MITOPENCOURSEWARE MASSACHUSETTS INSTITUTE OF TECHNOLOGY



October 2013 Newsletter

<u>Current Events in Context</u> | <u>New Courses</u> | <u>Updated Courses</u> | <u>Highlights for High School</u> | <u>Views from Supporters</u>

Current Events in Context: New Technique for Hair Growth



Hair loss affects millions of people. Image courtesy of eoshea.

In a <u>recent study</u>, published in the Proceedings of the National Academy of Sciences of the United States of America, scientists have reported a new method of generating human hair. These scientists have successfully grown human hair by manipulating cell culture conditions, cloned the cells in tissue culture, then grafted this new hair onto mice. The initial results show new hair growth that have lasted about six weeks.

If the study successfully makes it through clinical trails, its applications may be able to help millions of people who suffer from hair loss or thinning hair and may not be candidates for current hair transplant therapies.

The following courses take a look at the underlying science and biology of cells and cellular growth.

- 7.013 Introductory Biology's video lecture on stem cells, which may be the foundation for which biologists can model tissue or organ repair. There's also a segment on hair growth and hair cycle.
- 7.342 <u>Developmental and Molecular Biology of Regeneration</u> which critically examines classic and modern scientific literature about the developmental and molecular biology of



We live in a golden age of personal learning. If you have access to a computer, you have access to knowledge from thousands of universities around the world.

OCW remains at the forefront of creating free and openly licensed educational resources for educators and learners worldwide. We now share materials from thousands of MIT undergraduate and graduate courses.

Our site received 23 million visits in 2012 and we expect to receive at least 27 million visits by the end of this year. But we need your help to serve the growing numbers of people who come to our site.

Your <u>support</u> provides the resources we need to publish new and updated courses, meet the increasing costs for global distribution of our content, and continue creating innovations like OCW Scholar and OCW Educator.

regeneration.

 Resource Listing for Reproduction/Growth/ Development which includes topics such as growth and differentiation, stem cells-self renewal, regeneration and stem cells and transplant assays.

New Courses

- 17.581 Riots, Rebellions, Revolutions
- 21W.035 Science Writing and New Media: Elements of Science Writing for the Public

If you can afford to contribute to OCW, please donate today and support the online learning revolution and the tremendous benefits and opportunities created by free access to knowledge.

If you've already donated, then thank you for the support!

Updated Courses

- <u>17.871 Political Science Laboratory</u>
- 21L.006 American Literature
- > Find courses that interest you
- > Subscribe to the RSS

OCW is grateful for the

support of:













Highlights for High School



Teachers and students interact during an introductory astronomy class. Image courtesy of NASA.

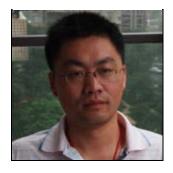
Teachers, did you know there is a space just for you on the newly redesigned Highlights for High School website?

The "For Teachers" section will show you ways of integrating the open educational resources into your teaching, provide examples of how other teachers are using this site, and can answer all of your burning questions about Highlights for High School in the classroom. Enjoy!

> Visit For Teachers on Highlights for High School

Views from Supporters

"MIT is so generous to put up the best quality education for the whole world, so that people like me who don't have access



to world class education now have the chance to use the superior material. I want to support this wonderful behavior from MIT."

- Jianqiang, Independent Learner, Australia

> Read more

Tell us what you think of OCW here.



> Privacy and Terms of Use

MIT OpenCourseWare is located at: One Broadway, Cambridge, MA 02142