A PETITION

BY

Graduate Students and Alumni of the
Duke University Doctoral Program in Biochemistry

TO

Professor Kenneth Kreuzer, Interim Chair, Duke Department of Biochemistry
Professor Sally Kornbluth, Vice Dean for Basic Sciences, Duke University School of Medicine
Professor Nancy Andrews, Dean, Duke University School of Medicine
Professor R. Sanders Williams, Senior Vice Chancellor for Academic Affairs, Duke University
School of Medicine
Professor Victor Dzau, Chancellor for Health Affairs at Duke University, President and CEO of
Duke University Health System
Professor Jo Rae Wright, Provost and Dean of the Duke University Graduate School
Professor Peter Lange, Provost of Duke University
Professor Richard Broadhead, President of Duke University

BACKGROUND

In February 2008, Duke Biochemistry Professor Homme W. Hellinga and his former
graduate student Dr. Mary Dwyer retracted two high-profile papers describing the
computational design of an active enzyme\(^1,2,3\). These publications, especially the 2004
*Science* paper\(^1\), were hailed as breakthroughs by the scientific and popular media\(^4\). Prior
to their retraction, Professor Hellinga’s findings garnered him high and pecunious
accolades, including an inaugural National Institutes of Health Director’s Pioneer Award.

In 2007, Professor John Richard of the State University of New York attempted to repeat
aspects of the aforementioned findings. His inability to reproduce these results, for
fundamental scientific reasons, compelled Hellinga and Dwyer to retract them\(^5,6\).

In the autumn of 2007, as the retractions were being negotiated, Professor Hellinga
requested and pursued a research misconduct investigation of Dr. Dwyer under the
auspices of the Duke University School of Medicine\(^5,6\). This investigation, which was
completed within a period of four months, formally acquitted Dr. Dwyer of the charges
made against her\(^5,6\).

While Dr. Dwyer’s role in the publication of Professor Hellinga’s retracted findings has
been examined\(^5\), the scientific and ethical culpability of these papers’ other authors
remains a matter of speculation\(^5,6,7,8,9\). In particular, eminent biochemists have published
their concerns that the Hellinga-Dwyer retractions are insufficient to explain the manner
in which Hellinga and Dwyer arrived at their erroneous conclusions\(^8,9\). To date,
Professor Hellinga has declined to publicly address these concerns. Moreover, the
appropriateness of Professor Hellinga’s decision to pursue misconduct charges against
Dr. Dwyer has been widely questioned\(^5,6,7\).
Dr. Dwyer, explaining her role in the submission of the now-retracted papers, claims to have apprised Professor Hellinga of her concerns regarding the validity of the conclusions drawn from her data⁵. Professor Hellinga allegedly chose not to “mention the [experimental] variability Dwyer had noticed,” a scenario he contests⁵. As of May 2008, Professor Hellinga claimed that he had not been formally notified of any investigation regarding his role in this controversy⁵.

REQUEST FOR ACTION

We, undersigned graduate students and alumni of the Duke University Doctoral Program in Biochemistry, respectfully request, for reasons of equity and due diligence, that Duke University determine whether Professor Homme W. Hellinga:

1. Published Dr. Mary Dwyer’s data, despite her objections, with the effect of “manipulating research procedures and data so as to bias results”¹⁰

2. Pursued “baseless and malicious, or reckless”¹⁰ research misconduct charges against Dr. Dwyer

Thorough investigation, unbiased and transparent, is science’s greatest need, its most essential characteristic. We ask this petition’s addressees to exercise whatever authority may be necessary to fulfill, in the context of the Hellinga-Dwyer controversy, Duke University’s obligation to science and to science’s conscientious practitioners.

REFERENCES


SIGNATURES AND CERTIFICATION

Copies of this petition’s signature page, including the printed names, titles, and signatures of the petitioners, are attached to this document. These photocopies are notarized to certify the accuracy of their duplication. The original is to be filed with the Duke University Department of Biochemistry, in the care of Interim Chair Professor Kenneth Kreuzer.