

#### FORMAT OF THE TUTORIAL

Each chapter has a set of aims, step-by-step instructions, background information, references and a Multiple Choice Quiz (MCQ). A notepad is available for saving results between chapters, and a list of contents is always visible on the left-hand side of the page. Navigation may be effected either via the labelled page tabs or by means of the table of contents.

The instruction pages are broken down into convenient steps and navigation arrows are provided to allow progression to subsequent steps once all tasks have been completed. The information pages provide supporting theoretical information, broken down under suitable sub-headings and illustrated, where possible, with a variety of images, diagrams and so on. Again, navigation arrows allow progression to and from different sub-headings. A glossary is also provided, allowing information retrieval by glossary term, by definition, abbreviation and/or synonym.

As mentioned above, assessment tools have also been incorporated into the tutorial, commencing with an MCQ to gauge student knowledge before undertaking the tutorial, followed by self-assessment quizzes in each chapter, and a final MCQ to gauge student knowledge having completed the tutorial. For each MCQ, answers are computed and relayed to the student, with information to indicate how many correct answers were obtained and, if mistakes were made, what the errors were. The results of the final quiz are related to those of the initial quiz, so students may see how they have performed overall relative to when they commenced the tutorial.

### CONCLUSION

EMBER is one step towards the provision of self-contained bioinformatics teaching materials suitable for face-to-face

delivery, or self-paced tuition at home or in the workplace. It has already replaced BioActivity in Manchester's Bioinformatics MSc and will be used in our Distance Learning MSc. The website is now open for wider testing (contact attwood @bioinf.man.ac.uk for details); we welcome your comments.

#### **REFERENCES**

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## **Professor Terri Attwood**

University of Manchester attwood@bioinf.man.ac.uk

# **NEW GUIDES**

TSN BIOSCIENCE IS PRODUCING A SERIES OF guides intended to be an accessible introduction to good learning and teaching practice within the context of competing research and institutional pressures (see http://www.bioscience.heacademy .ac.uk/TeachingGuides/). The general title of the series is 'Teaching Bioscience — Enhancing Learning' and the first publication is Self- and Peer-Assessment: Guidance on Practice in the Biosciences. The aim of each publication is to provide a persuasive overview of the pedagogic reasons for adopting a particular practice, supporting these reasons with sufficient practical guidance and information to turn ideas into reality. The guides are structured around a common format; Chapter 1 provides a general introduction to the topic, Chapter 2 advice on how to implement the topic and Chapter 3 more in-depth information on the topic and the opportunity to investigate further.

In addition, each guide contains a collection of bioscience case studies highlighting how others have introduced the topic into their teaching practice. It is intended that the guide will be useful to academics in their first year of lecturing,



particularly those who are studying for a Postgraduate Certificate in Learning and Teaching in Higher Education, as well as to those with many years of teaching experience.