

# CCSS Biospecimen Update

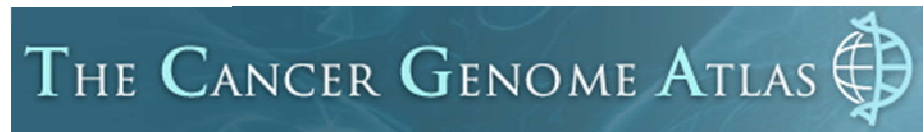
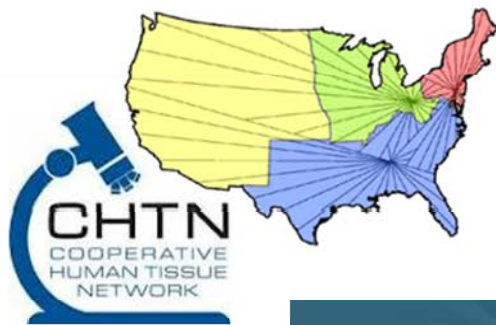


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# CCSS Biospecimen Repository Goals

- Maintain surgical pathology material submitted to CCSS for use in future research
  - Optimize storage conditions
  - Manage inventory to improve clarity and accessibility to CCSS investigators

# Projects/Banks Supported by the Biopathology Center (BPC) at NCH



**ALCHEMIST**

**Exceptional Responders**

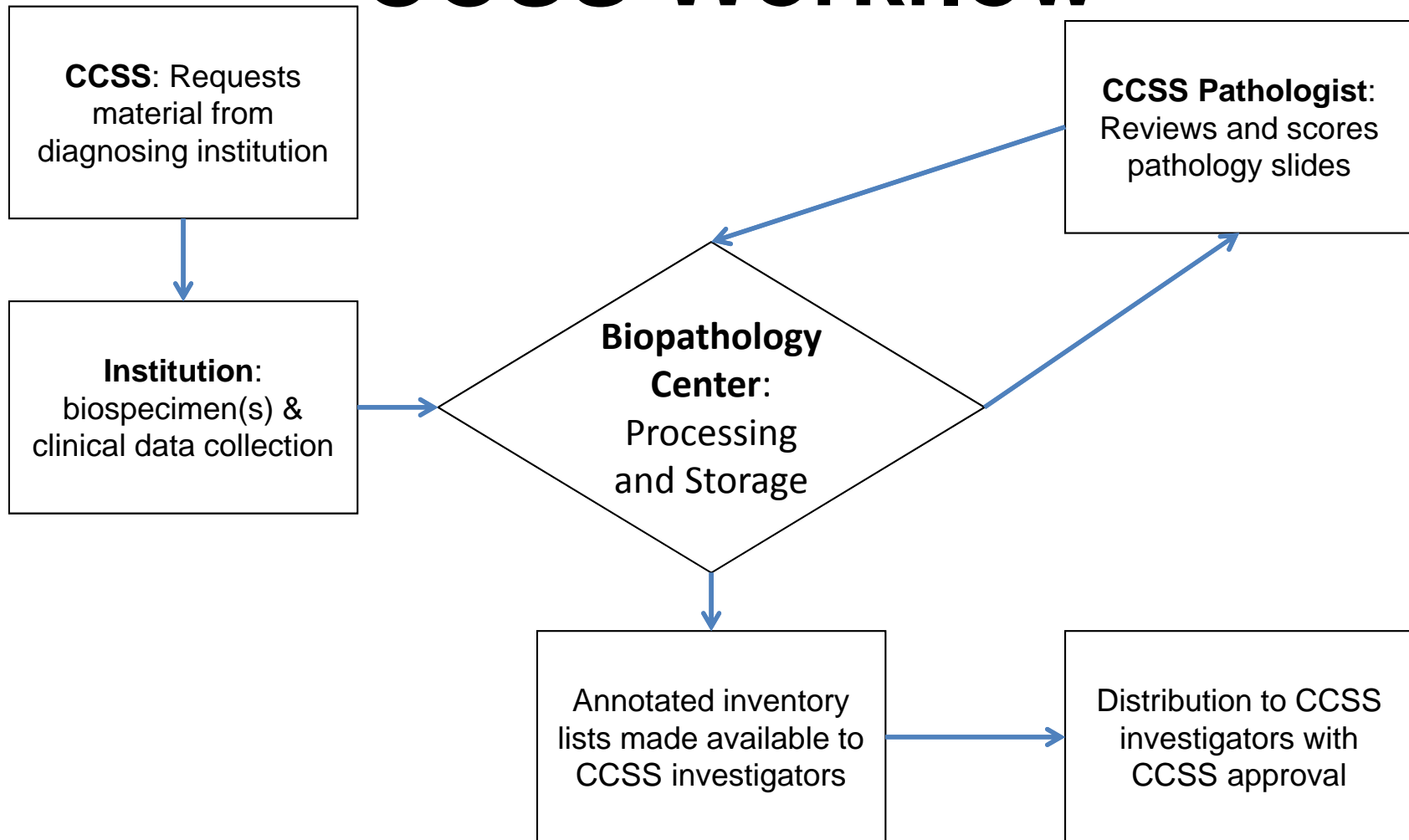


# Scope NCH BPC of Activities

- >4 million biospecimens in storage
- >50,000 specimens distributed every year to academic and commercial researchers across the US and overseas
- Close to 1,000 biospecimens received everyday from >500 national and international institutions
- Accredited by the *College of American Pathologists Biorepository Accreditation Program (CAP BAP)*
- Involved in scientific publications (including biospecimen processing, banking, and regulatory issues)



# CCSS Workflow



# CCSS Inventory

<b>Distribution of Biologic Material Available for Subsequent Neoplasms</b>												
SMN	Total case reported	Total with path reports	# with host tissue			Host tissue (any kind) and MRAF data	Total with MRAF data	Total with SMN tissue	Number of Cases with Tissue Type			
			Buccal cells	Oragene	Blood				H&E Slides	Unstained Slides	Scrolls	Blocks
Breast	486	309	246	257	216	344	468	160	145	103	28	49
Meningioma*	395	179	210	236	161	293	369	52	50	42	12	19
Other CNS	130	66	29	28	18	38	126	19	13	16	1	4
Thyroid	287	140	122	171	131	213	280	77	74	65	25	22
Sarcoma	117	75	40	38	33	55	109	20	17	19	4	3
Leukemia	55	24	10	11	7	14	49	5	5	4	0	1
Bone	55	38	11	9	10	17	47	1	1	1	0	1
Melanoma	70	37	29	36	27	48	68	10	9	9	2	1
Lymphoma	61	34	18	24	19	31	57	8	7	6	1	2
Renal Cell	48	25	23	25	15	28	45	4	4	4	0	1
Other Carcinoma	249	125	106	119	73	150	242	49	48	32	3	18
NMSC*	3,632	1,626	1,920	2,160	950	2,669	3,384	5	5	3	0	1
All Other	61	21	22	20	13	28	56	9	8	6	0	1
<b>TOTALS</b>	<b>5,646</b>	<b>2,699</b>	<b>2,786</b>	<b>3,134</b>	<b>1,673</b>	<b>3,928</b>	<b>5,300</b>	<b>419</b>	<b>386</b>	<b>310</b>	<b>76</b>	<b>123</b>

# CCSS Inventory Breakdown

	H&E Slides	Unstained Slides	Scrolls	Blocks
Cases	386	310	76	123



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	H&E Slides	Unstained Slides	Scrolls	Blocks
Cases	386	310	76	123
Total Number of Items	1,115	8,262	170	375

# CCSS Inventory Breakdown

	H&E Slides	Unstained	Scrolls	Blocks	
Total Number of Items	1,115	8,262	170	375	
Breast	369	2,219	49	112	
Meningioma	147	1,049	31	50	
Other CNS	26	526	7	6	
Thyroid	208	1720	37	46	
Sarcoma	42	442	10	4	
Leukemia	32	185	0	2	
Bone	4	79	0	1	
Melanoma	11	222	2	2	
Lymphoma	14	145	1	8	
Renal Cell	6	69	0	1	
..... Other Carcinoma	159	884	6	82	.....
NMSC	20	60	0	1	
All Other	19	277	1	2	

# Planned Inventory Annotation

CCSS ID	Block	Diagnosis	Area Tumor (sq mm)	Area Non-tumor (sq mm)	Area Necrosis (sq mm)
12345678	S15-123 A1	Papillary Thyroid cancer	250	4	0
12345678	S15-123 A2	Papillary Thyroid cancer	12	4	0
12345678	S15-123 A3	Papillary Thyroid cancer	15	100	10
12345678	S15-123 A4	Papillary Thyroid cancer	350	50	0
12345678	S15-123 A5	Papillary Thyroid cancer	235	15	0

# Final Inventory List

- CCSS ID
- Surgical Pathology Case number
- Diagnosis
- Quantity of H&E stained slides, unstained slides, scrolls and blocks available
- Scoring of tumor, non-tumor and necrosis corresponding to each H&E

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