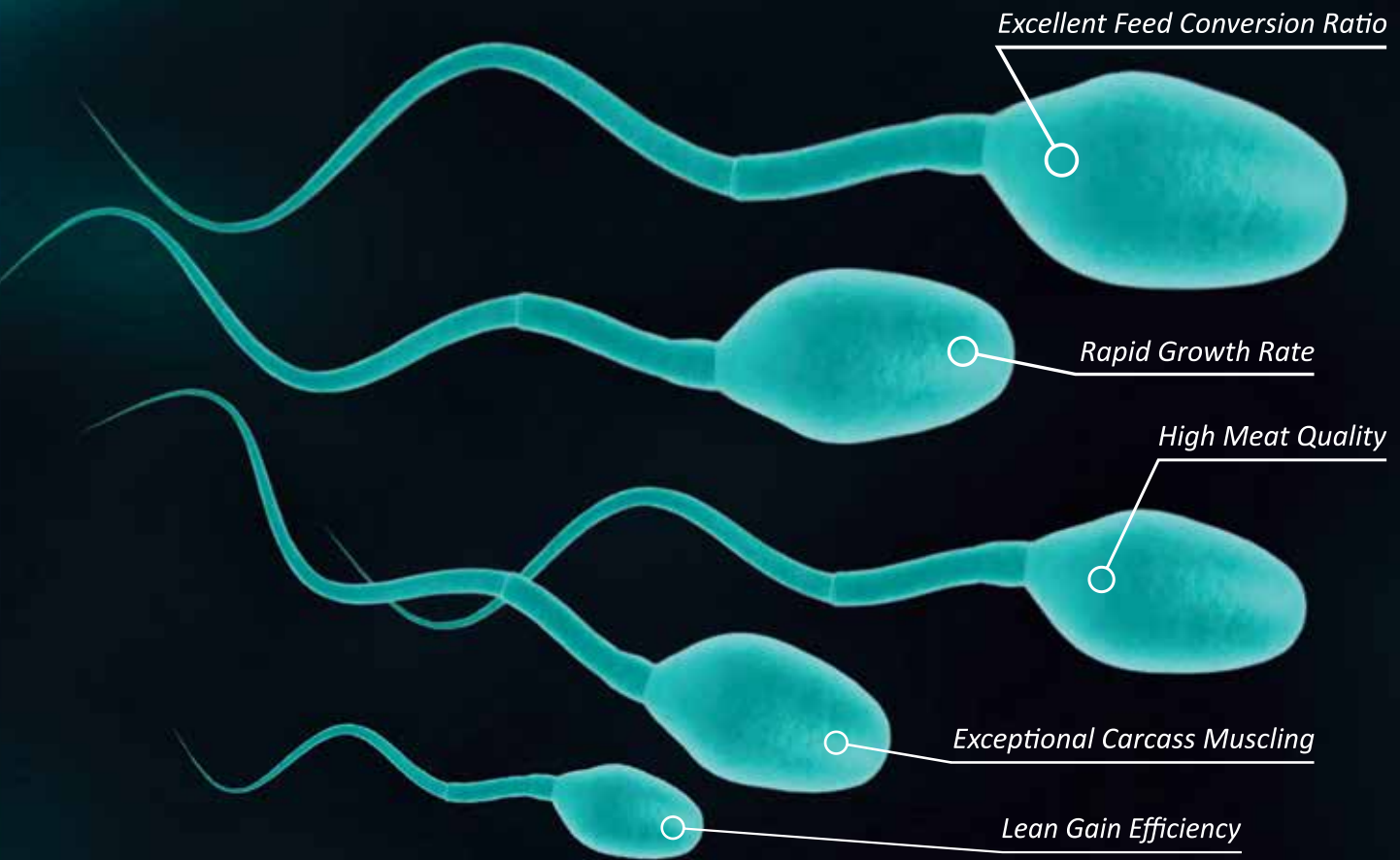


THIS LITTLE PIGGY WILL GO TO THE MARKET



Analysed, Scrutinized & Certified Superior Quality Semen



Never
Stop
Improving



Better technology at PIC's lab

By Elizma Beukes

PIC South Africa's Gene Transfer Centre is proud to welcome yet another revolutionary invention from Minitube to the laboratory which is already well-equipped with a wide range of products from this corporation that prides themselves in being the world's leading producer and supplier of reproduction technology on farm animals in the fields of artificial insemination, embryo transfer and related biotechniques.

The AndroVision® is a computer assisted semen analysis system, taken to the next level. It can easily be adapted and is flexible in its operation. Apart from the typical CASA features, it provides accurate, repetitive and automatic assessment of a wide range of more innovative evaluations of extremely sensitive indicators of sperm functionality, including sperm viability, acrosome integrity, mitochondrial potential and DNA integrity, that are available as add-on modules. This allows for the possibility of early identifica-

tion of suitable breeding boars and further enhancing assays will be available soon.

The AndroVision® consist of a:
 Microscope with a negative phase contrast objective and heated stage
 Touchscreen monitor
 Barcode scanner
 And a variety of software modules including AutoMorph, Morphology and Morphometry.

Some of the features of the AndroVision® includes the analysis of more than 1 000 sperm cells per field to allow for quick and accurate assessments. Due to the highly efficient particle filter, it also recognizes sperm heads precisely and differentiate sperm cells efficiently from other small particles or debris in the ejaculate. All agglutinated cells are excluded from the evaluation and due to the high repeatability, the concentration measurement is very accurate.

A recent study by Dr. Rudolf Großfeld discloses very few (Concordance Correlation Coefficient of

0.9164) differences between the results of boar semen concentration when measured with the AndroVision® and the NucleoCounter SP-100, which is not used in daily production due to its high running costs but serves as a great reference point as recommended by the National Association of Animal Breeders in Europe, among others.

The software can also record and save AVI video and photo files to be evaluated at a later stage and therefor permits great flexibility of semen assessment, both in time and location. Custom made reports can be generated and exported to MS Excel and other programs to provide a full quality report.

The AndroVision's® evaluation principles guarantee the application to measure identical standards under all conditions. This makes it possible to compare data between technicians, collectors, laboratories and even production days. The threshold values are clearly defined to make it impossible to process or ship an inferior product.



AndroVision analyzing sperm quality

Newly installed AndroVision

AndroVision in full operation at PIC's GTC.

Markus Graumüller from Germany, Marissa Richter, Wihan Cornelius and Elizma Beukes in PIC's GTC with the newly installed AndroVision software

