Paul Dale
Chief of Surgical Oncology
University of Missouri-Columbia
School of Medicine and Ellis Fischel Cancer Center
MU Biodesign and Innovation
Collaboration is the Key

Program Sponsors:
Department of Surgery
Co-director: Paul Dale, MD
College of Engineering
Co-director: Gregg Scheller
Missouri Technology Corporation

Program Coordinator:
Megan Jahnsen

Administrative Assistant:
Whitney Hays

Website:
www.MUBIODESIGN.com
MU Biodesign and Innovation Fellowship

- Education of Idea to Market
- First group of fellows 2007
- 3 Person Fellowship Team Selection Process
  - Physician - Surgical Resident, Medical Resident
  - Engineer - M.S. or higher
  - Business Professional - MBA

Clinical Observation 4 mo
Operating Room and Clinic
Filtering of Needs and Ideas

Engineering Phase 4 mo
Product Design
Prototyping

Business Phase 4 mo
Market Analysis
Business Model

Top Needs & Solutions
Product
Business Plan

MISSOURISUMMITS.COM
Output of MUBIP Fellowship

- >400 CLINICAL NEEDS IDENTIFIED
- 18 Invention Disclosures
  - 1/8 of all FY09 Columbia campus disclosures
- 2 Provisional Patents Filed
- Prototype Animal Testing
- Founding of Limited Liability Company
  - SBIR application submitted
- Potential License to Industry
  - Laparoscopic Suction Device
- Sponsored Research Agreement
  - Discussion with A Medical Device Company
MUBIP STRENGTHS AND CHALLENGES

• Fosters Interdisciplinary Research at Faculty Level
  – Screening of Circulating Cancer Cells

• Proximity Promotes Collaboration
  – Schools of Medicine, Engineering, Business, Law and Veterinary Medicine and large tertiary hospital all on 1 campus

• Assists in Undergraduate Capstone Course
  – Mechanical and Biological Engineering

• “Super” Second Year Fellow
  – Focused on Commercialization and Product Development

• Challenges
  – Sustainable Funding
  – “Valley of Death” for Early Stage Projects