

## What is the experiment about?

The current experiment investigates the genes that control stem cells. A suite of curriculum-linked resources are provided to support the experiment and full guidance is available on how Virtual Lab could be incorporated into a lesson.

## How much time does it need?

The Virtual Lab team understands that teaching time is limited and therefore students can simply complete the experiment in their own time. However the Virtual Lab experiment and resources can also be used to support a lesson. The project also offers schools a unique opportunity to interact with an MRC scientist. Participating schools can request a Virtual Lab Ambassador scientist to run a workshop incorporating the experiment with their students.

## How do we take part?

Simply contact the Virtual Lab team using the contact details below. We will be happy to discuss how Virtual Lab could be used in your school and arrange a visit from a Virtual Lab Ambassador if you wish.

*Want to know more?* Please contact me:

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Virtual Lab

MRC

Clinical  
Sciences  
Centre



# Virtual Lab

Real biomedical research **online**



[www.virtuallab.co.uk](http://www.virtuallab.co.uk)

## What is Virtual Lab?

Virtual Lab is an interactive web-based experiment that allows students to experience authentic biomedical research. The website provides a data analysis activity based on MRC science. Students examine and evaluate real data, discovering the ambiguities and uncertainties of real data as they develop their own scientific ideas.

The objectives of Virtual Lab are...

- To give students an insight into how research is conducted
- Provide an experience of real research without the need for expensive equipment or special expertise
- Encourage students to discuss scientific ideas and problems

## What age group is Virtual Lab aimed at?

The website will offer a rolling programme of experiments aimed at either KS4 or post 16 students, but some experiments may also be suitable for KS3.

## How does the website work?

Visitors to the website can:

- Read about the project on the **About Virtual Lab** page
- Explore **How Experiments Work** through an animation which introduces pupils in a light-hearted fashion to the principles of experimental design
- Explore the scrapbooks of past experiments through the Experiment Archive
- Access the high-score board through High Scores
- Send a message to the VL administrators through the Contact page

To take part in an experiment users are required to register through **www.virtuallab.co.uk**. Users simply choose a username and password and fill in some preliminary information regarding school, age, gender, etc<sup>1</sup>.

Each experiment is divided into three sections:

**Back-story to research** – what students/teachers need to know to understand the experiment including the broader context and the relevance of the research to society

**Training** – the apprentice stage that teaches students how to interpret the data

**Experiment** – the real research project during which students compare test and control data and submit scores for evaluation. They are also presented with questions to encourage them to reflect on what they have learnt and the implications of their results.

Students may be featured on a high-score board and their articles and feedback are archived in a Virtual scrapbook.

<sup>1</sup>Data/child protection: All data is treated as confidential and will not be shared with third parties. Participants will not be contacted in the future without prior consent.

