

# **Implementing international training programs for oncology research development**

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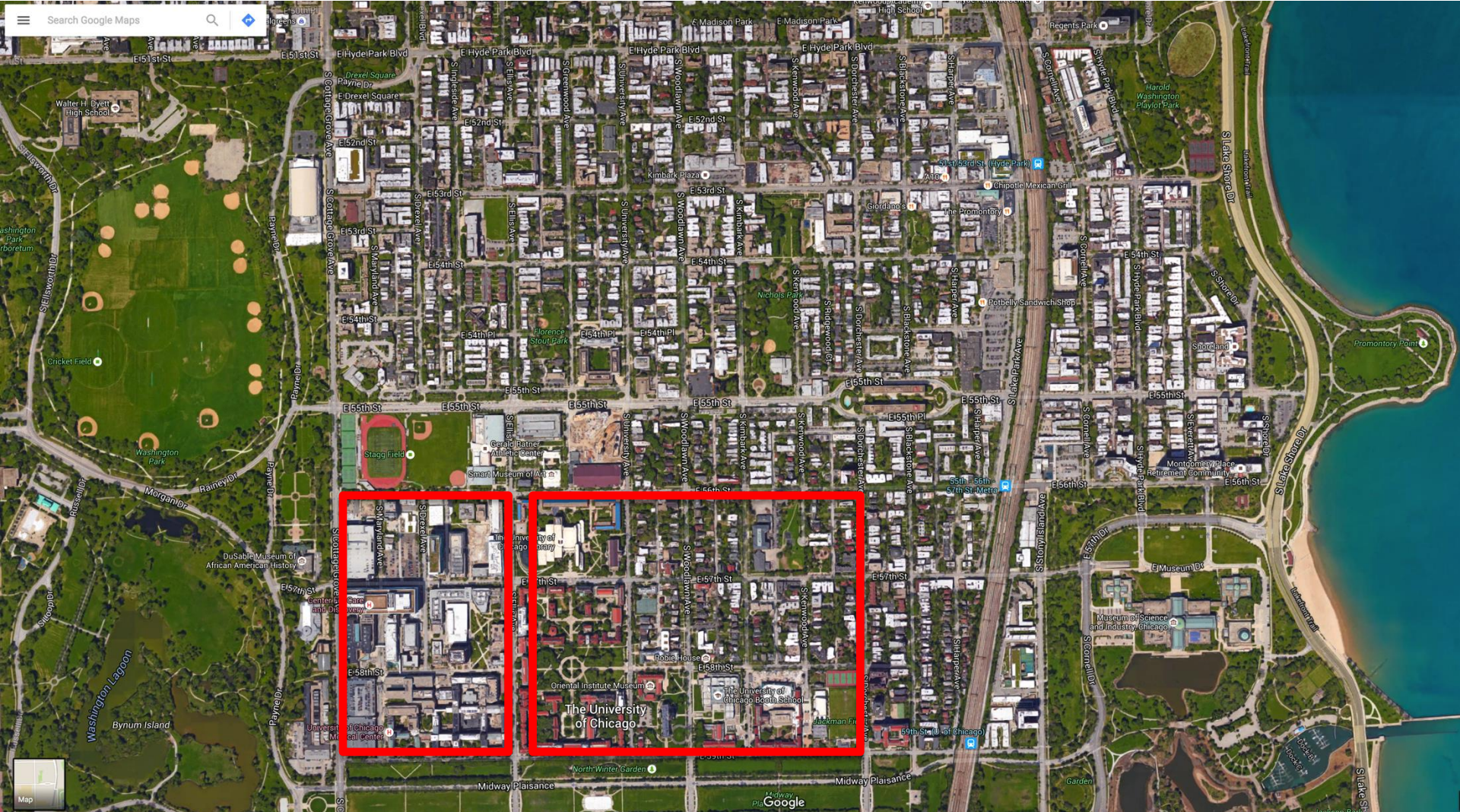
# **Introduction to research training**

- **Geography of the University of Chicago**
- **History of oncology research at the University of Chicago**
- **Description of our fellowship training**
- **Global Health Programs**

# University of Chicago Medical Center



# Integrated university and medical center campuses



# Oncology research at the university



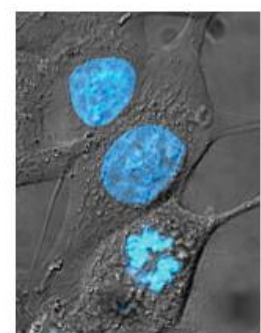
Charles E. Scharf studies the role of the endocrine system in the development of cancer. He was the first to demonstrate that the hormone insulin can stimulate the growth of cancer cells. He was awarded the National Cancer Institute Career Development Award in 1966 and the National Cancer Institute Research Career Development Award in 1970.

Janet Rowley discovered the first chromosome translocation in leukemia, the Philadelphia chromosome, leading to the discovery of the BCR-ABL fusion gene. She won numerous awards, including the National Cancer Institute Research Career Development Award in 1970 and the National Medal of Science in 1987.

Michelle Rowley discovered the first chromosome translocation in leukemia, the Philadelphia chromosome, leading to the discovery of the BCR-ABL fusion gene. She won numerous awards, including the National Cancer Institute Research Career Development Award in 1970 and the National Medal of Science in 1987.

Jameel M. Khan leads the World Class and Leadership Diagnostic program at the University of Chicago.

# 2014



Yusuke Nakamura, MD, PhD, develops a novel anti-cancer therapy targeting the T-lymphokine-activated killer cell-originated protein kinase (TOPK) and demonstrates potent activity in preclinical lung cancer studies.



THE UNIVERSITY OF CHICAGO MEDICINE

Comprehensive Cancer Center

AT THE FOREFRONT OF CANCER CARE AND DISCOVERY™

# Genomic Data Commons

Center for Data Intensive Science



Vice President Joe Biden talks with Prof. Robert Grossman, director of Center for Data Intensive Science at UChicago, and Louis M. Staudt of the National Cancer Institute as they tour the Genomic Data Commons on June 6.

Photo by Robert Kozloff 



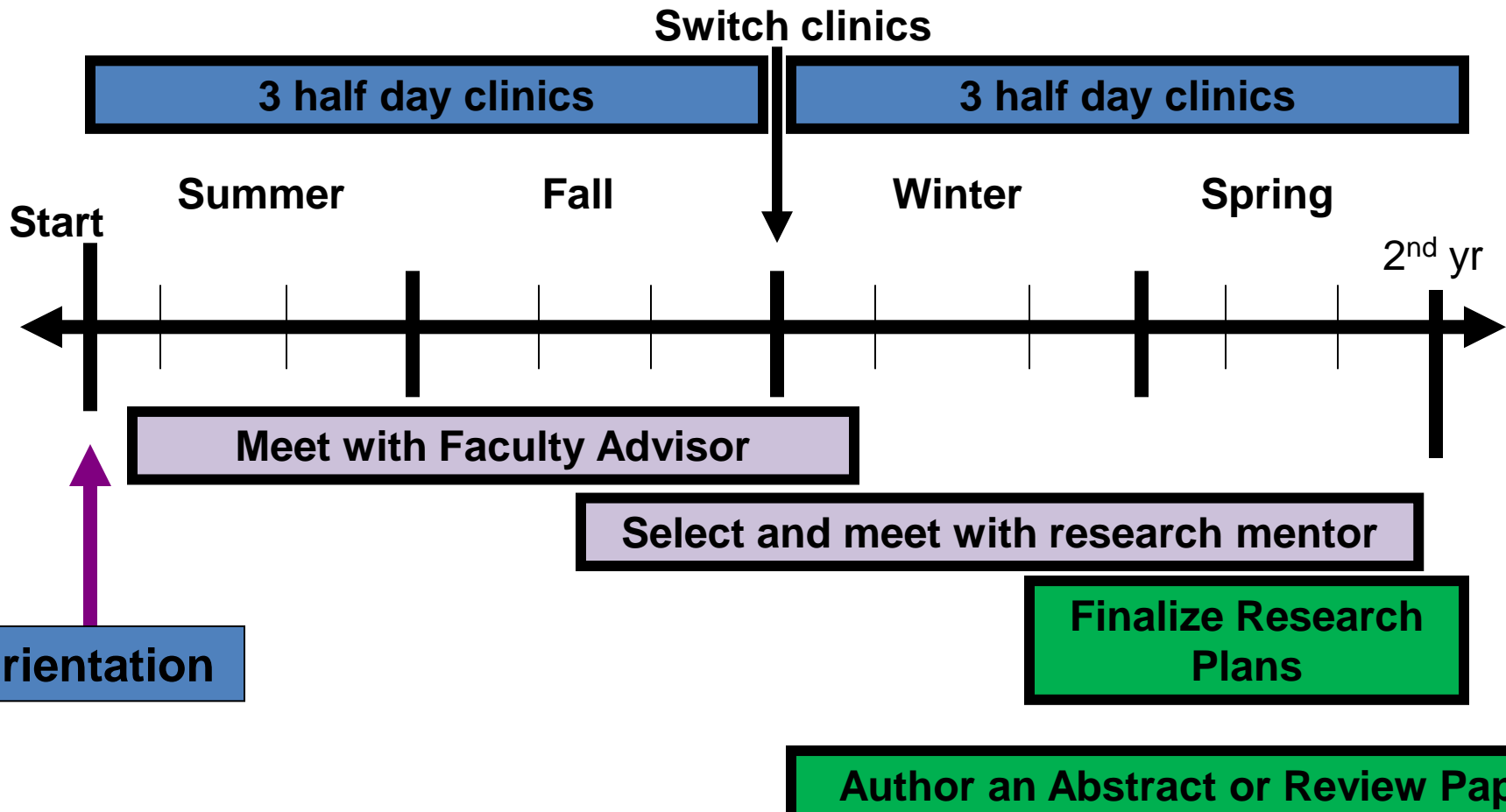
 Biden to unveil launch of major, open-access database to advance cancer research — Vice President Joe Biden to announce Genomic Data Commons project (Washington Post)

## Related Links

 Science Life blog: Joe Biden visits Genetic Data Commons  
 Genomic Data Commons  
 National Cancer Institute  
 White House's Cancer Moonshot

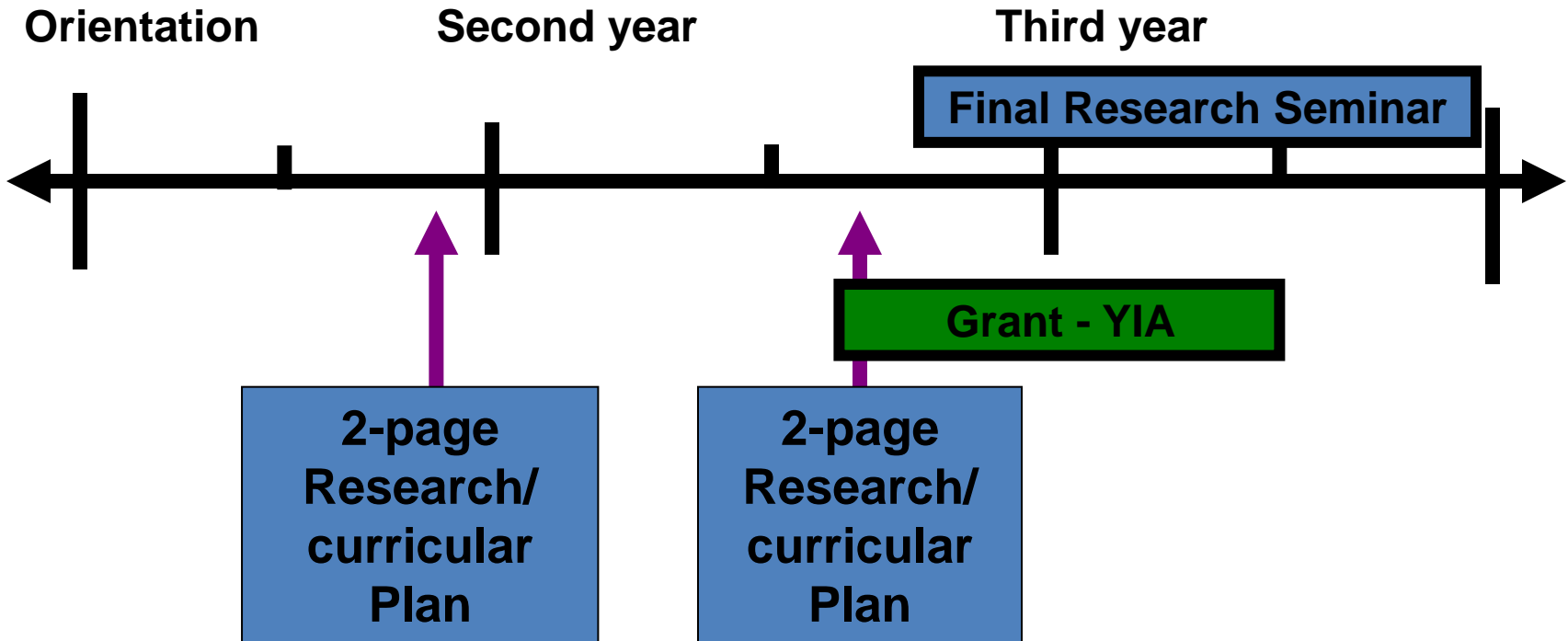
# First Year Clinical/Research Training

**Clinical rotations (ambulatory and inpatient)**



# Senior Fellow Training (2 years)

Protected Time = 18 months  
Clinical Disease Specialty



Mentorship Committee Meeting Every 6 Months



# Specialized Training Programs

- **Essentials of Patient Oriented Research**
- **Summer Program in Outcomes Research Training**
- **MERITS Fellowship for education**
- **Ethics Fellowship**
- **Geriatric Medicine Fellowship**
- **Masters Programs (selected options)**
  - Masters in Science for Clinical Professionals
  - Bioinformatics
  - Arts and Humanities
  - Anthropology and Sociology

# Individualized fellow training paths

- **Traditional lab based projects**
- **Phase I trial experience with correlative research**
- **Investigator initiated and pharma phase I/II/III trial experience**
- **Outcomes research**
  - Young adult and survivorship
  - Economics and health policy
  - Geriatric Oncology (SOCARE clinic)
  - Sociology/Anthropology
  - Healthcare disparities research
- **Hospitalist Scholars Program in Global Health**

# Clinical Pharmacology and Pharmacogenomics Training Program

- **Clinical Therapeutics in Oncology**
  - 4 year program
  - Joins our comprehensive heme-onc program with Clinical Pharmacology and Pharmacogenomics
  - Dual certification
- **Clinical Therapeutics in Industry**
  - 3-4 year program collaborative program
  - Specialized education and research programs at Abbvie in North Chicago
  - **New training opportunity in international clinical trial education**

# Center for Global Health (CGH)

- **Leadership**

- Olufunmilayo Olopade, MD, FACP, Professor of Medicine and Director of the Center for Clinical Cancer Genetics

- **Mission**

- To collaborate with communities locally and globally to democratize education, increase service learning opportunities, and advance novel, transdisciplinary, and sustainable solutions to improve health and well-being while reducing global health disparities and inequalities

# **CGH Research Niche Areas**

- **Health, environment, and vulnerable populations**
- **Genomics and chronic non-communicable diseases**
- **Urban health services and systems delivery**
- **Women's and children's health and well-being**

# Training opportunities for Univ of Chicago students and trainees



# **Benefits of international exchange and research training**

- **Trainee access to novel and unique training resources**
- **Two way exchange of clinical and research practices**
  - “Trainee as teacher”
- **Creation of long term collaborative foundations for research**
  - Research reagents and techniques
  - Shared databases and heterogeneous tumor banks
  - International multi-institutional clinical trials
  - Formal training exchanges can foster long-term informal exchanges between labs and clinical research teams

# **Relay for Life My Oncology Dream Award**

- **Awardee embeds in research group for year**
- **Primary time spent on research pursuits**
- **Additional educational resources open to awardee**
  - Clinical research programs
  - Program director advice
  - All first year and senior fellow conferences
  - Graduate level conferences
    - Committee on Cancer Biology
    - Committee on Immunology



# Research areas of first award recipients

- **Dr. Ken Hatogai, Department of GI Oncology, National Cancer Center Hospital East**
  - “Overcoming resistance to immunotherapy based on oncogene alteration in bladder cancer
    - Mentor: Dr. Thomas Gajewski
- **Dr. Eisaku Miyauchi, Department of Respiratory Medicine, Tohoku University**
  - “T cell receptor repertoire analysis in cancer tissues
  - Mentors
    - Dr. Yusuke Nakamura (lab)
    - Dr. Jyoti Patel (clinic)

# Summary

- **Wide array of training resources**
- **Mentors with experience in a variety of research activities and training**
- **Goal is to help train the next generation of clinician researchers**
- **We are interested in establishing international collaborations**

