CURRICULUM VITAE

NAME:
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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Gothenburg, Sweden	Ongoing PhD studies	2022 up to Now	Pharmacogenomics & pharmacokinetics
Konkuk University, South Korea	MSc. In Medicine	2 (2019-2021)	Cellular & Molecular Medicine
Kenyatta University, Kenya	Med in SNE	2 (2013-2015)	Special Needs Education
UR- College of Medicine and Health Science	BSc. BLS	4(2008-2012)	Biomedical Laboratory Sciences
University of Liege	Fellowship-Certificate	2017	Hematological Molecular Biology

A. Positions

Currently I am Assistant Lecturer at the Department of Biochemistry, Molecular Biology and Genetics, School of Medicine and Pharmacy, College of Medicine and Health Sciences – Univesity of Rwanda: Since October 2016 to date and project coordinator at center for human genetics, University of Rwanda

B. Previous position

Period	Institution	Position
2012-2013	Nyanza district hospital	Laboratory technician
2013-2016	Byumba district hospital	Lab scientist working on TB research

C. Research Grants. List ongoing or completed (during the last five years) research projects.

2017 – 2023: Grant administrator. “Project title: « Transgenerational epigenomics of trauma and PTSD in Rwanda» award in response to the application submitted in regards of RFA-RM-16-015 (Human Heredity and Health in Africa- H3Africa) grant funded by National Institute of Health » [**NIH** grant **U01MH115485-01**; #**USD 1,250,000.00**].

2018 – 2023: project manager. “Fellowship in minimally invasive surgery at the University of Rwanda” Funding Agency: Académie de Recherche et d’Enseignement Supérieur (ARES), PFS-2018 « Projet de Formation Sud » [**PFS-2018** grant **ARES-JN-OSS-MA-AMD-17-080; # 499,999 €**].

2020 – 2024: grant administrator. “Creation d’un programme de master en biotechnologie à l’Université du Rwanda” Funding Agency : Académie de Recherche et d’Enseignement Supérieur (ARES), PFS-2020 « Projet de Formation Sud » [**PFS-2020** grant ; **# 499,999 €**].

2019 – 2023: project manager. “Project title: « Identification and functional evaluation of autosomal recessive nonsyndromic hearing impairment genes in sub-Saharan Africans» grant funded by National Institute of Health » [**NIH** grant 1**R01DC016593-01A1**; #**USD 2,478,920**].

2021 – 2023: project manager. “Project title: A multi-centre randomized controlled non-inferiority trial to compare the efficacy, safety and tolerability of triple-artemisinin-based combination therapies versus first-line ACTs+ placebo for the treatment of uncomplicated Plasmodium falciparum malaria in Africa” awarded by the University of Oxford grant number **R52891/CN017**; #**£ 227,692**].

2021 – 2026: project manager. “Project title: Global Health Research Unit on NTD -BSMS Phase 2”. NIHR-Brigthon Sussex Medical School – Podoconiosis: genomics and implementation research in Rwanda [**NIHR-BSMS Phase-2 £ 931,000**].

2023 – 2026: project manager. “Project title: Mitigating Antimalarial Resistance Consortium in South-East Africa”. HORIZON-JU-GH-EDCTP3-2022-01 [**Grant No. 101103076-MARC SE Africa EUROS 4,170,631**].

2024 – 2025: grant administrator. “Supporting Masters and PhD program in biotechnology at the University of Rwanda.” (**European Union/ENABEL: €830.000).**

2024 – 2025: project manager. “A multi-centre randomised controlled non-inferiority trial to compare the efficacy, safety and tolerability of Triple Artemisinin-based Combination Therapies versus first-line ACTs + placebo for the treatment of uncomplicated *Plasmodium falciparum* malaria in Africa (DeTACT). University of Oxford grant Foreign, Commonwealth & Development Office (FCDO) project number: 300341-114; #**£ 59,270**].

2024 – 2025: Grant administrator. “A Phase III open-label, randomized, controlled, non-inferiority trial to compare the efficacy, safety and tolerability of a Fixed Dose Triple Artemisinin-based Combination Therapy (TACT), artemether-lumefantrine-amodiaquine versus first-line Artemisinin-based Combination Therapies (ACTs) for the treatment of uncomplicated *Plasmodium falciparum* malaria (FD-TACT) funded by the University of Oxford (grant number **R580001/CN180; #£ 274,964**)

2024 – 2028: program coordinator. “Strengthening the bio-pharmaceutical and vaccine manufacturing capacity in Rwanda.” (**European Union/SIDA-Expertise France: €25 millions).**

2022-2026: principal Investigator: Impact of genetic variation in metabolic enzymes on paclitaxel treatment and clinical outcome in cancer patients in Rwanda**, SIDA Bilateral 360,000 euros**

D. Peer-reviewed publications

1. Genomic and transmission dynamics of the 2024 Marburg Virus Outbreak in Rwanda December 2024, Nature Medicine 2024, DOI: 10.1038/s41591-024-03459-9´, Claude Mambo Muvunyi's Lab, Leon Mutesa, Ivan Butera, **Alexis Rugamba**
2. Genomic characterization uncovers transmission dynamics of Marburg Virus in Rwanda following a single zoonotic spillover event, DOI: 10.1101/2024.11.01.24316374, Claude Mambo Muvunyi's Lab, Leon Mutesa, Ivan Butera, **Alexis Rugamba**
3. Response of ROS in Host Plant Assaulted by Opportunistic Fungi and Nematodes, DOI: 10.1007/978-981-97-2045-3_5, June 2024, Yusuf.O, Nur Sakinah Binti Mohd Yusri, **Alexis Rugamba**
4. Impact of Intervention Practices on Recurrence of Parasitemia among Artemether-Lumefantrine (Al) Treated Patients in Bushenyi District, Uganda J. of Biomed. & Clin. Sci. June 2023, 8(1), 67-80
5. Musanabagannwa Clarisse, **Alexis Rugamba**, leon mutesa, Stefan jansen Community engagement in epigenomic and neurocognitive research on post-traumatic stress disorder in Rwandans exposed to the 1994 genocide against the Tutsi: lessons learned, August 2022 Epigenomics 14(5482) DOI: 10.2217/epi-2022-0079
6. **Alexis Rugamba**, Nipin Sp, Dong Young Kang, Doh Hoon Kim, Ji-Seung Yoo, Eun Seong Jo, Kyoung-Jin Jang and Young Mok Yang. Silibinin Regulates Tumor Progression and Tumorsphere Formation by Suppressing PD-L1 Expression in Non-Small Cell Lung Cancer (NSCLC) Cells 2021 IF: 6.6
7. Dong Young Kang†, Nipin Sp†, Eun Seong Jo, **Alexis Rugamba**, , Kyoung-Jin Jang and Young Mok Yang. Non-toxic sulfur inhibits LPS-induced inflammation by regulating TLR-4 and JAK2/STAT3 through IL-6 signaling. 2021
8. Nipin Sp, Dong Young Kang, Doh Hoon Kim, Ji-Seung Yoo, Eun Seong Jo, **Alexis Rugamba**, Kyoung-Jin Jang and Young Mok Yang. Natural Sulfurs Inhibit LPS-Induced Inflammatory Responses through NF-κB Signaling in CCD-986Sk Skin Fibroblasts. Life 2021 **IF: 3.78**.
9. Nipin Sp, Dong Young Kang, Doh Hoon Kim, Ji-Seung Yoo, Eun Seong Jo, **Alexis Rugamba**, Kyoung-Jin Jang and Young Mok Yang. Tannic acid inhibits non-small cell lung cancer (NSCLC) stemness through inducing G0/G1 cell cycle arrest and intrinsic apoptosis. *Anticancer Research* 2020. 40(6):3209-3220. **IF: 1.994**.
10. Eun Seong Jo†,Nipin Sp†,Dong Young Kang, **Alexis Rugamba**, Il Ho Kim, Se Won Bae, Qing Liu, Kyoung-Jin Jang, and Young Mok Yang. Sulfur Compounds Inhibit High Glucose-Induced Inflammation by Regulating NF-κB Signaling in Human Monocytes. *Molecules* 2020. 25(10), 2342. **IF: 3.267.**
11. Doh Hoon Kim†, Nipin Sp†, Dong Young Kang†, Eun Seong Jo, **Alexis Rugamba**, Kyoung-Jin Jang and Young Mok Yang. Effect of Methylsulfonylmethane on Proliferation and Apoptosis of A549 Lung Cancer Cells Through G2/M Cell-cycle Arrest and Intrinsic Cell Death Pathway. *Anticancer Research* 2020. 40(4): 1905-1913. **IF: 1.994**.
12. Dong Young Kang†, Nipin Sp†, Eun Seong Jo, **Alexis Rugamba**, Dae Young Hong, Hong Ghi Lee, Ji-Seung Yoo, Qing Liu, Kyoung-Jin Jang and Young Mok Yang. The inhibitory Mechanisms of Tumor PD-L1 Expression by Natural Bioactive Gallic Acid in Non-Small-Cell Lung Cancer (NSCLC) Cells. *Cancers* 2020, 12(3): 727. **IF: 6.162.**
13. Nipin Sp**,** Dong Young Kang, Eun Seong Jo, **Alexis Rugamba**, Wan Seop Kim, Yeong-Min Park, Dae-Yong Hwang, Ji-Seung Yoo, Qing Liu, Kyoung-Jin Jang and Young Mok Yang. Tannic Acid Promotes TRAIL-Induced Extrinsic Apoptosis by Regulating Mitochondrial ROS in Human Embryonic Carcinoma Cells. *Cells* 2020, 9(2): 282. **IF: 5.656.**
14. Doh Hoon Kim†, Nipin Sp†, Dong Young Kang†, Eun Seong Jo, **Alexis Rugamba**, Kyoung-Jin Jang and Young Mok Yang. Methylsulfonylmethane Induces Cell Cycle Arrest and Apoptosis, and Suppresses the Stemness Potential of HT-29 Cells. *Anticancer Research* 2020

15. Proline, a unique amino acid whose polymer, polyproline II helix, and its analogues are involved in many biological processes: a review

E. PhD topic: "*Impact of genetic variation in metabolic enzymes on paclitaxel treatment and clinical outcome in cancer patients in Rwanda"*

F. Awards and Honors

-CMHS Outstanding award for preparation and execution of 2021 EAC universities inspection

G. Professional Societies and Committee Responsibilities

-2024-present: representing the university of Rwanda in Australia-Africa Universities Early Career Researchers Network.

- 2022-present: American Society of Human Genetics (ASHG)

- 2022-present: Swedish society of pharmacist (Apotekarsocieteten)

-2021-present: board member of Rwanda down syndrome organization (RDSO)

-2021-present: Rwanda Society for human genetics

-2014-present: Rwanda allied health professional council

H. Language

KINYARWANDA is Mother tongue

	Understanding				**Speaking**				**Writing**
	Listening		Reading		Spoken interaction		Spoken production		
ENG	Independent level	C1	Proficient level	B2	Independent level	B2	Independent level	B2	Independent level
FREN	Proficient level	C2	Proficient level	B2	Independent level	B2	Independent level	C1	Independent level

I certify that the statements made are true, complete and correct to the best of my knowledge and belief.