

# SRUC Pig Research Research Studies & Services

## • Behaviour and Welfare

- Welfare evaluation including Qualitative Behavioural Assessment
- Behavioural observations and analysis
- Cognitive tests and social network analysis
- Pain and stress assessment
- Positive welfare assessment
- Positive stockpersonship and husbandry techniques
- Physiological sampling
- Building design and environmental enrichment
- Stakeholder engagement and social science

## • Nutrition and Gut health

- Growth and Performance
- Nutrition and gut health
- Microbiome, including AMR profiling
- Alternatives to antibiotics
- Challenge models
- Feed intake and growth rate
- Environmental impact
- Genetics

## • Sensors and Technology

- IR Thermal and CT imaging
- 3D cameras and EID
- DNA tagging
- Facial recognition
- CCTV surveillance
- Behavioural event logging
- Activity and accelerometry
- Heart rate monitoring
- Environmental monitoring and data collection

## • Laboratory and Data Services

- Veterinary Investigation services
- Post-mortem investigations
- Analytical services and feed analysis
- Epidemiology
- Biomarkers laboratory

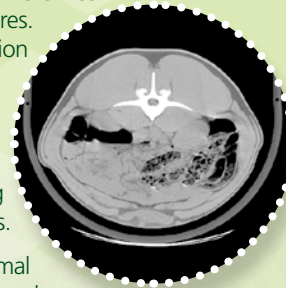


## SRUC Pig Research

SRUC's Pig Research Centre has two farrow-to-finish pig units and specialises in high quality research and education. Easter Howgate is a high health and high welfare pig unit with commercial buildings that can host experiments as well as dedicated research facilities offering greater flexibility and control in terms of feeding, housing, group sizes, temperature, ventilation and flooring.

New facilities, supported by funding from the Centre of Innovation Excellence in Livestock have expanded our free farrowing facilities and the capacity of our dedicated research buildings to accommodate flexible flooring. This enables us to conduct research focussed at tackling industry-relevant needs such as, finding solutions to tail biting, tail docking, freedom around farrowing, meeting legislative requirements, codes and recommendations to provide manipulable materials.

Easter Howgate is a designated establishment allowing Home Office licenced trials and accommodating minor surgical procedures. Off-site and mobile facilities include a Veterinary Investigation Unit, Analytical Services Department (specialising in feed analysis), a Biomarkers Laboratory, a mobile CT scanner, as well as mobile Thermography capabilities. Oatridge pig unit is a conventional farm accommodating educational training in animal husbandry techniques as well as offering potential for focussed trial work under commercial settings.



SRUC designs and manages major research projects in animal science to a high standard, publishing in refereed international journals (Quality Assurance ISO 9001:2008). Our skills and experience cover a wide range of animal husbandry and research methodologies.

## Contact Details

T: 0131 535 4000 E: [pigs@sruc.ac.uk](mailto:pigs@sruc.ac.uk) [CIEL@sruc.ac.uk](mailto:CIEL@sruc.ac.uk)

Scotland's Rural College, SRUC  
Leading the way in Agriculture and Rural Research, Education and Consulting

SRUC is a charity registered in Scotland, No. SC003712 1357936AD.30.4.2018

We work with  
**Innovate UK**

In partnership to deliver  
innovation in livestock



We work with  
**Innovate UK**

In partnership to deliver  
innovation in livestock



THE QUEEN'S  
ANNIVERSARY PRIZES  
FOR HIGHER AND FURTHER EDUCATION  
2017



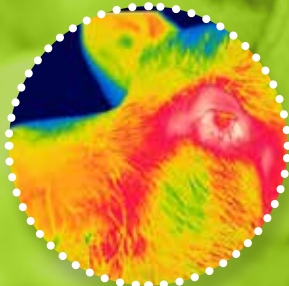
SRUC

## Pig Research

Specialising in high quality research and education



SRUC - Scotland's Rural College  
Leading the way in Agriculture  
and Rural Research, Education  
and Consulting



SRUC – winners of the

Queen's Anniversary Prize 2017 – supports innovation and sustainable development in agriculture and the rural sector in Britain and internationally. We are one of the UK's leading agriculturally-focussed higher education institutions, offering a unique blend of research, education and consultancy.

SRUC's research and education activities operate from six campuses and eight farm and research centres across Scotland. Our consultancy arm supports more than 12,000 farms and rural businesses across the UK from 25 consultancy offices and eight veterinary disease surveillance centres.

## SRUC Pig Research Capabilities

### Breeding herd

- **Gilt-rearer:**

18 gilt places in 3 pens each for 6 gilts. Boar pen. Straw bed, dunging channel, individual feeders. Viewing gallery.

- **Dry sow house:**

108 sow places in 18 pens each for 6 sows. Straw bed, dunging channel, individual feeders, 2 boars, AI service area.

- **Conventional farrowing house:**

30 sow places in 6 crated pens in each of 5 rooms. Straw and shavings on concrete, small slatted dunging area behind sow, covered heated creep (at front). Instrumented for behavioural and climate monitoring.

- **PigSAFE free farrowing houses:**

24 sow places in 2 buildings housing 12 sows each. Mix of flooring types (concrete and slatted) with straw and shavings. Instrumented for behavioural and climate monitoring.



### Weaner/Growers/Finishers

- **Weaner shed:**

12 sloped "Straw Flow" pens for 20 pigs (240). Lid covered beds, straw on concrete, dunging channel.

- **Grower shed:**

18 pens for 20 pigs (360). Straw bedding on concrete, dunging channel.

- **Finisher shed:**

24 pens for 20 pigs (480). Straw bedding on concrete, dunging channel. Automatically controlled natural ventilation throughout.



### Research Buildings

- **Research Building 1:** Two rooms 18m x 8.2m and 11.5m x 8.2m.

- Room 1: Created through our partnership with the Centre for Innovation Excellence in Livestock, this new room provides flexible flooring (Ikaden Ultraflex) and adjustable penning to allow different pen sizes and configurations. Underfloor scrapper system for slurry removal.
- Room 2: Flexible penning to accommodate a range of trial needs, including discrete behavioural tests.
- Viewing gallery over both rooms.
- Instrumented for behavioural and climate monitoring.



- **Research Building 2:** Two rooms, each 15m x 15.2m.

- Room 1: Flexible penning to accommodate a range of trial needs. Climate controlled.
- Room 2 Currently 12 Loose farrowing (PigSAFE) prototype. Part slatted, part solid flooring with underfloor scraper system for slurry removal. Instrumented for behavioural and climate monitoring.

- **Research Building 3:** Six rooms, each 7.3m x 5.1m.

- This building can be quarantined from the rest of the unit, enabling import of pigs and pathogen studies.

- **PigSAFE free farrowing commercial demonstration and research building:** Two rooms, each 14.7m x 5.3m

- 12 PigSAFE pens (2.4m x 3.6m each).
- Part-slatted, part solid flooring (Ikaden Ultraflex) to accommodate trial needs, with integrated slurry system.
- Instrumented for behavioural and climate monitoring.