173: Minimum information guideline for spectrophotometric and fluorometric methods to assess biofilm formation in microplates - *Allkja J*

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Introduction: The lack of reproducibility of published experimental studies is one of the major issues facing science today, and the field of biofilm research is no exception. While many factors contribute to this phenomenon, selective or insufficient reporting of experimental details in the published literature is one of the more significant causes.

Hypothesis and aims: One effective strategy to improve reproducibility is the use of minimum information guidelines. These can be defined as a guide for authors and reviewers on the necessary information that a manuscript should include for the experiments in a study to be clearly interpreted and independently reproduced. We propose a guideline for spectrophotometric and fluorometric methods to assess biofilm formation in microplates.

Methodology: The guideline was created through a literature review of articles related to the methods included in the guideline and articles on factors that affect biofilm formation and properties. Furthermore, several discussions among international groups working in the area of biofilms provided a more balanced view on what were reasonable and relevant requirements to include in the guideline.

Results: The final guideline has been divided into 5 main sections (Experimental design, Biofilm formation, Biofilm assessment, Statistical assessment and Bioinformatics), each presenting a comprehensive set of recommendations. This outline is designed to follow the chronological order in which the assays are typically performed and described.

Conclusion: We believe that the implementation of this minimum information guideline will improve the quality of scientific communication leading to better reproducibility in biofilm microplate assays.