

Colorado

CAFÉ SCIENTIFIQUE

Tuesday 12 October 2010

at the Wynkoop Brewing Company

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

Corner of 18th and Wynkoop in LoDo, Denver

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

Making cancer cells kill themselves

Andrew Thorburn, PhD, Chair, Department of Pharmacology
University of Colorado Medical School, Aurora

A staggering number of your cells die every day. This death is “programmed” in that it is supposed to happen for good physiological reasons: for example, our intestines are exposed to bacteria and food chemicals, some of which are harmful, so it’s better to replace the lining every 3 days or so. Likewise for skin, blood cells, and almost all others in the body. In the 1980s it was found that not only is there programmed cell death, there is a cell death program: a genetic pathway whose end point is (suicidal) cell death. It is called apoptosis. If you could convince cells to commit suicide, which would you choose? Cancer cells, surely. In fact, cell suicide probably explains why cancer is relatively rare considering all the environmental triggers for it. But cancers that survive do so, in part, by becoming resistant to committing suicide. Andrew Thorburn is one of the pioneering scientists trying to convince them to do so. To be effective, you need to identify the suicide signals and ways to (re)establish and then trigger them in cancer cells. This could be more effective than current therapies, and potentially a lot less toxic.

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

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