

About the Large Animal Research and Imaging Facility

The University of Edinburgh's Large Animal Research and Imaging Facility (LARIF) is located on the Easter Bush Campus, which is also home to The Royal (Dick) School of Veterinary Studies, the Roslin Institute and other partners (see below). It offers users the opportunity to capitalise on a wide range of expertise in farm animal production, health and welfare, including infectious diseases and zoonoses, vaccines, genetics and genome editing, imaging, radiology, medicine surgery and critical care.

Research within the LARIF supports the One Health framework, recognising the link between human, animal and environmental health. It offers exceptional specialist facilities for in-depth studies of all major farmed livestock, including containment areas for work involving infectious pathogens, facilities to produce genetically altered animals, environmentally controlled units suitable for behaviour and welfare studies, medical imaging for large animals and surgical and critical care facilities.

On site resources and collaborations

The location of the LARIF on the Easter Bush Campus, which is a major national focus for animal research, provides ready access to a broad range of expertise and additional facilities, including:



Farm facilities including holding areas for cattle, sheep and pigs of all ages



Veterinary facilities and services at the Royal (Dick) School of Veterinary Studies



Expertise in farm animal genetics, health and production from the Roslin Institute



Specialist pathology services via Easter Bush Pathology



Aquaculture facilities



Global Academy of Agriculture and Food Security



National Research Facility for poultry



Centre for Tropical Livestock Genetics and Health



Scotland's Rural College (SRUC)



Edinburgh Imaging

Researchers at the Easter Bush Campus also have extensive collaborations with leading animal breeding and pharmaceutical companies

Contact Us

To find out more about what LARIF can offer, read case studies and request information about accessing the LARIF facilities, please visit our website or email us using the details below.

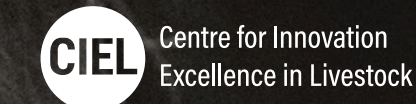
 larif@ed.ac.uk

 edin.ac/larif

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.



THE UNIVERSITY of EDINBURGH
The Royal (Dick) School
of Veterinary Studies



Centre for Innovation
Excellence in Livestock

Large Animal Research and Imaging Facility

Transgenics/Embryology

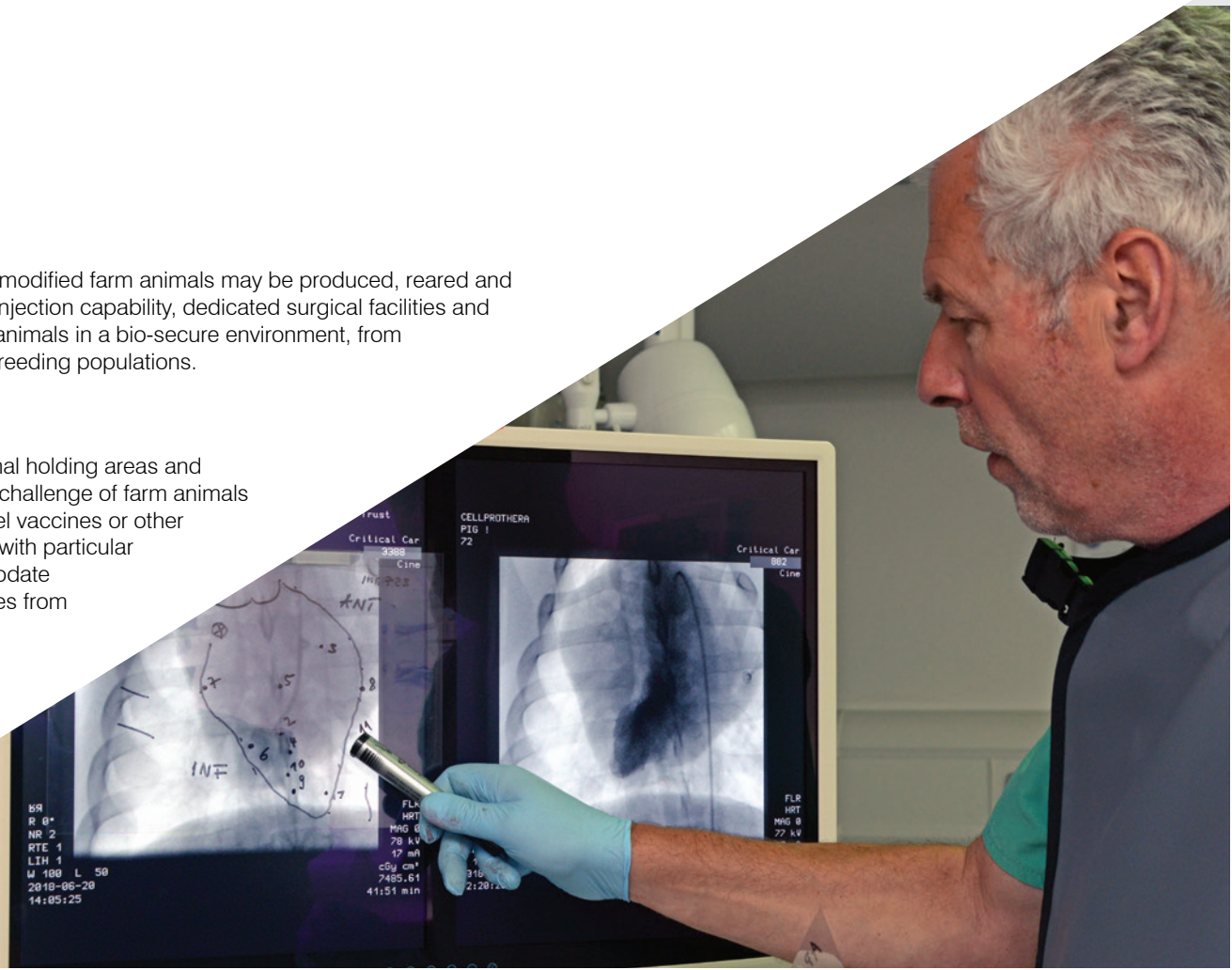
Within LARIF and in cooperation with our partners, genetically modified farm animals may be produced, reared and studied. Our facilities include embryology facilities with micro-injection capability, dedicated surgical facilities and environmentally controlled animal rooms, which can maintain animals in a bio-secure environment, from implantation of engineered zygotes through to the rearing of breeding populations.

Infectious Diseases

A Containment Unit (CU) within LARIF provides specialist animal holding areas and dedicated procedure rooms, allowing controlled experimental challenge of farm animals with infectious pathogens, e.g. to test the effectiveness of novel vaccines or other therapies. The CU can hold multiple species of large animals, with particular expertise in cattle, sheep and pigs. The CU can also accommodate poultry, and users benefit from unique avian lines and resources from the National Avian Research Facility (NARF) on campus.

Behaviour/welfare studies

The LARIF provides environmentally-controlled units equipped with CCTV, suitable for farm animal welfare and behaviour studies, which can also take advantage of the imaging and surgical facilities where required.



Imaging and Surgical Facilities

The LARIF provides cutting-edge medical imaging facilities, including:

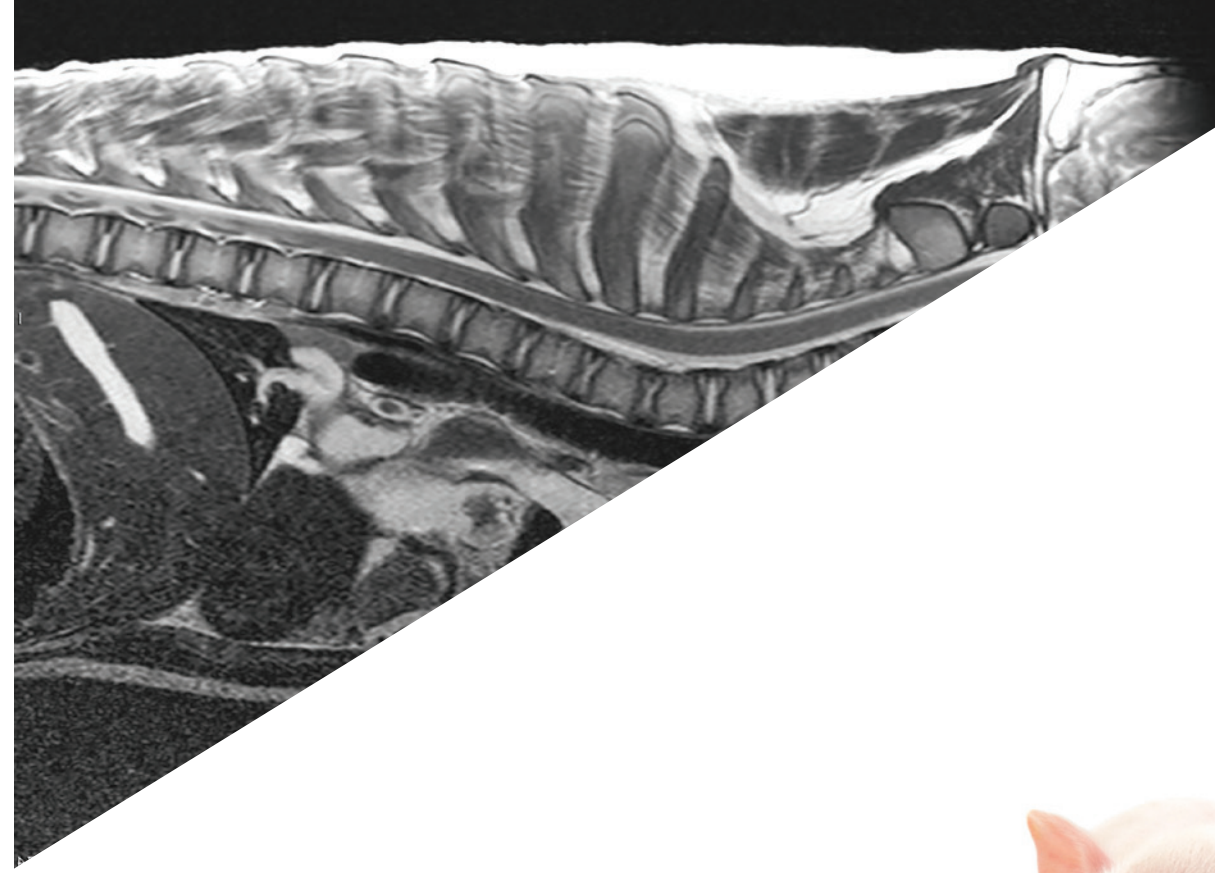
- Computed tomography (64-slice scanner)
- Magnetic resonance imaging (3 tesla (3T) MRI scanner)
- C-arm fluoroscopic X-ray system
- Ultrasound

The LARIF imaging facilities benefit from close collaboration and support from Edinburgh Imaging, an academic hub of expertise in medical/veterinary imaging, preclinical imaging and image analysis.



Critical Care Unit (CCU)

The CCU provides year-round, 24-hour intensive care for large animals, equivalent to that provided in human intensive care units, via a highly skilled team of European and RCVS-recognized specialists in veterinary anaesthesia. As such, it is the only unit of its kind in Europe, and the team are recognised nationally and internationally for their expertise and achievements. They also provide vital support for large animal surgical and imaging studies.



Welfare

A Culture of Care is central to the function of the LARIF and animal welfare is our utmost priority. All work will be undertaken in line with UK Home Office Guidelines and licencing requirements and will be overseen by a team of dedicated Named Veterinary Surgeons who are independent from the work carried out within the facility.

