

February 11, 2019

USC Davis School of Gerontology

3715 McClintock Ave.

Los Angeles, CA 90089-1091

Journal of Visualized Experiments

1 Alewife Center, Suite 200

Cambridge, MA 02140

Dear editor,

We submit an article titled “Examination of mitotic and meiotic fission yeast nuclear dynamics by fluorescence live-cell microscopy” for your publication and video production consideration. We believe the simplicity of this protocol will help many yeast researchers answer important cell biology questions through live-cell fluorescence microscopy. We provide a method to successfully prepare fission yeast samples for prolonged fluorescence visualization. We also offer basic ImageJ analysis steps that researchers can follow to give meaning to their real-time microscopy observations of mitotic and meiotic events.

Although there are live-cell imaging protocols in the literature that successfully address real-time events during mitosis, few focus on the time-sensitive process of meiotic progression. In this methods paper, we present an optimized approach that has worked well in our hands and which produces abundant information from just a few live-cell videos. Provided researchers follow recommendations we stipulate in the manuscript, we believe they can study multiple aspects of meiosis that are difficult to examine through biochemical or molecular biology approaches. Some of the processes that we highlight, and which are amenable to our methods, deal with the timing, stability, and movement dynamics of nuclear events. For this reason, we ask for your serious consideration of this work.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Escorcía'.

Wilber Escorcía, Ph.D