on high quality research with high impact on the population of East Africa and beyond that would be strongly aligned with national health research priorities for

relevance and impact.

As an institution, we are determined to grow into a world-leading Medical College located here in East Africa, providing the highest quality of health professional education, state of the art evidence-based health care, and research programmes that actually influences policy and practice globally.

Importantly, this year's Symposium comes at a time when the Medical College, East Africa, envisions to expand our academic offerings, including the expansion of our postgraduate programmes with additional Residency, Masters, Doctorate and Post-doctoral programmes. Therefore, we seek to complete the evolution of our College into a modern Medical School located in a vibrant Academic Health Centre with the introduction of the Bachelor of Medicine and Bachelor of Surgery programme in the near future.

I take this opportunity to welcome all of you to this year's Symposium. I hope that this year's Symposium will encourage all of you to strive to be lifelong learners and leaders applying best practices in research in order to address the health care priorities and needs to reduce the burden of disease in Africa and to impact the health of the communities that we serve.

Prof Lukoye Atwoli
Professor and Dean, Medical College, East Africa

MESSAGE FROM
Associate Dean, Research, Faculty of Health Sciences



I am delighted to welcome you all to this 5th Annual Early Career Health Researchers' Symposium. The last four symposia have seen this annual activity grow in popularity, attracting large number of abstracts submission from within and beyond Aga Khan University. I am happy to announce that the proceedings of this particular symposium will now be published as a book by the AKU library for the first time.

The theme of the symposium this year is "Integrating Ethical Research into Practice and Policy". The choice enabled acceptance of a wide range of research topics cutting across basic, clinical and public health research. Conducting of ethical research, as we know, has been stretched to the limits by the covid-19 pandemic that exposed our systems to a conflict

from urgent need for effective treatments over extremely tight time periods to save lives.

The overwhelming pressure to deliver results tested resolve of ethics review committees in balancing of common good and need to protect interests of individual study subjects. Imbalance in vaccine access to low and middle income countries exposed global inequities. Despite many challenges, enormous volumes of new knowledge have been generated over an extremely short period of time saving millions of lives. This annual symposium now presents a great opportunity for the budding researchers to show case the contribution that their work has made towards improvement of health status of the populations. We expect, even in virtual meeting, that participants will take advantage of the chat box to network with colleagues to extend their networks.

As the patron of the conference steering committee, I would like to acknowledge the efforts of the chair of the committee – Dr Shahin Sayed, the entire committee, secretariat and reviewers for the hard work and personal time sacrifice in preparation of this symposium.

I hope poster and oral presenters selected to present their work will enjoy the honor of sharing their work with a highly receptive and friendly audience.

Dr William M. Macharia

Professor and Associate Dean Research, Faculty of Health Sciences,

Ambassador, Association of Academic Health Centers International, East Africa

MESSAGE FROM
The Chair, 5th Annual Early-Career Health Researchers' Symposium Committee



being cognizant of the ethical implications of the research in the community and the environment. The COVID-19 pandemic exemplifies the important role of research in propelling humanity forward; the accelerated pace of research into novel vaccine development and its subsequent roll out has avoided what could have easily become a major global catastrophe in living memory. However, these innovations and discoveries take time, passion, commitment and great perseverance to achieve as early researchers inculcating these habits will ensure your future success in research.

I would urge each and every participant to advocate for research through communicating the science we do. Only then can we hope to better the health and livelihood of communities that we serve in this part of the world. We wish to congratulate the presenters for being selected, and as has been the tradition, we will be awarding the overall winner and runner up prizes for both the oral and poster presentations.

I take this opportunity to sincerely thank and acknowledge the efforts of the organising committee that comprised members from the AKU Research Office, Medical College and SONAM faculty from Nairobi, Dar es Salaam and Kampala campuses and the Communications and Operations team.

We hope you will enjoy the rich programme we have lined up and look forward to your active participation and feedback during the two-day Early-Career Health Researchers' Symposium.

Dr Shahin Sayed

Associate Professor, Chair of the Department of Pathology, Medical College, East Africa.

I am pleased to invite you to our 5th Annual Early-Career Health Researchers' Symposium. This important scientific event will be addressed by two keynote speakers setting the stage for excellent learning opportunities for early career researchers in advancing their understanding of scientific research and encouraging scientific discourse. The symposium will also give those in their early part of their research journey an opportunity to hear from their experienced colleagues.

Whereas no platform can replace the time-honored in-person interactions, as has become the norm, this year's Symposium is a hybrid event with many exciting presentations by budding scientists who will be addressing the theme of the meeting, "Integrating Ethical Research into Practice and Policy."

Every research journey begins with the curious mind that asks questions, looks for answers, innovates, and implements while

PROGRAMME

Thursday, November 25, 2021

DAY 1: Moderator – Dr Asim Jamal

5:00 – 5:05 PM	<p>Welcome Remarks Dr Shahin Sayed, <i>Chair, Organizing Committee, Associate Professor, Chair of the Department of Pathology, Medical College, East Africa, Aga Khan University</i></p>
5:05 - 5:15 PM	<p>Introductory Remarks Dr Eunice Ndirangu, <i>Dean, School of Nursing and Midwifery, East Africa, Aga Khan University</i></p> <p>Prof Lukoye Atwoli, <i>Dean, Medical College, East Africa, Aga Khan University</i></p>
5:15 – 5:45 PM	<p>Session 1: COVID-19</p> <p>Moderator: Prof Rodney Adam</p> <p>Each presentation will be 10 minutes.</p> <p>High Patient Satisfaction and Acceptability of Tele-Neurology Consultations at a Regional Tertiary Referral Hospital in Kenya During the COVID-19 Pandemic Dr Fazal Yakub, <i>Aga Khan University</i></p> <p>Pre-admission Testing for SARS COV-2 as a Screening Strategy for COVID-19: A retrospective Chart Review of Patients Admitted at Aga Khan University Hospital Nairobi. David Odada, <i>Aga Khan University</i></p> <p>A pilot phase IB/II study of Whole-Lung Low Dose Radiation Therapy (LDRT) in the treatment of severe COVID 19 pneumonia on (or requiring) mechanical ventilator support. Dr Karishma Sharma, <i>Aga Khan University</i></p>
5:45 – 6:00 PM	Question & Answer Session
6:00 – 6:15 PM	<p>Keynote Address</p> <p>Dr Mwikali Ndolo, MBChB, MMed (Radiology), FACR <i>Neuroradiology, Alabama, USA</i></p>

6:20 – 6:40 PM	<p>Session 2: KAP surveys</p> <p>Moderator: Dr Wesley Too</p> <p>Knowledge and practice towards cardiovascular diseases prevention among residents of Ainamoi Constituency, Kericho County. Sharon Chepkemoi Sang, <i>The Catholic University of Eastern Africa</i></p> <p>Knowledge Attitude and Practice of Basic Trauma Life Support Among Boda Boda riders in Kilifi County, Kenya Dr Faraj Alkizim, <i>Centres for Health and Education Programmes</i></p>
6:40 – 6:55 PM	Question & Answer Session
6:55 – 7.00 PM	Closing Remarks

PROGRAMME

Friday, November 26, 2021

DAY 2: Moderator - Dr Kamran Hameed

5:00 – 5:05 PM	Opening Remarks
5:05 – 5:25 PM	<p>Session 3: Pregnancy-related research I</p> <p>Moderator: Dr Joseph Musana</p> <p>Each presentation will be 10 minutes.</p> <p>A comparison of Intergrowth-21st method to Hadlock formula in estimating fetal weight in low-risk pregnancies.</p> <p>Dr Esther Simiyu, <i>Aga Khan University</i></p> <p>Planned delivery at 37 weeks gestation versus expectant management for non-severe chronic hypertension, A systematic review.</p> <p>Dr Jackson Njuguna, <i>Aga Khan University</i></p>
5:25 – 5:35 PM	Question & Answer Session
5:35 – 5:50 PM	<p>Keynote Address</p> <p>Dr Prof Akbar K. Waljee MD, MSc. <i>Professor of Gastroenterology and Internal Medicine University of Michigan</i></p>
5:50 – 6:10 PM	<p>Session 4: Pregnancy-related research II</p> <p>Moderator: Dr Mariam Noorani</p> <p>Each presentation will be 10 minutes.</p> <p>Decision to delivery interval of emergency caesarean section and the associated maternal and neonatal outcomes at Thika level five Hospital.</p> <p>Dr Machoka Kanario Penina, <i>Jomo Kenyatta University of Agriculture and Technology</i></p> <p>Outcomes of neonates born through meconium stained amniotic fluid at Thika 5 hospital, Kiambu county</p> <p>Fedinand Nyabuto, <i>Jomo Kenyatta University of Agriculture and Technology</i></p>

6:10 - 6:20 PM	Question & Answer Session
6:20 – 6:50 PM	<p>Session 5: Antimicrobials</p> <p>Moderator: Dr Felix Riunga</p> <p>Each presentation will be 10 minutes.</p> <p>Prevalence of Antibiotics prescription among women during childbirth in Pumwani Maternity Hospital, Aga Khan University Hospital and Kihara Sub-County Hospital: A retrospective review.</p> <p>Dr George Ireri, <i>Aga Khan University</i></p> <p>Evaluation of prescribing practices at Thika Level 5 Hospital Outpatient Department using the World Health Organization Prescribing Indicators.</p> <p>Dr Allan Tulienge, <i>Jomo Kenyatta University of Agriculture and Technology</i></p> <p>Comparative Evaluation of ADAGIO and VITEK Automated Antimicrobial Susceptibility Testing Platforms using a collection of Kenyan Clinical Isolates.</p> <p>Dr Justin Nyasinga, <i>Aga Khan University</i></p>
6:50 – 7:00 PM	Question & Answer Session
7:00 – 7:20 PM	<p>Judges feedback</p> <p>Presentation of awards</p>
7:20 – 7:30PM	<p>Vote of thanks and Closing remarks</p> <p>Prof William Macharia, <i>Associate Dean Research, Faculty of Health Sciences, Medical College, East Africa, Aga Khan University Ambassador, Association of Academic Health Centers International, East Africa</i></p>

BIOGRAPHIES

KEYNOTE SPEAKERS



Dr J. Mwikali Ndolo, MD

She is a Consultant Radiologist currently working in a private practice group in Huntsville, Alabama USA. After completing her radiology residency at Aga Khan University Hospital, Nairobi, she attended Vanderbilt University Medical Center, USA. At Vanderbilt University, Dr Ndolo obtained fellowships in Pediatric Radiology, Pediatric Neuroradiology, Nuclear Medicine and Adult Neuroradiology.

Dr Ndolo completed her medical degree at the University of Nairobi, Kenya. She is a member of the Radiological Society of North America (RSNA), American College of Radiology (ACR), American Society of Pediatric Neuroradiology (ASPNR), American Society of Head and Neck Radiology (ASHNR) among others. She currently sits on the Learning Library Committee of the American Society of Pediatric Neuroradiology (ASPNR).

She has co-authored several publications in high impact journals and books, including a chapter in Caffey's book of Pediatric Radiology. She is currently co-authoring a book titled 'Key Differentials in Pediatric Neuroradiology'. Dr Ndolo has presented at several international conferences including the American Roentgen Ray Society and Society of Pediatric Radiology meetings.



Dr Akbar K. Waljee, MD

He is a Professor in the Department of Internal Medicine at the University of Michigan (UM). Dr Waljee serves as the Associate Director of the Data and Methods Hub and the Director of the Michigan Integrated Center for Health Analytics and Medical Prediction (MiCHAMP) both at the UM Institute for Healthcare Policy & Innovation (IHPI). He also serves as the Director of the Veteran Affairs Center for Clinical Management Research's (VA CCMR) Prediction Modeling Unit (PMU) and, clinically, he is the Director of the Inflammatory Bowel Disease clinic both at the VA Ann Arbor Healthcare System.

Dr Waljee was born in Kenya and moved to the United States to complete his undergraduate and medical degrees at Emory University in Atlanta, GA. He then completed his residency and fellowship at the University of Michigan. Dr Waljee holds a Master's degree in Health Services Research from the University of Michigan and completed a health care policy fellowship at the Center for Health and Research Transformation.

Dr Waljee's work is at the forefront of using machine learning and deep learning techniques to improve healthcare access, quality, and efficiency (high-value care) in resource constrained settings. He uses novel machine learning techniques to implement decision support systems and tools that facilitate more personalized care for disease management and healthcare utilization to ultimately deliver efficient, effective and equitable therapy for chronic diseases. To test and advance these principles, he built operational programs that are guiding—and improving—patient care in costly gastroenterology and liver disorders in under-resourced settings both domestically and abroad.

JUDGES



**Dr Rosalind Parkes-Ratanshi, MBBS MA PhD
FFPH FRCP DipGUM DFSRH**

Dr Rosalind combines her experience as a physician and a researcher to improve health systems with an emphasis on HIV and sexually transmitted infections in Uganda. She is the Founding Director of the Academy for Health Innovation, Uganda based at the Infectious Diseases Institute, Makerere University and is a Principal Research Associate at University of Cambridge, UK.

She is a principal investigator on various multi-disciplinary studies investigating the impact of digital technologies. She and her team developed the ARTAccess App tool which allows HIV drug delivery in private pharmacies which is being scaled nationwide in Uganda. Their Call for Life tool has supported the Ugandan Ministry of Health COVID-19 response through automated calls to COVID contacts and psycho-social support to those affected as well as those living with HIV and TB.

Her Medical Drones project is piloting HIV drug delivery, and COVID and STI sample delivery to remote areas. Rosalind is a strong advocate for multi-disciplinary work, for example a History of HIV project brought together with artists, social scientists and biomedical teams to create an exhibition at the Uganda Museum and now a film showing on TV stations around Uganda.

She is a module leader for Masters in Global Health at Cambridge and is a PhD and Masters supervisor at Makerere and Cambridge. She serves the Aga Khan Development Network in various voluntary roles as Chairperson of Aga Khan Health Services in Uganda and a member of the Aga Khan Development Network Testing Sub-committee, and is Vice President of the Aga Khan National Council for Uganda.



Prof Julius Otieno Oyugi, MSc, PhD

Prof Oyugi started his career as a researcher in 1989 working as a laboratory technician for the University of Nairobi/University of Manitoba HIV/AIDS research group. At the time, HIV/AIDS pandemic had just been around and there were no vaccines and

effective treatment. The group was conducting serious research on HIV/AIDS with the view to getting information that could be used to either develop a vaccine or treatment for AIDS virus.

It was during this period that Prof Oyugi developed interest in Virology and discovery research. He enrolled at the Kenya Polytechnic for a Diploma in Medical Laboratory Sciences, then Higher Diploma in Virology at Kenya Medical Training Institute. In 2003, Prof Oyugi joined Liverpool University in the UK to take a Masters degree in Medical Virology. In 2004, he joined the University of Manitoba to take a PhD course in Virology which he finished in 2009.

During these period, Prof Oyugi spent time investing in acquiring new knowledge and required to become a researcher. The journey was not easy and he had to quit employment in order to move to another country to acquire new knowledge. His advice to young people who would like to become scientists is to never give up as long as you have a plan on how you will reach your destination.



Dr Unab Khan, MBBS, MSc

Dr Unab Khan is an Associate Professor of Family Medicine. After returning to her alma mater as Chair of Family Medicine, Dr Khan has focused on improving quality of healthcare in primary care settings within and beyond AKU. Along with Family Medicine faculty and BDL-NET colleagues, they developed a blended-learning certification course for general practitioners.

The modular course uses multiple online teaching and learning concepts that allow busy physicians to update their clinical knowledge and improve skills in an engaging and flexible manner. In 2020, FamMed Essentials was endorsed by the WHO as a “Regional Diploma in Family Medicine”. The course remains very popular, and to date, more than 150 participants have completed the course.

5th Annual Early-Career Health Researchers’ Symposium Committee Members

Steering Committee

1. Dr Shahin Sayed, Chair
2. Dr Cyrus Matheka, Vice Chair
3. Prof William Macharia, Patron
4. Dr Asim Jamal, Scientific Sub-Committee Lead
5. Mr Patrick Gumo, Communications Sub-Committee Lead
6. Dr Anthony Ngugi, Member
7. Dr Rose Ndumia, Member
8. Dr Jasmit Shah, Member
9. Dr Kamran Hameed, Member
10. Prof Marleen Temmerman, Member
11. Prof Wesley Too, Member
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3. Ms Jacqueline Ndegwa, Member

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