corner of the homepage. When the search results appear, as shown below, the abstracts of interest should be ticked off in the "include in report" box. Browsing through the search results, it is possible to move back and forth through the results by pressing the phrase "next 10 results" or "previous 10 results". When the abstracts of interest have been ticked off, press the phrase "Generate report" in the top right corner of the page with search results. A window will appear, asking, "Do you wish to include abstracts?" Press OK or Cancel.

When OK is pressed, a window will appear telling you that in order to access this information you need to register with your name and email. After registering, the full abstract is made available on the screen.
only three colonies exist (in Germany, Denmark and the United States) with very limited population sizes. Adverse effects of inbreeding are an increased frequency of genetic defects (e.g. extra claws), inbreeding depression, especially in fertility and health traits, and, in the long run, the erosion of the genetic diversity of the population. However, in closed populations of small size a certain amount of inbreeding is unavoidable, although it was possible to keep the increase of inbreeding at an acceptable level, this strategy had two major disadvantages: it did not explicitly improve the genetic structure of the population, and it required maintaining more breeding animals (e.g. boars and sows). For the Gottingen minipig the method is used to estimate breeding values for fertility, measured as the number of piglets born alive per litter. The advantage of BLUP is that an animal’s breeding value is not only based on the animal’s own performance, but also on the performances of relatives, which are correctly weighted. Thus, fertility breeding values are also obtained for boars and young sows. The estimated breeding values are the basis of selection with the objective of increasing litter size. This, however, increases the risk that related animals (e.g. full-brothers) may be selected as breeders, even increasing the inbreeding level. This is prevented by the use of the optimum genetic contribution theory. This concept, known as balancing the genetic contributions of the founder animals of the population. Practically, it allows restricting the degree of inbreeding and, under this restriction, selecting the sows and boars with the highest breeding values. In the present implementation the concept is used in two stages: to select piglets at weaning to be kept as potential breeders, and to select boars and sows and set up a mating plan for adult animals.

The connection of BLUP breeding value estimation and OGC selection and mating guarantees maximum genetic progress in the chosen trait with the smallest possible increase of inbreeding in the future.

The whole procedure is implemented on a computer at the University of Gottingen and can be used by all breeding units. This centralised process has the advantage that methodological improvements and modification of the models only need to be installed once and will immediately be available to all breeding units.

The use of unified genetic management also guarantees that the concepts of BLUP will develop in the same direction relative to the genetic trait. This will make no difference genetically which breeding unit a Gottingen minipig is obtained from.

Health status at Ellegaard Göttingen Minipigs (EGM)

The incidence of purulent infections has not increased in the herd since the last health monitoring report. However, at the semi-annual health monitoring in spring 2004, nasal swabs of the Göttingen minipigs turned out positive for haemolytic strep- tococci. Species identification of the positive sample verified the diagnosis of one animal from Barrier 2. The haemolytic streptococcus was identified as a Strep. dysgalactiae subsp. equisimilis strain. Skin scrapings examined for bacterial pathogens from the pigs tested at EGM did not test positive for haemolytic streptococci.

No other changes in health status were discovered.

Strep. dysgalactiae belongs to the pyogenic b-haemolytic strep- tococci and is usually Lancedelf group C, G and L antigens. Infection with pyogenic streptococci can cause arthritis, metritis, endocarditis or septicaemia. Strep. dysgalactiae is divided into two subspecies: Strep. dysgalactiae subsp. dysgalactiae and Strep. dysgalactiae subsp. equisimilis based on protein profile and biochemical properties (Vandamme, P et al, 1996).

Strep. dysgalactiae subsp. equisimilis is part of the normal com- mercial flora of the skin and mucosa in the nose and pharynx of humans and many animal species such as cattle, dogs, cats, pigs and poultry, and is not a frequent cause of the above-mentioned purulent infections. Streptococci of many serological groups are frequently isolated from nasal and pharyngeal secretions of swine. These infections are not known to be associated with disease of the upper respiratory tract (Sanford, S.E. & Higgins, R.).

Since Strep. dysgalactiae subsp. equisimilis is part of the normal nasopharyngeal flora of the Göttingen minipig, it is reasonable to assume that the colonization of the respiratory tract and the colonization of the nasal mucosa is from one of the staff members. Staff members were screened as potential carriers of the pathogen.

Contact information – Do you have an unanswered question about research in minipigs?

At Ellegaard Göttingen Minipigs we offer to arrange contacts between our customers to disseminate the non-confidential knowledge that we know from our customers have.

If you would like to cooperate in research, considering a specific area of research where the minipigs are used, or you plan to use minipigs, we offer to contact other companies within the same area of research, and with their acceptance we will pass on their contact information to you. If we know the answer to your question, we will of course help you directly, but often we are asked questions beyond our knowledge, and we have found our customer contacts very helpful in these cases.

At the same time we would like to thank all our good contacts who have helped us over the years to answer specific questions and communicate their valuable knowledge about minipigs in research. This is also a way of meeting the 3 R’s by reducing the use of research animals, and that has already been implemented.

Handling Courses – We can help you to stress-free handling of minipigs.

It is of great importance to Ellegaard Göttingen Minipigs that our customers and other users of the Göttingen Minipigs have a positive impression of handling the animals during research pro- cedures and daily husbandry. At our barrier facilities, procedures are in place to increase the positive social behaviour of the minipigs. In order to ensure this behaviour at the users’, Ellegaard offers handling courses to our customers, students and person- nel working with laboratory animals free of charge. The courses take place at Ellegaard Göttingen Minipigs ApS, Dalsøe.

Courses are offered to new as well as to experienced custo- mers. Courses can be arranged ad hoc as customers need them or participants can sign up for the scheduled courses. Courses can be arranged for two or more people – so don’t hesitate to contact us for a handling course.

The handling course takes one day. It is made up of a theo- retical and a practical part. The participants learn about the development of the minipig, the theoretical background for the use of the minipig in research, and the ethical factors involved. The participants will receive a certificate certifying their partici- pation in the handling course.

Handling courses and demonstrations can also be given at a customer’s facility – if local legislation allows. If a presentation of specific procedures is desired, please contact Nanna Grand, DVM; Email: nanna.grand@minipigs.dk; phone: +45 58185818.

To schedule a handling course, please send an email to ellegaard@minipigs.dk or call +45 58185818.

Surgery Courses

In 2005 a two-day minipig surgery course will be held in Copenhagen. The agenda of the course is not yet finalized. If you would like to include a certain surgery technique, please contact us and we will do our best to include it in the course.

Literature database on Ellegaard Göttingen Minipigs’ Homepage

The database on Ellegaard Göttingen Minipigs’ homepage is updated regularly. The database contains 7800 abstracts about minipigs.