

A Stem Cell Story

By the European Consortium for Stem Cell Research

Reviewed by Philipp Gebhardt, European Molecular Biology Laboratory, Germany

A Stem Cell Story portrays scientists from the field of stem-cell research, their individual research interests and the potential applications of their work. The DVD is aimed at the public, to shed light on stem-cell research and on the science behind the headlines and public debate of the last few years.

Even though research on stem cells has been going on for 40 years, another level of controversy was added when researchers derived the first human embryonic stem-cell line in 1998. The hopes associated with this cutting-edge technology are as diverse as the production of replaceable tissues, the repair of defective tissues using healthy cells and the treatment of a broad spectrum of diseases.

The film begins by comparing the complex processes in the microscopic world of our cells to the hustle and bustle of modern city life. The fast-changing scenery makes it very appealing to an audience used to the style of contemporary music videos. At the beginning of the documentary, the filmmakers introduce the importance of stem cells for the generation and maintenance of a multiplicity of specialised cells in our body, and the natural role of embryonic stem cells in development.

The underlying science is communicated with very creative cartoon-like animations, which are integrated nicely into the plot and illustrate the plasticity in the system of differentiating cells. This is highlighted during interviews with scientists, who explain their strategies for inducing isolated embryonic stem cells to specialise; one scientist

describes it as a “battle of wills” to induce cells to follow a particular pathway of differentiation. Examples of the clinical applications of stem-cell research are reviewed, such as skin transplantation, and the generation of neural stem cells and insulin-producing cells for the treatment of diabetes.

With its beautiful pictures of fluorescently labelled cells and its modern, informative and very appealing look, this educational film is a valuable resource for people who want to go beyond the headlines on this controversial topic. The DVD offers a captivating insight into the world of stem cells, but at the same time does not go much beyond pure knowledge transfer. Its main goal is to demonstrate the fascinating possibilities of this branch of biomedical research, which is probably why the relevant ethical questions are to a great extent left out. Furthermore, although the very fast turnover of the illustrations maintains a high attention level, it can make it somewhat difficult to follow the theory.

The original soundtrack is in English, but voice-overs and subtitles are available in other languages (see below for details). Its short format makes this film ideal for use in the classroom, for example as an introduction to stem cells. It is recommended for audiences aged 14 and older.

Details

Technical details: DVD PAL, all zones
Producer: EuroStemCell, European Consortium for Stem Cell Research (www.eurostemcell.org)

Publication year: 2005

Running time: 15 min

Soundtrack: English

Voice-over and subtitles: French, German, Italian

Subtitles: Swedish, Dutch

Ordering

Within Europe, the first copy costs £4, including postage and packaging. Additional copies cost £2.50 each; up to five copies can be ordered. For further details, see www.eurostemcell.org/Outreach/outreach_film.htm

Resources

The website of the European Consortium for Stem Cell Research has additional information about stem cells. In its outreach section, it offers a jargon-buster (definitions of key stem-cell terms), information about the legislation of human embryonic stem-cell research in different countries, and other interesting facts: www.eurostemcell.org/Outreach/outreach.htm

