



AIC
Kijabe
Hospital
Health Care to God's Glory

4th

Annual Research Day

15 | 03 | 2024

VITALCONNECTION
CONNECTED



THE ITINERARY

Event starts at 7am(Tea will be provided)
Raffle prize drawing for all who arrive on time
Prize for best poster

CONTACT

researchcoord@kijabehospital.org

AT KIJABE HOSPITAL WE DO RESEARCH

Welcome Note

Welcome to 4th Annual Kijabe Research Day, a day dedicated to recognize and celebrate all the ways Kijabe Hospital is advancing the conversation on improving the quality of care, developing training for health care workers, and utilizing local data to address health care needs on the continent.

Come Learn About

WHO is doing research and quality improvement work at Kijabe.

WHAT type of things are they doing?

HOW to get involved in getting answers to questions that matter to you.

The poster presentations at Kijabe Research Day are designed to showcase ongoing work and provide a learning opportunity for everyone, including consultants, trainees, residents, and staff from various departments including clinical, nursing, finance, human resources, housekeeping, security, and the Kijabe College of Health Sciences.

Poster Presentations will have 5 thematic tracks, these include;

- Recently published work
- Completed research projects
- Quality Improvement Projects
- Medical education and training programs
- Work in progress (both quality improvement and research focused)

Note: Best Category of each thematic group will be awarded!!!

Research Day Program

Time	Event	Facilitator
7:00am-7:05am	Prayer/Opening ceremony	Dr. Arianna Shirk
7:05am -7:10am	Introduction to Kijabe Research department	Dr. Mary Adam
7:10am-7:15am	Raffle tickets award	
7:15am-8:00am	Oral Presentations (3 presentations)	
8:00am-8:30am	Special guest's celebrities' interviews	Dr. Arianna Shirk
8:30am-10:30am	Poster for judging [everyone with posters will be required to stand next to their poster]	Invited guests Research Celebrities
12:30 -1:30 pm	Lunch time interactions for thematic groups discussion	
	Solving Africa's problems using Africa's Data (Experts: Dr. Geoffrey Omuse, Dr. Jacinta Nzinga & Dr. Miriam Njoki)	Dr. Chege Macharia
	Quality Improvement and Implementation Science: Closing the Know- Do Gap (Experts: Dr. Meghan Kumar & Dr. Cyrus Mugo)	Dr. Watson Maina
	Stamping out Hospital Acquired Infections: Learning from our Data (Experts: Prof. Rodney Adam & Dr. Felix Riunga)	Grace Waceke
1:30pm-1:35pm	Awarding best posters	Invited Guests
1:35pm – 1:50pm	Share a Cake and Closing ceremony	Dr. Chege Macharia Dr. Arianna Shirk Dr. Peris Kiarie

Note: Posters will be available for viewing the whole day

Our Guests



Cyrus Mugo, MBChB, MPH, PhD

Dr Mugo is a senior research scientist at Kenyatta National Hospital. He has over ten years of experience in clinical/public health research, clinical practice, and training in the delivery of health services. He has also received training in medicine, global health, epidemiology, and implementation science. Dr Mugo is experienced in designing & managing research projects in HIV prevention, testing, treatment and treatment support, and infectious disease surveillance in Kenya and Nigeria. Highlights of his research work include studies on index case testing for the children and adolescents, implementation strategies for community roll-out of HIV self-testing among adolescents in Kenya, development of tools to guide transition of adolescents from pediatric to independent care; these studies directly informed HIV testing and treatment guidelines and policies in Kenya. Currently he is undertaking studies assessing social factors in adolescent HIV. He has more than 45 publications in high impact journals. Beyond grant writing, He is involved in mentorship of junior researchers at KNH and research project staff affiliated with KNH.

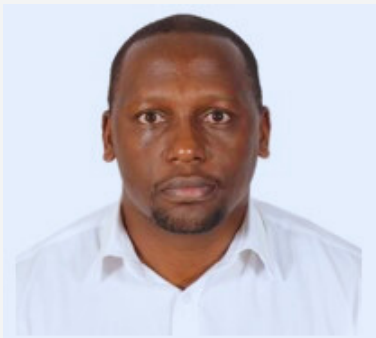
[View Cv https://bit.ly/4c67xqe](https://bit.ly/4c67xqe)



Jacinta Nzinga, BSC, MSC, PHD

Dr. Jacinta Nzinga is a post-doctoral social scientist with the KEMRI-Wellcome Trust Research Programme in Nairobi. She has a PHD in Health and Social Studies (University of Warwick) and a master's degree in global health (Oxford University). Jacinta is adjunct faculty with the institute of health care management at Strathmore Business School, Kenya and visiting lecturer at the University of Oxford, UK and Pwani University in Kenya. Her research work and interests are mainly in the areas of management of human resources for health, health policy analysis and the interpretive analysis of their implementation, organizational change and implementation of innovation, organizational behavior and clinical leadership and health system governance. Jacinta co-leads the ethnographic element of the Health Services that Deliver for Newborns (HSD-N) study. She recently won an HSRI development grant as a co-applicant to develop health workforce research on the role of nursing in the delivery of quality of care, focusing on nurse identity and nurse leadership.

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Geoffrey Amuka Omuse MBChB, MMed, PHD

Dr. Geoffrey Omuse is an Associate Professor and Consultant Clinical Pathologist at the Aga Khan University Hospital, Nairobi. He has a Bachelor of Medicine and Bachelor of Surgery undergraduate degree from the University of Nairobi, Master of Medicine in Clinical Pathology from Aga Khan University, PhD in Chemical Pathology from Stellenbosch University, Fellow of the College of Pathologists East Central and Southern Africa, and a Fellow of the Africa Research Excellence Fund. He is the immediate former Chair of the Kenya Association of Clinical Pathologists having served 2 terms. He has published over 50 articles in peer reviewed journals (H index 18), supervised over 20 MMed and MSc students. He has various research interests including laboratory reference intervals having been the Kenyan lead for the International Federation of Clinical Chemistry (IFCC) project on harmonization of reference intervals

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Felix Riunga, MBChB, MMed.

Dr. Riunga earned his medical degree from the University of Nairobi in 2006, and his Master of Medicine (Internal Medicine) from the Aga Khan University, Nairobi in 2014. He later pursued specialty training in Infectious Diseases at the Aga Khan University Hospital, Nairobi in conjunction with the University of British Columbia, Vancouver. Currently, Dr. Riunga serves as an Infectious Diseases consultant at the Aga Khan University Hospital, Nairobi. He has been involved in clinical trials involving treatment of COVID-19 with immunomodulation and treatment of HIV with injectable antiretroviral agents.

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Our Guests



Rodney D. Adam

Prof. Rodney D. Adam is an Infectious Disease Specialist with over 35-year work experience. He received his MD degree at the University of Illinois, USA in 1981 and his BA in Mathematics, Chemistry and Biology at Trinity International University, USA in 1976. He completed his training in Internal Medicine and Infectious Diseases as well as laboratory training in Molecular Parasitology before joining the University of Arizona College of Medicine faculty. He joined the department of pathology at Aga Khan University Hospital in 2012 where he has been working in the Microbiology section with a focus on molecular diagnostics, especially related to the diagnosis of infectious diseases. His current research interests include hospital-acquired infections and their prevention. Prof. Adam is interested in the correlation of the intestinal microbiota with a variety of adverse outcomes.

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Meghan Bruce Kumar, MSc,FHEA,PhD

Dr. Meghan is a health systems researcher whose research is strongly driven by health economics considerations of value and sustainability. Her PhD work was in health economics of quality improvement in community health systems. She focuses primarily on patient experience aspects of quality of care and implementation/evaluation of quality improvement interventions in MNCH. She also has some methodological work driven by the importance of considering patient costs and resource barriers to action in participatory economic evaluation, and she is developing methods around creative collaborative inquiry. Dr. Meghan has been Based in Nairobi for the last 12 years, and her field-oriented work focuses primarily on sub-Saharan Africa.

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Miriam Njoki Karinja, MSC, PHD

Dr. Njoki Miriam, serves as a Senior Program Officer - Clinical Research and Trial Community at Science for Africa Foundation. She is a passionate Clinical Epidemiologist with over 10 years' experience collaborating with public-private partnerships to design, implement and evaluate health interventions in low- and middle-income countries, and has extensive work experience in South Africa, Nigeria, and Kenya. Njoki has significantly been involved in clinical trials for novel treatment of multidrug-resistant tuberculosis (MDR-TB) and extensively drug-resistant tuberculosis (XDR-TB) at the TASK Applied Science, Cape Town South Africa. She has also served in a humanitarian emergency context as a Mission Epidemiologist for Médecins Sans Frontières (MSF-Holland) providing epidemiological support on MSF programs and operational research activities across four states in Nigeria (Abuja, Zamfara, Benue, and Sokoto). Before joining SFA, she was a Data, Analytics, and Research Consultant at the World Food Program in Rome, Italy before relocating back home. She holds a PhD degree in Epidemiology from the Swiss Tropical and Public Health Institute/ University of Basel, Switzerland and a master's degree in clinical Epidemiology from Stellenbosch University, South Africa.

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Thematic Discussion

Quality Improvement and Implementation

Science: Closing the Know- Do Gap

Quality healthcare is a matter of life and death. Across LMICs there are 8.6 million preventable deaths and 5 million of them are attributed to poor quality care after reaching a facility. Come and learn about bridging the KNOW-DO gap. Journey into the frontier of driving quality care for Africa. Join us for a conversation about the differences and similarities of quality improvement and implementation science.

Solving Africa's problems using Africa's Data

The African context is unique in many ways. Home to 1.4 billion people, their healthcare needs and treatments cannot be simply copy pasted from western data sources. Learn about solving healthcare challenges in the African context from both the researcher perspective as well as the program funder side.

Stamping out Hospital Acquired Infections: Learning from our Data

Patients come to the hospital because they want to get better. Yet patients can get an infection as a result of being in the hospital. Come and learn ways to stamp out hospital acquired infections and make hospital care safer for everyone, patients and healthcare workers.

Experts

Dr. Meghan Kumar
Dr. Cyrus Mugo

Moderator

Dr. Peter Watson

Experts

Dr. Geoffrey Omuse
Dr. Jacinta Nzinga
Dr. Miriam Njoki

Moderator

Dr. Chege Macharia
Dr. Mary Adam

Experts

Prof. Rodney Adam
Dr. Felix Riunga

Moderator

Grace Waceke

POSTERS

Completed Projects

1	<p>Clinical Characteristics, Treatment and Survival Outcomes for Cancer Patients at a tertiary Referral Hospital in Kenya. Authors: B Akinyi MBBS1, H Musau, MBChB,D Kanana, M Obat,R Kauffmann, MD, MPH,J MacLeod ,M Odhiambo</p>
2	<p>Death and Coping: Perception of Nurses in Kenya. Authors: Peris Kiarie1, Gabriel Okombo1, Wambui Makobu2, Joel Ambikile3 & Mary B. Adam</p>
3	<p>Impact Of Patient Deaths Among Healthcare Workers at AIC Kijabe Hospital Pediatric Department Authors: Francis Lomunyin, Daniel Karanja, Bob Okeyo, Arianna Shirk, Millicent Muthoni</p>
4	<p>Factors Affecting Adherence to Treatment and Retention in Care Among Adolescents and Youth Living with HIV in Kenya: A Systematic Review Author: Stella Kibet</p>
5	<p>Bacterial Nasal Carriage Among Outpatient Paediatric Patients at Kijabe Hospital Authors: Terryanne Nginyo, MBChB,Whitney Allen, MD, MPH, MHS,Lynnette Lefall, DO Lucy Wahome, Arianna Shirk, MD,Britney L. Grayson, MD, PhD</p>
6	<p>Use of a Perioperative Data Collection Tool at a Rural District Hospital in Burundi Authors: Gregory Sund, MD,Carson Gutierrez,Joseph Nibigira</p>
7	<p>Impact of Hydrocortisone on Pediatric Patients with Sepsis and septic Shock Requiring Vasopressors Authors: Dr Bonnke Arunga, Dr Camilla Dolfine, Dr Anneviola, Dr Arianna</p>
8	<p>A Qualitative Study of Family Replacement Donors: Promoters and Barriers to Future Voluntary Blood Donation Author: Prof. Jana Macleod,Dr. Kathleen Kabeu, Abigael Jeptoo, Gladys Kuria,Ronny Chebii,Dr. Simon Akhnoukh</p>
9	<p>Retrospective Analysis of Hemovigilance Practice at AIC Kijabe Hospital: Documentation and Investigation Authors: Lucy N. Maina, Argwings Chagwira, Michelle Ngaruiya</p>
10	<p>Strengthening AMR Surveillance: A Comparative test of accuracy of five WHO priority pathogens-SPIDAAR Pilot Program Authors: Argwings Chagwira, Dr. P. Watson Maina Moses Odhiambo, Doreen Buraje</p>
11	<p>Attitudes, beliefs, and practices toward end-of-life care among physicians in Sub-Saharan Africa Authors: BREATHE Team</p>
12	<p>Multimodal, iterative lung ultrasound training in Hypoxemic respiratory failure in Sub-saharan Africa Authors: BREATHE Team</p>
13	<p>Oxygen saturation targets for adults with acute hypoxemia in low and lower-middle income countries: A scoping review with analysis of contextual factors Authors: BREATHE Team</p>
15	<p>Adherence To the Kijabe Hospital Protocol for Cardiotocographic Monitoring in Meconium-Stained Amniotic Fluid, And Associated Pregnancy Outcomes in Term Pregnancies. A Prospective Cohort Study Author: Dr. Chan Joack, Supervisors: Dr Mary Adam, Prof. Anne B. Kihara</p>

Completed Projects	
15	Leveling Biopsy without a Stoma: A Novel Approach to Hirschsprung's Disease Management in a Resource-Limited Setting Authors: Mehret Desalegn, Chirag Ram, Moses Odhiambo, Britney Grayson
16	Understanding 'Second Victim Experience' among staff at Kijabe Authors: Faith Lelei, Mary B. Adam, Elijah Ntomariu, Moses Odhiambo, Peris Kiarie
17	A Retrospective Analysis of the Outcomes of Cholecystectomies Done at AIC Kijabe Hospital Authors: Dr Vallery Logedi, Dr Jack Barasa
18	Patient preparation, Experience, and Satisfaction Among Expectant Mothers Scheduled for OGTT At AICKH Authors: Lucy Maina, Argwings Chagwira, Grace Munga
19	Automating Data Extraction for Hospital-Acquired Infections Assessment in a Rural Teaching Hospital in Kenya Author: Dr. P. Watson Maina, Argwings Chagwira
Medical Education	
20	Point Of Care Ultrasound Training of Anesthesiology Residents in Kenya Authors: Betelhem Belda, MBChB, Cynthia Achola, MBChB, Michael Douglas, MD, Gregory Sund, MD, James M. Kynes, MD
21	CME+ Increasing the impact of evidence-based training in NCDs with quality improvement in frontline primary health care Authors: Dr Kaya Belknap, Dr Stella Kibet, Dr Mary Adam, Dr Katy Linley
22	Evaluation of the Medicalcpd.Africa online platform for continuous professional development of healthcare workers in Kenya and its borders Authors: Elijah Ntomariu, Patrick Gitonga, Bernice Njoroge, Kenneth Miriti, Ibrahim wako, Jon Fielder
Quality Improvement	
23	To Improve Hba1c Test Uptake Among Adult Diabetic Patients at Engineer County Hospital Authors: Shadrack, Anisia Njagi, Daniel Ocharo, Lydia, Joseph Mukundi
24	Improving Screening Of Diabetes In Manunga Health Center Authors: Dennis Mogaka, Esther Kanyuku , David Karuiru, Philomena Makonyo, Monica Mwaura
25	Nhif Utilization at Jm Kariuki County Referral Hospital Authors: Jacob Kungu, Margaret Gatungu, Stephen Gachigi, John Hika, Leonard Kamau
26	Treatment Optimization for Newly Diagonised Dm Patients in Ndaragwa Health Centre Authors: Jane Muraya, Lucy Munyeki, Margaret Maina, Martha Mbogo
27	Improving the availability of Metformin and HbA1C at Health Facilities in Nyandarua County Authors: Martin Ndungu, Everlyne Macharia, Dr. Kiriiri Geoffrey, Philomena Atsiaya, Sophia Otieno
28	Effective Diabetes Screening at Kasuku Health Centre - Oljororok Authors: Lucy Njuguna, Joseph Macharia, Elizabeth Wangari, Joseph Maina
29	Increase Screening Of Diabetic Complications At Jm Kariuki County Hospital Authors: Dr. Aisha Mwatuwano, Emmah Wanjenga, Michael Ruitururi, Stephen Kariuki, Edward Njeru
30	Using Group Discussion to Drive Intervention Co-Design: Reducing Blood Culture Contaminants Authors: Michelle Ngaruiya, Jeffrey Osano, Kennedy Abangi

<h2>Quality Improvement</h2>	
31	Increase the number of ANC attendance and Deliveries through Maternal and Newborn Health Training Authors: Wambui Makobu, Simon Mbugua, Wilson Kamiru, Margaret Chege, Helina Njeri
32	Pre-intervention Survey to Evaluate Readiness for the Establishment of a Neuraxial Labor Analgesia Service in Kijabe, Kenya Authors: Stephen Ellwood, MD, Gregory Sund, MD, Noor Raheel, MBChB, Ayumi Maeda, MD, James M. Kynes, MD, Vesela Kovacheva, MD, PhD
33	Addressing the Problem of Pediatric Central Line Associated Blood Stream Infections at AIC Kijabe Hospital Authors: Muse French, MD, Alexander S. Mina, MD, Moses Odhiambo, Britney L. Grayson, MD, PhD
34	Improving Documentation of goals of care discussion in outpatient palliative care at AIC Kijabe Hospital Authors: Pitty Mugure, Dr. Fred Ogada, Dr. Faith Lelei, Nevyce Mokeira, Argwings Chagwira
35	Blood Culture Contamination Quality Improvement Project Authors: Argwings Chagwira, Dr. P. Watson Maina Moses, Kennedy, Lucy, Doreen, Michelle, Grace, Yego, Felister, Emmanuel, Sospeter
36	Establishing Hemovigilance Practice at Aic Kijabe Hospital "Getting to Do It Right" (QI) Authors: Lucy N. Maina, Argwings Chagwira Mentor: Dr. P. Watson Maina, John Mark, Dr. Francine, Kennedy Perpetua
37	Clinical staff, knowledge and practices on gender-based violence in Kijabe Hospital Authors: GBV TEAM-KIJABE HOSPITAL
<h2>Work in Progress</h2>	
38	Building respiratory support in East Africa through High Flow versus Standard Flow Oxygen Evaluation Authors: BREATHE Team
39	Hospital-Wide Longitudinal Surveillance for Hospital Acquired Infections at AIC Kijabe Hospital. Authors: Dr. P. Watson Maina, Argwings Chagwira, Kennedy Abangi, Doris Kanana, Philip D. Musiya, Moses Odhiambo,
40	Uti Diagnosis Criteria Among Pediatric Patients Between 1 Month To 60 Months in Aic Kijabe Hospital Pediatric Department Authors: Mercy Adoyo, Sharon Mukewa, Emma Doll, Arianna Shirk
41	Patterns and Outcomes of Hemorrhagic and Infarctive Strokes at the AIC Kijabe Mission Hospital in Kenya: A Retrospective Cohort Study Authors: Elijah Yulu, Stella Kibet, Waweru Peter
42	Understanding adolescent transitions for youth with Spina Bifida in a LMIC: Using Focused Group Discussions to evaluate successes and challenge areas identified by young adults living with Spina Bifida. Authors: Mercy Mwangi, Luke McAuley, Supervisor: Mary Adam, MD
43	Healthcare Workers Experiences of Providing Care to Children with Hydrocephalus Authors: Ann Naliaka Chesoli, Supervisor: Luke McAuley & Jessica Tsotsoros
44	Enhancing Communication For Children With Cerebral Palsy Without Verbal Communication Through Pictorial Engagement - A Pilot Study Authors: Faith Nyambura Ndungu, Supervisor: Luke A. McAuley & Jessica Tsotsoros

Work in Progress

	Work in Progress
45	<p style="text-align: center;">Impacts Of Sitting Aid Devices for Children with Physical Disabilities in Addressing Specific Needs and Challenges Faced by Caregivers.</p> <p style="text-align: center;">Authors: Robert Mutuku, Supervisors: Luke A. McAuley & Jessica Tsotsoros</p>
46	<p style="text-align: center;">VASOPRESSOR PROSPECTIVE</p> <p>Authors: Kimani Brian, Grace Gao, Odhiambo Moses, Alice Mwonge, Musau Jack, Thairu Benjamin, Maneeno judy, Wanjiru Hannah, Okari winslet, Ndibaru fredrick, Vihenda lilian, Ogonda Dorothy, wairimu Judy, Nalungala Ann, Kinuthia Michael, Kinzi nixon, Nakayama ann, J</p>
47	<p style="text-align: center;">Patient Characteristics and One-Year Outcome for Heart Failure Patients in A Faith-Based Referral Hospital in Kenya, A Retrospective Observational Study.</p> <p style="text-align: center;">Authors: Kimani Brian, Mwangi Caroline, Caroline Wachira, Otieno George</p>
48	<p style="text-align: center;">AI Assisted Detection of Pulmonary Tuberculosis on CXR at AIC Kijabe Hospital</p> <p style="text-align: center;">Authors: Dr. Miriam Miima, Oliver Mulwa, Timothy Makori</p>
49	<p style="text-align: center;">A Pilot Study Comparing the Efficacy of the Trunk Targeted Control Training for Different Age Groups of Children Living with Cerebral Palsy, GMFCS Level IV, V Below 15 Years in Kenya</p> <p style="text-align: center;">Authors: Alphine Kipsang, Supervisors: Luke McAuley & Jessica Tsotsoros</p>
50	<p style="text-align: center;">Understanding The Needs of People Living with Duchenne Muscular Dystrophy Using Lived Experiences of Healthcare Workers, Caregivers and Individuals with DMD.</p> <p style="text-align: center;">Authors: EDMOND KIPRUTO, Supervisors: LUKE MCAULEY & JESSICA TSOTSOROS</p>
51	<p style="text-align: center;">Improving Patient Education in Diabetes</p> <p>Authors: Felix Magego, Nancy Njoroge, Thomas Joseph, Katy Linley, Alice Wangu, Belinda Kibet, Dorcas Wandia, Kennedy Abangi, Moses Odhiambo, John Mwai, Valentine Langat</p>
52	<p style="text-align: center;">Validation of Swahili Translation of the National Institute of Health Stroke Scale (NIHSS) in a Rural Tertiary Hospital, Kenya</p> <p style="text-align: center;">Authors: Peter Waweru, Elijah Yulu, Antony Kuria, Albright Luvai, Paul Macharia, John Macharia, Irene Kinyua, Paul Ocharo, David Ojakapel, Stella Kibet</p>

Bibliography

AIC Kijabe Published work from January 2022-February 2024

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FROM THE INSIDE



Patrick

Mardi Steere

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He enters the world with a cry
 And this little life, this sculpted being
 Is a Picasso.
 Twelve fingers, twelve toes
 Abstract heart
 A cacophony of connections
 A window of belly to naked bowel
 A confusion of creation.
 We dress for battle
 Helmet of oxygen
 Needles for spears
 Rations of salty sugary fluids -
 Engaging impending death
 With determination that we should
 Win.
 For two days we fight
 Parry and thrust
 Charge and retreat
 With combat cries we forge ahead
 Determined that, whoever the victor,
 We will have battled well.
 But by day three the smoke is clearing -
 the battlefield is deserted.
 Across the way we see
 No hood, no sickle, no face of fear
 Instead we see a beckoning friend.
 We lay down our weapons
 Embracing what is next -
 Not a loss in a blaze of attempted glory
 Where the outcome is resisted until the end
 But a journey together.
 With holiness and sobriety
 with tears
 with solace
 with silence

with grief
 with waiting
 with prayer.
 Fearfully and wonderfully made
 But for a different time and place.
 Kisses and cuddles and murmurs of
 love. Such love.
 Father, into Your hands
 We entrust his spirit.
 Farewell sweet one
 Baby Picasso.

Declarartions

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