



## 2017 YCCSA SUMMER SCHOLARSHIP PROJECT SUBMISSION

This form is for prospective project supervisors to submit their projects to be included in the YCCSA Summer Scholarships Programme for 2017.

It is the purpose of the YCCSA Summer School that any projects submitted are novel and interdisciplinary in nature.

<b>Date</b>	15-12-2016
<b>Supervisors' Names and Departments / Affiliation and Contact Email</b>	Angelika Sebald, YCCSA and Dept. of Chemistry David Mitchell, YCCSA and Calderdale and Huddersfield NHS Foundation Trust <a href="mailto:angelika.sebald@york.ac.uk">angelika.sebald@york.ac.uk</a> <a href="mailto:david.mitchell@york.ac.uk">david.mitchell@york.ac.uk</a>
<b>Project Title</b>	Animation as an alternative to video of operations and human physiology
<b>Project Description</b>	<p>We are building a comprehensive and fully validated website with information for maxillofacial patients (many of whom are head &amp; neck cancer patients), carers and professionals – maxfacts. Maxfacts is a multidisciplinary project including medical and scientific expertise, web design and usability / accessibility aspects, media provision. We are planning to launch a public beta-version of maxfacts in June 2017. All information on maxfacts is provided in three levels of breadth/depths of information: level1 – short and easy to read; level2 – slightly more technical and more content, jargon explained; level3 – expert level, including language. We use many different ways to provide information: text based (different levels), integrated with graphics and photographs, video material.</p> <p>There are several areas of content where it is by no means obvious which integrated text / graphics / media versions are most suitable. These are all topics where structure, function and dynamics are tightly coupled with each other. There is an urgent need to understand much better which tools are most suitable for which purposes of transferring information about such topics by non-verbal means, in a non-patronising but accessible and technically correct way: graphics, animated graphics, videos and/or photographs. The only way to learn about the most suitable tools for different purposes is to implement the various different versions for two or three selected topics and then collect feedback from users (in our case maxillofacial patients, carers and professionals).</p> <p>We have identified three rather different topics from the whole maxfacts theme as promising trial candidates to find out about optimal representations for in-depth, integrated explanations: i) neck dissection (real time, un-edited theatre video material exists), ii) superficial parotidectomy (again, theatre video material is available) and iii) the physiology of swallowing. Some graphics for swallowing and neck dissection exist.</p>
<b>Required Skills</b>	Interest in science and medical science communication for adult users by electronic tools, fluency in graphics production and animation. Willingness to interact with interdisciplinary team and to obtain feedback from users, including patients.

<b>Supervision and Collaboration Arrangements</b>	All supervisors will play an active part in regular project supervision, with Sebald taking responsibility for day-to-day activities.
<b>Project Dates</b>	<i>The summer school runs for 9 weeks, starting on Monday, 10 July 2017 and finishing on Friday, 8 September 2017.</i>
<b>Other Information</b>	Maxfacts currently runs on a local virtual machine and is not yet publically accessible, Please contact us for further information and details.
<b>References</b>	A previous summer project was concerned with the design and implementation of a novel interactive self-assessment tool. The results are currently in press (R.Brown, L.Tomasello, D.A.Mitchell, A.Sebald and S.Stepney. The ternary graph as a questionnaire – a new approach to Quality of Life assessment? <i>Br.J.Oral Maxillofac. Surg.</i> , accepted (2017)). Source code ( <a href="https://github.com/laurenkt/magic-triangle">https://github.com/laurenkt/magic-triangle</a> ) and a demo version of the tool ( <a href="https://laurenkt.github.io/magic-triangle/">https://laurenkt.github.io/magic-triangle/</a> ) can be accessed on GitHub.

When complete, please email the form to [sarah.christmas@york.ac.uk](mailto:sarah.christmas@york.ac.uk)