UC Irvine 趙 Chao Family Comprehensive Cancer Center

Experimental Tissue Resource

Wendy Cozen, DO, MPH

2026 Scientific Retreat

November 5, 2026

Mission & Leadership

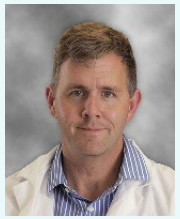
MISSION

The aims of ETR are to provide access and analysis of human and animal tissues for basic, translational, clinical and population research and to provide a database of annotated archival tissues available for queries by cancer center members

To fulfill these aims, **ETR**:

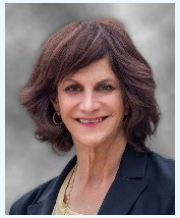
- Provides procurement and distribution of fresh, frozen, and formalin-fixed paraffin-embedded (FFPE) human tissues and body fluids
- Provides comprehensive human and animal tissue histology, immunohistochemical staining of targets (IHC), and digital pathology services
- Provides expert interpretive histopathology and mouse model consultation

LEADERSHIP



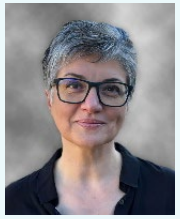
Robert Edwards, MD, PhD

Co-Director



Wendy Cozen, DO, MPH

Co-Director

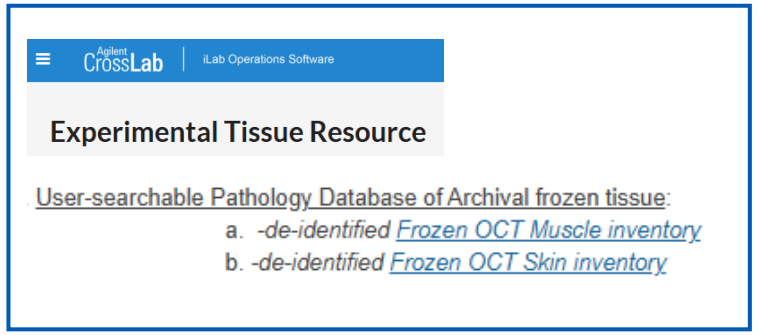


Delia Tifrea, MD, MBA

Manager

Services, Technologies & Equipment

- Fresh and FFPE Tissue Procurement and Biobanking
  - Inventory
    - FFPE (Surgical + Biopsy): 386,783 from 2000 diagnoses
    - Frozen Tissue: 6,543 - searchable frozen inventory on ETR iLab page from 2012



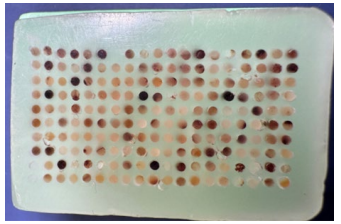
- Interpretive Histopathology Consultation

- Custom Complex Requests with Clinical Criteria (examples):
  - Fresh ovarian tumoral tissue by grade, diabetic patients abdominal fat
  - On demand only, custom cohort remnant blood collections:
    - leukemia, dyslipidemia, smoking, diabetic patients, normal blood controls under 40years old, by blood type
    - RA with or without lung disease involvement, postmenopausal with HRT

- Serum Procurement and Biobank

Services, Technologies & Equipment cont.

- Tissue Histology and IHC services
  - TMA creation: 13 custom FFPE tissue TMA, using renal, lymphoma, prostate, breast, brain and pancreatic tissue, as well as custom manual animal tissue arrays for IHC including multiplex and slide preparation for spatial transcriptomic platforms Visium, CosMx, Xenium, AtlasXomix, Atera
  - Customization of service was performed for 25 projects
    - special embedding of vascular clips
    - custom tissue cutting for aortal arch





- Mouse Pathology services and consultation on mouse models of human disease

- Training and education

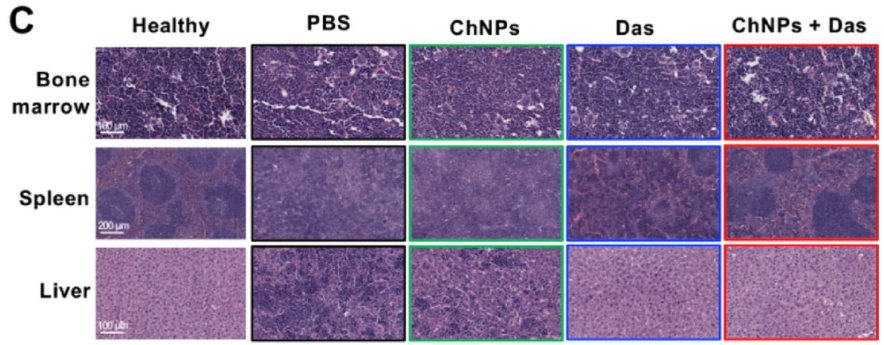
Service Summary

Cancer focused projects in 2026	66.2%
Total individual requests in 2026	926
Number of Clinical Trials served	143
Number of patients enrolled	387
Basic/population research laboratories on UCI/Orange campus	97
ETR consultation for database	45
IRB clearance letters	6
Grant support letters	16

Scientific Highlights

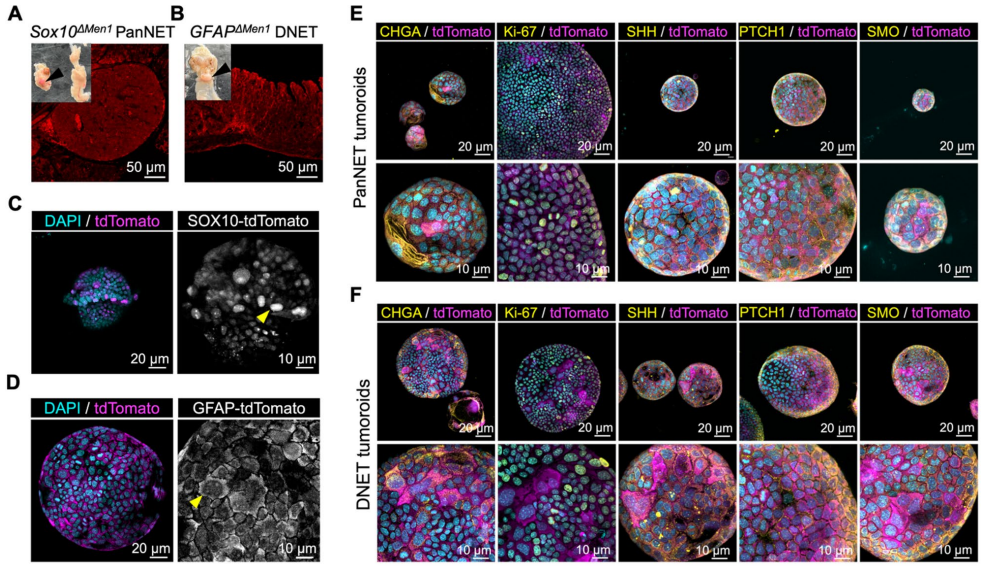
- Multimodal gene and targeted drug therapy for chronic myelogenous leukemia using BIM/MCL-1 chimeric nanoparticle: computational target analysis and therapeutic validation

- **Angela Fleischman, MD, PhD** - SPT
- **Young Jik Kwon, PhD** - BIDD



- Hedgehog signaling drives glial cell plasticity and oncogenic reprogramming in gastroenteropancreatic neuroendocrine neoplasms.

- **Suzann Duan, PhD** - SPT
- **Reed Ayabe, MD** - SPT



UC Irvine 趙 Chao Family
Comprehensive Cancer Center

Experimental Tissue Resource

Questions? Contact us!

cancer.uci.edu/etr
dtifrea@uci.edu