The Pig as a Model – University of Copenhagen, August 2012

1. Name, Research Group and Department
Ole Lerberg Nielsen, Department of Veterinary Disease Biology

2. e-mail
ole@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
We primarily use the pig to model infectious (bacterial) diseases. In previous studies on Staphylococcus aureus mediated sepsis and related diseases, we developed a localized haematogenous osteomyelitis model (only one leg infected). We will develop radioactive PET-tracers that specifically will target inflammation (e.g. both porcine and human neutrophils) and infection (S. aureus), and prove the efficacy of the tracers by scanning pigs induced with localized, S. aureus osteomyelitis. PET scannings will be compared to quantitative pathology (stereology).

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Inflammation, sepsis, osteomyelitis, neutrophils, endothelium, staphylococci

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Radiochemistry, PET tracers, osteomyelitis, diagnostics, staphylococci

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Ingen besvarelse

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Radiochemical lab. facilities, PET scanners, histopathology lab., immunohistochemistry specific to pigs, blood sample assays specific to pigs

8. Do you have access to biological material? If yes, can this material be included in future research projects?
I do have access to biological material. The material can be included in future research conditional to acknowledgement of the usual collaboration agreements.

9. What is your vision for your research area?
We would like to develop our sepsis model further, and expand the post inoculation time from the present 48 hours (non-anaesthetized) to 96 hours (the pigs are kept anaesthetized). This would more precisely mimic the human situation, and we expect the pigs to develop more manifest organ failure.
1. Name, Research Group and Department
Axel Kornerup Hansen, Section of Biomedicine, Laboratory Animal Science Group, Dept. Veterinary Disease Biology

2. e-mail
akh@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
The importance of the early life when modelling inflammatory disease in pigs

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Laboratory animal science, immunology, inflammation, diet, gut microbiota

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Comparative Medicine, Early life, Diabetes

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Ingen besvarelse

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Frederiksberg pig facility, various laboratories in the section

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Characterized human gut microbiotas, according to agreement with other project holders it can probably be used

9. What is your vision for your research area?
We want to have full control over the gut microbiota in laboratory animals
The Pig as a Model – University of Copenhagen, August 2012

1. Name, Research Group and Department
Jens Juul Holst, div endocrinol Metab, Dept Biomedical Sciences, Panum

2. e-mail
jjholst@sund.ku.dk

3. Your research interests using the pig - please describe briefly and generally
We have used pigs for biomedical research in endocrinology and gastroenterology since 1976 for its similarity to human physiology. Main focuses have been endocrine and neuronal control of organ function, including exocrine endocrine and motor function of all organs in the abdominal cavity, including adrenal glands.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Physiology. Isolated perfused organs. Stomach, pancreas, gall bladder, duodenum, small intestine, large intestine, adrenal glands,

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

physiology; neural regulation, parasympathetic, sympathetic, non-cholinergic, nonadrenergic (peptidergic);

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Physiology; gut hormones; mechanisms for release of gut hormones

7. Describe methods, infrastructures/apparatus/facilities that you use/have

8. Do you have access to biological material? If yes, can this material be included in future research projects?
NO. But we can collaborate and provide tissues/samples from any region of a pig.

9. What is your vision for your research area?
The pigs are probably particularly useful for pancreatic research, where the similarities to human physiology are particularly prominent. It is also great for studies of neuronal regulation. Pigs might be particularly useful if a model for human metabolic syndrome/type 2 diabetes could be developed (better than fat Göttingen pigs).
1. Name, Research Group and Department

Thomas Eriksen

2. e-mail

ter@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally


4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Surgery, vascular access, percutaneous CT guided CVK

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Surgery, minimal invasive surgery, endoscopy guided vascular access

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Surgery, GI-surgery, gastrostomy, jejunostomy, caecostomy.

7. Describe methods, infrastructures/apparatus/facilities that you use/have

General and endoscopic surgical techniques incl experience staff, anaesthesia and analgesia, OR-suite for appr. 12 animals incl inhalation anaesthesia. Trained staff with extensive experience in anaesthesia and analgesia.

8. Do you have access to biological material? If yes, can this material be included in future research projects?

Bloodsamples and tissue sample from approx. 150 normal experimental animals can be obtained.

9. What is your vision for your research area?

Development of standardised high quality surgical techniques in experimental GI- and vascular surgical models.
1. Name, Research Group and Department
Merete Fredholm, Genetics and Bioinformatics, IKVH

2. e-mail
mf@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
1) We have established a pig resource population designed to elucidate the molecular background for obesity and obesity related disease. 2) Characterization of genes involved in the development of lung emphysema in a pig model. 3) Host-pathogen interaction

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
genetics, genomics, molecular pathways, obesity, obesity related diseases

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Genetics, genomics, molecular pathways, emphysema, COPD

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Genetics, genomics, host-pathogen interaction

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Linkage studies, GWAS, SNP genotyping, sequencing, qPCR, RNAseq, western blotting

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Animals, tissue biobank

9. What is your vision for your research area?
Elucidation of novel molecular mechanisms underlying diseases and traits of major importance to global health.
1. Name, Research Group and Department
Vanessa Hall, Anatomy Group, Department of Veterinary Clinical and Animal Sciences

2. e-mail
vha@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Porcine embryonic stem cells, induced pluripotent stem cells, neural stem cells, cell signaling in pluripotency

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

   stem cells

   pluripotency

   Alzheimer's disease

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

7. Describe methods, infrastructures/apparatus/facilities that you use/have
qPCR, immunocytochemistry, Westerns, ELISA, fluorescent microscope, GMO Class 1 lab

8. Do you have access to biological material? If yes, can this material be included in future research projects?
yes, pigs from slaughterhouses

9. What is your vision for your research area?
Establish bona fide embryonic stem cells, improve stem cell culture conditions, define pluripotency signaling
1. Name, Research Group and Department
John Olsen/Luca Guardabassi - Department of Veterinary Disease Biology

2. e-mail
joe@life.ku.dk/lg@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
The pig is used to study 1) mechanisms of antimicrobial resistance 2) colonization with infectious agents, for example MRSA 3) to study the importance of the normal gut flora on health

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Antibiotic resistance

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Staphylococcus aureus

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Gut flora

7. Describe methods, infrastructures/apparatus/facilities that you use/have
General bacteriology methods, specialized microbiological methods, isolation facilities (pig-box) in experimental animal unit.

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Large strain collections of bacteria including genetically modified bacteria. Large collections of DNA samples from intestine of pigs treated with antibiotics.

9. What is your vision for your research area?
Improve the health of the pigs as well as of humans and other animals through research with the pig as a model
1. Name, Research Group and Department

Poul Hyttel

2. e-mail

poh@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally

Developing the pig as a biomedical model using (1) genetic modifications implemented by cloning by somatic cell nuclear transfer and (2) stem cell research with particular focus on pluripotent stem cells.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Stem cells, pluripotency, induced pluripotent stem cells (iPSC)

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Cloning, genetic modifications

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Ingen besvarelse

7. Describe methods, infrastructures/apparatus/facilities that you use/have

Stem cell laboratory with all equipment for contemporary stem cell culture and characterization. Laboratory for transmission electron microscopy.

8. Do you have access to biological material? If yes, can this material be included in future research projects?

Access to porcine embryos and fetuses and porcine induced pluripotent stem cells (iPSC) and their differentiated progeny, with special focus on neural differentiation.

9. What is your vision for your research area?

To develop the pig as a faithful biomedical model for stem cell therapy.
1. Name, Research Group and Department

Johanna G Christiansen, PhD-student of the Experimental Staphylococcus aureus Sepsis Group, Department of Veterinary Disease Biology, Section of Pathology

2. e-mail

jogy@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally

The induction of porcine experimental endocarditis (S.aureus endocarditis, in particular) as a model for the human disease. Histopathology and immunohistochemistry of endocarditis.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Histopathology

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Staphylococcus aureus

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Endocarditis

7. Describe methods, infrastructures/apparatus/facilities that you use/have

Experimental induction of sterile endocardial thrombi as well as endocarditis associated with S. aureus. Necropsy facilities and a histologic laboratory. Bacteriology in cooperation with the microbiological section. Surgical facilities in cooperation with the laboratory animal section, ultrasonography/echocardiography and other scanning facilities in cooperation with IMHS.

8. Do you have access to biological material? If yes, can this material be included in future research projects?

Yes, possibly. Paraffin-embedded tissue from pigs with endocarditis.

9. What is your vision for your research area?

Endocarditis is a disease with a high mortality, and the number of cases due to S. aureus has increased in the past years. Therefore, the development of a reproducible porcine model of the disease could make it possible to study the disease pathogenesis, pathology, therapy and might also be used as a model of embolism (e.g. to the brain), which is seen in many of the human cases and is associated with increased mortality.
1. Name, Research Group and Department
Helle Gerda Olsen, S.aureus pyemia pig model research group, pathology, Dep. of Vet. disease biology.

2. e-mail
gerda@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Sepsis, inflammation, acute phase response, gastro-intestinal and liver function during sepsis. Also how to preserve animal welfare in sepsis studies, i.e. working with practical aspects of model development and refinement. The pig is advantageous in sepsis studies because its size eases continuous monitoring, blood sampling etc.: Possible to obtain a highly detailed perspective of the complex processes of sepsis.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
immunology, acute inflammation, sepsis, liver function, acute phase response, serum amyloid A (SAA).

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Pathology, histology, liver and intestinal morphology in pigs with sepsis, gut-liver axis.

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Statistics, chemometrics (i.e. multivariate analysis approaches), model development/refinement.

7. Describe methods, infrastructures/apparatus/facilities that you use/have

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Yes, we, at research group level, have worked on establishing a 'tissue bank', comprising serum, formalin-fixed paraffin-embedded tissue, and RNA-stabilized tissue. Hopefully it can and will be used in future studies.

9. What is your vision for your research area?
To establish a robust, well-characterized, manageable porcine sepsis model that can be used for testing new sepsis treatment regimes for humans.
1. Name, Research Group and Department
Lærke Boye Astrup, Special Pathologi, University of Copenhagen

2. e-mail
boye@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
   The pig as a model of brain diseases/pathology

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
   Immunology, bacteriology, staphylococci

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
   Surgery, brain, micro - and macro approach

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
   Pathology, brain, infectious versus sterile, macroscopic and histological

7. Describe methods, infrastructures/apparatus/facilities that you use/have

8. Do you have access to biological material? If yes, can this material be included in future research projects?
   Yes. Maybe (I do not know how much will be left after my examinations....)

9. What is your vision for your research area?
   To design porcine models of brain diseases - with special emphasis on infectious models using Staphylococcus aureus
1. **Name, Research Group and Department**
Karla Kristine Freude Anatomi Department of Veterinary Clinical and Animal Sciences

2. **e-mail**
kkf@sund.ku.dk

3. **Your research interests using the pig - please describe briefly and generally**
derivation of iPS cells from pig fibroblasts for genetic manipulations and studying neurological human diseases

4. I. **Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**
developmental biology

5. II. **Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**
stem cell biology

6. III. **Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**
disease related pathway and gene analysis

7. **Describe methods, infrastructures/apparatus/facilities that you use/have**
stem cell culture, nucleofection devices, molecular biology tools, Real time PCR machine, microscopes immuno and ER

8. **Do you have access to biological material? If yes, can this material be included in future research projects?**
pig fibroblast cell lines

9. **What is your vision for your research area?**
generate truly pluripotent iPS cells from pig fibroblasts
1. Name, Research Group and Department
Maria Vang Johansen, PSU, Dept. Veterinary Disease Biology

2. e-mail
mvj@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
The pig is the intermediate host of zoonotic helminths especially cestodes and trematodes which cause significant health and economical problems where prevalent. In low-income countries the societal cost of these neglected zoonoses is a major obstacles for improved livelihood. We are working in the field and with experimental set-ups to assess the burden of these diseases and ways to effectively control them.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
epidemiology, parasitology, Taenia solium cysticercosis

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
livelihood, prevention and control, effectiveness, modelling, anthelmintics, drug efficacy

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
epidemiology and control, trematodes, liver and intestinal flukes

7. Describe methods, infrastructures/apparatus/facilities that you use/have
models, low-cost parasite diagnostic techniques for field use, lifecycles of helminths

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Pig serum from field and experimental studies, parasite material

9. What is your vision for your research area?
Recommend sustainable and acceptable solutions to control emerging parasitic zoonoses in low-income countries
1. Name, Research Group and Department
Preben Dybdahl Thomsen

2. e-mail
pdt@sund.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Molecular embryology, in particular the epigenetic regulation of development using porcine embryos as a model

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
epigenetics, embryology

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Ingen besvarelse

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Ingen besvarelse

7. Describe methods, infrastructures/apparatus/facilities that you use/have
qPCR, in situ hybridization, fluorescence microscopy, immunohistochemistry

8. Do you have access to biological material? If yes, can this material be included in future research projects?
A collection of porcine embryos from Day 13 to Day 50

9. What is your vision for your research area?
That molecular studies of porcine embryo development can validate and broaden the base of knowledge on mammalian embryonic and fetal development
1. Name, Research Group and Department
Stig Milan Thamsborg

2. e-mail
smt@life.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Pig parasitology with main focus on helminths: host-parasite relationships, population dynamics, immunity, epidemiology, disease impact and control

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Nutrition, dietary carbohydrates, parasitology, nematodes, Ascaris, Trichuris, Oesophagostomum

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Genetics, immunology, parasitology, nematodes, Ascaris, Trichuris, Oesophagostomum

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Epidemiology, developing countries, cestodes, Taenia solium

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Standard parasitological procedures, including photographic equipment, PCR, immunoassays

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Routine maintenance of a number of nematode strains; Stored sera and tissues from a range of experimental infections

9. What is your vision for your research area?
- to describe a range of factors influencing the regulation of nematode populations in host, aiming at alternative solutions of control and a better understanding of immunoregulation
| 1. Name, Research Group and Department          | Mette N. Svendsen |
| 2. e-mail                                      | mesv@sund.ku.dk  |
| 3. Your research interests using the pig - please describe briefly and generally | An interest in the social practices and moral implications of using pig as model of man seen from a social scientific perspective |
| 4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each. | anthropology, ethics, animal models, human-animal relationships, understandings of humanness |
| 5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each. | Ingen besvarelse |
| 6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each. | Ingen besvarelse |
| 7. Describe methods, infrastructures/apparatus/facilities that you use/have | Ethnographic fieldwork, qualitative interviews, observational studies, discourse analysis |
| 8. Do you have access to biological material? If yes, can this material be included in future research projects? | No |
| 9. What is your vision for your research area? | To increase collaboration between social science, humanities, and health and veterinarian studies. To help a more robust translational proces of scientific results. |
1. **Name, Research Group and Department**
   
   Lene Koch, Unit of Health Services Research, Institute of Public Health Univ of Copenhagen

2. **e-mail**
   
   leko@sund.ku.dk

3. **Your research interests using the pig - please describe briefly and generally**

   Social and moral implications of using the pig as a model of man

4. **I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**

   Moral landscapes, anthropology, ethics, species categories, notions of humanness and animal-ness

5. **II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**

   Ingen besvarelse

6. **III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**

   Ingen besvarelse

7. **Describe methods, infrastructures/apparatus/facilities that you use/have**

   Ethnographic fieldwork, qualitative interviews, discourse analysis, document analysis, observational studies etc

8. **Do you have access to biological material? If yes, can this material be included in future research projects?**

   No

9. **What is your vision for your research area?**

   To improve collaboration between social science, humanities, veterinarian, health studies and to help translate scientific results and help create a more robust socially embedded pig-based science.
1. Name, Research Group and Department
Steen Honoré Hansen, Advanced Drug Analysis, Dept. of Pharmacy

2. e-mail
steen.honorehansen@sund.ku.dk / shh@farma.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Test animal for drug metabolism; PKPD model

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Analytical chemistry; Drug metabolism; Bioanalysis

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Isolation of subcellular fractions from liver to be used in drug metabolism and toxicity studies

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Isolation of mitochondria to be used in tox studies

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Advanced analytical chemical instrumentations; cell lab.;

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Only from various collaborative partners

9. What is your vision for your research area?
To obtain more knowledge of adversed drug reactions. ; To improve analytical chemical technology and methods for bioanalysis
1. Name, Research Group and Department
Jann Hau, department of Experimental Medicine

2. e-mail
jhau@sund.ku.dk

3. Your research interests using the pig - please describe briefly and generally
In my research we predominantly use rodents, chickens and non-human primates in studies mainly focused on assessment and alleviation of pain and distress, and as models of infectious diseases and dementia. Apart from a few studies of stress-sensitive molecules in the pig, and how pigs adjust to metabolism cage housing we have done little with the pig as an animal model. My main interest - in the present context - is to stimulate and promote an increased use of the pig as an animal model. We have modern up-to-date facilities for experimental surgery in large animals, which are presently under-utilized, and it is important to stimulate an increase use of these. Combined with the availability of core-facilities like Andreas Kjær's Molecular Imaging facility and Per Sangild's Neonatal pig facility and facilities for infectious studies we should be in good shape to build strong projects using the pig as model.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

7. Describe methods, infrastructures/apparatus/facilities that you use/have

8. Do you have access to biological material? If yes, can this material be included in future research projects?

9. What is your vision for your research area?
1. Name, Research Group and Department
Karin Kold, Driftsleder Forsøgsdyrenheden, IVS

2. e-mail
kko@sund.ku.dk

3. Your research interests using the pig - please describe briefly and generally
Ingen besvarelse

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Ingen besvarelse

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Ingen besvarelse

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

Ingen besvarelse

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Jeg deltager fordi jeg er interesseret i at vide hvad der kan blive behov for af faciliteter til grisforsøg i fremtiden.

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Ingen besvarelse

9. What is your vision for your research area?
Ingen besvarelse
1. Name, Research Group and Department
Jørgen Agerholm, Genital Tract Inflammation, Dept of Large Animal Sciences

2. e-mail
jager@sund.ku.dk

3. Your research interests using the pig - please describe briefly and generally
We are using pigs as a model to study inflammation of the female genital tract. At present we collaborate with SSI and FARMA on the development of a porcine model for genital chlamydiosis in women. Genital tract inflammation in the pregnant and non-pregnant uterus is a key research area for the group and we study spontaneous animal diseases, zoonoses and models.

4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Inflammation, Chlamydia, infection, bacteria, pathology, immunology

5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.

7. Describe methods, infrastructures/apparatus/facilities that you use/have
Experience in inoculation and sampling, estrus synchronization, clinical examination, necropsy, histopathology, immunohistochemistry,

8. Do you have access to biological material? If yes, can this material be included in future research projects?
Yes. Yes if accepted by the steering committee of the Chlamydia project.

9. What is your vision for your research area?
To combine our clinical and pathological skills to become an attractive partner in genital tract inflammation research.
1. Name, Research Group and Department
Peter Nejsum, PSU, IVS
2. e-mail
pn@life.ku.dk
3. Your research interests using the pig - please describe briefly and generally
Pig parasitology with focus on helminths (worms): host-parasite relationships, host and parasite genetics, population dynamics, immunity, epidemiology, disease impact and control
4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Genetics, genomics, host-parasite interaction, nematode, helminth, Ascaris, Trichuris
5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
epidemiology and control and zoonotic potential of helminths, Ascaris, Trichuris
6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.
Immunity, Immunomodulation, Trichuris
7. Describe methods, infrastructures/apparatus/facilities that you use/have
Standard parasitological procedures, basic lab for molecular work
8. Do you have access to biological material? If yes, can this material be included in future research projects?
Routine maintenance of a number of nematode strains; Stored sera and tissues from a range of experimental helminth infections, Ascaris and Trichuris worm material
9. What is your vision for your research area?
Better control of infection through: 1. understanding the genetics of host-parasite interaction, 2. use genomic data as novel approached for drug developement, 3. genetics of parasites to explore transmission and zoonotic potential, 4. infection studies to explore zoonotic potential and pathogenesis of helminths and 5. the immunomodulation properties of helminths
**1. Name, Research Group and Department**
Camilla Foged, Section for Biologics, Department of Pharmacy

**2. e-mail**
cfo@farma.ku.dk

**3. Your research interests using the pig - please describe briefly and generally**
My research interests using the pig is to study further requirements for induction of mucosal immunity via the airways with subunit vaccines

**4. I. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**
Vaccinology, vaccine formulation, adjuvant design, mucosal vaccination

**5. II. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**

**Ingen besvarelse**

**6. III. Type in keywords describing your research going from broadest to more specific, e.g. immunology, bacteriology, staphylococci. Please do this for each of your research interests/projects in relation to pigs. Use one textbox for each.**

**Ingen besvarelse**

**7. Describe methods, infrastructures/apparatus/facilities that you use/have**
We have infrastructure for preparation and extensive physicochemical characterization of nanoparticulate adjuvants for subunit vaccines and are routinely performing in vitro experiments

**8. Do you have access to biological material? If yes, can this material be included in future research projects?**
Yes, immunopotentiating compounds and vaccine delivery systems

**9. What is your vision for your research area?**
To establish more fundamental knowledge about the formulation requirements for induction of mucosal immune responses