

COLORADO

# CAFÉ SCIENTIFIQUE

TUESDAY 16 MARCH 2010

at the Wynkoop Brewing Company

<http://www.wynkoop.com/>

Corner of 18<sup>th</sup> and Wynkoop in LoDo, Denver

About a block from Light Rail. Thirteen minutes by foot from Auraria.

## The Stem Cell Revolution

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Stem cells are cells that, when they divide, give rise to another stem cell, as well as a cell that then begins the process of differentiating, that is, becoming specialized, like a muscle, nerve, or skin cell. Some stem cells are restricted: the basal cells in skin are stem cells, but normally give rise only to skin; hematopoietic stem cells in the bone marrow give rise normally only to the cells of the blood. These adult stem cells are very different from embryonal stem cells, which are present in the very early embryo and can give rise, through their division and specialization, into any of the body's cell types. These cells hold great promise for treatment of conditions in which new cells are needed but not available: for example, to replace the destroyed insulin-producing cells in children with diabetes. But their study and use have been dogged with political and emotional issues, and they cannot be custom-made for a recipient. Recently it has been found that by manipulating as few as four gene products, adult cells may be made to take on many of the properties of embryonal stem cells. Is this the beginning of a whole new medicine? What are the risks, and what is the future?

***EVERYONE IS WELCOME.*** The discussion starts at 6:30 in the Mercantile Room (no food service there). Come before 6 PM to leave yourself time to get something to eat, or stay and eat afterwards. We end around 8 PM.

There's no charge. The Wynkoop is generously providing the facility; we buy our own drinks. It is first come, first seated, and **seating is limited** so that everyone can take part in the discussion.

The Colorado Café Scientifique is organized by an informal group of faculty from CU and institutions up and down the Front Range, as well as science fans from industry, government and elsewhere. We welcome your input, including ideas for speakers and topics. Bring them with you to the next Café, or e-mail them and any questions to [John.Cohen@UCDenver.edu](mailto:John.Cohen@UCDenver.edu)

Essential information on our Web site at: <http://CafeSciColorado.org>