

Microscope HD video streaming in University Pathology teaching through YouTube and Twitch

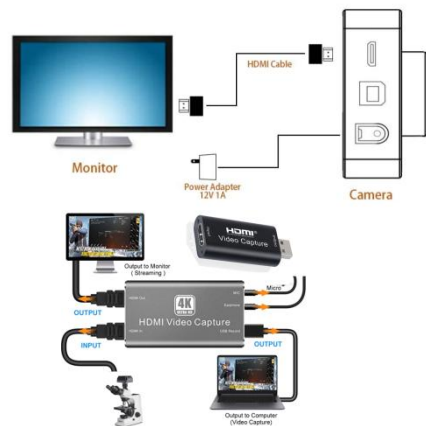
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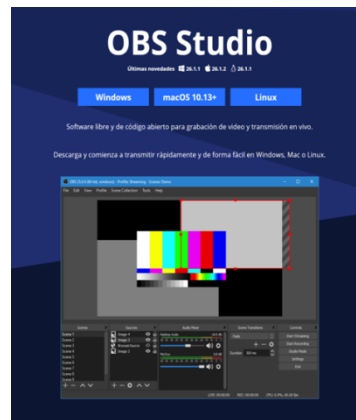


Camera

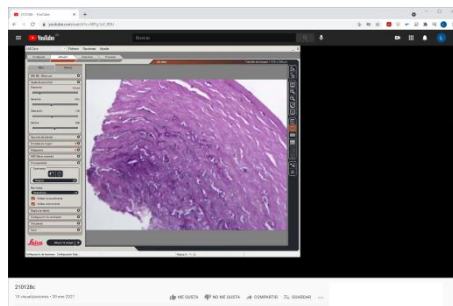
HAYEAR 34MP 1080 p 60FPS 2K
Full HD HDMI USB C-Mount



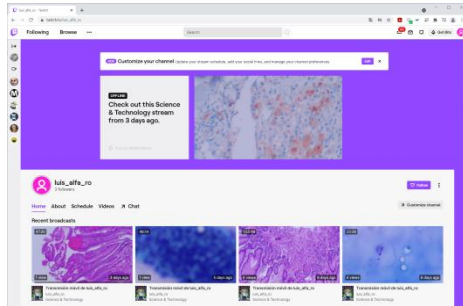
Connection diagram



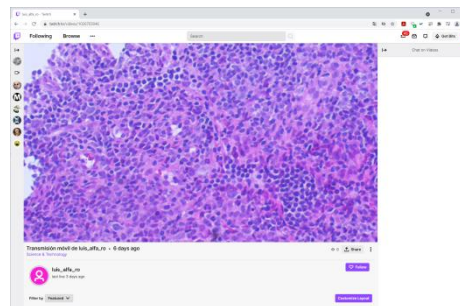
Streaming software



YouTube channel streaming



Twitch channel video collection



Twitch channel streaming

Videoconferencing systems, have replaced most face-to-face classes during pandemia. Pathology practical teaching requires an adaptation in which digital pathology has intensified models with remote diagnosis.

Our practical teaching with scanned digital microscope slides has been complemented with HD Video streaming. We have installed a HD camera with 1080p video output (Hayear) in a trinocular microscope with a video capture device to a computer and broadcast images with OBS (Open broadcasting software) of routine daily cases. Video transmission was directed to YouTube and Twitch and students access these platforms to watch the images and follow the explanations. The dialogue and comments was followed with Microsoft Teams. HD video image quality is very high. Students already familiar with scanned slides have acquired a new view of pathological diagnosis. The practice model maintains the selected cases of each type of representative pathology lesions. Teachers transmit in real time their diagnostic activity, while explaining the morphological criteria or the additional techniques.

High definition video transmission in real time brings for university students the most direct approach to the diagnostic pathology and to the knowledge of the morphological patterns of each entity. It represents the understanding in a much more exact way the work of attending pathologists and the importance of their role in the hospital management of patients.

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