CURRICULUM VITAE

Sue Hammond, M.D.
(Phyllis M. Sue Hammond Innes)

Nationwide Children's Hospital
700 Children's Drive
Columbus, OH 43205

College Education:

B.S.	1971-1975	Stanford University, Stanford, California
M.S.	1977-1978	Harvard University, School of Public Health, Boston, Massachusetts
M.D.	1978-1982	University of California, Davis, California

Graduate Medical Experience:

1982-1986	Residency in Anatomic and Clinical Pathology, Department of Pathology (Donald A. Senhauser, M.D., Chairman), Ohio State University Hospitals and School of Medicine, Columbus, OH
1985-1986	Chief Resident in Pathology, Department of Pathology, Ohio State University Hospitals
1986-1987	American Cancer Society Fellow in Surgical Pathology, Ohio State University Hospitals
1987-2000	Clinical Assistant Professor, Department of Pathology, The Ohio State University College of Medicine and Public Health
2000-2007	Clinical Associate Professor, Department of Pathology, The Ohio State University College of Medicine and Public Health
2007-present	Clinical Professor, Department of Pathology, the Ohio State University College of Medicine and Public Health
1987-1991	University Pathology Services The Ohio State University Hospitals, Columbus, Ohio and Memorial Hospital of Union County, Marysville, Ohio
1990-1991	Medical Director of Hospital Laboratory, Memorial Hospital of Union County
1991-1992	Fellowship in Pediatric Pathology, Department of Laboratory Medicine (Stephen J. Qualman, M.D., Chief), Children's Hospital, Columbus, Ohio
1992-1993	Staff Pathologist, Department of Laboratory Medicine (Stephen J. Qualman, M.D., Chief) Children's Hospital, Columbus, Ohio

1993-2004	Chief, Section of Anatomic Pathology, Department of Laboratory Medicine (Stephen J. Qualman, M.D., Chief), Children's Hospital, Columbus, Ohio
2004-2008	Vice-Chair for Clinical Pathology, Department of Laboratory Medicine, Children's Hospital, Columbus, Ohio
2007-2008	Interim Chief, Department of Laboratory Medicine, Nationwide Children's Hospital, Columbus, Ohio
2008-present	Chief, Department of Pathology and Laboratory Medicine, Nationwide Children's Hospital, Columbus, Ohio
1994-2001	Alternate, Children's Cancer Group, Pathology Reviewer, Intergroup Rhabdomyosarcoma Study Group
2002- present	Institutional Reviewer, Children's Oncology Group, Soft Tissue Sarcoma Group
1995-present	Pathology Reviewer for Second Malignancies in the Childhood Cancer Survivors Study, Leslie L Robison Ph.D. P.I., St. Jude Children's Research Hospital
1999-2004	Director, Fellowship in Pediatric Pathology, Children's Hospital, Columbus, Ohio
2005-2007	Member, SENTAG Project Hope Basrah Children's Hospital

Certification:

Ohio State Medical License, 54448

Diplomat of the American Board of Pathology
Anatomic and Clinical Pathology 1987
Pediatric Pathology 1997

Professional Societies:

College of American Pathologists, 1983
Ohio Society of Pathologists, 1987
Central Ohio Society of Pathologists, 1987
Society for Pediatric Pathology, 1993

2004-2006 Chair, Planning Committee 2006 Interim Meeting, Columbus, OH Oct 5-8.
2007-2011 Council member-at-large

Publications:

1. Stux S, **Hammond P**, Fitzpatrick D, Dubey D, Yunis E: Use of monocytes in HLA-A, B, C and DR typings. Tissue Antigens. Feb 15(2):152-60, 1980.

2. **Hammond S**, Lott JA: An Unusual CK Pattern in MI: Marker of Autoimmune Disease? Diagnostic Medicine, 1985; Vol 8, No. 1:8-9.

3. Roberts WH, **Hammond S**: Histochemistry of Sulfhydryls in Acute Myocardial Infarction. Virchows Archiv. 407:289-294, 1985.

4. **Hammond S**, Rofagha-Keyhani S, O'Toole RV: Statistical Analysis of Breast FNA Cytology. Acta Cytologica 31:276-280, 1985.

5. **Hammond S**, Roberts WH, Thesing JA, Caldwell JH, Clausen KP: In situ Hybridization for Cytomegalovirus in Colon Biopsies. American Journal of Clinical Pathology. 1987.

6. Roberts WH, **Hammond S**, Sneddon JM, Thesing J, Caldwell JH, Clausen KP: In-situ DNA Hybridization for Cytomegalovirus in Colonoscopic Biopsies. Archives of Pathology and Laboratory Medicine 112:1106-1109, 1988.

7. Potter CJ, Fishbein M, **Hammond S,** McCoy K, Qualman S: Can the Histologic Changes of Cystic Fibrosis Be Predicted by Clinical Criteria? Journal of Pediatric Gastroenterology and Nutrition 25:32-36, 1997.

8. Daniels CJ, Schutte DA**, Hammond S**, Franklin WH. Acute Pulmonary Toxicity in an Infant from Intravenous Amiodarone. American Journal of Cardiology 80:1113-1116, 1997.

9. Bethel CA, Mutabagani K, **Hammond S**, Besner GE, Caniano DA, Cooney DR. Nonteratomatous Germ Cell Tumors in Children. Journal of Pediatric Surgery 33:1126-1127, 1998.

10. Binkovitz LA, Allen E, Bloom D, Long F, **Hammond S**, Buonomo C, Donnelly LF. Atypical Presentation of Clostridium difficile Colitis in Patients with Cystic Fibrosis. American Journal of Roentgenology 172(2):517-521, 1999.

11. Turman MA, **Hammond S**, Grovas A, Rauck AM. Possible Association of Retinoic Acid with Bone Marrow Transplant Nephropathy. Pediatric Nephrology 13(9):755-758, 1999.

12. Neglia JP, Friedman DL, Yasui Y, Mertens AC, **Hammond S**, Stovall M, Donaldson SS, Meadows AT, Robison LL. Second Malignant Neoplasms in Five-Year Survivors of Childhood Cancer: Childhood Cancer Survivor Study. Journal of the National Cancer Institute 93:618-29, 2001.

13. Pascasio J, **Hammond S**, Qualman S. Recognition of Crohn Disease on Incidental Gastric Biopsy in Childhood. Pediatric and Developmental Pathology 6:209-214, 2003.

14. Wynn TT, Heerema NA, **Hammond S**, Ranalli M, Kahwash SB. Acute Lymphoblastic Leukemia with Hypereosinophilia: Report of a Case with 5q Deletion and Review of the Literature. Pediatric and Developmental Pathology 6:558-563, 2003.

15. Fangusaro J, Klopfenstein K, Groner J, **Hammond S**, Altura RA. Inflammatory myofibroblastic tumor following hematopoietic stem cell transplantation: report of two pediatric cases. Bone Marrow Transplantation 33:103-7, 2004.

16. Arca MJ, Gates RL, Groner JI, **Hammond S** and Caniano DA. Clinical manifestations of appendiceal pinworms in children: An institutional experience and review of the literature. Pediatric Surgery International 20: 372-375, 2004.

17. Kenney LB, Yasui Y, Inskip PD**, Hammond S**, Neglia JP, Mertens AC, Meadows AT, Friedman D, Robison LL and Diller L. Breast cancer after childhood cancer: a report from the Childhood Cancer Survivor Study. Annuals of Internal Medicine 141: 590-597, 2004.

18. Johnson TR, Mertz SE, Gitiban N, **Hammond S,** LeGallo R, Durbin RK, Durbin JE. Role for
Innate IFNs in Determining Respiratory Syncytial Virus Immunopathology. Journal of Immunology 174(11):7234-7241, 2005.

19. Perkins JL, Liu Y, Mitby PA, Neglia JP, **Hammond S,** Stovall M, Meadows AT, Hutchinson R, Dreyer ZE, Robison LL, Mertens AC. Nonmelanoma Skin Cancer in Survivors of Childhood and Adolescent Cancer: A Report from the Childhood Cancer Survivor Study. Journal of Clinical Oncology 23(16):3733-3741, 2005.

20. Sigurdson AJ, Ronckers CM, Mertens AC, Stovall M, Smith SA, Lui Y, Berkow RL, **Hammond S,** Neglia JP, Meadows AT, Sklar CA, Robison LL, Inskip PD. Primary Thyroid Cancer after a First Tumour in Childhood (the Childhood Cancer Survivor Study): a Nested Case-control Study. Lancet 365(9476):2014-2023, 2005.

21. Nowicki PT, Dunaway DJ, Nankervis CA, Giannone PJ, Reber KM, **Hammond S,** Besner GE,
Caniano DA. Endothelin-1 in Human Intestine Resected for Necrotizing Enterocolitis. Journal

of Pediatrics 146:805-810, 2005.

22. Michalsky MP, Arca MJ, Groenman F, **Hammond S**, Tibboel D, Caniano DA. Alveolar Capillary Dysplasia: a Logical Approach to a Fatal Disease. Journal of Pediatric Surgery _____40(7):1100-5, 2005.

23. Bassal M, Mertens AC, Taylor L, Neglia JP, Greffe BS, **Hammond S**, Ronckers CM, Friedman DL, Stovall M, Yasui YY, Robison LL, Meadows AT, Kadan-Lottick NS. Risk of Selected Subsequent Carcinomas in Survivors of Childhood Cancer: a Report from the Childhood Cancer Survivor Study. Journal of Clinical Oncology 24(3):476-83, 2006.

24. Caldas H, Jaynes FO, Boyer MW, **Hammond S**, Altura RA. Survivin and Granzyme B-Induced Apoptosis, a Novel Anticancer Therapy. Molecular Cancer Therapy 5(3):693-703, 2006.

25. Nowicki PT, Reber KM, Giannone PJ, Nankervis CA, **Hammond S,** Besner GE, Caniano DA.
Intestinal O2 Consumption in Necrotizing Enterocolitis: Role of Nitric Oxide. Pediatric Research 59(4):500-505, 2006.

26. Rocourt DV, Shiels WE, **Hammond S**, Besner GE. Contemporary Management of Benign Hepatic Adenoma Using Percutaneous Radiofrequency Ablation. Journal_of_Pediatric_Surgery 41(6):1149-52, 2006.

27. Martinez-Sobrido L, Gitiban N, Fernanez-Sesma A, Cros J, Mertz SE, Jewell NA, **Hammond S**,
Flano E, Durbin RK, Garcia-Sastre A, Durbin JE. Protecting Against Respiratory Syncytial Virus by a Recombinant Newcastle Disease Virus Vector. Journal of Virology 80(3):1130-9, Feb 2006.

28. Arndt CA, **Hammond S**, Rodeberg D, Qualman S. Significance of persistent mature rhabdomyoblasts in bladder/prostate rhabdomyosarcoma: Results from IRS IV. Journal of Pediatric Hematology Oncology 28(9):563-7, Sep 2006.

29. Ronckers CM, Sigurdson AJ, Stovall M, Smith SA, Mertens AC, Liu Y, **Hammond S**, Land CE, Neglia JP, Donaldson SS, Meadows AT, Sklar CA, Robison LL, Inskip PD. Thyroid Cancer in
Childhood Cancer Survivors: a Detailed Evaluation of Radiation Dose Response and its Modifiers. Radiation Research 166(4):618-28, Oct 2006.

30. Neglia JP, Robison LL, Stovall M, Liu Y, Packer RJ, **Hammond S**, Yasui Y, Kasper CE, Mertens AC, Donaldson SS, Meadows AT, Inskip PD. New Primary Neoplasms of the

Central Nervous System in Survivors of Childhood Cancer: a Report from the Childhood Cancer Survivor Study. Journal of the National Cancer Institute 98(21):1528-37, Nov 2006.

31. Nowicki PT, Caniano DA, **Hammond S**, Giannone PJ, Besner GE, Reber KM, Nankervis CA.
Endothelial Nitric Oxide Synthase in Human Intestine Resected for Necrotizing Enterocolitis. Journal of Pediatrics 150(1):40-5, Jan 2007.

32. Henderson TO, Whitton J, Stovall M, Mertens AC, Mitby P, Friedman D, Strong LC, **Hammond**
S, Neglia JP, Meadows AT, Robison L, Diller L. Secondary sarcomas in childhood cancer survivors: a report form the Childhood Cancer Survivor Study. Journal of the National Cancer Institute 99(4):300-8, Feb 21 2007.

33. **Hammond S**, Chenever E, Durbin JE. Respiratory Virus Infection in Infants and Children. Pediatric and Developmental Pathology 10:172-180, Mar 2007.

34. Dinu I, Liu Y, Leisenring W, Mertens AC, Neglia JP, **Hammond S**, Robison LL, Yasui Y. Prediction of Second Malignant Neoplasm Incidence in a Large Cohort of Long-term Survivors of Childhood Cancers. Pediatric Blood and Cancer [Epub ahead of print] Aug 2007.

35. Yeager ND, **Hammond S**, Mahan J, Davis JT, Adler B. Unique Diagnostic Features and Successful Management of a Patient with Disseminated Lymphangiomatosis and Chylothorax. Journal of Pediatric Hematology and Oncology 30(1):66-69, Jan 2008.

36. Bluhm EC, Ronckers C, Hayashi RJ, Neglia JP, Mertens AC, Stovall M, Meadows AT, Mitby PA, Whitton JA, **Hammond S**, Barker JD, Donaldson SS, Robison LL, Inskip PD. Cause-specific mortality and second cancer incidence after non-Hodgkin lymphoma: a report from the Childhood Cancer Survivor Study. Blood 111(8):4014-21, Apr 15, 2008.

37. Dinu I, Liu Y, Leisenring W, Mertens AC, Neglia JP, **Hammond S**, Robison LL, Yasui Y. Prediction of second malignant neoplasm incidence in a large cohort of long-term survivors of childhood cancers. Pediatr Blood Cancer 50(5):1026-31, May, 2008 .

38. Arora A, Caniano DA, **Hammond S**, Besner GE. Inversion appendectomy acting as a lead point for intussusception. Pediatr Surg Int 24(11):1261-4, Nov 2008.

39. Meadows AT, Friedman DL, Neglia JP, Mertens AC, Donaldson SS, Stovall M, **Hammond S,**

Yasui Y, Inskip PD. Second Neoplasms in Survivors of Childhood Cancer: Findings from the Childhood Cancer Survivor Study Cohort. Journal of Clinical Oncology 27(14):2356-62 May 2009. Epub Mar 2, 2009.

40. Otabor IA, Abdessalam SF, Erdman SH, **Hammond S**, Besner GE. Gastric outlet obstruction due to adenocarcinoma in a patient with Ataxia-Telangiectasia syndrome: a case report and review of the literature. World Journal of Surgical Oncology 7(1):29 Epub Mar 12, 2009.

41. Robison LL, Armstrong GT, Boice JD, Chow EJ, Davies SM, Donaldson SS, Green DM, **Hammond S**, Meadows AT, Mertens AC, Mulvihill JJ, Nathan PC, Neglia JP, Packer RJ, Rajaraman P, Sklar CA, Stovall M, Strong LC, Yasui Y, Zeltzer LK. The Childhood Cancer Survivor Study: a National Cancer Institute-supported resource for outcomes and intervention research. Journal of Clinical Oncology 27(14):2308-18 May 2009.

42. Inskip PD, Robison LL, Stovall M, Smith SA, **Hammond S**, Mertens AC, Whitton JA, Diller L, Kenney L, Donaldson SS, Meadows AT, Neglia JP. Radiation dose and breast cancer risk in the Childhood Cancer Survivor Study. Journal of Clinical Oncology 27(24):3901-7, Aug 2009.

43. Barr FG, Duan F, Smith LM, Gustafson D, Pitts M, **Hammond S**, Gastier-Foster JM. Genomic and clinical analyses of 2p24 and 12q13-q14 amplification in alveolar rhabdomyosarcoma: a report from the Children's Oncology Group. Genes, Chromosomes and Cancer 48(8):661-72. Aug 2009.

44. Mast KJ, **Hammond S**, Qualman SJ, Kahwash SB. The coinheritance of beta- and alpha-thalassemia: a review of one patient and her family. Laboratory Hematology 15(3):30-3 2009.

45. Wasilewski-Masker K, Liu Q, Yasui Y, Leisenring W, Meacham LR, **Hammond S**, Meadows AT, Robison LL, Mertens AC. Late recurrence in pediatric cancer: a report from the Childhood Cancer Survivor Study. Journal of the National Cancer Institute 101(24):1709-20 Dec 2009.

46. Fernandez K, Serinagaoglu Y, **Hammond S**, Martin LT, Martin PT. Mice lacking dystrophin or alpha sarcoglycan spontaneously develop embryonal rhabdomyosarcoma with cancer-associated p53 mutations and alternatively spliced or mutant Mdm2 transcripts. American Journal of Pathology 176(1):416-34 Jan 2010.

47. Ness KK, Li C, Mitby PA, Radloff GA, Mertens AC, Davies SM, **Hammond S**, Armstrong GT, Robison LL. Characteristics of responders to a request for a buccal cell specimen among

survivors of childhood cancer and their siblings. Pediatric Blood and Cancer 55(1):165-70 July 2010.

48. Almarzooqi S, **Hammond S**, Kahwash SB. Hodgkin lymphoma in a thymic cyst: report of a case with multiple secondary neoplasms. Case Report Medicine 2010:795037. Epub 2010 June 2.

49. Friedman DL, Whitton J, Leisenring W, Mertens AC, **Hammond S**, Stovall M, Donaldson SS, Meadows AT, Robison LL, Neglia JP. Subsequent neoplasms in 5-year survivors of childhood cancer: the Childhood Cancer Survivor Study. Journal of the National Cancer Institute 102(14): 1083-95. Epub 2010 July 15.

50. Ginsberg JP, Goodman P, Leisenring W, Ness KK, Meyers PA, Wolden SL, Smith SM, Stovall M, **Hammond S**, Robison LL, Oeffinger KC. Long-term survivors of childhood Ewing sarcoma: report from the Childhood Cancer Survivor Study. Journal of the National Cancer Institute 102(16):1272-83. Aug 2010.

51. Bhatti P, Veiga LH, Ronckers CX, Sigurdson AJ, Smith SA, Stovall M, Weathers R, Leisenring W, Mertens AC, **Hammond S**, Friedman DL, Neglia JP, Meadows AT, Donaldson SS, Sklar CA, Robison LL, Inskip PD. Risk of second primary thyroid cancer after radiotherapy for a childhood cancer in a large cohort study: an update from the Childhood Cancer Survivor Study. Radiation Research 174(6):741-52. Dec 2010.

Abstract Presentations:

1. Hammond S, Rofagha-Keyhani S, O'Toole RV: Statistical Analysis of Breast FNA Cytology. Presented at the 33rd Annual Scientific Meeting of the American Society of Cytology, New York City, November 1985.

2. Hammond S, Roberts WH, Thesing JA, Caldwell JH, Clausen KP: In situ Hybridization for Cytomegalovirus in Colon Biopsies. Presented at the 1987 ASCP/CAP Spring National Meeting, San Francisco, March 28-April 2, 1987.

3. Hammond S and Hamoudi AC: A New Glycogen Storage Disease? Report of an Autopsy Case. Presented at the Interim Meeting of the Society for Pediatric Pathology, Octobr 1-4, 1992, Louisville, Kentucky.

4. Hammond S, Fishbein M, Qualman S: Histologic Criteria for Differential Diagnosis of Colitis in Pediatric Patients. Presented at the Annual Meeting of the Society for Pediatric Pathology, March 12-13, 1994, San Francisco, California.

5. Hammond S, Qualman S, Neglia J, Meadows A, Robinson L: Assessment and Validation of Second Neoplasms in the Childhood Cancer Study. Presented at the Annual Meeting of the Society for Pediatric Pathology. Feb/March 1997.

6. Hammond S, Qualman S, Neglia J, Meadows A, Robison L. Mucoepidermoid Carcinoma of the Salivary Gland as a Second Malignant Neoplasm in the Childhood Cancer Survivor Study. Presented at the Annual Meeting of the Society for Pediatric Pathology. March 1998.

7. Neglia J, Mertens A, Yasui Y, Hammond S, Friedman D, Donaldson S, Meadows A, Robison L. Risk Factors for Second Primary Neoplasms in Long-Term Survivors of Childhood Cancer – Initial Analysis of the Childhood Cancer Survivor Study. Presented at the International Society of Paediatric Oncology September 1999.

8. Hammond S, Neglia J, Qualman S, Mertens A, Yasui Y, Meadows A, Robison L. Tissue Archive of Second Malignant Neoplasms in the Childhood Cancer Survivor Study. Presented at the Pediatric Academic Societies Meeting April/May 2001.

9. Neglia J, Yasui Y, Mertens A, Friedman D, Hammond S, Donaldson S, Stovall M, Meadows A, Robison L. Second Primary Neoplasms of the Central Nervous System in Five Year Survivors of Childhood Cancer – a Report from the Childhood Cancer Survivor Study. Presented at the American Society of Clinical Oncology May 2001.

10. Sigurdson A, Ronckers C, Mertens A, Sklar C, Stovall M, Smith S, Liu Y, Hammond S, Berkow R, Neglia J, Meadows A, Robison L, Inskip P. Second primary thyroid cancer after a first childhood malignancy: a report from the childhood Cancer survivor Study. American Association for Cancer Research. 2004.

11. Mertens AC, Neglia JP, Hammond S, Perkins JL, Liu Y, and Robison LL. Incidence rates of keratinocyte carcinoma in survivors of childhood and adolescent cancer: a report from the Childhood Cancer Survivor Study. Presented at the 66th Society for Investigative Dermatology Annual Meeting in St Louis, May 2005.

12. Henderson T, Whitton J, Hammond S, Stovall M, Meadows A, Neglia J, Robison L, Cook F, Diller L. Sarcomas as a subsequent malignancy in survivors of pediatric malignancy: the Childhood Cancer Survivor Study. American society of Clinical Oncology, May 2005.

13. Arndt CA, Hammond S, Rodeberg DA and Qualman SJ. Significance of persistent rhabdomyoblasts in bladder prostate rhabdomyosarcoma: Results from Intergroup Rhabdomyosarcoma Study IV. Presented at the International Sarcoma Meeting Stuttgart (SMS) 2005 Congress, Stuttgart, Germany, June 2005.

Current Grant Support

U01 CA55727 (Les Robison PhD) 12/01/10 – 11/30/11 10%
St. Jude Children's Research Hospital/NIH/NCI $29,999
Childhood Cancer Survivor Study

R01 DK065306 (Gail Besner MD) 07/01/07 – 06/30/11 3% WOC
NIH/NIDDK $222,500
Children's Research Institute, Columbus, OH
"Role of NO and Endothelin in Human NEC"

U01-CA54021 (Nilsa C. Ramirez MD) 07/01/08 – 03/31/13 1%
NIH/NCI $1,044,040
"Pediatric CHTN: Pediatric Cooperative Human Tissue Network

(Julie Gastier-Foster PhD) 03/01/07 – 02/29/12 1%
St. Baldrick's $
COG Neuroblastoma Reference Laboratory

(Julie Gastier-Foster PhD) 09/24/10-03/23/12 10%
NIH/NCI
Biospecimen Core Resource for the
Cancer Genome Atlas Project