Other Dimensions for Biomedical Science PhD Program:
Clinical & Translational Science
Career Development
Professional Development

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Clinical & Translational Science Interdisciplinary Concentration ("Co-Major")

- Dual Basic & Clinician Scientist Mentors
- CTS Specific Aim required for dissertation project
- Present research at annual CTSI Annual Research Symposium
- Graduate Certificate Training Grant (TL1)
  - TL1 Teams and TL1 Mentoring Teams
  - Submission of CTS review paper relevant to team research topic
  - Present research at annual national Translational Science conference (ACTS)
CTS PhD Curriculum

Translational Research & Therapeutics: Bench, Bedside, Community, & Policy (3)
Team Science (1)
Responsible Conduct of Biomedical Research (1)
Ethical & Policy Issues in Clinical Research (2)
Leadership for Innovators (1)
CTS Journal Club (1)
CTS Seminar (1)
Biostatistics (2-3)
Electives (6-7)
Team Science

- Team-Based Learning (TBL)
  - Translational Research & Therapeutics
  - Team Science
  - Responsible Conduct of Biomedical Research
- Funding of “TL1 Teams” instead of individual trainees
  - Alteration Model for TL1 Team Formation
  - Mentored “TL1 Team” Experience
  - TL1 Mentor Teams
- T Team
TL1 Track Record 2009-2016

- 11-14 applicants/year → 3 trainees/year
- Now 7 trainees/year
- 29 trainees to date
  - 13 still in training
  - 15 PhD graduates
    - Average 4.6 publications (range 1-13)
    - 11 postdocs (UF, Vanderbilt, Harvard, NIH, Case, Hopkins, MD Anderson, CDC)
    - 1 staff veterinarian (Charles River)
- 2 faculty
  - UF, Research Assistant Professor
  - Kaiser U, education administration
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Career Interest Teams

- Industrial Biotechnology
- Research Education & Outreach
- Regulatory Science & Government
- Tech Transfer & Entrepreneurship
- Clinical Research Navigation & Community Engagement
## Sample Career Interest Teams

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<th>Career Interest</th>
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| **Industrial Biotechnology**         | • In collaboration with Center of Excellence for Regenerative Health Biotechnology (CERHB)  
• Elective courses (e.g., Biologic Drug Development; Translational Biotechnology Internship)  
• Industry Credential Short Courses (e.g., Current Good Lab Practices; Intro to Medical Device Manufacturing; Understanding Corporate Culture; Current Good Manufacturing Practices)  
• Industrial Biotechnology Teacher Experience | • Graduate Certificate in Industrial Biotechnology  
• Industry Credential Certificates |
| **Tech Transfer & Entrepreneurship** | • In collaboration with UF Office of Technology & Licensing (OTL)  
• Guided tours: Florida Innovation Hub, Sid Martin BioTech Incubator, Progress Corporate Park  
• Lab visits with biotech companies at above facilities  
• Florida Innovation Hub seminars & workshops  
• Sid Martin Annual Celebration of BioTechnology  
• Annual UF Celebration of Innovation  
• OTL Startup Quest Bootcamp  
• Empowering Women in Tech Startups (eWiTS)  
• SBIR Grant-Writing Workshop  
• OTL “The Hatchery” Mentor Program  
• Elective Courses (College of Business) | • UF Office of Technology Licensing (OTL) Certificates of Completion  
• Graduate Minor in Entrepreneurship |
Biomedical Science Career & Professional Development Program

Professional Skills Workshops

Communication

Leadership

Research Management

Teaching
Sample Research Management Topics

- Obtaining and Negotiating a Faculty Position
- University Structure & Planning for Tenure
- Laboratory Leadership in Science
- Staffing Your Laboratory
- Mentoring and Being Mentored
- Time Management
- Project Management
- Data Management and Laboratory Notebooks
- Getting Funded
- Getting Published & Increasing Your Visibility
- Understanding Technology Transfer
- Setting Up Collaborations