



## AJIT ALLES, PhD, MD PEDIATRIC PATHOLOGY

### BOARD CERTIFICATIONS

- Anatomic & Clinical Pathology
- Pediatric Pathology

### FELLOWSHIP

- Pediatric Pathology  
The Children's Hospital and Harvard  
Medical School  
Boston, MA

### RESIDENCY

- Anatomic and Clinical Pathology  
Massachusetts General Hospital and  
Harvard Medical School  
Boston, MA

### MEDICAL/DOCTORATE DEGREE

- Faculty of Medicine, University of  
Colombo  
Colombo, Sri Lanka

### RESEARCH/PHD DEGREE

- Anatomy and Cell Biology  
Medical University of South Carolina  
Charleston, SC

### HOSPITAL AFFILIATIONS

- Kootenai Health
- Providence Holy Family Hospital
- Providence Sacred Heart Medical  
Center

### PROFESSIONAL SOCIETIES & ASSOCIATIONS

- College of American Pathologists
- Society for Pediatric Pathology

Dr. Alles joined Incyte in 2016. He is board certified in Anatomic and Clinical Pathology with subspecialty certification in Pediatric Pathology. He received his initial medical training at the Faculty of Medicine, University of Colombo in Sri Lanka, the second oldest medical school in South Asia.

After completing his medical degree and internships, Dr. Alles pursued his research interests, completing a PhD in Anatomy and Cell Biology at the Medical University of South Carolina in Charleston. He then served as a postdoctoral fellow and research scholar at the University of North Carolina at Chapel Hill.

Dr. Alles returned to clinical practice and completed a residency in Anatomic and Clinical Pathology at the Massachusetts General Hospital and Harvard Medical School. He followed his residency with a fellowship in Pediatric Pathology at Boston Children's Hospital and Harvard Medical School. During his time in Boston he had the opportunity to interact with and learn from some of the leaders in the field of pathology at the Massachusetts General Hospital, Brigham and Women's Hospital, and Boston Children's Hospital.

Dr. Alles comes to Incyte Diagnostics following two decades of practice as a pediatric pathologist at Cook Children's Medical Center in Fort Worth, Texas. During his time at Cook Children's he served as the interim director of the pathology department, directed the cellular apheresis service, established the flow cytometry laboratory, and functioned as the clinical consultant to the transfusion service. He was also an active member of hospital committees including the Internal

Review Board, where he served as interim chairman, the System Quality Improvement Committee and the Continuing Medical Education committee.

Dr. Alles' research interests include embryology, teratology and pathology. For a list of his publications please see his curriculum vitae (attach link). Apart from his subspecialty interests in general pediatric pathology, Dr. Alles also has an interest in pediatric neuropathology and pediatric transfusion medicine.

Dr. Alles is passionate about teaching and has taught post-graduates, medical students and laboratorians throughout his career. He plans to continue teaching in Spokane.

Dr. Alles is an avid reader and gardener and loves to play and listen to music. He enjoys the environment in the inland northwest.

PRESENTATIONS & ABSTRACTS

- Invited speaker M.D. /PhD Program, University of Texas Medical School, Houston, TX, 1989.
- Invited conference participant "Retinoids and Teratogenesis: Molecular Mechanisms and Approaches", Conference sponsored by Hoffman La Roche, NY, 1989.
- Invited conference speaker "Programmed Cell Death Concepts and Mechanisms", Banbury Center, Cold Spring Harbor Laboratory, New York, April 16 19, 1990.
- Alles, A.J., Longtine, J. And Roberts, D.J. (1996) The incidence of Factor V Leiden in fetal thrombotic events. *Lab Invest* 76(1): 1P.
- Invited conference speaker FASEB Summer Research Conference "Retinoids", Saxton's River, Vermont, June 17-22, 1990.
- Invited speaker Society of Toxicology symposium entitled "Molecular Approaches to Understanding Retinoid Teratogenicity", Dallas, Texas, February 27, 1991.
- Invited speaker "Pediatric Congenital Heart Disease Symposium", sponsored by Cook Children's Medical Center, Fort Worth Texas, September 30, 2009
- Meinershagen, M. D., Carr, K., and Alles, A.J. (2002) Leukapheresis in a 3.3 Kg infant with congenital leukemia. *Ped Devel Path* 5(6):604.
- Murray, J.C., Honeycutt, J.H., Donahue, D.J., Head, H.W, Alles, A.J (2011) Congenital spinal canal tumors: a report of two infants with unusual neuroimaging and histopathology. *Society for NeuroOncology Annual Meeting*, 2011
- Alles, A.J., Fazel, A.R. and Dom, R.M. (1986) Lectin Binding Patterns in the Developing Retina. Annual Meeting of the Society for Complex Carbohydrates, Charleston, South Carolina.
- Alles, A.J. and Dom, R.M. (1986) Determining Neuronal Birthdate in the Facial Motor Nucleus Using a Monoclonal Antibody to 5bromodeoxyuridine. *Neuroscience Abstracts*, 12(2): 1121.
- Alles, A.J., Fazel, A.R., Spicer, S.S. and Dom, R.M. (1987) Detection of Glycoconjugates in the Developing Optic Vesicle. *Journal of Histochemistry and Cytochemistry*, 35(9): 1020.
- Alles, A.J., Fazel, A.R., Spicer, S.S. and Dom, R.M. (1987) Glycoconjugate Patterns in the Developing Retina. *Anatomical Record*, 218(1): 7a
- Alles, A.J., Sulik, K.K. and Sadler, T.W. (1988) A Comparative Study of Cultured and In Vivo Mouse Embryos Using Nile Blue Sulphate and Scanning Electron Microscopy. *Teratology* 37(5): 444.
- Rogers, J.M., Chernoff, N., Massaro, E.J., Zucker, R.M., Elstein, K.H., Alles, A.J. and Sulik, K.K. (1988) Cell Cycle Alterations and Cell Death in Cyclophosphamide Teratogenesis. *Journal of Cell Biology*, 107: 610a
- Alles, A.J. and Sulik, K.K. (1989) Phocomelia and Patterns of Programmed Cell Death. *Proceedings of the Greenwood Genetic Center* 8: 182
- Alles, A.J. and Sulik, K.K. (1989) Physiological Cell Death in the Pathogenesis of Retinoic Acid Induced Spina Bifida. *Teratology* 39(5): 439.
- Rogers, J.M., Chernoff, N., Francis, B.M., Elstein, K.H., Zucker, R.M., Alles, A.J., Sulik, K.K. and Massaro, E.J. (1989) Flow Cytometric Analysis of Cyclophosphamide (CP) Cytotoxicity in Mouse Limb Buds: Evidence of a Threshold? *Teratology*, 39(5): 475.
- Sulik, K.K., Alles, A.J., Chernoff, N., Rogers, J.M., Zucker, R.M. and Massaro, E.J. (1989) A Rapid Technique for Mapping Sites of Intense DNA Synthesis and Pattern of Teratogenic Vulnerability. *Teratology*, 39(5): 484.
- McCullen, B.K., Peiffer, R.L., Sulik, K.K., Alles, A.J. and Eifrig, D.E. (1990) Cyclophosphamide Induced Ocular Malformations in a Mouse Model. *Investigative Ophthalmology and Visual Science (Suppl)* 31: 57.
- Rogers, J.M., Francis, B.M., Sulik, K.K., Alles, A.J., Elstein, K.H., Zucker, R.M., Massaro, E.J., Rosen, M.B. and Chernoff, N. (1990) Cell Cycle Alterations, Cell Death and Teratogenesis Induced in Mouse Embryos by 2deoxy5azacytidine (DAZA). *Teratology*, 41: 587.
- Sulik, K.K., and Alles, A.J. (1989) Experimental Retinoid Teratogenesis: A Review and What's New. *Proceedings of the Greenwood Genetic Center*, 9: 68
- Zakeri, Z., Alles, A.J., Xia, P. Yesner, L., Kodamon, N. and Lockshin, R. (1990) Difficulty of Recognizing, and Potential Lack of Early DNA Degradation in Programmed Cell Death in Mice and Insects. *Cell Biology*
- Zakeri, Z., Sulik, K. and Alles, A.J. (1990) Mechanism of Cell Death in Limb Development. *Third European Congress on Cell Biology. Cell Biol Int Rep*, 14 Suppl: 171
- Sulik, K.K., Alles, A.J., Thayer, J.M., Kotch, L.E. and Gage, J.C. (1990) Sensitive Developmental Stages for the Genesis of Common Malformation Patterns. *Proceedings of the Greenwood Genetic Center*, 10: 105
- Alles, A.J., Murakami, R., Stumpf, W.E.

and Sulik, K.K (1991) Exogenously Administered Retinoic Acid is Localized in Sites of Physiological Cell Death. *Teratology*, 43(5): 430

- Aylsworth, A.S., Sulik, K.K. and Alles, A.J. (1991) Toward a Teratogenic Model for Towne's Syndrome. *Proceedings of the Greenwood Genetic Center* 11:76
- Sulik, K.K., Mesrobian, HG. J., Aylsworth, A.S. and Alles, A.J. (1991) The Pathogenesis of Caudal Dysgenesis(Regression) as Illustrated in Animal Models. *Proceedings of the 2nd International Workshop on Fetal Genetic Pathology*: 19
- Wei, X., Alles, A.J., Dehart, D.B. and Sulik, K.K. (1991) Cell Death Patterns Associated with Ochratoxin A Induced Craniofacial Malformations. *Teratology*, 43(5):430
- Alles, A.J., Wu, T.F.T., Aylsworth, A.S. and Sulik, K.K.(1992) Etretnate Induced Abnormalities of the Cranial Base *Teratology* 45:485
- Mesrobian, HG. J., Alles, A.J. and Sulik, K.K.(1992). Excessive Cell Death in the Neural Crest Portends Renal Agenesis in Murine Embryos with the Danfort Mutation. *Teratology* 45:497

#### PUBLICATIONS

- Alles, A.J., Warshaw, A.L., Southern, J.F., Compton, C.C. and Lewandrowski, K.B. (1994). *Expression of CA 724 (TAG72) in the Fluid Contents of Pancreatic Cysts. A New Marker to Distinguish Malignant Pancreatic Cystic Tumors from Benign Neoplasms and Pseudocysts.* *Annals of Surgery* 219(2): 1314.
- Alles, A.J., Waldron, M.A., Sierra, L.S. and Matia, A.R. (1995). *Prospective Comparison of Direct Immunofluorescence and Conventional Staining Methods for Detection of Giardia and Cryptosporidium*

*spp. in Human Fecal Specimens.* *Journal of Clinical Microbiology* 33(6): 16321634.

- Vern, T.Z., Alles, A.J., KowalVern A., Longtine J., and Roberts, D.J. (2000) Frequency of Factor V (Leiden) and Prothrombin 20210A in placentas and their relationship to placental lesions. *Human Pathol.* 31(9): 103643.
- Wang M, Tihan T, Rojiani AM, Bodhireddy SR, Prayson RA, lacuone JJ, Alles AJ, Donahue DJ, Hessler RB, Kim JH, Haas M, Rosenblum MK, Burger PC (2005). Monomorphous angiocentric glioma: a distinctive epileptogenic neoplasm with features of infiltrating astrocytoma and ependymoma. *J Neuropathol Exp Neurol.* 64(10):87581.
- Wright R, Hernandez A, Malik S, Donahue DJ, Alles A, Perry MS (2011) Dravet syndrome associated with cortical dysplasia of Taylor type. *J Ped Neurol.* 9: 479481.
- Alles, A.J. and R.M.Dom. (1985) Peripheral Sensory Nerve Fibers that Dichotomize to Supply the Brachium and the Pericardium in the Rat: A Possible Morphological Explanation for Referred Cardiac Pain? *Brain Research*, 342: 382385.
- Alles, A.J. and K.K. Sulik. (1989) Retinoic Acid Induced Limb Reduction Defects: Perturbation of Zones of Programmed Cell Death as a Pathogenetic Mechanism. *Teratology*, 40(2): 163171.
- Chernoff, N., Rogers, J.M., Alles, A.J., Zucker, R.M., Elstein, K.H., Massaro, E.J. and Sulik, K.K. (1989) Cell Cycle Alterations and Cell Death in Cyclophosphamide Teratogenesis. *Teratogenesis Carcinogenesis and Mutagenesis*, 9(4):199209.
- Alles A.J. and K.K. Sulik (1990) Retinoic Acid Induced Spina Bifida: Evidence for a

Pathogenetic Mechanism. *Development*, 108: 7381.

- Alles, A.J., Fazel, A.R., Spicer, S.S. and Dom, R.M. (1990) Distribution of Glycoconjugates in the Optic Vesicle and Optic Cup. *Anatomy and Embryology*, 182(6): 611616.
- Francis, B.M., Rogers, J.M., Sulik, K.K., Alles, A.J., Elstein, K.H., Zucker, R.M., Massaro, E.J., Rosen. M.B., and Chernoff, N.(1990) Cyclophosphamide Teratogenesis: Evidence For a Compensatory Response to Induced Cellular Toxicity. *Teratology*, 42: 473482.
- Thompson RP, Lindroth JR, Alles AJ, Fazel AR. Cell differentiation birthdates in the embryonic rat heart. *Ann N Y Acad Sci.* 1990; 588: 446-448.
- Alles, A.J. and Sulik, K.K. (1991) Pathogenesis of Retinoic Acid Induced Hindbrain Malformations in an Experimental Model. *Clinical Dysmorphology* 1(4): 187200.
- Peiffer, R.L., McCullen, R., Alles, A.J. and Sulik, K.K. (1991) Relationship of Cell Death to Cyclophosphamide Induced Ocular Malformations. *Teratogenesis Carcinogenesis Mutagenesis* 11(4):20312.
- Kotch, L.E., Dehart, D.B., Alles, A.J., Chernoff, N and Sulik, K.K. (1992) Pathogenesis of Ethanol Induced Limb Reduction Defects in Mice. *Teratology* 46(4):32332.
- Rogers, J.M., Francis, B.M., Sulik, K.K., Alles, A.J., Massaro, E.J., Zucker, R.M., Elstein, K.H., Rosen, M.B., and Chernoff, N (1994) Cell Death and Cell Cycle Perturbation in the Developmental Toxicity of the Demethylating Agent, 5aza2'-deoxycytidine. *Teratology*, 50(5):32339.

- Alles, A.J., Losty, P.D., Donahoe, P.K., Manganaro, T.F. and Schnitzer, J.J. (1995) Embryonic Cell Death Patterns Associated with NitrofenInduced Congenital Diaphragmatic Hernia. Journal of Pediatric Surgery 30(2): 353360.

#### CURRENT RESEARCH

- The Use of Fluorine F 18fluorodopamine Positron Emission Tomography Combined with Computed Tomography in Congenital Hyperinsulinism. Subinvestigator, 2013 2016.
- Diagnoses and Outcomes in Temporal Lobectomies in Children: Assessing the Utility and Disutility of iMRI and En Bloc Hippocampal Resection Subinvestigator, 2010 2014
- Histone Modification and Gene Expression in Palatine Tonsils. Subinvestigator, 2011 2012