

## DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY



**Name of Staff:** Dr. Isaac Njangiru

**Designation/Rank:** Senior Technologist I

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**Google Scholar:** <https://scholar.google.com/citations?user=P3YaRw0AAAAI&hl=en&oi=ao>

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### **Educational Background/Qualification**

- PhD (Anticancer drug development), University of Szeged, Hungary (2024)
- Masters of Science in Medical Biochemistry, Kenyatta University, Kenya (2017)
- Bachelors of Science in Biochemistry, Moi University, Kenya (2009)

### **Brief Auto-biography of the Faculty/Staff**

Dr. Njangiru is an accomplished scientist specializing in anticancer drug development. He earned a PhD in Pharmaceutical Sciences (2024) from the University of Szeged, Hungary, where his research focused on novel approaches to combat cervical cancer. Dr. Njangiru holds a Master of Science in Medical Biochemistry (2017) from Kenyatta University, Kenya, and a Bachelor of Science in Biochemistry (2009) from Moi University. With a strong foundation in biochemistry and extensive expertise in medical research, he is passionate about advancing innovative therapies to improve global health outcomes. His academic journey reflects a commitment to excellence and a dedication to making meaningful contributions to the field of pharmaceutical sciences.

## Research Interest

1. Anticancer Drug Development
2. Pharmacology and Toxicology
3. Natural Products and Medicinal Chemistry
4. Translational Research
5. Nanomedicine in Oncology
6. Molecular Biology and Genomics in Cancer

## Publications

1. **Publications** Kimani, N. L., **Njangiru, I. K.**, Njagi, E. N. M., & Orinda, G. O. (2017). Antidiabetic Activity of Administration of Aqueous Extract of *Berberis holstii*. *Journal of Diabetes Metabolism*. doi: [10.4172/2155-6156.1000774](https://doi.org/10.4172/2155-6156.1000774)
2. Gitimu, R. M., **Njangiru, I. K.**, & Njagi, E. N. M. (2017). Need for reference ranges for liver function tests in infants and children from Taita Taveta County, Kenya. *Journal of Clinical Chemistry and Laboratory Medicine*.
3. **Njangiru, I. K.**, Gitonga, N. Z., & Njagi, E. M. (2019). Hypoglycemic Potential and Safety of Aqueous Extract of *Aspilia Mossambicensis* in Alloxinised Diabetic Mice. *Journal of Medical Research and Health Sciences*. doi.org/[10.15520/jmrhs.v2i3.38](https://doi.org/10.15520/jmrhs.v2i3.38)
4. Tayeb, B. A., **Njangiru, I. K.**, & Minorics, R. (2024). Beyond boundaries: Neuroprotective effects of steroids and ecdysteroids in SH-SY5Y cells-A systematic review. *Neuroprotection*. . doi.org/[10.1002/nep3.37](https://doi.org/10.1002/nep3.37)
5. **Njangiru, I. K.** (2019). Bioscreening for Hypoglycemic Potential of Aqueous Extract of *Tridax Procumbens* in Mice Model. *Journal of Medical Research and Health Sciences*. doi.org/[10.15520/jmrhs.v2i10.121](https://doi.org/10.15520/jmrhs.v2i10.121)
6. Muhoro, A. M., Kosgei, J. J., **Njangiru, I. K.**, Rasaki, L. A., & Farkas, E. É. (2024). Potential of *Cladonia Foliacea* Extract as an Oral Toxic Insecticide Against Adult *Anopheles Gambiae*, Malaria Vector in Western Kenya. *Acta Botanica Hungarica*. doi.org/[10.1556/034.66.2024.3-4.7](https://doi.org/10.1556/034.66.2024.3-4.7)
7. Tayeb, B. A., Osman, A. A., & **Njangiru, I. K.** (2024). Liquid biopsy biomarkers in breast cancer: An overview of systematic reviews. *Clinica Chimica Acta*. doi.org/[10.1016/j.cca.2024.120063](https://doi.org/10.1016/j.cca.2024.120063)
8. **Njangiru, I. K.**, Bózsity-Faragó, N., Resch, V. E., Paragi, G., Frank, É., Balogh, G. T., ... & Minorics, R. (2024). A Novel 2-Methoxyestradiol Derivative: Disrupting Mitosis Inhibiting Cell Motility and Inducing Apoptosis in HeLa Cells In Vitro. *Pharmaceutics*. doi.org/[10.3390/pharmaceutics16050622](https://doi.org/10.3390/pharmaceutics16050622)
9. Le, T. M., **Njangiru, I. K.**, Vincze, A., Zupkó, I., Balogh, G. T., & Szakonyi, Z. (2024). Synthesis and medicinal chemical characterisation of antiproliferative O, N-functionalised isopulegol derivatives. *RSC advances*. DOI: [10.1039/D4RA03467H](https://doi.org/10.1039/D4RA03467H)

10. Kimani, N. L., **Njangiru, I. K.**, Njagi, E. N., & Orinda, G. O. (2017). Antidiabetic activity of administration of aqueous extract of *Berberis holstii*. [doi: 10.4172/2155-6156.1000774](https://doi.org/10.4172/2155-6156.1000774).
11. **Njangiru, I. K.**, & Njeri, L. K. (2017). Effects of Oral Administration of Aqueous Extract of *Tridax Procumbens* on Body Organs and Hematological Parameters. *International Journal of Contemporary Research and Review*. [doi.org/10.15520/ijcrr/2017/8/04/164](https://doi.org/10.15520/ijcrr/2017/8/04/164).
12. Muhoro, A. M., Ochomo, E. O., **Kinyua, I. N.**, Kosgei, J. J., Rasaki, L. A., & Farkas, E. (2024). A study on the effectiveness of (+)-usnic acid as oral toxic sugar bait against adult male and female *Anopheles gambiae*. *Malaria Journal*. [doi.org/10.1186/s12936-024-05141-4](https://doi.org/10.1186/s12936-024-05141-4)
13. Molnár, B., **Kinyua, N. I.**, Mótyán, G., Leits, P., Zupkó, I., Minorics, R., ... & Frank, É. (2022). Regioselective synthesis, physicochemical properties and anticancer activity of 2-aminomethylated estrone derivatives. *The Journal of Steroid Biochemistry and Molecular Biology*. [doi.org/10.1016/j.jsbmb.2022.106064](https://doi.org/10.1016/j.jsbmb.2022.106064)