Atypical BSE prion progression in natural hosts (production of EQA reference materials)

Christine Fast, Martin Groschup, Sonja Ernst







Project Lead

FLI







EURL TSE



Giuseppe Ru

Employees (who will make it happen)

1x PostDoc: Sonja Ernst

1x Animal keeper: Ben Schiller

• ½ Technician: Miriam Müller

Work Plan

- Intracerebral Inoculation of calves with Atypical BSE (H- und L-Typ)
- 10 Holstein Friesian cows per BSE type
- **Sampling during incubation time**
- **Expected incubation time: 15-20 mpi**



Total duration: 3 years

| Group | No. of Animals | Inocula | Blood | CSF | Clinical examination | Systematic neurol. examination |
|---------------|-------------------|--|---------|---------------------|-------------------------|--|
| H-type BSE | Up to 10 | 10% homogenate (1 st passage) | Monthly | Every six months | At least weekly | Depending on health status of animal after first neurological signs |
| L-type BSE | Up to 10 | 10% homogenate (1st passage) | | | | |

Specific research questions can be assessed on request by other researchers



Biological material for the next 20 years are secured

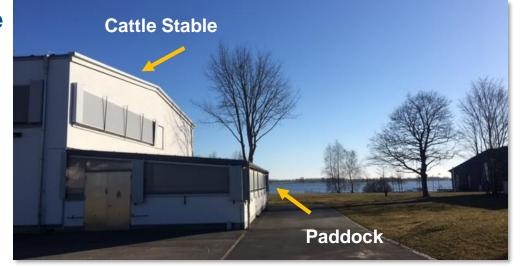


BSL 3** Facility













BSE Necropsy Hall





seit 1910



BSE Stable





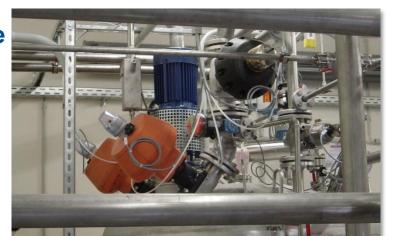








Bundesforschungsinstitut für Tiergesundheit Federal Research Institute for Animal Health BSE Stable





All waste/wastewater will be autoclaved at 136 °C for 4h at 3bar







seit 1910

Bundesforschungsinstitut für Tiergesundheit
Federal Research Institute for Animal Health

Stable has been prepared

- ✓ Usage of storage room for old furniture => everything has been cleared out
- √ Sinks and sewage pipes has been cleaned
- ✓ Stable has been cleaned from storaged hay (autoclave!)
- ✓ Technical tests of autoclaving procedures ongoing



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Isolates

✓ Material available in Italy (H-type) and Germany (L-type)





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vailable to finish her thesis to be allowed for July sonja has to finish her thesis to be allowed for July ✓ All additional staff members (PostDoc

Isolates

✓ Material available

Animal

- ✓ Pro approval is in preparation
- Animal are planned for August, first 6-8 weeks probation period for the stable, training for inoculation ...









