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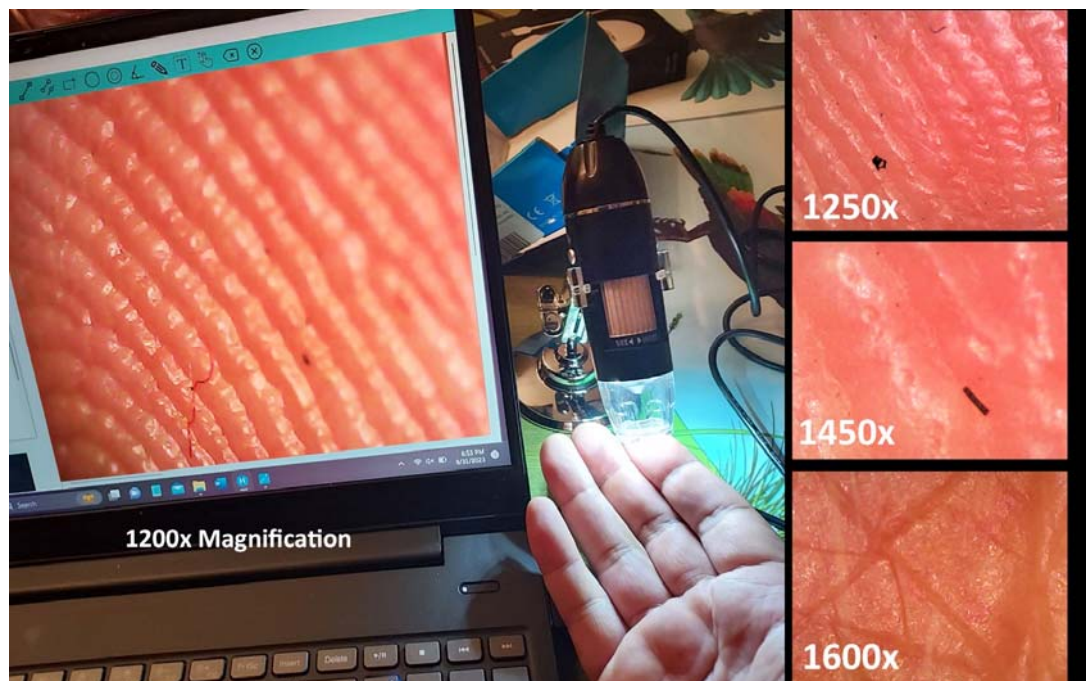
NEW TECH: MEET THE 1600X ENDOSCOPE USB MICROSCOPE CAMERA

All images and review by: Lennard M. Gettz, Ed.D

Dermatologists and other clinical specialists have similar, more expensive camera microscopes to micro-scan skin disorders and chronic inflammatory diseases including cancers and melanoma. To capture and magnify these disorders to such remarkable magnification (as 1600x) is to find the finest splinter or blemish in between the strands of a fingerprint. Today's digital optics offering real-time monitoring, recording and high-magnification projecting of skin surface imaging is a vital advancement for an expanded host of diagnostic needs for the clinician or

researcher. Such is the case of this DESKTOP or HANDHELD ILLUMINATED ENDOSCOPE. This affordable micro-camera allows us up to a 1600x magnification to identify the condition and health of the skin either in a lab or procedural setting. Treatment specialists will find great advantage to this remarkable detective tool for therapeutic performance testing in actual time.

In vivo endoscopic optical microscopy provides a tool to assess tissue architecture and morphology with contrast and resolution similar to that provided by standard histopathology--without need for physical tissue removal. In this article, we focus on optical imaging technologies that have the potential to dramatically improve the detection, prevention, and therapy of epithelial cancers. Epithelial pre-cancers and cancers are associated with a variety of morphologic, architectural, and molecular changes, which currently can be assessed only through invasive, painful biopsy. Optical imaging is ideally suited to detecting cancer-related alterations because it can detect biochemical and morphologic alterations with sub-cellular resolution throughout the entire epithelial thickness. Optical techniques can be implemented non-invasively, in real time, and at low cost to survey the tissue surface at risk. Our manuscript focuses primarily on modalities that currently are the most developed: reflectance confocal microscopy (RCM) and optical coherence tomography (OCT).



However, recent advances in fluorescence-based endoscopic microscopy also are reviewed briefly. We discuss the basic principles of these emerging technologies and their current and potential applications in early cancer detection. We also present research activities focused on development of exogenous contrast agents that can enhance the morphological features important for cancer detection and that have the potential to allow vital molecular imaging of cancer-related biomarkers. In conclusion, we discuss future improvements to the technology needed to develop robust clinical devices.

ABOUT THIS DEVICE: MANUFACTURER'S SPECS

- Compatible for Windows 7, 8, 10 / MAC & Android smart-phones.
- Multi-Functional Design: Like a still/photo or video camera, it can not only zoom in but also take photos and record videos, built-in 8 dimmable LEDs provide enough illuminance when working. The manual adjustable control of this model greatly guarantees the clarity of the picture quality, and come with a metal stand, the flexible metal tripod offers an optimal and comfortable observation experience for you, allows for shooting images and video with reduced shaking.
- Applications: This USB digital microscope can be used for educational presentations, skin examinations, research projects, hair exams, and a host of other uses.
- Portable: The mini sized camera microscope can be hand-held or mounted for optimal use. This mini microscope is easy to carry in your pocket- and is designed to function with a laptop, desktop or a smart phone on the field.



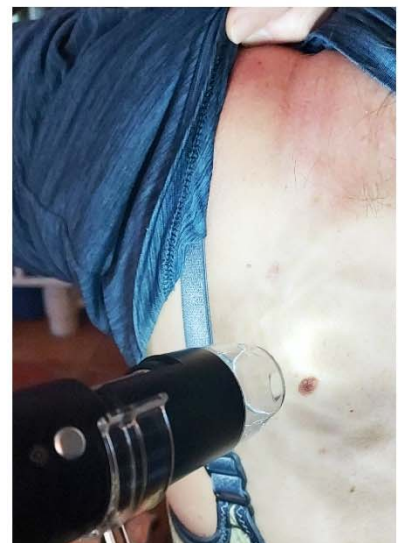
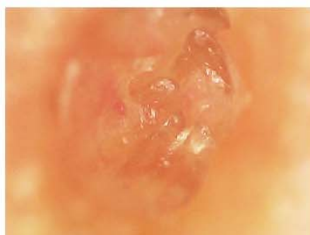
1000x Mag: Silver Hair



1000x Mag: Chest skin



1400x Mag: Black Hair



Skin growths that may be of concern: magnified endoscopy aids the diagnostic process