

CURRICULUM VITAE

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Professional Address:

Hayward Genetics Center SL-31
Tulane University Medical School
1430 Tulane Avenue
New Orleans, LA 70112

Home Address:

2770 Aldrich Drive
Cumming, GA 30040

Professional Experience:

- 1/16-Present Director, Cytogenetics Laboratory
Hayward Genetics Center
Tulane University Medical School
New Orleans, LA 70112
- Full service cytogenetics
- 7/14-1/16 Director, Cytogenetics
City of Hope
Duarte, CA
- Cancer cytogenetics
- 6/12-7/14 Clinical Laboratory Director
Empire Genomics
Buffalo, NY
- Startup clinical cytogenetics laboratory
 - NYS certification
 - CAP certification
- 9/06-4/12 Director, Genetics
CSI Laboratories
Alpharetta, GA
- CAP certification within first year
 - NYS certification
 - COG ALL approval
 - Validation of > 30 FISH probes including oncology and solid tumor
 - Increase cytogenetic volume from ~3,000 to ~9,000
 - Increase FISH volume from ~1,000 to ~6,000
 - Increase staff from 11 to >40
 - Internship for students from Kennesaw State University and Georgia Health Sciences University
 - Serve on Kennesaw State University College of Science and Mathematics advisory board (2011-2013)
- 9/02-9/06 Laboratory Director, Cytogenetics
Genzyme Genetics, previously IMPATH
Phoenix, AZ
- Cancer diagnostics
 - Sign final test results
 - Communicate with physicians

- 1/02-8/02 Senior Biomedical Scientist
AL Tech Biomedical
Rockville, MD
- Suspension FISH (DOD grant)
 - Fluorescently labeled human band-specific microdeletion probes
 - Technical support for customers
 - Laboratory manager
- 8/00- 1/02 Research Fellow
National Cancer Institute
Medicine Branch/ Genetics Laboratory
Cancer Chromosome Aberration Project (www.ncbi.nlm.nih.gov/CCAP)
Bethesda, MD
- Preparation of high resolution chromosome slides
 - High resolution FISH
 - Indirect probe labeling
 - Isolation of probe DNA
- 3/00-7/00 Laboratory Supervisor
Georgetown University Medical Center
Cytogenetics Laboratory
Georgetown, Washington D.C.
- Supervise four technicians
 - Train M.D. and Ph.D. fellows
 - Communicate with physicians and Genetic Counselors
 - Sign off charts and reporting the results
 - Microscope analysis of PB, BM, AF, and POC specimens
 - Karyotype, automated
 - Diagnostic FISH
- 8/92-12/96 Cytogenetic Technologist- part time
Prenatal Diagnostic Laboratory
Department of Medical Genetics
University of Alabama at Birmingham
Birmingham, AL
- Microscope analysis of AF samples
 - Karyotype, automated
 - Occasional analysis of PB specimens
- 2/91-8/92 Cytogenetic Technologist
Cytogenetics Laboratory
University of Kentucky
Lexington, KY
- Microscope analysis of specimens
 - Tissue culture of PB and BM specimens
 - Develop film
 - Karyotype, manual
 - Initial FISH validation
- 6/90-2/91 Cytogenetic Technologist
Bone Marrow Section, Cytogenetics Laboratory
Indiana University-Purdue University

Indianapolis, IN

- Microscope analysis of BM and tumor specimens
- Tissue culture of BM and tumor specimens
- Karyotype, manual, automated

Education and Training:

- 2/98-3/00 Post-doctoral fellowship
NIAMS/ NIH
Laboratory of Skin Biology
Bethesda, MD
- Molecular diagnostics
 - Linkage analysis
 - DNA sequencing
 - Candidate gene analysis
- 7/98-7/00 Metro Washington D.C. Genetics Training Program
NIH/ Georgetown University
Georgetown, Washington D.C.
- Clinical Cytogenetics fellowship training
 - Microscope analysis of PB, BM, AF, and POC samples
 - Karyotype, manual
 - Report results to physicians
 - FISH for microdeletions and translocations
- 6/97-2/98 Post-doctoral fellowship
NIDDK/ NIH
Laboratory of Molecular and Cellular Biology
Bethesda, MD
- 8/92-7/97 Ph.D. in Medical Genetics
Laboratory of Medical Genetics
University of Alabama at Birmingham
Birmingham, AL
- Molecular diagnostics
 - Clinical Cytogenetics- prenatal laboratory
- 8/86-5/90 BS in Genetic Biology
Purdue University
West Lafayette, IN

Certifications/Licenses:

- 1991-present Technologist in Cytogenetics-ASCP-690
2002-present NYS COQ in cytogenetics and FISH- BROWT1
2005-present Diplomat of the American Board of Medical Genetics and Genomics- 102713
2008-present Licensed by the state of California as a Clinical Cytogeneticist-DRM00000051
2013-present Licensed by the state of Florida as a Clinical Laboratory Director- 187073

Membership in Professional Societies:

American Society of Human Genetics
Association of Genetic Technologists

American College of Medical Genetics and Genomics
American Cytogenetics Conference
American Society of Hematology
Cancer Cytogenomics Microarray Consortium (CCMC)

Manuscripts:

Tennese, A, Skrabek P, Nasr MR, Sekiguchi C, Morales C, **Brown TC**, Weisenburger DD, Perry A. Four lymphomas in one patient: a unique case of triple composite non-Hodgkin lymphoma followed by classical Hodgkin lymphoma. *Int J Surg Pathol*. 2016 sep 29 Epub

Ramachandiran S, Adon A, Guo X, Wang Y, Wang H, Chen Z, Kowalski J, Sunay UR, Young AN, **Brown TC**, Mar JC, Du Y, Fu H, Mann KP, Natkunam Y, Boise LH, Saavedra HI, Lossos IS and Bernal-Mizrachi L. Chromosome instability in diffuse large B cell lymphomas is suppressed by activation of the noncanonical NF- κ B pathway. *Int J Cancer*. 2014 Oct 30. doi: 10.1002/ijc.29301

Schultz R, Tsuchiya K, Furrow A, Slovak M, McDaniel LD, Wall M, Crawford E, Ning Y, Saleki R, Fang M, Cawich V, Johnson CE, Minier SL, Neill NJ, Morton SA, Byerly S, Surti U, **Brown TC**, Ballif BC, Shaffer LG. CGH-based Microarray Detection of Cryptic and Novel Copy Number Alterations and Balanced Translocations in Cytogenetically Abnormal Cases of B-cell ALL. *Health* 2013; 5(5a):23-40.

Callahan E, Schultz R, **Brown TC**. Patient with t(4;12)(q11;p13) with therapy-related MDS and known history of stage II metastatic colorectal cancer. *Atlas Genet Cytogenet Oncol Haematol*. 2013; 17(2):148-150.

Kolquist KA, Schultz RA, Furrow A, **Brown TC**, Han, JY, Campbell LJ, Wall M, Slovak ML, Schaffer LG, Ballif BC (2011). Microarray-Based Comparative Genomic Hybridization (aCGH) Reveals Novel, Recurrent Genetic Aberrations in the Myelodysplastic Syndromes. *Cancer Genetics* 204:603-608.

Kolquist K, Schultz RA, Slovak ML, McDaniel L, **Brown TC**, Tubbs R, Cook JR, Theil KS, Cawich V, Valentin C, Minier S, Neill N, Byerly S, Morton SA, Sahoo T, Ballif BC, Shaffer LG (2011). Evaluation of chronic lymphocytic leukemia by oligonucleotide-based microarray analysis uncovers novel aberrations not detected by FISH or cytogenetic analysis. *Molecular Cytogenetics* 4:25

Jang W, Yonescu R, Knutsen T, **Brown T**, Reppert T, Sirotkin K, Schuler GD, Ried T, Kirsch IR (2006) Linking the human cytogenetic map with nucleotide sequence: the CCAP clone set. *Cancer Genet Cytogenet* 168:89-97.

Brown, TC, Tarleton, J.C., Go, R.C.P., Longshore, J.W., and Descartes, M. (1997). Instability of the FMR2 Trinucleotide Repeat Region Associated With Expanded FMR1 Alleles. *Am J Med Genet*: 73: 447-455.

Abstracts and Presentations:

Schultz RA, **Brown TC**, Campbell LJ, Wall M, Schoumans J, Han J-Y, Surti U, Stewart SD, Fang M, Fink JM, Tubbs RR, Cook JR, Gitelson E, McDaniel LD, Shaffer LG, Ballif BC. (2012) Detection of Copy Number Alterations in DNA Repair/Repair-Related Genes for a Diversity of Hematologic Malignancies Identifies Disease-Specific Biomarkers of Potential Clinical Relevance. 54th Annual American Society of Hematology meeting; Abstract 2531.

Schultz RA, **Brown T**, Campbell L, Wall M, Schoumans J, Han J-Y, Surti U, Crawford E, Stewart SD, Fang M, Hsu W-T, Tubbs R, Cook J, Gruver AM, Dean A, Tezcan H, Furrow A, Shaffer L, Ballif B. (2011) Microdeletions at apparently balanced translocation breakpoints are biomarkers for heightened genomic instability in patients with non-MLL acute myeloid leukemia. 53rd Annual American Society of Hematology meeting.

Schultz RA, **Brown TC**, Andreeff M, Wang RY, Campbell L, Wall M, Schoumans J, Han JY, Surti U, Kolquist K, Ouahchi K, Crawford E, Stewart SD, Fang M, Hsu WT, Tubbs R, Cook J, Fink J, Furrow A, Shaffer LG, and Ballif BC. (2011) Evaluation of Acute Myeloid Leukemia Specimens by Array-CGH Reveals New Abnormalities Across Prognostic Groups. Association of Molecular Pathology.

Schultz RA, Cawich V, Valentin C, Minier S, Neill N, Morton SA, Byerly S, Furrow A, **Brown T**, Campbell L, Wall M, Han J-Y, Surti U, Shaffer LG, Ballif BC. (2011) Detection of balanced translocations in hematologic disorders by array CGH. Cancer Cyto-genomics Microarray Consortium.

Morton SA, Schultz RA, Slovak ML, McDaniel L, Furrow A, Han JY, Fink J, Surti U, Berry N, Fagan K, **Brown TC**, Cawich V, Valentin C, Minier S, Neill N, Byerly S, Sahoo T, Ballif BC, and Shaffer LG. (2011) Rapid detection of copy number imbalances and balanced translocations in multiple myeloma by translocation array CGH. Poster presentation 61st annual American Society of Human Genetics Meeting.

Epps T, Bohls N, **Brown TC**. (2011) B-lineage acute lymphoblastic leukemia- An inverted view of a cryptic translocation. Poster presentation. 36th annual Association of Genetic Technologists meeting. J of AGT 37(3), #5

Chen J, Scott KV, Blasingame A, Braun J, Sellers HL, **Brown TC**. (2011) Deletion 13q14 in patients with chronic lymphocytic leukemia: Further prognostic implications. Poster presentation. 36th Annual Association of Genetic Technologists meeting. J of AGT 37(3), #1

Slovak ML, Ning Y, Yu L, Hunger S, Carroll AJ, **Brown TC**, Campbell LJ, Wall M, Crawford E, Fang M, Kolquist K, Saleki R, Shaffer LG, Ballif B, and Schultz R. (2010) Targeted Microarray Analyses Augment the Clinical Cytogenetic Diagnosis of Acute Lymphoblastic Leukemia (ALL): Submicroscopic Genetic Events Improve Diagnosis, Contribute to Risk Stratification, and Provide Genetic Markers for Minimal Residual Disease (MRD) Testing. Blood (ASH Annual Meeting Abstracts), Dec 2010; 116: 2690.

Schultz RA, Ballif B, McDaniel LD, **Brown TC**, Campbell L, Wall M, Han JY, Surti U, Kolquist K, Ouahchi K, Shaffer L and Slovak ML. Analysis of chronic myelogenous leukemia, including balanced *bcr/abl1* translocations, by microarray analysis. 2010 Association of Molecular Pathology. Poster H09

Carstarphen B, Sey O, Blake D, Scott KV, **Brown TC** (2010). Do you have a BCR/ABL? Go FISH! Poster presentation. 35th annual Association of Genetic Technologists meeting. J of AGT 36(3), 35

Schultz R, Slovak ML, Greisman H, Tubbs R, **Brown TC**, Ballif B, Shaffer, LG. (2010) Use of Microarray Technology (a-CGH) in the evaluation of both copy number changes and balanced translocations with relevance to chronic lymphocytic leukemia (CLL). Poster presentation 41st Biennial American Cytogenetics Conference.

Slovak ML, **Brown TC**, Han JY, Campbell J, Wall M, Shaffer LG, Ballif B, Schultz R.(2010) Emerging data using a targeted oligo-based microarray in the myelodysplastic syndromes reveal provocative complexity and new recurrent genetic aberrations. Platform presentation 41st Biennial American Cytogenetics Conference.

Keeney J, Vigo E, Scott, K, Roberts A, **Brown T**. (2007) Rare ABL1 amplification in adult T-cell acute lymphocytic leukemia. Poster presentation, 32nd annual Association of Genetic Technologists meeting. J of AGT 33(3),68

Hart, G, Aguilar, C, Berger, C, Bezzegh, G, Richmond, L, Skierkowski, J, **Brown TC** (2006). A unique rearrangement involving the BCL6, MYC, IGH and BCL2 loci in diffuse large cell lymphoma. Poster presentation 56th annual American Society of Human Genetics Meeting (310).

Ornelas M.P, Berger CS, Karamanov S, **Brown TC** (2005). A novel t(14;20)(q32;p13) in acute myelogenous leukemia. Poster presentation, 55th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 77, 310

Maroz Y, Dong SY, **Brown TC** (2005). A novel translocation (12;14)(q24.3;q11.2) in a patient with a therapy related AML. Poster presentation, 55th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 77, 304

Durand-Scott L, Valenzuela M, Berger C, Trevizo S, Stephenson CF, **Brown TC** (2005). Sequential multitech analysis of CML with an unusual complex variant Philadelphia chromosome. Poster presentation, 30th annual Association of Genetic Technologists meeting. J of AGT 31(3), 81

Dean L, Ornelas M, Berger, CS, Stephenson, CF, **Brown, TC** (2004). Amplification of the MLL and MYC genes in acute myelogenous leukemia. Poster presentation, 29th annual Association of Genetic Technologists meeting. J of AGT 30(3), 13

Brown TC, Yonescu R, Reppert T, Knutsen T, Ried T, Kirsch IR (2001). The cancer chromosome aberration project (CCAP): An update. Poster presentation, 51st annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 69(4), 288

Brown TC, Kozma C, Meck J (1999). Mild clinical feature of 18q deletion and trisomy 19q seen in a child with a novel 18;19 translocation. Poster presentation, 49th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 65(4), 775

Brown, TC, DiGiovanna, JJ, Compton JG, Fleckman, P, Bale, SJ (1998). Linkage studies and mutational analysis of a family with a novel skin disorder. Poster presentation, 48th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 63(4), 1633

Brown, TC, Descartes, M, Tarleton, J, and Finley, WH (1996). Population study and correlation analysis of FRAXA and FRAXE trinucleotide repeats. Poster presentation, 46th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 59(4), 1443.

Li, P, **Brown, TC**, Descartes, M, Finley, WH, Thompson, JN (1996). Molecular diagnosis of Hunter syndrome: mutation identification, carrier detection, and haplotype segregation analysis in six families. Poster presentation, 3rd Joint Clinical Genetics Meeting.

Li, P, **Brown, TC**, Descartes, M, Thompson, JN (1996). Analysis of deletions in the iduronate-2-sulfatase gene using flanking polymorphic markers. Poster presentation, 46th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 59(4), 1552.

Descartes, M, **Brown, TC**, King, P, Spence, WC, Tarleton, J, Longshore, J, and Finley, WH (1996). CTG expansions in both myotonic dystrophy alleles of a mildly affected female. 46th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 59(4), 2306

Brown, TC, Descartes, M, Longshore, JW, and Finley, WH (1994). PCR direct genomic sequencing of COL10A1 in kindred with Metaphyseal Chondrodysplasia-Schmid Type (MCDS). 44th annual American Society of Human Genetics Meeting. Am J Hum Genet suppl 55(3), 2090.