Preface

The EU Concerted Action on the Genetic Improvement of Functional Traits in cattle (GIFT) is a three-year project (January 1997 – December 1999). GIFT aims at bringing together researchers and people from breeding organisations to develop concepts for genetic improvement of functional traits by defining breeding goals and strategies to achieve the goals. GIFT enhances collaborative efforts for the further development of efficient recording systems and breeding value estimation procedures.

A series of four GIFT workshops was organised focussing on four main groups of functional traits:

1. **Health** - Uppsala, June 1997, INTERBULL bulletin no. 15,
2. **Fertility and Reproduction** - Grub, November 1997, INTERBULL bulletin no. 18,
3. **Metabolic Stress** - Edinburgh, October 1998, joined publication BSAS/BCVA/GIFT/INTERBULL,

These proceedings include all full papers from the presentations at the workshop on longevity. Papers cover the statistical background for the analysis of longevity data (using survival analysis or other techniques applied to mixed models). Phenotypic and genetic relationship of functional traits (mastitis or disease resistance, fertility, conformation traits) with longevity are presented. Different aspects (like model of analysis) related to the implementation of genetic evaluations of bulls based on longevity of their daughters, and the incorporation of longevity evaluations into existing breeding programs are discussed.

These proceedings also include the annual report on the GIFT activities in 1998.

Evaluation of longevity is currently a main area of interest in livestock breeding. There is a rapid progress in techniques available for the routine evaluation of longevity and more and more knowledge is obtained on the relationships between longevity and reasons for the farmers to cull the animals (like health problems and reproductive failure).

The core-group wishes to express many thanks to all contributors to the workshop. The presentations stimulated discussions among all participants from research institutes and breeding organisations. Participants certainly learned from the interactions and even before these proceedings are published, results from the workshop are implemented in national evaluations for longevity in dairy cattle.

On behalf of the GIFT core-group,

Yours sincerely,

Dr. A.F. Groen
Overall co-ordinator GIFT