



SexedULTRA

Because Your Business Begins at Conception

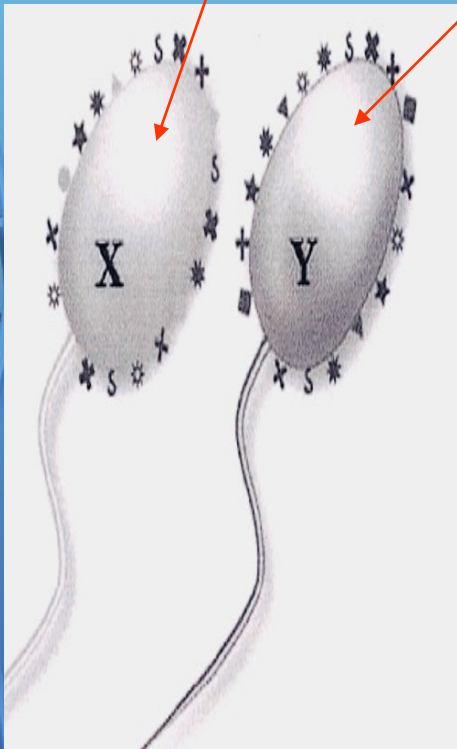
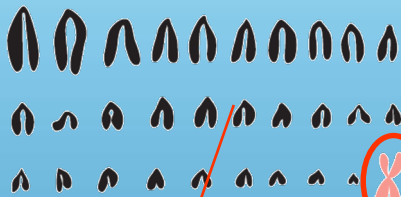
Advantages Sexed Semen

- 90 % Females
 - increase of herd size
 - sale of breeding stock
 - use of beef sires
 - female of your best cow
- Less calving problems
 - heifers give easier births
 - heifers healthier and more fertile
- Higher milk production
 - successive female calves means more milk
- Accelerating genetic progress
 - sexed semen doubles results genomic selection

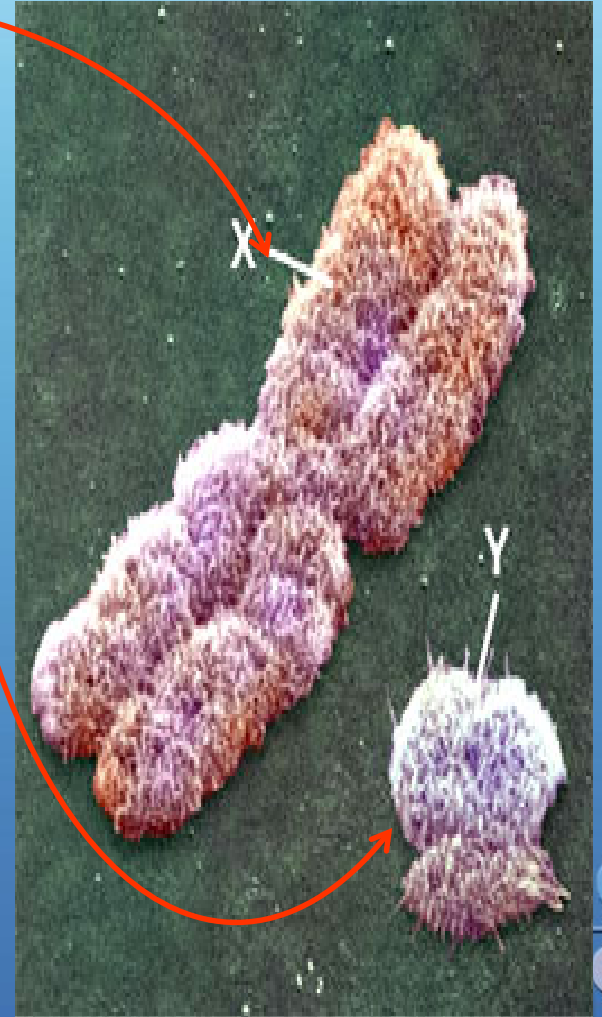


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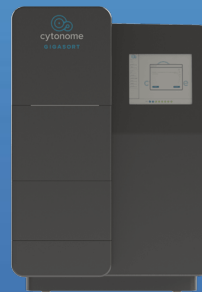
How it works



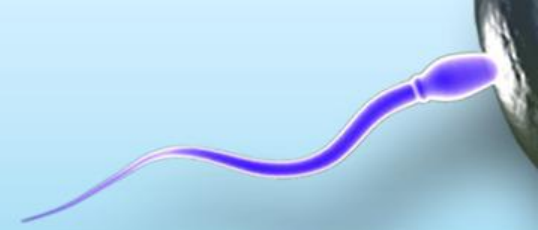
X
Chromosome
bearing
Bovine
Spermatozoa
=
+ 3.8 % DNA



Development of machines



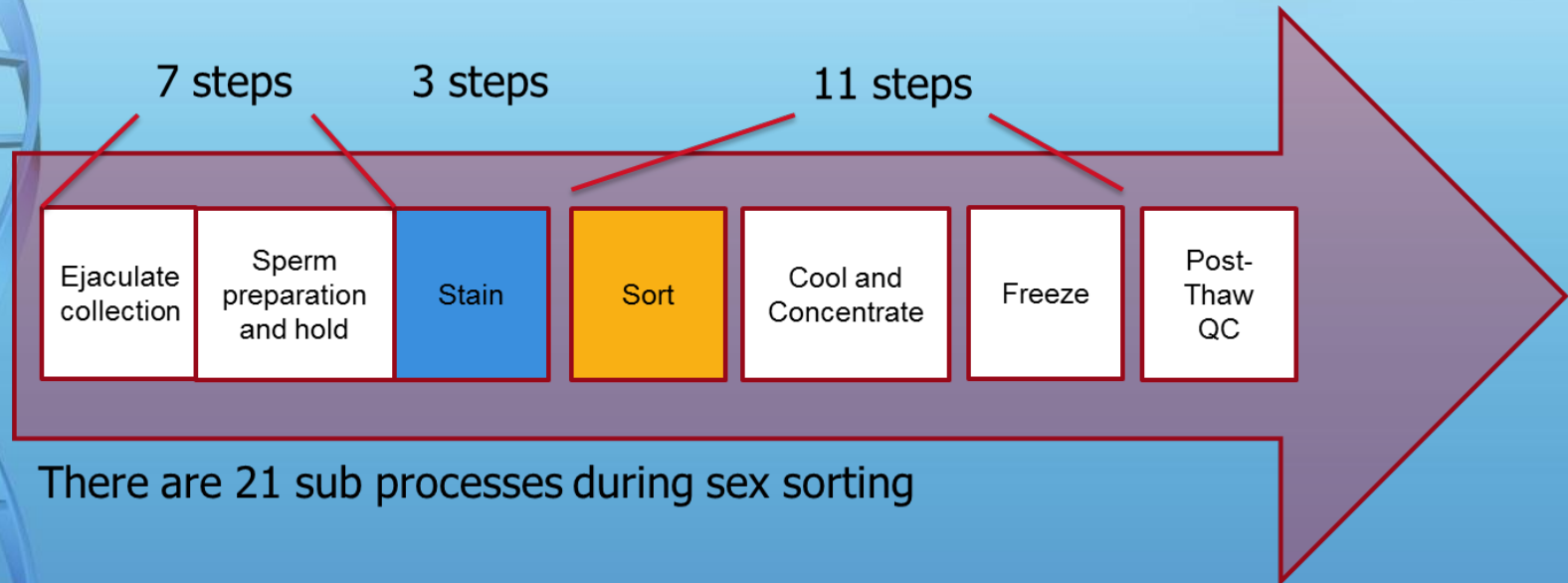
Genesis III sorters



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Sexino
technologies
www.sexingtech.com

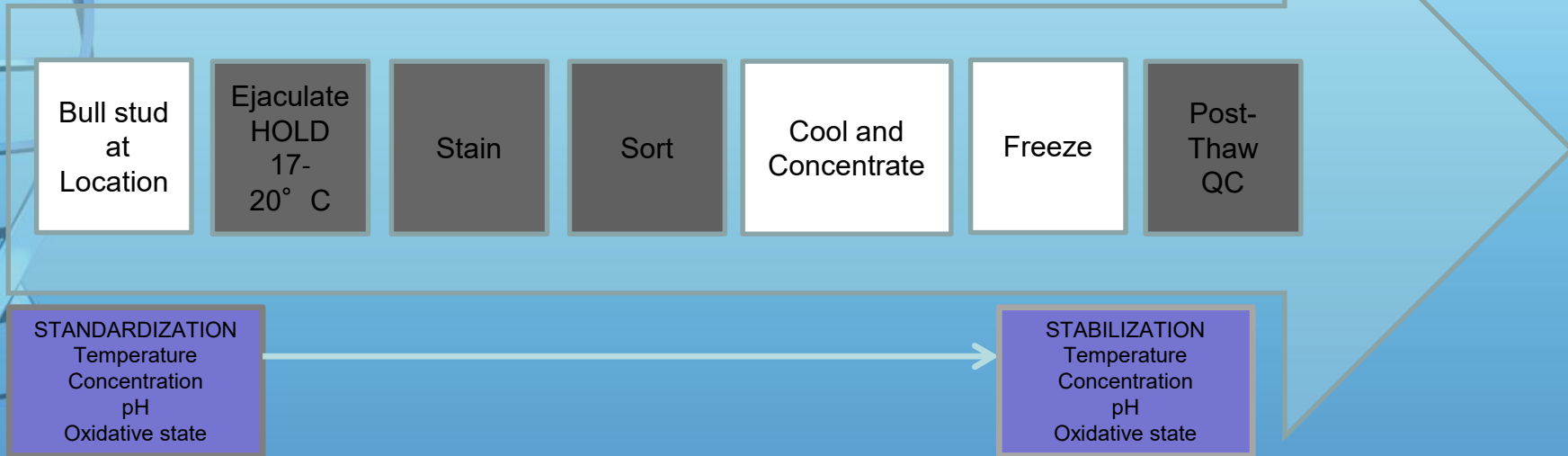
The cause of diminished functional capacity of sex-sorted sperm is multifactorial



- High dilution (up to 5000×)
- Nuclear staining and incubation
- Mechanical forces (pressure)
- Exposure to UV laser & electric charge

- Projection into collection medium (80-90km/h)
- Post-sorting centrifugation
- Post-sorting freezing/thawing

Recent changes in processes with sex sorting semen



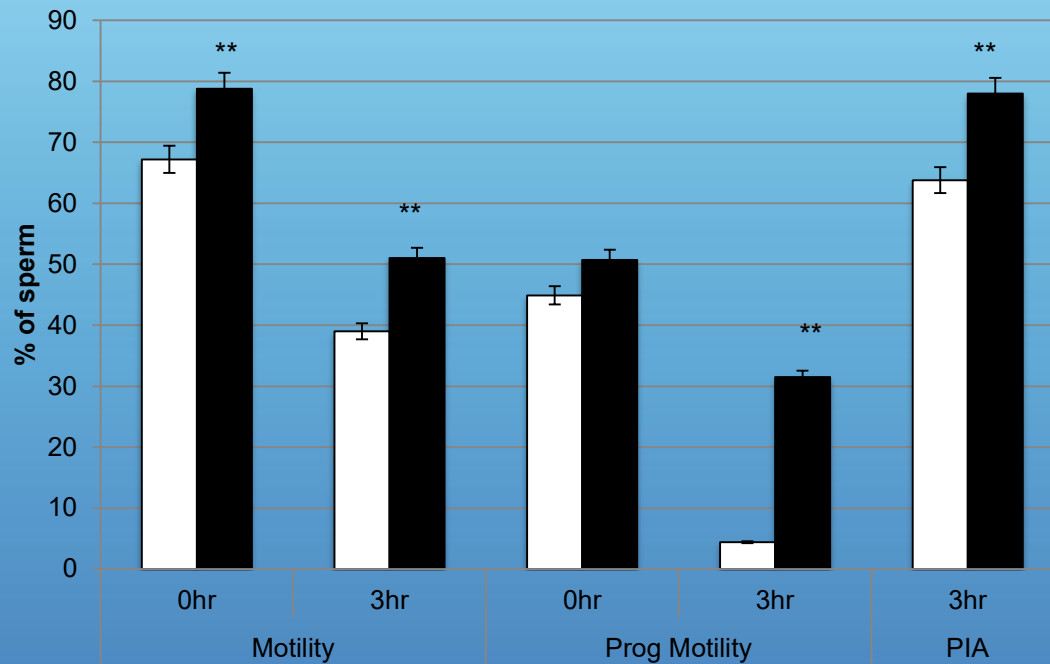
- A system that **maintains consistency in temperature** through the entire process.
- A system that **standardizes the pH and concentration** of all the ejaculates as soon as they are collected.
- A system that **reduces oxidative damage** at each step
- A buffer system that **stabilizes and maintains the pH** along the sorting process.

*The collective process is termed **SexedUltra™***

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SexedULTRA™ method improves in vitro sperm characteristics compared with the XY method



Open bars XY method, Close bars, SexedULTRA™ method
** significantly different to XY method n = 12, P < 0.01

SexedULTRA™

- Improved biotechnology
 - specially formulated media
 - minimum damage to sperm cells
- New developed sorting machines
 - advanced computer software
 - sorting more quickly and accurately
 - Fewer sperm cells lost
- Improved fertility
 - up to 95 % of conventional semen
 - less repeated inseminations

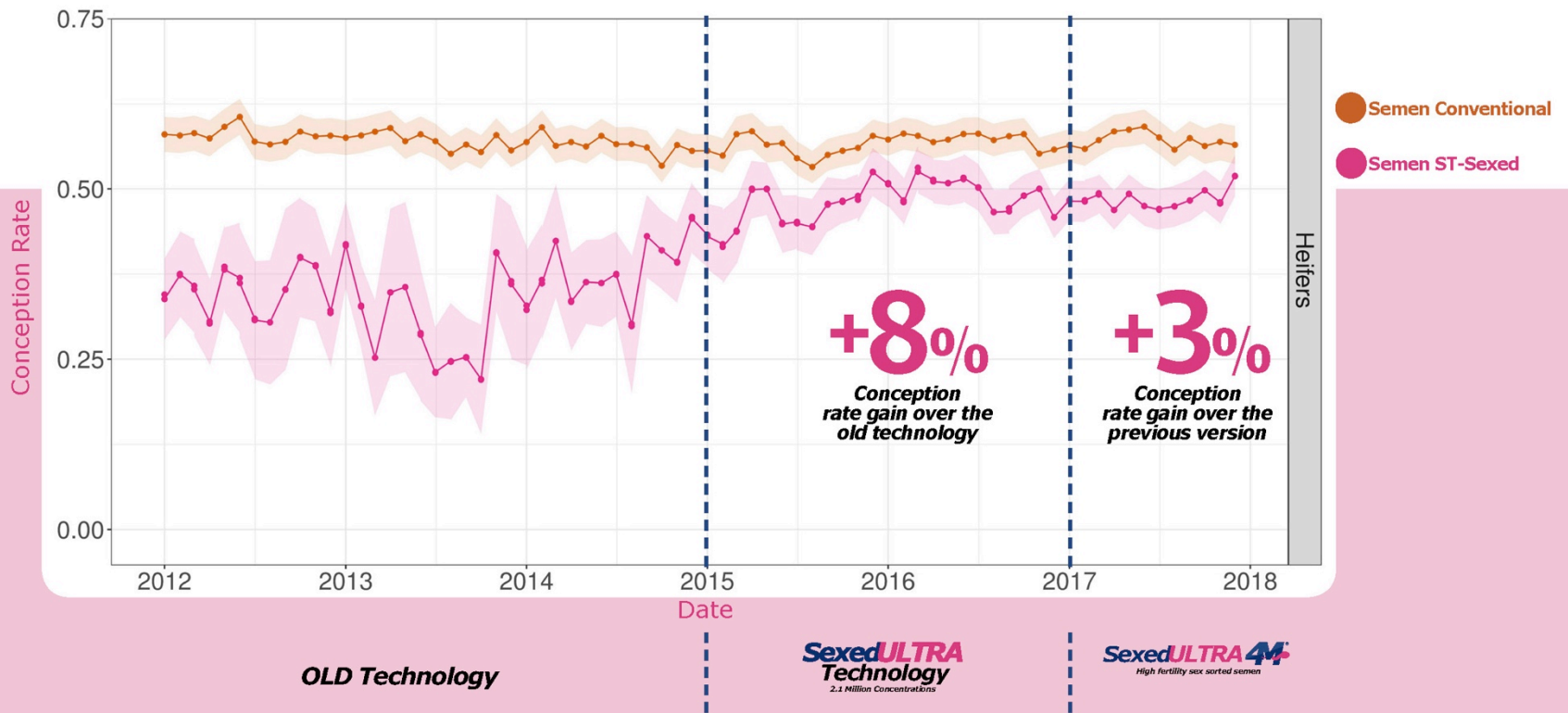


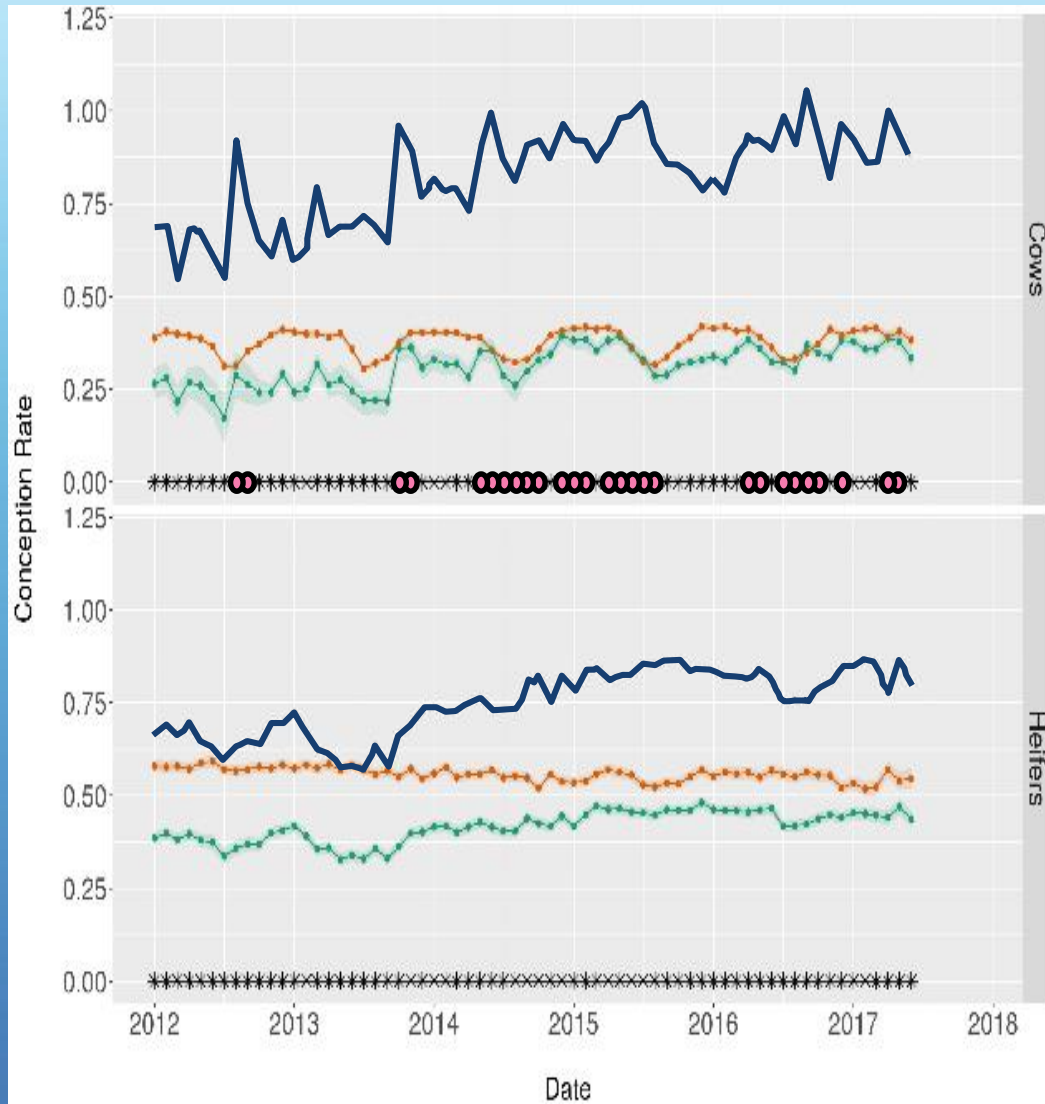
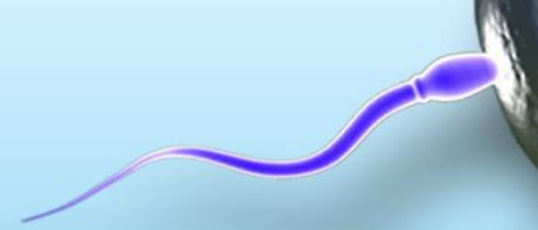
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DON'T SETTLE FOR ANYTHING LESS.

SexedULTRA 4M[®]

High fertility sex sorted semen





— Sexed - Relative Conception Rate

Semen Type
— Conventional
— Sexed

Fertility of sexed semen

- Relative fertility vs. conventional
 - 2009: 75%
 - 2011: 80%
 - 2015: 92%
- SexedULTRA-4M™
 - 2016: up to 100 %

SexedULTRA™

STgenetics[®]

? ? FEMALE CELLS
MALE CELLS
DEAD CELLS



Other technology

90%
AVG OR HIGHER
FEMALE

TWICE AS HIGH
POST THAW 3 HR
PROGRESSIVE
MOTILITY



Sexed**ULTRA 4M**

DON'T SETTLE FOR ANYTHING LESS.

Sexed**ULTRA 4M**[®]

High fertility sex sorted semen





Sexed**ULTRA**TM

- Fertility comparable with conventional semen
- Doubles the effect of genomic selection
- Females from your best cows
- Increased production
- Easier calvings



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