# Semen Assessment Course

Hosted by Professor Simon de Graaf FRSN FSRB

## 2nd-3rd October 2024 | 8.30am-5pm

RMC Gunn Building, The University of Sydney, NSW

#### **Course overview**

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This course offers participants the opportunity for hands on training in basic and advanced livestock semen assessment techniques. Each participant will be provided with their own phase contrast microscope, warm stage and associated items for the duration of the course in order to maximise the practical learning experience. Participants will also have the opportunity to operate benchtop and portable CASA systems, experience DIC microscopy, use of a nucleocounter for concentration assessment and more.

#### Course Outline Day 1: Wednesday 2nd October

| Session       | Description   |
|---------------|---|
| 8:30-10:30am  | Welcome and Lab WHS Inductions<br><b>Tutorial 1:</b> Sperm production and physiology<br><b>Activity 1a</b> : Motility standardisation (8 x videos)  |
| 10:30-11:00am | Morning tea   |
| 11:00-1:00pm  | <ul><li>Tutorial 2: Semen assessment, microscopy 101, lab equipment, assessment of sperm motility</li><li>Activity 2: Prepare slides &amp; assess sperm motility subjectively on a microscope</li></ul> |
| 1:00-2:00pm   | Lunch and networking  |
| 2:00-3:30pm   | Tutorial 3: Assessment of sperm concentration<br>Activity 3: Prepare a haemocytometer & assess concentration on a microscope  |
| 3:30-4:00pm   | Afternoon tea   |
| 4:00-5:00pm   | <b>Activity 1b</b> : Motility standardisation (8 x videos)<br>Semen dilution problems, general discussion, Q&A  |

#### Course Outline Day 2: Thursday 3rd October

| Session       | Description   |
|---------------|---|
| 8:30-10:00am  | Review of Day 1Activity 1c: Motility standardisation (8 x videos)Tutorial 4: Assessment of sperm morphologyActivity 4: Prepare slides and assess the morphology of sperm by phase<br>contrast and DIC microscopy  |
| 10:00-10:30am | Morning tea   |
| 10:30-1:00pm  | Tutorial 5: Thawing and assessment of frozen semen for QC<br>Activity 5: Thaw bull and ram semen, and assess motility, concentration and<br>morphology of each sample   |
| 1:00-2:00pm   | Lunch and networking  |
| 2:00-3:30pm   | <ul> <li>Tutorial 6: Advanced semen assessment- benchtop CASA, portable CASA, nucleocounter</li> <li>Activity 6: Assess motility and concentration of thawed semen on CASA systems and nucleocounter</li> <li>Activity 1d: Motility standardisation (8 x videos)</li> </ul> |
| 3:30-4:00pm   | Afternoon tea   |
| 4:00-5:00pm   | <b>Tutorial 7:</b> Semen standards, laboratory QA/QC<br>Q&A, general discussion and course feedback   |

#### **Course Pricing and Registration**

Pricing: \$1,600 (ex GST) for both days inclusive of all equipment, consumables, handbook, catering and certificate of completion

Please register and pay at thereproductionco.com/courses

#### **Australian Veterinary Association CPD points**

Claim 26 points for 13 hours of structured wetlabs and workshops

#### What to bring

- Non-permeable shoes
- Calculator
- Lab coats and safety glasses if you have them (not essential as they can be provided if needed)

## Contact us

### For Further Enquiries

#### Email: info@thereproductionco.com

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