Joint Statement by Samir Soneji, PhD (Dartmouth College) and Hiram Beltrán-Sánchez, PhD (UCLA)

In October 2016, the *New England Journal of Medicine* published "Breast-Cancer Tumor Size, Overdiagnosis, and Mammography Screening Effectiveness" by H. Gilbert Welch, Philip Prorok, Barnett Kramer, and James O'Malley. Upon publication, Samir Soneji and Hiram Beltrán-Sánchez filed a formal allegation of plagiarism against H. Gilbert Welch. Dartmouth College conducted a research misconduct investigation, which lasted 21 months.

In June 2018, Dartmouth College concluded H. Gilbert Welch "engaged in research misconduct, namely, plagiarism, by knowingly, intentionally, or recklessly appropriating the ideas, processes, results or words of Complainants without giving them appropriate credit, and that these actions represented a significant departure from accepted practices of the relevant research community." The Dartmouth College investigation further concluded the three coauthors of this paper, Barnett Kramer and Philip Prorok of the National Cancer Institute and James O'Malley of Dartmouth College, had not engaged in any research misconduct themselves.

The New England Journal of Medicine reviewed the full Dartmouth College investigation report after the Journal was notified of the finding of plagiarism. The Journal's "opinion in this matter, which is concordant with that of the United States Office of Research Integrity, is that this is an authorship dispute." The decision by the Journal to not retract the paper is contrary to International Committee of Medical Journal Editors (ICMJE), of which NEJM is a member. The ICMJE states, "If the procedures involve an investigation at the authors' institution, the editor should seek to discover the outcome of that investigation, notify readers of the outcome if appropriate, and if the investigation proves scientific misconduct, publish a retraction of the article." In accordance with ICMJE, we believe the plagiarizing paper, Welch et al. (2016), ought to be retracted since an investigation conducted by Dr. Welch's own institution found research misconduct.

Institutions and journals have an important role in research misconduct investigations, as they did in this matter. And we believe the scientists involved should take an active role and have a voice, too.

Plagiarism is antithetic to the ethical conduct of scientific research and damages all parties and institutions involved. The researchers whose ideas and results are plagiarized are denied appropriate credit for their substantial intellectual efforts, thus breaking the incentive structure of the scientific community. The individuals who engage in plagiarism damage their professional reputation. Even coauthors who unwittingly publish papers based on plagiarized research suffer an unfortunate guilt by association. Beyond damage to researchers' careers, plagiarism erodes the public's trust in science.

We hope our experience helps the scientific community. We encourage scientists to bring forward concerns of research misconduct and hope their institutions and journals will take such concerns seriously. We encourage scientists to take pause and honestly assess research ideas and results, to give appropriate credit to their originators, and to correct the scientific record when necessary. And we encourage all scientists to engage in research that adheres to the highest ethical standards.

Samir Soneji, PhD & Hiram Beltrán-Sánchez, PhD