

Seattle Tuberculosis Research Advancement Center (SEA-TRAC)

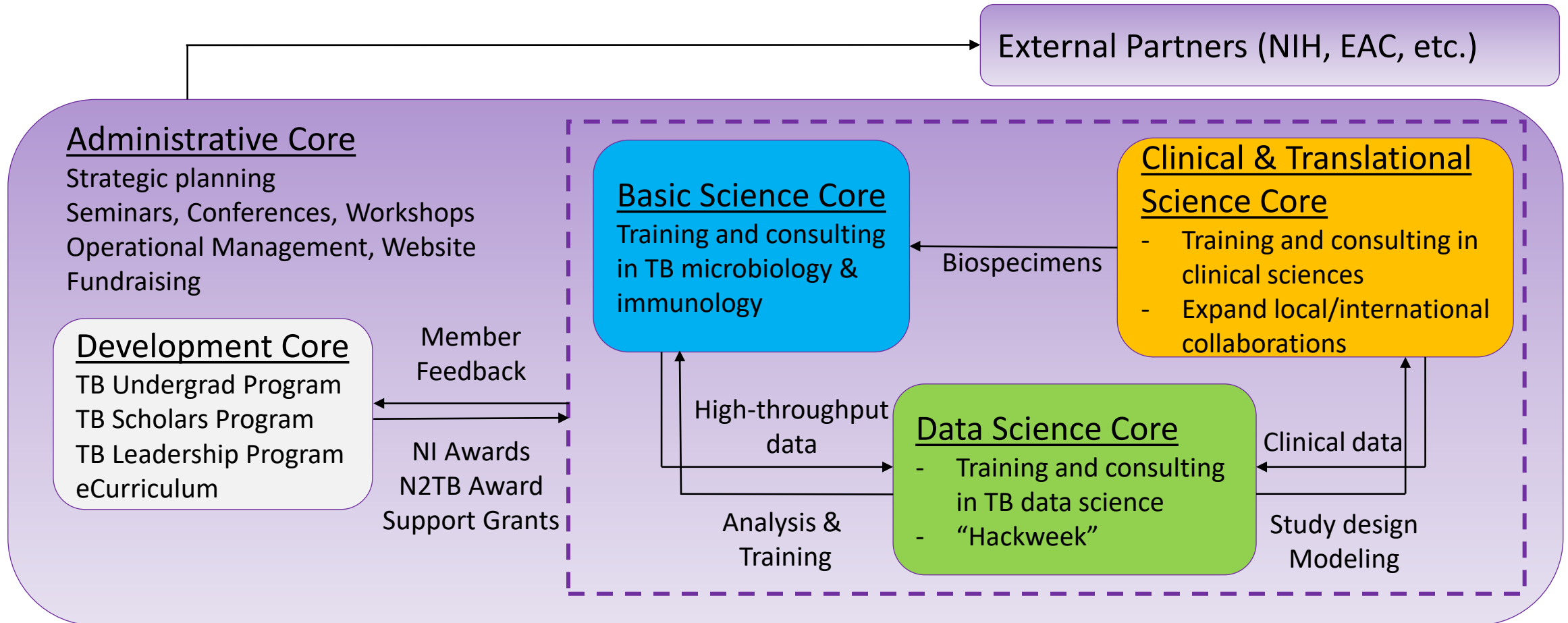
Paul K. Drain, MD, MPH

University of Washington

pkdrain@uw.edu



SEA-TRAC – Structure



Clinical & Translational Sciences Core (CTSC)

Co-Directors:



Paul Drain, MD, MPH
Depts of Global Health,
Medicine (ID), and Epidemiology



David Horne, MD
Dept of Medicine (Pulm/Crit Care)
*Recently became Assistant Dean
of DEI in SoM*



Rhea Coler, PhD
Seattle Children's Research
Institute

CTSC: Gaps, Central Objective, and Primary Goals

Existing Gaps

- Development support for individual trainees
- Research grants for pilot research projects
- Support for TB-specific education and training

Central Objective

- To provide expertise for a broad array of clinical research topics, provide shared research support for resources, services and training, and to strengthen TB clinical research through domestic and international collaborations.

Primary Goals

- To educate and train new investigators, including people working in TB-endemic countries
- To leverage existing biorepositories to catalyze TB research and generate preliminary data using the UW research network in Latin America, sub-Saharan Africa, and Asia.

Advanced TB Research Training Course

- Annual 1-week course in September
- Over 300 participants worldwide in 2023
 - Clinicians, Researchers, Students, Public Health, Disease Modelers, Faculty, Policy Experts, Business leaders, Advocates, etc.
- Covered diverse TB themes, and from basic to clinical to modeling research topics
 - **Mon:** Immunology and Vaccines
 - **Tues:** Pathogenesis and Treatment
 - **Wed:** Biomarkers, Diagnostics, & Case Finding
 - **Thurs:** Aerobiology, Transmission & Prevention
 - **Fri:** Disease Modeling, Implementation Science, and Advocacy



ADVANCED TB RESEARCH TRAINING COURSE

Sept 18-22, 2023 | 7:30 – 11:00am PDT
Virtual Format | Registration required:
<https://bit.ly/3MxKRDj>



Topics covered:

- Immunology & vaccines
- Pathogenesis & treatment
- Biomarkers, diagnostics, case findings
- Aerobiology, transmission, prevention
- Disease modeling, implementation science, advocacy

Contact SEATRAC at seatrac@uw.edu for general inquiries about the course.

SEATRAC TRTC
Seattle Tuberculosis Research Advancement Center

**TUBERCULOSIS RESEARCH
& TRAINING CENTER**
UNIVERSITY of WASHINGTON

CTSC: Access to Biospecimens

Foster and catalyze collaborations with investigators with established cohorts, robust clinical databases, and biospecimens for advancing basic, translation, and clinical TB research

- The CTSC will support a database of investigators (“authorizing investigators”) with biospecimens relevant to TB research who are willing to collaborate with SEA-TRAC investigators, including access to a well-characterized biorepository of individuals with TB, their close contacts, and healthy controls.
- The database will include specimen type, collection protocols, and the types of clinical and demographic data that is available. Specimens remain with the authorized investigators.

<https://seatrak.uw.edu/resources/biorepository>

CTSC: Access to Biospecimens

BIOREPOSITORY LIST

The Center for AIDS Research (CFAR) Network of Integrated >Project description: The CNICS consortium is made up of ten specimens from people living with HIV (PLWH). All specimens are data and are made available to any qualified investigator with a March 25, 1987 to 2019, CNICS has collected and stored 1,043, PLWH at 139,148 timepoints.

>**Specimens stored:** frozen plasma, viably frozen peripheral blood
<https://sites.uab.edu/cnics/specimens/>

The UW / Fred Hutch Center for AIDS Research (CFAR) Trans Repository

>**Project description:** The HIV Specimen Repository is a collection of mononuclear cells (PBMCs) donated by people living with HIV (F2) Washington HIV Clinics and is enrolled in University of Washington is ongoing and participants are asked to voluntarily donate up to 3) from the patients' electronic medical record is linked to these records 4) the virologic, immunologic, genetic, and demographic determinants 5) comorbidities. Overall, from October 29th, 2002 to May 19th, 2016 6) stored 105,589 aliquots of biological specimens from 1,576 unique

>**Specimens stored:** frozen plasma and viably frozen peripheral blood

Specimen Request from Biorepository

Please complete the survey below providing as many details as possible especially in the Requester Information section.

All shipping costs and shipping materials are paid by the requestor.

Requests that might require additional compensation:

- more than 100 specimens requested
- more than one specimen type requested (e.g. serum + urine)
- specimens stored in LN2
- specimens that require international shipping from the Repository
- requests with sub-aliquoting from existing vials, re-labeling with scannable barcoded labels

Response was added on 06/02/2022 1:19pm.

Requester Information

1) Requestor Title	<input type="radio"/> Dr. <input type="radio"/> Mr. <input type="radio"/> Mrs. <input type="radio"/> Ms. <input type="radio"/> Mx. <input type="radio"/> Prof.
Requestor First Name	Paul
Requestor Last Name	Drain
Requestor Email	pkdrain@uw.edu
Requestor phone number	2063063066
Requestor Primary Institutional Affiliation	UW
Requestor Primary Department (if UW)	Global health
2) Requestor Position	<input type="radio"/> Assistant Professor <input checked="" type="radio"/> Associate Professor <input type="radio"/> Fellow/Postdoc <input type="radio"/> Instructor <input type="radio"/> Medical Student <input type="radio"/> PhD candidate <input type="radio"/> Professor <input type="radio"/> Resident <input type="radio"/> Staff (non-faculty) <input type="radio"/> Other
9) Have you previously requested specimens from SEATRAC Repository?	<input type="radio"/> Yes <input checked="" type="radio"/> No

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Request scope

19) Please indicate the service(s) that you are requesting: NOTE from ER_I was not sure if choices 1 and 2 might be an option to request from SEATRAC. If not, this question can be removed from the survey.	<input type="checkbox"/> Feasibility (to determine whether there are enough subjects or specimens meeting your study criteria and/or to apply for a grant to fund your study; you will receive aggregate data, does not require Human Subjects approval) <input type="checkbox"/> Clinical data set (to request data for subjects meeting your study criteria) <input checked="" type="checkbox"/> Specimens Repository (to request specimens and associated clinical data already collected and stored in the repository)
20) Please choose a study from which you are requesting specimens. List of studies participating in the SEATRAC will be updated.	<input checked="" type="checkbox"/> Partners PrEP <input type="checkbox"/> Study #2 <input type="checkbox"/> Study #3
21) If requesting existing specimens, please describe how they will be used (research question)	none
22) Pulling criteria - number of participants in this request	10
23) Pulling criteria - specimen type requested (e.g. plasma, urine, serum etc.)	urine
24) Pulling criteria - number of specimens requested	20
25) Pulling criteria - volume of aliquots requested. Please specify total volume per participant, minimum volume per one aliquot and any other information that you think might be helpful. Note that specimens will be provided in the volume as initially collected (no sub-aliquoting).	5 ml per sample
26) Shipping Address for receiving specimens:	ICRC lab
Organization Consignee - First Last name Consignee - phone number Consignee - email Phone number Street, room City, zip code, State	
27) Request date	June 2

Integration with other TB Biorepositories

Repositories and Clinical Data

- UC-San Francisco
- UC-Berkeley
- Emory University
- Johns Hopkins University



TB Portals



Case Browsing

Explore case records, including clinical, imaging, and bacterial genomic information, from the TB Portals in Case Browser.



Multi-Domain Data Analysis

Create and statistically compare virtual TB case cohorts across all data domains in DEPOT.



Mycobacterium Tuberculosis Genomics

Explore cases through GWAS, drug-resistance prediction, and network analysis in GAP.



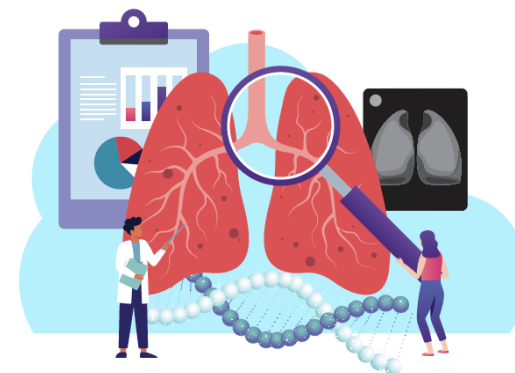
Radiomics

Visualize chest X-rays and CT studies from TB Portals cases and use them to create virtual case cohorts in RAP.



Data Sharing

Use our data in your research. Visit our Data Sharing site to learn about the available data and how to access it.



11469*

TB Cases

4441*

Genomic Sequences

13038*

Chest X-Ray and CT Images

16

Countries Represented

40

Sites Contributing Data

* As of August, 2023

Questions

Paul K. Drain, MD, MPH

University of Washington

pkdrain@uw.edu

Rhea Coler, PhD

Seattle Children's Research Institute

rhea.coler@seattlechildrens.org