

International cooperation: MYTOX-SOUTH partnership to improve food security & food safety

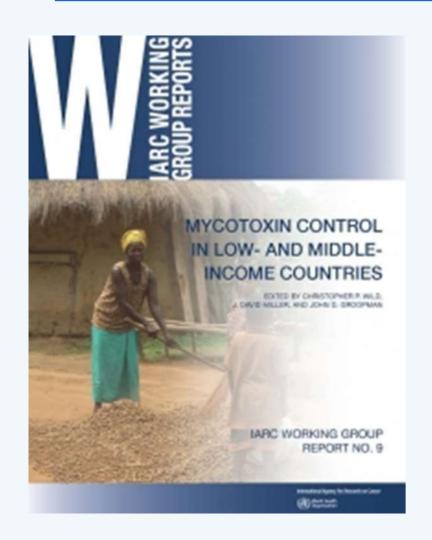
Prof. Sarah De Saeger, Dr. Marthe De Boevre & Prof. Carl Lachat

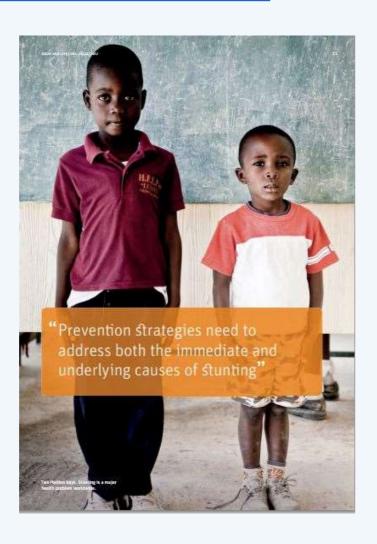


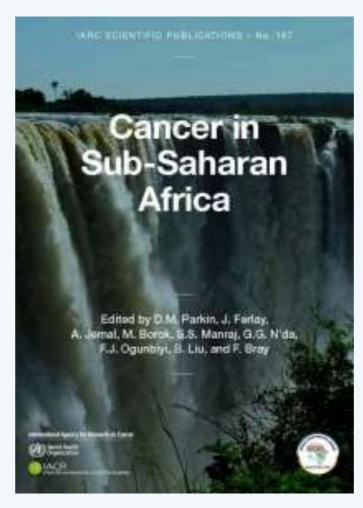




MYCOTOXINS AND HEALTH





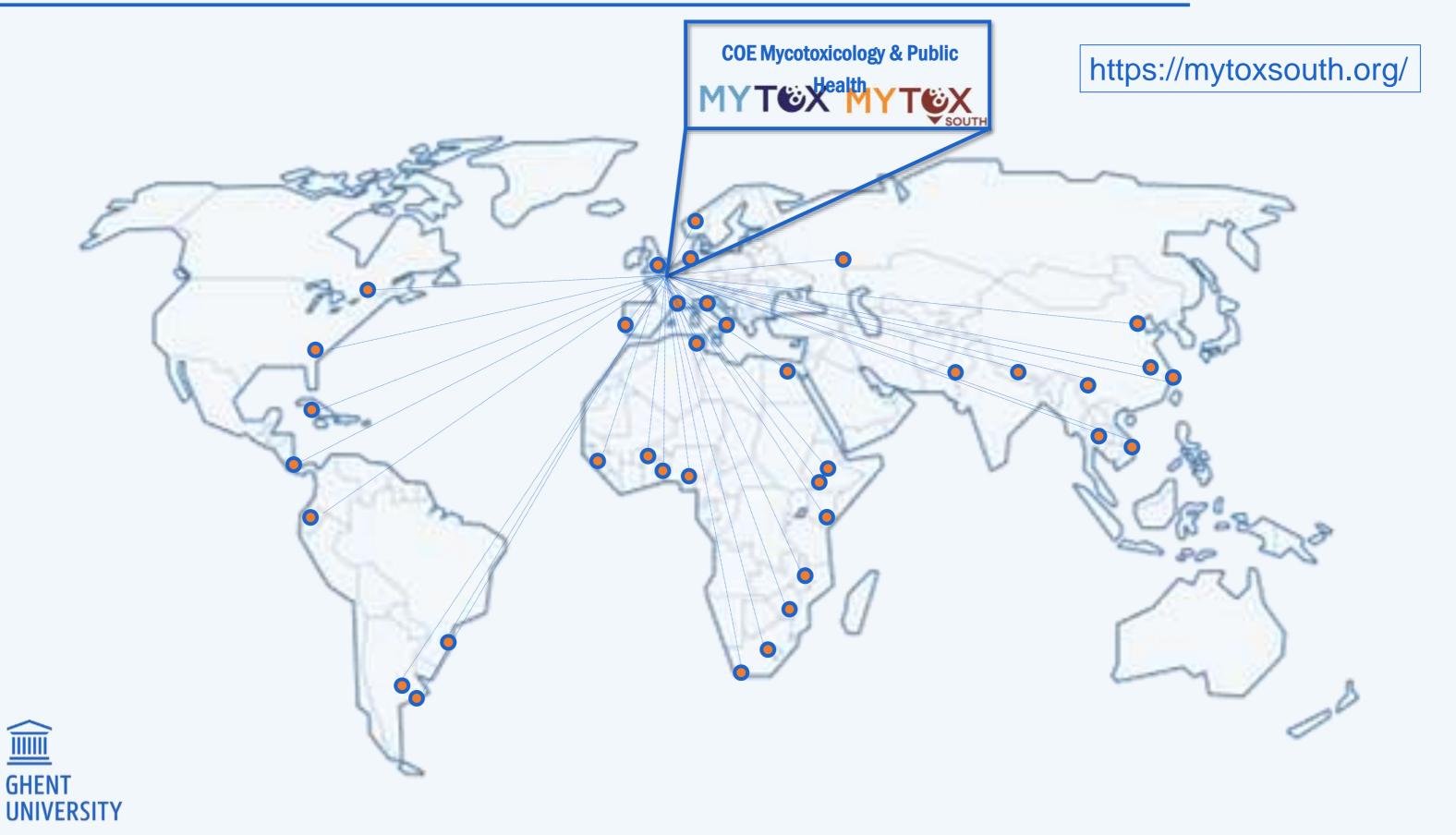




IARC concluded that Aflatoxins & Fumonisins not only are a cause of <u>acute poisoning and cancer</u> but also are a likely contributor to the high levels of <u>stunting</u> in children in affected populations. 26% of the world's children younger than 5 years having stunted stature.



GLOBAL PROBLEM NEEDS INTERNATIONAL APPROACH



MYTOX-SOUTH Coordination at GHENT UNIVERSITY

- CoE in Mycotoxicology and Public Health

Prof. Dr. Sarah De Saeger & Dr. Marthe De Boevre (Coordinators)

Prof. Dr. Carl Lachat (Nutrition and Health expert)











Supported by the Ghent University Global Minds Fund



MYTOX-SOUTH PARTNERS











BioIntellipro Inc.

Dr. Martin Lo

WFPC

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ISPA-CNR, Italy

Dr. Antonio Moretti

CAS, Shanghai

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Complutense Uni, Madrid

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GHENT UNIVERSITY

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S. Croubels & G. Antonissen

M. Eeckhout

P. Dubruel

S. Dehenauw & S. Abbeddou



EUROPEAN COMMISSION

JOINT RESEARCH CENTRE

Directorate Sustainable Resources (Ispra)

Food Security Unit

Letter of collaboration signed May 2020



MYTOX-SOUTH PARTNERS



Prof. Sheila Okoth & Dr. Johanna Lindahl - Dr. Delia Grace ILRI (Kenya)

Prof. Obadina Adewale, Prof. Atanda Olusegun, Prof. Hussaini Makun & Prof. Yemisi Jeff-Agboola (Nigeria)

Prof. Loveness Nyanga (Zimbabwe)

Dr. Limbikani Matumba (Malawi)

Prof. Ashagrie Woldegiorgis (Ethiopia)

Dr. Lindy Rose & Prof. Patrick Njobeh & Prof. Mulunda Mwanza (South Africa)

Dr. Happy Magoha & Prof. Martin Kimanya (Tanzania)

Dr. Richard Echodu (Uganda)

Prof. dr. Andrea Patriarca & Prof. Sofia Chulze (Argentina)

(PAEPARD) Platform for an Africa-Europe Partnership for Agricultural Research for Development (François Stepman)



GHENT

UNIVERSITY















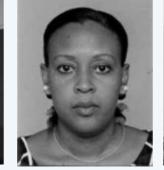






















MYTOX-SOUTH: AIM

- 1. Educating & training young students & scientists from low- & middle-income countries Building capacity through co-creation
- 2. Awareness creation Networking/partnerships
- 3. Conducting research and developing innovative technologies in terms of suitable mitigation strategies



















MYTOX-SOUTH selects young researchers for traineeship periods (1 to 6 months).











- Agustina Pavicich (Buenos Aires University, Argentina) 2018
- Sefater Gbashi (Johannesburg University (UJ), South-Africa) 2018
- John Awiel (South Sudan) 2018
- Ayodele Adebayo Soretirei (Nigeria) 2019
- Ouahamin Olivier Sombie (Burkina Faso) 2019
- Rumbidzai Changwa (UJ, South-Africa) 2019
- Olabisi Adeola Lanlokun (Nigeria) -2021
- Kgomotso Galian Setsetse (Northwest University, South-Africa) 2021





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Dissemination to policy makers







Harare, Zimbabwe, February 2018







Dissemination to policy makers

FIT-UGent mission,
November 2019





Flemish trade mission to Nigeria

Lagos, Abuja



Trade Mission Nigeria

SEMINAR AFRICA PLATFORM OF GHENT UNIVERSITY ASSOCIATION
ACADEMIA-PRIVATE SECTOR COLLARORATION: REST PRACTICE

TUESDAY 12 NOVEMBER 2019 - EKO HOTEL, LAGOS

14h00: Opening and introduction

by Annelies Verdoolaege (Coordinator Africa Platform AUGent)

4h10: Presentations by:

- Sarah De Saeger & Marthe De Boevre (Mytox-South, Ghent University)
- Marc Heijde (VIB-IPBO, Ghent University)
- Hussaini Anthony Makun (Federal University of Technology, Minna)
- Reinout Impens (SIAT Group)
- Frederick Schreurs (IITA's Business Incubation)

15h30: Coffee break and poster presentations of UGent and IFS alumni

16h30: Presentations b

- Jelmen Haaze (Belgian Alliance for Sustainable Palmoil)
- Robert Coleman (Dangote Foods)
- Emmanuel ljewere (Nigerian Agribusiness Group)
- Representatives of the Nigerian diaspora in Belgium (Ette Ibibio, Tonia Nkiru Emejuru & Azubuike Erinugha)

17h30: Q&A

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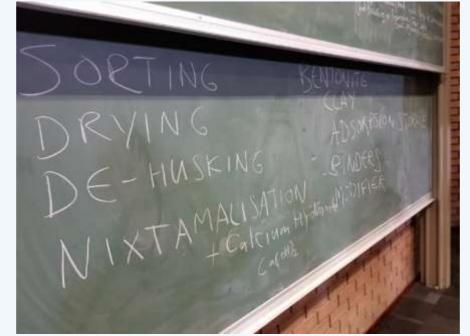
Awareness creation for farmers







Farmers' Lab, Soweto, Johannesburg, Feburary 2020





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MYTOX-SOUTH collaborative projects





A Long term EU- Africa research and innovation Partnership on food and nutrition security and sustainable Agriculture

MYCO-SAFE SOUTH. To provide safe-use options for AFs and/or FBs-contaminated food for children and adults through means of safe and efficient post-harvest intervention strategies, including nixtamalization, dehulling, fermentation and the usage of mycotoxin binders and/or modifiers investigated via *in vitro* and *in vivo* studies.

Nearly **US\$ 1M project** to tackle the mycotoxin issue in Africa!

Coordination: Prof. Siska Coubels and Prof. Gunther Antonissen



















MYTOX-SOUTH collaborative projects

MYT &X

THE WORLD BANK



January 2019

The World Bank grant (ACE Impact) for Mycotoxin Research in Africa

The Food and Toxicology Research Group (FTRG) of the **Federal University of Technology Minna (FUT) (Nigeria)** together with MYTOX-SOUTH were awarded to establish the "**African Centre of Excellence (ACE) for Mycotoxin and Food Safety**", \$6M

The creation of ACEMFS will create learning opportunities and research results to address Africa's shortage of expertise and applicable solutions to ensure a safe, controlled and sufficient food supply that will support economic

growth and public health.

Coordination: Prof. Hussaini Makun (FUT)







ERC STG HuMyco - DR. MARTHE DE BOEVRE

INVESTIGATING THE HUMAN MYCOBOLOME THROUGH UNITING LARGE-SCALE EPIDEMIOLOGICAL AND MECHANISTIC POLY-OMIC DESIGNS (2021 - 2026)

- IDENTIFICATION NEW MYCOTOXIN BIOMARKERS OF EXPOSURE AND EFFECT
- EXTERNAL RISK ASSESSMENT WITHIN EUROPEAN PROSPECTIVE COHORTS & PROOF-OF-CONCEPT AFRICA

- Internal risk assessment via biomarker profiling within European prospective cohorts

& AFRICA



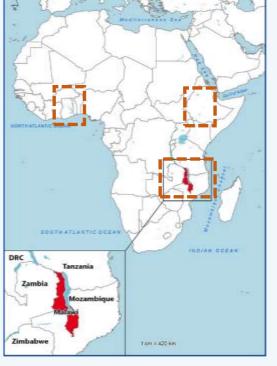
UNIVERSITY



International Agency for Research on Cancer







MYTOX-SOUTH: TAKE HOME

- To make progress in mycotoxin and food safety management, we need:
 - interdisciplinary research & development
 - co-creation
 - an international approach
 - outreach and debate with different policy makers, farmers, scientists



Team up for safety

Food safety is a shared responsibility









Prof. Sarah De Saeger

CENTRE OF EXCELLENCE IN MYCOTOXICOLOGY & PUBLIC HEALTH

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www.ugent.be - www.mytox.be - https://mytoxsouth.org

Funded by Ghent University & VLIR-UOS

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in Ghent University







