



60,000 children develop cancer across Africa each year.

INTRODUCING THE APFP

The African Paediatric Fellowship Programme (APFP) is a South African initiative committed to building a workforce for specialist child healthcare in Africa.

By the end of 2022, 169 health professionals from across the continent had completed their training with the APFP at the University of Cape Town. Of these, nine qualified in paediatric oncology, with three more in training.

Many of these still go undiagnosed... ..

Most children diagnosed with cancer globally each year live in low- and middle-income countries (LMICs) where treatment is often unavailable or unaffordable. On average, only 20–30% of these children survive, compared to more than 80% in high-income countries.

In recognition of this gross inequity, 2018 saw the World Health Organization launch a new Global Initiative for Childhood Cancer (GICC). The goal is clear: to bring survival rates for childhood cancer up to at least 60% in LMICs by 2030 and to reduce suffering for all.

The development of recognised Centres of Excellence is central to the GICC approach. This includes the training of a multidisciplinary workforce to ensure the delivery of high-quality, patient-centred care.



The team at the APFP identifies closely with the GICC priorities. As you will read in the following profiles, we work with emerging centres in Africa to select and train a growing network of paediatric oncologists – with the last few years seeing us move to provide in-service training to specialists working in supportive fields (e.g. paediatric surgery, pharmacology, radiology, and nursing).

With each trainee part of a strategically selected, multi-disciplinary team, we are building the workforce needed to improve the prognosis for children with cancer.

DR. JOYCE BALAGADDE-KAMBUGU

HEAD OF PAEDIATRIC HAEMATOLOGY & ONCOLOGY. UGANDA CANCER INSTITUTE



2011 & 17

INTRODUCING DR. BALAGADDE-KAMBUGU

Fresh from her paediatrics training, in 2009, Dr Balagadde-Kambugu became the first-ever paediatrician to work at the Uganda Cancer Institute (UCI) since it had opened in 1967. At the time, there was no dedicated children's service or paediatric oncologist in this national referral centre. Children were treated by adult physicians and surgeons – often with suboptimal outcomes.

For Dr Balagadde-Kambugu, the need for a specialist paediatric oncologist to spearhead an agenda for children with cancer was abundantly clear. And so it was that in 2011, she went to train at UCT with APFP. Completing her second year in 2017, she returned to Uganda as the country's first and only specialist paediatric oncologist and Head of Paediatric Oncology at UCI.

■ BUILDING A CENTRE OF EXCELLENCE

Back in Uganda, Dr Balagadde-Kambugu's first priority was to set up a dedicated children's cancer service at UCI. Seeing 250 new cases in its first 12 months, today the unit is part of a recognised Regional Centre of Excellence that treats 650 new patients a year and offers specialist multidisciplinary care, including a new brain tumour service (plans to offer stem cell transplants are also in development). The impact is clear to see, with five-year survival rates for all six major childhood cancers doubling to 40- 50% today.

“Before I trained with APFP, mortality rates in Uganda were so high, no-one questioned it. Now they are so much better. It's really something, knowing that our children can survive.”

■ A PLATFORM FOR GROWTH

For Dr Balagadde-Kambugu, setting up UCI's paediatric cancer service was the foundational piece on which other critical components could grow. It started

with a small team of nurses and a medical officer. Today, UCI's services have advanced to a point that enables it to function as a specialist training centre - with the Institute now offering full subspecialty training in paediatric oncology for fellows across East Africa. With four Ugandans now qualified and working at UCI, Dr Balagadde-Kambugu's team has grown considerably. Furthermore, having recently secured Ministry funding and support, UCI's fellowship programme is positioned to train six fellows a year, and is now an established part of national and regional training plans.

They have come a long way for a small team, and as the role and services of UCI grow, so does its reach. A hub for what will become a national childhood cancer service, Dr Balagadde-Kambugu and her team are supporting the development of two specialist units in Western and Northern Uganda. With three more in the pipeline, UCI will continue to provide specialist, top-tier treatment, with general care shared across these new regional units.

■ STANDING UP FOR CHILDREN WITH CANCER

As her role evolves, Dr Balagadde-Kambugu has had to step back from a lot of her clinical work. It was a hard adjustment to make. Treating children is her first love, but Dr Balagadde-Kambugu is clear that to make a sustained and meaningful impact on child health, she must engage with policy makers on the local and global stage.

“If you stay on the ward, you can make a difference in one child's life. If you go to where people are making the decisions, you can open doors that will change the whole landscape.”

As Uganda's national coordinator for paediatric oncology, Dr Balagadde-Kambugu has successfully advocated for critical cancer drugs and radiotherapy to be made available in-country. She is also central to the development of Uganda's first National Cancer Plan, which outlines and provides for coordinated childhood cancer care across the whole health system. This includes a concerted effort to train and support health workers at lower levels of care so that they can learn to identify and refer new cases.

It doesn't stop there. In 2021, Dr Balagadde-Kambugu was elected President of the International Society of Paediatric Oncology (SIOP) Africa. Proud to represent her country and continent, she knows how important it is for Africans to take their place on the international stage, and use their insight and expertise to influence change.

“Africa should be the master of its own destiny. We need to be able to make decisions for our own countries, and know that they're the right ones.”

ON TRAINING WITH THE APFP

“It is a rigorous top-notch training, but also relevant to our context as Africans. You don't find that anywhere else.”

DR. VIVIAN PAINTSIL

HEAD OF PAEDIATRIC ONCOLOGY,
KOMFO ANOKYE TEACHING HOSPITAL



2012-13

MEET DR. VIVIAN PAINTSIL

Dr Vivian Paintsil discovered her passion for paediatric oncology in a side corridor in Kumasi's Komfo Anokye Teaching Hospital (KATH) in 2009. At the time, the hospital had no oncology ward and children with unsightly Burkitts Lymphoma tumours were treated there out of sight of other patients. Lacking a sterile laminar flow machine, their chemotherapy was mixed in an incubator. Dr Paintsil was drawn to these children, and as she started caring for them, she says, her love for oncology grew. A few years later, facilitated by the hospital's visionary Head of Paediatrics, she was on her way to Cape Town, determined to garner the expertise she needed to turn their experiences of cancer around. She was the first of 17 colleagues from KATH who have since followed in her footsteps to undertake specialist paediatric training with APFP.

■ GROWING A SERVICE

Medical school curricula don't envisage fundraising as a core skill for health professionals, but it's more than handy for doctors looking to set up services from scratch. When Dr Paintsil arrived home after her training, she set about raising money to turn an unused hospital storeroom into a dedicated oncology day ward and pharmacy. Once she – and the lone nurse allocated to her – had the space ready, she quips, she could lure in more staff to assist.

An avid teacher, trainer and mentor, she has since built a team consisting of two sub-specialists – herself and Dr Osei-Tutu (a more recent APFP alumnus), two paediatricians, 24 nurses, 4 senior paediatric residents, and a consistent rotation of junior residents and house officers. She's roped in the hospital's paediatric surgeons, radiation oncologist, neurosurgeons, ophthalmologists, social workers, and pathologists to meet regularly to discuss patients and make collaborative decisions

about treatment. And in December 2022, she was thrilled to be joined by her colleague Dr Sekyere, fresh from training in paediatric palliative care with the APFP.

“We want to revolutionise what we are doing here, to be a Centre of Excellence, where we are not just a centre of care for Ghanaians, but where anyone, from anywhere, can come and access quality care”.

Next, she awaits the return of two of her protégés from their subspecialist training in paediatric oncology (one with the APFP). Each additional trained health care professional passionate about paediatric cancer brings her team closer to this larger vision.

■ CHILDHOOD CANCER IS CURABLE

Widespread perceptions that cancer is a death sentence meant that in order to establish a successful service, Dr Paintsil not only had to develop a clinical team but also to demonstrate the impact of appropriate care for childhood cancer. If families don't understand that hope comes along with treatment adherence, they are more likely to abandon the costly and gruelling process involved in curing their child. “Otherwise”, she says, “they feel we don't even need to treat”. In 2014, these perceptions were not far-fetched: Not a single child with Wilms Tumour at KATH had survived prior to that point. Today, with a survival rate of over 60% in the service, it's a profoundly different picture.

“We showcase our past patients. When people see our children who are alive and those who have gone to university, they realise their own child can live...”

Dr Paintsil views the shifts in popular perception amongst both clinical and general populations as one of her most important achievements.

■ FROM TREATMENT REGIMENS TO SURVIVORSHIP

Participation in locally relevant research has enabled Dr Paintsil to tailor treatment regimens to best fit the context. Simple improvements to systems of patient referral and tracking are reducing delays in diagnosis and treatment abandonment. National childhood cancer protocol development has been a step towards mobilising more resources. Efforts to improve district-level care and referral systems are underway. Now, Dr Paintsil says, it is time to pay attention to survivorship: to put in place care that supports patients' long-term quality of life. What a remarkable milestone to reach. Its no wonder that Dr Paintsil was selected in 2022 as one of the first cohort in the Leadership Programme for Women in Oncology, the start of a network of women leading change in cancer care in low- and middle-income countries.

ON TRAINING WITH THE APFP

“APFP has really built the support base at our Hospital. As alumni, we call on each other all the time. That is the beauty of it. You get the subspecialty input and support you need, and that improves your patient's outcome”.

DR. GEORGE CHAGALUKA

HEAD, DEPT. PAEDIATRICS AND CHILD HEALTH,
QUEEN ELIZABETH CENTRAL HOSPITAL



2013-15

A SPOTLIGHT ON DR GEORGE CHAGALUKA

At the time that Dr Chagaluka completed his general paediatrics training to become one of the first local paediatricians in Malawi, Prof Liz Molineux – long-time stalwart of paediatrics in the country and founder of the paediatric oncology service at Queen Elizabeth Central Hospital (QECH) in Blantyre – was gearing up for retirement. Dr Chagaluka was identified to step into her shoes, and in preparation, he took up a paediatric oncology fellowship with APFP at UCT in 2013. The training was useful for exposing him, he says, to a wide range of cancers, treatments, and approaches to care.

“The experience was wonderful and very motivating. It gave me an extra eye for looking at things”.

Since his return home in 2015, Dr Chagaluka has led the Paediatric Oncology division at QECH, taking on the additional role of overall Clinical Head of the Department of Paediatrics and Child Health in 2021.

■ CLINICAL TEAMS

Dr Chagaluka was struck by the close collaboration between different members of staff in the oncology service at UCT and was determined to replicate it once home. He is quietly pleased with his efforts: today there is a well-functioning team in place providing multidisciplinary care to children with cancer.

■ RESEARCH REALLY MATTERS

By consistently undertaking institutional as well as collaborative research with colleagues across the continent, Dr Chagaluka and his team have been able to expand critical scientific understanding of children’s cancer in Africa and to gradually adapt their service provision to best-fit to their context. This has been an important focus of his work post APFP training:

“Whatever you do, it must come from evidence”.

Of this, he is absolutely clear. Interventions can be misplaced without local insight, and result in poorer outcomes and wasted resources. Recently, for example, his team looked into the reasons behind a perturbing level of non-adherence to treatment. Transport challenges, a variety of social issues, widespread fear, and multiple myths about cancer all emerged as factors driving no-shows for appointments. By adding nutrition packs, free transport, and intensified counselling to their package of services, non-adherence dropped from 17% to 6%. Through research, correctly targeted assistance was set in place. And through publication of the research findings, a donor stepped forward with a commitment to provide the funding to sustain this program of support for 10 years.

■ REDUCED MORTALITY

Thanks to a strengthened clinical team, and the development of locally appropriate clinical protocols informed by focussed research, service provision has changed remarkably over time at QECH, and survival dramatically improved:

“Wilms Tumour survival has increased from a baseline of 30% to more than 60%. Burkitt’s Lymphoma from 50 % to 70%”

These survival rates are heading towards those seen in well-resourced settings, where – unlike in Malawi – diagnostic tests, equipment and advanced chemotherapy options are widely available.

■ EARLY WARNING SIGNS

Today, the QECH oncology service has grown to see 300 in-patients and 1800 out-patients a year. Dr Chagaluka estimates however that these are just 60% of the children needing treatment. He’s concerned that children with cancer are not being identified, or being identified early enough, at lower level health facilities and are dying without appropriate care. That’s why he has established – and raised funds for – training for district-level health workers on the early warning signs of cancer in children. By the end of 2023, he anticipates 2000 district clinicians and nurses will be reached with the training. And hopefully more children’s lives will soon be saved.

Meanwhile, Dr Chagaluka remains the only qualified paediatric oncologist, with a team of 13 nurses and 3 general paediatricians. It’s an overwhelming clinical load. He is almost counting the days until his young colleague (and current APFP trainee) Dr Beatrice Chikaponya-Phiri will complete her subspecialty training and return to add much needed capacity to the team in 2024.

ON TRAINING WITH THE APFP

“The APFP moulded me to become not only a clinician but also a manager and a researcher.”

DR. MOTUNRAYO ADEKUNLE

CONSULTANT PAEDIATRIC ONCOLOGIST,
LAGOS STATE UNIVERSITY TEACHING HOSPITAL



2020-21

MEET DR. MOTUNRAYO ADEKUNLE

During her general paediatrics training at Lagos State University Teaching Hospital (LASUTH), Dr Motunrayo Adekunle's heart would sink each time a child was admitted with cancer. She knew this would mean facing yet another death. Delving into the scientific literature in search of solutions, she found survival rates of 75% were widely achievable elsewhere:

“I couldn't fathom why we were doing so badly in Nigeria. That was when I made up my mind that I had to do something about it, that I am needed in this field. I knew there was something wrong that we could change”

And so she set out to become the first formally trained paediatric oncologist for LASUTH. Having observed the dynamism of a colleague who returned from training in nephrology with the APFP a few years prior, she was clear that she too wanted to head to UCT. She says she was not disappointed. Exposure to cutting-edge scientific knowledge and clinical expertise, effective systems for patient management, multidisciplinary teamwork and colleagues from across the continent gave Dr Adekunle just the tools she needed to embark on carrying out her vision.

■ FIRST THINGS FIRST

In her first year back home after training, she asked herself: what things can I change right away? What can be done with limited additional resources? With the evidence for interventions now at her fingertips, Dr Adekunle was able to motivate for a section of the paediatric ward to be set aside for oncology patients, to reduce the risk of infections from others. She managed to convince the blood services of the urgency of getting platelets to a child with cancer. Today they prioritize her service needs. Adapting those in use during her training at UCT to her

local context, she completely revised the clinical protocols for paediatric oncology care at LASUTH. And introduced a simple 'tick sheet' for better day-to-day patient management in the unit. It took diplomacy and persistence to get all staff to adopt the new approaches.

■ THE VALUE OF TIME

Distressed by long delays in treatment due to a reliance on adult oncologists for key diagnostic tests, upon her return home Dr Adekunle immediately trained all paediatrics residents to conduct bone-marrow testing. This enables immediate diagnosis as well as staging of disease for the first time, with much more timely and targeted treatment opportunities. A new partnership with the National Children's Cancer Society provides free chemotherapy, ensuring no child's survival is compromised by their parents' inability to pay upfront for treatment.

■ PROACTIVE POST-CHEMO MANAGEMENT

Chemotherapy decimates children's immune systems. Post-chemo infections were a primary cause of death at LASUTH prior to Dr Adekunle's return. Here again, her training has been key.

“Now I know what to expect, and I know how to treat. We don't lose these children anymore. We lose some of them to the disease, but not to the treatment.”

Following an entirely new and well-informed protocol, the team can prepare well, and act fast and appropriately when infection sets in. Child mortality from febrile neutropenia (chemo-related infection) has dropped from over 80% to less than 12% in a matter of months, a remarkable achievement.

■ MULTIDISCIPLINARY TEAMWORK

Cancer management requires teams. Oncologists, nurses, surgeons, pathologists, and more. It necessitates a new approach at LASUTH. Dr Adekunle has identified colleagues with interests in child cancer and is gradually inducting them into this model. She is sure, with time, they too will see the value of shared care.

■ THE WAY FORWARD

There is a long road ahead. Dr Adekunle's medium-term plans include accessing vital equipment not yet in place, opening an isolation space for in-patients, and establishing a radiotherapy unit and a PICU. But she is unequivocal: If there is ONE thing that would profoundly shift the future of children's cancer care in Nigeria, it will be to establish local paediatric oncology training. She already has her eye on that goal. The APFP is right behind her.

ON TRAINING WITH THE APFP

“The beautiful thing was that at every moment of my training, we had discussions with my supervisors on how to adapt what I was learning. ‘You might not be able to do this. If you can't, this is what you should do ...’”

DR. LOYCE HLATYWAYO

CONSULTANT PAEDIATRIC HAEM-ONCOLOGIST,
PARIRENATYWA HOSPITAL



2019–20

INTRODUCING DR. LOYCE HLATYWAYO

Even before she qualified as a doctor, Dr Hlatywayo knew that she wanted to specialise in childhood cancer. Unlike the “one-off” encounters characteristic of so many other specialties, it was the privilege of walking so closely alongside children and their families that drew Dr Hlatywayo to the world of paediatric oncology. That’s why, when the Head of Paediatric Oncology at Zimbabwe’s Parirenyatwa Hospital, Professor Chitsike, started planning for her retirement, Dr Hlatywayo was an obvious choice for a prospective replacement.

One of three fellows sent for training in South Africa by Prof Chitsike, the vision was clear: to build a highly qualified, subspecialist team that could take the reins and drive the development of paediatric oncology for Zimbabwe. And so it was, that in 2021, Dr Hlatywayo returned to practice at Parirenyatwa Hospital and take her place with fellow trainees Drs Patience Kuona and Vongai Mashoko as the three-strong team running the only paediatric oncology service in the country.

■ A CHALLENGING TRANSITION

It wasn’t an easy role to take on. Not only were childhood cancer mortality rates in Zimbabwe high, the resources needed to address them fell chronically short. Here, limited health budgets and high workforce migration had left critical gaps in key cancer services, including pathology, radiology and surgery – with many children waiting months for a diagnosis, and access to life-saving surgery and treatments often delayed. It was a hard reality to face, but their training with APFP had opened Dr Hlatywayo and her team up to a worldclass standard of care. They knew what was possible, and how to define and set the standards their country should be working towards.

“Zimbabwe is richer for my training – and the others who have trained with APFP.

We know where we’re going. What we’re aspiring to.”

■ A COLLABORATIVE EFFORT

When Dr Hlatywayo and her colleagues returned home, they began by analysing existing services, and identifying simple, low-cost changes that would improve the quality of care. It was this approach that led to the development of a dedicated paediatric oncology ward and the separation of the weekly outpatient clinic into two separate services: one for children receiving chemotherapy, the other for haematology cases. These changes were supported by an overhaul of clinical protocols and a move to promote – and embed – multi-disciplinary care. It took quite a shift in mindset, but the results were worth it. Today representatives from radio-oncology, radiology, pathology and surgery come together on a biweekly basis to discuss patient management care, and decide a way forward together.

“People are used to working in silos. But slowly, we’ve got them on board. There are other disciplines now that have seen what we’re doing, and they’re starting to replicate it, using the same approach.”

To support these services, Dr Hlatywayo and her colleagues collaborate with local non-profit, Kidzcan. This entity is helping to make sure that Parirenyatwa Hospital has the diagnostics and drugs it needs to deliver essential patient care.

■ PROMOTING POLICY CHANGES

The foundation of what is set to become a national service for children with cancer, Dr Hlatywayo and her team know that in order to keep moving forward they must close the gap in surrounding policies and make sure that the needs of children with cancer are catered for.

Backed by the quality and standing of their subspecialist qualifications, work is already in motion. This includes the addition of childhood cancer treatments to Zimbabwe’s Essential Medicines List – a strategic move that places responsibility on the government to fund and deliver life-saving treatments.

With Zimbabwe now a focal country for GICC, the last few years have also seen Dr Hlatywayo and her team support the development of the country’s first National Paediatric Oncology Guidelines, which outline the treatment standards and protocols needed to improve the quality of care for children with cancer. There is still a long way to go before the targetted 60% survival rates are in sight, but as the team move their focus towards advocacy, early warning signs, diagnosis, and steps to improve treatment adherence, they know they are on the right track.

ON TRAINING WITH THE APFP

“It’s an international family. We’ve got access to the team at UCT, and access to colleagues across Africa, as well as in the UK and US. We are never at a loss when it comes to dealing with difficult cases. I know I can call on any of them.”

OUR VISION | MULTIDISCIPLINARY TEAMS ACROSS AFRICA

... to diagnose and treat children with cancer

WHAT NEXT FOR PAEDIATRIC ONCOLOGY?

The APFP is proud to be associated with a growing network of alumni who are making their mark, individually and collectively, as leaders in the field of childhood cancer. As we look to the future, we are committed to supporting the development of fellows and partnership centres by:

- Maintaining a steady flow of fellowship opportunities and continuing to provide in-service training in associated disciplines.
- Expanding our offer by developing tailored training in broader areas of the GICC strategy, including: advocacy, leveraged financing and governance.
- Providing ongoing mentoring and support to all alumni (with a particular focus on collaborative research) through a combination of telemedicine events, in-person visits, and international platforms.

Recognising our role and experience in the field of paediatric oncology education, the next few years will also see us:

- Work with select partners to develop dedicated neuro-oncology teams and regional Centres of Excellence in neuro-oncology.
- Support the development of a new Education Programme Assessment Tool (EPAT) to verify the quality of fellowship programmes globally, identify and prioritise areas for development.

APFP is committed to building the workforce needed to bring regional targets for childhood cancer in sight. Donate today and you can be part of this life-changing journey.

FOR MORE INFORMATION

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PLEASE SUPPORT OUR WORK

It costs US\$30 000 a year to fully support the training of paediatric specialists like those profiled in this piece. If you would like to support our work, please visit:

The Children's Hospital Trust
www.childrenshospitaltrust.org.za/donate
and choose the APFP.

