**Kevin P. Keegan, Ph.D.** Independent Researcher Glen Ellyn, IL, USA Email: kevin.p.keegan@gmail.com

**December 19, 2024**

**Editor-in-Chief** BMC Genomics

Dear Editor-in-Chief,

I am pleased to submit my manuscript entitled **"Re-analysis of Covid-19 Related RNASeq Count Data Reveals a Robust List of Genes that Exhibit Significant Covid-19 Dependent Differential Expression"** for consideration for publication in **BMC Genomics**.

## Abstract

In this manuscript, I present a novel analysis of RNASeq data from three large-scale studies on Covid-19. My analysis includes a total of 2678 samples, rigorously screened and filtered for quality and relevant metadata. I identify a robust list of 61 genes (60 annotated) showing significant Covid-19 dependent differential expression, highlighting the potential impact on the scientific and medical communities. The reproducible analysis is implemented using the R programming language, enabling further investigations and facilitating future research endeavors.

## Significance of the Study

Given the substantial public interest and ongoing research efforts focused on understanding Covid-19, my study contributes valuable insights by synthesizing publicly available RNASeq data. The integration of these datasets and the identification of consistent differentially expressed genes across multiple studies represent a significant advancement in Covid-19 genomics research. My approach also exemplifies the power of R and its ecosystem in conducting sophisticated, large-scale biological analyses with modest computational resources.

## Suitability for BMC Genomics

BMC Genomics is an ideal venue for this manuscript due to its focus on high-quality research in genomics and related fields, including bioinformatics and computational biology. My work aligns with the journal's mission of advancing understanding in genomics through innovative and rigorous scientific inquiry. I believe that my findings and methodological approach will be of great interest to the readership of BMC Genomics.

This manuscript has not been published and is not under consideration for publication elsewhere. As sole author I have read and approved the final version of the manuscript and agree to its submission to BMC Genomics.

Thank you for considering my manuscript for publication. I look forward to your positive response.

Sincerely,

Kevin P. Keegan, Ph.D. Independent Researcher Glen Ellyn, IL, USA Email: kevin.p.keegan@gmail.com