



Health Sciences Tissue Bank

Paraffin Translation Tissue Resource: Tissue arrays for cancer research

About the Paraffin Translational Tissue Resource (PTTR)

The PTTR includes already developed and partially annotated tissue microarrays (TMA) from cancer cases provided by the University of Pittsburgh to The Cancer Genome Atlas (TCGA) project. The PTTR provides central support for University of Pittsburgh research programs needing TMA for cancer research. This resource is available to faculty research investigators of the University of Pittsburgh who have eligible research needs.



The resource was funded through a partnership between the *University of Pittsburgh Cancer Institute (UPCI)* and the *Clinical and Translational Science Institute (CTSI)*. The resource is distributed, maintained and replenished through the Health Sciences Tissue Bank based on a partnership and funding from the Department of Pathology (DOP) within the School of Medicine, and the Office of the Senior Vice Chancellor for Health Sciences (OSVCHS) and fee-for-service charges.

The cases used in the creation of each TMA were obtained from consented patients (surgical cases) seen at the University of Pittsburgh Medical Center (UPMC) and submitted to the clinical surgical pathology department for processing into paraffin blocks. The surgical cases yielded correlating frozen tissue samples that were subsequently submitted to The Cancer Genome Atlas (TCGA) research center. There were 19 tumor types in total that were part of the TCGA project. Of those, six types were selected for inclusion in the initial PTTR in addition to one multi-tumor TMA.

The cancer types included in the available TMA resource are described below.

Breast	Infiltrating Ductal Carcinoma and normal breast tissue	
Lung	Adenocarcinoma with normal lung	
Lung	Squamous Cell Carcinoma with normal lung	
Endometrium	Endometrial Carcinoma and normal endometrium	
Bladder	Papillary Urothelial carcinoma and normal bladder tissue	
Ovary	Ovarian Serous Cystadenocarcinoma and normal ovary	
Melanoma	Metastatic Melanoma and normal skin	
Multi tumor (NOS)	Ovary	Bladder
	Testes	Lung
	ChondroSarcoma	Melanoma
	Desmoid	Thyroid
	Sarcoma	Head & Neck
	Colon	Prostate
	Kidney	Adrenocortical
	Pancreas	
	Breast	Lobular Carcinoma
	Breast	Invasive Ductal Carcinoma

Details of TMA blocks available by cancer type:

Breast			Lung		Endometrium		Bladder		Ovary		Melanoma		Multi tumor	
258 total cases			31 Adeno total cases		45 total cases		23 total cases		61 total cases		41 total cases		116 total cases	
TMA blocks created			21 SCC total cases		TMA blocks created		TMA blocks created		TMA blocks created		TMA blocks created		TMA blocks created	
Group 1	1-1	200 cores	Adeno	1	1	237 cores	1	47 cores	1-1	154 cores	1	55 cores	1	222 cores
	1-2	200 cores	SCC	1					1-2	194 cores				
Group 2	2-1	198 cores												
	2-2	191 cores												
Group 3	3-1	193 cores												
	3-2	190 cores												

The TMAs are comprised of tumor, normal and metastatic disease (when applicable) from selected areas of the clinical paraffin blocks and placed into a new recipient block. A template (layout grid) will be provided for reference and orientation purposes. The template (and block) contains up to 4 cores per case (de-identified) and is unique to its corresponding block. An H&E image of the corresponding block will be provided. An extra slide will not be cut and stained. Any custom annotation or honest brokering can be provided. Please refer to the table below for pricing.

PTTR Price Table	
1 paraffin section	\$150.00 per slide
Template & H&E image	Included
Custom Annotation / Honest Broker	\$40.00 per hour (1 hour minimum)

To request slides from one of the arrays listed above, please follow the instructions below.

- 1) The PI or designee must go online to the Tissue Bank Project Management Tool at <https://pathapps.upmc.com/Applications/pathapps/bioTrack/>
- 2) Enter all necessary information as well as uploading any pertinent documents.
 - a. All requests must have prior IRB approval. Exempt protocol and approval letter must be submitted with the online request.
 - b. Reference TMA request in the summary under Request Details
 - c. Select **UPCI\CTSI TMA** as the request type
 - d. A completed RH request form <http://www.tissuebank.pitt.edu/forms/>
 - i. The “Description of Work Needed” section must indicate the number of slides requested, and staining (IHC) to be performed.
 - ii. Any special notations should be documented on the form, i.e. dipping of slides for preservation.
- 3) The Project Manager will review the request and uploaded documents entered into the tool and contact the PI if there are any issues.
- 4) The Project Manager will forward the request and associated documentation to the PTTR Tissue Utilization Committee for approval.
- 5) The Project Manager will assign the project to the appropriate Research Histology personnel for preparation and distribution of the requested slides.
- 6) An email will be sent to the researcher upon completion.

Please remember to cite the resource in your grants and publications: The Tissue and Research Pathology Services/Health Sciences Tissue Bank receives funding from the National Institutes of Health through Grant Number UL1TR000005 and P30CA047904.

Please [click here](#) for information regarding our other TMA services as well as our Research Histology & IHC services.