With the emergence of the web, the nature of scholarly communication has fundamentally changed. Increasingly, scholarly articles contain URI references to resources on the web such as project websites, wikis, ontologies, online debates, blogs, etc. These references are an integral part of the article as they provide context for the reported research. A reader who visits such web resources by following a URI reference is lead to believe that the resource’s content is representative of what the author originally cited at the time of writing the article. However, due to the dynamic nature of the web, this may not be the case.

In this talk I will present research results from our studies on “reference rot” in scholarly communication. I will provide a quantitative analysis based on more than one million URI references from three large corpora containing more than 3.5 million scholarly articles. I will further offer solutions how to tackle the problem of reference rot, including simple steps that every author can take to make references more robust by utilizing available web archiving infrastructure.