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OFFICE OF THE VICE CHANCELLOR FOR RESEARCH 119 CALIFORNIA HALL #1500

BERKELEY, CALIFORNIA 94720-1500

May 25, 2010

## PERSONAL & CONFIDENTIAL

Norman Brown Lee Brown President and Owner Delta Construction Company P.O. Box 277517 Sacramento, CA 95827

## Gentlemen:

President Yudof has forwarded to me your letter of March 24, 2010, in which you allege that Professor Michael Jerrett has violated the UC Standards of Ethical Conduct and has committed research misconduct. I am the campus official responsible for managing the process of investigating allegations of research misconduct. The procedures followed when these kinds of allegations are made can be found at the following URL: <a href="http://vcresearch.berkeley.edu/research\_policies/compliance/misconduct">http://vcresearch.berkeley.edu/research\_policies/compliance/misconduct</a>. As you can see from the above website, UC Berkeley has an extensive policy and set of procedures to deal with allegations of research misconduct. These conform to Federal Regulation 42CFR93. Our process has three phases: Assessment, Inquiry, and Investigation. The purpose of the initial Assessment phase is to determine if the complaint received constitutes a bona fide allegation of research misconduct within the definition contained in Federal regulation and campus policy.

Your specific claim with regard to your allegation of research misconduct is that Professor Jerrett engaged in the falsification of research results. As you note in your letter, campus policy and federal regulations define falsification as "manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record." What this definition refers to is the record of the investigator's own research activity, i.e., the data and findings resulting from experimentation or other data gathering techniques conducted by the investigator and reported in scholarly journals, grant applications, presentations, and the like. In the material you provided to us there is no instance in which Professor Jerrett can be said to have altered or misrepresented the data and findings of his studies. You point to a number of instances in which Professor Jerrett did not refer to studies conducted by other researchers that may or may not have been consistent with his findings. But Professor Jerrett is not obligated to do so, and such omissions do not fall within the definition of research falsification under University policy and/or Federal regulations.

Your allegation that Professor Jerrett has violated the UC Standards of Ethical Conduct is apparently based on a claim that he did not reference a variety of publications in his own work. In particular, you object to statements made by Professor Jerrett to the California Air Resources Board (CARB) in support of a project for which he sought funding; statements which you contend he knew or should have known

to be false. Specifically you take exception to the following claim by Professor Jerrett: "This study will derive the first California wide estimates of mortality associated with PM2.5 exposure and other criteria co-pollutants, thus supplying policymakers with a valuable resource for deriving benefit estimates." You contend that Professor Jerrett was aware of "a very large and detailed study of PM2.5 and mortality in California" published in 2005 by Dr. Enstrom, and thus the claim Jerrett makes for his own study is false and intended to mislead the CARB.

I note two things with respect to these allegations of an ethical breach by Professor Jerrett. First, a researcher is under no obligation, ethical or otherwise, to reference or acknowledge every study conducted on a topic similar to theirs. Researchers make judgments about the value and relevance of the work done in their field and on that basis choose what to include as part of their own published material. Scholars may well value things differently and on that basis engage in debate about their results and findings. The existence of such differences and the debate they engender does not indicate the existence of ethical issues. Second, the evidence available indicates that Professor Jerrett's study is much more comprehensive than the earlier study of Dr. Enstrom. The Enstrom study has subjects residing in 25 of 58 counties across California, but only 11 of 58 had air pollution estimates. The Jerrett study includes 54 of the 58 counties (all 54 have health data and pollution estimates). While the Enstrom study covered 19% percent of California's counties, the Jerrett study includes more than 93% of the counties. Hence, your assertion that Jerrett misled CARB by claiming his study offered comprehensive coverage of California is not sustained by the available evidence.

Accordingly, I have concluded that the information you have provided is not evidence of conduct that would violate any University policy covering research or other ethical misconduct or would warrant any further inquiry under University policy.

Sincerely,

Robert Price

Associate Vice Chancellor for Research