

## **Dr. Elvis Chikwati - Curriculum Vitae**

### **Introduction**

Elvis is a veterinarian with a specialization in fish health and nutrition.

He has experience in the physiological, histomorphological and immunological evaluation of gut integrity and function in fish exposed to novel feed ingredients and bioactive anti-nutrients. His research expertise includes evaluation of alternative feed ingredients, optimizing utilization feed resources, and development of tools for the monitoring of fish gut health.

His current activities are the development of a gut health monitoring service for fish farms, and the conduct of trials to evaluate the positive or negative effects of novel feed ingredients. Elvis also contributes to assessments and expert reports on veterinary medicines for fish, and provides histopathology expertise for the Nutrition research group at the NMBU School of Veterinary Medicine.

### **Expertise**

- Aquatic veterinary medicine
- Fish gastrointestinal physiology and nutritional disorders of fish
- Feed ingredients, bioactive feed components, functional feeds
- Pathology, histopathology, light and confocal microscopy

### **Work experience**

Aquamedic AS, Oslo. Research scientist ( 2015 )

- Gut health monitoring service and functional feeds trials
- Contributions to assessments and expert reports on veterinary medicines for fish
- Fish health and welfare projects

PhD thesis and Researcher in Professor Åshild Krogdahl's Nutrition group, NMBU School of Veterinary Medicine ( 2007 )

- Histology, histopathology, immunohistochemistry, and immunofluorescence
- Fish feeding and growth experimentation in both fresh and sea water
- Digestive physiological function measurements
- In vitro research methods using fish gut tissue and -cells

### **Education**

- PhD, Fish nutrition and health, Norwegian School of Veterinary Science (2013)
- Master of Aquatic Medicine, Norwegian School of Veterinary Science (2007)
- Bachelor of Veterinary Science, University of Zimbabwe (2004)

## Publications

*Bakke A.M., Chikwati E. M., Venold, F. F., Sahlmann, C., Holm, H., Penn, M. H., & Krogdahl, Å. (2014).*

Bile enhances glucose uptake, reduces permeability, and modulates effects of lectins, trypsin inhibitors and saponins on intestinal tissue.

Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology, 168, 96-109.

*Chikwati E. M., Gu J., Penn M. H., Bakke A. M., & Krogdahl Å. (2013).*

Intestinal epithelial cell proliferation and migration in Atlantic salmon, *Salmo salar* L.: effects of temperature and inflammation. Cell and tissue research, 1-15.

*Chikwati E. M., Sahlmann C., Holm H., Penn M. H., Krogdahl Å., & Bakke A. M. (2013).*

Alterations in digestive enzyme activities during the development of diet-induced enteritis in Atlantic salmon, *Salmo salar* L. Aquaculture.

*Chikwati E. M., Venold F. F., Penn M. H., Rohloff J., Refstie S., Guttvik A., Hillestad M. & Krogdahl Å. (2012).*

Interaction of soyasaponins with plant ingredients in diets for Atlantic salmon, *Salmo salar* L. British Journal of Nutrition, 107(11), 1570.

*Marjara I. S., Chikwati E. M., Valen E. C., Krogdahl Å., & Bakke, A. M. (2012).*

Transcriptional regulation of IL-17A and other inflammatory markers during the development of soybean meal-induced enteropathy in the distal intestine of Atlantic salmon (*Salmo salar* L.). Cytokine.