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

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