

## CURRICULUM VITAE

Douglas Carter Anthony, M.D., Ph.D.

November 1, 2018

Current position: Professor, Pathology and Laboratory Medicine, and  
Professor, Neurology  
Warren Alpert Medical School of Brown University  
Chief, Pathology and Laboratory Medicine  
Lifespan Academic Medical Center  
Deputy Director for Translational Research  
Lifespan Cancer Institute

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Web site: [vivo.brown.edu/display/dca](http://vivo.brown.edu/display/dca)  
NCBI URL: <http://www.ncbi.nlm.nih.gov/sites/myncbi/1nEJeLu4bh652/bibliography/41649010/public/?sort=date&direction=descending>

Lifespan Laboratories: <https://www.lifespan.org/centers-services/lifespan-laboratories>

### EDUCATION

Undergraduate	B.S. (Chemical Engineering), Washington University, St. Louis, MO
Honors	Engineering Academic Achievement Award, Tau Beta Pi, Antoinette Dames Academic Achievement Award, Omicron Delta Kappa, Final Honors
Medical School	M.D. (Medicine), Duke University, School of Medicine, Durham, NC
Honors	Medical Scientist Training Program Award, National Institute of General Medical Sciences
Graduate School	Ph.D. (Experimental Pathology), Duke University Graduate School, Durham, NC
Honors	Phi Beta Kappa, Honorable Mention for Weil Award of the American Association of Neuropathologists

POSTGRADUATE TRAINING

Residency Pathology Residency, Anatomic Pathology, Duke University Medical Center, Durham, NC  
Fellowship Neuropathology, Duke University Medical Center, Durham, NC

POSTGRADUATE HONORS AND AWARDS

Clinical Investigator Development Award, National Institute of Neurological Disorders and Stroke  
International Society of Toxicology, Neurotoxicology Award  
Society of Toxicology, Mechanism Award  
North Carolina Society of Toxicology Scientific Award  
Feodor Lynen Research Award, Alexander von Humboldt Foundation  
Dr. Edison H. and Sallie Y. Miyawaki Teaching Award in Neurosciences, Harvard Medical School, Boston, MA  
Recognition Award for Faculty, United States and Canadian Academy of Pathology (2002)  
Curriculum Board Excellence in Teaching Award, School of Medicine, University of Missouri (2003)  
Excellence in Education Award, Medical Student Affairs Council, Pre-clinical Sciences, University of Missouri (2004)  
Order of Socrates, University of Missouri (2008)  
America's Top Doctors, Castle Connolly Recognition (2012-2016)  
M.A. *ad eundem*, Brown University, Providence, RI (2012)  
Certificate of Recognition for Education (2016), Biol 3652 IMSII: Brain Sciences, Warren Alpert Medical School of Brown University  
Certificate of Recognition for Education (2017), Biol 3652 IMSII: Brain Sciences, Warren Alpert Medical School of Brown University  
Dean's Excellence in Teaching Award (2017), Biol 3652 IMSII: Brain Sciences, Warren Alpert Medical School of Brown University

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

1986 Diplomate, National Board of Medical Examiners  
1986 - 1995 Licensed physician, North Carolina Board of Medical Examiners  
1987 - present Registered practitioner, United States Drug Enforcement Agency  
1987 - present Board Certification, American Board of Pathology (Anatomic Pathology), Lifetime Certification (Voluntary Re-Certification 2013)  
1987 - present Certificate of Special Qualification, American Board of Pathology (Neuropathology), Lifetime Certification  
1992 - 2002 Licensed physician, Commonwealth of Massachusetts Board of Registration in Medicine  
1992 - 2002 Registered physician, Massachusetts Department of Public Health, Division of Food and Drugs  
2001 – present Licensed physician, State of Missouri Board of Registration in Medicine

2001 - present Registered physician, Missouri Department of Public Health, Bureau of  
Narcotics and Dangerous Drugs  
2011 - present Licensed physician, Rhode Island Board of Medical Licensure and  
Discipline, Providence, RI  
2011 - present Registered physician, Rhode Island Controlled Substance Registration  
2014 – present Certificate of Recognition in Laboratory Medical Leadership, College of  
American Pathologists

#### ACADEMIC APPOINTMENTS

1987 - 1992 Assistant Professor of Pathology, Duke University  
1992 - 1995 Assistant Professor of Pathology, Harvard University  
1995 - 2001 Associate Professor of Pathology, Harvard University  
2001 – 2012 Professor of Pathology and Anatomical Sciences, University of Missouri  
2003 – 2012 Professor of Neurology, University of Missouri  
2012 – present Professor of Pathology and Laboratory Medicine, Brown University  
2015 – present Professor of Neurology, Brown University

#### HOSPITAL AND CLINICAL APPOINTMENTS

1987 - 1992 Attending Pathologist, Duke University Medical Center, and Partner,  
Duke University Private Diagnostic Clinic, Durham, NC,  
1987 - 1992 Medical Examiner, Durham County, North Carolina  
1992 - 2001 Staff Pathologist, Children's Hospital, Boston, MA  
1992 - 2001 Staff Pathologist, Brigham and Women's Hospital, Boston, MA  
1992 - 2001 Director of Neuropathology, Children's Hospital, Boston, MA  
1992 - 1998 Consultant Pathologist, New England Deaconess Hospital, Boston, MA  
1996 - 2001 Consultant Neuropathologist, Office of Chief Medical Examiner for the  
Commonwealth of Massachusetts, Boston, MA  
1998 - 2001 Pathologist (Neuropathologist), Beth Israel Deaconess Medical Center,  
Boston, MA  
2002 – 2012 Pathologist, University of Missouri Health Care, Columbia, MO  
2002 – 2012 Pathologist, Harry S. Truman Veterans Administration Medical Center,  
Columbia, MO  
2002 – 2012 Medical Director, Pathology Clinical Laboratories, University of Missouri  
Health Care, Columbia, MO  
2002 – 2012 Medical Director, Ellis Fischel Cancer Center Clinical Laboratories,  
Columbia, MO  
2002 - 2012 Neuropathologist, Office of the Medical Examiner for Boone and  
Callaway Counties, MO,  
2004 – 2012 Pathologist, Women's and Children's Hospital/Columbia Regional  
Hospital, Columbia, MO  
2005 – 2012 Medical Director, Keene Clinical Laboratory, Columbia, MO  
2007 – 2012 Medical Director, Smiley Lane Clinical Laboratory, Columbia, MO  
2009 – 2012 Neuropathologist, Office of the Medical Examiner, Greene County, MO

2010 – 2012	Associate Medical Examiner, Office of the Medical Examiner for Boone, Callaway, and Greene Counties, MO
2012 – present	Pathologist-in-Chief, Lifespan Academic Medical Center, Providence, RI
2012 – present	Medical Director, Lifespan Laboratories at Rhode Island Hospital, Department of Pathology and Laboratory Medicine, 593 Eddy Street, Providence, RI, 02906-2800 (CLIA 41D0701581; CAP 1164301)
2012 – present	Medical Director, Lifespan Laboratories at the Miriam Hospital, Department of Laboratory Medicine, 164 Summit Avenue, Providence, RI, 02903 (CLIA 41D0083675; CAP 1165201)
2012 – present	Medical Director, Molecular Pathology, Lifespan Laboratories at the Coro Building, Department of Laboratory Medicine, 1 Hoppin St., Providence, RI, 02903 (CLIA 41D2029025; CAP 1164301)
2012 – present	Medical Staff member (Pathology), Rhode Island Hospital, Providence, RI
2012 – present	Medical Staff member (Pathology), The Miriam Hospital, Providence, RI
2014 – 2016	Medical Staff member (Pathology), Newport Hospital, Newport, RI
2014 – 2016	Medical Staff member (Pathology), Eleanor Slater Hospital, Cranston, RI
2015 - present	Member, Lifespan Cancer Institute Steering Committee, Lifespan Academic Medical Center, Providence, RI
2015 - present	Member, Lifespan Cancer Institute Clinical Operations Committee, Lifespan Academic Medical Center, Providence, RI
2017 - present	Member, Cancer Care and Research Committee, Lifespan Cancer Institute, Lifespan Academic Medical Center, Providence, RI
2017 – present	Member, Lifespan Cancer Institute Strategy Group, Lifespan Academic Medical Center, Providence, RI
2018 – present	Member, Lifespan Research Council, Lifespan Academic Medical Center, Providence, RI

## OTHER APPOINTMENTS

### Major Administrative Responsibilities

1987 - 1992	Director, Peripheral Nerve Pathology Service, Duke University Medical Center, Durham, NC
1989 - 1992	Associate Director, Medical Scientist Training Program (M.D.-Ph.D. Program), Duke University, Durham, NC
1991 - 1992	Acting Director, Pathology and Clinical Laboratory Informatics, Duke University, Durham, NC
1992 - 2001	Director of Neuropathology, Department of Pathology, Children's Hospital, Boston, MA
1992 - 2001	Member, Children's Hospital Pathology Foundation, Inc., Boston, MA
1995 - 2001	Board of Directors
1997 - 2000	Vice President
2000 - 2001	President

1995 - 2000 Associate Pathologist-in-Chief (Vice Chairman), Department of Pathology, Children's Hospital, Boston, MA

1995 - 1998 Member, Board of Directors, Physicians' Organization at Children's Hospital, Inc., Boston, MA

1997 – 2001 Member, Medical Staff Executive Committee, Children's Hospital, Boston, MA

1998 - 2001 Member, Physician Leadership Council, Physicians' Organization at Children's Hospital, Boston MA

1998 - 2001 Physician Liaison for Pathology, Children's Hospital, Boston, MA

2000 - 2001 Acting Pathologist-in-Chief (Acting Chairman), Department of Pathology, Children's Hospital, Boston, MA

2000 - 2001 Executive Committee, Department of Pathology, Harvard Medical School, Boston, MA

2001 – 2012 Chair, Department of Pathology and Anatomical Sciences, University of Missouri School of Medicine, Columbia, MO

2001 - 2012 Chief, Pathology Clinical Laboratories, University of Missouri Hospital and Clinics, Columbia, MO

2007 – 2012 Director, Tom and Anne Smith M.D.-Ph.D. Program, University of Missouri, Columbia, MO

2007 – 2012 Associate Director, Institute for Clinical and Translational Sciences (Director of ICTS Training Programs), University of Missouri, Columbia, MO

2007 – 2012 Chair, Clinical Chairs Committee, University of Missouri, Columbia, MO

2007 – 2012 Director, Center for Translational Neurosciences, University of Missouri, Columbia, MO

2009 – 2012 Secretary-Treasurer, Missouri State Anatomical Board

2011 – 2012 Director, Electron Microscopy, Department of Clinical Pathology Laboratories, University of Missouri, Columbia, MO

2011 – 2012 Director, Quality Assurance, Surgical Pathology, University of Missouri, Columbia, MO

2012 – present Chief, Department of Pathology and Laboratory Medicine, Rhode Island Hospital, Providence, RI

2012 – present Chief, Department of Pathology and Laboratory Medicine, The Miriam Hospital, Providence, RI

2012 – present Chief, Department of Pathology and Laboratory Medicine and Medical Director for Lifespan Laboratories<sup>TM</sup>, Providence, RI

2017 – present Deputy Director for Translational Research, Lifespan Cancer Institute, Providence, RI

2018 – present Member, Board of Trustees, Rhode Island Brain and Spine Tumor Foundation, Providence, RI

2018 – present Governance Chair (interim), Board of Trustees, Rhode Island Brain and Spine Tumor Foundation, Providence, RI

National Committees and Panels

1987	Member, Ad Hoc Scientific Study Section, National Institutes of Health, "Adverse Health Effects of Aluminum (RFA 86-03)"
1988 - 1992	Consultant, U.S. Environmental Protection Agency, Evaluation of the neurotoxic potential of 2-hydroxyethyl acrylate
1989	Member, Ad Hoc Scientific Study Section, Health Effects Institute, "Health Effects of Methanol Exposure: Metabolism and Pharmacokinetics; Fetal and Perinatal Neurotoxicity; Reproductive Toxicity (RFA 89-1)"
1990	Ad Hoc Member, Toxicology Study Section, National Institutes of Health
1990	Member, Ad Hoc Study Section, National Institutes of Health, "Training Programs in Toxicology"
1990 - 1994	Consultant, U.S. Environmental Protection Agency, Determination of the cumulative neurotoxicity of acrylamide and implications for risk assessment
1991	Ad Hoc Reviewer, Toxicology Study Section, National Institutes of Health
1991 - 1993	Member, Advisory Committee, National Human Exposure Assessment Survey (NHEXAS Project), Cadmus Group, U. S. Environmental Protection Agency and the Office of Health Research
1992	Ad Hoc Reviewer, Toxicology Study Section, National Institutes of Health
1992 - 1995	Consultant, Burroughs Wellcome Corporation, Evaluation of the incidence of white matter protein deposits following exposure to zidovudine (AZT)
1992 - 1997	Consultant, U.S. Environmental Protection Agency, Evaluation of the neurotoxicity associated with chronic low-level exposure to 2-dichloroacetate
1993 – 1999	Consultant, U.S. Environmental Protection Agency, Evaluation of the cumulative neurotoxicity of 2,5-hexanedione and implications for risk assessment
1994	Ad Hoc Reviewer, Air Force Office of Scientific Research, Department of Defense
1994	Member, Consensus Panel for Evaluation of Teased Fiber Analysis in Diabetic Neuropathy, Toronto, Ontario
1995	Member, Site Visit Team, Program Project "Aging and neurodegenerative disease in Micronesia", University of California, San Diego, CA (Washington, D.C.)
1995	Member, Second Consensus Panel for Evaluation of Teased Fiber Analysis in Diabetic Neuropathy, Miami, FL
1995	Extramural Expert Reviewer, Peripheral Neuropathy in Diabetes Mellitus, Michigan Diabetes Research and Training Center, Ann Arbor, MI
1997	External Consultant in Neuropathology, School of Medicine, University of Alabama at Birmingham, Birmingham, AL
1999 - present	Ad Hoc Reviewer, Alzheimer's Association, Chicago, IL

2000	External Consultant, Review of Department of Pathology, Children's Memorial Hospital, Chicago, IL
2006	External Consultant, External Review of Department of Pathology, Medical University of South Carolina, Charleston, SC
2008	Study Section, Department of Health, State of Pennsylvania, Performance Reviews, Cycle 07-08 A
2008 – 2012	Member, MD-PhD Section, Association of American Medical Colleges (AAMC GREAT Group for Graduate, Research Education and Training)
2009 – 2010	Member, Standard Setting Panel, National Board of Medical Examiners, USMLE Step I, Philadelphia, PA
2012 – present	Member, Professional Practice Council, Association of Pathology Chairs
2013 – present	Member, Professional Affairs Committee, American Association of Neuropathologists
2014 – present	Chair, Committee for Web Site and Digital Technologies, American Association of Neuropathologists
2015	Study Section, Department of Health, State of Florida, Biomedical Research Programs Grant Program
2016 – present	Member, External Advisory Council, Department of Pathology, Duke University, Durham, NC
2016 - present	Executive Board, New England Society of Pathologists, Inc. President-elect, 2016-2017 President, 2017-2018 Past President, 2018-2020
2017 – 2018	Delegate, House of Delegates, College of American Pathologists
2017 – present	Vice President for Professional Affairs, American Association of Neuropathologists, Inc. Member, Executive Council Chair, Professional Affairs Committee Member, Education Committee, <i>ex officio</i>
2018 – present	Member, Society for Ultrastructural Pathology Program Committee, International Meeting, Ultrapath XIX
2018 – present	Vice President, International Society of Neuropathology.

Editorial Boards

1994 - 1997	<i>Journal of Neuropathology and Experimental Neurology</i>
1994 - 1999	<i>Advances in Anatomic Pathology</i>
1998 – 2007	<i>Pediatric Pathology and Molecular Medicine</i>
2004 – 2006	<i>Frontiers in Bioscience</i>
2013 – present	<i>Interdisciplinary Neurosurgery</i>
2014 – present	<i>Journal of Neuropathology and Experimental Neurology</i>
2015 – present	<i>Journal of Neurology and Neurobiology</i>

Solicited Reviewer

*Advances in Anatomic Pathology, American Journal of Pathology, Archives of Pathology and Laboratory Medicine, Brain Pathology, Cancer Cytopathology, Cancer, Clinical Neuropathology, Human Molecular Genetics, Interdisciplinary Neurosurgery, Interdisciplinary Neurosurgery, Journal Neuro-Oncology, Journal of Neurological Sciences, Journal of Neurology and Neurobiology, Journal of Neuropathology and Experimental Neurology, Journal of Neuroscience Methods, Laboratory Investigation, Metabolism, Modern Pathology, Neuroscience, Neurosurgery, Neurotoxicology, Pediatric and Developmental Pathology, Perspectives in Pediatric Pathology, Toxicology and Applied Pharmacology, Ultrastructural Pathology*

HOSPITAL COMMITTEES

- 1987 - 1992 Member, House Staff Admission and Advisory Committee, Department of Pathology, Duke University, Durham, NC
- 1989 - 1991 Chairman, Committee to Evaluate Computing Resources, Department of Pathology, Duke University, Durham, NC
- 1991 - 1992 Member, Duke Hospital Computer Advisory Committee, Durham, NC
- 1991 - 1992 Member, Institutional Committee for Graduate Medical Education, Duke University Medical Center, Durham, NC
- 1991 - 1992 Member, Search Committee for Director of Medical Center Information Systems, Duke University Medical Center, Durham, NC
- 1995 - 2000 Member, Board of Directors, Physicians' Organization at Children's Hospital, Inc. (Dr. Paul Hickey, Chairman), Boston, MA
- 1996 - 1997 Member, Tissue Repository Committee, Committee on Clinical Investigation (Dr. Peter Wolfe, Chairman of Committee on Clinical Investigations), Children's Hospital, Boston, MA
- 2002 - 2012 Member, University Physicians Management Committee, University of Missouri, Columbia, MO
- 2002 Member, Committee for Women's Health Services Facilities, Columbia, MO
- 2002 - 2012 Member, Hospital Operations Director's Committee, University Hospital and Clinics, Columbia, MO
- 2003 - 2012 Member, University Physicians Executive Committee, University of Missouri, Columbia, MO
- 2004 - 2006 Member, University of Missouri Health Care Executive Advisory Council, Columbia, MO
- 2005 - 2006 Member, University of Missouri Health Care Strategic Planning Committee, Columbia, MO
- 2008 - 2010 Member, Clinical Executive Advisory Group, University of Missouri Health Care, Columbia, MO
- 2008 - 2010 Co-Chair, Children's Hospital Planning Committee for Ancillary Services, University of Missouri Health Care, Columbia, MO



2008 – 2010 Member, Children’s Hospital Steering Committee (Women’s and Children’s Hospital), University of Missouri Health Care, Columbia, MO

2012 – present Member, Medical Executive Committee, Rhode Island Hospital, Providence, RI

2012 – present Member, Medical Executive Committee, The Miriam Hospital, Providence, RI

2012 – present Standing Member, Physician Claims Review Committee, Lifespan Academic Medical Center, Providence, RI

2012 – present Member, Steering Committee, Norman Prince Neuroscience Institute, Lifespan Academic Medical Center, Providence, RI

2012 – present Chair, Quality Assurance Committee, Department of Pathology and Laboratory Medicine, Lifespan Academic Medical Center, Providence, RI

2012 – 2013 Chair, Laboratory Information System Evaluation Committee, Lifespan Academic Medical Center, Providence, RI (Epic selected for EMR; Co Path Plus and Soft selected for Lab Information Systems)

2012 – 2013 Member, eHealth Information System Evaluation Committee, Lifespan Academic Medical Center, Providence, RI (Epic selected for system-wide EMR)

2012 – 2014 Member, Integration Committee for Evaluation of Electronic Medical Record, Lifespan Academic Medical Center, Providence, RI (Epic selected for EMR)

2013 – 2014 Member, Physician Retirement Plan Advisory Committee, Lifespan Health Care System, Providence, RI

2013 – present Member, EPIC Physician Advisory Committee, Lifespan Academic Medical Center, Providence, RI

2013 – 2015 Member, EPIC Laboratory Design Committee, Lifespan Academic Medical Center, Providence, RI

2013 – 2015 Member, EPIC Order Sets Committee, Lifespan Academic Medical Center, Providence, RI

2013 – present Member, Pathology Residency Steering Committee, The Warren Alpert Medical School of Brown University, Providence, RI

2013 – present Member, Lifespan Cancer Center Steering Committee, Lifespan Academic Medical Center, Providence, RI

2014 – present Physician Super User, Epic Electronic Medical Record (LifeChart), Lifespan Academic Medical Center, Providence, RI

2015 – present Member, Lifespan Cancer Center Advisory Committee, Lifespan Academic Medical Center, Providence, RI

2016 – present Member, Lifespan Cancer Center Operations Council, Lifespan Academic Medical Center, Providence, RI

2016 – present Member, Dana Farber Cancer Institute/Lifespan Genomics Design Team, Integrated Regional Cancer Center Planning Group, Providence RI and Boston MA.

2016 – present Member, Lifespan Clinical Informatics Technology Council, Lifespan Academic Medical Center, Providence, RI

UNIVERSITY COMMITTEES

1976-1978 Member, University Judicial Board, Washington University, St. Louis, MO

1977-1978 Chairman, University Judicial Board, Washington University, St. Louis, MO

1987 Member, Committee for the Evaluation of Clinical Clerkships, Liaison Committee for Medical Education (LCME), Duke University School of Medicine, Durham, NC

1988 - 1992 Member, Executive and Admissions Committee, Duke University Medical Scientist Training Program (M.D.-Ph.D. Program), Durham, NC

1988 - 1992 Member, Admissions and Executive Committee, Duke University Graduate Program in Experimental Pathology, Durham, NC

1989 - 1992 Member, Committee on Admissions, Duke University School of Medicine, Durham, NC

1991 - 1992 Member (Alternate), Basic Science Faculty Steering Committee, Duke University School of Medicine, Durham, NC

1994 Member, Search Committee for Pediatric Pathologist, Children's Hospital and Harvard Medical School (Dr. Ramzi Cotran, Chair), Boston, MA

1994 Member, Working Group for Human Nervous System and Behavior, Harvard Medical School, IN707 (Dr. Thomas Glick, Chair), Boston, MA

1995 - 2000 Chairman, Organizing Committee for the Amico Bignami Memorial Lecture in Neuropathology, Boston, MA

1998 - 1999 Chairman, Search Committee for Pediatric Pathologist, Children's Hospital and Harvard Medical School, Boston, MA

1999 - 2000 Chairman, Search Committee for Hematopathologist, Children's Hospital and Harvard Medical School, Boston, MA

2000 - 2001 Chairman, Search Committee for Director of Cardiac Pathology, Children's Hospital and Harvard Medical School, Boston, MA

2001 - 2002 Member, Dean's Advisory Group, University of Missouri School of Medicine, Columbia, MO

2001 - 2012 Member, Council of Chairs, University of Missouri School of Medicine, Columbia, MO

2001 - 2003 Member, Steering Committee for Mission Based Management, University of Missouri School of Medicine, Columbia, MO

2001 - 2012 Member, Clinical Chairs Committee, School of Medicine, University of Missouri, Columbia, MO

2002 - 2008 Member, Research Advisory Committee, School of Medicine, University of Missouri, Columbia, MO

2002 Member, Committee for Review of Compensation Policies, School of Medicine, University of Missouri, Columbia, MO

2002 - 2003 Member, Diabetes and Cardiovascular Disease Center Steering Committee, School of Medicine, University of Missouri, Columbia, MO

2002 - 2005 Member, University Chairs Council (Representative for the School of Medicine), University of Missouri, Columbia, MO

2002 - 2004 Leadership Executive Committee, University of Missouri School of Medicine, Columbia, MO

2003 - 2006 MU 2020, Steering Committee to Revise the Curriculum of the School of Medicine, University of Missouri, Columbia, MO

2003 Member, Search Committee for the Chair of Internal Medicine, University of Missouri School of Medicine

2003 Member, Search Committee for the Chair of Surgery, University of Missouri School of Medicine, Columbia, MO

2003 - 2012 Consultant, Internal Scientific Review Board, University of Missouri College of Veterinary Medicine, "Vascular Cell Biology: Exercise Training and Coronary Disease", Columbia, MO

2004 - 2012 Ad Hoc Grant Reviewer, MU Research Board, University of Missouri, Columbia, MO

2006 – 2009 Member, Executive Committee, Interdisciplinary Neuroscience Program, University of Missouri, Columbia, MO

2006 – 2007 Chair, Task Force for Advanced Degrees in Clinical and Translational Sciences, University of Missouri, Columbia, MO

2006 - 2008 Admissions Leadership Advisory Group, University of Missouri, Columbia, MO

2006 – 2012 Member, Planning and Steering Committees, Clinical and Translational Sciences Institute, University of Missouri, Columbia, MO

2006 – 2012 Chair, Graduate Education Task Force for Clinical and Translational Sciences Institute, University of Missouri, Columbia, MO

2006 – 2008 Member, MU2020 Admissions Steering Committee, University of Missouri, School of Medicine, Columbia, MO

2006 – 2008 Member, MU2020 Admissions Planning Group, University of Missouri, School of Medicine, Columbia, MO

2008 – 2010 Member, Search Committee, Associate Dean for Curriculum, University of Missouri, School of Medicine, Columbia, MO

2010 – 2011 Member, Search Committee for the Chair of Emergency Medicine, University of Missouri, School of Medicine, Columbia, MO

2010 – 2012 Member, Research Council, University of Missouri School of Medicine, Columbia, MO

2010 – 2011 Chair, Organizing Committee, Translational Neuroscience Symposium, University of Missouri, Columbia, MO

2011 – 2012 Member, Dean's Advisory Committee for Research, University of Missouri School of Medicine, Columbia, MO

2011 - 2012 Member, Executive Clinical Chairs Committee, University of Missouri School of Medicine, Columbia, MO

2012 – present	Executive Committee, Department of Pathology and Laboratory Medicine, Brown University, Providence, RI
2012 – 2013	Member, Search Committee for the Chair of Dermatology, Brown University, Providence, RI
2013 – present	Member, Advisory Group for the Office of Diversity and Multicultural Affairs (ODMA), Brown University, Providence, RI
2013 – 2015	Member, Search Committee, Clinical Genetics, Department of Pediatrics, Brown University, Providence, RI
2013 – 2015	Chair, Subcommittee for Student and Faculty Recruitment, Advisory Group for the Office of Diversity and Multicultural Affairs, Brown University, Providence, RI
2014 – 2015	Member, Clinical and Translational Sciences Grant Planning Committee, Brown University, Providence, RI
2014 – 2015	Member, Search Committee, Chair, Department of Neurosurgery, Brown University, Providence, RI
2014 – 2015	Member, Search Committee, Chief of Hematology-Oncology, Department of Internal Medicine, Brown University, Providence, RI
2015 – 2016	Member, Search Committee, Chair, Department of Orthopedic Surgery, Brown University, Providence, RI
2015 – 2016	Member, Data Analysis and Computation Core Task Force, Brown University, Providence, RI
2015 – 2016	Member, Academic Design and Investment Committee, Warren Alpert Medical School of Brown University and Rhode Island Medical Group, Providence, RI
2016 – 2018	Member, Clinical and Translational Sciences Grant Writing Group, Brown University, Providence, RI
2016 – 2018	Co-Director, Training Core (TL1), Clinical and Translational Sciences (Advance-CTSA), Brown University, Providence, RI
2017 – 2018	Coordinator for Precision Medicine educational initiatives, Clinical and Translational Sciences (Advance-CTSA), Brown University, Providence, RI

#### MEMBERSHIP IN SOCIETIES

1987 - present	United States and Canadian Academy of Pathology (USCAP) Course Director, Short Course - "Problems in Neuromuscular Pathology: Evaluation of Nerve and Muscle Biopsies", United States and Canadian Academy of Pathology, 1997 Chairman, Neuropathology Platform Session, 86th Annual Meeting, United States and Canadian Academy of Pathology, 1997 Panel Member, Neuropathology Diagnostic Session, 86th Annual Meeting, United States and Canadian Academy of Pathology, 1997 Panel Member, Neuropathology Diagnostic Session, 87th Annual Meeting, United States and Canadian Academy of Pathology, 1998
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Course Director, Short Course - "Problems in Neuromuscular Pathology: Evaluation of Nerve and Muscle Biopsies", United States and Canadian Academy of Pathology, 1999  
Panel Member, Neuropathology Diagnostic Session, 88th Annual Meeting, United States and Canadian Academy of Pathology, 1999  
Faculty Member, Diagnostic Pathology Series (Neuropathology), United States and Canadian Academy of Pathology, 1999 - 2002  
Course Director, Short Course - "Problems in Neuromuscular Pathology: Evaluation of Nerve and Muscle Biopsies", United States and Canadian Academy of Pathology, 2001  
Panel Member, Electron Microscopy Symposium, Ultrastructural Pathology Companion Meeting, United States and Canadian Academy of Pathology, 2000  
Ambassador, United States and Canadian Academy of Pathology, 2011  
Course Director, Short Course - "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, 2016  
Course Director, Short Course - "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, 2017  
Course Director, Short Course - "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, 2018

1988 - present

American Association of Neuropathologists (AANP)  
Chairman, Peripheral Nerve and Muscle Platform Session, 64th Annual Meeting, American Association of Neuropathologists, 1988  
Chairman, Toxic and Metabolic Disorders Platform Session, 65th Annual Meeting, American Association of Neuropathologists, 1989  
Chairman, Peripheral Nerve and Muscle Platform Session, 67th Annual Meeting, American Association of Neuropathologists, 1991  
Chairman, Peripheral Nerve and Muscle, Scientific Poster Discussion Session IV, 68th Annual Meeting, American Association of Neuropathologists, 1992  
Member, Program Committee, Organization and Planning for the 71st Annual Meeting, American Association of Neuropathologists, 1995  
Chairman, Neuromuscular Disorders Poster Discussion Session, 71st Annual Meeting, American Association of Neuropathologists, 1995

- Member, Program Committee, Organization and Planning for the 72nd Annual Meeting, American Association of Neuropathologists, 1996
- Chairman, Neuromuscular Disorders Platform Session, 72nd Annual Meeting, American Association of Neuropathologists, 1996
- Chairman, Nerve and Muscle Disorders, Platform Session VII, 74th Annual Meeting, American Association of Neuropathologists, 1998
- Chairman, Nerve and Muscle Disorders, Poster Session VII, 75th Annual Meeting, American Association of Neuropathologists, 1999
- Panelist, Diagnostic Slide Session, 82nd Annual Meeting of American Association of Neuropathologists & 16th International Congress of Neuropathology, 2006
- Member, Professional Affairs Committee, 2013 – present
- Chair, AANP Web Site Design and Digital Technologies Committee, 2014 – 2018
- Vice President for Professional Affairs, 2017 – present
- 1989 - present      Society for Neuroscience (SfN)
- 1992 - present      Society of Toxicology (SOT)  
                            Chairman, Neurotoxicity: Peripheral Nerve and Muscle, 32nd Annual Meeting, Society for Toxicology, 1993  
                            Chairman, Neurotoxicity: Peripheral Nervous System/Axonal Degeneration, Scientific Poster Discussion Session 22, 34th Annual Meeting, Society for Toxicology, 1995
- 1993 - present      American Society for Neurochemistry (ASN)  
                            Chair, Neurochemistry Colloquium, “Oxidative/Nitrosative Stress: A Double-edged Sword in Neurodegenerative Diseases.”, St. Louis, MO, 2011  
                            Functional Neuroanatomy, “Learning and Memory”, St. Louis, MO, 2011
- 1993 - present      American Society for Investigative Pathology (ASIP)
- 1994 - present      Society for Pediatric Pathology
- 1997 - present      Member, College of American Pathologists (CAP)  
                            Fellow, College of American Pathologists (elected 2005)  
                            Delegate, CAP House of Delegates (Alternate, elected 2017)
- 2001 - present      Association of Pathology Chairpersons (APC)  
2007 - 2008          Co-Sponsor/Program Chair with Patricia Thomas, M.D., Chair of Pathology, University of Kansas, West-Midwest Regional Association of Pathology Chairpersons, Maui, Hawaii
- 2001 – present      Member, Practice Committee
- 2002 - 2012          American Association of Clinical Anatomists
- 2005 – present      American Medical Association (AMA)

2004 - 2012	Missouri State Medical Association
2004 - 2012	Boone County Medical Association
2012 – present	Rhode Island Medical Society
2012 – present	Rhode Island Society of Pathologists
2016 – present	New England Society of Pathologists President-Elect, 2016-2017 President, 2017-2018
2014 – present	International Society of Neuropathology Vice President, 2018 - present
2017 – present	American Association for Cancer Research (AACR)

## PUBLICATIONS

(<http://www.ncbi.nlm.nih.gov/sites/myncbi/1nEJeLu4bh652/bibliography/41649010/public/?sort=date&direction=descending>; 5,397 total citations, h-index 42)

## ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Graham DG, Anthony DC, Boekelheide K, Maschmann NA, Richards RG, Wolfram JW, Shaw BR. Studies of the molecular pathogenesis of hexane neuropathy. II. Evidence that pyrrole derivatization of lysyl residues leads to protein crosslinking. *Toxicol Appl Pharmacol* 1982;64:415-22.
2. Graham DG, Anthony DC, Boekelheide K. *In vitro* and *in vivo* studies of the molecular pathogenesis of *n*-hexane neuropathy. *Neurobehav Toxicol Teratol* 1982;4:629-34.
3. Anthony DC, Giangaspero F, Graham DG. The spatio-temporal pattern of the axonopathy associated with the neurotoxicity of 3,4-dimethyl-2,5-hexanedione in the rat. *J Neuropathol Exp Neurol* 1983;42:548-60.
4. Anthony DC, Boekelheide K, Graham DG. The effect of 3,4-dimethyl substitution on the neurotoxicity of 2,5-hexanedione. I. Accelerated clinical neuropathy is accompanied by more proximal axonal swellings. *Toxicol Appl Pharmacol* 1983;71:362-71.
5. Anthony DC, Boekelheide K, Anderson CW, Graham DG. The effect of 3,4-dimethyl substitution on the neurotoxicity of 2,5-hexanedione. II. Dimethyl substitution accelerates pyrrole formation and protein crosslinking. *Toxicol Appl Pharmacol* 1983;71:372-82.
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126. Anthony DC, Montine TJ, Valentine WM, Graham DG. Toxic responses of the nervous system. In: Klaassen CD, Watkins JB, eds. Casarett and Doull's Essentials of Toxicology. New York: McGraw-Hill, 2003:233-51.
127. Vallat JM, Anthony DC, DeGirolami U. Peripheral nerve diseases. In Gray F, De Girolami U, Poirier J, eds. Manual of Basic Neuropathology, 4<sup>th</sup> Edition. Philadelphia, PA: Butterworth-Heinemann Publishers, 2003:315-43.
128. Anthony DC, Goebel HH, Mikol J. Hereditary metabolic diseases. In Gray F, De Girolami U, Poirier J, eds. Manual of Basic Neuropathology, 4<sup>th</sup> Edition. Philadelphia, PA: Butterworth-Heinemann Publishers, 2003:219-48.
129. Anthony DC, Frosch MP, DeGirolami UL. Peripheral nerve and skeletal muscle. In: Kumar V, Abbas AK, Fausto N, eds. Robbins and Cotran Pathologic Basis of Disease, 7th Edition. Philadelphia: Elsevier Saunders, 2005:1325-1346.
130. Frosch MP, Anthony DC, DeGirolami UL. The central nervous system. In: Kumar V, Abbas AK, Fausto N, eds. Robbins and Cotran Pathologic Basis of Disease, 7th Edition. Philadelphia: Elsevier Saunders, 2005:1347-1419.

131. Anthony DC, Frosch MP, DeGirolami UL. Peripheral nerve and skeletal muscle. In: Mitchell RN, Kumar V, Abbas AK, Fausto N, eds. Pocket Companion to Robbins Pathologic Basis of Disease, 7th Edition. Philadelphia: W B Saunders Company, 2006:659-72.
132. Frosch MP, Anthony DC, DeGirolami UL. The central nervous system. In: Mitchell RN, Kumar V, Abbas AK, Fausto N, eds. Pocket Companion to Robbins Pathologic Basis of Disease, 7th Edition. Philadelphia: W B Saunders Company, 2006:673-708.
133. Anthony DC, Frosch MP, DeGirolami UL. Peripheral nerve and skeletal muscle. In: Kumar V, Abbas AK, Fausto N, Aster JC, eds. Robbins and Cotran Pathologic Basis of Disease, 8<sup>th</sup> Edition. Philadelphia: Elsevier Saunders, 2010:1257-77.
134. Frosch MP, Anthony DC, DeGirolami UL. The central nervous system. In: Kumar V, Abbas AK, Fausto N, Aster JC, eds. Robbins and Cotran Pathologic Basis of Disease, 8<sup>th</sup> Edition. Philadelphia: Elsevier Saunders, 2010:1279-1344.
135. Montine TJ, Anthony DC. Toxicological neuropathology in medical practice. In: Bolon B, Butt M, eds. Fundamental Neuropathology for Pathologists and Toxicologists: Principles and Techniques. Hoboken NJ: Wiley, 2011:475-486.
136. Anthony DC, Frosch MP, DeGirolami UL. Peripheral nerve and skeletal muscle. In: Mitchell RN, Kumar V, Abbas AK, Fausto N, Aster JC, eds. Pocket Companion to Robbins Pathologic Basis of Disease, 8th Edition. Philadelphia: W B Saunders Company, 2012:642-56.
137. Frosch MP, Anthony DC, DeGirolami UL. The central nervous system. In: Mitchell RN, Kumar V, Abbas AK, Fausto N, Aster JC, eds. Pocket Companion to Robbins Pathologic Basis of Disease, 8th Edition. Philadelphia: W B Saunders Company, 2012:657-89.
138. Vallat JM, Anthony DC, DeGirolami U. Peripheral nerve. In Gray F, De Girolami U, Duyckaerts C, eds. Escourolle and Poirier Manual of Basic Neuropathology, 5<sup>th</sup> Edition. Oxford, UK: Oxford University Press, 2014; 313-342.
139. Sedel F, Anthony DC, Goebel HH. Hereditary metabolic diseases. In Gray F, De Girolami U, Duyckaerts C, eds. Escourolle and Poirier Manual of Basic Neuropathology, 5<sup>th</sup> Edition. Oxford, UK: Oxford University Press, 2014; 227-256.
140. Anthony DC, Lacomis D. Critical illness polyneuropathy. In: Vallat J-M, Weis J, eds. Peripheral Nerve Disorders: Pathology and Genetics. Oxford, UK: Wiley Blackwell, 2014; 273-5.
141. Bilbao J, Anthony DC, De Girolami U. Methods for examination of peripheral nerve. In: Vallat J-M, Weis J, eds. Peripheral Nerve Disorders: Pathology and Genetics. Oxford, UK: Wiley Blackwell, 2014; 24-9.

142. Pytel P, Anthony DC. Peripheral nerve and skeletal muscle. In: Kumar V, Abbas AK, Aster JC, eds. Robbins and Cotran Pathologic Basis of Disease, 9<sup>th</sup> Edition. Philadelphia: Elsevier Saunders, 2015; 1227-50.
143. Frosch MP, Anthony DC, DeGirolami UL. The central nervous system. In: Kumar V, Abbas AK, Aster JC, eds. Robbins and Cotran Pathologic Basis of Disease, 9<sup>th</sup> Edition. Philadelphia: Elsevier Saunders, 2015; 1251-1318.
144. Anthony DC, DeGirolami U, Vallat JM. Peripheral nerve. In Gray F, De Girolami U, Duyckaerts C, eds. Escourolle and Poirier Manual of Basic Neuropathology, 6<sup>th</sup> Edition. Oxford, UK: Oxford University Press, 2019; in press.
145. Anthony DC, Goebel HH. Hereditary metabolic diseases. In Gray F, De Girolami U, Duyckaerts C, eds. Escourolle and Poirier Manual of Basic Neuropathology, 6<sup>th</sup> Edition. Oxford, UK: Oxford University Press, 2019; in press.
146. Pytel P, Anthony DC. Peripheral nerve and skeletal muscle. In: Kumar V, Abbas AK, Aster JC, eds. Robbins and Cotran Pathologic Basis of Disease, 10<sup>th</sup> Edition. Philadelphia: Elsevier Saunders, 2020; in press.

#### OTHER NON-PEER REVIEWED PUBLICATIONS

147. Anthony DC. Ultrastructural Study of the Human Diseased Peripheral Nerve: 2nd Edition. Vital C, Vallat JM. Arch Pathol Lab Med 1989;113:815.
148. Anthony DC. Textbook of Neuropathology: 2nd Edition. Davis RL, Robertson DM, eds. Am J Clin Pathol 1992;96:401.
149. Anthony DC. Quality and cost are inter-related in pathology. Society for Pediatric Pathology Newsletter, Fall 1995:3-4.
150. Anthony DC. Specificity of neurofilamentous swelling and axonal atrophy. Neurotoxicol 1997;18:23-4.

#### INVITED PRESENTATIONS

1. Anthony DC. "The molecular pathogenesis of hexane neuropathy." Society of Toxicology, Las Vegas, Nevada, March 9, 1983.
2. Anthony DC. "Neurotoxicology." IBM Conference on Clinical and Occupational Toxicology, Research Triangle Park, NC, 1988.

3. Moser VC, Phillips PM, Anthony DC, Sette WF, MacPhail RC. "Final report of subchronic study of 2-hydroxyethyl acrylate and acrylamide in rats." Report to the Office of Toxic Substances. 1989; #68-02-4450.
4. Anthony DC. "The toxic neurofilamentous neuropathies: An experimental model with implications for axonal dystrophies." Mayo Clinic, Rochester, Minnesota, 1989.
5. Anthony DC. "Adrenoleukodystrophy: A reappraisal of the selective demyelination." Department of Neurology, Mayo Clinic, Rochester, Minnesota, 1989.
6. Anthony DC. "Diagnostic neuropathology." Department of Pathology, Mayo Clinic, Rochester, Minnesota, 1989.
7. Anthony DC. "Understanding axonal dystrophies: The use of toxic models." University of Nebraska, Omaha, Nebraska, 1989.
8. Anthony DC. "Toxic disruption of the axonal cytoskeleton." Stanford University, Palo Alto, California, 1989.
9. Anthony DC. "Neurotoxicology." In: Principles of environmental and industrial toxicology, Institute of Chemical Toxicology, Wayne State University, Detroit, MI, 1989.
10. Anthony DC. "Evaluating patients with peripheral neuropathies: The use of teased fiber preparations." Society of Histotechnology, Raleigh, NC, 1990.
11. Anthony DC. "The cellular basis of neurotoxicology." Duke University Division of Occupational Health Sciences, Durham, NC, 1990.
12. Anthony DC. "Toxic models of neurofilament accumulation: A form of axonal dystrophy." Program in Toxicology, North Carolina State University, Raleigh, NC, 1991.
13. Anthony DC. "The use of toxic models to understand neurologic disease." The University of Alabama, Birmingham, AL, 1991.
14. Anthony DC. "Toxic models of neurologic disease." The University of Florida, Gainesville, FL, 1991.
15. Anthony DC. "Peripheral neuropathies." Department of Neurology, Mayo Clinic, Rochester, MN, 1991.
16. Anthony DC. "Disruption of axonal transport." Department of Pathology, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, 1991.
17. Anthony DC. "Disorders of peripheral nerve." The F. Stephen Vogel Clinical Pathological Correlation in Practical Neuropathology, Durham, NC, 1991.

18. Anthony DC, Pyle SJ. "Impairment of the translocation of intermediate filaments." In: Involvement of the cytoskeleton in chemical-induced neurodegenerative disorders, The International Neurotoxicology Association, Elsinore, Denmark, 1993.
19. Graham DG, Valentine WM, Amarnath V, Anthony DC. "Mechanism of protein cross-linking by hexane and carbon disulfide." International Society for the Study of Xenobiotics, Raleigh, NC, 1994.
20. Anthony DC. "Neuropathology: clinical and scientific frontiers." The Medical Scientist Symposium Series, Brown University, Providence, RI, May, 1994.
21. Anthony DC. "Quantitation of molecular injury in neurotoxicology." Visiting Lecture Series, Joint Program in Toxicology, Rutgers University, Piscataway and University of Medicine and Dentistry of New Jersey - Robert Wood Johnson Medical School, Brunswick, NJ, November, 1994.
22. Anthony DC. "Glial tumor grading and pathology and radiation necrosis." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1995.
23. Anthony, DC. Clinical commentator, Brain Tumor Symposium: Research Presentations and Clinical Perspectives, Sponsored by the Brain Tumor Society, Boston, MA, December, 1995.
24. Anthony DC. "Peripheral nerve biopsies." Symposium presentation, College of American Pathologists, Boston, MA, April, 1996.
25. Anthony DC. "Peripheral nerve biopsies: issues in handling and evaluation." Department of Pathology, University of Kansas, Kansas City, KS, August, 1996.
26. Anthony DC. "Neuromuscular Case Studies." Visiting Professor, Department of Pathology, University of Kansas, Kansas City, KS, August, 1996.
27. Anthony DC. "Brain Tumor Pathology." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1996.
28. Anthony DC. "Challenging cases in brain tumor pathology." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1996.
29. Anthony DC. "Peripheral nerve biopsies: pathologic evaluation and clinical integration." Massachusetts General Hospital, Pathology Grand Rounds, Boston, MA, November, 1996.

30. Anthony DC. "Diseases of the peripheral nervous system." Neurosurgical Grand Rounds, Brigham and Women's Hospital and Children's Hospital Program in Neurosurgery, Boston, MA, January, 1997.
31. Anthony DC, DeGirolami U. "Problems in neuromuscular pathology: Evaluation of nerve and muscle biopsies." Symposium presentation, United States and Canadian Academy of Pathology, Orlando, FL, March, 1997.
32. Anthony DC. "Neuropathology Diagnostic Slide Session - Lhermitte Duclos disease." Symposium presentation, United States and Canadian Academy of Pathology, Orlando, FL, March, 1997.
33. Anthony DC. "Peripheral nerve biopsies: pathologic evaluation and clinical integration." Spaulding Hospital Grand Rounds, Boston, MA, March, 1997.
34. Anthony DC. "Peripheral nerve biopsies: current issues in handling and evaluation." New England Deaconess Hospital, Pathology Conference, Boston, MA, April, 1997.
35. Anthony DC. "Primitive neuroectodermal tumors in childhood." Universidade Federal de São Paulo, Escola de Medicina, São Paulo, Brazil, April, 1997.
36. Anthony DC. "Myopathies of childhood." Universidade Federal de São Paulo, Escola de Medicina, São Paulo, Brazil, April, 1997.
37. Anthony DC. "Case discussions: Neuropathology." Universidade Federal de São Paulo, Escola de Medicina, São Paulo, Brazil, April, 1997.
38. Anthony DC. "Classification and grading human gliomas: current issues." University of South Florida, Tampa, FL, April, 1997.
39. Anthony DC. "Peripheral neuropathies." The Chinese University of Hong Kong Program in Neuropathology, Beijing, China, September, 1997.
40. Anthony DC. "Malignant tumors of childhood." The Chinese University of Hong Kong Program in Neuropathology, Beijing, China, September, 1997.
41. Anthony DC, DeGirolami U. "Evaluation of muscle biopsies." The Chinese University of Hong Kong Program in Neuropathology, Beijing, China, September, 1997.
42. Anthony DC. "Neuropathology Diagnostic Session; Case Studies for Pathologists." The Chinese University of Hong Kong Program in Neuropathology, Beijing, China, September, 1997.



43. Anthony DC. "Evaluation of biopsies from patients with neuromuscular disease" Harvard Longwood Neurology Program, Harvard Institutes of Medicine, Boston, MA, October, 1997.
44. Anthony DC. "Brain Tumor Pathology." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1997.
45. Anthony DC. "Challenging cases in brain tumor pathology." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1997.
46. Anthony DC. "Neuropathology Diagnostic Slide Session - Dysembryoplastic neuroepithelial tumor." Symposium presentation, United States and Canadian Academy of Pathology, Boston, MA, March, 1998.
47. Anthony DC. "Neuropathology Diagnostic Slide Session - Choroid plexus neoplasms." Symposium presentation, United States and Canadian Academy of Pathology, San Francisco, CA, March, 1999.
48. Anthony DC, DeGirolami U. "Problems in neuromuscular pathology: Evaluation of nerve and muscle biopsies." Symposium presentation, United States and Canadian Academy of Pathology, San Francisco, March, 1999.
49. Anthony DC. "Diagnostic Neuropathology: Current Issues with Case Presentations." Visiting Professor, Vanderbilt University, Nashville, TN, May, 1999.
50. Anthony DC. "Surgical Neuropathology." Diagnostic Pathology, United States and Canadian Academy of Pathology, Minneapolis, MN, August, 1999.
51. Anthony DC. "Complex Cases in Brain Tumor Pathology." Harvard University Continuing Education Course "Tumors of the Central Nervous System: Brain Tumor Management", Boston, MA, November, 1999.
52. Anthony DC. "Inherited and storage diseases of peripheral nerve." Ultrastructural Pathology Meeting Symposium, held jointly with the United States and Canadian Academy of Pathology meeting, New Orleans, LA, March, 2000.
53. Anthony DC. "Pathologic evaluation of peripheral neuropathies." St. Lukes Hospital Neuroscience Symposium, Manila, Philippines, October, 2000.
54. Anthony DC. "Leukodystrophies and demyelinating diseases of childhood." St. Lukes Hospital Neuroscience Symposium, Manila, Philippines, October, 2000.

55. Anthony DC. "Current Trends in Pediatric Autopsies." Surgical Grand Rounds, Children's Hospital, Boston, MA, January, 2001.
56. Anthony DC. "Pediatric Autopsies: A Post-Mortem Analysis." Oncology Grand Rounds, Dana Farber Cancer Institute, Boston, MA, January, 2001.
57. Anthony DC. "Peripheral Nerve Biopsies: Current Diagnostic Issues." Department of Pathology, Medical College of Georgia, Augusta, GA, March, 2001.
58. Anthony DC. "Peripheral Neuropathy: Pathologic and Molecular Classification." Department of Pathology, University of Tennessee, Memphis, TN, May, 2001.
59. Anthony DC. "Disorders of the Axon: Pathologic and Molecular Classification." Department of Pathology, University of Missouri, Columbia, MO, May, 2001.
60. Anthony DC. "The Autopsy: A Post-Mortem Analysis." Vanderbilt University, Department of Pathology, Nashville, TN, January, 2003
61. Anthony DC. "The Autopsy: A Post-Mortem Analysis." Medicine Grand Rounds, University of Missouri, Columbia, MO, February, 2003
62. Anthony DC. "Brain Tumors: Refining the Current Classification with Biochemical and Molecular Markers." Surgery Grand Rounds, University of Missouri, Columbia, MO, March, 2004
63. Anthony DC. "Seminar on Advanced Pathologic Techniques: Current Issues in Neuropathology." American College of Veterinary Pathologists and ILSI Health and Environment Sciences Institute, Boston, MA, December, 2005
64. Anthony DC. "Case 2006-9; AANP Diagnostic Slide Session." International Congress of Neuropathology, San Francisco, CA, September, 2006
65. Anthony DC. "Brain Tumors: Refining the Classification in the Molecular Era." Kansas University Pediatric Grand Rounds, Kansas City, KS, November, 2006
66. Resnik AG, Anthony DC. "The Role of the Hippocampus in Memory Formation." University of Missouri, Psychiatry Grand Rounds, Columbia, MO, November, 2006
67. Anthony DC. "Using the Autopsy to Improve Patient Care." University of Missouri, Internal Medicine Grand Rounds, Columbia, MO, January, 2007.
68. Anthony DC. "Forensic pathology: Meeting the RRC mandates while serving the community." Association of Pathology Chairpersons, Puerto Vallarta, Mexico, November, 2007.

69. Anthony DC. “Non-occlusive cerebrovascular injury of the brain.” University of Missouri, Neurology Grand Rounds, Columbia, MO, January, 2008.
70. Anthony DC, Stacy CC. “Forensic pathology – the scientific basis of post-mortem diagnosis.” U.S. Department of Justice and Missouri Supreme Court-Sponsored ASTAR (Advanced Science and Technology Adjudication Resource) Presentation, Columbia, Missouri, 2008.
71. Anthony DC. “Center for Translational Neurosciences Research”. Neurosurgery Conference, Columbia, MO, 2008.
72. Anthony DC. “ACGME Requirements for Pathology Residency Programs”. Association of Pathology Chairs, Maui, HI, 2008.
73. Anthony DC, Smith FH. “Medical Examiners As Part Of The CSI Team”. Association of County Commissioners, State of Missouri, Jefferson City, MO, February, 2009.
74. Anthony DC. “Brain Tumors: Current Classification and New Horizons”. Pathology Grand Rounds, Kansas University Medical Center, Kansas City, KS, 2009.
75. Anthony DC. “Expert Panel Discussion – Translational Research in Bioelectrics”, International Bioelectric Symposium, Columbia, MO, 2009.
76. Anthony DC, Miller DC. “Pyogenic Infections of the CNS.” Neurology Grand Rounds, University of Missouri, Columbia, MO, 2009.
77. Anthony DC. “Brain Tumors: A Look at the Horizon.” Seminars in Translational Neurosciences, University of Missouri, Columbia, MO, 2010.
78. Anthony DC, Miller DC. “Viral Encephalopathies.” Neurology Grand Rounds, University of Missouri, Columbia, MO, 2010.
79. Anthony DC. “Statistics and Scientific Certainty.” U.S. Department of Justice-Sponsored ASTAR (Advanced Science and Technology Adjudication Resource) Boot Camp, Language of the Court-Related Sciences, St. Louis, Missouri, 2010.
80. Anthony DC. “Statistical Approaches to Medical Certainty.” U.S. Department of Justice-Sponsored ASTAR (Advanced Science and Technology Adjudication Resource) Boot Camp, Language of the Court-Related Sciences, St. Louis, Missouri, 2010.
81. Anthony DC. “Translational Neurosciences – An Introduction to the Approach at the University of Missouri.” Translational Neuroscience Symposium, Columbia, Missouri, 2011.

82. Anthony DC. “State of the Science: Brain Development and Anatomy.” Plenary Lecture, U.S. Department of Justice-Sponsored ASTAR (Advanced Science and Technology Adjudication Resource) Conference, Developmental Forensics of Children Adjudicated by Courts, Chapel, NC, 2011.
83. Anthony DC. “Fetal Alcohol Syndrome.” Workshop and Lecture, U.S. Department of Justice-Sponsored ASTAR (Advanced Science and Technology Adjudication Resource) Conference, Developmental Forensics of Children Adjudicated by Courts, Chapel, NC, 2011.
84. Anthony DC. “Functional Neuroanatomy of Learning and Memory.” American Society for Neurochemistry, St. Louis, MO, 2011.
85. Anthony DC. “Oxidative and Nitrosative Stress: A Double-Edged Sword in Neurodegenerative Disease.” Chair, American Society for Neurochemistry Colloquium, St. Louis, MO, 2011.
86. Anthony DC. “MU Center for Translational Neuroscience – An Update”. Translational Biomedicine Seminar, University of Missouri, Columbia, MO, 2011.
87. Anthony DC. “Declarative and Non-declarative Memory – The Functional Anatomy of Remembering What and How.” Medical Sciences Seminar Series, University of Missouri, Columbia, MO.
88. Anthony DC. “A Center for Translational Neuroscience – Coordinating Clinical and Basic Science Research Programs.” Brown University and Lifespan Academic Medical Center, Providence, RI, 2011.
89. Anthony DC. “Mission-Based Metrics in Academic Pathology.” Association of Pathology Chairs, Monterey, CA, 2011.
90. Anthony DC. “Overview – Communications in Forensics: A Multidisciplinary Approach to Problematic Cases.” Branson, MO, 2011.
91. Anthony DC. “Gliomas: Pathway to Personalized Diagnostics.” Yale University, School of Medicine, Pathology Grand Rounds, New Haven, CT, 2013.
92. Anthony DC. “Neuropathology Difficult Case Conference.” Yale University, School of Medicine, Pathology Resident Slide Session, New Haven, CT, 2013.
93. Anthony DC. “Digital Imaging in Histopathology.” American Society of Clinical Laboratory Sciences, Providence, RI, 2014.
94. Anthony DC. “The Future of Pathology and Laboratory Medicine: Looking toward 2020”. Pathology Grand Rounds, Brown University, 2015.

95. Anthony DC. “Web Site and Digital Technologies – A Plan for Neuropathology” American Association of Neuropathologists, Denver, CO, 2015.
96. Anthony DC, Pytel P. "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, Seattle, WA, 2016
97. Anthony DC. “Advances in the Web Presence for the American Association of Neuropathologists – Committee Report - <http://www.neuropath.org/>”, Baltimore, MD, 2016.
98. Anthony DC. “Update on the American Association of Neuropathologists Website and Member Engagement”, Baltimore, MD, 2016.
99. Anthony DC. “Precision Medicine”, Board of Trustees, Lifespan Academic Medical Center, Providence, RI, 2016.
100. Anthony, DC. “Precision Medicine – Current Success and Future Trends”, Board of Trustees, Rhode Island Hospital Foundation, Providence, RI, 2016.
101. Anthony DC, Pytel P. "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, San Antonio, TX, 2017.
102. Anthony DC. “Enhanced Online Capabilities of the American Association of Neuropathologists – Committee Report - <http://www.neuropath.org/>”, Garden Grove, CA, 2017.
103. Anthony DC. “A Model for Cancer Translational Research”, Lifespan Cancer Institute, Providence, RI, 2017.
104. Anthony DC, Pytel P. "Nerve and Muscle Biopsies: A patient-centered approach for the general pathologist", United States and Canadian Academy of Pathology, Vancouver, British Columbia, Canada, 2018.
105. Anthony DC. “A Coordinated Approach to Brain Tumors and Clinical Trials”, Dana Farber Cancer Institute, Boston, MA, 2018.
106. Anthony DC. “Precision Medicine: Long Term Plans for Improved Health Outcomes”, Lifespan Cancer Institute, Research and Practice Committee, Providence, RI, 2018.
107. Anthony DC. “Translational Research Program: Planning for the Future”, Lifespan Cancer Institute, Providence, RI, 2018.

108. Anthony DC, “Glioblastoma: On the Path to Personalized Medicine”, Boston University Department of Pathology Grand Rounds, Boston University, Boston, MA, 2018.
109. Anthony DC. “Electron Microscopy in Neuropathology”, Ultrapath XIX, The International Meeting of the Society for Ultrastructural Pathology, Newport, RI, USA, 2018.

## GRANTS

1. Environmental Toxicant-Induced Neurofilament Neuropathology  
National Institutes of Health/R01, 1984 - 1989  
Co-investigator (National Institute of Environmental Health Sciences; Dr. D. G. Graham, Principal Investigator)  
Goal: To investigate the molecular mechanisms involved in neurofilament accumulation in toxic neuropathies.
2. Toxic Models of Neurofibrillary Pathology  
National Institutes of Health/K08, 1987 - 1992  
Principal Investigator (National Institute of Neurological Disorders and Stroke)  
Goal: To investigate the molecular mechanisms involved in neurofilament accumulation in toxic neuropathies and implications for neurologic diseases.
3. Environmental Toxicant-Induced Neurofilament Neuropathy  
National Institutes of Health/R37 MERIT Award, 1989 - 1999  
Co-investigator (National Institute of Environmental Health Sciences; Dr. D. G. Graham, Principal Investigator)  
Goal: To investigate the molecular mechanisms involved in neurofilament accumulation in toxic neuropathies, and structure-activity relationships.
4. Duke University Medical Scientist Training Program  
National Institutes of Health/T32, 1989 - 1992  
Associate Program Director (National Institute of General Medical Sciences; Dr. S. V. Pizzo, Program Director)  
Goal: To train physician scientists in a rigorous traditional scientific environment and a novel medical school curriculum.
5. Hemoglobin Adducts: Dosimeter of Internal Exposure  
National Institutes of Health/R01, 1989 - 1995  
Principal Investigator (National Institute of Environmental Health Sciences)  
Goal: To quantify toxic exposures using hemoglobin covalent adducts as an internal dosimeter.
6. Duke University Medical Scientist Training Program  
National Institutes of Health/T32, 1992 - 1997  
Associate Program Director (National Institute of General Medical Sciences; Dr. S. V. Pizzo, Program Director)  
Goal: To train physician scientists in a rigorous traditional scientific environment and a novel medical school curriculum.
7. Studies on the Intra-axonal Transport of Neurofilaments  
Feodor Lynen Foundation Research Award, 1994 - 1995  
Principal Investigator (Alexander von Humboldt Foundation)

- Goal: To study the movement of neurofilament proteins within the axon in models of neurologic disease.
8. P-selectin Expression and Leukocyte Recruitment in Brain  
National Institutes of Health/R01, 1994 - 1998  
Consultant (Dr. T. Mayadas-Norton, Principal Investigator)  
Goal: To identify and quantify the migration of leukocytes within the brain in response to inflammatory stimuli.
  9. MRI Single Voxel Spectroscopy in Pediatric Brain Tumors  
American Cancer Society Research Award, 1994 - 1998  
Co-investigator (Dr. A. Tzika, Principal Investigator)  
Goal: To compare signals obtained by magnetic resonance spectroscopy with the cellular pathology of brain tumors.
  10. Intermediate Filament Localization: Control of Synthesis and Translocation  
Wilkes Foundation Research Award, 1996 - 2001  
Principal Investigator (Wilkes Foundation)  
Goal: To characterize the synthesis and movement of intermediate filaments within cells, and the alteration of movement induced in pathologic conditions.
  11. Local Control of Immune Activity in the Brain  
National Institutes of Health/R01, 1997 - 2000  
Co-Investigator (Dr. L. Lampson, Principal Investigator)  
Goal: To characterize lymphocytic infiltration of the brain and local environments that participate in immune activity within the brain.
  12. Metabolic and Hemodynamic MR Characterization of Pediatric Brain Tumors  
American Cancer Society Research Award, 1998 - 2001  
Co-Investigator (Dr. A. Tzika, Principal Investigator)  
Goal: To compare signals obtained by magnetic resonance spectroscopy and diffusion-weighted imaging with the cellular pathology of brain tumors.
  13. Consented High-Performance Indexing and Retrieval of Pathology Specimens  
National Institutes of Health, Program Project in Pathology Informatics, 2001  
Co-Investigator (NCI Pathology Informatics, Dr. I. Kohane, Principal Investigator; Inter-institutional Dana Farber/Harvard Cancer Center, Massachusetts General Hospital, Brigham and Women's Hospital, and Children's Hospital)  
Goal: To develop indexing and retrieval strategies for pathology specimens using diagnostic text with context specificity.
  14. Neuro-oncology SPORE Grant  
National Institutes of Health/SPORE, 2001  
Co-Investigator; Children's Hospital Director (National Cancer Institute, Dr. D. Louis, Program Director)



- Goal: To develop a specialized center for research across multiple Harvard-affiliated institutions to correlate cellular and molecular markers in brain tumors with prognosis and clinical outcome.
15. Therapeutic Na<sup>+</sup> channel blockers: receptor and drug design  
National Institutes of Health/2RO1-GM48090, 2000 - 2004  
Co-Investigator (Dr. G. K. Wang, Principal Investigator)  
Goal: To develop sodium channel blockers that create long-lasting pain control while avoiding peripheral nerve toxicity.
  16. Evaluation of Astrocytomas with HRMAS 1H-MR Spectroscopy  
National Institutes of Health/R01-CA77727, 1999 - 2004  
Co-Investigator (National Cancer Institute, Dr. L. Cheng, Principal Investigator)  
Goal – To utilize high-resolution magnetic imaging spectroscopy in combination with magic angle spinning techniques to characterize the high-intensity signals emanating from brain tumors, and identify the cellular and molecular basis of these signals.
  17. Continuum of Guidance With a Network of Mentors  
National Science Foundation Presidential Recognition Award/ HRD-0328407, 2004-2006  
Principal Investigator (Dr. Ellis Ingram, Nominee)  
Goal – To establish a network of individuals in scientific fields to provide a continuum of mentoring for underrepresented minorities of ages K-20, and facilitate their inclusion in scientific and medical professions.
  18. Therapeutic Na<sup>+</sup> Channel Blockers: Receptor and Drug Design  
National Institutes of Health/2RO1- GM48090, 2004 - 2008  
Consultant, 5% Effort (Dr. G. K. Wang, Principal Investigator)  
Goal – To develop long-acting Na channel blockers pertinent to pain management and to gain a better understanding of the mechanism of action of these blockers and their potential toxicity.
  19. Clinical & Translational Sciences Planning Grant: MU Institute for Clinical and Translational Sciences, University of Missouri  
National Institutes of Health/CTSA, 1P20-RR023527-01, 2006 - 2008  
Co-Investigator, 10% Effort (National Center for Research Resources, Dr. Jamal Ibdah, Principal Investigator)  
Goal – To create a transdisciplinary institute at the University of Missouri that supports the rapid translation of basic research findings to clinical utility using a multi-departmental approach and graduate program.
  20. Application of 454 Sequencing to Cancer Epigenetics  
National Institutes of Health/1R33-CA134304-01A1, 2008 - 2011  
Co-investigator, 5% Effort (National Cancer Institute, Dr. Huidong Shi, Principal Investigator)

- Goal – To develop a high-throughput, large-scale, sequencing-based approach to provide efficient methods for deeply exploring the cancer epigenome in brain tumors.
21. Beta-galactin mediated pathways as therapeutic targets in prostate cancer  
VA Merit Award, 2009 - 2015  
Co-investigator, 5% Effort (Dr. Slava Glinskii, Principal Investigator)  
Goal – To define the mechanisms of galectin-3 mediated prostate cancer homing to the microvasculature of distant organs and its role in site-specific metastasis.
  22. Building Networks for the Center for Translational Neuroscience  
Mizzou Advantage Innovation Program Grant, 2010 - 2011  
Principal Investigator  
Goal – To support a symposium focused on the research efforts of neuroscience faculty members, and provide a catalyst for the development of comprehensive neurosciences at the University of Missouri.
  23. Ovarian Cancer Cell Invasion and Metastasis  
National Institutes of Health, NCI 3R01-CA086984-12S, Subcontract to University of Missouri, 2011-2012  
Principal Investigator, 2% Effort (National Cancer Institute, Subcontract, S. Stack, Principal Investigator)  
Goal – To provide graduate student support in a collaborative effort to identify the mechanisms involved in ovarian cancer invasion and metastasis; subcontract to the University of Missouri from the University of Notre Dame, UND-309914.
  24. Targeting tumor invasion and drug resistance using 3D human organoids  
Dean's Award, Brown University, 2015-2017  
Co-Investigator (Ian Wang, Alexander Brodsky, Co-Principal Investigators)  
Goal – To measure the emergence of drug resistance and invasiveness in biomimetic 3D organoids of breast cancer and glioblastoma.
  25. Profiling heterogeneous invasion and resistance using 3D tumor organoids  
COBRE Project (NIGMS), 2015 – 2017  
Co-Investigator (Ian Wong, Principal Investigator)  
The major goal of this project is to measure the epithelial-mesenchymal transitions in 2D and 3D cultures after stimulation of specific pathways, and how the transition is affected by specific therapeutic regimens.
  26. Medley Genomics Feasibility of Cell Lineage Determination in Human Cancer  
Rhode Island Innovation Voucher, 2017 – 2019  
Co-Investigator (Murray Resnick, Principal Investigator)  
Goal - To compare molecular signatures in primary tumors and metastases using Genomic Heterogeneity<sup>TM</sup> Software to identify and characterize tumor cell subpopulations.

27. Defining the Mechanisms Underlying Dormant Stem Cell Tumorigenicity in Glioblastoma.  
DOD Peer Reviewed Cancer Research Program (In Review), 2018-2023  
Co-Investigator (Ashley Webb, PI)  
Goal – To collect new information characterizing quiescent glioma stem cells using a combination of molecular approaches that may lead to new targets for potential therapies.
28. Trans-nasal Delivery of Chemotherapy to Glioblastoma using Magnetic Nanoparticles and Magnetic Focusing.  
STTR R41 CA213540, 2017-2019  
Co-Investigator (Irving Weinberg, PI)  
Goal – To use magnetic nanoparticles to focus drug delivery directly to glioblastoma tumor beds at higher therapeutic levels than could otherwise be achieved using systemic delivery.
29. Role of Epigenetic Regulation in Human Glioma: Non-coding RNA and RNA Methylation.  
Warren Alpert Foundation Research Grant  
Co-Investigator (Steven Toms, PI)  
Goal – To identify how epigenetic modification of messenger RNA and non-coding RNA occurs in malignant gliomas, and the impact of these epigenetic pathways on the biologic behavior of malignant glioma cells.

#### UNIVERSITY TEACHING ROLES

##### Courses and training programs

1987 - 1992	General Pathology ( <u>Path 200</u> ), Duke University, School of Medicine Lecturer, lab instructor, and clinical pathologic conferences
1987 - 1992	Neuropathology ( <u>Path 353</u> ), Duke University Graduate School Lecturer
1987 - 1992	Subcellular Pathology ( <u>Path 346</u> ), Duke University Graduate School Lecturer
1987 - 1992	Faculty Member, Neuroscience Tract, Duke University School of Medicine
1988 - 1992	Faculty Member, Toxicology Program, Duke University, School of Medicine and Graduate School of Arts and Sciences
1991 - 1992	Mechanisms of Cell Injury ( <u>Cell Biology 211</u> ), Duke University Graduate School of Arts and Sciences, Lecturer
1993 – 2001	Human Nervous System and Behavior, Harvard Medical School, Boston, MA, Lecturer and laboratory Instructor
1999 - 2001	Human Pathology, Harvard Medical School, Laboratory Instructor
2002 - 2012	Problem-Based Learning Curriculum; Learning Objectives and Teaching Coordination in Anatomy and Pathology, University of Missouri, School of Medicine, Columbia, MO

M1 Block 3 (Neuroscience focus), First Year Medical Students,  
Lecturer and Laboratory Instructor  
M2 Block 5 (General Pathology focus), Second Year Medical  
Students, Lecturer and Laboratory Instructor  
M2 Block 6 (Pulmonary, cardiac, and hematology learning foci),  
Second Year Medical Students , Laboratory Instructor  
M2 Block 7 (GI, GU, and endocrine learning foci), Second Year  
Medical Students, Laboratory Instructor  
M2 Block 8 (Neurology, breast, bone, skin, reproductive, vascular  
and infections learning foci), Second Year Medical  
Students, Laboratory Instructor  
2002 - 2012 Member of the Graduate Faculty, University of Missouri,  
Columbia, MO  
2002 - 2012 Member of the Doctoral Faculty, University of Missouri,  
Columbia, MO  
2002 - 2012 Member of the Interdisciplinary Neuroscience (Graduate Student)  
Program, University of Missouri, Columbia, MO  
2005 – 2012 Member of the Pathobiology Area (Graduate Student) Program,  
University of Missouri, Columbia, MO  
2002 – 2012 Course Director, Research in Pathology and Anatomical Sciences,  
Masters level (PAS 8290)  
2002 – 2012 Course Director, Research in Pathology and Anatomical Sciences,  
Doctoral level (PAS 9090)  
2002 – 2012 Course Director, Elective in Anatomic and Clinical Pathology for  
Fourth Year Medical Students (PAS 6653)  
2002 – 2012 Course Director, Advanced Pathology (PAS 7300), Graduate  
School, University of Missouri  
2002 – 2012 Course Director, Advanced Biomedical Sciences Elective in  
Neurosciences (PAS 6672) for Fourth Year Medical  
Students  
2005 – 2012 Integrative Neurosciences I (BIOL 8440), University of Missouri,  
School of Arts and Sciences, Course Design and Lecturer  
2005 – 2012 Cancer Biology, Biological Sciences (BIOL 4994), University of  
Missouri, School of Arts and Sciences, Lecturer  
2005 – 2012 Mechanisms of Disease, Veterinary Pathobiology (VPB 8436),  
University of Missouri, College of Veterinary Medicine,  
Lecturer  
2007 – 2012 Integrative Neurosciences II (BIOL 8442), University of Missouri,  
School of Arts and Sciences, Course Design and Lecturer  
2008 – 2012 Forensic Pathology and Death Scene Investigation, Pathology and  
Anatomical Sciences (PAS 7020), School of Medicine,  
Graduate School of Arts and Sciences, and School of Law,  
Course Design and Lecturer  
2015 – 2018 Biol 3652 IMSII: Brain Sciences, Brown University, Content  
Design and Lecturer

Educational leadership roles

- 1994 Working Group to assess the educational goals for the Neuromuscular Section of Human Nervous System and Behavior, Harvard Medical School, Boston, MA  
Planning revisions in neuromuscular education for Harvard medical students; locating and preparing teaching materials for newly-identified teaching objectives.
- 2000 – 2001 Head of Cannon Society Laboratory, Pathology Education, Harvard Medical School, Boston  
Coordinating the teaching activities of faculty teaching for pathology laboratories for second year medical students in Cannon Society
- 2001 - 2012 Coordination of Education for anatomy-intensive (predominantly Blocks 1-4) and pathology-intensive (predominantly Blocks 5-8) portions of the Problem-Based Learning curriculum, School of Medicine, University of Missouri, Columbia, MO
- 2002 – 2012 Block 3 Steering Committee, serving on the committee responsible for identifying the learning objectives of the third (of four) blocks for first-year medical school education, reviewing cases used for problem-based learning, coordinating lectures and laboratories with cases, and designing allocation of time between lectures, labs, and PBL tutor sessions.
- 2003 – 2005 Block 5 Steering Committee, serving on the committee responsible for identifying the learning objectives of the first (of four) blocks for second-year medical school education, reviewing cases used for problem-based learning, coordinating lectures and laboratories with cases, and designing allocation of time between lectures, labs, and PBL tutor sessions.
- 2002 - 2012 MU 2020 Curriculum Revision Project; Task Force to assess the educational goals and admissions procedures for the School of Medicine, University of Missouri, Columbia, MO
- 2016 – 2018 Biol 3652 IMSII: Brain Sciences, Brown University, Providence, RI  
Member of planning committee for Brain Sciences (Luba Dumenco, Director)

Individual student training

a. Predoctoral research students:

- 1986 - 1988 Independent Study, M. Anthony Moody, B.S., Major: Chemistry; Duke University School of Arts and Sciences (currently M.D., Associate Professor of Pediatrics, Duke University)

- 1987 - 1988 Independent Study, Grant Simons, M.D.; Duke University School of Medicine (currently cardiologist and Chief of Heart Rhythm Services, Englewood Medical Center, Englewood, NJ and Associate Clinical Professor of Cardiology, Mount Sinai Medical Center)
- 1988 - 1989 Independent Study, Mohammed S. Ghotbi, M.D.; Duke University School of Medicine (currently Director of Cardiac Anesthesiology, Kaiser Permanente, San Francisco, CA)
- 1988 - 1989 Independent Study, Lawrence Wetterau, B.S., Major: Chemistry; Duke University School of Arts and Sciences (currently M.D., and Pediatric Endocrinologist, Kaiser Permanente, Baldwin Park, CA)
- 1988 - 1989 Doctoral Dissertation Committee, Mark Swaim, M.D., Ph.D.; Duke University Graduate School of Arts and Sciences (On the structure, function, and biosynthesis of human inter- $\alpha$  inhibitor, 1989) (currently gastroenterologist, Jackson, TN)
- 1988 - 1990 Doctoral Dissertation Committee, Jay Edelberg, M.D., Ph.D.; Duke University Graduate School of Arts and Sciences (A kinetic analysis of the effects of lipoprotein-a on fibrinolytic regulation, 1990) (currently Vice President, and Head of Cardiovascular Development, , Sanofi, New York City, NY)
- 1989 - 1991 Doctoral Dissertation Committee, Alan Mast, M.D., Ph.D.; Duke University Graduate School of Arts and Sciences (Aspects of the structure of serpins and their reaction with proteinases, 1991) (currently Associate Professor of Pathology, Medical College of Wisconsin, and Senior Investigator of the Blood Center of Wisconsin, Madison, Wisconsin)
- 1989 - 1992 Thesis Advisor, Sally J. Pyle, Ph.D.; Duke University Graduate School of Arts and Sciences (Neurofilament transport: the effects of the  $\gamma$ -diketones on protein movement, 1992) (currently Associate Professor with Tenure, Department of Cell Biology, University of North Dakota, Grand Forks, ND)
- 1991 - 1992 Doctoral Dissertation Committee, David Rubenstein, M.D., Ph.D.; Duke University Graduate School of Arts and Sciences (Structure and function of monomeric  $\alpha$ -macroglobulins, 1992) (currently Louis Skinner Distinguished Professor of Dermatology, University of North Carolina, Chapel Hill, NC)
- 1991 - 1992 Independent Study, Elizabeth (Betsy) Kau, B.S., Major: Chemistry; Duke University School of Arts and Sciences (currently M.D., Ralph Johnson Veterans Administration Medical Center, Charleston, SC)

- 1991 - 1993      Doctoral Dissertation Committee, Brad Bolon, D.V.M., Ph.D.;  
Duke University Graduate School of Arts and Sciences  
(Methanol-induced neural tube defects in mice:  
characterization of lesions, target and teratogen, 1993)  
(currently President, GEMpath Inc., Cedar City, UT)
- 1992      Independent Study, Emily (Kazaks) Prosis, B.S., Major: Biology;  
Duke University School of Arts and Sciences (currently  
M.D., Dermatology, Austin, TX)
- 1994      Honors Thesis Committee, Wendy Armstrong, M.D.; Harvard  
Medical School (Graduation with Honors in a Special  
Field, Cum Laude; Thesis: Evaluation of MHC Expression  
Xenografts of Human Neural Cell Lines) (currently  
Professor and Vice Chair for Education and Integration,  
Department of Medicine, Emory University, Atlanta, GA)
- 1994      Independent Study, Erik J. Clemente, B.S., Major: Microbiology  
and Biochemistry; University of California, Los Angeles  
(Summer Study at Harvard Medical School,  
Neuropathology Program of the Brigham and Women's and  
Children's Hospitals, Boston, MA)
- 1996      Honors Thesis Committee, Laura Lambert, M.D.; Harvard Medical  
School (Thesis: Irreversible conduction block in isolated  
frog sciatic nerve by high concentrations of local  
anesthetics.) (currently Associate Professor of Surgery,  
University of Massachusetts, Worcester, MA)
- 1997      Honors Thesis Committee, Jack Tsao, M.D., D.Phil; Harvard  
Medical School (Thesis: Early events in Wallerian  
degeneration.) (currently Professor of Neurology,  
Uniformed Services University, Washington, DC)
- 1998      Thesis Committee, External Examiner, Tong Yuen Kwan, Ph.D.;  
The Chinese University of Hong Kong (Thesis: Molecular  
genetics of oligodendrogliomas and ependymomas.)
- 1999      Thesis Committee, External Examiner, Chen Lan, Ph.D.; The  
Chinese University of Hong Kong (Molecular genetic and  
pathologic studies of Alzheimer's disease in Chinese.)
- 2003      Doctoral Dissertation Committee, Elizabeth (Liz) Tonkin, Ph.D.;  
Vanderbilt University Graduate School of Arts and  
Sciences (Evaluation of the neurotoxicity of  
dithiocarbamates, 2003) (currently Associate Director,  
Nektar Therapeutics, San Francisco, CA)
- 2004-2006      Research Fellowship, Brandon Sylvester; University of Missouri  
Graduate School of Arts and Science (currently Psy.D. and  
Mental Health Counselor, Sylvester Consulting LLC, and  
Associate Professor, Texas School of Professional  
Psychology of Argosy University, Katy, TX)

- 2005-2009      Doctoral Dissertation Committee, Farah Rahmatpanah, Ph.D.;  
University of Missouri Graduate School, Pathobiology  
Area Program (DNA methylation in hematologic  
malignancies – relationships between patterns of gene  
silencing and biologic behavior) (currently Research  
Scientist, University of California – Irvine, Irvine, CA)
- 2007 - 2010      Doctoral Dissertation Committee, Wonshill Koh, M.D., Ph.D.;  
University of Missouri Graduate School and School of  
Medicine (Angiogenesis in cancer – novel systems to  
evaluate the stages of endothelial invasion of the  
extracellular matrix) (currently Assistant Professor in  
Cardiology, Cincinnati Children’s Hospital and University  
of Cincinnati, Cincinnati, OH)
- 2008 – 2014      Doctoral Dissertation Committee, Natalie Downer, Ph.D.,  
University of Missouri Graduate School Interdisciplinary  
Neurosciences Program (The role of neurofilament  
structure on axonal diameter)
- 2008 – 2012      Doctoral Dissertation Committee, Devin Berry, Ph.D., University  
of Missouri Graduate School Interdisciplinary  
Neurosciences Program (The transport and polymerization  
of neurofilaments) (currently Post-doctoral Fellow, Zeng-  
Feng Chen lab, Washington University, St. Louis, MO)
- 2008 – 2013      Doctoral Dissertation Committee, Jacqueline (Jackie) Glascock,  
Ph.D., University of Missouri Graduate School  
Pathobiology Area Program (SMN gene function and  
motor neuron diseases.) (currently Chief Scientific Officer,  
Cure SMA, Elk Grove, IL)
- 2009 – 2011      Masters Dissertation Committee, Joey Garrity, M.S., University of  
Missouri Graduate School Pathobiology Program  
(Improved survival of explant cultures of joint surfaces for  
orthopedic surgical transplantation.) (currently Resident  
Physician, Department of Radiology, St. Louis University,  
St. Louis, MO)
- 2009 – 2011      Masters Dissertation Committee, James Bosanquet, M.S.,  
University of Missouri Graduate School Pathology Masters  
Program (Patients with venous thromboembolism have  
higher prevalence of obstructive sleep apnea than the  
general population) (currently pulmonologist, St. Louis,  
MO)
- 2010 – 2015      Doctoral Dissertation Committee, Kawasi Lett, University of  
Missouri Graduate School, Biological Sciences (Loss of  
afferent input alters voltage gated ion channel and  
neuromodulator receptor expression in crustacean and  
mammalian neurons) (currently Post-doctoral Fellow, Ron  
Harris-Warrick lab, Cornell University, Ithaca, NY)



b. Post-Doctoral research fellows:

- 1988 - 1990 Post-Doctoral Fellowship, Kalyani Amarnath, Ph.D.; Duke University (currently Research Associate Professor, Department of Pathology, Vanderbilt University Medical Center, Nashville, TN)
- 1990 - 1991 Visiting Scholar, Robert Denlinger, V.M.D., Ph.D.; Duke University (currently Senior Consultant for Drug Safety, The Upjohn Company, Kalamazoo, MI)
- 1991 - 1992 Post-Doctoral Fellowship, William Valentine, D.V.M., Ph.D.; Duke University (currently Associate Professor with Tenure of Pathology, Microbiology, and Immunology, Vanderbilt University Medical Center, Nashville, TN)
- 1992 - 1994 Post-Doctoral Fellowship, Sally J. Pyle, Ph.D.; Harvard Medical School (currently Associate Professor with Tenure, Department of Cell Biology, University of North Dakota, Grand Forks, ND)
- 1993 - 1994 Post-Doctoral Fellowship and 1994 Feodor Lynen Fellow of the Alexander von Humboldt Foundation, Alexander Vortmeyer, M.D.; Harvard Medical School (currently Professor of Pathology and Director of Neuropathology, Indiana University School of Medicine, Indianapolis, IN)
- 1993 - 1995 Post-Doctoral Fellowship, Donald Price, Jr., M.D.; Longwood Area Neurology Program and Harvard Medical School (currently Associate Professor of Neurology, East Carolina University School of Medicine, Greenville, NC)
- 1996 - 1999 Post-Doctoral Fellowship, Robert J. Barry, Ph.D.; Harvard Medical School (currently Director of Scientific Affairs, Kaneka Nutrients, LP)
- 2008 – 2010 Post-Doctoral Fellowship, Jianjun Zhou, Ph.D.; University of Missouri (currently Associate Professor of Cancer Biology, University of Beijing, Beijing, China)

c. Medical students and post-graduate medical trainees:

Medical Students (advisees)

- 2003 - 2004 Medical student advisee, Kyle Bradley; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at Emory University in Pathology (currently Assistant Professor of Pathology, Emory University)
- 2004 - 2006 Medical student advisee, Allison Lisle; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at University of Missouri in Pathology (currently Partner and Dermatopathologist, Midwest Pathology Associates, Kansas City, MO)

- 2005 - 2007 Medical student advisee, Robert Hillard; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at University of Kentucky in Pathology (currently Pathologist, Greensboro Pathology Associates, Greensboro, NC)
- 2005 - 2007 Medical student advisee, Justin Kreuter; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at Dartmouth University in Pathology (currently Associate Director of Transfusion Services, and Medical Director of Blood Donor Program, Mayo Clinic, Rochester, MN)
- 2006 - 2008 Medical student advisee, Jason Pettus; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at Dartmouth University in Pathology (currently Assistant Professor of Pathology and Laboratory Medicine, Dartmouth University, Lebanon, NH)
- 2006 - 2008 Medical student advisee, Anna Harris; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at Harvard Medical School/Beth Israel Deaconess Medical Center in Pathology (currently Pathologist, Virginia Mason Medical Center, Seattle, WA)
- 2006 - 2008 Medical student advisee, Jamie Odem; University of Missouri - Columbia (4th Year Medical Student) – NRMP match at University of Missouri in Pathology (currently Pathologist, Mercy Clinic, Springfield, MO)
- 2007 - 2009 Medical student advisee, Kevin Fisher; University of Missouri - Columbia (MD-PhD Student) – NRMP match at Emory University in Pathology (currently Assistant Professor of Pathology and Immunology, Baylor College of Medicine and Texas Children’s Hospital, Houston, TX)
- 2008 – 2010 Medical student advisee, Wonshill Koh; University of Missouri – Columbia (MD-PhD Student), NMRP match at North Shore-Long Island Jewish/Hofstra University in Pediatrics (currently Clinical Instructor, University of Pittsburgh, Schneider Children’s Hospital)
- 2010 – 2012 Medical student advisee, Sarah Hackman; University of Missouri – Columbia (MD Student), NMRP Match at University of Missouri, in Pathology (currently Assitant Professor and Surgical Pathologist, University of Texas Health System, San Antonio, TX)
- 2008 – 2014 Medical student advisee, Daniel Miller; University of Missouri – Columbia (MD-PhD Student), NMRP Match at Johns Hopkins University in Pathology (currently pathology resident at Johns Hopkins)

Neuropathology Fellows

- Sebastian Alston, M.D. (currently Professor, Alabama College of Osteopathic Medicine, Dothan, AL)
- Gregory Fuller, M.D., Ph.D. (currently Professor of Pathology, Chief of Neuropathology, M. D. Anderson Cancer Center, University of Texas – Houston, Baylor University, Houston, TX, and Past President of USCAP)
- Jacob Vandersteenhoven, M.D., Ph.D. (currently Pathologist, Palmetto Richland Hospital, Columbia, SC)
- Thomas Montine, M.D., Ph.D. (currently Professor and Chair, Department of Pathology, Stanford University)
- Natasa Zec, M.D., Ph.D. (currently Research Associate, Massachusetts General Hospital and Harvard Medical School, Boston, MA)
- Selina Cortez, M.D. (currently Neuropathologist and Surgical Pathologist, University of Massachusetts Memorial Medical Center, Worcester, MA)
- Dara Nachmanoff, M.D. (currently Neurologist, San Francisco, California)
- Donald Price, Jr., M.D. (currently Associate Professor of Neurology, East Carolina University, Greenville, NC)
- Mel Feany, M.D., Ph.D. (currently Professor of Pathology, Brigham and Womens Hospital and Harvard Medical School, Boston, MA)
- Ady Kendler, M.D., Ph.D. (currently Associate Professor of Pathology and Director of Neuropathology, University of Cincinnati, Cincinnati, OH)
- Alexander Vortmeyer, M.D. (currently Professor and Director of Neuropathology, University of Indiana School of Medicine, Indianapolis, IN)
- S. Humayun Gultekin, M.D. (currently Professor and Director of Clinical and Molecular Neuropathology, University of Miami Health System, Miami, FL)
- Ed Monuki, M.D., Ph.D. (currently Professor and Chair of Pathology, University of California - San Diego, San Diego, CA)
- Matt Anderson, M.D., Ph.D. (currently Associate Professor of Pathology and Neurology, and Director of Neuropathology, Beth Israel Deaconess Hospital, and Harvard Medical School, Boston, MA)
- Margaret McLaughlin, M.D. (currently Director of Pharmacology in Oncology Translational Research, Novartis Institutes for Biomedical Research NIBR, Boston, MA)
- Keith Ligon, M.D., Ph.D. (currently Associate Professor of Pathology, Harvard Medical School, and Director of Neuropathology, Brigham and Womens Hospital, Boston, MA)
- Jennifer Chan, M.D. (currently Associate Professor of Pathology, and Deputy Director of the Charbonneau Cancer Institute, University of Calgary, Calgary, Alberta, CA)
- Joe Corbo, M.D., Ph.D. (currently Professor of Pathology and Immunology, Genetics, Ophthalmology and Visual Sciences, Washington University, St. Louis, MO)

- Mohammad Mahboob, M.D. (currently Neuropathologist and Pathology Specialist, National Institutes of Health, Bethesda, MD)
- Keyla Kleyser-Sugrue, M.D. (currently Assistant Professor of Pathology and Neuropathology, University of South Florida & Tampa General Hospital, Tampa, FL)
- Anne Lee, M.D., Ph.D. (currently Fellow in Forensic Pathology, Saint Louis University, St. Louis, MO)
- Michael Ponsoni, M.D. (currently Assistant Professor of Pathology and Neuropathology, and Director of Neuropathology, University of Nebraska, Omaha, NE)
- Nelli Lakis, M.D. (currently Assistant Professor of Pathology, University of Kansas, Kansas City, Kansas)
- Darren Groh, M.D. (current Assistant Professor of Pathology, Creighton University, Omaha, NE)
- Galam Khan, M.D. (in training; Warren Alpert Medical School of Brown University, Neuropathology Fellowship)
- Renee Stonebridge, M.D. (in training; Warren Alpert Medical School of Brown University, Neuropathology Fellowship)

Clinical courses and hospital-based programs

- 1987 - 1992 Pathology Housestaff training, Diagnostic Neuropathology and Peripheral Nerve Biopsies, Duke University Medical Center, Rotations, clinical conferences, and lectures
- 1988 - 1992 Neurology and Neurosurgery Housestaff training, Duke University Medical Center, Rotations, clinical conferences, and lectures
- 1992 - 2001 Pathology Housestaff training, Diagnostic Neuropathology, Children's Hospital, Brigham and Women's Hospital, and New England Deaconess Hospital, Boston, MA; Rotations, clinical conferences, and lectures
- 1992- 2001 Neurology Housestaff training, Children's Hospital, Boston, MA; Rotations, clinical conferences, and lectures
- 1992- 2001 Neurosurgery Housestaff training, Children's Hospital and Brigham and Women's Hospital Combined Residency Program, Boston, MA; Rotations, clinical conferences, and lectures
- 1992- 2001 Oncology Housestaff training, Dana-Farber Cancer Institute, Boston, MA; Clinical conferences, and lectures
- 1993- 2001 Ophthalmology Housestaff training, Children's Hospital, Boston, MA; Clinical conferences and lectures.
- 2002- 2012 Pathology Housestaff training, University of Missouri, Clinical rotations, research electives, clinical conferences, and lectures
- 2005- 2012 Ophthalmology Housestaff training, University of Missouri, Clinical conferences and lectures

- 2006- 2012 Neurology/Neurosurgery Housestaff training, University of Missouri, Neuropathology rotations, neuroanatomy laboratories, clinical conferences, and lectures
- 2007- 2012 Psychiatry Housestaff training, University of Missouri, Lectures, neuroanatomy laboratories.
- 2012 – present Pathology Housestaff training, Brown University, Clinical rotations, electives, clinical conferences, and lectures
- 2012 – present Neurology and Neurosurgery Housestaff training, Brown University, Clinical rotations and clinical conferences

Educational leadership roles

- 1989 - 1992 Coordinator for Continuing Medical Education in Neuropathology, Duke University Medical Center, Durham, NC  
Planning topics for CME conferences (50-70 residents, rotating students, and senior staff from Pathology, Neurology, and Neurosurgery, 50 conferences/year), maintaining records of educational objectives and attendance, and providing CME records and accreditation.
- 1992 - 2001 Neuropathology Training Program, Brigham and Women's Hospital and Children's Hospital, Boston, MA  
Coordinating and scheduling activities of the Neuropathology Training Program between three Harvard-affiliated hospitals (Brigham and Women's, Children's, New England Deaconess), arranging appointments and orientation of affiliating residents to the Children's Hospital, and providing ongoing bidirectional evaluation of the training of residents and fellows in the Neuropathology Program at Children's Hospital.
- 1992- 2001 Neurology Program of the Children's Hospital, Boston, MA  
Coordinating the teaching activities of the Neuropathology Program with the educational goals of the Neurology Program of Children's Hospital, including scheduling of Pediatric Neurology/Pathology Conferences, Pediatric Neuromuscular Pathology Conference series, Neuropathology Rotations for Neurology residents at the Children's Hospital, and coordination of Continuing Medical Education accreditation for the Children's Hospital Neuropathology conferences.
- 1992 - 2001 Neurosurgery and Neuro-Oncology Programs of the Children's Hospital and Dana Farber Cancer Institute, Boston, MA  
Coordinating the teaching activities of the Neuropathology Program with the Neurosurgery Program of Children's Hospital and the Oncology and Radiation Therapy Programs of Children's Hospital and Dana Farber Cancer Institute, including

neuropathology participation in the Brain Tumor Working Group conferences, Neuropathology presentations in the Neuroradiology/Neuro-Oncology weekly conferences, and Neuropathology participation in the Dana Farber Tumor Board conferences.

- 1993 - 2001            Ophthalmology Pathology Program of the Children's Hospital, Boston  
                                 Coordinating the teaching activities of the Pathology Department  
                                 with the Ophthalmology Program at the Children's Hospital,  
                                 including planning of monthly conferences and determining  
                                 educational goals of Ophthalmic Pathology conferences.
- 2012 – present        Pathology Residency Program, Brown University, Providence, RI  
                                 Assisting in the coordination and scheduling of activities of the  
                                 Residency Training Program and providing ongoing evaluation  
                                 of the training of residents in Pathology at Brown University and  
                                 serving on the Steering Committee for the Brown Pathology  
                                 Residency Program
- 2012 – present        Neuropathology Fellowship Program, Brown University, Providence, RI  
                                 Assisting in the coordination and scheduling of activities of the  
                                 Neuropathology Fellowship Training Program, arranging  
                                 appointments and orientation of fellows, and providing ongoing  
                                 bidirectional evaluation of the training of fellows in the  
                                 Neuropathology Fellowship Program.

Residency Program Reporting (abstracts with residents and fellows since 2012)

1. Odum BR, Wen F, Anthony DC. Systemic hemangiomas associated with renal papillary adenomas, renal cortical cysts, and coronary artery aneurysm: an unusual manifestation of cerebral cavernous malformation? USCAP March 2013, Baltimore, MD.
2. Lakis N, Brodsky A, Smith T, Yang D, Wong I, Anthony DC. A subset of cells in glioblastoma multiforme express multiple stem cell markers. J Neuropathol Exp Neurol 2016;75:582.
3. Nix JS, Gardner JM, Gokden M, Moore B, Rodriguez F, Martinez-Lage Alvarez M, D'Almeida Costa F, Anthony DC. Neuropathology in social media. J Neuropathol Exp Neurol 2017;76:527.
4. He X, Anthony DC, Cao W. Pulmonary tumor embolism: comparison of clinical diagnoses and autopsy findings in a retrospective study over a 29-year period. Modern Pathol 2019; #327, in press.