

## Online resources for Bioscience Educators

Web sites have been included in this list on the basis that they provide access to multiple science education resources that will be of use to bioscientists in their teaching.

### General Bioscience

#### **BEN portal**

**[www.biosciednet.org/portal/](http://www.biosciednet.org/portal/)**

This site is from the American Association for the Advancement of Science. The portal provides a single access point to resources held by all member organisations. Registration is required to gain free access to the portal. Contains over 10,000 resources covering seventy-seven biological sciences topics and includes twenty-five different types of resources ranging from journal articles to simulations.

#### **INTUTE: Health and Life Sciences**

**[www.intute.ac.uk/healthandlifesciences/](http://www.intute.ac.uk/healthandlifesciences/)**

Intute (formerly Biome) is a freely available online service which provides access to evaluated web resources for education and research. Resource descriptions are searchable by keyword or can be browsed by topic including: Bioresearch; Natural History; Agriculture, Food and Forestry; BioethicsWeb (biomedical ethics) and Psci-com (public engagement with science and technology). Intute also offer a number of free internet tutorials through their Virtual Training Suite to help individuals learn how to find and evaluate web resources.

#### **BioNET Changing the pattern of Teaching in Biology and Pre-clinical medicine**

**[www.bioscience.heacademy.ac.uk/hosted/bionet/Bionet/www.leeds.ac.uk/bionet/compend/contents.htm](http://www.bioscience.heacademy.ac.uk/hosted/bionet/Bionet/www.leeds.ac.uk/bionet/compend/contents.htm)**

A compendium of courseware (downloadable software) and experience gathered from BioNet members as part of the TLTP Programme. Subject areas include: Anatomy and Histology, Biochemistry, Medicine, Microbiology, Molecular Biology and Genetics, Physiology, Plant Science and IT Skills and Generic and Staff Development materials.

#### **BIODIDAC**

**<http://biodidac.bio.uottawa.ca/>**

A bank of digital images, diagrams, video, and animations that can be used and adapted for teaching Biology.

#### **Fieldwork Methodology (Barcelona Field Studies Centre)**

**<http://geographyfieldwork.com/Fieldwork%20Methodology.htm>**

Contains a lot of interesting general information on approaches to fieldwork of very distinct relevance to life sciences fieldwork and field courses.

#### **MERLOT Multimedia Education Resource for Learning and Online Teaching**

**[www.merlot.org/Home.po](http://www.merlot.org/Home.po)**

Free and open resource of links to online learning materials, annotated with peer reviews, example student assignments and comments on how individual resources have been employed. Materials for use in science and technology teaching and learning account for a subset of the total records. Note: some materials listed in MERLOT are freely available whereas others have usage restrictions or costs.

#### **Bioethics Briefings**

**[www.bioscience.heacademy.ac.uk/resources/ethicsbrief.aspx](http://www.bioscience.heacademy.ac.uk/resources/ethicsbrief.aspx)**

A series of short briefings intended to help teachers in higher education to deal with various ethical topics. The briefings are in pdf format and contain a balance of scientific and ethical input, plus case studies and up to date examples of ethics news items.



### **Centre for Bioscience event reports**

**[www.bioscience.heacademy.ac.uk/events/reports/index.aspx](http://www.bioscience.heacademy.ac.uk/events/reports/index.aspx)**

A series of reports, each providing a summary of the Centres bioscience learning and teaching-themed events: as such they provide a useful collection of information on various topics.

### **Employability resources (Centre for Bioscience)**

**[www.bioscience.heacademy.ac.uk/resources/employability/](http://www.bioscience.heacademy.ac.uk/resources/employability/)**

Webpages which aim to help staff address employability in a Bioscience context through a series of questions and answers. Also provides access to our Employability Audit tool, materials on industry expectations and the Employability Card Sort.

### **Teaching Development Fund (TDF) and Departmental Teaching Enhancement Scheme (DTES) Projects (Centre for Bioscience)**

**[www.bioscience.heacademy.ac.uk/funding/](http://www.bioscience.heacademy.ac.uk/funding/)**

The Centre for Bioscience TDF supports projects of up to £3000 to encourage the development, establishment or validation of innovative learning, teaching and assessment materials or methods. The DTES provides bioscience schools and departments with funds of up to £15,000 to develop and implement some aspect of practice that will lead to an improved learning experience for their students. The DTES aims to effect change across entire department(s) rather than within a single module or one individual's teaching practice.

Details of completed and current projects with associated reports and resources are available from the URL above.

### **Centre for Bioscience ImageBank**

**[www.bioscience.heacademy.ac.uk/imagebank/](http://www.bioscience.heacademy.ac.uk/imagebank/)**



A collection of over 6000 copyright-cleared images and diagrams for use in bioscience teaching and learning.

### **Centre for Bioscience Compendium of Practicals**

**[www.bioscience.heacademy.ac.uk/resources/compendium/index.aspx](http://www.bioscience.heacademy.ac.uk/resources/compendium/index.aspx)**

A collection of tried and tested bioscience practicals. Please note the compendium is currently undergoing re-development.

### **Audit Tools from the Centre for Bioscience**

**[www.bioscience.heacademy.ac.uk/resources/audit.aspx](http://www.bioscience.heacademy.ac.uk/resources/audit.aspx)**

Audits are a good way to initiate discussion and facilitate development on an issue. They enable you to make clear the range of activities which may contribute to the issue and the process can also reassure colleagues that quite a lot of work may already be developed in the area. Audits are available for: assessment, employability, work related learning, enterprise and a number of other areas.

## **Specific Disciplines**

### **Biochemistry:**

#### **eLABorate**

**[www.york.ac.uk/depts/chem/staff/elaborate/packages/packages.html](http://www.york.ac.uk/depts/chem/staff/elaborate/packages/packages.html)**

This site provides access to a collection of simulations on aspects of biochemistry and chemistry that have been designed to be incorporated within the laboratory investigation component of chemistry and biochemistry modules. These could be used to provide students with the opportunity to carry out virtual investigations.

## **Microbiology:**

### **MicrobeLibrary.org**

**[www.microbelibrary.org/](http://www.microbelibrary.org/)**

The Microbiology curriculum library site from the American Society of Microbiology. Provides a peer reviewed web-based collection of resources about the microbial world. Content includes images and animations; curriculum activities for both classroom and laboratory and educational reviews and resources. Some aspects are free and some require a subscription.

## **Pharmacology:**

### **EPHARNET**

**[www.bps.ac.uk/site/cms/contentcategoryview.asp?category=238](http://www.bps.ac.uk/site/cms/contentcategoryview.asp?category=238)**

This Compendium of Innovation and Good Practice in Teaching Pharmacology (collated during the EPHARNET project) outlines various teaching methods and techniques which have been used successfully in teaching pharmacology. It is intended to be used as a source of ideas, experience and expertise and is freely accessible across Europe. The material in the Compendium is grouped and indexed according to the type of teaching method involved and the main purpose of the exercise. PowerPoint slides and case study and Problem Based Learning materials are available.

### **Pharma-CAL-ogy**

**[www.pharmacology.com](http://www.pharmacology.com)**

This is a collection of Teaching and Learning technology-based materials for pharmacologists. Tutor's guides are available for each product and these explain the variety of ways in which the material can be used to meet various learning objectives. Areas covered include drug metabolism; drug targets; neuropharmacology; cardiovascular system; simulations; clinical development; asthma and inflammation. Some of the materials are produced for video but most are computer based and can be supplied on CD-Rom for Windows stand alone, network or inter/intranet delivery.

## **General Teaching and Learning:**

### **SNAS (Supporting New Academic Staff) Database**

**[www.heacademy.ac.uk/ourwork/professional/snas](http://www.heacademy.ac.uk/ourwork/professional/snas)**

The SNAS database, hosted by the Higher Education Academy, aims to provide discipline-specific and generic resources specifically for new academic staff. Resources are reviewed and submitted by individual Subject Centres and are grouped into themed areas such as; Assessment, Employability and Laboratory work. The database can be searched by: Subject (e.g. Biosciences, Geography Earth and Environmental Sciences), Topic (e.g. Fieldwork, Pedagogic research) and Resource details (title and author). Please note that SNAS database is currently undergoing a review and consequently some records may be out of date)

### **Higher Education Academy**

**[www.heacademy.ac.uk/](http://www.heacademy.ac.uk/)**

The Higher Education Academy's website contains a wide variety of generic teaching and learning resources. The Supporting Learning section contains resources and information grouped into themed areas such as assessment, student support and employability and enterprise. The resources section of the site contains, amongst others, the searchable resources database and Academy Exchange, the Higher Education Academy's magazine, which aims to encourage the exchange of ideas, practices, news and support on learning and teaching issues.

## **Subject Network**

**[www.heacademy.ac.uk/ourwork/networks/subjectcentres](http://www.heacademy.ac.uk/ourwork/networks/subjectcentres)**

The Subject Network consists of 24 Subject Centres, covering disciplines from Art Design and Media to Social Policy and Social Work. Each Subject Centre produces a range of resources, which can be both subject specific and generic, on a wide variety of topics such as assessment, Education for Sustainable Development, employability and student diversity. The page URL above contains links to the homepage of each Subject Centre; alternatively you can search all the Subject Centre websites using the search on the Centre for Bioscience website.

## **TechDis**

**[www.techdis.ac.uk](http://www.techdis.ac.uk)**

“TechDis aims to enhance provision for disabled students and staff in higher, further and specialist education and adult and community learning, through the use of technology.” Their website contains a wide variety of resources including; Accessibility essentials guides, enabling you to make electronic documents accessible; the TechDis staff packs, highlighting important issues surrounding technology and disability; TechDis Database, an online resource of information and products available to assist disabled students and staff.

## **JISC Plagiarism Advisory Service**

**[www.jiscpas.ac.uk/](http://www.jiscpas.ac.uk/)**

“The Plagiarism Advisory Service provides generic advice and guidance on all aspects of plagiarism prevention and detection to institutions, academics and students.”