

ABSTRACT**METHOD AND SYSTEM FOR PREPARING A LAMELLA**

A system and a method for preparing a lamella. The method may include aligning, by the manipulator, a mask and a sample. Positioning the mask and the sample in front of an ion miller while unchanging the spatial relationship between the mask and the sample. Milling a first exposed portion of the sample until exposing a first sidewall of the lamella. Positioning the mask and the sample in front of the ion miller so that the mask masks a second masked portion of the sample. Milling, by the ion miller, the second exposed portion of the sample until exposing a second sidewall of the lamella. Removing, by the miller, matter from both sides of the lamella; and detaching the lamella from the sample.

Figure 3