

Curriculum Vitae

Full name and date

Nji Wandj, Benjamin
Male

Date and place of birth, nationality, current residence

25.09.1985, Kumba, Cameroon.

Cameroonian

Tilhenkatu 1A 6, 20610 Turku, Finland

+358 (0) 449-101140, benjwa@utu.fi

Education and degree awarded

Doctoral Program in Molecular Life Science, University of Turku, Biochemistry and Bioscience major (Faculty of Mathematics and Natural Science, University of Turku, Vatselankatu 2, 20014 Turku, Finland). Telephone +358 2 333 6454, www.utu.fi

International Master of Science in MPD in Protein Science and Biotechnology, University of Oulu, Biochemistry major, (grade: 4 “very good”), 22.02.2015. (Faculty of Biochemistry and Molecular Medicine, PO. Box 5400, 90014 University of Oulu Finland, Tel. +358 (0)294 481200, fbmm@oulu.fi)

Bachelor of Science in Biochemistry, University of Buea, Cameroon (Cumulative GPA of 3.41 on a scale of 4), 31.07.2009

Other education and training, qualifications and skills

Laboratory Animal Centre, Using animals in research - Carrying out procedure. University of Oulu, 18.03.2013 - 08.05.2013

Linguistic skills

English (C2, Proficient User), French (B2, Independent User) and Finnish (A2, Basic User)

Current position

Doctoral student in Molecular Life Science, University of Turku, Department of Biochemistry

Previous work experience

University of Turku - Project researcher (Ph.D. student)

January 2016 – present

- Natural products production, purification and analysis.
Production of bioactive compounds by culturing *Streptomyces* bacteria; purification by preparative HPLC and common chemistry procedures; assessment of purity and quality through analytical HPLC. Enzymatic biosynthesis of target compounds with purified enzymes.
- Protein production and purification
Generation of chimeric enzymes involved in nogalamycin biosynthesis - primer design, PCR, cloning, protein expression test, protein purification (small and large scale purification) with IMAC.

University of Oulu, FBMM - Research trainee/project researcher

August 2014 - December 2014/ April 2015 - June 2015

- Protein production and analysis/crystallization
Primer design, PCR, cloning, protein expression test, protein purification (small and large scale purification) with IMAC and Ion Exchange Chromatography. Protein crystallization, protein disulfide content determination by N-ethylmaleimide, Iodoacetic acid treatments and MS. Ellman's assay for free thiols, structure determination by CD and DLS/SLS.

Project researcher - February 2015 - March 2015

- Oxygen sensing and oxygen-dependent gene expression.
Luciferase assay, hypoxia cell lines characterization by WB

Research trainee - March 2014 - June 2014

- Proliferation assay (CFA), Cell cycle distribution (CyFlow of DAPI/EdU/ γ H2AX/tRFP)
- MTT assay, Immunofluorescence microscopy, FACS, Western Blotting, qPCR.

Leibniz-Institut für Altersforschung Fritz-Lipmann-Institute.V. (FLI) Jena, Germany:

Project researcher - November 2013 – January 2014

- Establishing of stable cell lines with inducible downregulation of target genes.
- Titration of knockdown with doxycycline, verification of knockdown by WB and qPCR

University of Oulu - Research trainee

April 2013 - October 2013

- Working with yeast genetics group carrying out different tasks and exploiting techniques such as cloning, PCR, yeast dissection, genes knockout, transformation and plate preparation and streaking.
- Cell culture, Transduction, Cloning, Cell migration assay.
- Downregulation/knockdown of genes by RNAi technique

Awards, prizes and honours

Award from the Scholarship Foundation of the University of Oulu. 28 May, 2013.

Merits in teaching and pedagogical competence

Supervision of summer trainees and visitors in laboratory, 6 months

Scientific and societal impact of research

Publications:

1. Siitonen, V., **Nji Wandji, B.**, Törmänen, A.-P., and Metsä-Ketelä, M. (2018) Enzymatic Synthesis of the C-Glycosidic Moiety of Nogalamycin R. *ACS Chem. Biol.* acschembio.8b00658.

2. Dinis, P.; **Nji Wandi, B.**; Grocholski, T.; Mestä-Ketelä, M. (2018) Chimeragenesis for Biocatalysis in Biomass, Biofuels and Biochemicals Series (*Elsevier*). Accepted (to be published)
3. **Nji Wandi, B.**, Siitonen, V., Dinis, P., Vukic, V., Salminen, T.A., and Metsä-Ketelä, M. (2018) Evolution-Guided Engineering of Non-Heme Iron Enzymes Involved in Nogalamycin Biosynthesis. *FEB Journal*. (Submitted)
4. **Nji Wandi, Benjamin**. (2015) BRCA Pathway and Hypoxia. University of Oulu, Faculty of Biochemistry and Molecular Medicine, Biochemistry.

Presentations at Conferences

- **Benjamin Nji Wandi**. (2017) Protein engineering of two non-heme iron α -ketoglutarate (α -KG)–dependent enzymes in the nogalamycin biosynthetic pathway. *VAAM Workshop "Biology of Bacteria Producing Natural Products"* in Tübingen, Germany.
- **Benjamin Nji Wandi**. (2018) Metabolic engineering for production of novel anthracycline anticancer agents. The 5th Russian-Finnish Drug Development Symposium: “Tomorrow's trends and technologies in drug development”

Scientific Visits:

- The European Synchrotron Radiation Facility (30.09. – 02.10.2018) Grenoble, France.

Positions of trust in society and other societal merits

- Responsible for managing the purchase order flow-through from the laboratory to the financial department at the University of Turku.

Project Management Skills

- Capable of evaluating risks and developing strategies to overcome project obstacles.
- Demonstrated commitment to safety throughout a projects lifespan.

Personal Skills

- Comfortable working in a changing environment
- Willingness to accept responsibility when delegated.
- Results driven; forward thinking with a problem solving mentality.
- Ability to prioritize own work in response to deadlines.
- Able to plan research and organize tasks effectively.
- Ability to resolve problems independently.
- Flexible with working hours and having excellent interpersonal skills.
- Experience in carrying out experimental research.