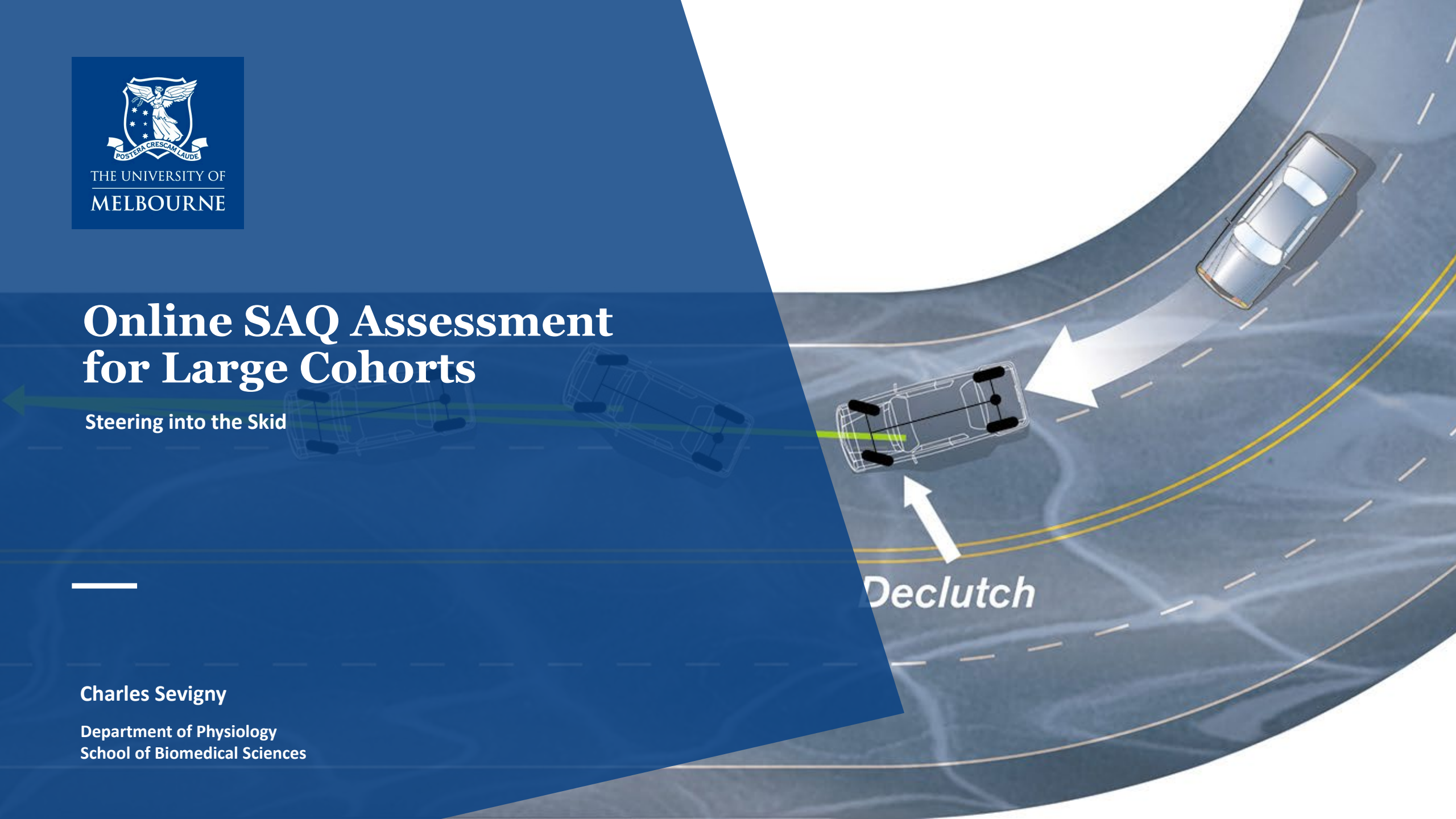
Online SAQ Assessment for Large Cohorts

Steering into the Skid



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Online Assessment: Inconvenient Truths

- Regardless of ‘the rules’, all online assessment is open resource, open collaboration.
- Barring collaboration and resources punishes the honest students.
- In a large cohort, at least some students will experience every issue possible (technical, connectivity, etc.).
- Assessment open for short timeframes amplifies connectivity issues and requires accounting for OS students in different time zones.
- ‘Online invigilation’ is highly invasive.

Human Physiology MST and Final Exam Format

- Short answer questions
- Open collaboration
- Open resource
- Open for 12 hours (MST) to 14 hours (EOS Exam)
- MS Word doc to fill in and upload through Turnitin

<u>The Rules</u>

- No plagiarism
- No open forums (discussion board, Facebook pages etc)
- No asking questions in Yahoo answers, etc.
- Encouraged to keep groups small

Q4- One potential cause of hypovolemic shock is **osmotic diuresis in the nephron** due to hyperglycemia (high blood glucose). This is commonly due to diabetes and is one reason diabetes results in high urine output. Describe how high blood glucose can lead to excessive diuresis. **(75-125 words; 6 marks)**

Writing questions

- Attempting to avoid ‘Google-able’ or factual recall questions.
- Aim for questions which encourage discussion and debate.

Consider four preparations, each with a chamber containing a mystery muscle fibre connected to a force transducer and a stimulating electrode. You are able to:

- Stimulate the muscle fibre and cause an action potential
- Vary stimulation frequency and amplitude
- Measure the contractile force of the muscle fibre but **NOT the duration** (don’t ask me why. You bought the cheapest force transducer they had at K-Mart).
- Change the composition of the artificial extracellular fluid in the muscle chamber i.e. add or remove ions. You may ‘reset’ this between experiments.

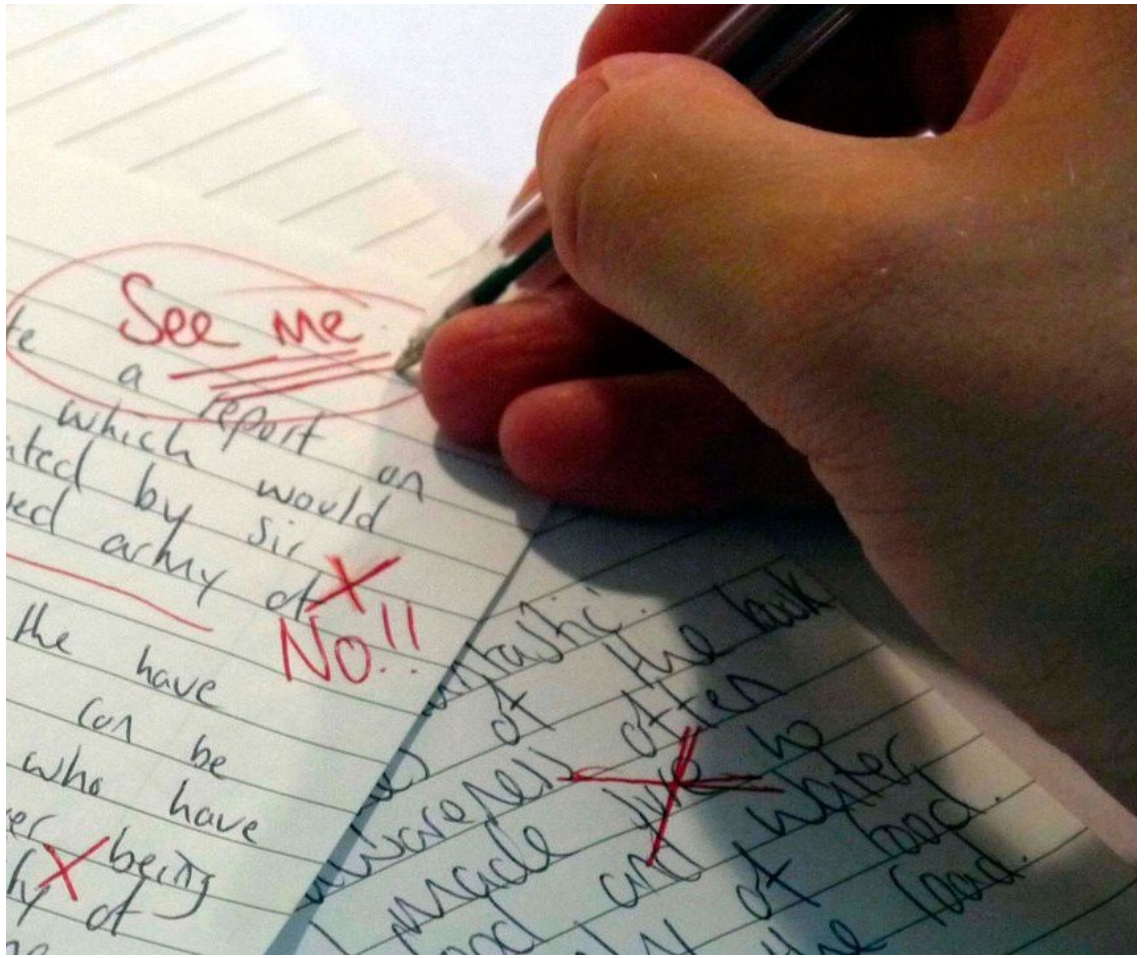
Each of the four preparations contain a different type of muscle fiber:

- A slow-twitch skeletal muscle fibre
- A fast-twitch skeletal muscle fibre
- A cardiac contractile cell
- A cardiac autorhythmic cell

Describe how you would go about determining which type of muscle fibre is in the chamber. There is no one correct answer to this, but you must describe your reasoning in the context of Physiology. **(**I did this in **350 words** ensuring I described the Physiology, but yours may vary depending on your method; **15 marks)**

Marking and Feedback

- Each question was marked by one assessor across all students- eliminated variability between papers
- No feedback was left on student papers
- Assessors had one week to mark and provided feedback on common errors
- Students were provided with model answers and general demonstrator feedback for each question



So did everyone get an H1?

	MST1	MST2	MST Total	EOS %	Total
2020 S1	77.15%	72.36%	74.22%	70.73%	73.90%
2019 S2	67.53%	71.39%	69.26%	64.24%	67.95%

The Pros

- Easy to deploy
  - Didn’t need to make adjustments for AEAs or time zones
  - Very little ‘policing’ required
  - No stress about tight time windows
- Students were actually discussing and researching the material
- Written responses highlight students who understand the material
- Anecdotally, students responded well to the format, appreciating the flexibility and feedback

The Cons

- Students with ‘good study groups’ were advantaged
- Marking time and $
- Difficult to write questions- not appropriate for all disciplines
- Potential for ‘passengers’ in study groups
- Can’t re-use tests

The Dons

Thank You

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