

INTRODUCTION

The Department of Public Health, Pharmacology and Toxicology (PHPT) is one of the five academic departments in the Faculty of Veterinary Medicine. It offers training, research and consultancy services in the following areas: Veterinary Public Health, Epidemiology, Food Hygiene (meat, milk and eggs), Meat Inspection, Zoonoses, Water Hygiene, Food Microbiology, Food Safety and Quality Assurance, Livestock Economics and Business Management, Pharmacology and Toxicology of Veterinary Drugs and Natural Products. Teaching takes place in the department for both undergraduate and post graduate programs.

The department is located at the College of Agriculture and Veterinary Sciences (CAVS), Upper Kabete Campus of the University of Nairobi. It comprises of two sections:

- Public Health Section
- Pharmacology and Toxicology Section

ACADEMIC PROGRAMMES

Undergraduate training:

The department offers the following courses to undergraduate students studying for the following Bachelor`s degrees in the faculty.

- Bachelor of Veterinary Medicine
- Bachelor of Biomedical Technology
- Bachelor of Wildlife and Tourism Management

Courses Offered:

- Public Health
- Epidemiology
- Biostatistics and Computer use
- Pharmacology and Toxicology
- Livestock Economics and Business Management
- Management and Entrepreneurship
- Food and Beverage Production, Sales and Service
- House Keeping
- Tourism Economics and impact management
- Public Relations and Entrepreneurship

The Department will soon start offering the following Diploma and Certificate Programs

- Diploma in Veterinary Public Health and Meat Technology
- Certificate in Meat Hygiene and Quality Assurance

Postgraduate training:

Masters programs:

The department offers the following four masters degree programs that are offered by coursework and thesis.

1. Master of Science in Pharmacology and Toxicology
2. Master of Veterinary Public Health
3. Master of Veterinary Epidemiology and Economics
4. Master of Natural Products and Bioprospecting

PhD programs:

Ph.D. programs are offered in each of the departments areas of specialization. The programs are currently offered by research and thesis only.

Consultancy Services:

The Department of PHPT provides consultancy services in the following areas:

- Microbiological quality analysis of food, water and feed
- Toxicity studies for pest control products
- Antibiotic residue analysis of food, honey and animal feeds (HPLC is used for analysis)
- Pesticide residue analysis of food and feed products including meat, fish, milk, honey, feeds, etc (GC) is used for analysis
- Aflatoxin analysis of food, feeds and other samples(using ELISA and HPLC techniques)
- Toxicological analysis of food and animal feeds
- Drug assays and efficacy trials
- Meat speciation tests
- Epidemiological and field surveys on areas of specialization.

Research Areas:

The department carries out research mainly in the following areas:

- Food safety and hygiene(Meat milk and fish)
- Zoonotic diseases: Epidemiology, diagnosis, control and prevention
- Food borne diseases: Epidemiology, diagnosis, control and prevention
- Chemical residues in foods and feeds (antibiotics, pesticides and mycotoxins)
- Pharmacology and toxicology of medicinal plants
- Epidemiology and economics of livestock diseases
- Toxicity of new pesticides

Collaborative linkages:

1. Pesticide Control and Products Board (PCPB). To provide toxicity testing for new pesticides products to the Kenyan Market for purposes of registration.

2. FAO Somalia – To provide training and consultancy services for Somalia`s the meat sector.
3. Addis Ababa University, University of Khartoum, Sudan University of Science and Technology (Sudan), Makerere University (Uganda) and Freie Universität, Berlin (Germany): On development and implementation of a joint masters course in Trans-boundary Animal Disease Management. This initiative is funded by the ACP-EU Collaborative Program in Higher Education (EDULINK).
4. Bee Keeping Station, Ministry of Livestock Development: On analysis of antibiotic and pesticide residues in honey
5. Ministry of Livestock Development, Department of Veterinary Services(Public Health Section)- On meat inspection and analysis of chemical residues in meat.
6. Carnage-Regional Initiative in Science and Education (RISE) through African Natural Research and training Network (AFNNET) – to provide training and research in natural products.
7. International Livestock and Research Institute (ILRI)
8. Kenya Agricultural Research Institute (KARI)
9. Kenya Medical Research Institute (KEMRI)
10. African Medical and Research Foundation (AMREF)

ACADEMIC STAFF AND THEIR AREAS OF SPECIALIZATION

Chairman:

Prof. Ombui, J.N. B.V.M. M.Sc., Ph.D. (Nbi) - Public Health, Food safety and hygiene, microbial biotechnology, antibiotic residues in food, antibiotic resistance..

Professors:

Gathuma, J.M., B.V.Sc., M. Sc., Ph.D. (Nbi) – Veterinary Public Health. Parasitic zoonosis, epidemiology, Animal health economics.

Mitema, S.E.O., B.V.M. (Nbi), M.S. (Kansas), Ph.D. (Nbi) – Pharmacology and Toxicology. Chemotherapeutic agents against haemoprotezoa, antibiotic residues studies, calcium channel blockers.

Maitho, T. E., B.V.M. M.Sc. (Nbi) Ph.D. (London) – Pharmacology and Toxicology. Non-steroidal anti-inflammatory drugs, pesticide residue in food.

Kang'ethe, E.K., B.V.M. (Nbi), M.Sc., (Bristol), Ph.D. (Nbi) – Public Health. Meat Science, forensic meat science, meat hygiene, Urban animal husbandry.

Associate Professors:

Kagiko, M. M., B.V.M., M.Sc., Ph.D. (Nbi) – Public Health. Parasitic zoonoses, immunology and food microbiology.

Arimi, S.M., B.V.M., M.Sc. (Nbi), Ph.D. (Reading) – Public Health, Milk hygiene, food microbiology and zoonosis.

Ombui, J. N., BVM, MSc., PhD (Nbi). Public Health, Food safety and hygiene, microbial biotechnology, environmental hygiene.

Njeruh, F.M., B.V.M., M.Sc., Ph.D. (Nbi) – Public Health., Immunology of parasitic zoonosis. Milk hygiene.

Senior Lecturers:

Gathura, P.B., B.V.M., M.Sc., Ph.D. (Nbi) – Public Health. Parasitic zoonosis, immunology and water hygiene.

Ogara, W. O., D.V.M., M.Sc., Ph.D. (Moscow) – Public Health, Meat and Fish hygiene, Environmental Health and hygiene, Environmental Impact Assessment.

Kitala, P.M., B.V.M., M.Sc., Ph.D. (Nbi) – Public Health. Viral zoonoses, epidemiology and disease control programs on rabies.

Kanja, L. W., B.Sc., M.Sc., Ph.D. (Nbi) – Pharmacology and Toxicology, Analytical chemistry, pesticide residues in food and mother`s milk.

Mbaria, J.M., B.V.M., M.Sc., Ph.D. (Nbi) - Pharmacology and Toxicology. Medicinal and toxic plants.

Lecturers:

Nderu, F.M.K., B.V.M., (Nbi), M.P.V.M. (California) – Public Health. Meat hygiene.

Kahunyo, J.M., B.V.M., M.Sc., (Nbi) – Pharmacology and Toxicology. Pesticide residue in food, mycotoxins.

Senerwa, D. M., B.V.M., M.Sc., (Nbi), on going Ph.D. – Public Health; Food Microbiology, Molecular biology, bacterial plasmid transfer and resistance.

Macharia, S.M., B.V.M., M.Sc., (Nbi) – Public Health. Epidemiology and animal health economics, control of zoonoses.

Oguna, M.J., B.V.M., MSc., (Nbi) ongoing Ph.D. (Nbi) – Pharmacology and Toxicology. Reproductive pharmacology.

Muchemi, G.M., B.V.M., M.Sc., Ph.D. (Guelph) – Public Health. Parasitic zoonoses, Biostatistics.

Mapenay, I.M., B.V.M., M.Sc., Ph.D. (Nbi) – Pharmacology and Toxicology. Reproductive pharmacology.

Nguta, J. M., B.V.M., M.Sc., Ph.D. (Nbi) – Pharmacology and Toxicology. Ethnopharmacology/Pharmacology and Toxicology of Phytomedicines

Tutorial Fellows:

Onono, J. O., B.V.M., MSc., Ph.D. – Public Health. Epidemiology and Biostatistics, Animal Health Economics.

Chief Technologist:

Mr. Johnson N. Gitahi, M.Sc., (Kenyatta Univ). Immunology, Molecular Biology, Food Microbiology



Senior Technical Staff:

Mr. Robert R. Koske, HND, B.Sc. (MKU)

Mr. Kenneth N. Maloba, HND

Mrs. Lucy W. Mwangi, HND

Mrs. Dorcas W. Nduati, HND, Bphil. (Applied Statistics), TUK

The department has much more to offer to industries, the public and all stakeholders in Public Health related issues.

Clients are encouraged to visit or call the department for services. For more information on training, research collaboration consultancy and partnerships, please contact the chairman through the contacts given below.

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COLLEGE OF AGRICULTURE AND VETERINARY SCIENCES (CAVS)



FACULTY OF VETERINARY MEDICINE

**DEPARTMENT OF PUBLIC HEALTH,
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