

COLORADO

CAFÉ SCIENTIFIQUE

TUESDAY 25 SEPTEMBER 2007

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.

AGING, ALCOHOL, MEMORY, AND MOLECULES

**MICHAEL D. BROWNING, PHD, PROFESSOR
PROGRAM IN NEUROSCIENCE AND DEPARTMENT OF PHARMACOLOGY
UCDHSC**

How does the brain make memories? From the time of Pavlov and his dogs, we have known that almost all animals including man can remember that food is coming soon after the dinner bell. What happens in our brain when we make this association? The first clue came from a man who had a surgery that removed a part of his brain. This surgery left his old memories intact but he was never able to make a new memory after the surgery. The second clue came when we discovered that the brain had the ability to greatly increase the strength of some of the signals that one brain cell sent to another (potentiation). The final discovery was that there is a protein molecule in the brain that can detect coincidence. Dr. Browning will describe these discoveries and what they tell us about how the brain makes memories. We can also discuss how the coincidence detector molecule is damaged in aging and Alzheimer's disease, and how alcohol blocks memories by inhibiting this protein. There are drugs on the horizon that could ameliorate some of the effects of aging, Alzheimer's and alcohol on this magical molecule that is known as the NMDA receptor.

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 President's Teaching Scholars and 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@UCHSC.edu

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