Postgraduate Online Learning Open Days 2025

International Animal Health

MSc, Pg Diploma, Pg Certificate

Dr Ewan MacLeod | Programme director Dr Emily O'Reilly | Deputy programme director

International Animal Health MSc, Pg Diploma, Pg Certificate



 Number of cattle, 2023

OurWorldinData.org/meat-production | CC B

Data source: Food and Agriculture Organization of the United Nations (2025

• Livestock are vital to the lives of millions of people

- Endemic and epidemic diseases that affect livestock limit productivity and exacerbate poverty.
- Infections that can be transmitted between domestic animals and people also threaten the health of livestock keepers, their families and their communities.
- This programme will equip you will the skills and knowledge needed to develop strategies to tackle the international animal health challenges of the 21st Century.



Our students

- Students join our programme from all over the world!
- Range of geographical, cultural and professional expertise:

Vets – technicians – lab – policy – educators

 Through class discussions you will have the opportunity to network and learn about the challenges and explore the policies and strategies that are being developed globally.



The Programme

- Certificate
 - Pathogen strategies for transmission and survival
 - Host responses to infection
 - Applied veterinary epidemiology
- Diploma
 - Zoonotic disease, transboundary diseases, wildlife, GIS, vaccinology, diagnostics, project planning, socioeconomics
- MSc
 - Dissertation (10,000-15,000 words)

Zoonotic disease

Surveillance and control of transboundary diseases affecting international trade

An introduction to transboundary diseases and their impact on trade and wildlife populations

Wildlife animal health and environment

Control of economically important parasites

The Nexus of Food Security and Global Health

Technological advances in diagnostics

Project planning and decision support for animal disease control

Introduction to GIS and spatial data analysis

New developments in epidemiology and the control of vector borne disease

An introduction to vaccinology

The Use of Artificial Reproductive Technologies in Threatened Species

Zoonotic diseases in a global setting

Globalisation and health

Pastoralism and Herd Health

The Modern Zoo

Project Management of Development Aid

> Am J Trop Med Hyg. 2021 Sep 7;105(6):1582-1589. doi: 10.4269/ajtmh.21-0241.

Bite Injuries among Vaccination Staff Participating in a Mass Canine Rabies Vaccination Campaign, Haiti 2016-2017

Rudy T Kirkhope ¹, Andrew D Gibson ² ³, Pierre Dilius Augustin ⁴, Kelly Crowdis ⁵, Natael Fénelon ⁶, Ewan T MacLeod ⁷, Marco A N Vigilato ⁸, Emily G Pieracci ⁹, Ryan M Wallace ⁹

Vet Parasitol Reg Stud Reports. 2019 Aug;17:100309. doi: 10.1016/j.vprsr.2019.100309. Epub 2019 May 31.

Prevalence of hemoprotozoan parasites in small ruminants along a human-livestock-wildlife interface in western Uganda

Keneth Iceland Kasozi ¹, Monica Namayanja ², Alex Kiarie Gaithuma ³, Michael Mahero ⁴, Enock Matovu ⁵, Junya Yamagishi ³, Chihiro Sugimoto ³, Ewan MacLeod ⁶

Review > Vet Rec. 2017 Sep 30;181(13):347. doi: 10.1136/vr.104370. Epub 2017 Aug 29.

Engaging veterinarians and farmers in eradicating bovine viral diarrhoea: a systematic review of economic impact

Matt J Yarnall ¹ ², Michael V Thrusfield ³

> BMC Vet Res. 2021 Mar 1;17(1):95. doi: 10.1186/s12917-021-02782-4.

A serological survey of brucellosis in wildlife in four major National Parks of Uganda

Robert Aruho ¹ ², Ewan T MacLeod ³, Leonard Manirakiza ⁴, Innocent B Rwego ⁵ ⁶

> J Helminthol. 2019 Oct 4;94:e92. doi: 10.1017/S0022149X19000890.

A socio-economic study of *Fasciola* infections in cattle and sheep at the Etoudi slaughterhouse, Yaoundé, Cameroon

E E Takang ¹ ², M LeBreton ³, C E Ayuk ⁴, E T MacLeod ¹

> Parasite Epidemiol Control. 2019 Feb 7;4:e00093. doi: 10.1016/j.parepi.2019.e00093. eCollection 2019 Feb.

Detection of circulating antigens for *Taenia* spp. in pigs slaughtered for consumption in Nairobi and surroundings, Kenya

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James M Akoko <sup>1</sup> <sup>2</sup> <sup>3</sup>, Ewan MacLeod <sup>2</sup>, Lian F Thomas <sup>1</sup> <sup>4</sup>, Pablo Alarcon <sup>5</sup>,
Erastus Kang'ethe <sup>6</sup>, Velma Kivali <sup>1</sup>, Dishon Muloi <sup>1</sup> <sup>7</sup> <sup>8</sup>, Patrick Muinde <sup>1</sup> <sup>5</sup>,
Maurice K Murungi <sup>1</sup> <sup>5</sup>, Julius M Gachoya <sup>9</sup>, Eric M Fèvre <sup>1</sup> <sup>4</sup>
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Studying

Teaching block	Weeks 1-5	Consolidation week	Weeks 6-10
Term 1	15 th Sept -17 th Oct		27 th Oct- 28 th Nov
Term 2	5 th Jan – 6 th Feb		16 th Feb- 20 th Mar
Term 3	6 th Apr- 8 th May		19 th May- 19 th Jun

- Taught courses are 10 or 20 credits
 - 10 credit course 5 weeks
 - 20 credit course 11 weeks
- Assessment
 - Written assignments
 - Essays, posters, grant submission, presentation
 - Online assessments
 - Online assessed discussion boards
 - Dissertations
 - 10,000-15,000 word dissertation



Modes of study and fees

- Part time
 - 60C-£6370
- Intermittent
 - 10C-£1065, 20C-£2125, 60C-£6370
- Postgraduate professional development
 - 10C-£1065, 20C-£2125

Entrance requirements



Honours degree

2.1 honours degree Suitable work experience with a lower qualification



English

An undergraduate or masters degree, that was taught and assessed in English in a majority English speaking country Graduated from an approved university Passed an English test in the last two years IELTS, TOEFL-iBT

Antigua and Barbuda Australia the Bahamas Barbados Belize Canada Dominica Grenada Guyana Ireland Jamaica New Zealand St Kitts and Nevis St Lucia St Vincent and the Grenadines Trinidad and Tobago UK USA

https://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/view&id=241



Graduate profiles

Emmanuel Isingoma (MSc IAH, 2018 Winter Graduation)



Game-changer: how the International Animal Health programme helped Emmanuel Isingoma develop as a government veterinarian in Uganda.

Brieuc Cossic (MSc IAH, 2015 Winter Graduation)



I have always known that I wanted to work at the international level on collaborative projects with other scientists, and thus the "One Health" approach was very attractive, not only for the level of science it fosters, but also for its direct applicability and the solutions that it may provide to people and animals worldwide.

Dorothy Breed (MSc.IAH, 2014 Winter Graduation)



I qualified as a veterinarian 2006 in South Africa and after 5 years in private practice I decided to study further in the 'One Health' field. I came across the International Animal Health programme at the University of Edinburgh and was very keen to do a degree in this field, especially through this prestigious university. I started the programme in 2011 and finished in 2014.

Emma Hobbs (MSc.IAH 2013 Winter Graduation)



When I qualified as a veterinarian in 2007, I was not drawn to traditional veterinary careers but was unsure of what career path I wanted to follow. A chance encounter with a group of field researchers studying schistosomiasis in chimpanzees and humans in Uganda provided the 'light bulb' moment for me, and I decided that "One Health" was the focus I had been looking for.

Laura Egbe (MSc.IAH, 2011 Winter Graduation)



On completing my doctor of veterinary medicine programme from the University of Ibadan in Nigeria in 1997, I returned home to Cameroon. I started giving part-time lectures at the department of Animal Sciences, University of Dschang with the hope to start a postgraduate programme. Things did not turn out as planned and before the end of my contract with the university I was taken up by the Cameroon government to work in the ministry of Livestock, Fisheries and Animal industries.

Dennis Muhanguzi (MSc.IAH, 2009 Winter Graduation)



When I joined the then Faculty of Veterinary Medicine and currently the College of Veterinary Medicine Animal Resources and Biotechnology at Makerere University, I found that over 6 very senior Faculty members had at some point been trained and graduated from the University of Edinburgh. As such, this group of Senior Faculty members just like anyone else regarded The University of Edinburgh very highly. Alex Thiemann (MSc IAH, Winter 2009 graduation)



For the first half of my career I focused solely on the clinical aspect of being an equine practitioner in a large practice, then went on to specialise in donkeys.

Career advancement

Alex from the UK

- Now able to combining clinical work with global outreach
- Providing education and training in role at the Donkey Sanctury
- New job title: Senior Veterinary Surgeon Education and Research
- Now leading strategy to improve donkey welfare (UK and globally)

"With this combination of postgraduate credentials I can now combine clinical work with involvement in the global aspect of the work of the Donkey Sanctuary, and provide education and teaching to a range of users. My new job title is Senior Veterinary Surgeon – Education and Research. With this new role comes the ability to guide strategy that will improve the lives of donkeys both in the UK and worldwide, and from the donkeys to the communities that depend upon them for their livelihoods"

Career advancement

Laura from Cameroon

- Directly applied knowledge from the programme at work
- Gained insights from global classmates
- Achieved notable success and multiple promotions
 - Promoted to Divisional Delegate
 - Now Sub-Director of Food Safety & Veterinary Public Health
- Inspired colleagues to join the programme
- Highly recommends the programme for working professionals

I have continued applying what I learnt from the MScIAH programme and sharing the knowledge gained with my colleagues at work. The programme gave me an added advantage as I was exposed to new research findings and learnt from the *experiences of my classmates from different* countries. I got some real outstanding successes in the way I executed my duties and this earned me several promotions, first as the Divisional Delegate in charge of the Mfoundi division hosting the capital Yaounde in Jan 2013 and I am now the Sub-Director in charge of Food Safety and Veterinary Public Health at the Department of Veterinary Services as of Feb 2015. I also inspired some colleagues who joined the programme after me. I am very happy I completed the programme and will highly recommend it to anyone who would like to further their education whilst carrying on with their professional life.

Further study....

Dennis from Uganda

- Secured EU-funded PhD after graduating
- Gained access to advanced lab facilities and expert supervision
- Completed PhD in 2015 on insecticide use for disease control
- MSc IAH supported academic and career growth
- Published over 40 peer-reviewed papers since 2006
- Promoted from Teaching Assistant to Lecturer
- Now a permanent university faculty member

I was not only able to competitively access an EU funded PhD a grant after my graduation in 2009, but also to access state of the art facilities to undertake PhD lab work. Through the same network, I got scientific support (supervision) and I finished my PhD early in 2015 after successfully optimising restricted application of pyrethroid insecticides for simultaneous tsetse and tick-borne disease control. The academic advancement above bolstered by MSc. IAH has also helped me advance my career. I have since 2006 published more than 40 peer reviewed manuscripts. As a result, I have been promoted from the then Teaching assistant, to Assistant lecturer and recently to Lecturer. As a result of the confidence my employer has had in me, I was also recently confirmed (upgraded to permanent Faculty Member) into University service.

Further study....

Emma:

- Enjoyment of MSc studies led to starting a PhD in Feb 2015 at vets school in St Kitts, the Institute of Tropical Medicine in Antwerp and University of Ghent
- Research part of the CYSTISTOP project in Zambia (One Health focus)
- Project targets *Taenia solium* control using biomedical and sociocultural methods
- Multiple publications on biomedical, socioeconomic, and educational findings

The enjoyment and intellectual stimulation I obtained from my studies with The University of Edinburgh directly led to my decision to undertake a PhD, which I started in February 2015 as a jointlyenrolled student with the Ross University School of *Veterinary Medicine (RUSVM) in St Kitts, West Indies in conjunction with the Institute of Tropical* Medicine (ITM), Antwerp and the University of *Ghent, in Belgium – certainly an international* student experience! My project sat within a large intervention-based field trial in Zambia called CYSTISTOP, a truly One Health project that aims to establish the 'best fit' package for Taenia solium control and/or elimination in sub-Saharan Africa using a combination of biomedical and sociocultural approaches. There have been several publications arising from our Taenia solium work in Zambia so far, reporting on the biomedical, socioeconomic and educational components of the project, which will continue until late 2020.

Interest

Michael:

- Loved work but felt disconnected from broader veterinary knowledge
- Missed engaging with the wider world of veterinary medicine
- More in touch with profession

I love my work, but after spending so many years in specialty practice my knowledge of other areas of veterinary medicine was dwindling, and this was a source of sadness for me as I always wanted to reach out to the world. In that respect this programme has been an "eye opener" and a "brain opener" for me, and I feel more like a veterinarian and more in touch with my profession than I have for many years

Michael

Last two years...

I recommend this Masters programme to any veterinary surgeon with a role in dealing with infectious diseases of livestock, wherever you might be in the world and whatever stage you are at in your career! Studying epidemiology during the Covid pandemic was particularly apt timing. The learning and work on my dissertation has enhanced my input as a board member for both the Moredun Foundation and the British Cattle Veterinary Association.

The taught course were challenging, thought provoking and trained me to examine evidence and research references in a way I had not done before. It is great to be made to think beyond one's narrow borders after a long period of immersion in UK agriculture.

I enrolled on this course after a long career in farm animal veterinary practice in the UK. The programme has offered almost all that I had hoped for... The on-line interaction with other students, working in a wide variety of fields across the world, is a highlight.

Teams calls give further opportunities to meet up and provide a taste of the day jobs of other students.

Why did you choose to study at the University on burgh?

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Resources



- Library
 - Journals
 - eBooks
- Software
 - Office 365
 - Teams
- Institute for Academic Development



Further information

Check out our website

https://www.ed.ac.uk/biomedical-scien

<u>ces/postgraduate-studying/online-learning/international-</u> <u>animal-health</u>

Contact us on IAH.onlineMSc@ed.ac.uk

Or

futurestudents@ed.ac.uk

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International Animal Health (MSc, Pg Diploma, Pg Certificate)

Building on a solid foundation of biological, immunological, pathological and epidemiological principles, you will develop the skills and expertise needed to identify, control and manage animal diseases.



Livestock are vital to the lives of millions of people, however, endemic and epidemic diseases that affect livestock limit productivity and exacerbate poverty. Infections that can be transmitted between domestic animals and people also threaten the health of livestock keepers, their families and their communities. In many developing regions farmers and animal health workers are often ill equip pou will the skills and knowledge needed to develop strategies to tackle the international animal health challenges of the 21st Century.

Students join our programme from all over the world with a huge range of geographical, cultural and professional expertise. Through class discussions you will have the opportunity to network and learn about the challenges students are facing in different countries and explore the policies and strategies that are being developed globally.



What will you study?

veterinary security masters disease education diseases di animal msc cattle work dissertation health career **New** mapping infectious colleagues students research immunity university programme poultry promotion welfare