



UNIVERSITÀ  
DEGLI STUDI DI TRIESTE

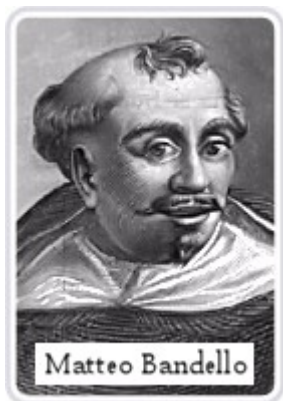


DIPARTIMENTO DI  
MATEMATICA E INFORMATICA



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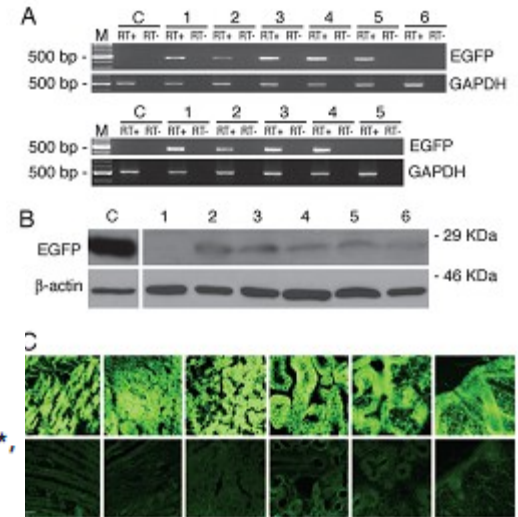


".. quanta differenza sia da chi sa e non ha messo in opera ciò che sa, da quello che oltre il sapere ha più volte messo le mani, come dir si suole, in pasta, e dedutto il pensiero e concetto de l'animo suo in opera esteriore"

Matteo Bandello (Castelnuovo Scrivia, 1485 – Bazens, 1561)

# Genetically modified pigs produced with a nonviral episomal vector

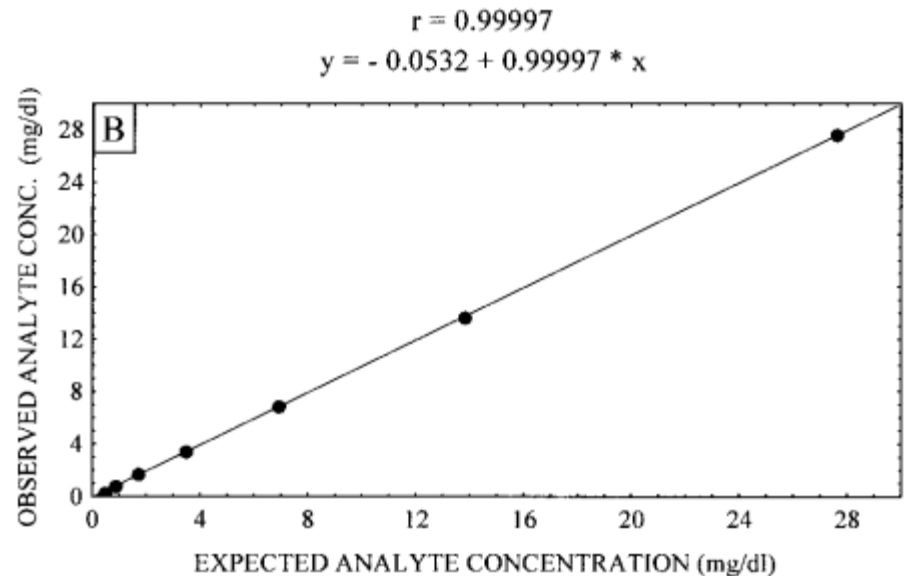
Stefano Manzini<sup>\*</sup>, Alessia Vargiolu<sup>\*</sup>, Isa M. Stehle<sup>†</sup>, Maria Laura Bacci<sup>‡</sup>, Maria Grazia Cerrito<sup>\*</sup>, Roberto Giovannoni<sup>\*</sup>, Augusta Zannoni<sup>‡</sup>, Maria Rosaria Bianco<sup>§</sup>, Monica Forni<sup>‡</sup>, Pierluigi Donini<sup>¶</sup>, Michele Papa<sup>§</sup>, Hans J. Lipps<sup>†</sup>, and Marialuisa Lavitrano<sup>\*||</sup>



**Statistical Analysis.** All values are presented as means  $\pm$  SD. Comparison of percentage of EGFP-positive cells (percentage of positive cells per area in six randomly selected sections) between the different fetuses and between the different combined tissues was performed with one-way ANOVA (SPSS 13.0; SPSS, Chicago, IL). Differences were considered significant at  $P < 0.05$ .

## Validation of a human immunoturbidimetric assay to measure canine albumin in urine and cerebrospinal fluid

Fabio Gentilini,<sup>1</sup> Francesco Dondi, Cinzia Mastrorilli, Massimo Giunti, Claudia Calzolari, Gualtiero Gandini, Danilo Mancini, Paolo Famigli Bergamini



**Figure 2.** Linearity. Linear regression analysis of expected versus observed albumin values of 2 urine samples (A: 225 mg/dl; B: 27 mg/dl) assayed undiluted and serially diluted. Data points represent the mean of 2 determinations.

## LETTERS

## Cattle movements and bovine tuberculosis in Great Britain

M. Gilbert<sup>1</sup>, A. Mitchell<sup>2</sup>, D. Bourn<sup>3</sup>, J. Mawdsley<sup>2</sup>, R. Clifton-Hadley<sup>2</sup> & W. Wint<sup>3</sup>

**Table 2 | Multi-annual multiple logistic regression**

Parameter	Remote with transformed distance
Variables available to model	100
Variables included in model	6
-2 log-likelihood	6.255.1
$\chi^2$	6,493.5
<i>P</i>	<0.001
Correct presence (%)	87.67
Correct absence (%)	84.51
Overall correct (%)	86.04
Overall kappa	0.72
Variable 1	NYBTB (80.7)
Variable 2	DNT (184.7)
Variable 3	TDBTD (1,150.1)
Variable 4	NDVIMN (54.0)
Variable 5	CAD (36.2)
Variable 6	PCU (73.2)

Two sets of analyses were undertaken. The first was designed to extend the earlier modelling of known BTB presence using multiple logistic regressions, to compare cattle movement indices with other previously assessed environmental, demographic, agricultural and climatic parameters (detailed in Supplementary Information). Pro-

## Transfer of Bovine Embryos Produced In Vivo or In Vitro: Survival and Fetal Development<sup>1</sup>

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### *Statistical Analyses*

Proportional data for pregnancy status, twinning, and sex of fetus were analyzed by the Chi-square test [23]. Concentrations of serum progesterone on the day of transfer in recipient heifers that either remained pregnant for 7 mo or lost their pregnancies were analyzed by the Wilcoxon Rank Sum Test [23].

Survival of embryos after transfer was examined using survival analysis techniques [24, 25]. The Kaplan-Meier method was used to estimate survival functions for embryos through Day 215 after transfer, and plots of these functions, known as survival curves, are presented. Cox's proportional hazards regression model was then used to examine factors that could contribute to the time of embryo or fetal loss after transfer. Factors examined were em-

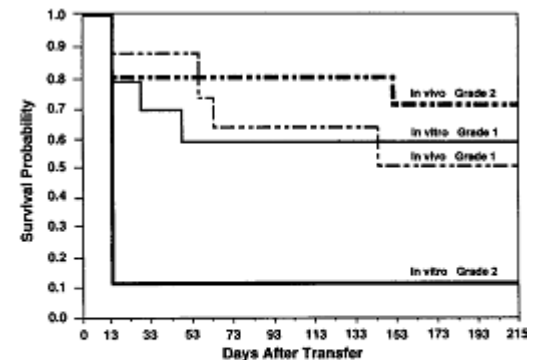


FIG. 1. Survival curves for embryo pairs produced either in vivo or in vitro of quality grade 1 (excellent) or 2 (good) from day of transfer to recipient heifers through Day 215 after transfer. The proportion of heifers that remained pregnant until Day 215 after transfer was 4 of 8 for in vivo grade 1, 8 of 11 for in vivo grade 2, 6 of 10 for in vitro grade 1, and 1 of 9 for in vitro grade 2.

## A genetic evaluation of growth in sheep using random regression techniques

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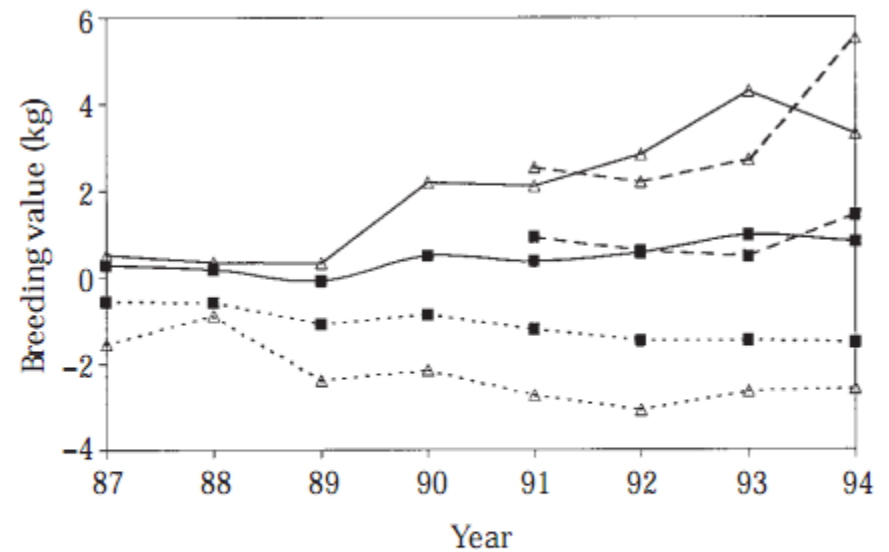


Figure 4 Mean breeding values at day 56 (■) and at day 150 (△) based on random regression analyses for the selection (—) and control (.....) line, and for the sire reference scheme (---), by year of birth.