Device to guide oxygen over cells for photo-oxidation

Summary (1024-character limit)
Device is used to guide a stream of oxygen or carbon dioxide over a dish of cells during fluorescence microscopy. Invention includes the 3D printing software to create the device. The device makes it possible to easily provide a steady source of oxygen or carbon dioxide to cells while operating a fluorescent microscope to oxidize fluorophores for later visualization in electron microscopy. NCI seeks commercial partners to license this technology.

NIH Reference Number
E-244-2016

Product Type
- Devices

Keywords
- Transmission Electron Microscopy, TEM

Collaboration Opportunity
This invention is available for licensing.

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Description of Technology

Researchers at the NCI Laboratory for Cell Biology have invented a device to guide a stream of oxygen or carbon dioxide over a dish of cells during fluorescence microscopy. The invention includes the 3D printing software to create the device. The device facilitates application of a steady source of oxygen or carbon dioxide to cells while operating a fluorescent microscope to oxidize fluorophores for subsequent visualization via electron microscopy.

Potential Commercial Applications
- Device facilitates use of Transmission Electron Microscopy (TEM) in cancer research

Inventor(s)

Giovanna Grandinetti (NCI)

Development Stage

- Prototype

Patent Status

- **Research Material:** NIH will not pursue patent prosecution for this technology

Related Technologies

- E-243-2016 - Device for Growing Mammalian Cells on EM Grids

Therapeutic Area

- Cancer/Neoplasm