

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Updated April 22, 2019

ADDRESS: 1320 Narragansett Blvd.
Cranston, RI 02905
Telephone: 401-443-6159
Email: CYoung11713@gmail.com

EDUCATION

Undergraduate:
8/1981 – 12/1981 University of Michigan
Ann Arbor, Michigan

1/1982-4/1985 Florida State University
Tallahassee, Florida
Biology
B.S. cum laude 1985

Medical School:
8/1985-5/1989 University of Florida
College of Medicine
Gainesville, Florida
M.D.

POST-GRADUATE TRAINING

Internships:
7/1989-6/1990 Milton S. Hershey Medical Center
Pennsylvania State University
Hershey, Pennsylvania

7/1990 – 6/1991 Polyclinic Medical Center
Harrisburg, Pennsylvania
Internal Medicine

Residencies:
7/1991 – 6/1992 Milton S. Hershey Medical Center
Pennsylvania State University
Hershey, Pennsylvania
Anatomic Pathology

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Residencies (continued):

7/1992 – 6/1995	Warren Alpert Medical School of Brown University Providence, Rhode Island Anatomic Pathology Clinical Pathology
-----------------	-----------------------------------------------------------------------------------------------------------------------------

POSTGRADUATE HONORS AND AWARDS

2009	Teaching Recognition Award from The Warren Alpert Medical School of Brown University
2015	Providence Business New Business Women Award for Woman to Watch, Healthcare Services (for leading clinical trial to test blood donors for <i>Babesia microti</i>).
2017	America's Blood Centers Got Talent Winner (played piano for fundraising event, winner raised most funds for ABC's Foundation supporting education and blood banking awareness).
2019	Nominated for Warren Alpert Medical School at Brown University Dean's Excellence in Teaching Award.

PROFESSIONAL LICENSEES AND BOARD CERTIFICATION

Licenses:

1995	Rhode Island Medical License
1998	New York Medical License
2005	New York State Department of Health Certificate of Qualification for Blood Banking Collection- Comprehensive Histocompatibility Parentage/Identity Testing- DNA testing HLA testing
8/2017	Parasitology- limited to molecular testing for Babesia
2010	New Jersey Medical License
2018	Connecticut Medical License

Board Certification:

7/1990	Diplomat, National Board of Medical Education
2/1998	Diplomat, Clinical Pathology, American Board of Pathology
7/1998	Diplomat, Blood Banking and Transfusion Medicine American Board of Pathology

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Other Certifications:

4/1998	American Society for Histocompatibility and Immunogenetics (ASHI) Accredited Director approved to direct laboratories performing: Hematopoietic Stem Cell/Bone Marrow Transplantation: Related Donor, Transfusion Support, and Histocompatibility Testing for other Clinical Purposes
9/2004	Solid Organ Transplantation-Live donor
5/2015	Hematopoietic Stem Cell/Bone Marrow Transplantation: Unrelated Donor

ACADEMIC APPOINTMENTS

11/1998-Present	Clinical Assistant Professor Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island
7/1996-11/2018	Clinical Assistant Professor of Clinical Laboratory Science University of Massachusetts Dartmouth, Massachusetts
4/2002	Visiting Professor Yale University New Haven, Connecticut
7/1994 – 6/1995	Chief Resident Pathology Residency Program Warren Alpert Medical School of Brown University Providence, Rhode Island
7/1994 – 6/1995	Assistant Instructor in Pathology and Laboratory Medicine Warren Alpert Medical School of Brown University Providence, Rhode Island
7/1994 – 6/1995	Rhode Island Delegate Residents' Forum College of American Pathologists
8/1988 – 5/1989	Student Representative University of Florida College of Medicine Board of Alachua County Medical Society Gainesville, Florida
8/1984-5/1985	Teaching Assistant Florida State University Tallahassee, Florida

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

EXPERIENCE

1/2004-11/2018	Vice President/Chief Medical Officer Rhode Island Blood Center Providence, Rhode Island
11/1998-12/2004	Medical Director Rhode Island Blood Center Providence, Rhode Island
7/1995-11/1998	Assistant Medical Director
9/1995-11/1998	Director of HLA, Reference, DNA, and Education Rhode Island Blood Center Providence, Rhode Island

OTHER APPOINTMENTS

2017-Present	Board Member of Chartercare Foundation – a non-profit foundation with a mission to support health-related services.
2017-Present	Reviewer, Journal of Clinical Apheresis
2007-Present	Reviewer, Transfusion (AABB)
7/2008-6/2014	AABB Interagency Work Group on Babesia and other Tick Borne Pathogens
9/2006- 11/2018	UNOS Region 1 Histocompatibility Elector
1/2005- 11/2018	America’s Blood Centers Blood Bulletin Review Committee 21 st Edition Blood Bank/Transfusion Service AABB Standards Program Unit
4/2000-4/2003	22 nd Edition Blood Bank/Transfusion Service AABB Standards Program Unit AABB previously known as American Association of Blood Banks
1/2000-1/2002	Parentage Testing Committee College of American Pathologists (CAP)
1/1999-12/1999	CAP Blood Bank Inspector
1/1998-1/2000	Blood Centers of America Representative to the Interagency Genome Amplification Testing Task Force

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

MEMBERSHIPS IN SOCIETIES

2004	Massachusetts Association of Blood Bankers Society
1998-Present	American Society of Histocompatibility and Immunogenetics
1997-2018	Rhode Island Medical Society
1996-2000	International Society for Hematotherapy and Graft Engineering
7/1995-Present	American Medical Association
7/1995-Present	American Society of Clinical Pathologists
1995-Present	Rhode Island Society of Pathologists
7/1995-Present	American Association of Blood Banks
7/1995-Present	College of American Pathologists
1991-1992	Pennsylvania Association of Pathologists

PUBLICATIONS

Original Publications in Peer-Reviewed Journals:

1. Bush RA, Young CT, Williams TP. Rhodopsin decreases in rat retina following optic nerve section. Association for Research in Vision and Ophthalmology 1987; 28(3):142.
2. Kasales CJ, Langer JE, Young CT, Singapuri K, Arger PH. Residual mass after treatment of primary cervical lymphoma: the utility of gallium 67 and MRI. Abdom Imaging. 1994 May-Jun;19(3):274-277. PMID: 8019363.
3. Young C, Di Benedetto J Jr, Glasser L, Mark HF. A Philadelphia chromosome positive CML patient with a unique translocation studied via GTG-banding and fluorescence in situ hybridization. Cancer Genet Cytogenet. 1996; Jul 15;89(2):157-162. PMID: 8697424.
4. Young C, Gordon N, Safran HP, Schatz S, Stopa E, King TC. Monoclonal B-cell population mimicking lymphoma in a patient with multiple sclerosis. Arch Pathol Lab Med. 1996 Mar;120(3):275-278. PMID: 8629904.
5. Young CT, Lawton-Bryant JB, Lynch S, Cristian K, Pinkoski E, Yankee R. Paternity testing in Rhode Island. Proceedings of the 7th International Symposium on Human Identification 1996. Promega Corporation 1997; 183.

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Original Publications in Peer-Reviewed Journals (continued):

6. McCullough J, Bianco C, Busch M, Dodd R, Hewlett IK, Jackson JB, Katz LM, McFarland J, Mied PA, Page P, Preston MS, Simon T, Stramer S, Stroncek D, Young CT. Interagency Genome Amplification Testing Task Force: preliminary report. *Transfusion*. 1998; Oct;38(10):903-4. PMID: 9767738.
7. McCullough J, Bianco C, Bracey A, Busch M, Dodd RY, Gammon RR, Harrison C, Jackson JB, Katz LM, Kleinman S, McFarland J, Page P, Preston S, Sher GD, Sherman L, Simon T, Stramer SL, Stroncek D, Young CT, Hewlett IK. Nucleic acid amplification testing of blood donors for transfusion-transmitted infectious diseases: report of the Interorganizational Task Force on Nucleic Acid Amplification Testing of Blood Donors. *Transfusion* 2000 Feb;40(2):143-159. PMID: 10685998.
8. Young C, Losikoff P, Chawla A, Glasser L, Forman E. Transfusion-acquired *Trypanosoma cruzi* infection. *Transfusion* 2007 Mar;47(3):540-4. PMID: 17319837.
9. Young C, Krause PJ. The problem of transfusion-transmitted babesiosis. *Transfusion*. 2009 Dec;49(12):2548-2550. doi: 10.1111/j.1537-2995.2009.02494.x. PMID: 20163687.
10. Sprawka N, Young C, O'Brien B. Bombay blood type and use of red cell apheresis during pregnancy. *Obstet Gynecol*. 2011 Feb;117(2 Pt 2):463-5. doi: 10.1097/AOG.0b013e3181f738f3. PMID: 21252790.
11. Herwaldt BL, Linden JV, Bosserman E, Young C, Olkowska D, Wilson M. Transfusion-associated babesiosis in the United States: a description of cases. *Ann Intern Med*. 2011 Oct 18;155(8):509-519. doi: 10.7326/0003-4819-155-8-201110180-00362. Epub 2011 Sep 5. PMID: 21893613.
12. Alhumaidan H, Westley B, Esteva C, Berardi V, Young C, Sweeney J, Transfusion-transmitted anaplasmosis from leukoreduced red blood cells. *Transfusion*. 2013 Jan;53(1):181-6. doi: 10.1111/j.1537-2995.2012.03685.x. Epub 2012 May 7. PMID: 22563784.
13. Young C, Chawla A, Berardi V, Padbury J, Skowron G, Krause PJ, Babesia Testing Investigational Containment Study Group. Preventing transfusion-transmitted babesiosis: preliminary experience of the first laboratory-based blood donor screening program. *Transfusion*. 2012 Jul;52(7):1523-9. doi: 10.1111/j.1537-2995.2012.03612.x. Epub 2012 Mar 27. PMID: 22452654.
14. Reagan JL, Fast LD, Safran H, Nevola M, Winer ES, Castillo JJ, Butera JN, Quesenberry MI, Young CT, Quesenberry PJ. Cellular immunotherapy for refractory hematological malignancies. *J Transl Med*. 2013 Jun 19;11:150. doi: 10.1186/1479-5876-11-150. PMID: 23782682.

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Original Publications in Peer-Reviewed Journals (continued):

15. Reagan JL, Fast LD, Nevola M, Mantripragada K, Mulder A, Claas F, Rosati K, Schumacher A, Safran H, Young CT, Quesenberry MI, Winer ES, Butera JN, Quesenberry PJ. Nonengraftment donor lymphocyte infusions for refractory acute myeloid leukemia. *Blood Cancer J.* 2015 Dec 4;5:e371. doi: 10.1038/bcj.2015.100. PMID: 26636286.
16. Nemkov T, Sun K, Reisz JA, Song A, Yoshida T, Dunham A, Wither MJ, Francis RO, Roach RC, Dzieciatkowska M, Rogers SC, Doctor A, Kriebardis A, Antonelou M, Papassideri I, Young CT, Thomas TA, Hansen KC, Spitalnik SL, Xia Y, Zimring JC, Hod EA, D'Alessandro A. Hypoxia modulates the purine salvage pathway and decreases red blood cell and supernatant levels of hypoxanthine during refrigerated storage. *Haematologica.* 2018 Feb;103(2):361-372. doi: 10.3324/haematol.2017.178608. Epub 2017 Oct 27. PMID: 29079593.

Books and Book Chapters:

1. Young CT, Mark HFL. Chapter 18: Cytogenetics in Transfusion Medicine, In: *Medical Cytogenetics.* Mark HFL, Ed. New York: Marcel Dekker, 2000.
2. Young CT. Chapter 16, Zika Virus screening. In: *Transfusion Medicine and Hemostasis, Clinical and Laboratory Aspects, 3rd edition,* Shaz BH, Hillyer CD, Gil MR, Eds. Elsevier, 2019.
3. Young CT. Chapter 17, Babesia Screening. In: *Transfusion Medicine and Hemostasis, Clinical and Laboratory Aspects, 3rd edition,* Shaz BH, Hillyer CD, Gil MR, Eds. Elsevier, 2019.

Corporate Authorship:

1. Gubernot DM, Nakhasi HL, Mied PA, Asher DM, Epstein JS, Kumar S. Conference Report: Transfusion transmitted babesiosis in the United States: Summary of a workshop. *Transfusion,* 2009, 49(12):2759-2771.

Created the plan to use prospective molecular based testing for Babesia microti to prevent transfusion transmitted babesiosis and wrote the presentation introducing the plan delivered at the September 2008 Blood Products Advisory Committee Workshop. Was Principal Investigator for the first Investigational New Drug protocol testing blood donations prospectively.

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Abstracts:

1. Young C, Perry C, Tehan S, Wilcox B. Donor Self-Administered History- A People Pleaser. October 2001 AABB Annual Meeting Poster Presentation, San Antonio, Texas.
2. Fort G, Hoffman P, Mikolich C, Whiteley C, Young C. Cases of Transfusion Associated Babesiosis in Rhode Island. XIth International Conference on Lyme Borreliosis and other tick-borne diseases, August 2002, New York, New York.
3. Young C, Maynard J, Folan D. Evaluation of Hemochromatosis Donations: Was it Worth the Effort? October 2002 AABB Annual Meeting Poster Presentation, Orlando, Florida.
4. Young C, Vitalo C, Asadorian S. Hemochromatosis Donor Program-The New Alchemy. October 2002 AABB Annual Meeting Poster Presentation, Orland, Florida.
5. Young C, Manchester K, Maynard J. The Effect of the First Tattoo Variance on Our Blood Supply. October 2003 AABB Annual Meeting Poster Presentation, San Diego, California.
6. Young C, Manchester K, Perry C. How Do You Spell Variance? PERSISTENCE. October 2004 AABB Annual Meeting Poster Presentation, Baltimore, Maryland.
7. Wilson M, Johnston S, Slemenda S, Won K, Sanders-Lewis K, Bishop H, Da Silva AJ, Pieniazek NJ, Young C, Herwaldt B. Laboratory investigation of donors involved in *Babesia microti* infections acquired by blood transfusion. November 2006.
8. DelSignore A, Morrissey P, Fischer S, Gohh R, Machan J, Monaco A, Yango A, Young C, Charpentier K. Early Graft Function in Pre-emptive Versus Previously Dialyzed Live Donor Kidney Transplant Recipients. New England Surgical Society, Boston, September 2008.
9. Young C, Lawton J, MacCann E. Transfusion Related Acute Lung Injury Reduction Efforts in Rhode Island. American Society for Histocompatibility and Immunogenetics. Toronto, Ontario, Canada, October 2008.
10. Sweeney J, Co-Authors: Fine FB, Nixon CP, Young C, Knoll BM. Transfusion Transmitted Anaplasmosis From Pooled Platelets, 25th Regional Congress of the ISBT London, United Kingdom, June 2015.
11. Aldarweesh F, Young C, Devine P, Hewins ME, Chawla A, Alberigo J, Folan D. Babesia Testing Investigational Containment (BTIC) Study Prevents Transfusion Transmitted Babesiosis: A Laboratory-Based Donor Screening Program October 2016 AABB Annual Meeting Poster Presentation, Orlando, Florida.
12. Bres V, Stramer SL, Williamson PC, Young C, Alberigo J, Reik RA, Diner S, Schneider W, Tonnetti L, Bakkour S, Busch MP, Linnen JM. Multicenter Clinical Evaluation of a Transcription-Mediated Amplification Assay on a Fully Automated System. Transfusion 2018 Vol. 58 Supplement S2 BBC57, October 2018 AABB Annual Meeting, Boston, MA

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

TEACHING & LECTURES

(50 average teaching/service hours per year 2016-2018 includes responsibility for rotation at RIBC)

- July 1995-Present Teaching Pathology Residents, Pediatric Hematology-Oncology Fellows
Donor Deferrals, Counseling, Testing and Current Topics
- Blood Banking from Recruitment to Distribution lecture given to
Brown University, Graduate Level Course BIOL 2245, Blood Substitutes:
Principles and Therapeutic Development
- Nov 2016 6 students
Nov 2017 7 students
Oct 2018 5 students
- Jul 1995-Nov 2018 Parentage Testing Lectures
- Oct 2018 Investigations of Suspected Transfusion Reactions by Blood Collection
Establishments (Transfusion related acute lung injury and transfusion
associated circulatory overload) AABB Annual Meeting, Boston.
- Jun 2017 Babesia testing. AABB webinar.
- Mar 2017 Babesia Testing update. America's Blood Centers (ABC), Pentagon City.
- Oct 2012 Babesia Testing. AABB, Boston.
- May 5, 2010 Granulocytes Lecture, Clinical Laboratory Scientists Central New England
(CLSCNE), Spring Meeting, (Regional)
- May 3, 2011 Babesia Testing Investigational Containment Study, CLSCNE, Spring
Meeting, (Regional)
- May 1, 2015 Treating Low T May Lead to High RBC, CLSCNE, Spring Meeting,
(Regional)
- Aug 2005 Victor/Victoria (transgender blood donors) ABC, Quebec.

RESEARCH

- Jul 2017-Nov 2018 Principal Investigator, Grifols Diagnostic Solutions - B10385-BABPS-
CSP-01, Procleix® Babesia Assay Testing Using the Procleix Panther®
System with Whole Blood Samples (Pro00021609),

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

RESEARCH (continued):

- Nov 2016-Nov 2018 Principal Investigator, Hologic, Inc. - B10383-ZIKVPS-CSP-01, Pre-pivotal Procleix® Zika Virus Assay Testing of Donations from Donors of Whole Blood and Blood Components (Pro00017603).
- Feb 2013-Nov 2017 Principal Investigator, Blood Donation Screening for Evidence of Babesia Microti by Real-Time Polymerase Chain Reaction (PCR) and Indirect Fluorescent Antibody (IFA) Assays, IND 14532.
- Jul 2012-Dec 2014 Investigator, Cellular Immunotherapy for Refractory Hematological Malignancies: A Brown University Oncology Research Group Study, BrUOG H273 IND 15008.
- Jul 2010-Feb 2013 Principal Investigator, Babesia Testing Investigational Containment Study (BTIC), IND 14042.
- May 2009-Sep 2013 Principal Investigator, Umbilical Cord Blood Bank, WIH 09-0020.
- Jan 2008- Dec 2009 Principal Investigator, Design Validation Protocol for the Evaluation of: ABBOTT PRISM Chagas Assay Chagas Confirmatory Assay and Extended Evaluation of: ABBOTT PRISM Chagas Assay and Chagas Confirmatory Assay.
- Jan 2004- Dec 2006 Principal Investigator, Procleix® WNV Assay for screening of Voluntary Donations of Whole Blood or Source Plasma Clinical Trial under IND, Protocol #2003BBWBWNV, sponsored by GenProbe (completed after licensure).
- Jan 2003- Dec 2004 Sub-investigator, Procleix® WNV Assay for screening of Voluntary Donations of Whole Blood or Source Plasma Clinical Trial under IND-through America's Blood Center (ABC), .
- Jan 1999- Dec 2002 Sub-investigator, HIV/HCV Nucleic Acid Testing (NAT) Clinical Trial under IND-through ABC (completed after licensure).
- Jan 1999- Dec 2001 HPV vaccine trial (Gynecologic Oncology Group)-Associate Investigator in phase I study of immunization with altering HPV E7 lipopeptide epitope vaccine and dendritic cells presenting the E7 epitope for the treatment of recurrent or persistent cervical cancer (NCI T98-0072).

CAREER HIGHLIGHTS

- Jul 2010 Created the first Babesia Investigational New Drug (IND) for prospective *Babesia microti* testing by PCR and IFA.

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

CAREER HIGHLIGHTS (continued)

- HLA antibody screening all female donors who have ever been pregnant since 2007, and previously screening all multiparous apheresis donors since the early 1990s.
- 2005 Started the G-CSF stimulated granulocyte collection program.
- Sep 2004 Added Living Solid Organ ASHI Director accreditation. ASHI Categories also included Related and Unrelated Stem Cell Transplants, Transfusion support, Antibody Testing, and Post-transplant monitoring.
- 2002 Wrote the FDA approved Variance to accept patients with hemochromatosis and hct 34%.
- 2001 Created the AABB Tattoo Variance which allowed accepting donors with aseptically applied tattoos in less than 12 months provided they were performed with single use, sterile needles, or sterilized needles, and single-use ink at a state regulated site; approved in 2002 and paved the way to revising the AABB Standard to allow more donors to be eligible.
- 2001 Started the therapeutic apheresis program with red cell exchanges, expanded to include plasmapheresis, white cell depletion and platelet depletion.
- Oct 2000 Wrote the FDA approved variance to accept patients with hemochromatosis as blood donors at intervals less than 8 weeks with prescription- approved b FDA.
- 1998 Applied and received American Society of Histocompatibility and Immunogenetics (ASHI) accreditation of Rhode Island Blood Center Lab
- 1998 Applied and received ASHI Director accreditation.

PERSONAL INTERESTS/ACTIVITIES:

Playing piano - give concerts for non-profit fund raisers, play at churches, gave concert for William Hall Free Library Spring Concert.

Writing inspirational stories- Olive Press newsletter, Book manuscript in process.

CURRICULUM VITAE
CAROLYN TE YOUNG, M.D.

Personal Information:

CAROLYN TE YOUNG, M.D.
1320 Narragansett Blvd
Cranston, RI 02905
Cyoung11713@gmail.com
401-443-6159 cell
401-461-3006 home