

January 19, 2022

Gary Dunbar 2469 Copper Creek Drive Bay City, MI 48706

Dear Gary:

Central Michigan University has received your response to the Research Misconduct Draft Inquiry report which was forwarded to you on December 15, 2021. You will recall that the concerns underlying the Draft Inquiry Report were:

In late October 2021, several people at CMU received an e-mail from PubPeer identifying what PubPeer believed were irregularities in multiple peer reviewed research papers featuring authorship by Dr. Gary Dunbar (CMU Faculty) and Dr. Panchanan Maiti (CMU Adjunct Faculty), among others.

The common theme of the irregularities concerns duplicative images in a number of journals publications (International Journal of Molecular Sciences; Alzheimer's Research & Therapy; BMC Neuroscience; Journal of Neuroinflammation), representing differential experimental conditions which in the minds of PubPeer would seem to be highly unlikely if not impossible. The specific publications and articles are cited below:

Maiti, P., Bowers, Z., Bourcier-Schultz, A., Morse, J., **Dunbar, G.L.**, 2021. Preservation of dendritic spine morphology and postsynaptic signaling markers after treatment with solid lipid curcumin particles in the 5xFAD mouse model of Alzheimer's amyloidosis. Alzheimer's Research & Therapy 13, 37. Doi:10.1186/s13195-021-00769-9.

Maiti, P., Palodugu, L., **Dunbar, G.L.**, 2018. Solid lipid curcumin particles provide greater anti-amyloid, anti-inflammatory and neuroprotective effects than curcumin in the 5xFAD mouse model of Alzheimer's disease. BMC Neuroscience 19, 7. Doi: 10.1186/s12868-018-0406-3.

Maiti, P., Manna, J., Burch, Z.N., Flaherty, D.B., Larkin, J.D., **Dunbar, G.L.**, 2020. Ameliorative properties of boronic compounds in in vitro and in vivo models of Alzheimer's disease. International Journal of Molecular Sciences 21, 6664. Doi: 10.3390/ijms21186664.

Paladugu, L., Gharaibeh, A., Kolli, N., Learman, C., Hall, T.C., Li, L., Rossignol, J., **Maiti, P.**, **Dunbar, G.L.**, 2021. Liraglutide has anti-inflammatory and anti-amyloid properties in streptozotocin-induced and 5xFAD mouse models of Alzheimer's disease. International Journal of Molecular Sciences 22, 860. Doi:10.3390/ijms22020860.

Peruzzaro, S.T., Andrews, M.M.M., Al-Gharaibeh, A, Pupiec, O., Resk, M., Story, D., **Maiti, P.**, Rossignol, J., **Dunbar, G.L.**, 2019. Transplantation of mesenchymal stem cells genetically

engineered to overexpress interleukin-10 promotes alternative inflammatory response in rat model of traumatic brain injury. Journal of Neuroinflammation 16, 2. Doi:10.1186/s12974-018-1383-2.

In your response to the Draft Inquiry Report, you included information relating to the co-author whose efforts were principally linked to the duplicate images – Panchanan Maiti, Ph.D. You also include a letter from Dr. Maiti wherein Dr. Maiti admits responsibility for the duplicate images.

The University has reviewed your response and has engaged in much thoughtful deliberation of the matter. CMU concludes as follows:

- Dr. Maiti's admission of accountability for the duplicate images in the articles cited by PubPeer resolves the question of whether or not any CMU employee engaged in behavior that violates CMU policy 3-29. Specifically, CMU Policy 3-29 notes that a finding of research misconduct requires that the misconduct be committed intentionally, knowingly, or recklessly. Dr. Maiti, in his admission, resolves the question of whether or not a CMU employee engaged in misconduct under the policy.
- In assessing whether or not there was reckless behavior, CMU adopted a definition of reckless
 that is consistent with ordinary definition; behavior which among similarly situated people
 would be considered careless or indifferent to the standard of care a similarly situated person
 would adopt.
- In that context, CMU next reflected upon the responses offered about the efforts made by yourself and others to make sure mistakes of this type don't happen. A common theme in your response and in that of those writing in support of you, is that it would be very difficult to discern among the 1500 2000 images considered those circumstances when duplication occurred. You indicated that that detection of most of the duplicate images required sophisticated artificial-intelligence-level (AI-level) technology as it was nearly impossible to detect these with the naked eye.
- Yet, despite what was described by you and your colleagues as extremely difficult, PubPeer
 was able to accurately assess the existence of duplicates. This suggests to CMU that it
 would be appropriate to caution you about due diligence and the care that must be
 extended to any publications bearing your name as a member of the CMU community of
 scholars.
- In this instance, the misconduct as alleged turned out to be accurately put images were duplicated among publications in a manner suggesting recklessness and a lack of due care from the person responsible. Here, your name is on the article, and you acknowledge you were heavily involved in editing the documents for publication. While you are not the person who inserted the duplicate images, they did appear in articles bearing your name and you were involved in editing those articles for final publication.

Accordingly, the University finds as follows:

The allegations you have engaged in misconduct as described in the Draft Inquiry report and as defined under policy 3-29 are dismissed. You did not engage in misconduct as it is defined under the policy.

You are cautioned that the intersection here of misfortune, mistake, and purposeful misconduct does not lend itself to confidence and you and your colleagues should increase your efforts at vigilance and the high standards of accuracy and data integrity that would ordinarily reflect well on your achievements and on the reputation of the academy.

The matter is thus concluded without additional need for investigation and without any finding of misconduct.

Sincerely,

Dennis Armistead, J.D.

Executive Director, Faculty Personnel Services

Central Michigan University

CC: Richard Rothaus, Interim Provost

David Weindorf, Vice President, Research and Innovation