



## 1st National Endocrinology Undergraduate Conference 2016

### *Best Poster*

#### **Preliminary assessment of the value of computer-assisted learning (CAL) in undergraduate endocrine medical education**

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**Background:** Pedagogical research has highlighted CAL as especially useful for teaching learning outcomes (LOs), empowering students with more control over their learning, and simplifying visually intensive subjects. In order to reinforce and enhance student understanding of thyroid function and dysfunction, a CAL package was created for second-year University of Edinburgh medical students (N=216). Each CAL programme was structured to provide succinct information, interspersed with reinforcing questions, with concluding summary formative assessment. Animations were used to illustrate anatomy and biochemical processes, and as a formative assessment tool. As a preliminary assessment of the CAL package, on-line questionnaires collected student feedback.

**Methods:** Edinburgh Reusable Object Sequencer (EROS) software was used to create each CAL programme. A multi-disciplinary team produced the CAL package: the author provided student insight, endocrinologists supervised and advised, and professional and student peer review was undertaken. Edinburgh Medical School and Society for

Endocrinology LOs also guided production. The CAL package was advertised to second-year medical students on-line and by word of mouth. Programme-specific and CAL package-generic questionnaires were created using Bristol Online Survey, with links embedded in each CAL programme.

**Results:** All responders (n=19) believe the CAL package reinforces key learning concepts, helps them achieve LOs, is interesting, user-friendly, and all would recommend to their peers. 17 students rated the CAL package as 'very good'; two rated it as 'good'. Students remarked that this CAL package is engaging, and highlighted its value as a tool to reinforce learning.

**Conclusion:** Results match with previous findings, namely that CAL is associated with high student satisfaction and improved reinforcement of LOs. Student-authored CAL offers the additional benefits of student needs at the forefront of CAL design, and reduced production costs. Other endocrine packages are in production and will likewise be evaluated to affirm their use, and to inform future CAL design.