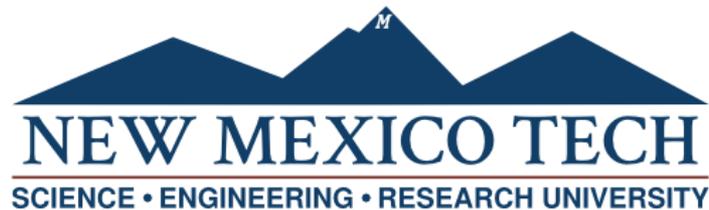


Ph.D. in Biotechnology

New Mexico Institute of Mining and Technology

Interdisciplinary program involving departments of

Biology, Chemistry, Psychology, Computer Science, Mathematics, Earth and Environmental Sciences, Chemical Engineering, Mechanical Engineering, Materials Engineering, Environmental Engineering, and Management



Flexible Curriculum

72 cr hrs beyond the Bachelor's degree, including

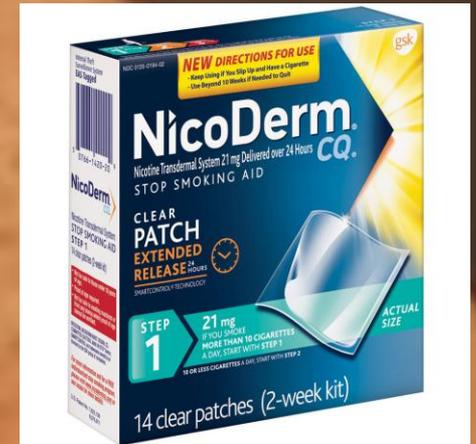
- **48 cr hrs of graduate coursework,** post bachelors degree. Up to 30 cr hrs can be applied from an M.S.
- **Core courses:**
 - BIOT 502 Molecular Biotechnology
 - BIOT 503 Biochemical Technology
 - BIOT 504 Biophysical Technology
 - BIOT 505 Biomechanical Technology
- **Graduate seminar**
- **24 cr hrs Dissertation (BIOT 595)**

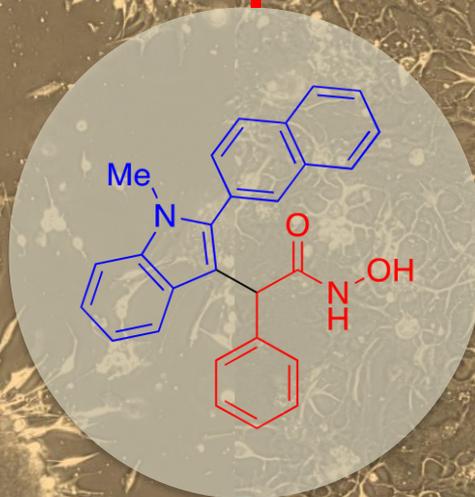


Nicotine patch



Transcutaneous application of nicotine
Patent no. 4597961 (1986)
Inventor: Frank T. Etscorn





Turns glioma (brain tumor) cells (left)

into normal astrocytes (right)

Treatment of drug-resistant cancer with 2-aryl-2-(3-indolyl)acetohydroxamates, Patent no. 9206124 (2015)

Inventors: Alexander V. Akensov, Snezna Rogelj, Liliya Frolova, Alexander Kornienko, Gabriel Avilucea

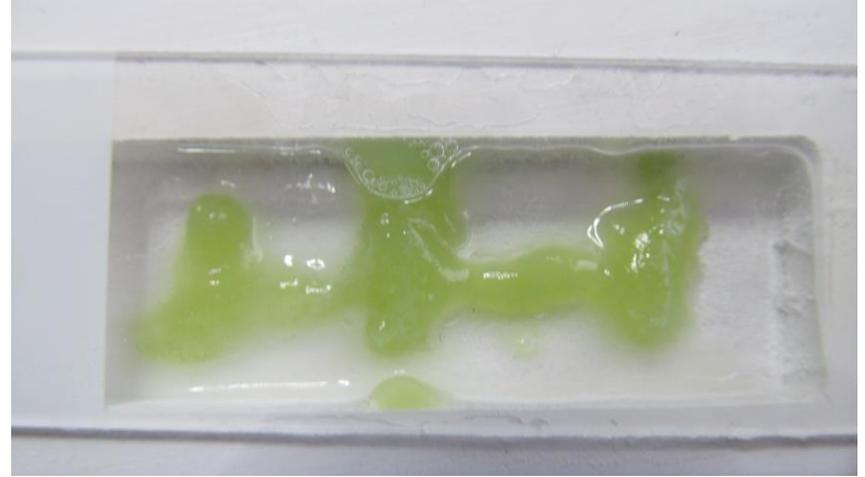
Paul Calvert

Chemical Engineering

3D printing biomimetic materials



3D printed ivory substitute for elephant conservation.
Bottom, true ivory, top 3D print material

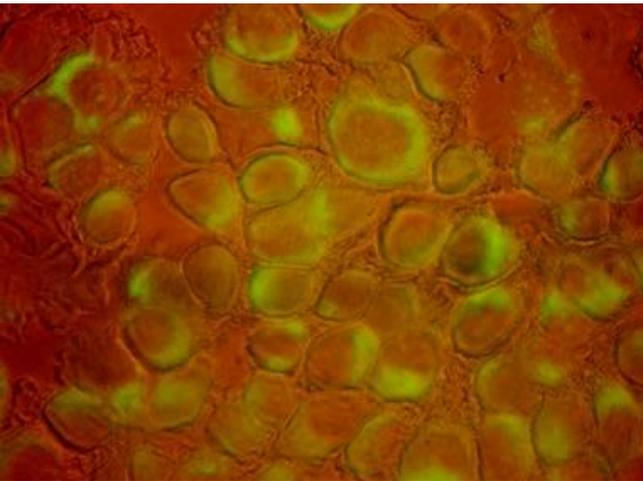


3D printed photosynthetic algae embedded in gel
Top: after printing
Bottom: after growing under a lamp.

Dr. Michaelann Tartis and students, Chemical Engineering Dept.

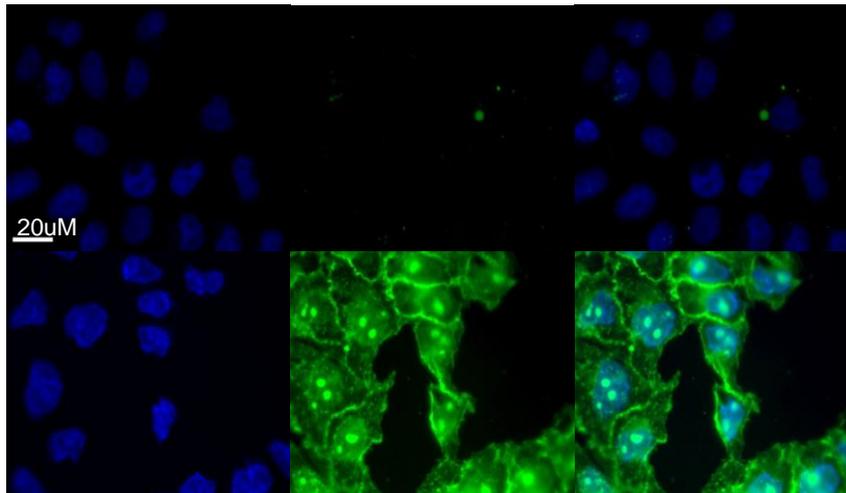


Drug delivery via micro-bubbles

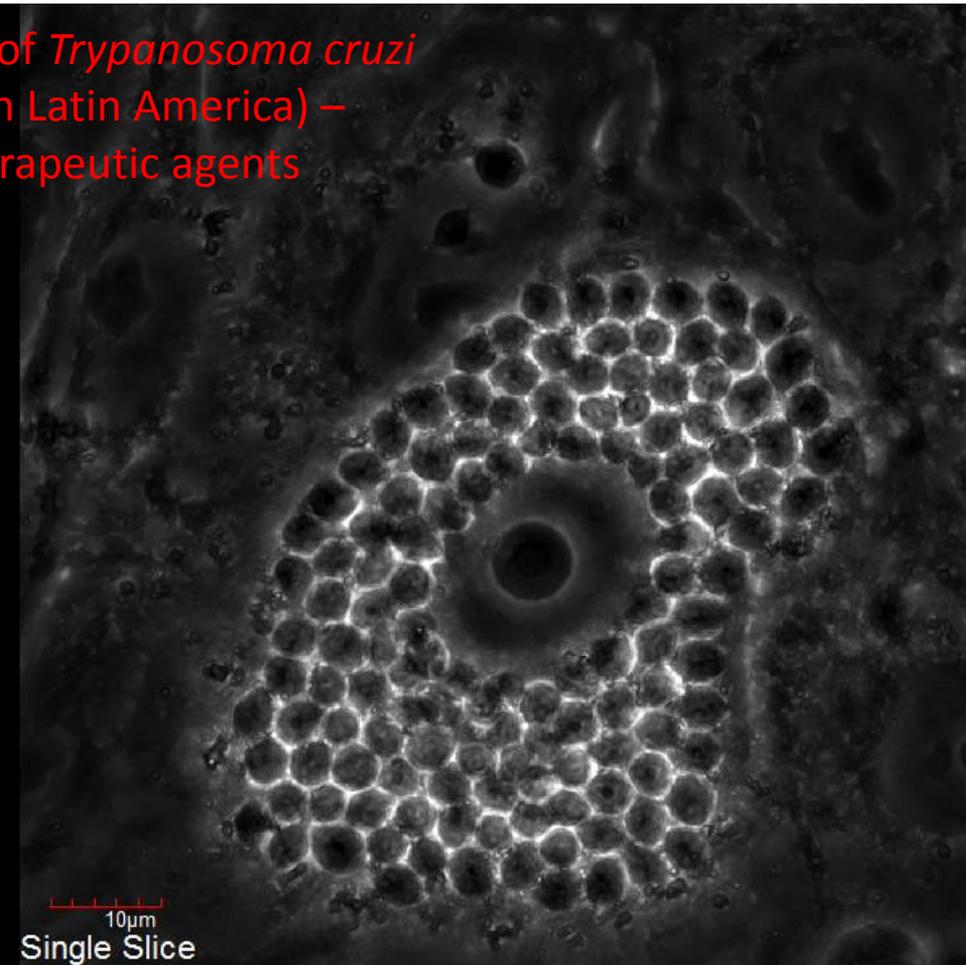
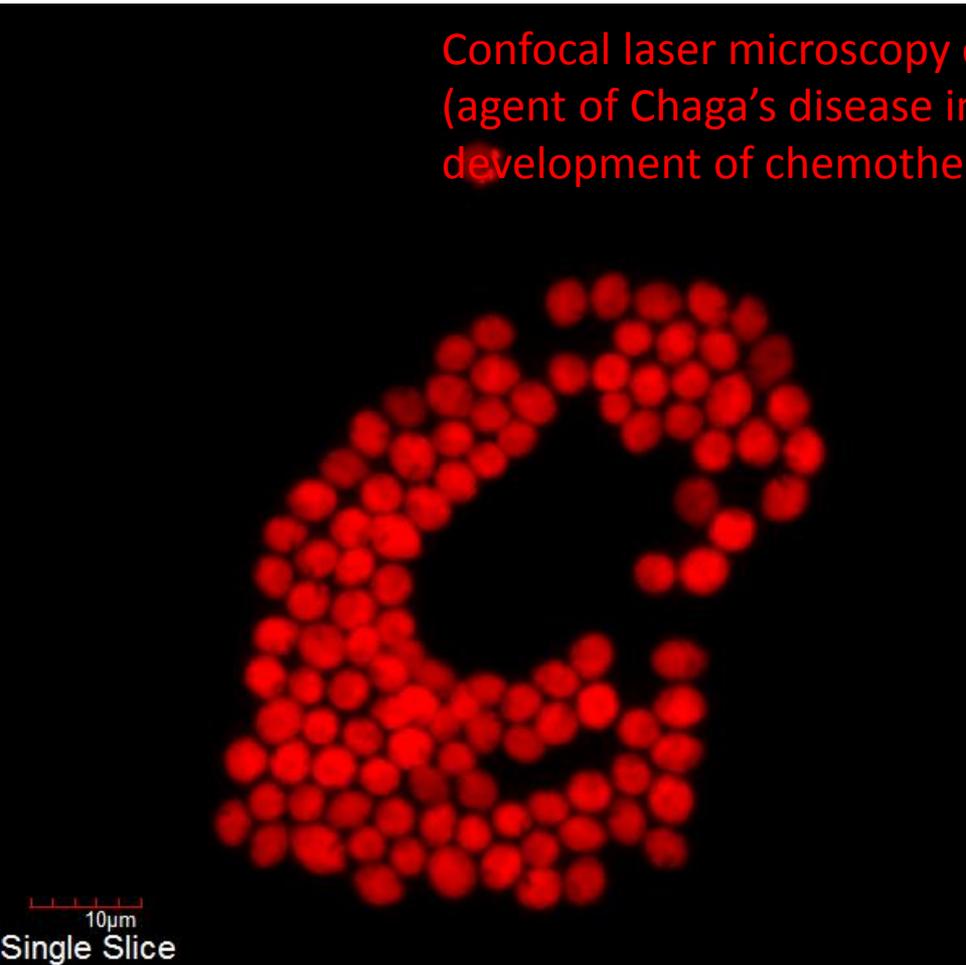


Liposome (green)-delivered
drugs to HELA cells

HeLa
+TMOS -silica



Confocal laser microscopy of *Trypanosoma cruzi*
(agent of Chaga's disease in Latin America) –
development of chemotherapeutic agents



Danielle Turner, Biol. Dept., NMT

AMIS

OCO BIOMEDICAL

PMc

PERSONALIZED
MEDICINE COALITION

AGILVAX

Protara Biomarkers

dnce

SOLARAN Rx
Advancing Personalized Melanoma Therapy™

intellicyt

Lovelace Respiratory
Research Institute
Lovelace™

SENIOR
SCIENTIFIC

BACHEM

Johnson & Johnson



Biophaqu

New Mexico Biotech Industries

BIODIRECTION

BioScience
CENTER

SUPPORTING TECHNOLOGY TRANSFER AND
CATALYZING ECONOMIC DEVELOPMENT AT
THE UNIVERSITY OF NEW MEXICO

Los Alamos National Laboratory

Delivering science and technology to protect our nation and promote world stability

PHARMA DIRECTIONS
Consulting and Project Management
Preclinical - CMC - Regulatory



MAAS BIOLAB



TRICORE
REFERENCE LABORATORIES



TECHNOLOGY
VENTURES
CORPORATION

Sandia
BioTech



RGK Consulting



Zocere, Inc.

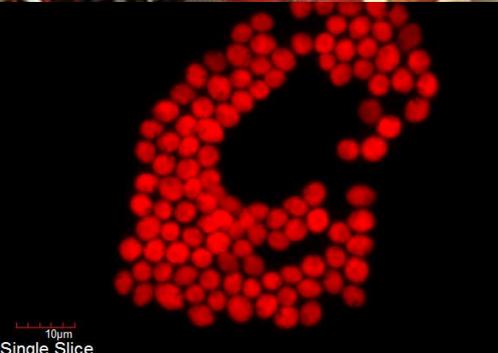
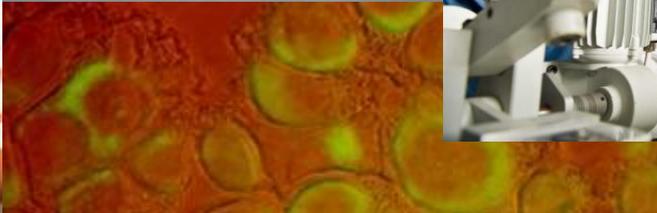
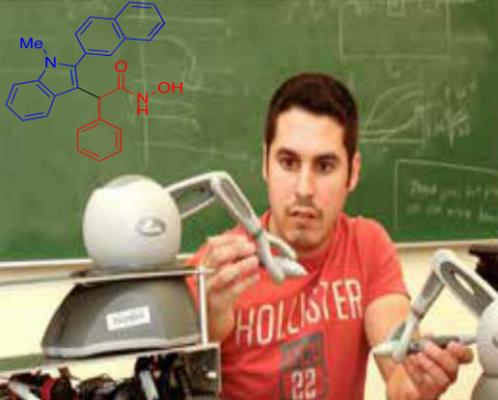
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Thank You

