Canadian Cancer Society

Research Training Awards
Master's Level 2026 Cycle 1 (RTA-M-26)
September 2026 Award Recipients

Ngueyanouba Calvin Djiraimadje — **$32,500**
CHU Sainte-Justine Research Centre — **2026-2027**

Better childhood cancer care in Canada during public health emergencies

Problem: Childhood cancer is rare but life-threatening. Early diagnosis is essential to improve survival and reduce complications. The COVID-19 pandemic disrupted healthcare access, meaning that some children with cancer may have experienced delays in diagnosis or presented with more severe illness.

Solution: Ngueyanouba Djiraimadje is studying new childhood cancer diagnoses in Canada before, during and after the COVID-19 pandemic. He plans to compare rates of new diagnoses and markers of cancer severity. He will also look at how age, cancer type, geographic location and social deprivation are linked to disease severity at diagnosis.

Impact: This research will uncover the effects of the COVID-19 pandemic on childhood cancer diagnosis and care across Canada. By identifying vulnerable populations and healthcare system gaps, the findings will help ensure that all children have timely, equitable access to cancer diagnosis and care during future public health emergencies.

Research Supervisors
Hallie Cotlin, CHU Sainte-Justine Research Centre
Nadia Roumeliotis, CHU Sainte-Justine Research Centre

Kenneth Ofori-Amanfo
University of British Columbia

$95,000
2026-2029

Understanding the link between wildfire smoke and lung cancer

Problem: Wildfire seasons in Canada are growing longer and more intense. Wildfire smoke has been linked to lung cancer, currently the leading cause of cancer-related death in Canada. However, researchers don't yet fully understand how wood smoke increases cancer risk and lowers survival rates.

Solution: Kenneth Ofori-Amanfo is studying how wood smoke affects lung cells. He will expose lung cells in the lab to either wood smoke or filtered air, then look at which cancer-associated genes are turned on or off in the cells exposed to smoke. He will also look at how people's inherited genes and the chemical tags that control them affect their cells' response to wood smoke.

Impact: Understanding how wood smoke affects lung cells can help with cancer prevention, detection and treatment. Knowing which inherited genes and chemical tags put people at higher risk of smoke-associated cancers can identify people who need stronger prevention and screening measures – and knowing which genes change after wood smoke exposure can point the way to new treatments that target those genes.

Research Supervisor
Emilia Lim, University of British Columbia

Chukwudozie (Dozie) Ubosi
Queen's University

$65,000
2026-2028

A tiny, AI-assisted robot to help detect lung cancer

Problem: The earlier lung cancer is detected, the more likely it is that treatment will be successful. Many lung cancers develop in narrow, fragile spaces deep in the lungs, making it difficult to spot them early with current technologies. Even advanced robotic tools sometimes used for lung biopsies have a high risk of damaging delicate airway tissues.

Solution: Dozie Ubosi is developing a tiny robotic device made of soft materials that can bend and maneuver in ways rigid robots cannot. It will be steered from outside the body using a magnet mounted on a robotic arm. The system will integrate AI to help make navigation in the lungs safer and more precise.

Impact: This innovation will let the new robot enter parts of the lung that are currently very difficult to access. This could make lung biopsies more successful and reduce complications, ultimately supporting earlier lung cancer diagnosis to improve outcomes.

Research Supervisors
Xian Wang, Queen's University
Yongjun Lai, Queen's University