

CCSS Biospecimen and Pathology Update

A report from the Childhood Cancer Survivor Study

Michael A. Arnold, Miriam Conces



CCSS Pathology Goals

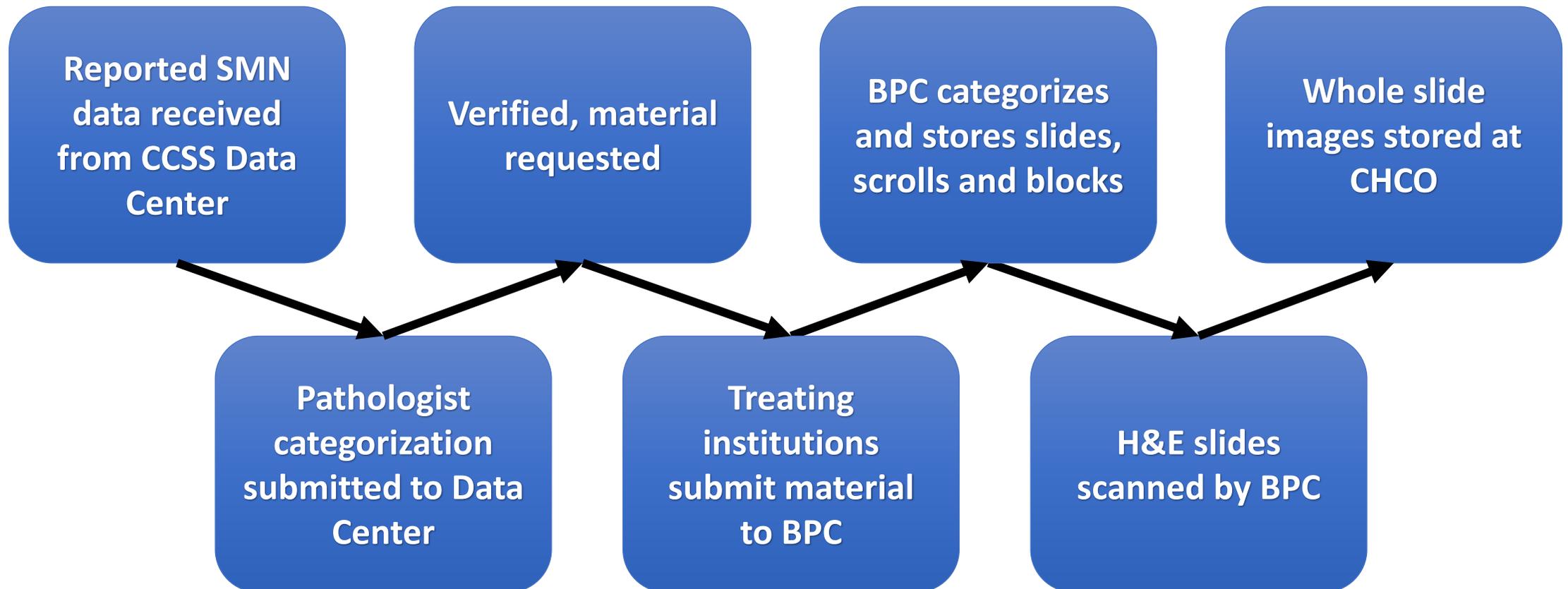
- Review reports of secondary malignancies
- Maintain surgical pathology material submitted to CCSS for use in future research
- Optimize storage conditions
- Manage inventory to improve clarity and accessibility to CCSS investigators
- Maintain whole slide images of banked specimens

Dr. Miriam Conces

- Pediatric pathologist at Nationwide Children's Hospital
- Associate Professor
- Residency at University of Virginia Medical Center
- Fellowship at NCH
- Research interests include pediatric gastrointestinal pathology and renal pathology



CCSS Pathology Workflow



Pathology Review History

- 2017: 748 conditions reviewed
- 2018: 475 conditions reviewed
- 2019: 1091 conditions reviewed
- 2020: 449 conditions reviewed
- 2021: 1026 conditions reviewed
- 2022: 857 conditions reviewed

Inventory Data

| SMN | Total with SMN Tissue | Number of Cases with SMN Tissue by Type | | | |
|-----------------|-----------------------|---|------------------|---------|--------|
| | | H&E Slides | Unstained Slides | Scrolls | Blocks |
| Breast | 253 | 250 | 141 | 44 | 51 |
| Meningioma | 130 | 130 | 81 | 16 | 23 |
| Other CNS | 39 | 38 | 25 | 6 | 7 |
| Thyroid | 131 | 130 | 99 | 40 | 23 |
| Sarcoma | 40 | 39 | 33 | 15 | 9 |
| Leukemia | 12 | 12 | 10 | 3 | 2 |
| Bone | 12 | 12 | 10 | 1 | 3 |
| Melanoma | 31 | 31 | 18 | 1 | 10 |
| Lymphoma | 15 | 14 | 10 | 5 | 4 |
| Renal Cell | 22 | 22 | 17 | 6 | 7 |
| Other Carcinoma | 138 | 138 | 73 | 24 | 66 |
| All Other | 89 | 56 | 36 | 40 | 22 |
| TOTALS | 912 | 872 | 553 | 201 | 227 |

> 1.5 TB of whole slide images





Zoom

Fit

2X

4X

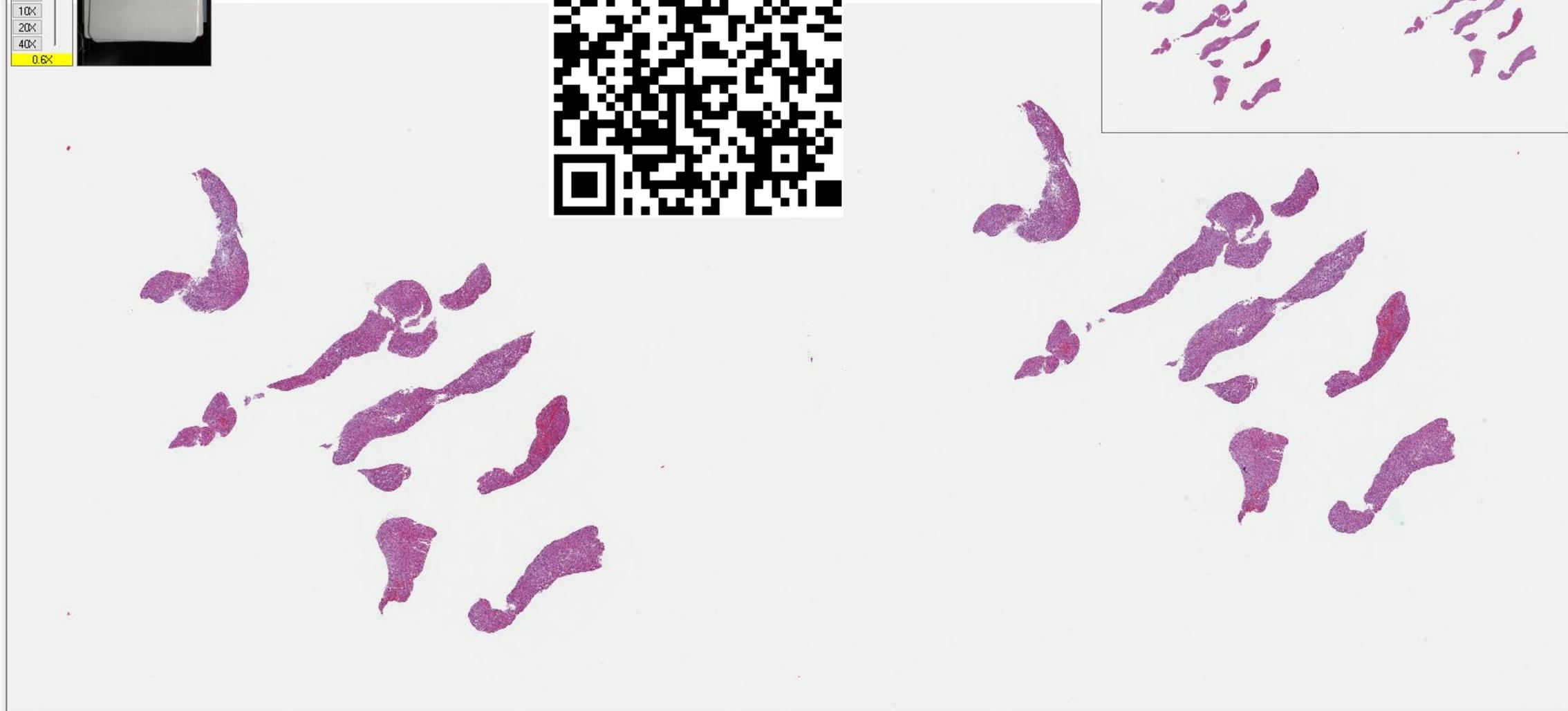
8X

10X

20X

40X

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Future Goals

- Compile inventory data with pathologist review data
- Review feasibility and project request with shared whole slide images

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