Supplemental Material S1. Obtain pixel aspect ratio (PAR) using MediaInfo (v22.03).

Find the embedded PAR information of a video file with MediaInfo with the following steps:

1. Open the video file

2. Change the display view by clicking the "View" toolbar icon and select "JSON" (Figure SM.2(a))

3. Scroll through the displayed video information to the section which starts with ""@type": "video"" and look for ""PixelAspectRatio"" entry (Figure SM.2(b)). This entry represents the ratio of pixel width by height (e.g., 0.889 if PAR=8:9)

Be aware that MediaInfo reports PixelAspectRatio as 1.000 even if the PAR is not stored in the video file. So, do not rely on this tool to determine whether the video file contains the PAR.
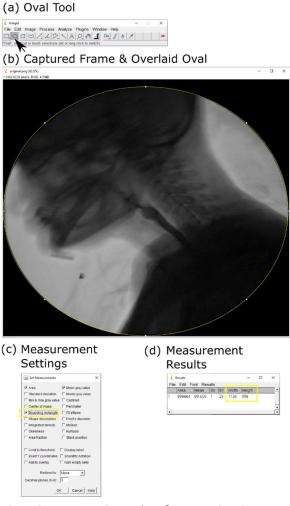

Figure SM.1. ImageJ Screenshots for PAR estimation.