



**UTTyler**<sup>™</sup>  
THE UNIVERSITY OF TEXAS AT TYLER

# Research is approachable, achievable, and available at UT Tyler

First Friday Lecture

February 3, 2023

Alan Cook, MD, MS, FACS

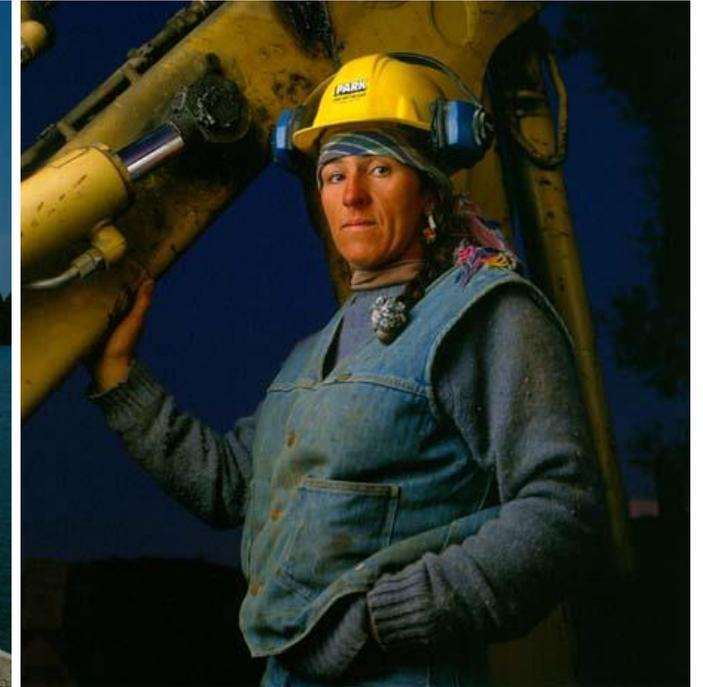


# Objectives

- Getting started
  - Examples from my career
- Research for fun and profit
- Resources at UT Tyler

# My background

- Bachelor's degree in Photography from East Texas State University, Commerce, TX
- Commercial photographer 10 years



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*The Journal of* **TRAUMA**<sup>®</sup> *Injury, Infection, and Critical Care*

## **Chest Radiographs of Limited Utility in the Diagnosis of Blunt Traumatic Aortic Laceration**

*Alan D. Cook, BA, Jeffrey S. Klein, MD, Frederick B. Rogers, MD, FACS, Turner M. Osler, MD, FACS, and Steven R. Shackford, MD, FACS*

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- Masters of Science, Epidemiology, University of AZ, 2019



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- Trauma/Acute Care Surgery/Critical Care 2008-2019
  - East Texas Medical Center, Tyler 2008-2011
  - Baylor University Medical Center, Dallas 2011-2014
  - Chandler Regional Medical Center, Chandler, AZ 2014-2019

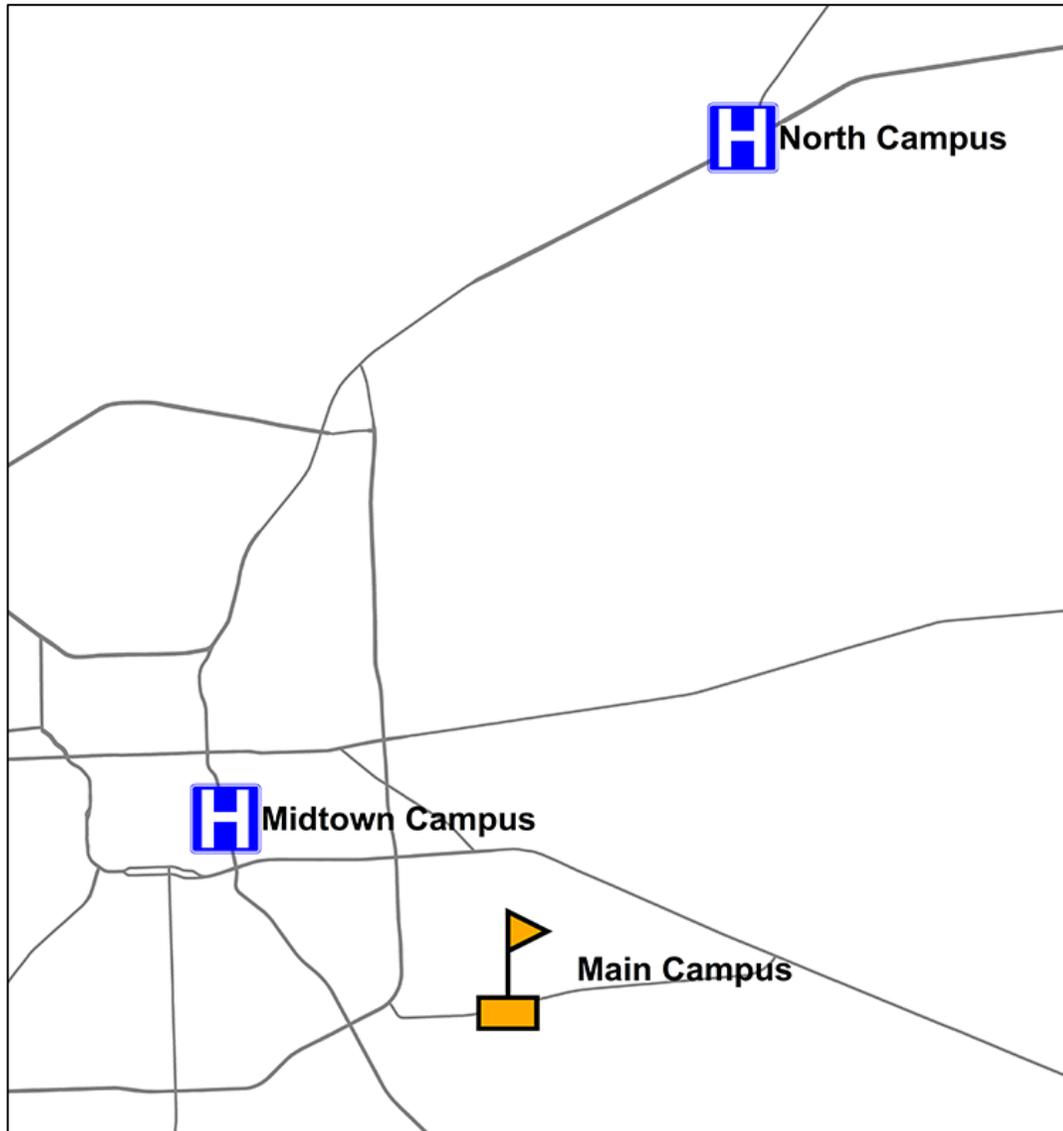


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- Joined UTHSCT 2019



# Research Sites



# Timeline: 76 Years



# Timeline: 76 Years



WW2

# Timeline: 76 Years



Renamed East Texas  
Tuberculosis Hospital

East Texas  
Tuberculosis  
Sanatorium

WW2

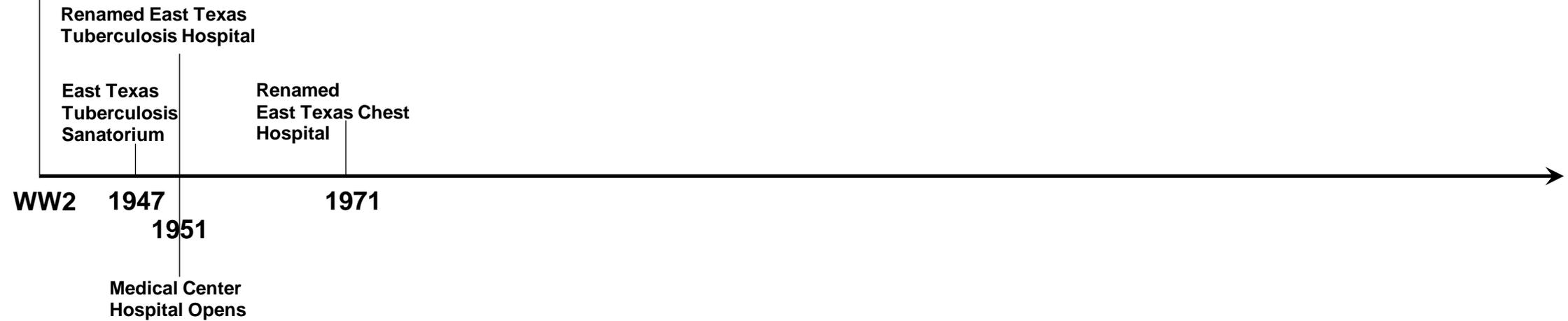
1947

1951

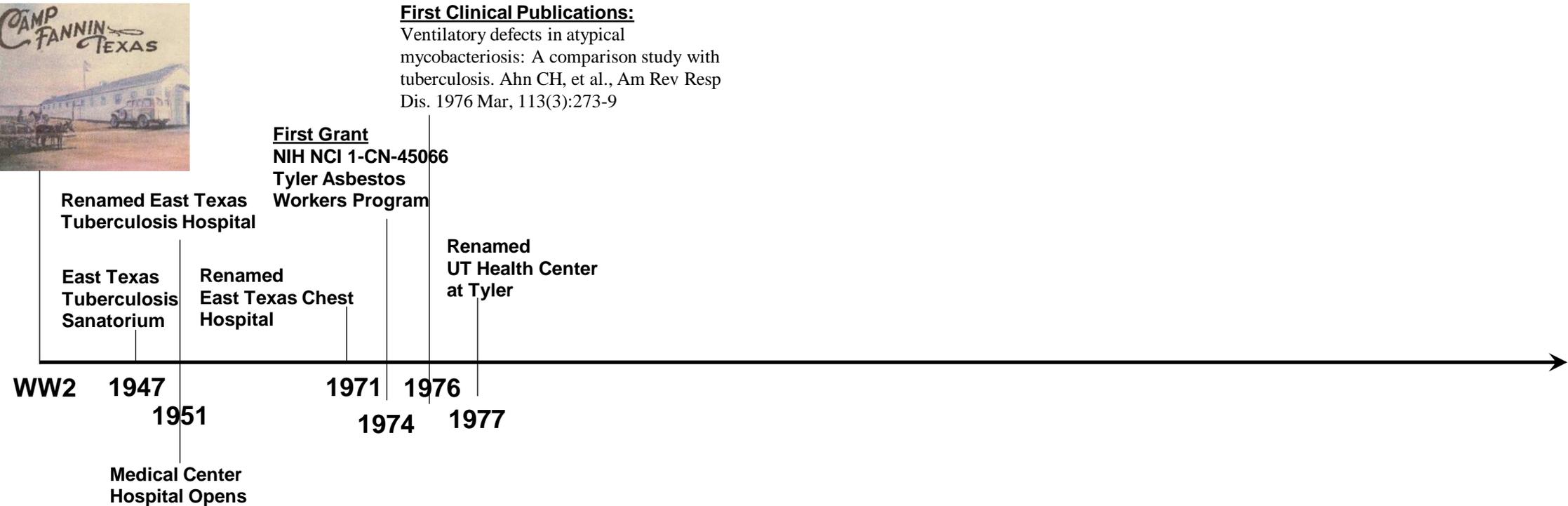
Medical Center  
Hospital Opens



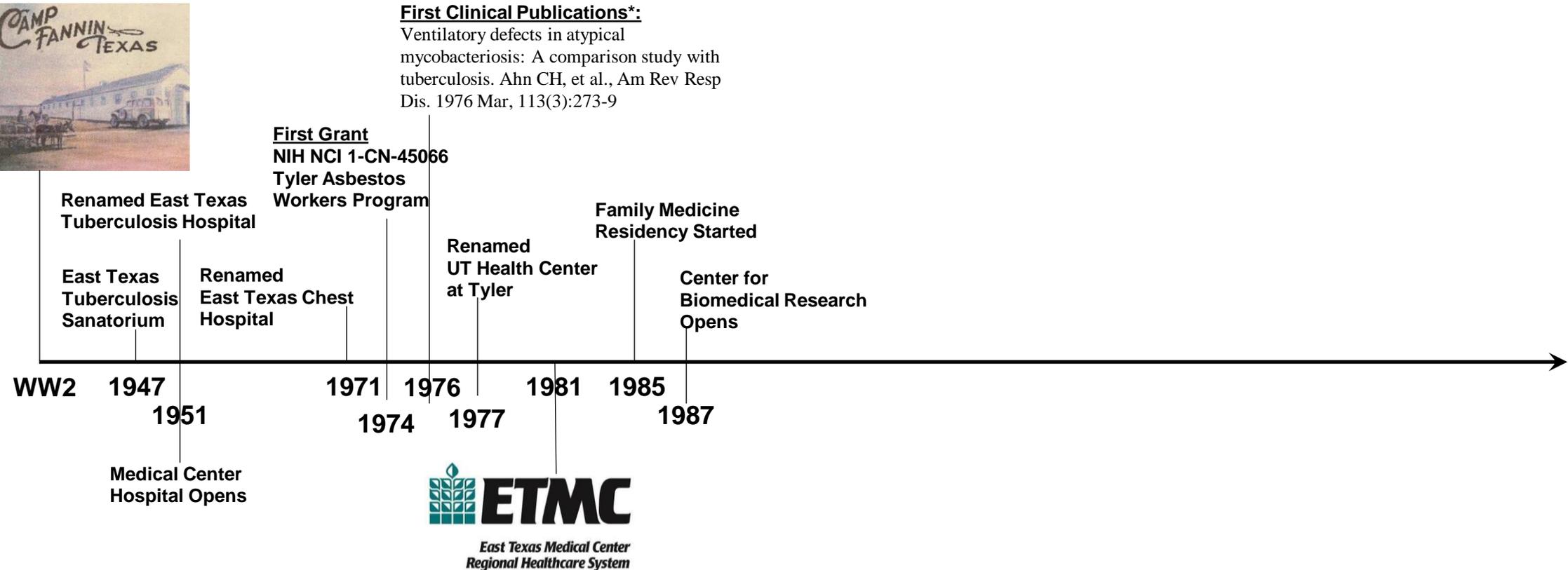
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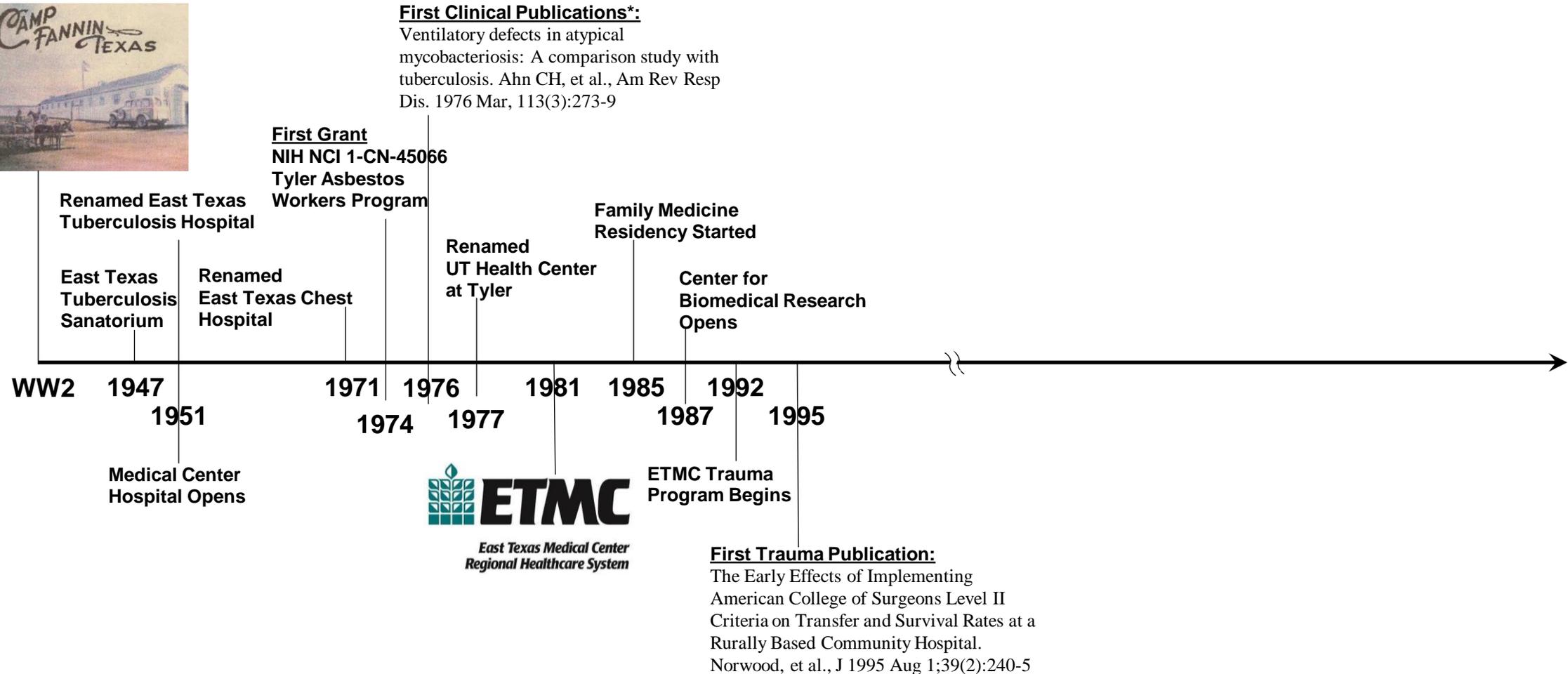
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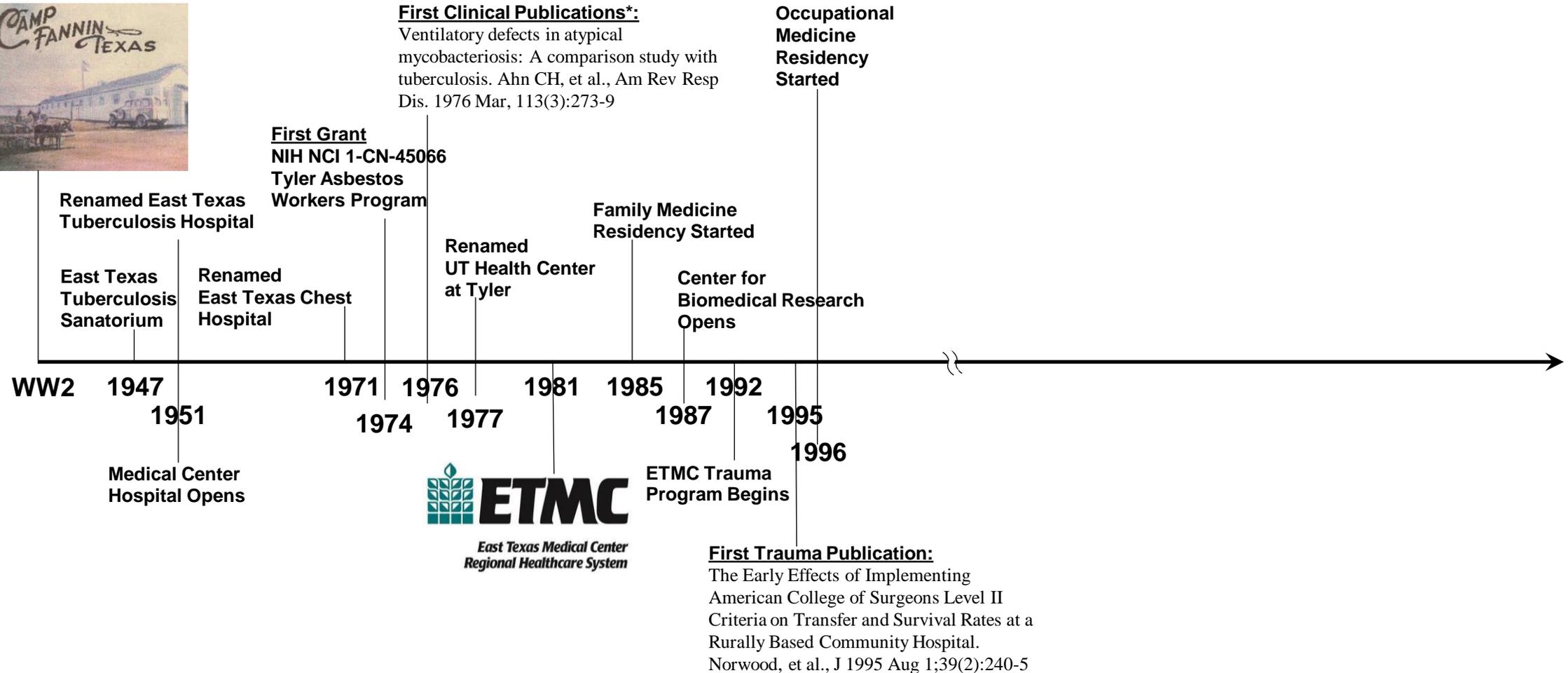
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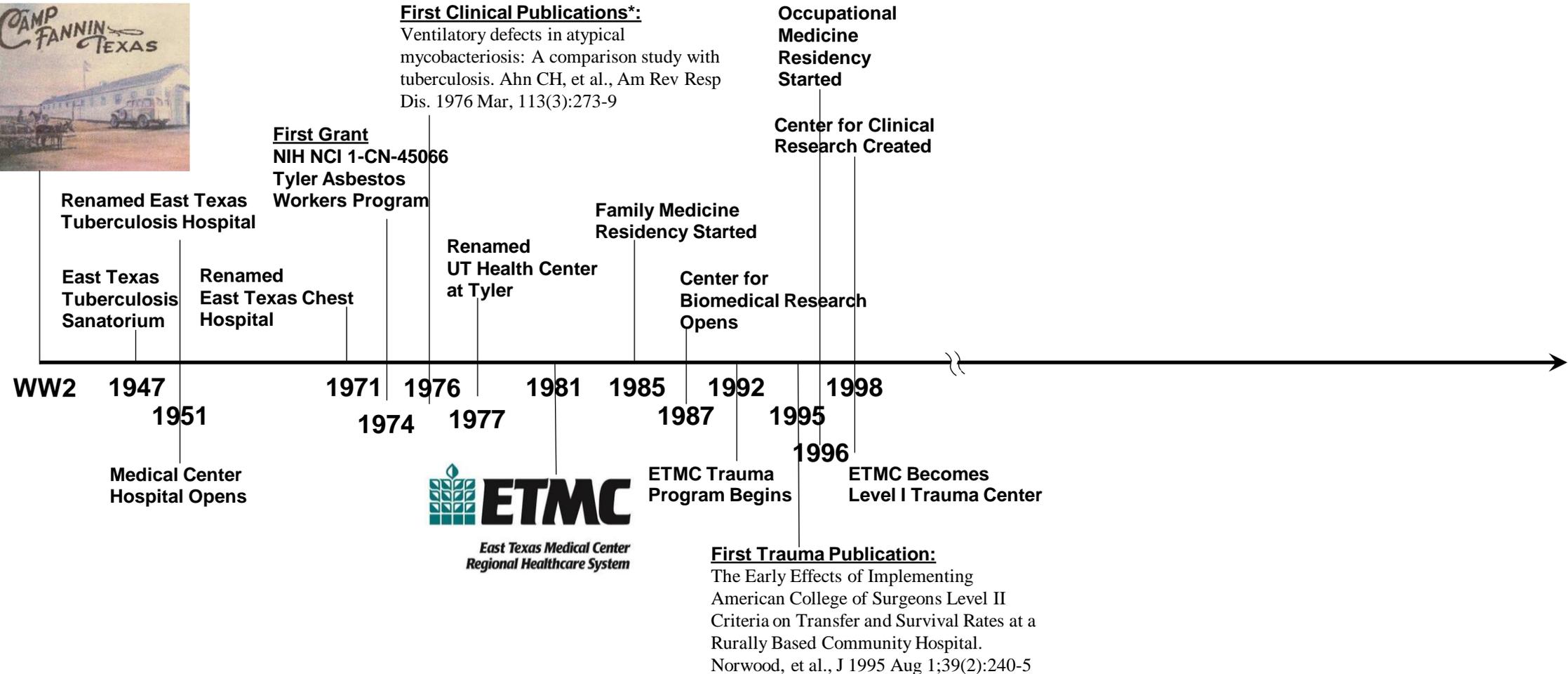
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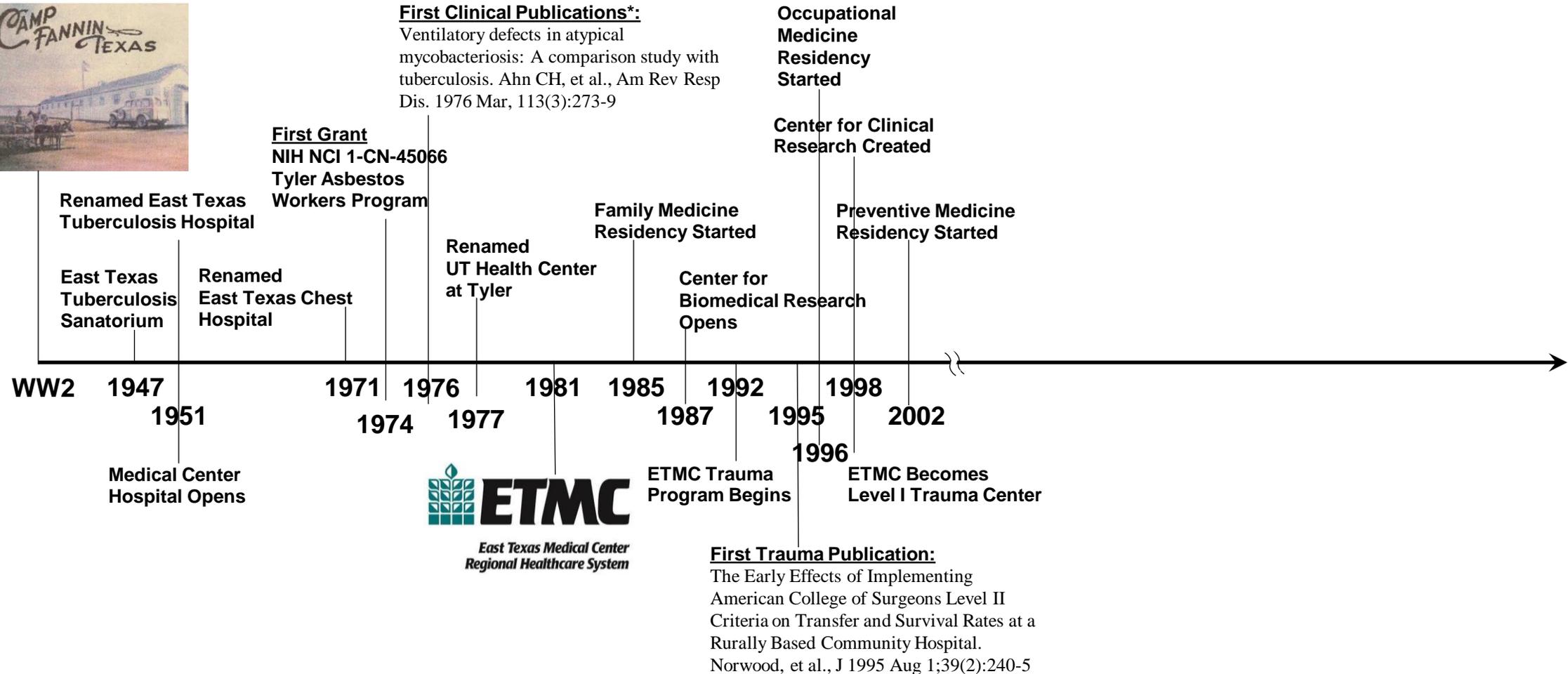
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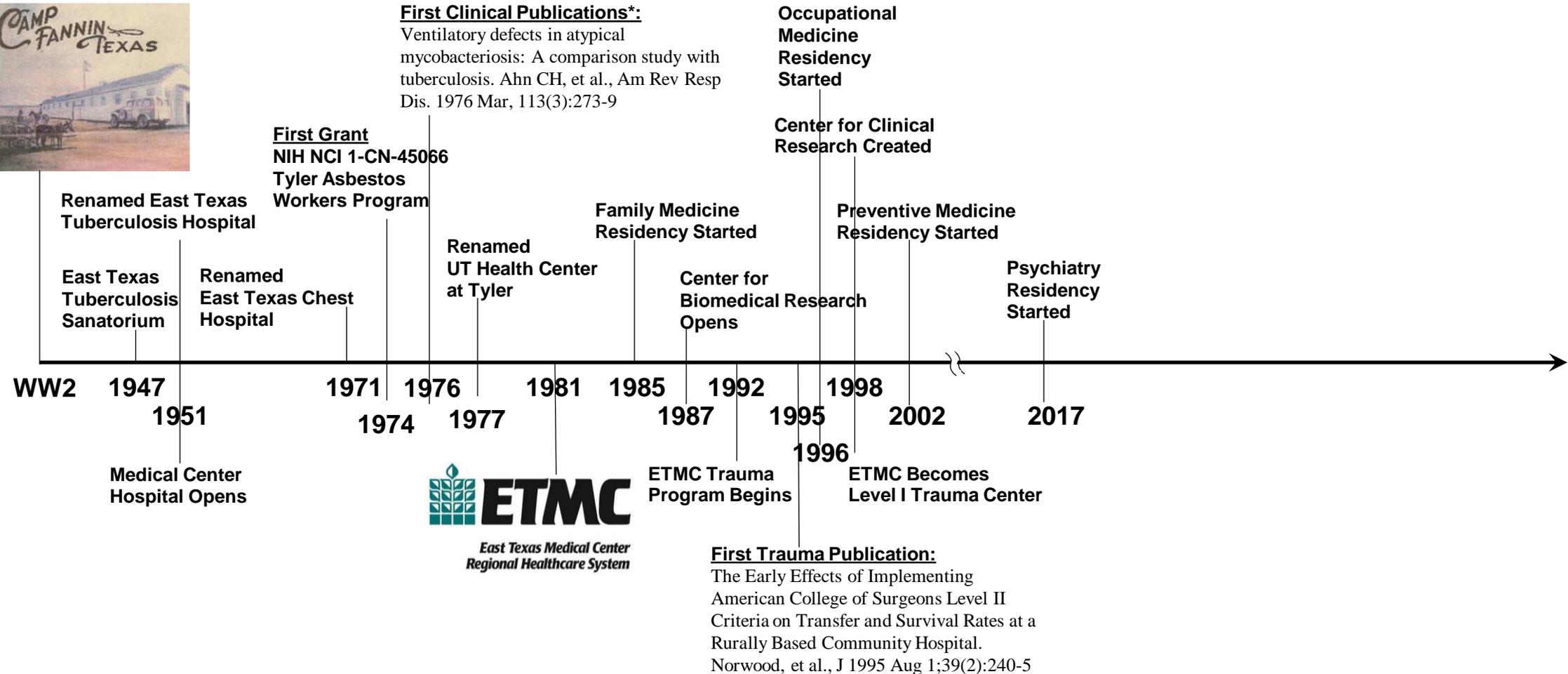
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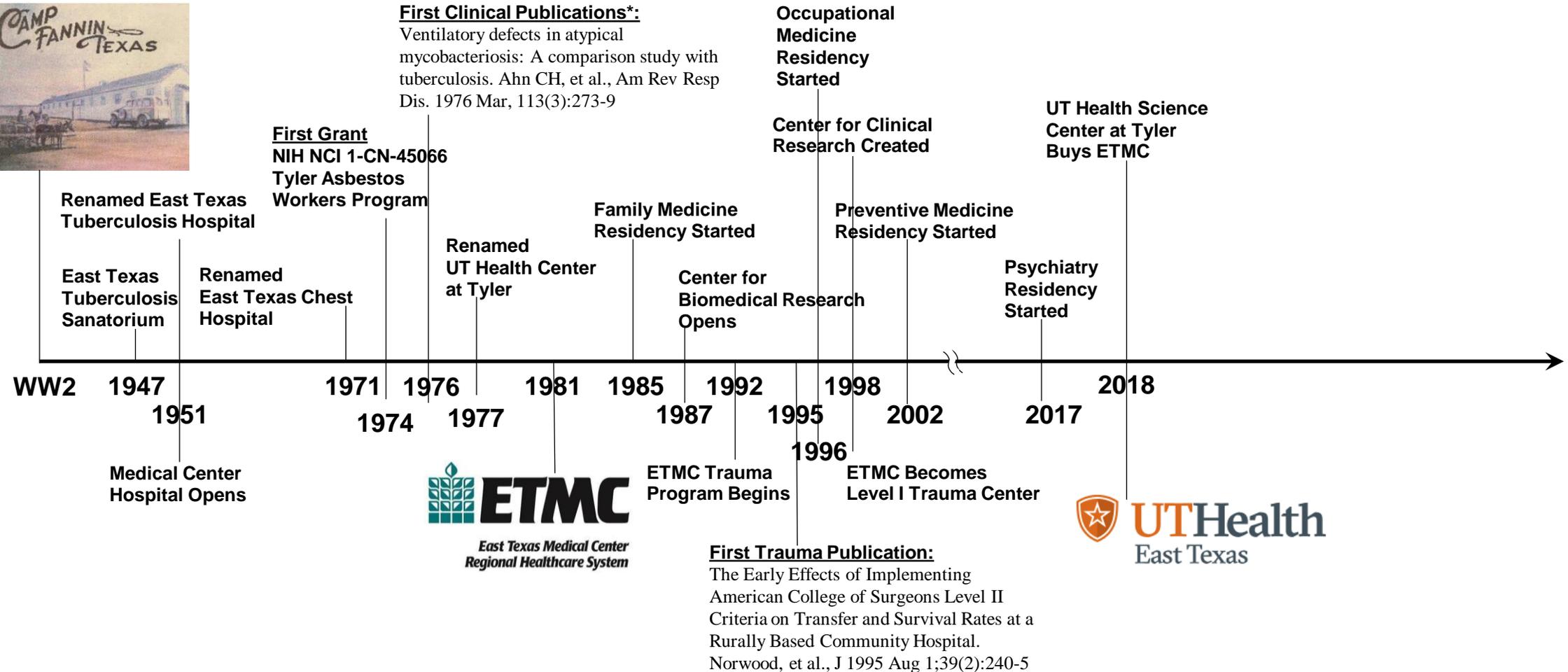
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**First Clinical Publications\*:**  
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**Occupational Medicine Residency Started**

**Center for Clinical Research Created**

**UT Health Science Center at Tyler Buys ETMC**

**Renamed East Texas Tuberculosis Hospital**

**East Texas Tuberculosis Sanatorium**

**Renamed East Texas Chest Hospital**

**First Grant NIH NCI 1-CN-45066 Tyler Asbestos Workers Program**

**Renamed UT Health Center at Tyler**

**Family Medicine Residency Started**

**Center for Biomedical Research Opens**

**ETMC Trauma Program Begins**

**Preventive Medicine Residency Started**

**1996**

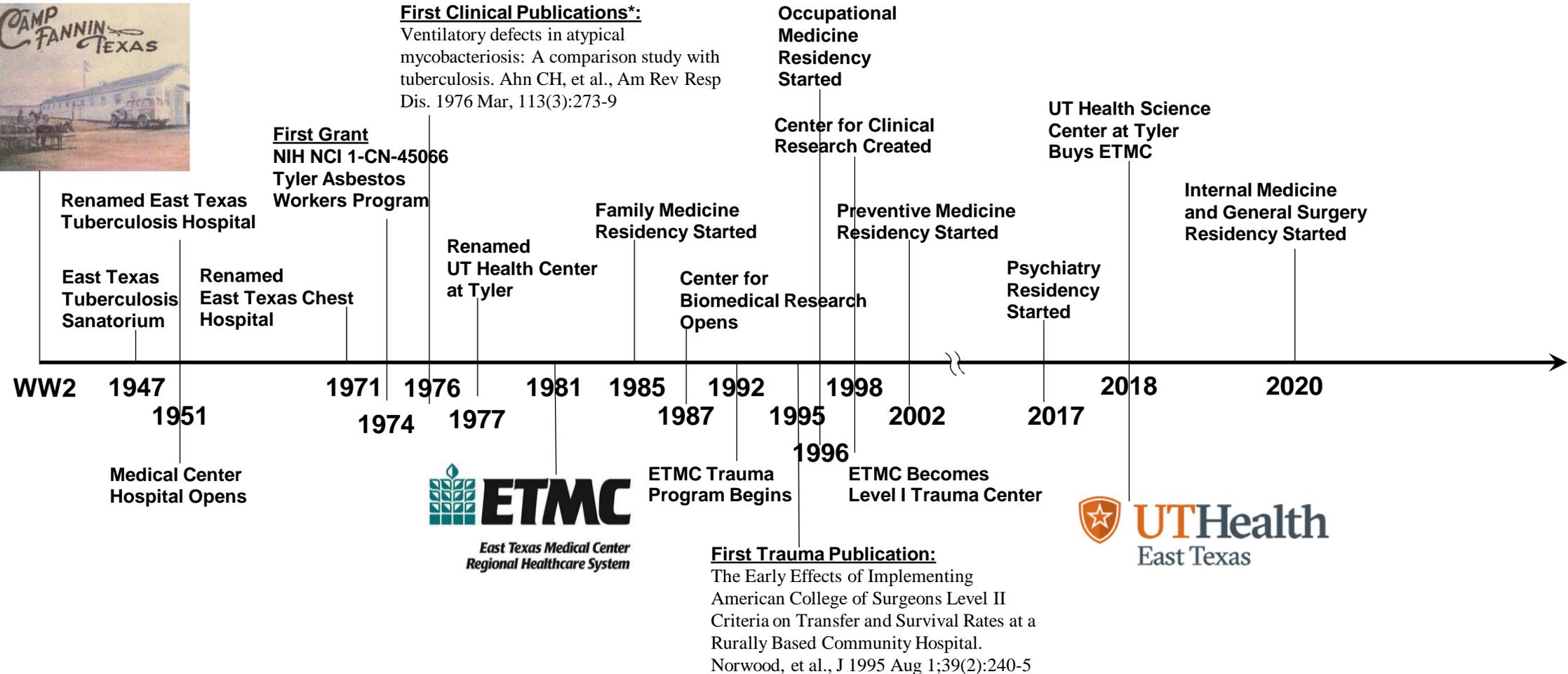
**ETMC Becomes Level I Trauma Center**

**Psychiatry Residency Started**

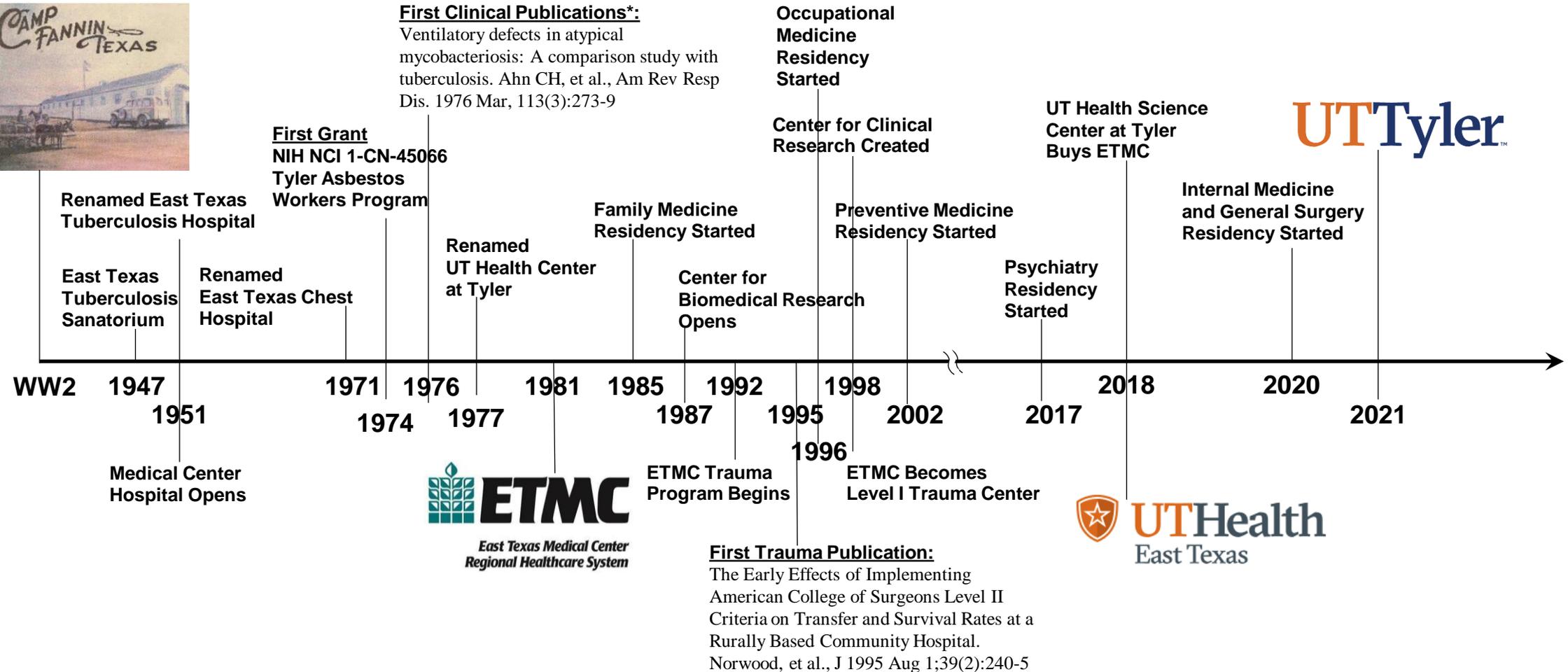
**2017**



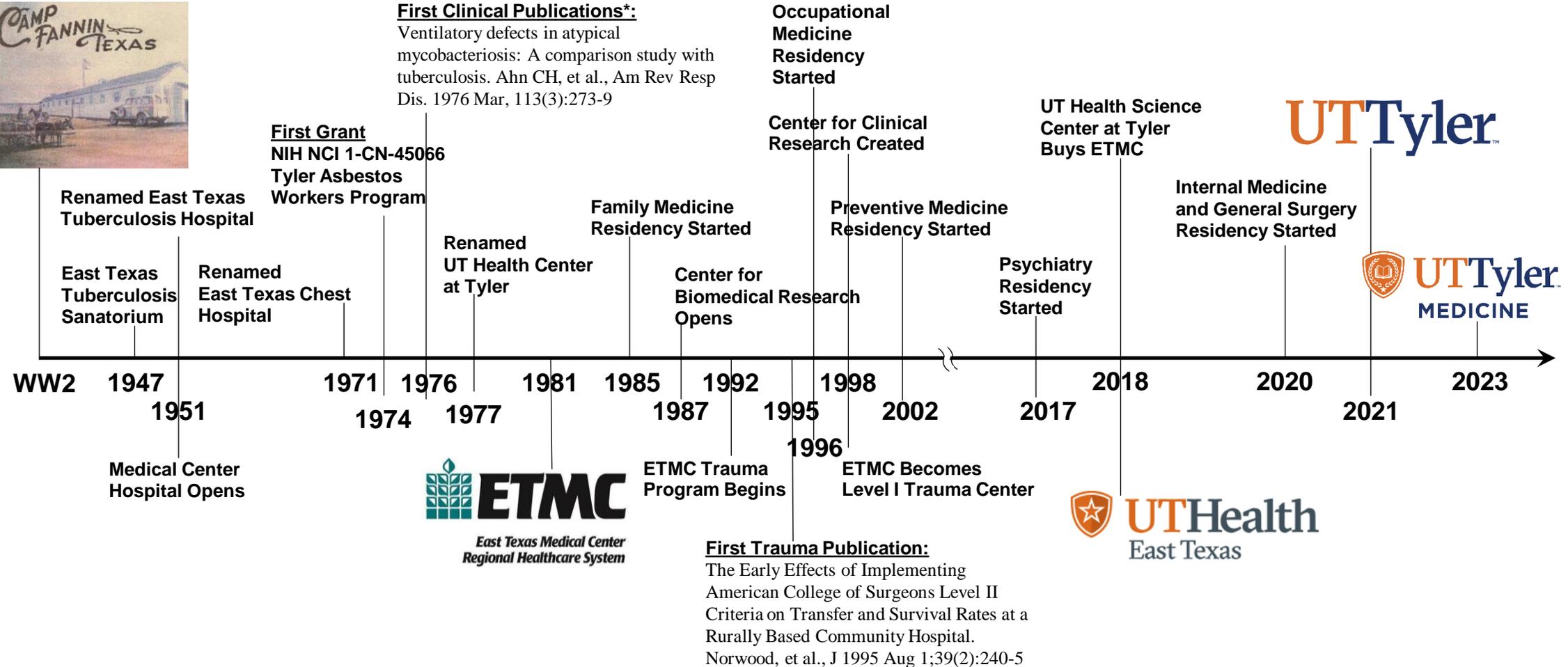
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**Occupational Medicine Residency Started**

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**UT Tyler**

**Internal Medicine and General Surgery Residency Started**

**UT Tyler MEDICINE**

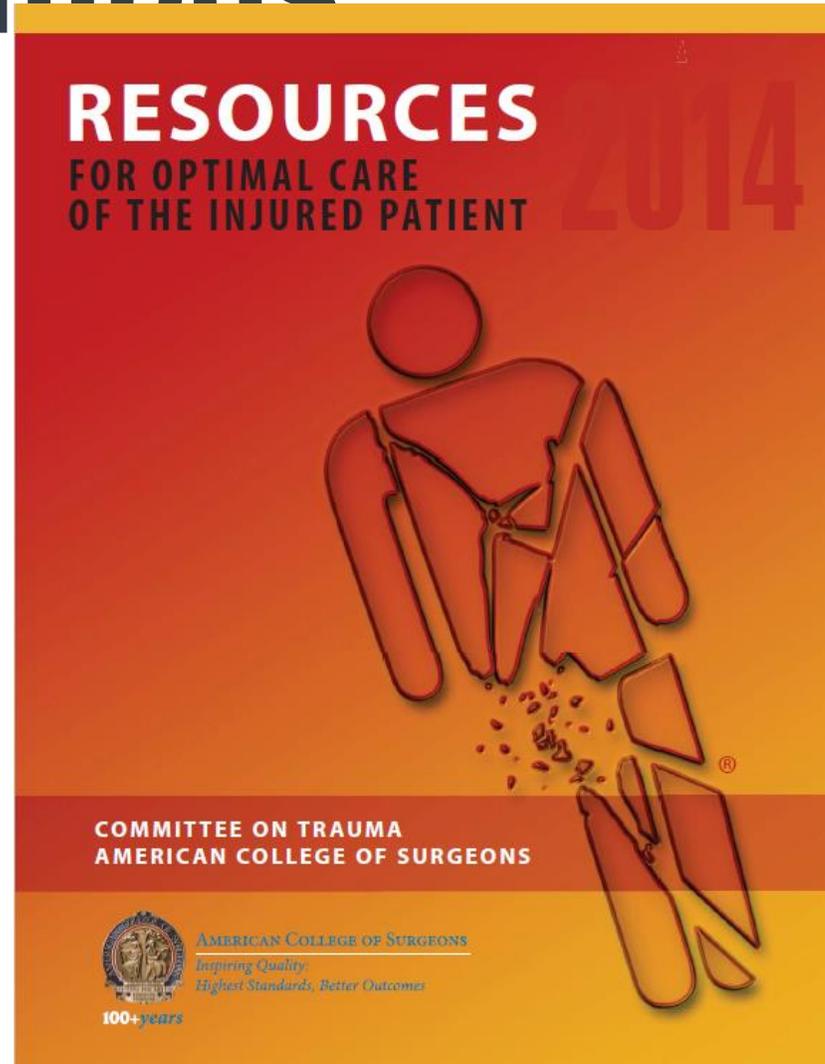


**First Trauma Publication:**  
 The Early Effects of Implementing American College of Surgeons Level II Criteria on Transfer and Survival Rates at a Rurally Based Community Hospital. Norwood, et al., J 1995 Aug 1;39(2):240-5



# Trauma Research at the Midtown Campus

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- From Resources for Optimal Care of the Injured Patient, 2014
- Research and scholarly activity are some of the capabilities that distinguish a Level I trauma center from other trauma centers.

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- Research and scholarly activity are some of the capabilities that distinguish a Level I trauma center from other trauma centers.
- Research, the process to advance knowledge, is essential to optimize the care of injured patients.

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- Trauma-related articles from at least three of the following 12 disciplines

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- Trauma-related articles from at least three of the following 12 disciplines

Anesthesiology  
Basic Sciences  
Cardiothoracic Surgery  
Critical Care  
Emergency Medicine  
Neurosurgery

Nursing  
Orthopaedics  
Plastic Surgery/OMFS  
Radiology  
Rehabilitation/Physiatry  
Vascular Surgery

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- Next Level I site visit February, 2023
  - Ninth Level I verification site visit for this institution

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# Trauma Research at the Midtown Campus

- Next Level I site visit February, 2023
  - **Ninth** Level I verification site visit for this institution
- 41 Articles published since 2020
  - 15 Multicenter papers
  - 6 trauma-related articles from the list of 12 disciplines

# Clinical Research at the North Campus

- Legacy Areas of Research
  - Pulmonary
    - Infectious Disease
    - Occupational/Environmental Lung Injury
    - Lung Development
    - Inflammatory Cell Mediated Diseases
    - Oxidant Mediated Damage
    - Cancer
    - Blood Coagulopathy

# Center for Clinical Research

- 20 Full time staff
- 290 Active studies overseen by the IRB
  - 14 Departments

Trauma

Nursing

Psychiatry

Cardiology

Orthopedics

Oncology

Pulmonary

Surgery

Rural / Community

Health

Wound Healing

Internal Medicine

Pediatric General Practice

Radiology

Neurology

# Center for Clinical Research

**Julie Philley, MD**  
Vice Provost, UT Tyler

**Alan Cook, MD, MS**  
Medical Director

## Center for Clinical Research and Human Research Protection Program

**Director of Human Research Protection Program**  
Lisa Bush, MS

**IRB Coordinator I**  
Felicia Calico

**IRB Coordinator I**  
Corrinne Warren

**IRB Coordinator I**  
*Vacant Position*

**Research Regulatory Specialist**  
*Position TBA*

**Reliance Coord./Auditor**  
*Position TBA*

**Director of Clinical Research**  
Debbie Fielder

**Regulatory Specialist**  
Christopher Herrick

**Sr CRC/Clinical Mgr.**  
Benji Hawkins

**Sr CRC/Clinical Mgr.**  
Rebekah Hibbard

**Research Coord.**  
Elizabeth (Lilly) Dohanich

**Research Coord.**  
Kimberly Greenlee

**Research Coord.**  
Alexis Hester

**Research Coord.**  
Ayomide Odugbesi

**Research Coord.**  
Anne Ford

**Administrative Assistant**  
Dana Bryant

**Research Pharmacist**  
Tameka Jackson

**Clinical Grant Billing Lead**  
Shelley Bernardelli

**Director of Oncology Research**  
Grace Loreda, PhD

**Research Coord.**  
Chaney Storey

**Research Coord.**  
Dana Gorbett

**Data Coordinator**  
Keysha Reeves

**Data Coordinator**  
Wendy Attaway

**Contracts/Billing**  
Jamie McBride

**Trials Navigator**  
Gabriela Salazar

**Regulatory Specialist**  
Jenny Collins

# Center for Clinical Research

- Founded in 1998

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- 86 Active/Open Studies
- ~1,100 patients enrolled in protocols

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- 86 Active/Open Studies
- ~1,100 patients enrolled in protocols
- Phase I – Phase IV trials
- Annual revenue ~\$1.5M

# Center for Clinical Research

- Clinical Areas with active studies:
  - Cardiology
  - Gastroenterology
  - Infectious Disease
  - Neurology
  - Oncology
  - Psychiatry/Behavioral Health
  - Psychology
  - Pulmonary
  - Trauma

# Our

# Process

- Studies can originate as an idea from the investigator
  - “Investigator initiated”

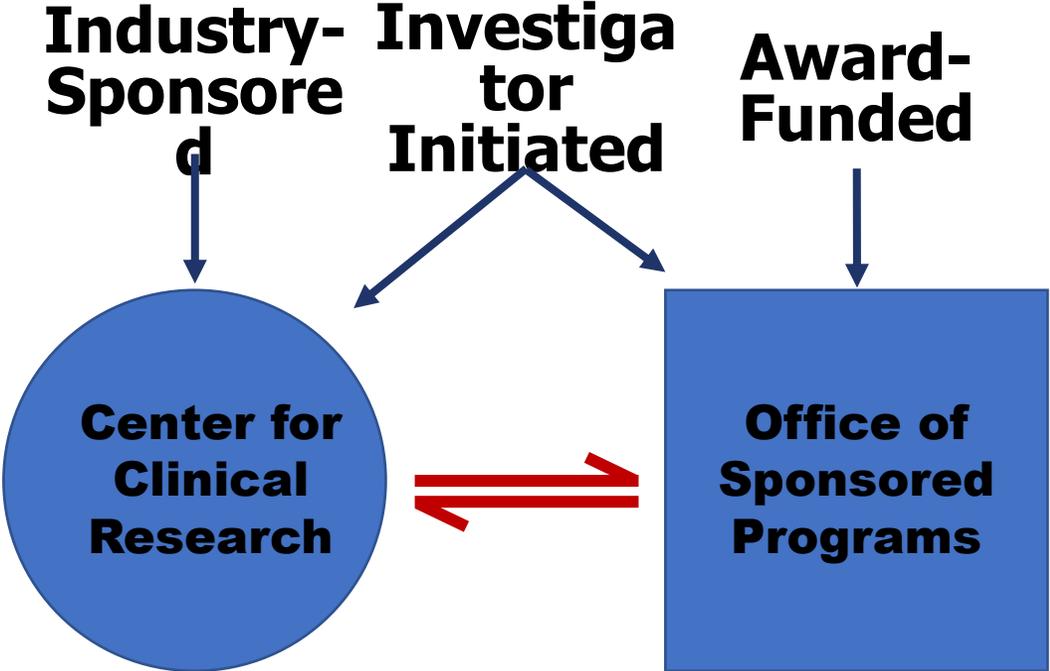
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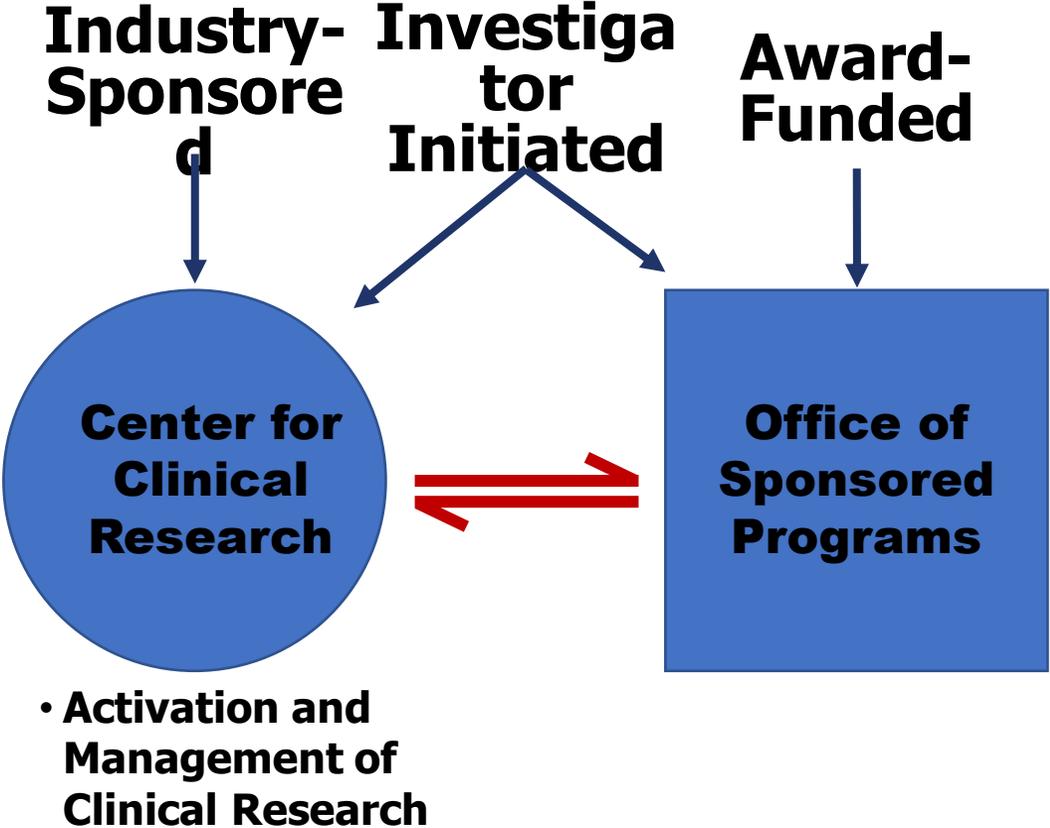
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  - ex. NIH, Dept. of Defense

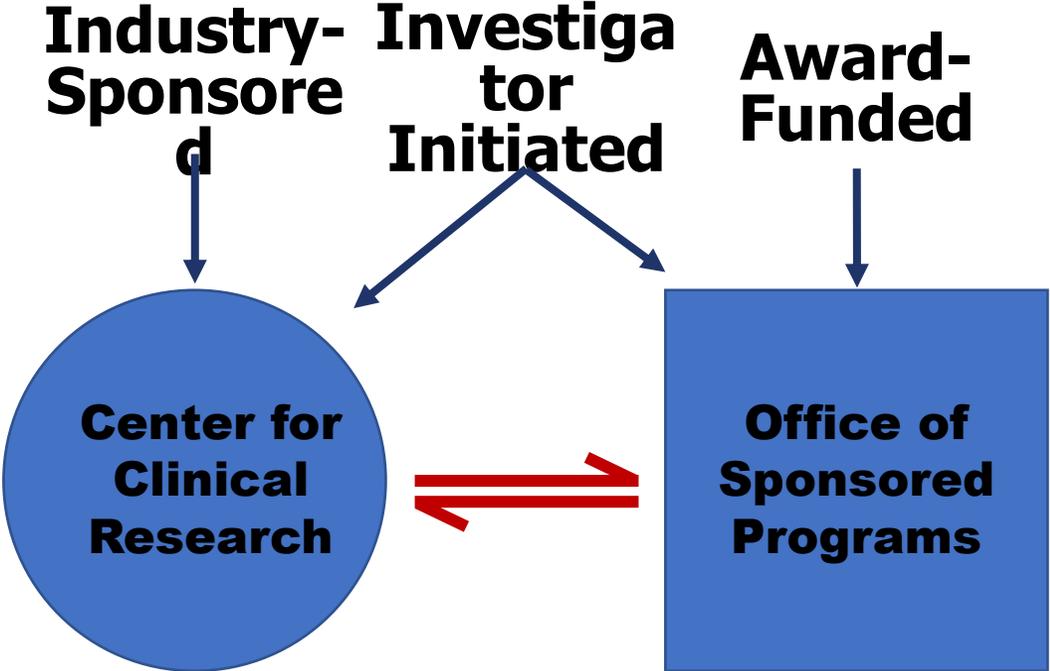
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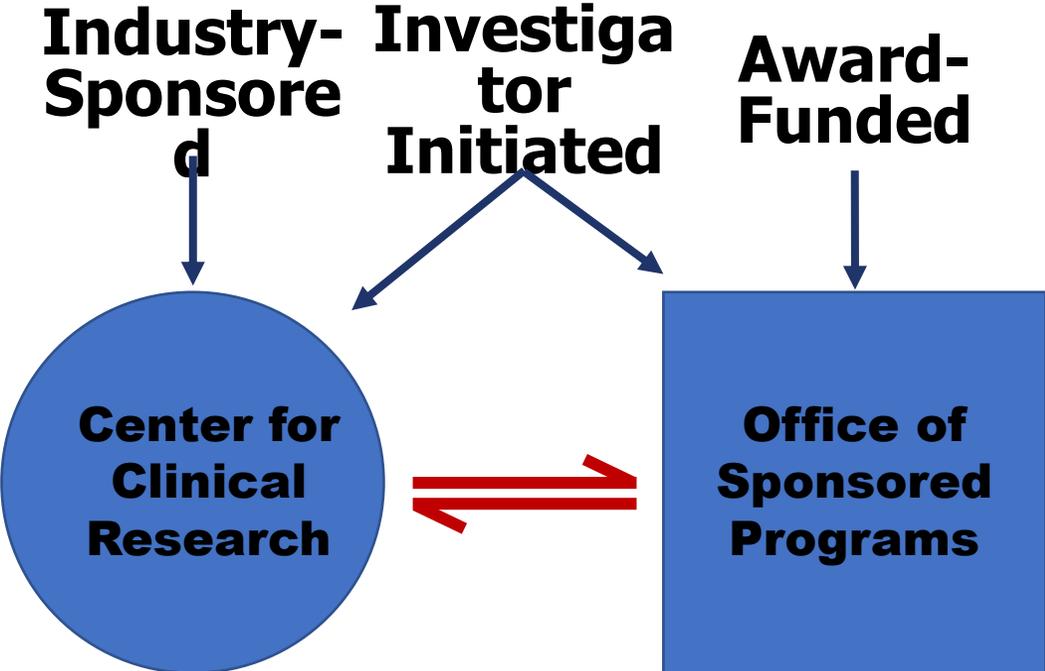


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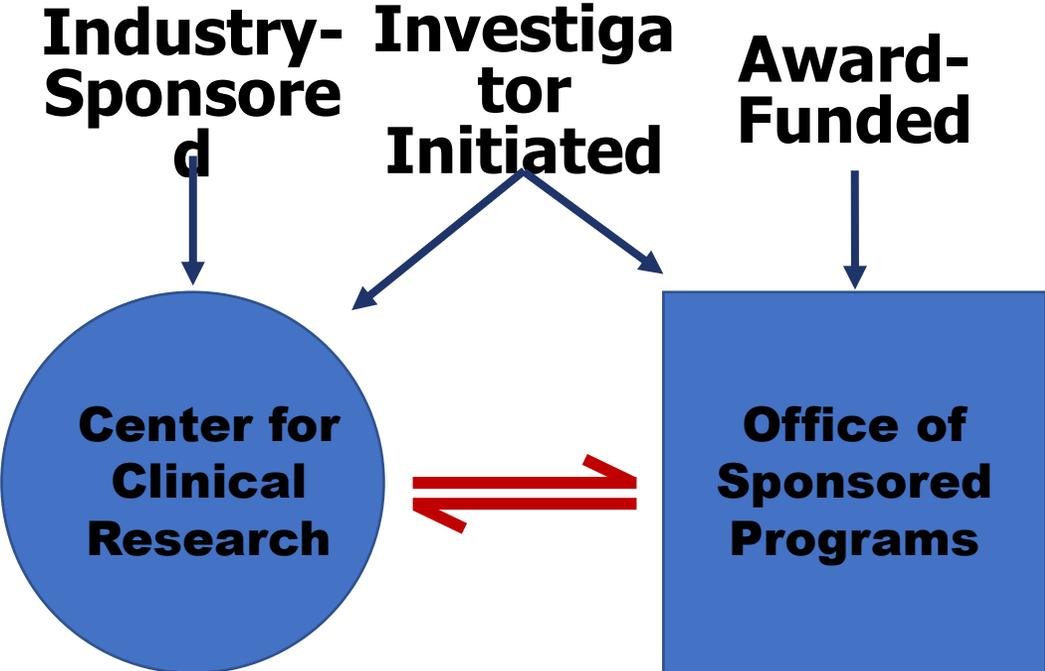
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- Auditing and Monitoring of Clinical Trials

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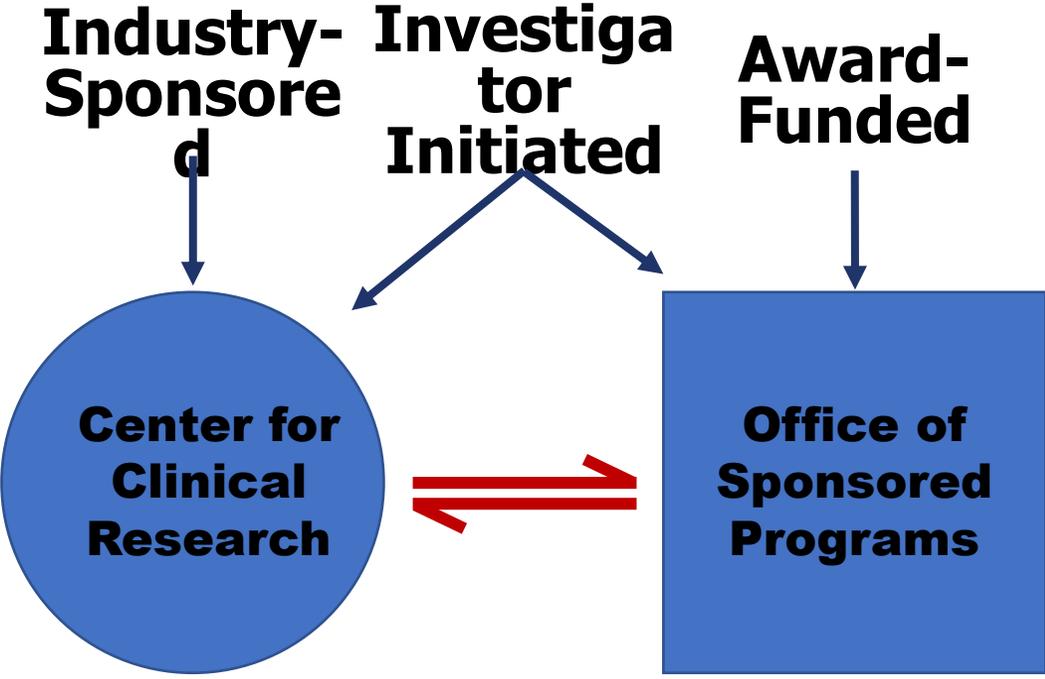
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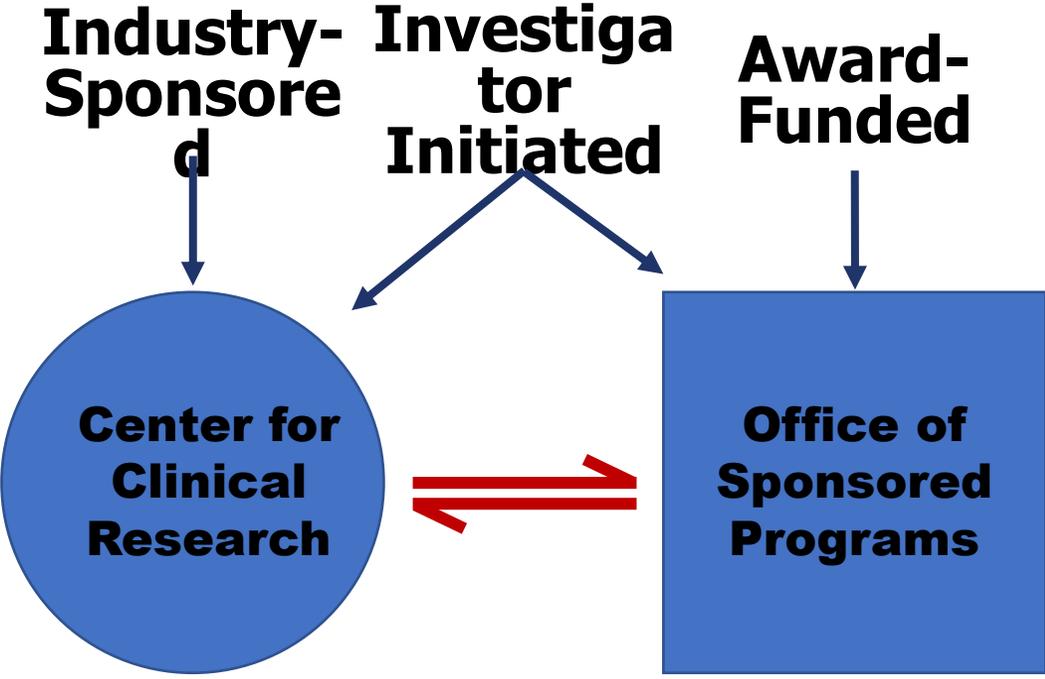
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- **Financial Management**

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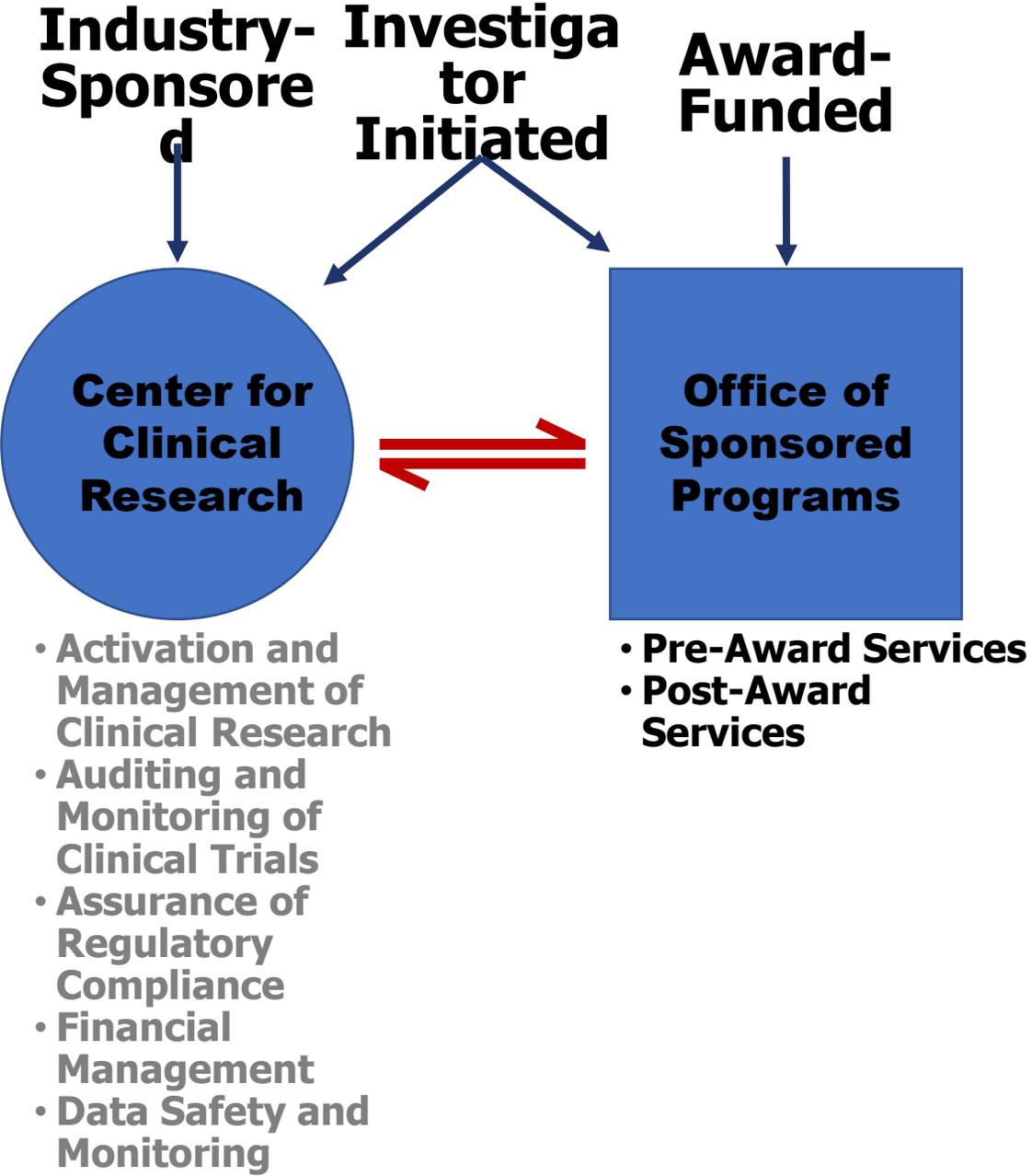
- **Activation and Management of Clinical Research**
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- **Data Safety and Monitoring**

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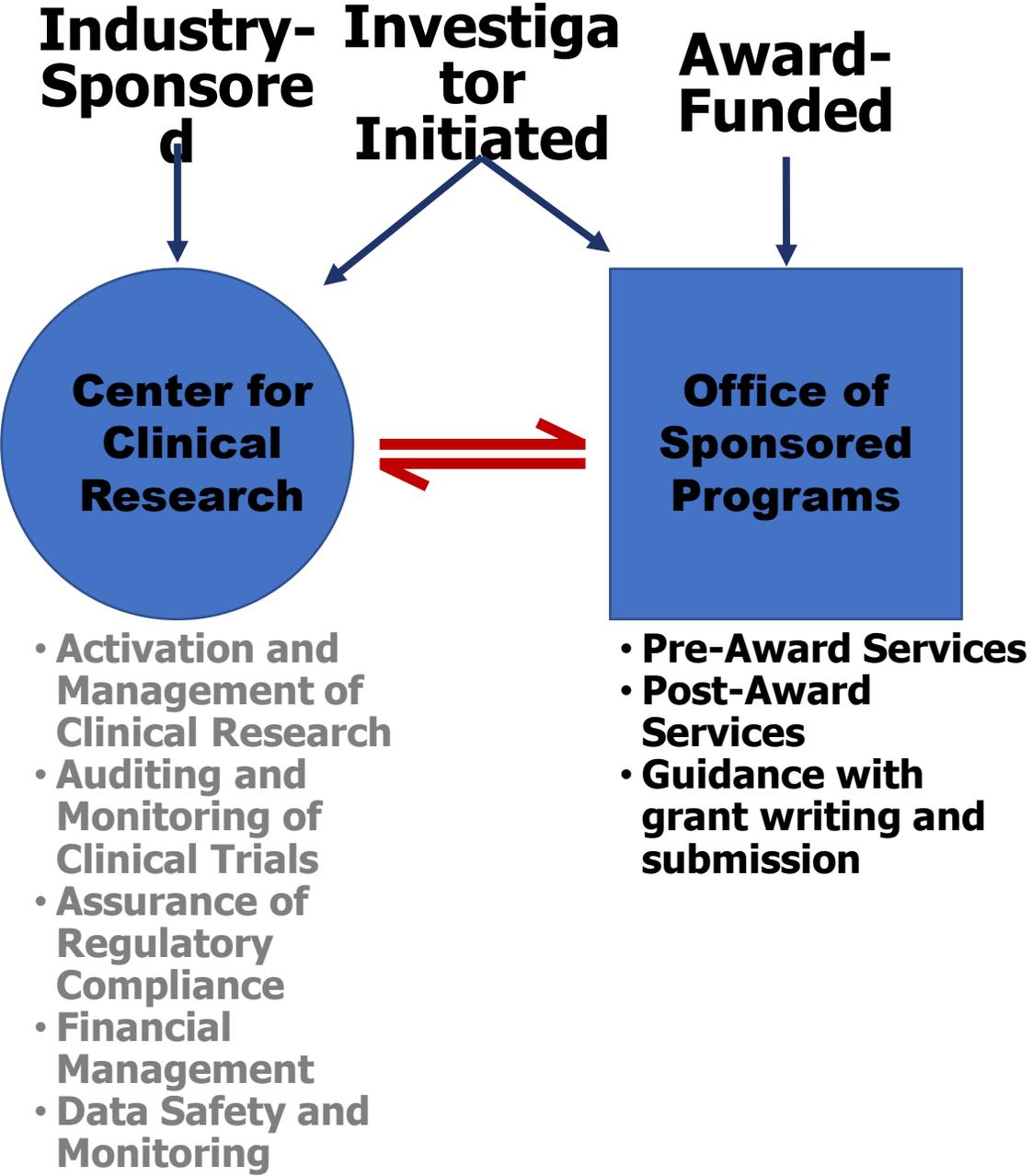


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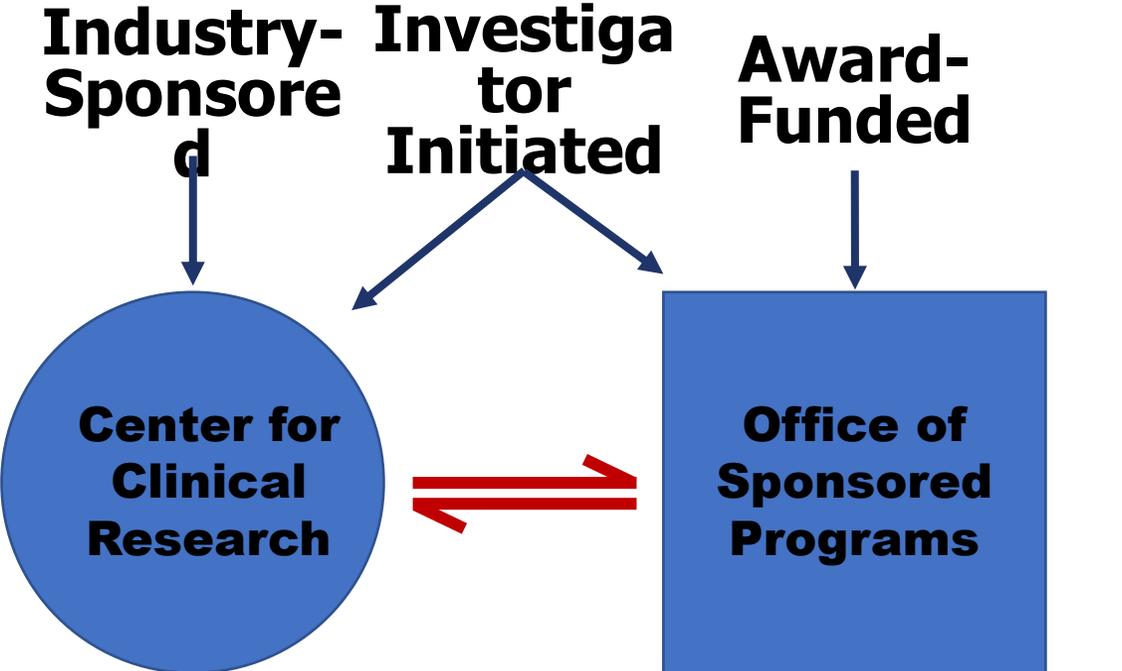
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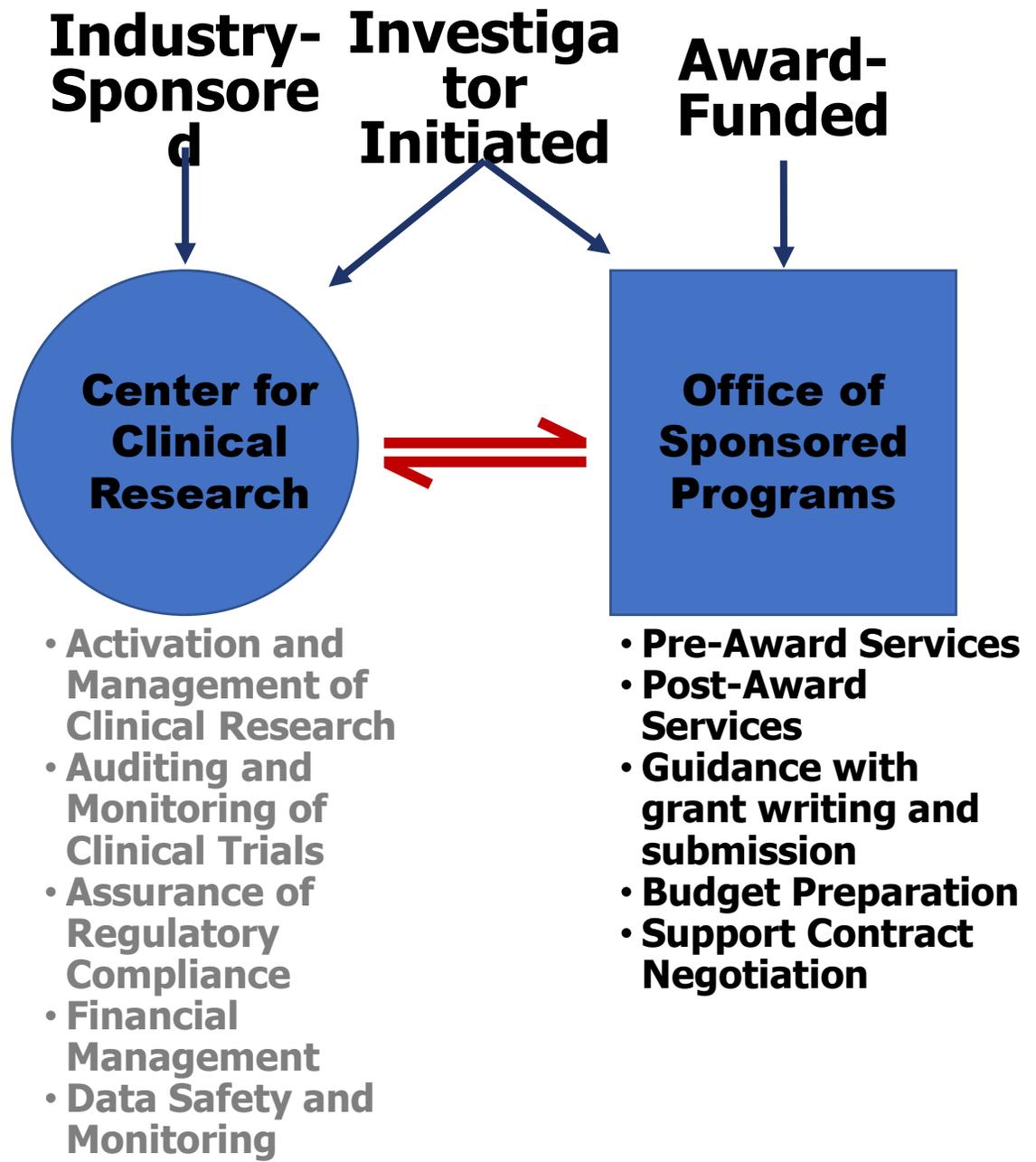
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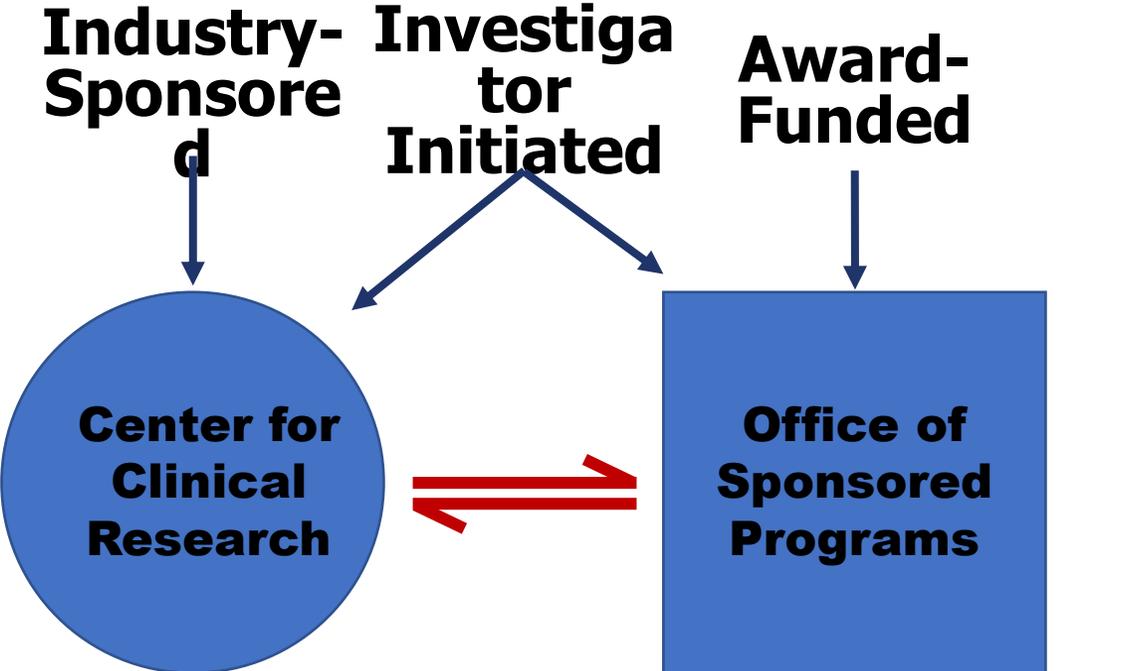
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- Pre-Award Services
- Post-Award Services
- Guidance with grant writing and submission
- Budget Preparation

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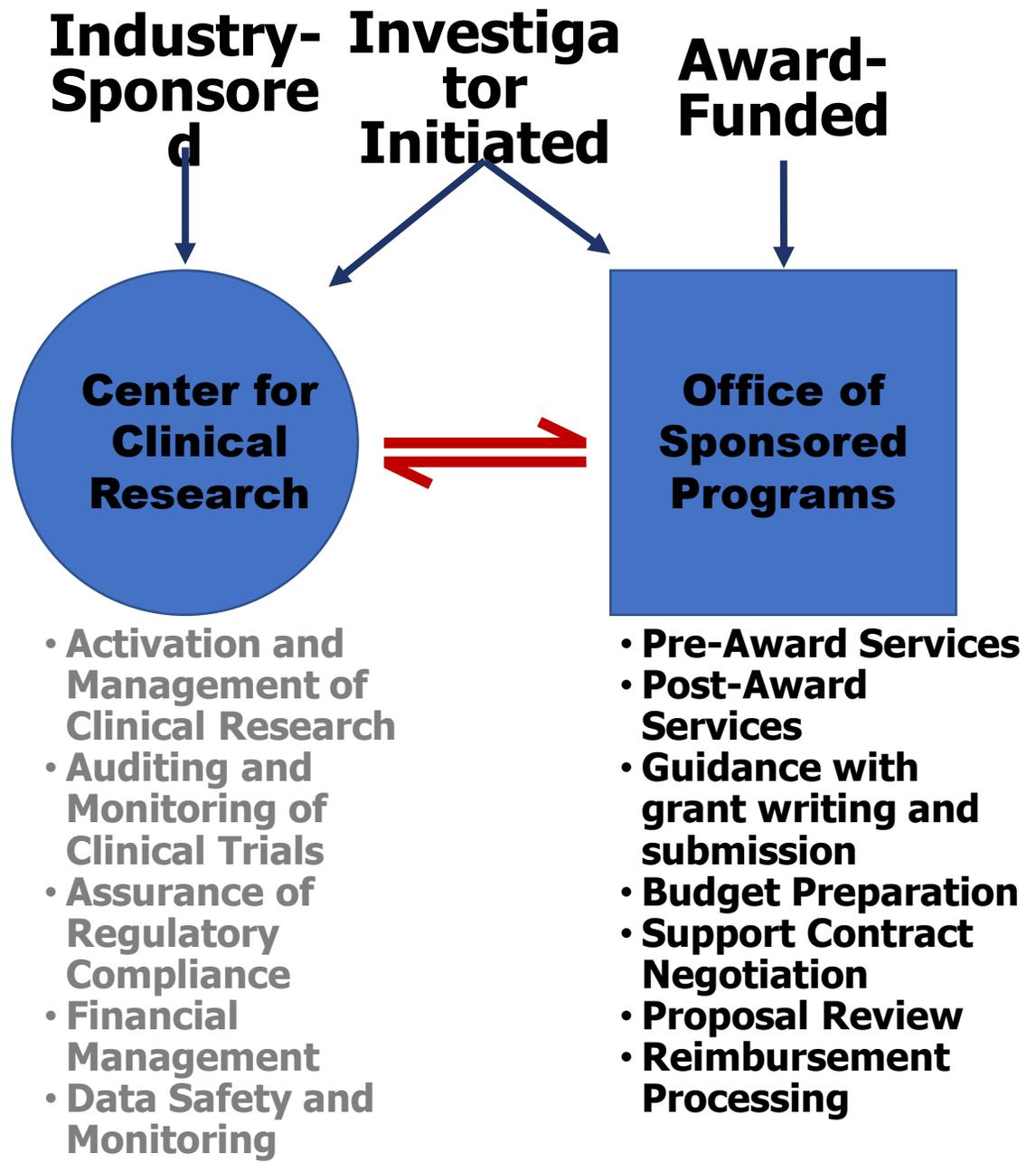
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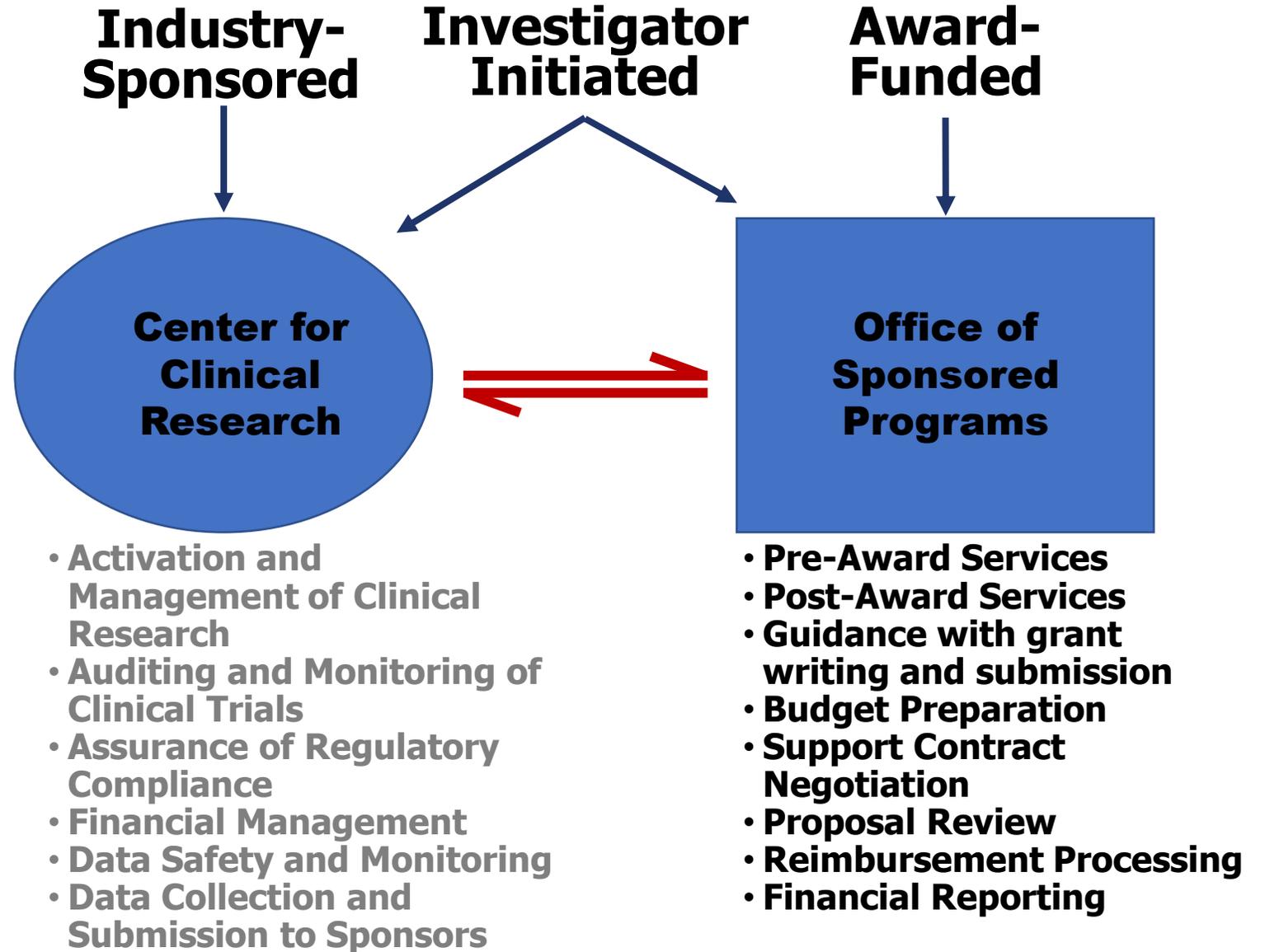
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- Support Contract Negotiation
- Proposal Review

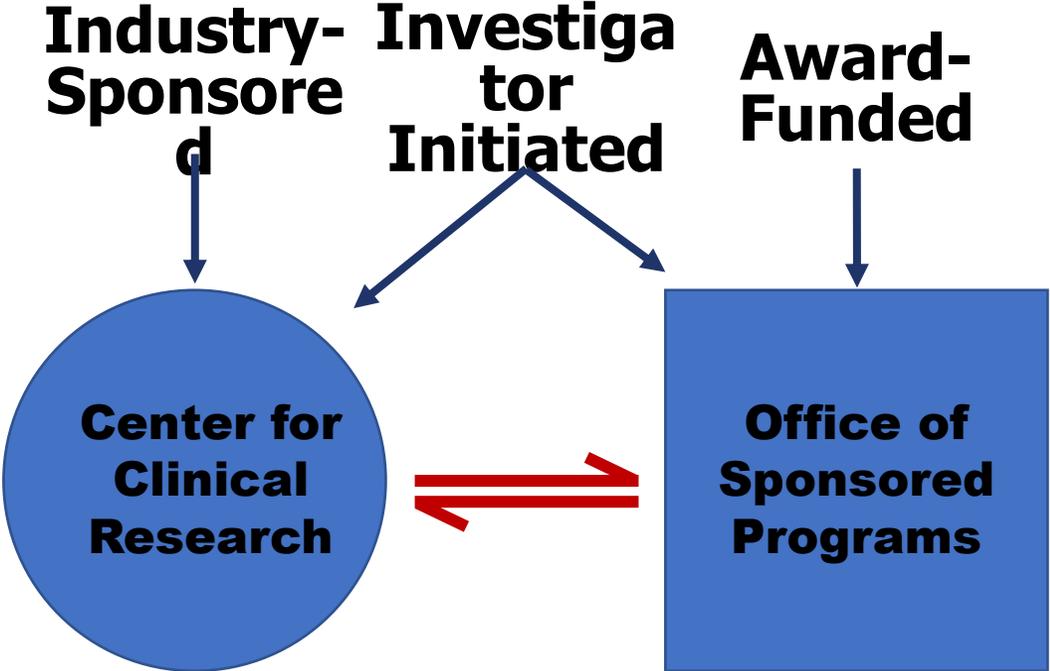
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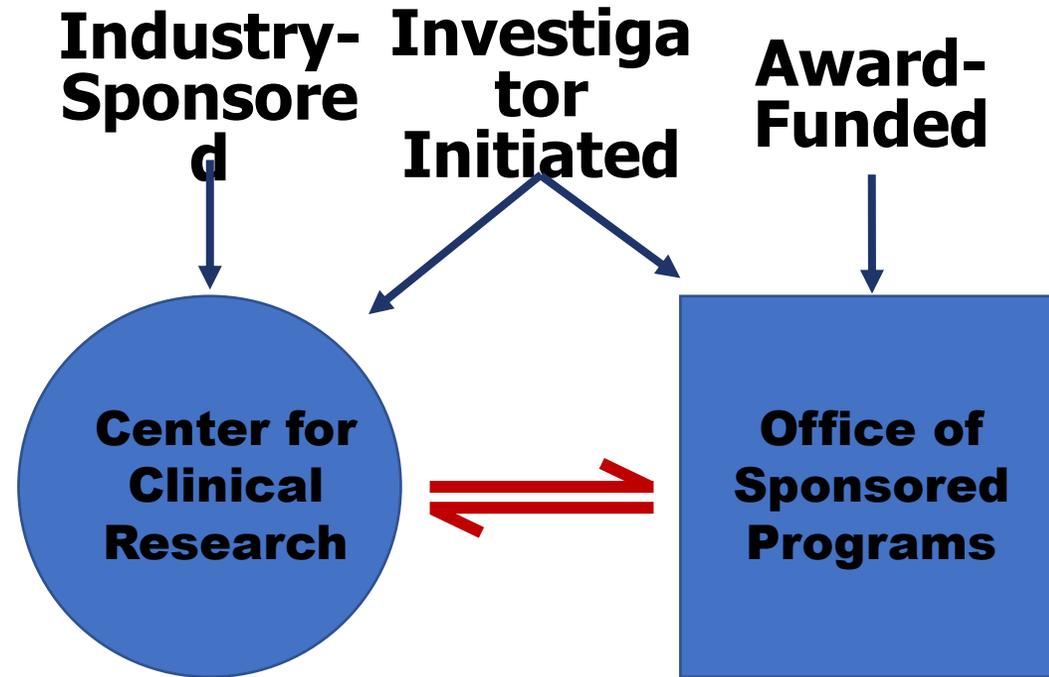


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**Investigator**

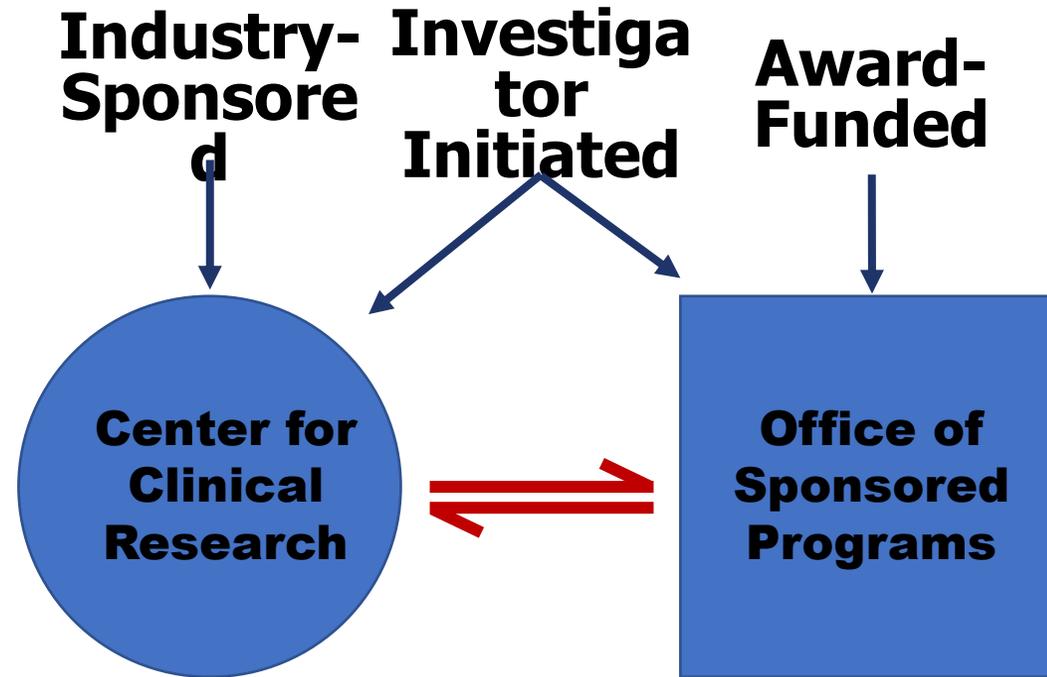
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## Investigator

- Identifies patients appropriate for the trial

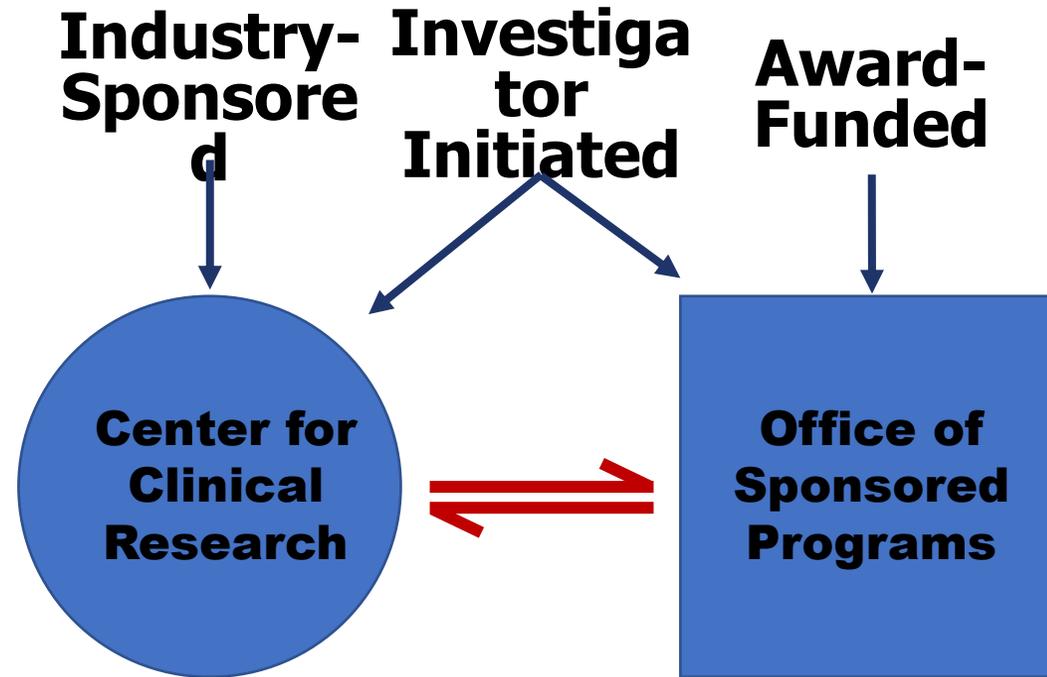
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## Investigator

- Identifies patients appropriate for the trial
- Collects data
  - Clinical follow-up

# Our Process



## Investigator

- **Identifies patients appropriate for the trial**
- **Collects data**
  - Clinical follow-up
- **Can be compensated for time**

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  - How many studies
  - How much money
  - How big is the staff
  - How many centers
  - How many investigators

# Clinical Research, The Future

- We could present a vision of the future as
  - How many studies
  - How much money
  - How big is the staff
  - How many centers
  - How many investigators
- We need to talk about the future clinical research will help create

# Clinical Research, The Future

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- In the last 40 years, the proportion of US physicians engaged in research has declined
  - Peak of 4.7% of the overall physician workforce in the 1980s
  - 1.5% today
- Because of numerous changes, "... aspiring young physician-scientists see careers combining research and patient care as unattainable."

# Clinical Research and Medical Education

- We need physician-scientists

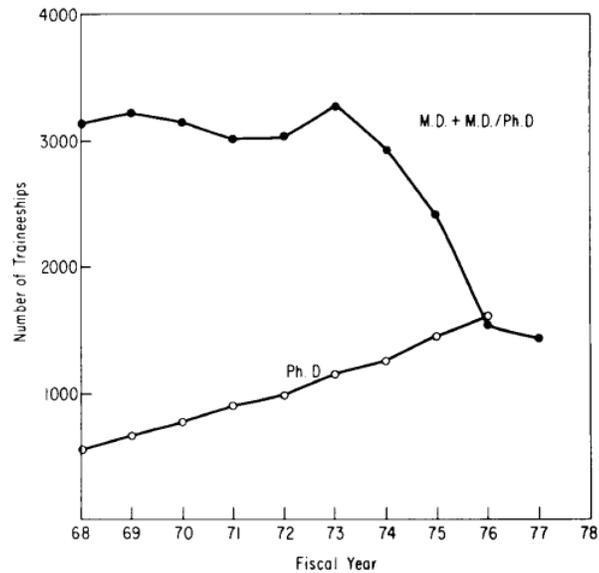


Figure 1. Postdoctoral Traineeships Awarded by the National Institutes of Health to Candidates Holding M.D., and M.D. plus Ph.D., Degrees, as Compared with Those Holding the Ph.D. Degree Only, 1968-77.

The data include renewal awards as well as first-time awards.

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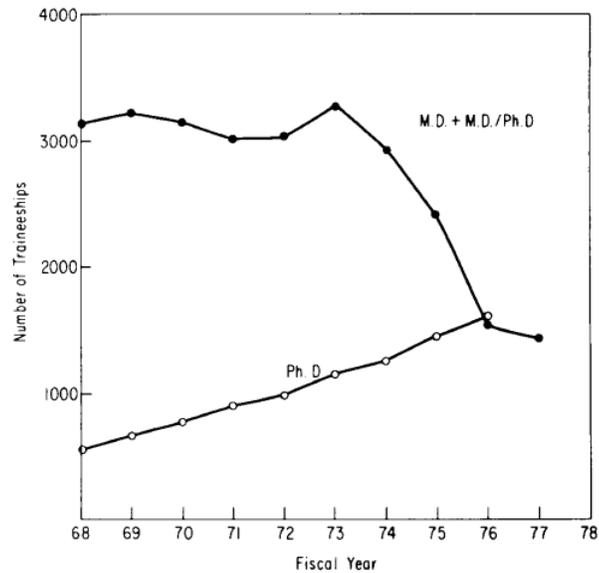
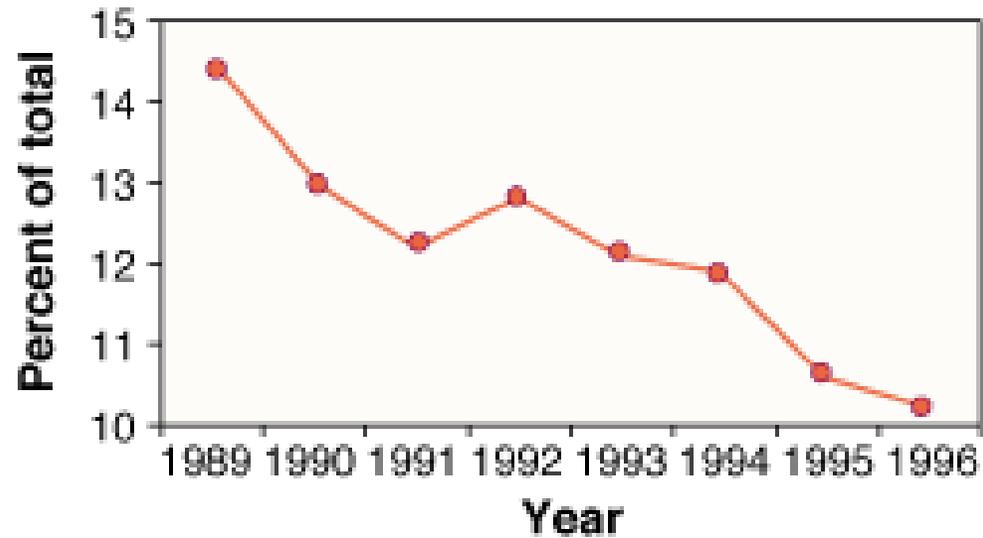


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Graduating medical students with strong research career intentions.

From Rosenberg, 1999, Science.

# Clinical Research and Medical Education

- We need physician scientists

# Clinical Research and Medical Education

- We need physician scientists
- ALL physicians are expected to deliver evidence-based care throughout their careers

# Clinical Research and Medical Education

- LCME Standards and Elements, Functions and Structure of a Medical School

# Clinical Research and Medical Education

- LCME Standards and Elements, Functions and Structure of a Medical School
- ACGME Required Educational Program Components

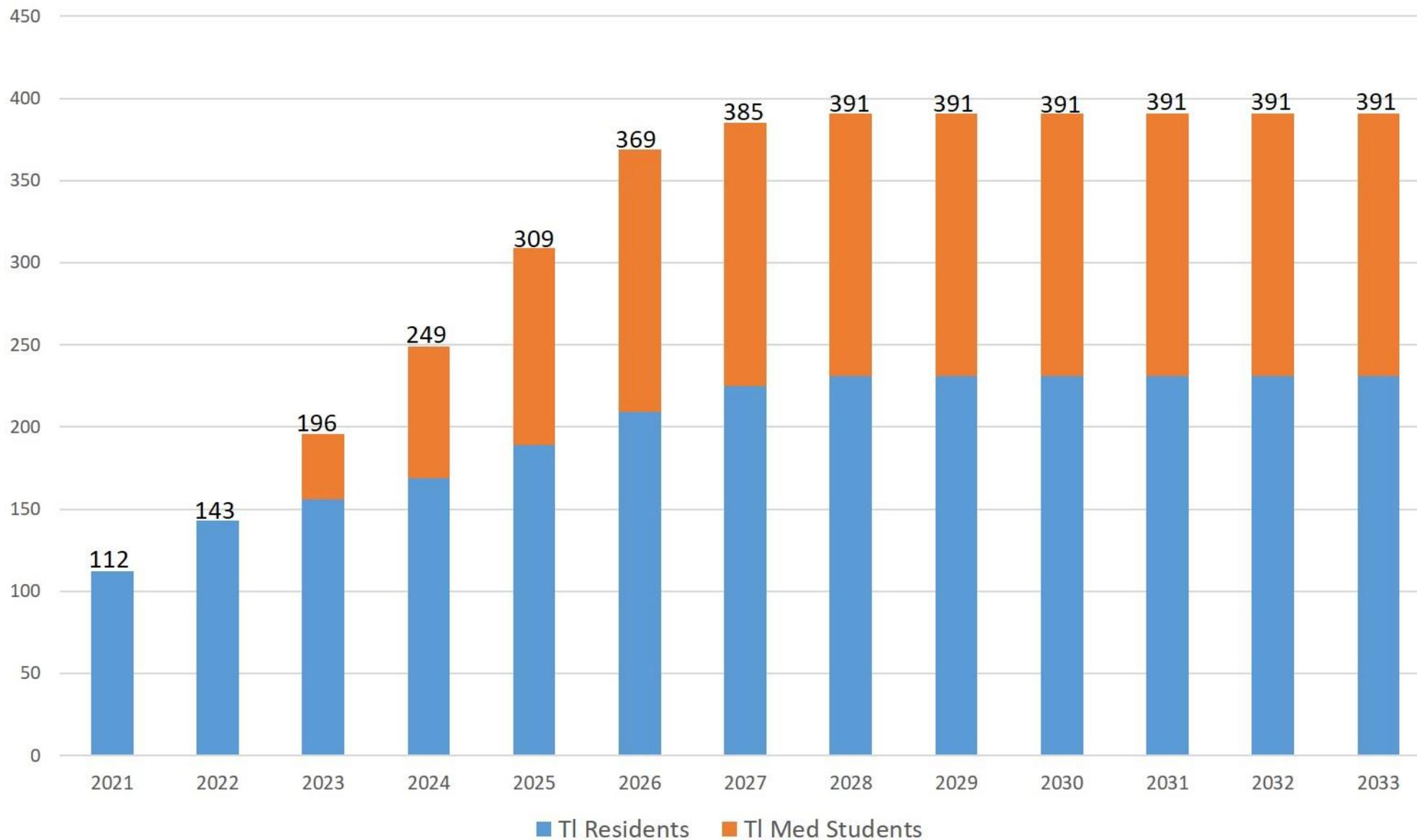
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- ACGME Required Educational Program Components
- We are educating our residents in research methodology and many are conducting their own studies
- The students of the UT Tyler School of Medicine will all engage in a scholarly project

## Learners by Year



**Thank you**