

BARRIE J. CARTER RESUME

Contact Information: 206-286-0746, 206-910-0255(cell), barrie.carter693@gmail.com

Extensive experience in executive management of multidisciplinary research and development.

Highly developed scientific experience and skills in molecular and cellular biology and virology as applied to translational research and product development of novel technologies as therapeutics in multiple clinical indications.

Strong and productive interpersonal skills and extensive experience in leading interactions with multiple groups in internal matrix management structure and with strategic corporate collaborators and project teams as well as managing productive partnerships with academic collaborators.

Extensive and productive experience and skills in interactions with investors, analysts, and scientific, industry and mass media press.

Very strong presentation skills in many forums from one-on-one meetings to large platform presentations at National and International forums.

Strong experience and direct impact in interactions with regulatory agencies to develop new guidelines for novel classes of therapeutics.

Highly recognized in both academic and industry peer groups.

Extensive service on high level advisory committees for HHS, NIH, FDA

Experience as executive officer of public biotech company, director of private biotech company, Scientific Advisory Board of public biotech company.

Officer, Director, American Society of gene and Cell Therapy

Past-President, American Society of Gene and Cell Therapy

Current

Retired

Previous

Vice President, Vector Biology, BioMarin Pharmaceutical, Novato, CA

President of Carter BioConsulting, LLC

Adjunct Professor, Department of Anatomy and Cell Biology, University of Iowa

Director, Lentigen Corporation

Career in Biotech Industry - 1992-2008

Executive Officer, EVP & CSO (Targeted Genetics Corporation)

- Strategic planning
- Corporate alliances
- Management of internal R&D (including research, pre-clinical development and process development, GMP manufacturing for viral and non-viral delivery systems) and collaborations with external academic and corporate collaborators
- Fund raising - Completion of IPO, follow-ons PIPES etc.
- Interaction with analysts, money fund managers, investors, board of directors
- Interaction with press: scientific and business press, mass print media, radio.
- Leading role in interactions and consensus conferences between regulatory agencies (especially FDA, as well as European groups), societies (ASGT, BIO) and NIH to provide:
 - Training in Clinical Development of Gene Therapy
 - Establish approaches to Non-clinical Studies for Licensure in Gene Therapy
 - Guidance for Long Term Follow up of Human Subjects in gene Therapy Clinical Trials

Professional Career at NIH. 1973-1992.

Rapid and progressive promotion on basis of both scientific and management skills.

Became recognized expert and pioneer in AAV molecular biology and AAV vectors.

Mentored some 30 post-doctoral and graduate students most of whom have subsequently had very successful careers including a number of full professors, several department chairs, dean of a medical school, a successful developer of an approved drug, patent lawyer, successful investment banker, current Acting Deputy Director for Science at NIH.

Administrative expertise on Institute and NIH-wide committees.

Procurement

Promotion

Patent

Regulatory

Regulatory review of gene therapy

Significant contributor to overall process

1980 - Recombinant Advisory Committee Working Group on NIH Guidelines.

1989 - 1992 Chairman of NIH IBC. Established overall IBC rules for gene therapy.

First IBC to review gene therapy clinical trials

Post-doctoral training at ICRF (London, UK) & NIH (Bethesda). 1969-1973

Training in molecular virology in two major leading institutions

Undergraduate and Graduate Education in NZ. 1963-69

Classical training in Molecular Biology and Biochemistry

Corporate Experience

Executive Officer of Targeted Genetics Corporation
Executive Vice President, Chief Scientific Officer, 2001-2008
Executive Vice President and Director, R&D, 1992-2000
Officer of Targeted Genetics Acquisition Co.
Director & Vice President, 1996-2003
Officer of Targeted Genetics Manufacturing
Vice President, 1998-2008
Officer of Emerald Gene Systems (Joint venture with Elan)
Director, 1999- 2003
Vice President, 1999- 2003
Officer of Genovo, Inc. (Acquired as subsidiary of TGC).
Director, 2000- 2008
Vice President, 2000- 2008
Board of Directors, Lentigen Inc. 2005 – present
Scientific Advisory Board of Sangamo BioSciences. 2003 - present

Fund Raising & Road shows

TGC Initial Public Offering 1994
TGC Self-managed Public Offering 1995
TGC Secondary Public Offering 1996
TGC PIPE 1998
TGC PIPE 2000
TGC Several subsequent funding rounds and equity investments since 2001

Mergers and Aquisitions

Acquisition of R Gene Therapeutics, Inc. by TGC 1996
Acquisition of Genovo Inc. by TGC 2000

Strategic Partnerships and Major Collaborations

TGC with Medeva/Celltech 1998 - 2002 (Cystic fibrosis)
TGC with Elan 1999 - 2003 (Joint venture focused mainly on non-viral delivery)
TGC with American Home Products (Wyeth) 2000 - 2002 (Hemophilia)
TGC with Biogen 2000 - 2003 (Viral gene therapy research)
TGC with Genzyme 2000 - 2002 (Lysosomal Storage Diseases)
TGC with International Aids Vaccine Initiative 2000- (HIV Vaccine)
TGC with CHOP (Philadelphia) and NIAID, NIH. 2005 - present (HIV Vaccine)
TGC with Celladon, Inc. 2005 – 2008 (Heart Failure)
TGC with SIRNA Therapeutics 2005- 2007 (Gene delivery to CNS for Huntington's)

disease.) (When SIRNA became a wholly-owned subsidiary of Merck, Inc. as of Jan 1, 2007 and this program was transferred completely to TGC)

Service on Committees

Extensive service on high level advisory committees at HHS, NIH, and FDA

Extensive service on committees and as an officer and President of The American Society for Cell and Gene Therapy

External advisory boards of entities such as UW School of Public Health, Keystone Symposia.

Speaking and Presentation Experience

Extensive experience and well developed public presentation skills

Scientific,

Regulatory and ethics issues in therapeutic development (especially of gene therapy)

Drug development

Commercialization of therapeutic development

Presentations to large convention audiences both scientific and business

Presentations and interactions with investor groups, analysts, press (science, business, and mass media), congressional staff

BARRIE JAMES CARTER**CV & BIBLIOGRAPHY**Home Address:

1218 3rd Avenue North
Seattle WA 98109-3280

phone: 206-286-0746

cell: 206-910-0255

email: barrie.carter693@gmail.com

Born: Dunedin, New Zealand.

Citizenship: United States Citizen, Naturalized March 30, 1979.

Education: B. Sc. with First Class Honors, 1967, Univ. of Otago, New Zealand

Ph. D. in Biochemistry 1969, Biochemistry Department, University of
Otago Medical School, Dunedin, New Zealand.

POSITIONS HELD

2013-2018 Vice President, Vector Biology, BioMarin Pharmaceutical, Inc.
2009-2019 President, Carter BioConsulting LLC
2009-2015 Adjunct Professor, Dept. of Anatomy & Cell Biology, University of Iowa.
2001-2008 Executive Vice President, Chief Scientific Officer
Targeted Genetics Corporation, Seattle.
1992-2000 Executive Vice President, and Director, Research and
Development, Targeted Genetics Corporation, Seattle.
1995-1999 Affiliate Professor of Medicine, University of Washington School of Medicine.
1985-1992 Chief, Laboratory of Molecular and Cellular Biology, NIDDK, NIH, Bethesda.
1981-1985 Head, Section on Macromolecular Genetics, Laboratory of Cell Biology,
NIDDK, NIH, Bethesda, MD.
1979-1981 Senior Investigator, Laboratory of Experimental Pathology, NIADDKD,
1978-1979 Visiting Scientist, Laboratory of Experimental Pathology, NIADDKD, NIH,
1974-1978 Senior Staff Fellow, Laboratory of Experimental Pathology, NIADDKD, NIH,
1973-1974 Visiting Associate, Laboratory of Molecular Biology, NCI, NIH.
1970-1973 Visiting Fellow, Laboratory of Biology of Viruses, NIAID, NIH.
1969-1970 Postdoctoral Fellow, Imperial Cancer Research Fund, London, UK.
1969 Lecturer in Biochemistry, University of Otago Medical School.
1966-1969 Graduate Research, Dept. of Biochemistry, Univ. of Otago, Dunedin, New
Zealand.

AWARDS

1967-1969 New Zealand University Grants Committee Post-graduate Fellow.

1969-1970	New Zealand University Grants Committee Post-doctoral Fellow.
1968	New Zealand Institute of Chemistry Prize for Graduate Research.
1984	Special Achievement Award, NIDDK, NIH.
2004	GEN Excellence in Biotechnology Award for Outstanding Achievement in Drug Delivery.
2025	Exemplary Service Award. American Society of Gene and Cell Therapy.

EDITORIAL BOARDS: Previous

1982-96	<i>Journal of Virology</i>
1983-2013	Associate Editor, <i>Virology</i>
1995-2020	<i>Human Gene Therapy</i>
1985-89	<i>CRC Handbook on Parvoviruses</i> , Editorial Advisory Board.
1994-96	<i>Gene Therapy News Letter</i>
1996-97	<i>Molecular Therapeutics - Gene Therapy & Oligonucleotides</i> , Editorial Board
1998-01	<i>Current Opinion in Molecular Therapeutics</i> , Section Editor
2003-06	Associate Editor, <i>Molecular Therapy</i>
2007-20	Editorial Board, <i>Molecular Therapy</i>

SOCIETIES

American Society for Microbiology 1973 -
 American Society of Biochemistry and Molecular Biology 1973 - 2009
 American Association for the Advancement of Science 1974 -
 American Society of Virology 1982 -
 American Society for Gene and Cell Therapy 1996 -

ACTIVITIES AT NATIONAL INSTITUTES OF HEALTH

NIH

1980-82	NIH Office of the Director, Task Force on Radioisotopes.
1988-89	Member, NIH Biosafety Committee.
1990-92	Chairman, NIH Biosafety Committee and NIH IBC.
1991-92	NIH Office of the Director, Task Force to Review Procurement Division.

National Institute for Diabetes, Digestive and Kidney Diseases (NIDDK)

1983	President, NIDDK Assembly of Scientists.
1982-85	Member, NIDDK Promotion Review Panel.
1985-88	Chairman, NIDDK Promotion Review Panel.
1989-92	NIH Intramural Scientists Procurement Advisory Committee.
1991-92	NIDDK CRADA/Patent Committee.
1991-92	NIDDK Tenure Advisory Committee.

NATIONAL AND INTERNATIONAL ACTIVITIES

Department of Health and Human Services, U S Government.

2000-02 Advisory Committee to Director, National Institutes of Health, DHHS

US National Institutes of Health

1987 Experimental Virology Study Section, DRG, Ad Hoc Member.
1987 Vision Research Review Committee, NEI, Ad Hoc Member.
1991 NHLBI RFA Review Committee, Gene Therapy for Cooley's Anemia.
1991 NHLBI RFA Review Committee, Animal/Cellular Models of Cystic Fibrosis.
1995 NIAID AIDS Division RFA Review Committee, SPIRAT Awards.
1999 NIAID Special Emphasis Review Panel: Novel HIV Therapies Integrated Preclinical/Clinical Program.
1999 NIDDK Review Panel: CF Centers Program.
2001 Government Performance and Results Act Assessment, Working Group of Advisory Committee to Director, NIH
2003 NIH Clinical Research Roadmap Advisory Panel
2004-05 NIH Blue Ribbon Panel to Review NIDDK Intramural Research Program
2004 Board of Scientific Counselors, NIDCR, NIH
2005 NHLBI Working Group on "Critical Resources for Gene Therapy in Heart, Lung and Blood Diseases.
2006 NIAID RFA Review Panel for HIV Vaccine Design and Development Program
2008 Board of Scientific Counselors, NIDCR, NIH
2009 NIAID RFA Review Panel for Basic HIV Vaccine discovery
2012 Board of Scientific Counselors, NIDCR, NIH

US Food and Drug Administration

1998-05 Scientific Review Committee for CBER Intramural Research, FDA, DHHS.
1998-05 FDA Credentials Committee for Senior Biomedical Research Scientists, DHHS

American Society of Gene Therapy

1998-99 Viral Vectors Sub-committee
1999-00 Industrial Relations Committee.
2000-03 Board of Directors
2003-04 Secretary, Board of Directors
2005-08 Board of Directors
2001-06 Program Planning Committee
2001-04 Industrial Liaison Committee
2001,2,3 Organizing Committee, Clinical Gene Transfer Training Course
2002-03 By-Laws Sub-committee
2005-06 Chair, By-Laws Committee
2003 Vice-Chair, Annual Meeting Abstract Review Committee
2004 Chair, Annual Meeting Abstract Review Committee
2003 Co-chair & Organizing Committee, Workshop on Non-clinical Toxicology in Support of Licensure of Gene Therapies
2004 Organizing Committee, Meeting on Long-term Follow-up of Participants in

Human Gene Transfer Research
 2003-09 Publications Committee
 2007 Nominating Committee
 2007-08 Strategic Planning Committee
 2008-09 Vice President

American Society of Gene and Cell Therapy (Previously Am Soc Gene Therapy)

2009-11 Finance Committee
 2009-10 Organizing Committee, Clinical Gene Transfer Training Course
 2009-11 President-Elect
 2010-11 Chair, Strategic Planning Committee
 2010-11 President
 2010-11 Co-Chair Organizing Committee, ASGCT NIH Gene Therapy Workshop
 2011-16 Advisory Council
 2011-12 ASGCT RAC Advisory Panel
 2011-13 Chair ASGCT Development Committee
 2013-17 ASGCT Development Committee
 2012 Co-Chair ASGCT/ESGCT Organizing Committee Clinical Trial Training Course
 2013-14 Co-Chair ASGCT/FDA Standardized Pathways Meeting
 2013-14 Organizing Committee, Clinical Gene Transfer Training Course
 2016-19 ASGCT Government Relations Committee
 2017-20. ASGCT Nominating and Awards Committee

Other

1977 Convenor/Chairman Transcription Session, Parvovirus Meeting, Cold Spring Harbor.
 1980 NIH DNA Recombinant Advisory Committee, Viral Vectors Working Group.
 1981-94 WHO International Committee on Taxonomy of Viruses, (Parvoviruses).
 1982 Am. Soc. of Biological Chemistry Annual Meeting Program Committee.
 1982, 85 Am. Soc. for Virology Annual Meeting, Convenor of Parvovirus Sessions.
 1984 American Type Culture Collection, Virology Advisory Committee.
 1985-90 External Reviewer, New Zealand Medical Research Council.
 1989 Gene Therapy Review Committee, Cystic Fibrosis Foundation.
 1990 Basic Defects in Cystic Fibrosis Review Committee, C. F. Foundation.
 1992-93 Advisory Committee, Washington Technology Center, U. Washington, Seattle.
 1995-06 Scientific Advisory Board, Keystone Symposia.
 1997 American Society for Virology, Program Committee.
 1997-99 Advisory Board, U. Washington Certificate Program in Technology Management.
 1999 Research Development Program, Review Panel: Cystic Fibrosis Foundation.
 2003-06 Biotechnology Technical Advisory Committee, Seattle Central Community College
 2005-10 External Advisory Board, School of Public Health, U. Washington, Seattle.
 2013-18. Biotechnology Industry Organization: BioSafe Group member.
 2013-18 Biotechnology Industry Organization: BioSafe Group Specialty Biologics Expert Working Group and Gene Therapy Sub-Committee

Corporate

2003-13 Sangamo BioSciences, Scientific Advisory Board

2005-14 Lentigen Corporation, Director

2012-16 Beat Therapeutics, Scientific Advisory Board

GRANT FUNDING

1987-88 Principal Investigator. "Regulation of HIV by AAV *rep* protein". Direct costs \$100,000 from AIDS Targeted Anti-viral Agents Program, NIH.

1989-91 Sponsor. Johns Hopkins/NIH Cystic Fibrosis Foundation Fellowship awarded to T. Flotte M. D. Direct costs \$90,000.

1990-93 Principal Investigator. "Adeno-associated virus transducing vectors." Cystic Fibrosis Foundation. Direct costs \$210,340.

1991-95 Co-sponsor (with G. Loughlin, M.D., Johns Hopkins Medical School) of Cystic Fibrosis Foundation Leroy Matthews Physician-Scientist Award to T. Flotte Direct costs \$259,000.

1994-98 NIAID "SPIRAT Award, 1 U19 AI36613, "Therapy of HIV with Genetically Modified T cell Clones", (P.I., P. Greenberg: Direct Costs \$4,927,796.00)
B. Carter, Director, Vector Core.

2005-09 NIAID Contract No. HHSN26620050008, ADB Contract No. N01-AI-50008:
HIV Vaccine Design and Development Teams.
PI: P. Johnson: Total Cost \$21,915,435.00.
Targeted Genetics Corporation Subcontract, PI: B. Carter: \$18,243,919.00.

2008-10 CMDRP, Army, Department of Defense, Grant Award AL073007 Preclinical Development of Therapeutics for Amyotrophic Lateral Sclerosis

PI: B. J. Carter: Total Cost \$2,418,559

INVITED TALKS: NATIONAL & INTERNATIONAL MEETINGS.

1968 "*Replication of Bacteriophage Lambda DNA*". New Zealand Institute of Chemistry Annual Meeting, Auckland, New Zealand, August.

1969 "*Replication of Bacteriophage Lambda DNA*". Division of Applied Biochemistry, Department of Scientific and Industrial Research, Palmerston North, New Zealand

1969 "*Replication of Bacteriophage Lambda DNA*". All India Medical Institute, New Delhi, India, November.

- 1970 “*Lytic Replication of Bacteriophage Lambda*”. Department of Biochemistry, University of Oxford, Oxford, UK, June.
- 1970 “*Replication of Bacteriophage Lambda DNA following Lytic Replication*”. Meeting on Bacteriophage Lambda, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York September.
- 1973 “*Transcription of adeno-associated virus*”. 5th Annual Tumor Virus Meeting, Cold Spring Harbor, New York.
1974. “*Replication of AAV DNA*”. MRC Laboratory of Molecular Biology, Cambridge, University, UK.
1974. “*Molecular Biology of adeno-associated virus*”. National Environmental Research Council Invertebrate Virology Unit, Oxford University, UK.
- 1974 “*Transcription of adeno-associated virus*”. Imperial Cancer Research Fund, London, UK.
- 1974 “*Molecular Biology of adeno-associated virus*”. Department of Microbiology, University of Aberystwyth, Wales.
1974. “*Transcription of the Adeno-associated Virus Genome*”. 2nd International Meeting on Parvoviruses, National Institutes of Health, Bethesda, MD.
- 1975 “*Molecular Biology of adeno-associated virus*”, Department of Biochemistry, McGill University, Montreal, Canada.
- 1975 “*Transcription of the adeno-associated genome*”. 3rd International Virology Congress, Madrid, Spain.
- 1975 “*The structure of the adeno-associated virus genome*” 3rd International Virology Congress, Madrid, Spain
- 1976 “*The structure of the adeno-associated virus genome*”, Meeting on Insertion Elements, Plasmids and Episomes, Cold Spring Laboratory, Cold Spring Harbor, NY, May.
- 1976 “*AAV RNA Transcription*”. Cancer Center, Department of Biology, MIT, Cambridge, MA
- 1977 “*AAV RNA synthesis In Vivo and In Vitro*”, Parvovirus Meeting, Cold Spring Harbor Laboratory, NY, May
- 1978 “*Molecular Biology of adeno-associated virus*”. Columbia Medical School, New York.
- 1979 *Molecular Biology of adeno-associated virus*. EMBO-FEBS Meeting on "RNA Synthesis in Animal Cells and Viruses", Weizman Institute, Rehovoth, Israel.

- 1980 "*Transcription of the Genome of Adeno-associated Virus*". American Society for Microbiology Annual Meeting, Miami Beach, FL.
- 1980 "*Molecular Biology of adeno-associated virus*". Dept of Microbiology, Georgetown University, Washington, DC.
- 1980 "*Replication of adeno-associated virus*". Department of Microbiology and Immunology, University of Florida, Gainesville, FL
- U Calif Irvine, CA
- 1981 "*Molecular Biology of adeno-associated virus*". Fifth International Virology Congress, Den Hague, Netherlands.
1981. "*Molecular Biology of adeno-associated virus*". Dept of Microbiol, U Maryland, MD,
- 1982 Symposium "*Molecular Biology of Parvoviruses*" American Society of Microbiology Annual Meeting, Atlanta, GA.
- Convener/Chair, Parvovirus Sessions, Am Soc. for Virology, 1st Ann. Meeting, Ithaca, NY, August.
- 1984 Symposium on "*Viral Gene Regulation*", Am. Soc. Microbiol., Ann. Mtg, St. Louis, MO.
- Convener/Chair, Parvovirus Sessions, Am. Soc. Virol. 4th Ann Mtg, Albuquerque, NM.
- Introductory Speaker and Session Chairman, EMBO Parvovirus Meeting, Grangeneuve, Switzerland.
- "*Regulation of gene expression in AAV vectors*", Meeting on "*Strategies for the Expression of Foreign Genes*", Rensselaerville, NY, October
- "*Symposium on Viral vectors*", 4th Carolina Conference, Chapel Hill, NC.
- 1986 "*Regulation of gene expression from AAV vectors by trans-acting proteins*", Department of Biological Sciences, UCLA School of Medicine, Los Angeles, CA. October.
- Department of Biological Sciences, St. John's University, New York, NY. March.
- International Union of Biochemistry/Royal Society of NZ Meeting on "*Genetic Manipulation*", Hanmer, New Zealand. August.
- Plenary Symposium on "*Molecular Evolution*", Ann Mtg. NZ Institute of Chemistry and Biochemical Society of NZ, Dunedin, New Zealand. August.

1987 Plenary Session Speaker, *AAV Replication and Transcription*. U.K. Society of General Microbiology, Oxford, U.K.

"Molecular Biology of Parvoviruses". Dept of Medical Microbiology, Uni Manitoba, Winnipeg, MA, Canada. May 6.

"Gene Regulation in the Human Parvovirus, Adeno-associated Virus", Dept of Medical Microbiology, Uni Manitoba, Winnipeg, MA, Canada. May 7.

Symposium on *"Early regulatory events for the establishment of virus/cell interactions"*, 7th International Virology Congress, Edmonton, Canada. August.

1989 *"AAV Genetics"*, Weizmann Institute, Rehovoth, Israel, May.

"Genetics of AAV DNA Replication", Tel Aviv University, Tel, Aviv, Israel, May.

"Molecular biology of adeno-associated virus", Waksman Institute, Rutgers University Medical School, New Brunswick, NJ. June.

Department of Physiology, Johns Hopkins Medical School, Baltimore, MD

"Parvovirus Transcription", Plenary Session Speaker, EMBO International Meeting on Parvoviruses, Kibbutz Ma'ale Hachmisha, Jerusalem, Israel, November.

1990 Department of Biochemistry, George Washington Medical School, Washington DC. Feb 14.

"Use of AAV vectors", Williamsburg Conference on Biochemical Defects in Cystic Fibrosis, Williamsburg, VA.

"AAV Vectors for expression of CFTR" Symposium on Models of Gene Transfection, International Cystic Fibrosis Conference, Arlington, VA.

1991 *"AAV and AAV vectors"*, Biology Department, Catholic University, Washington DC.

"AAV vectors for Cystic Fibrosis", Williamsburg Conference on New Therapeutic Treatments for Cystic Fibrosis, Williamsburg, VA. June.

"Expression of CFTR from AAV Vectors" in Symposium on Clinical Approaches to Gene Transfer and Chairman/Convenor of Workshop on *"Gene Therapy"*, N. Am. Conference on Cystic Fibrosis, Dallas, Texas.

"AAV Vectors", Gene Therapy Workshop, Cystic Fibrosis Foundation, Chantilly, VA.

Session Chairman, NIH Conference on Gene Therapy, NIH, Bethesda, MD.

- 1992 "*Biosafety in Gene Therapy Protocols and the Institutional Biosafety Committee*", National Cancer Institute Gene Therapy Programs Meeting, Rockville MD, February 28.
- "*Adeno-associated Virus Vectors*", Workshop on Gene Therapy for Hemophilia, NHLBI, Bethesda, MD.
- "*Gene Therapy for Immunotherapy and Genetic Disease*", IBC Conference on Gene Therapy, Washington, DC.
- "*Gene Transfer into Pulmonary Epithelial Cells for Cystic Fibrosis*", NIDDK Symposium on "Impact of Molecular Genetics on the Treatment of Disease", Bethesda, MD
- 1993 "*Immunotherapy of Human Disease*", BioEast Conference '93, Washington, DC, January
- "*AAV vectors for In Vivo gene Transfer*", Keystone Symposium on Gene Therapy and Antisense, Keystone, CO, April.
- "*AAV Vectors and Gene Therapy for Cystic Fibrosis*", IBC Conference on Gene Therapy, Washington, DC. June.
- "*AAV vectors for In Vivo Gene Therapy*", 1993 Annual Meeting sponsored by The Laboratory for Tumor Cell Biology, Bethesda, MD. August.
- Chairman & Convenor, "*Symposium on Vector Systems*", North American Cystic Fibrosis Conference, Dallas, Texas, October.
- "*In Vivo Gene Delivery with AAV vectors*", 5th International Meeting on Parvoviruses. Crystal River, Florida, Nov.
- 1994 "*AAV Vectors for In Vivo Gene Transfer*", Keystone Symposium on Gene Therapy, Copper Mountain, CO, Jan.
- "*AAV Vectors for In Vivo gene transfer*", Meeting on Immunotherapy & Gene Therapy, Ein Gedi, Israel, February.
- "*Gene Therapy for CF with AAV vectors*", CHI Conference on Recent Developments in Diagnosis & Treatment of Cystic Fibrosis, Alexandria, VA, March.
- IBC Conference on Gene Therapy, Wash. DC, April.
- "*Gene Therapy for Delivery to the Lung*", BIO Annual Meeting, Toronto, Canada, May.
- "*Symposium on Viral Latency & Host Response*", Annual Meeting of American Society for Microbiology, Las Vegas, May.
- "*Promises of Gene Therapy*", BioPharm 94 Conference, San Francisco, June.

- 1995 "Gene Therapy: Present and Future", Health Care 2010 - A Technology Summit, Seattle, January
- "Preclinical Evaluation of AAV vectors Expressing the Human CFTR cDNA"*, Keystone Symposium on Ribozymes, Breckenridge, CO, January.
- "In Vivo Gene Therapy for Cystic Fibrosis with AAV Vectors"*, Strategic Research Institute Meeting on Gene Therapy, San Diego, January.
- "AAV Vectors"*, National Institutes of Health Symposium Series on Gene Therapy for Cystic Fibrosis, Bethesda, MD. February.
- "Gene Therapy for Cystic Fibrosis using an AAV Vector"*, 5th Annual IBC Conference on Gene Therapy, Bethesda, MD. May.
- "Clinical Trials of Gene Transfer for Cystic Fibrosis"*, Canadian Cystic Fibrosis Foundation Workshop on Gene Therapy, Toronto, June.
- SPIRAT/NCDDG-HIV Conference. Novel HIV Therapies: From Discovery to Clinical Proof-of-Concept, Bethesda, MD. July,
- Hematopoietic Stem Cell Gene Therapy: Biology & Technology, Bethesda, MD. Sept.
- "AAV Biology: After 30 Years what do we Know?"* Overview Lecture, NIDDK Workshop on AAV, Bethesda, Dec.
- 1996 *"The challenge of Gene Therapy: Present and Future."* BioPharma Conference, Boston, MA, May.
- "Gene Therapy: An Industrial Perspective."* The Eighth Japanese-American Conference on Pharmacokinetics and Biopharmaceutics. Seattle. WA, July
- "AAV Vectors."* 10th International Biotechnology Conference. Sydney, Australia. Aug.
- 1997 *"Commercialization of Gene Therapy"*, BioEast '97, Washington, DC. Jan.
- "AAV Vectors for Gene Delivery"*, Royal Chemical Society Alfred Spinks Symposium, London, UK, March.
- "Use of AAV Vectors for Gene Therapy of Cystic Fibrosis"*, Kennedy Institute of Rheumatology, London, UK, March.
- "Persistence of AAV Vectors"*, Williamsburg Conference on Gene Therapy for Cystic Fibrosis, Williamsburg, VA, June.

“AAV vectors”, Session Summary, 7th International Parvovirus Workshop, Heidelberg, Germany, September.

“General Considerations for Developing Gene Therapy”, Puget Sound Biotechnology Association Conference on Gene Therapy, Woodinville, WA, Oct 3.

“What will it take to develop a gene therapy drug?” North American Cystic Fibrosis Meeting, Nashville TN, Oct 25.

1998 *“AAV Vectors and Vaccines”*. NIAID Division of AIDS Meeting on Viral Vectors as AIDS vaccines, Palm Springs, March.

“AAV Vectors for Cystic Fibrosis Gene Therapy”, Am. Soc. for Gene Therapy, Ann Mtg. Seattle, May.

“Basics of AAV Vectors for Gene Therapy”, Am. Soc. for Gene Therapy, Ann Mtg. Seattle, May.

“AAV vectors”, Williamsburg Conference on Cystic Fibrosis, Williamsburg, VA., June.

“AAV Vectors for Cystic Fibrosis Gene Therapy”, BIO 98, Annual meeting of Biotechnology Industry Organization, New York, NY. June.

1999 *“Delivery Systems for Gene Therapy”*, BIO 99, Annual meeting of Biotechnology Industry Organization. Seattle, WA. May. 2000

“Delivery of AAV Vectors to the Lung.” Am. Soc. for Gene Therapy, Annual Meeting, Washington DC. June.

“AAV vectors for Cystic Fibrosis”, Nature Biotechnology Conference on “Gene Therapy: Delivering the Medicines of the 21st Century”. Washington, DC. November 9.

“The Janus View: Looking Forward at the Next 50 Years from the Last 50 Years”, University Of Otago, Dunedin, New Zealand, Dec 3.

2000 *“Development of an AAV Gene Therapy Product”*, International Society of Nephrology, Forefronts in Nephrology Symposium. Beaver Creek, CO. June.

Gene Therapy Working Group, Boston University. Boston MA, June

“Safety Considerations in Gene Therapy Clinical Trials”, 26th Annual Toxicology Forum, Aspen, CO, July

2001 *“Developing commercial technology platforms for gene therapy”*, CIBC First Annual Biotechnology Conference, New York, June3,

- Session Chair, Clinical Gene Transfer Training Course, ASGCT, May.
- Convener/Moderator of Symposium on Biology of Gene Delivery, American Society of Gene Therapy, 4th Annual Meeting Seattle, June 1
- "Building Public Trust and Confidence in Biotechnology Products and Applications"*
Global Biosciences Forum, Washington, DC June
- "New Approaches to Inflammatory Disease"*, BIO2001, San Diego, June
- "Creating value in Drug Delivery"*, BIO2001, San Diego, June
- 2002 *"The Future of Gene Therapy."* Conference on Gene Therapy, London UK. Feb.
- "Gene Therapy and its Place in Drug Development"*, Current Topics in Medical Chemistry; A Distinguished Lecture Course Series. Boston University, MA, March.
- "Gene Therapy for Inflammatory Disease"*, Univ. of Pennsylvania. Philadelphia, April.
- Session Chair, Preclinical Development, Clinical Gene Transfer Training Course, ASGCT, Washington DC, May.
- Speaker, *Preclinical Studies on Biodistribution of Gene Transfer Vectors*, Clinical Gene Transfer Training Course, ASGCT, Washington DC, May.
- "AAV Vectors for Gene Therapy of Inflammatory Joint Disease."* Institute for Medical Science and Tokyo Institute of Technology, Tokyo University, Tokyo, November
- "Gene Therapy as a Therapeutic Modality."* 20th Anniversary International Symposium of The Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan, November
- 2003 Session Chair, Preclinical Development, Clinical Gene Transfer Training Course, ASGCT, Washington DC, May.
- "Intellectual Property Rights and Vaccine Development: A Biotech Company Perspective"*. AIDS Vaccine 2003 Conference, New York City, September.
- "AAV Vectors: A Product Development Platform"*. Cell and Gene Therapies Conference, London, UK, September.
- "Gene therapy for Cystic Fibrosis,"* Lovelace Respiratory Symposium 2003, Santa Fe, New Mexico, October.
- "CF Gene Therapy with AAV Vectors"*. North American Cystic Fibrosis Meeting, Anaheim, CA, October.

- 2004 *“Development of AAV Gene delivery Platform: AAV-TNFR:Fc Gene Therapy for Rheumatoid Arthritis”* Eurogenethy 2; Regulation, Safety and Ethics of Gene Therapy in Europe. Langen, Germany, April.
- “Scientific Issues”*. Long Term Follow-up for Subjects in Gene Transfer Research. BIO/CBER Liaison Meeting, Rockville, MD, April.
- “Long Term Follow-up of Subjects in Gene Transfer Research: Scientific Aspects.”* ASGT/FDA/BIO/Pharma/NIH Meeting on Long Term Follow Up of Participants in Human Gene Transfer Research, Minneapolis, June.
- Chair of Industrial Liaison Committee Symposium on “Commercialization of Gene Therapy – What will it Take?”, ASGCT Annual Meeting, Minneapolis, June.
- “The Current Status of Gene Therapy”*, BIO 2004, Annual International Convention of The Biotechnology Industry Organization, San Francisco, June 8.
- “Clinical Development: Issues and Challenges”*. CF Gene Therapy: Assessing the Possibilities. CFF Meeting, Bethesda, Md. September.
- “Gene Therapy as a Therapeutic Modality”*, School of Biological Sciences, University of Auckland, New Zealand, November.
- “Safety Assessment of AAV Vectors”*, DIA/EMA Joint meeting on Gene Therapy and Cell Therapy Products, London, UK, December.
- 2005 *“A Case Study of Clinical Development of an AAV Vector”*, Phacilitate Cell & Gene Therapy Forum 2005, Washington, DC, January.
- “Clinical Trials of AAV Vectors for Cystic Fibrosis”*, Gene Therapy: State of the Art. The Royal Society of Medicine, London, UK, April.
- “Viruses as Gene Delivery Vehicles”*, Plenary Session, XIII International Congress of Virology, San Francisco, July.
- 2006 *“Clinical Development of AAV Vectors”*, Phacilitate Cell & Gene Therapy Forum 2006, Baltimore, MD, January.
- “AAV Vectors for Treatment of Disease”*, Jacov Tal Memorial Symposium, Ben Gurion University of the Negev, Beer Sheva, Israel, March 1.
- “Safety of Gene Therapy for Chronic Conditions: Experience from Clinical Trials of AAV Vectors”*, 18th Annual Euro Meeting of Drug Information Association, Paris, March 8.
- “Clinical Studies of Intra-articular Administration of a Recombinant Adeno-associated*

- Vector containing a TNF-alpha Antagonist Gene in Inflammatory Arthritis*". Eleventh Parvovirus Workshop, Les Diablerets, Switzerland, Aug 27-30.
- 2007 "AAV Vectors in Clinical Development". Phacilitate Gene and Cell Therapy Forum, Washington DC, Jan 27-30.
- "Industry Perspective on Recruitment of Patients in Clinical Trials"*. In Symposium on Justice, Dilemmas and Ethics. American Society of Gene Therapy 10th Annual Meeting, Seattle, June 2007.
- "Gene Delivery Systems"*. Index BioForum, Stresa, Italy, September 2007.
- 2008 "AAV Vectors in Clinical Development". Phacilitate Cell & Gene Therapy Forum 2008, Washington, DC, January
- "Intra-articular Delivery of AAV Vectors for Inflammatory Joint Disease: Comparison of Pre-clinical and Clinical Trial Results"*. Gordon Research Conference on Viral Vectors, Ventura, CA, March 2008.
- "Careers in Industry v. Academia: Meet the Investigator Lunch"*, American Society of Gene Therapy 11th Annual Meeting, Boston, May.
- "Immunological Challenges to Clinical Gene Therapy"*, Round Table Discussion, American Society of Gene Therapy Annual Meeting, Boston, May.
- "Regulation of Gene Therapy and Public Perception"*. In session on "Myth v Reality in Gene Therapy", BIO Meeting 2008, San Diego, July.
- 2009 Clinical Gene Therapy, Moderator and Session Chair, American Society of Gene Therapy 12th Annual Meeting, San Diego, May.
- 2010 *"Preclinical Studies in Gene Delivery Biodistribution"*, ASGCT Gene and Cell Therapy Training Course, 13th Annual Meeting American Society of Gene and Cell Therapy, Washington DC, May.
- "Clinical Trials of Gene Therapy"*. DIA Annual Meeting, Washington DC, June.
- "Clinical Development of AAV Vectors: Success in Sight"*, Plenary Address to Annual Meeting of Japanese Society of Gene Therapy, Utsunomiya, Japan, July 1-3.
- "The Gene Therapy Journey: Are We There Yet?"* University of Massachusetts Medical School, Worcester, MA, August.
- "The Gene Therapy Journey: Where are we?"* School of Medicine, University of Iowa, Iowa City, December.

- 2011 Presidential Address, 14th Annual Meeting, American Society of Gene and Cell Therapy, Seattle, WA, May.

Prospects for Gene Therapy and NIH Initiatives. Summary Presentation. ASGCT NIH Workshop on Gene Therapy, Bethesda, MD, September.

- 2012 “*Success in Gene Therapy: Progress, Prospects and Challenges*”.ISBiotech 2nd Annual Meeting on *Viral Vectors and Vaccines*, Rosslyn, VA. April 2.

Speaker, “*Careers in Academia v Industry*” in Meet the Investigator Session, 15th Annual Meeting, American Society of Gene and Cell Therapy, Philadelphia, PA, May.

The Road to Gene Therapy. At BioMarin Pharmaceutical, Novato, CA Oct 1.

Chair, *Session on Preclinical Studies in Joint ASGCT/ESGCT Clinical Trials Training Course*, 20th Annual Meeting of the European Society of Gene and Cell Therapy, Versailles, France, October.

- 2013 Co-Chair Program, ISBiotech 3rd Annual Meeting on *Viral Vectors and Vaccines*, Rosslyn, VA. March

Speaker, “*Product and Clinical Translation: Gene and Cell Therapy*” In Session on lessons learned from manufacture and clinical translation of gene and cell therapy products. 16th Annual Meeting, American Society of Gene and Cell Therapy, Salt lake City Utah, May 18.

Speaker, *AAV Vectors*. GenomeRx Meeting, Lazard Capital Markets, New York City, October.

Keynote talk – *The Road to Gene Therapy and AAV*, BioMarin R&D Retreat, Asilomar, CA, September

- 2014 Chair, Session on “*Pathway to the Clinic*”, ASGCT Clinical Trials Training Course: Lab to Licensure. 17th Annual Meeting, American Society of Gene and Cell Therapy, Washington DC, May.

Co-Chair Session on “*Things You Wished You’d Known Early on Your Way to Late Stage Development*”17th Annual Meeting, American Society of Gene and Cell Therapy, Washington DC, May.

Speaker, *AAV Vectors*. GenomeRx Meeting, Piper Jaffray, New York City, June.

Gene Therapy, AAV and Hemophilia. Presentation to BioMarin Global Clinical Affairs. Nov 4.

- 2015 “*Gene Therapy for Hemophilia*”, 21st Annual Meeting of the Japan Society of Gene

- Therapy/1st International Symposium of the Asia-Pacific Gene Therapy Consortium, Osaka, Japan, July 24-26 (2015).
- Keynote Talk. “*Current Status and Prospects for Gene Therapy*”, 21st Annual Meeting of the Japan Society of Gene Therapy/1st International Symposium of the Asia-Pacific Gene Therapy Consortium, Osaka, Japan, July 24-26 (2015).
- 2016 *Gene Therapy for Hemophilia*. 6th International Collaborative for Gene Therapy of Genetic Diseases. Tokyo, Japan. Jan 16.
- Keynote Talk. *Progress and Prospects for Gene Therapy*. Personalized Medicine 9.0 Meeting, San Francisco State university, San Francisco, CA. May 26.
- Talk. *Gene Therapy for Hemophilia: The Journey from Basic Science to Therapeutic Development*. Personalized Medicine 9.0 Meeting, San Francisco State university, San Francisco, CA. May 26
- Gene Therapy, AAV and Hemophilia*. Presentation to BioMarin LSD GT Group. June 30.
- The Journey to Gene Therapy for Hemophilia*. BioMarin Finance and IT Group. Sept 27.
- Press Webinar. *Gene Therapy in Hemophilia and AAV5*. Dec 15.
- 2017 *AAV Gene Therapy for hemophilia*. Jeffries Gene Therapy Meeting New York, Oct 12.
- Gene Therapy, AAV and Hemophilia*. Presentation to BioMarin Government Affairs Group. June 30.
- 2018 *AAV 101*. BioMarin Gene Therapy IP Summit, Sonoma, CA February 12.
- AAV Platform*. BioMarin Gene Therapy IP Summit, Sonoma, CA February 13.
- Speaker, *Industry Perspectives Panel*, ASGCT Commercialization Workshop, Chicago, IL May 15 2018.
- 2019 *Gene Therapy Past, Present, Future*. Keynote Talk. BioMarin Gene Therapy Summit, Sonoma, CA March 5.
- 2024 *In Memoriam: Nic Muzyczka, PhD 1947-2023 and Kenneth I Berns, MD, PhD 1938-2024* Keynote talk at 19th International Parvovirus Meeting, Leuven, Belgium, September 3.
- “*The Pathway to Adeno-associated Virus Gene Therapy: From ITRs to Hemophilia.*” Institute for Learning in Retirement at Oak Hammock, University of Florida, October 2.

1. **Carter BJ**, Smith MG. 1968. Sedimentation of DNA from bacteriophage lambda-infected *Escherichia coli*. Biochim. Biophys. Acta 166:735-737. Doi: 10.1016/0005-2787(68)90389-4. PMID: 4881148.
2. **Carter BJ**. 1968. The replication of bacteriophage lambda DNA. J. New Zealand Inst. Chem 32:189-194.
3. **Carter BJ**, Shaw BD, Smith MG. 1969. Two stages in the replication of bacteriophage lambda DNA. Biochim. Biophys. Acta 195:494-505. Doi: 10.1016/0005-2787(69)90656-x. PMID: 4904393.
4. **Carter BJ**. 1969. The Replication of Bacteriophage Lambda. Ph.D. Thesis, University of Otago, New Zealand.
5. **Carter BJ**, Smith MG. 1970. Intracellular pools of bacteriophage lambda DNA. J. Mol. Biol. 50:713-718. 10.1016/0022-2836 970 090096-3. PMID: 4920498.
6. **Carter BJ**, Rose JA. 1972. Adeno-associated virus multiplication. Analysis of *in vivo* transcription induced by complete or partial helper viruses. J. Virol. 10:9-16.doi: 10.1128/JVI.10.1.9-16.1972. PMID: 4339201.
7. **Carter BJ**, Khoury G, Rose JA. 1972. Adeno-associated virus multiplication. Extent of transcription of the viral genome *in vivo*. J. Virol. 10:1118-1125. Doi: 10.1128/JVI.10.6.1118-1125.1972. PMID: 4345491.
8. Koczot FJ, **Carter BJ**, Garon CF, Rose JA. 1973. Self-complementarity of terminal sequences within plus or minus strands of adeno-associated virus DNA. Proc. Natl. Acad. Sci. USA. 70:215-219. Doi: 10.1073/pnas.70.1.215. PMID: 4509654.
9. **Carter BJ**, Koczot FJ, Garrison J, Rose JA, Dolin R. 1973. Separate helper functions provided by adenovirus for adeno-associated virus multiplication. Nature (London). 244:71-73. 10.1038/newbio244072a0. PMID: 4269132.
10. **Carter BJ**, Rose JA. 1974. Transcription *in vivo* of a defective parvovirus: Sedimentation and electrophoretic analysis of RNA synthesized by adeno-associated virus and its helper virus. Virology 61:182-199. Doi: 10.1016/0042-6822(74)90253-0. PMID: 4416689.
11. **Carter BJ**. 1974. Analysis of parvovirus mRNA by sedimentation and electrophoresis in aqueous and non-aqueous solution. J. Virol. 14:834-839. Doi: 10.1128/JVI.14.4.834-839.1974. PMID: 4425485.

12. **Carter BJ**, Khoury G. 1975. Specific cleavage of adeno-associated virus DNA by restriction endonuclease R.EcoRI: Characterization of cleavage products. *Virology* 65:523-538. Doi: 10.1016/0042-6822(75)90325-6. PMID: 1114700.
13. **Carter BJ**, Khoury G, Denhardt DT. 1975. Physical map and strand polarity of specific fragments of adeno-associated virus DNA produced by endonuclease R.EcoRI. *J. Virol.* 16:559-568. Doi: 10.1128/JVI.16.3.559-568.1075. PMID: 1159894.
14. Denhardt DT, Eisenberg S, Bartok K, **Carter BJ**. 1976. Multiple structures of adeno-associated virus DNA: Analysis of terminally labeled molecules with endonuclease R.HaeIII. *J. Virol.* 18:672-684. Doi: 10.1128/JVI.18.2.672-684.1976. PMID: 1271522.
15. Khoury G, **Carter BJ**, Ferdinand FJ, Howley PM, Brown M, Martin MA. 1976. Genome localization of Simian Virus 40 RNA species. *J. Virol.* 17:832-840. Doi: 10.1128/JVI.17.3.832-840.1976. PMID: 176448.
16. **Carter BJ**. 1976. Intracellular distribution and polyadenylate content of adeno-associated virus sequences. *Virology* 73:273-285. Doi: 10.1016/0042-6822(75)90080-5.
17. **Carter BJ**, Fife KH, de la Maza LM, Berns KI. 1976. Genome localization of adeno-associated virus RNA. *J. Virol.* 19:1044-1053. Doi:10.1128/JVI.19.3.1044-1053.1976. PMID: 972429.
18. de la Maza LM, **Carter BJ**. 1976. Cleavage of adeno-associated virus DNA with *SalI*, *PstI* and *HaeII* restriction endonucleases. *Nucleic Acids Res.* 10:2605-2616. Doi:10.1093/nar/3.10.2605. PMID: 995645.
19. **Carter BJ**, de la Maza LM, Jay FT. 1977. The structure of the adeno-associated virus genome. In "DNA Insertion Elements, Plasmids and Episomes", (A.I.Bukhari, J.A.Shapiro, S.L.Adhya, eds.), pp. 477-484, Cold Spring Harbor Laboratory, New York.
20. de la Maza LM, **Carter BJ**. 1977. Adeno-associated virus DNA structure. Restriction endonuclease maps and arrangement of terminal sequences. *Virology* 82:409-430. Doi: 10.1016/0042-6822(77)9006-2. PMID: 919346.
21. de la Maza LM, **Carter BJ**. 1978. DNA structure of incomplete adeno-associated virus particles. In "Replication of Mammalian Parvoviruses", (D.C.Ward and P.Tattersall, eds), pp. 93-204. Cold Spring Harbor, New York.
22. Jay FT, Laughlin CA, de la Maza LM, **Carter BJ**, Cook W. 1978. Adeno-associated virus RNA synthesis *in vivo* and *in vitro*. In "Replication of Mammalian Parvoviruses", (D.C.Ward and P.Tattersall, eds), pp. 385-397. Cold Spring Harbor, New York.
23. **Carter BJ**. 1978. Parvovirus Transcription. In "Replication of Mammalian Parvoviruses", (D.C.Ward and P.Tattersall, eds), pp. 33-52. Cold Spring Harbor, New York.

24. Armentrout R, Bates R, Berns K, **Carter BJ**, Chow M, Dressler D, Fife K, Hauswirth W, Hayward G, Lavelle G, Rhode S, Straus S, Tattersall P, Ward D. 1978. A standardized nomenclature for restriction fragments. In "Replication of Mammalian Parvoviruses", (D.C.Ward and P.Tattersall, eds), pp. 523-526. Cold Spring Harbor, New York.
25. **Carter BJ**, Laughlin CA, de la Maza LM, Myers MW. 1979. Adeno-associated virus auto-interference. *Virology* 92:449-462. Doi: 10.1016/0042-6822(79)90149-1. PMID: 218354.
26. Laughlin CA, Myers MW, Risin DL, **Carter BJ**. 1979. Defective-interfering particles of the human parvovirus, adeno-associated virus. *Virology* 94:162-174. Doi: 10.1016/0042-6822(79)90446-x. PMID: 6244311.
27. Jay FT, de la Maza LM, **Carter BJ**. 1979. Parvovirus RNA transcripts containing sequences not present in mature RNA: A method for isolation of putative mRNA precursor sequences. *Proc. Natl Acad. Sci. USA* 76:625-629. Doi: 10.1073/pnas.76.2.625. PMID: 218213.
28. Handa H, **Carter BJ**. 1979 Adeno-associated virus DNA replication complexes in Herpes simplex virus or adenovirus infected cells. *J. Biol. Chem.* 254:6603-6610. PMID: 221504.
29. Laughlin CA, Westphal H, **Carter BJ**. 1979. Spliced adeno-associated virus RNA. *Proc. Natl. Acad. Sci. USA.* 76:5567-5571. Doi: 10.1073/pnas.76.11.5567. PMID: 230481.
30. Richardson WD, **Carter BJ**, Westphal H. 1980. Vero cells injected with adenovirus type 2 mRNA produce authentic viral polypeptide patterns: Early mRNA promotes growth of adeno-associated virus. *Proc. Natl. Acad. Sci. USA.* 77:931-935. doi:10.1073/pnas.77.2.931. PMID: 6928688.
31. de la Maza LM, **Carter BJ**. 1980. Heavy and light particles of adeno-associated virus. *J. Virology* 33:1129-1137. Doi: 10.1128/JVI.33.3.1129-1137.1980. PMID: 6245263.
32. de la Maza LM, **Carter BJ**. 1980. Molecular structure of adeno-associated virus variant DNA. *J. Biol. Chem.* 255:3194-3203. PMID: 6244311.
33. Myers MW, Laughlin CA, Jay FT, **Carter BJ**. 1980. Adenovirus helper functions for growth of adeno-associated virus: Effect of temperature-sensitive mutations in adenovirus early gene region 2. *J. Virol.* 35:65-75. Doi: 10.1128/JVI.35.1.65-75.1980. PMID: 6251278.
34. Myers MW, **Carter BJ**. 1980. Adeno-associated virus assembly. *Virology* 102:71-82. Doi: 10.1016/0042-6822980090071-9. PMID: 6245509.
35. Myers MW, **Carter BJ**. 1981. Adeno-associated virus multiplication. The effect of L-canavanine or a helper virus mutation on accumulation of viral capsids and progeny single-stranded DNA. *J. Biol. Chem.* 256:567-570. PMID: 6256359.

36. Jay FT, Laughlin CA, **Carter BJ**. 1981. Eukaryotic translational control: Adeno-associated virus protein synthesis is affected by a mutation in the adenovirus DNA-binding protein. *Proc. Natl. Acad. Sci. USA*. 78:2927-2931. doi: 10.1037/pnas.78.5.2977. PMID: 6265925.
37. de la Maza LM, **Carter BJ**. 1981. Inhibition of adenovirus oncogenicity in hamsters by adeno-associated virus DNA. *J. Natl. Cancer Inst.* 67:1323-1326. PMID: 6273635.
38. Marcus CJ, Laughlin CA, **Carter BJ**. 1981. Adeno-associated virus RNA transcription *in vivo*. *Eur. J. Biochem.* 121:147-154. Doi: 10.1111/j.1432-1033.1981.tb0644.x. PM ID: 6173214.
39. Laughlin CA, Jones NC, **Carter BJ**. 1982. Effect of deletions in adenovirus early region 1 genes upon replication of adeno-associated virus. *J. Virol.* 41:868-876. Doi: 10.1128/JVI.41.3.868-876.1982. PMID: 6284977.
40. **Carter BJ**. 1983. "Variant and defective-interfering parvoviruses". In "The Parvoviruses", (K.I. Berns, ed), pp 209-258. Plenum Press, New York.
41. **Carter BJ**, Laughlin CA. 1983. AAV defectiveness and the nature of the adenovirus helper function". In "The Parvoviruses", (K.I. Berns, ed), pp 67-128, Plenum Press, New York.
42. **Carter BJ**, Laughlin CA, Marcus-Sekura CJ. 1983. Parvovirus transcription". In "The Parvoviruses", (K.I. Berns, ed), pp 153-208, Plenum Press, New York.
43. Watson RJ, Colberg-Poley AM, Marcus-Sekura CJ, **Carter BJ**, Enquist LW. 1983. Characterization of the Herpes simplex virus type 1 glycoprotein D mRNA and expression of this protein in *Xenopus* oocytes. *Nucleic Acids Res.* 11:1507-1522. Doi: 1-.1093/nar/11.5.1507. PMID: 6298745.
44. **Carter BJ**, Marcus-Sekura CJ, Laughlin CA, Ketner G. 1983. Properties of an adenovirus type 2 mutant, Add1807, having a deletion near the right hand genome terminus. Failure to help AAV replication. *Virology* 126:505-516. Doi: 10.1016/s0042-6822(83)800008-7. PMID: 6305001.
45. Marcus-Sekura CJ, **Carter BJ**. 1983. Chromatin-like structure of adeno-associated virus DNA in infected cells. *J. Virol.* 48:79-87. Doi: 10.1128/JVI.48.1.79-97.1983. PMID: 6310160.
46. Laughlin CA, Tratschin JD, Coon H, **Carter BJ**. 1983. Cloning of infectious adeno-associated virus genomes in bacterial plasmids. *Gene* 23:65-73. Doi: 10.1016/0378-1119(83)90217-2. PMID: 6352411.
47. Colberg-Poley AM, **Carter BJ**, Enquist LW. 1983. A library of Herpes simplex type 1 (KOS) DNA fragments obtained by partial digestion with *Sau3A*. *Gene* 24:327-330. doi: 10.1016/0378-1119(83)90093-8. PMID: 6315542.

48. Senapathy P, Carter BJ. 1984. Molecular cloning of adeno-associated virus variant genomes and generation of infectious virus by recombination in mammalian cells. *J. Biol. Chem.* 259:4661-4666. PMID: 6323482.
49. Bear SE, Colberg-Poley AM, Court DL, **Carter BJ**, Enquist LW. 1984. Analysis of two potential shuttle vectors containing herpes simplex defective DNA. *J. Molecular and Applied Genetics.* 2:471-484. PMID: 6090565.
50. Senapathy P, Tratschin JD, **Carter BJ**. 1984. Replication of adeno-associated virus DNA: Complementation of naturally-occurring *rep* mutants by a wild-type genome or an *ori* mutant and correction of terminal palindrome deletions. *J. Mol. Biol.* 179:1-20. Doi: 10.1016/0022-2836(84)90303-6. PMID: 6094825.
51. **Carter BJ**, Tratschin JD, West MHP. 1984. Regulation of AAV gene expression. In *Microbiology 1983*, (S. Schlessinger, ed), pp 213-216, ASM Publications, Washington DC.
52. Tratschin JD, Miller IL, **Carter BJ**. 1984. Genetic analysis of adeno-associated virus. Properties of deletion mutants constructed *in vitro* and evidence for an adeno-associated virus replication function. *J. Virol.* 51:611-619. Doi: 10.1128/JVI.51.3.611-619.1984. PMID: 6088786.
53. Tratschin JD, West MHP, Sandbank T, **Carter BJ**. 1984. A human parvovirus, adeno-associated virus as a eukaryotic vector: Transient expression and encapsidation of the prokaryotic gene for chloramphenicol acetyl transferase. *Mol. Cell. Biol.* 4:2072-2081. Doi: 10.1128/mcb.4.10.2072. PMID: 6095038.
54. Siegl G, Bates RC, Berns KI, **Carter BJ**, Kelly DC, Kurstak E, Tattersall P. 1985. Characteristics and taxonomy of Parvoviridae. *Intervirology* 23:61-73. Doi: 10.1159/000149587. PMID: 3980186.
55. Tratschin JD, Miller IL, Smith MG, **Carter BJ**. 1985. Adeno-associated virus vectors for high frequency integration, expression and rescue of genes in mammalian cells. *Mol. Cell. Biol.* 5:3251-3260. Doi: 10.1128/mcb.5.11.3251. PMID: 3018511.
56. Katz E, **Carter BJ**. 1986. A mutant cell line derived from NIH 3T3 cells which requires two oncogenes for *in vitro* transformation. *J. Natl . Cancer Inst.* 77:909-914. PMID: 346820.
57. Katz E, **Carter BJ**. 1986. Effect of adeno-associated virus on transformation of NIH 3T3 cells by a *ras* gene and on tumorigenicity of an NIH 3T3 cell line. *Cancer Res* 46:3023-3026. PMID: 3009007.
58. Tratschin JD, Tal J, **Carter BJ**. 1986. Negative and positive regulation in *trans* of gene expression from adeno-associated virus vectors in mammalian cells by a viral *rep* gene product. *Mol. Cell. Biol.* 6:2884-2894. Doi: 10.1128/mcb.6.8.2884. PMID: 3491293.

59. Mendelson E, Trempe JP, **Carter BJ**. 1986. Identification of *trans*-acting rep proteins of adeno-associated virus by antibodies to a synthetic oligopeptide. J. Virol. 60:823-832. Doi: 10.1128/JVI.60.3.823-832.1986. PMID: 3023672.
60. **Carter BJ**, Tattersall P. 1987. Structure of parvoviruses. In "Animal Virus Structure" (V. Nermut and A. Steven eds.), pp 325-334. Elsevier, Netherlands.
61. West MHP, Trempe JP, Tratschin JD, **Carter BJ**. 1987. Gene expression in mammalian cells from adeno-associated vectors. The effects of chimeric mRNA structure, helper virus and adenovirus VAI RNA. Virology 160:38-47. Doi: 10.1016/0042-6822(87)90041-9. PMID: 2820139.
62. Trempe JP, Mendelson E, **Carter BJ**. 1987. Characterization of adeno-associated virus rep proteins in human cells by antibodies raised against rep expressed in *Escherichia coli*. Virology 160:18-28. Doi: 10.1016/0042-6822(87)90166-8. PMID: 2823460.
63. Wondisford FE, Usala SJ, DeCherney GS, Castren M, Radovick S, Gyves PW, Trempe JP, Nikodem VM, **Carter BJ**, Weintraub BD. 1988. Cloning of the human thyrotropin beta subunit gene and transient expression of biologically active human thyrotropin after gene transfection. Mol. Endocrinol. 2:32-39. Doi: 10.1210/mend-2-1-32. PMID: 3398841.
64. Trempe JP, **Carter BJ**. 1988. Regulation of adeno-associated virus gene expression in 293 cells: Control of mRNA abundance and translation. J.Virol. 67:68-74. Doi: 10.1128/JVI.62.1.68-74.1988. PMID: 2824856.
65. Mendelson E, Smith MG, **Carter BJ**. 1988. Expression and rescue of an unselected marker from an integrated AAV vector. Virology 166:154-165. Doi: 10.1016/0042-6822(88)90157-2. PMID: 2842941.
66. Trempe JP, **Carter BJ**. 1988. Alternate mRNA splicing is required for synthesis of the adeno-associated virus VP1 capsid protein. J.Virol. 62:3356-3363. doi: 10.1128/JVI.62.9.3356-3363.1988. PMID: 2841488.
67. Mendelson E, Smith MG, Miller IL, **Carter BJ**. 1988. Effect of a viral rep gene on transformation of cells by an adeno-associated virus vector. Virology 166:612-615. 10.1016/0042-6822(88)90536-3. PMID: 2845666.
68. Redemann B, Mendelson E, **Carter BJ**. 1989. Adeno-associated virus rep protein synthesis during productive infection. J.Virol. 63:873-882. Doi: 10.1128/JVI.63.2.873-882.1989. PMID: 2536109.
69. Chejanovsky N, **Carter BJ**. 1989. Replication of a human parvovirus nonsense mutant in mammalian cells containing an inducible amber suppressor. Virology 171:239-247. Doi: 10.1016/0042-6822(89)90531-x. PMID: 2545030.

70. Chejanovsky N, **Carter BJ**. 1989. Mutagenesis of an AUG codon in the AAV rep gene. Effects on viral DNA replication. *Virology* 173:120-128. Doi: 10.1016/0042-6822(89)90227-4. PMID: 2554565.
71. **Carter BJ**. 1990. The growth cycle of adeno-associated virus. In "Handbook of Parvoviruses" (P. Tjissen, ed.). Vol I, pp 155-168. CRC Press, Boca Raton, FL.
72. **Carter BJ**, Mendelson E, Trempe JP. 1990. AAV DNA replication, integration and genetics. In "Handbook of Parvoviruses" (P. Tjissen, ed.). Vol I, pp 169-226. CRC Press, Boca Raton, FL.
73. **Carter BJ**, Trempe JP, Mendelson E. 1990. AAV gene expression and regulation. In "Handbook of Parvoviruses" (P. Tjissen, ed.). Vol I, pp 227-254. CRC Press, Boca Raton, FL.
74. **Carter BJ**. 1990. Adeno-associated virus helper functions. In "Handbook of Parvoviruses" (P. Tjissen, ed.). Vol I, pp 255-282. CRC Press, Boca Raton, FL.
75. **Carter BJ**. 1990. Parvoviruses as vectors. In "Handbook of Parvoviruses" (P. Tjissen, ed.). Vol II, pp 247-284. CRC Press, Boca Raton, FL.
76. Chejanovsky N, **Carter BJ**. 1990. Mutation of a consensus purine nucleotide binding site in the adeno-associated virus *rep* gene generates a dominant negative phenotype for DNA replication. *J. Virol.* 64:1764-1770. Doi: 10.1128/JVI.64.4.1764-1770.1990. PMID: 2157057.
77. **Carter BJ**, Flotte TR, Owens R. 1990. Adeno-associated viruses for gene transfer. *Ped. Pulmonology* 5:104-105.
78. Antoni BA, Rabson AB, Miller I, Trempe JP, Chejanovsky N, **Carter BJ**. 1991. Adeno-associated virus Rep protein inhibits human immunodeficiency virus type 1 production in human cells. *J. Virol.* 65:396-404. Doi: 10.1128/JVI.65.1.396-4054.1991. PMID: 1845899.
79. Khleif SN, Myers T, **Carter BJ**, Trempe JP. 1991. Inhibition of cellular transformation by the adeno-associated virus *rep* gene. *Virology* 181:738-741. Doi: 10.1016/0042-6822(91)90909-u. PMID: 1849683.
80. Owens R, Trempe JP, Chejanovsky N, **Carter BJ**. 1991. Adeno-associated virus rep proteins produced in insect and mammalian expression systems: Wild-type and dominant negative proteins bind to the viral replication origin. *Virology* 184:14-22. Doi: 10.1016/0042-6822(91)90817-u. PMID: 1651588.
81. Smuda JW, **Carter BJ**. 1991. Adeno-associated viruses having nonsense mutations in the capsid gene: Growth in mammalian cells having an inducible amber suppressor. *Virology* 184:310-318. Doi: 10.1016/0042-6822(91)90847-5. PMID: 1651593.

82. **Carter BJ**, Flotte TR, Zeitlin P, Solow R, Owens R, Afione S, Drumm M. 1991. Adeno-associated virus vectors and complementation of cystic fibrosis. *Ped. Pulmonology* 6:187-188.
83. Owens RA, **Carter BJ**. 1992. In vitro resolution of adeno-associated virus DNA hairpin termini by wild-type rep protein is inhibited by a dominant-negative mutant of rep. *J. Virol.* 66:1236-1240. Doi: 10.1128/JVI.66.2.1236-1240.1992. PMID: 1309900.
84. Mendelson E, Grossman Z, Mileguir F, Rechavi G, **Carter BJ**. 1992. Replication of adeno-associated virus type 2 in human lymphocytic cells and interaction with HIV-1. *Virology* 187:453-563. Doi: 10.1016/0042-6822(92)90477-w. PMID: 1372138.
85. Flotte T, Owens R, Afione SA, Solow R, Zeitlin PL, **Carter BJ**. 1992. Gene expression from adeno-associated virus vectors in airway epithelial cells. *Am. J. Resp. Cell Mol. Biol.* 7:349-356. doi: 10.1165/ajrcmb/7.3.349. PMID: 1325813.
86. Egan M, Flotte T, Zeitlin P, Afione S, Solow R, **Carter BJ**, Guggino WB. 1992. Correction of defective PKA regulation of outwardly rectifying chloride channels by insertion of normal CFTR into airway cells. *Nature (London)* 359:581-584. Doi: 10.1038/358581a0. PMID: 1380129.
87. **Carter BJ**. 1992. Adeno-associated vectors. *Current Opinion in Biotechnology* 3:533-539. Doi: 10.1016/0958-1669(92)90082-t. PMID: 1369403.
88. **Carter BJ**, Antoni BA, Klessig DF. 1992. Adenovirus having a deletion of the early region 2A gene allows growth of adeno-associated virus with decreased efficiency. *Virology* 191:473-476. Doi: 10.1016/0042-6822(92)90213-9. PMID: 1329332.
89. Flotte TR, Zeitlin PL, Solow R, Afione S, Owens RA, Markakis D, Drumm M, Guggino WB, **Carter BJ**. 1993. Expression of the cystic fibrosis transmembrane conductance regulator from a novel adeno-associated virus promoter. *J. Biol. Chem.* 268:3781-3790. PMID: 7679117.
90. Owens RA, Weitzman MD, Kyöstiö SRM, **Carter BJ**. 1993. Identification of a DNA binding domain in the amino terminus of adeno-associated virus rep proteins. *J. Virol.* 67:997-1005. Doi: 10.1128/JVI.67.2.997-1005.1993. PMID: 8380475.
91. Flotte TR, Afione SA, Conrad C, McGrath SA, Solow R, Oha H, Zeitlin PL, Guggino W, **Carter BJ**. 1993. Stable in vivo expression of the cystic fibrosis transmembrane conductance regulator with an adeno-associated virus vector. *Proc. Natl. Acad. Sci. USA*, 93:10163-10167. Doi: 10.1073/pnas.90.22.10613. PMID: 7504271.
92. Kyöstiö SRM, Antoni BA, Weitzman MD, Owens RA, Chejanovsky N, **Carter BJ**. 1994. Analysis of adeno-associated virus (AAV) wild-type and mutant Rep proteins for their abilities to negatively regulate AAV p5 and p19 mRNA levels. *J. Virol.* 68:2947-2957. Doi: 10.1128/JVI.68.5.2947-2957.1994. PMID: 8151765.

93. **Carter BJ**, Reynolds TC, Flotte TR. 1994 Adeno-associated vectors for in vivo gene transfer. BioPharm Conference 94 Proceedings, pp 294-301, Advanstar Communications, Oregon.
94. Flotte TR, Conrad CK, Afione SA, Reynolds TC, Guggino WB, **Carter BJ**. 1994. Preclinical trials of Adeno-associated virus vectors for cystic fibrosis gene therapy. *Pediatric Pulmonology* 10:153-154.
95. Flotte TR, Barraza-Ortiz X, Solow R, Afione SA, **Carter BJ**, Guggino WB. 1995 An improved system for packaging recombinant adeno-associated virus vectors capable of in vivo transduction. *Gene Therapy* 2:29-37. PMID: 7712331.
96. Flotte T, **Carter BJ**. 1995. Adeno-associated virus vectors for gene therapy. *Gene Therapy* 2:357-362. PMID: 7584109.
97. **Carter BJ**, Flotte TR. 1996. Development of adeno-associated virus vectors for gene therapy of cystic fibrosis. *Current Topics in Microbiology & Immunology*. Vol 218, pp. 119-144. Doi: 10.1007/978-3-642-80207-2_8.
98. **Carter BJ**. 1996. Molecular genetics of Adeno-associated virus. In "Viral Genome Methods" (ed. K. W Adolph), pp 253-268, CRC Press, Boca Raton, Florida.
99. Flotte TR, **Carter BJ**. 1997. In vivo gene therapy with adeno-associated virus vectors for cystic fibrosis. In *Advances in Pharmacology* (Ed. J.T. August) Vol 40; pp85-101. Doi: 10.1016/s1054-35898(08)60138-6. PMID: 9217924.
100. Weitzman MD, Kyostio SRM, **Carter BJ**, Owens RA. 1996. Interaction of wild type and mutant adeno-associated virus (AAV) rep proteins on AAV hairpin DNA. *J. Virol.* 70:2440-2448. Doi: 10.1128/JVI.70.4.2440-2448.1996. PMID: 8642672.
101. Afione SA, Conrad CK, Adams R, Reynolds TC, Guggino WB, Adams R, **Carter BJ**, Flotte TR. 1996. An in vivo model of AAV vector persistence and rescue. *J. Virol.* 70:3235-3241. doi: 10.1128/JVI.70.5.3235-3241.1996. PMID: 8627804.
102. Flotte, TR, **Carter BJ**, Conrad CK, Guggino WB, Reynolds TC, Rosenstein BJ, Taylor G, Walden S, Wetzel R. 1996. A phase I study of an adeno-associated virus-CFTR gene vector in adult CF patients with mild lung disease. *Hum. Gene Therapy*, 7:1145-1159.
103. Conrad CK, Allen S, Afione SA, Reynolds TC, Beck, SE, Fee-Maki M, Barraza-Ortiz X, Adams R, Askin FB, **Carter BJ**, Guggino WB, Flotte TR. 1996. Safety of single dose administration of an adeno-associated virus (AAV)-CFTR vector in the primate lung. *Gene Therapy*, 3:658-668. PMID: 8854091.
104. **Carter BJ**. 1996. The promise of adeno-associated virus vectors. *Nature Biotechnology*, 14:1725-1726.

105. Wagner JA, Moran L, Messner AH, Daifuku R, Conrad CK, Reynolds T, Guggino WB, Moss RB, **Carter BJ**, Wine JJ, Flotte TR, Gardner PA. 1998. Clinical Protocol. A Phase I/II study of tgAAV-CF for the treatment of chronic sinusitis in patients with cystic fibrosis. *Human Gene Therapy*, 9:889-909. Doi: 10.1089/hum.1998.9.6-889. PMID: 9581911
106. Flotte T, **Carter BJ**. 1998. AAV vectors for gene therapy of cystic fibrosis. *Methods in Enzymology: ABC Transporters, Biochemical, Cellular and Molecular Aspects* (Eds. S. Ambudkar and M Gottesman), Vol 292: -pp717-732. Academic Press, San Diego, CA. doi: 101016/s0076-6879(98)92055-9. PMID: 9711594.
107. **Carter BJ**. 1999. Viral vectors. For gene therapy. In "Biotechnology , 2nd Edition, Recombinant Proteins, Monoclonal Antibodies and Therapeutic Genes", (Ed. H-J.Rehm, G. Reed) Vol 5a pp 395-425, Wiley-VCH, Weinheim.
108. Wagner JA, Messner AH, Moran ML, Daifuku R, Kouyama K, Desch JK, Manley S, Norbash AM, Conrad CK, Friborg A, Reynolds T, Guggino WB, Moss RB, **Carter BJ**, Wine JJ, Flotte TR, Gardner P. 1999, Safety and biological efficacy of an adeno-associated virus vector-cystic fibrosis transmembrane regulator (AAV-CFTR) in the cystic fibrosis maxillary sinus. *The Laryngoscope*, 109:266-274. Doi: 10.1097/00005537-1999020000-0017. PMID: 10890777.
109. Beck SE, Jones LA, Chesnut K, Walsh S, Reynolds TC, **Carter BJ**, Askin F, Flotte TR, Guggino WB. 1999. Repeated delivery of adeno-associated virus vectors to the rabbit airway. *J. Virol.* 73:9446-9455. Doi: 10.1128/JVI.73.11.9446-9455.1999. PMID: 10516053.
110. Flotte TR, **Carter BJ**. 1999. Adeno-associated viral vectors. In "Gene Therapy Technologies, Applications and Regulations: From Laboratory to Clinic", (ed. Anthony Meager), pp. 110-125, John Wiley and Sons, Chichester, UK.
111. **Carter BJ**. 2000. Adeno-associated viruses as gene transfer vehicles. In "Parvoviruses: from Molecular Biology to Pathology and Therapeutic Uses". *Contrib. Microbiol.* (eds. S. Faisst and J. Rommelaere), pp 85-106, Karger AG, Basel. Doi: 10.1159/000060340. PMID: 10941572.
112. **Carter BJ**. 2000. AAV vectors for gene therapy. In "Gene Therapy: Therapeutic Mechanisms and Strategies" (eds. N. Templeton-Smith & D. Lasic), pp. 44-59, Marcel Dekker, New York.
113. Kohn DB, **Carter BJ**, Glorioso J. 2002 Gene therapy and viruses, In "Clinical Virology" (eds. D. Richman, R. Whitely, F. Hayden), 2nd Edition, pp 323-342. ASM Press, Washington, DC.
114. Aitken ML, Moss RB, Waltz DA, Dovey MA, Tonelli MR, McNamara SC,

- Gibson RL, Ramsey BW, **Carter B.J**, Reynolds TC. 2001. A phase I study of aerosolized administration of tgAAVCF to CF subjects with mild lung disease. *Human Gene Therapy* 12:1907-1916. Doi: 10.1089/104303401753153956. PMID: 11589832.
115. Wagner JA, Nepomuceno IB, Messner AH, Moran ML, Batson EP, DiMiceli S, Brown BW, Desch JK, Norbash AM, Conrad CK, Guggino WB, Flotte TR, Wine JJ, **Carter BJ**, Moss RB, Gardner P. 2002. A phase II, double-blind, randomized, placebo-controlled clinical trial of tgAAVCF using maxillary sinus delivery in CF patients with antrostomies. *Human Gene Therapy*, 13:1349-1359. Doi: 10.1089/104303402760128577. PMID: 12162817.
 116. **Carter BJ**. 2003. Gene delivery technology: Adeno-associated Virus. In “*Pharmaceutical Gene Delivery Systems*”. (eds. A. Rolland and S. Sullivan), pp 183-214, Marcel Dekker, New York.
 117. Flotte TR, Zeitlin PL, Reynolds TC, Heald A, Pedersen P, Beck S, Conrad CK, Brass-Ernst L, Humphries M, **Carter BJ**, Guggino WB. 2003. Phase I trial of intranasal and endobronchial administration of a recombinant adeno-associated virus serotype (rAAV2)-CFTR vector in adult cystic fibrosis patients: A two-part clinical study. *Human Gene Therapy* 14:1079-1088. Doi: 10.1089/104303403322124792. PMID: 12885347.
 118. **Carter BJ**, Burstein HB, Peluso RW. 2004. AAV vectors for gene therapy. In “*Gene and Cell Therapy: Therapeutic Mechanisms and Strategies*”, Second Edition (Ed. N. Templeton-Smith), pp 53-101, Marcel Dekker, New York.
 119. Ziegler RJ, Lonning SM, Armentano D, Li C, Souza DW, Cherry M, Ford C, Barbon CM, Desnick RJ, Gao GP, Wilson JM, Peluso RM, Godwin S, **Carter BJ**, Gregory RJ, Wadsworth SC, Cheng SH. 2004. AAV2 vector harboring a liver-restricted promoter facilitates sustained expression of therapeutic levels of α -galactosidase A and the induction of immune tolerance in Fabry mice. *Molecular Therapy*. 9:231-240. Doi: 10.1016/j.ymthe.2003.11.015. PMID: 14759807.
 120. **Carter BJ**. Adeno-associated Virus and the Development of Adeno-Associated Virus Vectors: A Historical Perspective. *Molecular Therapy*, (2004) 10:981-989. Doi:10.1016/j.ymthe.2004.09.011. PMID: 15564130.
 121. Carter, BJ. 2005. Adeno-associated Viral Vectors. In “*Encyclopedia of Medical Genomics and Proteomics*” (Eds. J Fuchs & M Podda), pp. 25-29. Marcel Dekker, New York. DOI: 10.1081/E-EDGP 120029815
 122. Zhang LN, Karp P, Gerard CJ, Pastor E, Laux, D, Munson K, Yan Z, Liu, X, Godwin S, Thomas CP, Zabner J, Shi, H, Caldwell, D, Peluso R, **Carter B**, Engelhardt JE. 2004. Dual Therapeutic Utility of Proteasome Modulating Agents or Pharmaco-Gene Therapy of

the Cystic Fibrosis Airway. *Molecular Therapy*. 10:990-1002.
doi:10.1016/j.jymthe.2004.08.009.

123. **Carter BJ**. 2005. Adeno-associated virus vectors in clinical trials. *Human Gene Therapy*, 16: 541-550. Doi: 10.1089/hum.2005.16.541. PMID: 15916479.
124. Flotte TR, Schweibert E, Zeitlin PL, **Carter BJ**, Guggino WB. 2005. Correlation between DNA transfer and cystic fibrosis airway epithelial cell correction after recombinant adeno-associated virus serotype 2 gene therapy. *Human Gene Therapy*, 16: 921-928. Doi: 10.1089/hum.2005.16.921. PMID: 16076250.
125. **Carter, BJ**. 2006. Adeno-associated virus Vectors and Biology of Gene Delivery. In *"Parvoviruses"*. (Eds. JR Kerr, SF Cotmore, ME Bloom, RM Linden, CR Parrish), pp. 497-498, Hodder Arnold, London, UK,
126. **Carter, BJ**. 2006. Clinical Development with Adeno-associated virus Vectors. In *"Parvoviruses"*. (Eds. JR Kerr, SF Cotmore, ME Bloom, RM Linden, CR Parrish), pp. 499-510, Hodder Arnold, London, UK
127. **Carter BJ**. 2008. Adeno-associated Virus Vectors. In *"Concepts in Genetic Medicine"* (Dropulic B, Carter BJ, Eds.), pp 61-67, John Wiley, New York.
128. Carter BJ. 2008. The lung as a delivery platform for gene therapy. In *"Concepts in Genetic Medicine"* (Dropulic B, Carter BJ, Eds.), pp 145-152, John Wiley, New York.
129. Moss RB, Milla C, Colombo J, Accurso F, Zeitlin PL, Clancy JP, Spencer LT, Pilewski J, Waltz DA, Dorkin H, Ferkol T, Pian M, Ramsey B, **Carter BJ**, Martin D, Heald A. 2007. Repeated aerosolized AAV-CFTR for treatment of cystic fibrosis: A randomized placebo-controlled phase 2B trial. *Human Gene Therapy*. 18:726-732. Doi: 10.1089/hum.2007.022. PMID: 17685853
130. McBride JL, Boudreau RL, Harper SQ, Staber PD, Monteys AM, Martins I, Gilmore B, Burstein H, Peluso RW, Polisky B, **Carter BJ**, Davidson BL. 2008. Artificial miRNAs mitigate shRNA-mediated toxicity in the brain: implications for the therapeutic development of RNA interference. *Proc Natl Acad Sci USA* 105:5868-5873. Doi: 10.1073/pnas.0801775105. Epub 2008 Apr 8. PMID: 18398004.
131. Bainbridge JW, Smith AJ, Barker S, Robbie S, Henderson R, Balaggan K, Viswanathan A, Fitzke FW, Holder GE, Stockman A, Tyler N, Peterson-Jones S, Battacharya SS, Thrasher AJ, **Carter BJ**, Rubin GS, Moore AT, Ali RR. 2008. Effect of gene therapy on visual function in adults with Leber's congenital amaurosis. *New England Journal of Medicine*, 358:2231-2239. Doi:10.1056/NELMoa0802268. Epub 2002 Apr 27. PMID: 18441371.
132. Kohn DB, **Carter BJ**, Glorioso J. 2009. Gene Therapy and Viruses, In *"Clinical Virology"* (eds. D. Richman, R. Whitely, F. Hayden), 3rd Edition. ASM Press, Washington, DC.

133. **Carter BJ**, Burstein HB, Peluso RW. 2009. AAV vectors for gene therapy. In “*Gene and Cell Therapy: Therapeutic Mechanisms and Strategies*”, Third Edition, (Ed. N. Templeton-Smith), pp 117-117, CRC Press, Taylor and Francis Group, Boca Raton, FL.
134. **Carter BJ**, Anklesaria P, Choi S, Engelhardt JF. 2009. Redox modifier genes and pathways in amyotrophic lateral sclerosis. In: *Anti-oxidants and Redox Signaling* 11:1-8. Doi: 10.1089/ars.2008.2414. PMID: 19187001.
135. Boudreau RL, McBride JL, Martins I, Shen S, Xing Y, **Carter BJ**, Davidson BL. 2009. Non-allele-specific silencing of mutant and wild type huntingtin demonstrates therapeutic efficacy in Huntington’s disease mice. *Molecular Therapy* 17:1053-1063. Doi: 10.1038/mt.2009.17. Epub 2009 Feb 24. PMID: 19240687.
136. **Carter BJ**. 2010. Clinical development of AAV vectors. *Gene Therapy and Regulation*. 5:5-30. DOI:10.1142/S0219198910000211.
137. **Carter BJ**. 2014. AAV vectors for gene therapy. In “*Gene and Cell Therapy: Therapeutic Mechanisms and Strategies*”, Fourth Edition, (Ed. N. Templeton-Smith), pp 85-132, CRC Press, Taylor and Francis Group, Boca Raton, FL.
138. Falese L, Sandza K, Yares B, Triffault S, Gangar S, Long B, Tsuruda L, **Carter B**, Vetterman C, Zoog SJ, Fong S. 2017. Strategy to detect pre-existing immunity to AAV gene therapy. *Gene Therapy* 24:768-778. DOI:10.1038/gt.2017.95
139. Srivastava A, **Carter BJ**. 2017. Authors response to Jesse D, Riordan. *Human Gene Therapy* 28:376-377. DOI: 10.1089/hum.2017.050. PMID: 28498777.
140. Srivastava A, **Carter BJ**. 2017. AAV Infection: Protection from cancer. *Human Gene Therapy* 28:323-327. DOI: 10.1089/hum.2016.147. E[ub 2016 Nov10. PMID: 27832705.
141. Bunting S, Zhang L, Xie L, Bullens S, Mahimkar R, Fong S, Sandza K, harmon D, Yates B, Handyside B, Suhn CR, Galicia N, Tsuruda L, O’Neill C, Bagri A, Colsi P, Long S, Vehar G, **Carter BJ**. 2018. Gene therapy with BMN270 results in therapeutic levels of FVIII in mice and primates and normalization of bleeding in hemophiliac mice. *Molecular Therapy* 26:1-14. DOI.org/10.1016/j.ymthe.2017.12.009
142. **Carter BJ**. 2020. My pathway to adeno-associated virus and adeno-associated virus gene therapy: A personal perspective. *Human Gene Therapy* 31:494-498. DOI:10.1089/hum.2020.29120.bca. Epub 2020 Apr 9. PMID: 32275185.

OTHER PUBLICATIONS AND REPORTS.

1. **Carter BJ**. "Eukaryotic Viral Vectors" (Y. Gluzman, Ed), Cold Spring Harbor. Book Review in *Anal. Biochem.* (1982) 127:460.

2. **Carter BJ.** "Enhancers and Eukaryotic Gene Expression" (Y. Gluzman and T. Shenk, Eds), Cold Spring Harbor Laboratory. Book review in Anal. Biochem. (1984) 138:263.
3. **Carter BJ.** Comments on the future of the DNA Guidelines. Recombinant DNA Technical Bulletin, (1990) 13:334-338.
4. **Carter BJ.** "Practical Molecular Virology. Viral Vectors for Gene Expression". Book Review in Anal. Biochem., (1992) 202:405-406.
5. **Carter BJ.** Review of "Zhou, Z.S., et al., Adeno-associated virus 2-mediated high efficiency gene transfer into immature and mature subsets of hematopoietic progenitor cells in human umbilical cord blood, J. Exp. Med. 1994, 179:1867-1875", in Gene Therapy Newsletter, (1994) 1:7
6. **Carter BJ.** Review of "Ohno, T., et al., Gene therapy for vascular smooth muscle cell proliferation after arterial injury, Science, 1994, 265:781-784", in Gene Therapy Newsletter, (1994) 4:9
7. **Carter BJ.** Review of "Crystal, R. G., et al., Administration of an adenovirus containing the human CFTR cDNA to the respiratory tract of individuals with cystic fibrosis", Nature Genetics, 1994, 8:42-51", in Gene Therapy Newsletter, (1995) 6:8.
8. **Carter BJ.** Review of "Grubb, B., et al., "Inefficient gene transfer by adenovirus vector to cystic fibrosis airway epithelia of mice and humans, Nature, 1994, 371:80-806," in Gene Therapy Newsletter, (1995) 6:9.
9. **Carter BJ.** Review of "Rooney et al., Use of gene-modified virus-specific T lymphocytes to control Epstein-Barr-virus-related lymphoproliferation, The Lancet, 1995, 345:9-13," in Gene Therapy Newsletter, (1995) 8:6.
10. **Carter BJ.** Review of "Dai et al., Cellular and humoral immune responses to adenoviral vectors containing factor-IX gene: tolerization of factor-IX and vector antigens allows for long term expression, Proc Natl. Acad Sci USA (1995) 92:1401-1405" in Gene Therapy Newsletter, (1995) 11:6.
11. **Carter BJ.** Editorial: Clinical Applications of Gene Transfer to Genetic Disorders. Current Research in Molecular Therapeutics. (1998) 1:149-150
12. **Carter BJ, Kohn DB.** Editorial: Clinical Applications of Gene Therapy. Current Opinion in Molecular Therapeutics. (1999) 1:420-421.
13. **Carter BJ.** Gene Therapy as Drug Development. Molecular Therapy. (2000) 1:211-212. Doi: 10.1006/mthe.2000.0040. PMID: 10933936

14. Aguilar LK, Aguilar-Cordova E, Ando D, Armendia-Borunda J, Burd PR, Butler EB, **Carter BJ**, Chiang YL, Glorioso JG, Henderson DR, Jolly D, McKenny GP, Nemunaitis J, Rieves M, Scherer S, Steele FR, Woo SLC. A Prescription for Gene Therapy: The First Cabo Working Group. *Molecular Therapy* (2000) 1:385-388.
15. **Carter BJ**, Kohn DB. Editorial: Safety Considerations in Clinical Applications of Gene Therapy. *Current Opinion in Molecular Therapeutics*. (2000) 2:360-361
16. **Carter BJ**, Kohn DB. Editorial: Clinical Applications of Gene Therapy. *Current Opinion in Molecular Therapeutics*. (2001) 3: 314-315
17. **Carter BJ**, Seiler S. Gene Therapy: The Next Step in the Evolution of Medicine. *North American Biotechnology Compendium* 2002.
18. Frederickson RM, **Carter BJ**, Pilaro AM. Meeting Report: Nonclinical Toxicology in Support of Licensure of Gene Therapies. Arlington, VA, USA, March 13-14, 2003. *Molecular Therapy* (2003) 8:8-10. Doi: 10.1016/s1525-0016(03)00192-8. PMID: 12872763.
19. Nyberg, K, **Carter, BJ**, Chen, T, Flotte, TR, Rose, S, Rosenblum, D, Simek, SL, Wilson, C. Workshop on Long-Term Follow-Up of Participants in Human Gene Transfer Research. *Molecular Therapy*, (2004) 10:976-980. Doi: 10.1016/j.ymthe.2004.10.1011. PMID: 16156012.
20. **Carter BJ**. Commentary: Still crazy after all these years? Reasons to believe in the promise of gene therapy. *North American Biotechnology Compendium*, 2006
21. **Carter BJ**. Dedication. Jacob Tal (1940-2005): An Appreciation. In "Parvoviruses". (Eds: JR Kerr, SF Cotmore, ME Bloom, RM Linden, CR Parrish). Pp v-vi, 2006, Hodder Arnold, London, UK.
22. **Carter BJ**. Resurgence of Gene and Cell Therapy. *Xconomy*, www.xconomy.com May 16, 2011.
23. **Carter BJ**. AAV vectors for hereditary emphysema; progressing along the clinical development highway. Commentary. *Hum. Gene Ther.* (2011) 22:1175-77. Doi: 10.1089/hum.2011.2524. PMID: 22044094.
24. Kiem HP, Baum C, Bushman FD, Byrne BJ, **Carter BJ**, Cavagnaro J, Malech HL, Mendell JR, Naldini LM, Sorrentino BP, Williams DA, Flotte TR. 2014. Charting a Clear Path: The ASGCT Standardized Pathways Conference. *Molecular Therapy* 22:1235-1238. Doi:10.1038/mt.2014.95. PMID: 24981438.
25. **Carter BJ**. 2022. Suppressing Nonsense for Gene Therapy. Commentary in *News and Views. Hum Gene Therapy*. 33: doi:10.089/hum.2022.29208.bjc.
26. **Carter BJ**. 2023. Memory of Nic Muzyczka. *Human Gene Therapy*. 34:247.

Doi: 1089/hum.2023.29240.nmu

27. **Carter BJ**. 2024. Ken Berns – A Remembrance. Human Gene Therapy. Volume 35, May 2024. Doi: 1089/hum.2023.29240.nmu

BOOKS

1. Dropulic, B. **Carter, BJ**. (Eds) 2008. “Concepts in Genetic Medicine”. J Wiley, NY.

PATENTS

1. **Carter BJ**, Tratschin JD. Adeno-associated Virus as a Eukaryotic Expression Vector. U.S. Patent 4,797,368 issued January 10, 1989.
2. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. US. Patent 5,587,308 issued Dec 24, 1996.
3. Flotte TR, **Carter BJ**, Guggino WB, Solow R. Generation of High Titers of Recombinant AAV Vectors. US Patent 5,658,776 issued Aug 19, 1997.
4. Flotte TR, **Carter BJ**, Guggino WB, Solow R. Generation of High Titers of Recombinant AAV Vectors. Australian Patent 688428 issued July 2 1998
5. Flotte TR, **Carter BJ**, Guggino WB, Solow R. Generation of High Titers of Recombinant AAV Vectors. European Patent 0 733 103 issued March 3, 2004.
6. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. US Patent 5,866,696 issued Feb 2, 1999.
7. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. US Patent 5,989,54 issued Nov 23. 1999.
8. **Carter BJ**, Flotte T, Solow R, Afione S. Amino-terminally truncated cystic fibrosis transmembrane regulator. US Patent 5,990,279 issued Nov 23, 1999.
9. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. US Patent 6,165,78 issued Dec 15, 2000.
10. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. European Patent 0 644 944 B1 issued Nov 21, 2001.
11. **Carter BJ**, Flotte T, Solow R, Afione S. Adeno-associated Virus Vector with Inverted terminal Repeat Sequences as Promoter for the In Vivo Transfer of a Functional CFTR Gene. HK Patent 1014549 issued June 2, 2002.

12. **Carter BJ**, Flotte T, Solow R, Afione S. Modified Adeno-associated Virus Vector Capable of Expression from a Novel Promoter. Australia Patent 45981/93 issued Feb 27, 1997.
13. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent 6,596,535 issued July 22, 2003.
14. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent 7,125,717 issued October 24, 2006.
15. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent 7,785,888 issued August 31, 2010.
16. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent 7,846,729 issued December 7, 2010
17. **Carter B. J.** Enhancement of expression of a single-stranded heterologous nucleotide sequence from recombinant viral vectors by designing the sequence such that it from intrastrand base pair. European Patent Application 10186008.8-2406, filed August 8, 2000.
18. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent 8,093,054 issued January 10, 2012.
19. **Carter BJ**. Metabolically Activated Recombinant Viral Vectors and Methods for Their Preparation and Use. US Patent Application 14/804,177. Filed August 20, 2015
20. Lochrie M, Colosi P, **Carter BJ**, Cinek T. Virus Free Cultures. US Application 62/972,211. Filed February 10, 2020.
- 201 Lochrie M, Colosi P, **Carter BJ**, Cinek T. Virus Free Cultures. PCT/US2021/017301. Filed February 9, 2021.
22. Lochrie M, Colosi P, **Carter BJ**, Cinek T. Virus Free Cultures. US Application 17/760,227. Filed Aug 5, 2020

MEETING ABSTRACTS AND PRESENTATIONS

1. Carter BJ, Smith MG. The Replication of Bacteriophage Lambda. Workshop on Bacteriophage Lambda, Cold Spring Harbor, New York, Abstracts (1970) p24.
2. Carter BJ, Rose JA. Adenovirus-associated Virus Transcription. In Vivo. Federation Proceedings Abstracts (1972) 31:408.

3. Carter BJ, Rose JA. Adenovirus-associated Virus Transcription. Abstracts, American Society for Microbiology Annual Meeting, Miami (1973).
4. Carter BJ, Khoury G, Rose JA. AAV RNA Transcription. Fifth Annual Tumor Virus Meeting, Cold Spring Harbor, New York (1973).
5. Carter BJ, Denhardt DT, Khoury G. Restriction and Transcription Maps of Adenovirus-associated DNA. Abstracts, American Society for Microbiology Annual Meeting, New York (1975), p255.
6. Carter BJ. Structure and Function of the AAV Genome. International Virology 3. Abstracts, Third International Congress for Virology, Madrid, (1975) p182.
7. Carter BJ, Denhardt DH, Khoury G. Physical mapping of Adeno-associated Virus DNA with restriction Enzymes. International Virology 3. Abstracts, Third International Congress for Virology, Madrid, (1975) p142
8. de la Maza LM, Carter BJ. Structure of the DNA from Incomplete AAV Particles. Abstracts, American Society for Microbiology Annual Meeting, New Orleans (1977).
9. Carter BJ, Jay FT, Laughlin CA, Cook WJ, de la Maza LM. AAV RNA Synthesis In vivo and In vitro. Parvovirus Meeting Abstracts, Cold Spring Harbor, New York, (1977).
10. de la Maza LM, Jay FT, Carter BJ. Structure of DNA from Incomplete AAV Particles. Parvovirus Meeting Abstracts, Cold Spring Harbor, New York, (1977).
11. Myers M, Laughlin C, de la Maza LM, Carter B. AAV DI Particles. Abstracts, American Society for Microbiology Annual Meeting, Las Vegas (1978).
12. Laughlin CA, Carter BJ. AAV-2 Transcription Complexes. Abstracts, American Society for Microbiology Annual Meeting, Las Vegas (1978)
13. Laughlin CA, Carter BJ. AAV-2 Transcription. Abstracts, Fourth International Congress for Virology, The Hague, (1978).
14. Carter BJ, de la Maza LM, Laughlin CA, Myers MW. Physical and Biological Structure of AAV DI Particles. Abstracts, Fourth International Congress for Virology, The Hague, (1978).
15. Laughlin CA, Jones N, Shenk T, Carter BJ. AAV Helper Ability of Early Adenovirus Deletion Mutants. Abstracts, American Society for Microbiology Annual Meeting, Los Angeles (1979)

16. de la Maza LM, Jay FT, Myers MW, Carter BJ. Physical Properties of Low and High Density AAV Components Abstracts, American Society for Microbiology Annual Meeting, Los Angeles (1979)
17. Carter BJ. AAV Genome Structure and Function. EMBO-FEBS Meeting on "RNA Synthesis in Animal Cells and Viruses", Rehovoth, Israel (1979).
- 17a. Richardson W, Carter BJ, Westphal H. Microinjected Adenovirus early mRNA promotes AAV growth. EMBO Meeting on Molecular Biology of Adenovirus. Peebles, Scotland . Abstracts p64. June (1980)
18. Marcus CJ, Laughlin CA, Carter BJ. Adeno-associated Virus RNA Processing: Nuclear and Cytoplasmic Transcripts. Fed. Proc. Abs. (1980).
19. Carter B, Laughlin CA, Myers M, Jay F. Involvement of Adenovirus Early Regions in the AAV Helper function. J. Supramolecular Structure, Supplement 4 (ed. CF Fox) (1980)
20. Laughlin CA, Marcus C, Jay F, Carter B. The Adenovirus helper Function for AAV. Tenth Tumor Virus Meeting, Cold Spring Harbor, New York. (1980)
21. Carter B, Jay F, Laughlin C, Marcus C, Myers M. Adenovirus Helper Functions for AAV. Fifth International Congress of Virology, Proceedings, Strasbourg, France. (1981)
22. Laughlin CA, Colberg-Poley A, Jones N, Ketner G, Carter B. Adenovirus and Herpes Simplex Virus Genes Involved in Replication and Rescue of AAV. J. Cell Biochem. 6:213 (1982).
23. Marcus CJ, Carter BJ. Nucleosome Formation by Adeno-associated Virus DNA. Fed. Proc Abstracts. p 516 (1982).
24. Colberg-Poley AM, Marcus-Sekura CJ, West, Carter B, Enquist LW. Expression of Herpes Simplex Virus Type 1 gD gene in *Xenopus* oocytes. Herpesvirus Meeting, Cold Spring Harbor, New York. (1982)
25. Marcus-Sekura CJ, Carter BJ. Nucleosome Formation by Single-stranded DNA Virus Adeno-associated Virus. Fed. Proc. Abstracts 42:1959 (1983).
26. Tratschin JD, Senapathy P, West MHP, Carter BJ. Mutational Analysis of AAV Replication and Gene Expression Using AAV-Plasmid Clones. UCLA Symposium on Gene Expression, Keystone, Colorado. (1983)
27. Senapathy P, Tratschin JD, Carter BJ. Molecular Cloning of Defective-Interfering Genomes of Adeno-associated Virus. UCLA Symposium on Gene Expression, Keystone, Colorado. (1983).

28. Tratschin JD, Smith MG, Miller IL, Carter BJ. Adeno-associated Virus (AAV): A Vector for Stable Integration and Expression of a Foreign Gene. Abstracts of 17th Annual Meeting of the Switzerland Union for General Experimental Biology, Geneva, Switzerland. 1985.
29. Katz E, Carter BJ. The Effect of Adeno-associated Virus on the Transformation of NIH-3T3 Cells by *ras* gene and on the Tumorigenicity of NIH-3T3 Transformed cell line. European Molecular Biology Organization Meeting on Parvoviruses, Grangeneuve, Switzerland (1985)
30. Carter BJ, Tratschin J, Katz E, Mendelson E, Miller I, Smith M, Tal J, Trempe J, West M. Gene Expression in AAV Vectors: Repression and Activation by Rep. European Molecular Biology Organization Meeting on Parvoviruses, Grangeneuve, Switzerland (1985)
31. Carter BJ, Tratschin JD, Mendelson E, Miller IL. Regulation of Gene Expression in AAV Vectors. Meeting on Strategies of Foreign Gene Expression, Rensselaerville, NY (1985).
32. Katz E, Carter BJ. A Mutant Cell line Derived from NIH-3T3 Cells Requires Two Oncogenes for In Vitro Transformation. American Society for Virology Annual Meeting, Santa Barbara, CA (1986).
33. Mendelson E, Carter BJ. The Regulatory Function of the AAV Rep Gene Product. American Society for Virology Annual Meeting, Santa Barbara, CA (1986).
34. Trempe JP, Carter BJ. Trans regulation of Gene Expression from AAV Vectors by a Viral Rep Gene Product. American Society for Virology Annual Meeting, Santa Barbara, CA (1986).
35. Carter BJ, Mendelson E, Miller I, Smith M, Tal J, Tratschin J, Trempe J. Development of a Human Virus as a Mammalian Cell Viral Vector. International Union of Biochemistry/Royal Society of New Zealand Joint Meeting on Genetic Manipulation, Hanmer, New Zealand. (1986)
36. Carter BJ, Mendelson E, Miller I, Smith M, Tal J, Tratschin J, Trempe J. Development of a Human Virus as a Mammalian Cell Viral Vector, New Zealand Institute of Chemistry Annual Meeting, Dunedin, New Zealand. (1986)
37. Chejanovsky NJ, Carter BJ. AAV-mediated Introduction of Genetic Material into Human Hematopoietic Stem cells. American Society for Virology Annual Meeting, University of North Carolina, Chapel Hill, NC (1987).
38. Mendelson E, Smith MG, Miller IL, Carter BJ. AAV Rep Gene Regulatory Function from Integrated AAV sequences. American Society for Virology Annual Meeting, University of North Carolina, Chapel Hill, NC (1987).
39. Trempe JP, Mendelson E, Carter BJ. Characterization of Adeno-associated Virus Rep Proteins in Human Cells by Antibodies Raised Against Rep Expressed in *E. Coli*. American Society for Virology Annual Meeting, University of North Carolina, Chapel Hill, NC (1987).

40. Lally C, Carter BJ. Regulatory Elements of the p40 promoter of AAV-2. American Society for Virology Annual Meeting, University of North Carolina, Chapel Hill, NC (1987).
41. Wondisford FE, Usala SJ, DeCherney GS, Castren M, Trempe JP, Nikodem VM, Carter BJ, Weintraub BD. Expression of Biologically Active Human Thyrotropin (hTSH) After Gene Transfection in Several Vector Systems. Endocrine Society Annual meeting, (1987).
42. Wondisford FE, Usala SJ, DeCherney GS, Castren M, Trempe JP, Nikodem VM, Carter BJ, Weintraub BD. Cloning of the Human Thyrotropin β -Subunit gene and Transient Expression of Biologically Active Thyrotropin (TSH) after Transfection. American Society for Clinical investigation Annual Meeting, San Diego (1987).
43. Mendelson E, Trempe JP, Miller IL, Carter BJ. The Regulatory AAV Rep Proteins. Second International Parvovirus Workshop, Oxford, UK. (1987).
44. Lally C, Trempe JP, Carter BJ. Regulatory Elements in the p40 promoter of AAV-2. Second International Parvovirus Workshop, Oxford, UK. (1987).
45. Carter B, Mendelson E, Trempe JP, Lally C, Chejanovsky N, Redemann B, Miller IL. Regulation of AAV Gene Expression. Seventh International Congress of Virology, Edmonton, Canada. Abstracts, p 41(1987).
46. Trempe JP, Lally C, Carter B. Post-transcriptional Regulation of Adeno-associated Virus Gene Expression. Translational Control Meeting Abstracts, Cold Spring Harbor, NY. (1987).
47. Blake RA, Chejanovsky N, Carter BJ. The construction of an adeno-associated virus vector which can only replicate in a t-RNA suppressor cell line. Seventh Annual NIH-MARC Scholars Conference, NIH, Bethesda, MD. (1988).
48. Chejanovsky N, Antoni BA, Owens RA, carter BJ. Autoregulation of the p5 promoter of adeno-associated virus by rep gene products. NIH Research Day, Bethesda, MD, (1989).
49. Antoni BA, Carter BJ. Induction of the rep gene of adeno-associated virus by HIV tat and subsequent inhibition of Tat function. NIH Research Day, Bethesda, MD, (1989).
50. Chejanovsky N, Carter B. Site-Directed Mutagenesis of the Adeno-associated Rep Gene. American Society for Virology 8th Annual Meeting, Ontario, Canada (1989).
51. Chejanovsky N, Carter B. Properties of an Adeno-associated Virus with a Mutation in the Consensus Purine nucleotide Binding Site of the Rep Gene. EMBO Workshop on Molecular Biology of Parvoviruses, Israel (1989).

52. Antoni BA, Chejanovsky N, Owens R, Trempe J, Carter B. Auto-regulation of the p5 Promoter of Adeno-associated Virus by Rep Gene Regulation. EMBO Workshop on Molecular Biology of Parvoviruses, Israel (1989).
53. Owens RA, Trempe JP, Chejanovsky N, Carter BJ. Interaction of Mutant and Wild-type Rep Proteins of the Adeno-associated Virus Genome. American Society for Virology 9th Annual Meeting, Salt Lake City, Utah (1990).
54. Smuda JW, Chejanovsky N, Carter BJ. The Effect of Amber Mutations in the AAV Capsid Genome. American Society for Virology 9th Annual Meeting, Salt Lake City, Utah (1990).
55. Antoni BA, Carter BJ. Auto-regulation of the AAV2 Rep Gene. American Society for Virology 9th Annual Meeting, Salt Lake City, Utah (1990).
56. Carter BJ, Flotte TR, Owens RA. Adeno-associated Viruses for Gene Transfer. 4th North American and International Cystic Fibrosis Conference. Pediatric Pulmonology, Supplement 5, p104-105 (1990).
57. Flotte TR, Owens RA, Carter BJ. The Adeno-associated Virus (AAV) p5 promoter: Activity in CF Bronchial Epithelial Cells and response to Forskolin. 4th North American and International Cystic Fibrosis Conference Late Breaking Science (1990).
58. Mendelson E, Mileguir F, Carter BJ, Grossman Z, Rechavi G, Ramot B. Infection of human lymphoid cells with adeno-associated virus. American Society for Virology 10th Annual Meeting, Fort Collins, CO, Abstracts p 27 (1991).
59. Flotte TR, Owens RA, Afione SA, Carter BJ. Adeno-associated Virus (AAV): Activity of the AAV-P5 promoter in CF Epithelial Cells and Gene Transfer with AAV Vectors. American Thoracic Society/American Lung Association International Conference, Anaheim, CA. American Review of Respiratory Disease 143:A513, (1991).
60. Carter B, Flotte T, Zeitlin P, Solow R, Owens R, Afione S, Drumm, Guggino W. Adeno-associated Virus vectors and Complementation of Cystic Fibrosis. 5th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology, Supplement 6 p187-188 (1991)
61. Flotte T, Zeitlin P, Afione S, Solow R, Drumm M, Guggino W, Carter B. Complementation of the CF Defect in Bronchial Epithelial Cells Using an AAV Vector: CFTR Expression and Restoration of Forskolin-Stimulated Chloride Efflux. 5th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology, Supplement 6 p 247 (1991)
62. Flotte T, Zeitlin, Afione S, Solow R, Guggino W, Carter B. Intracellular Localization of CFTR Expressed from an AAV Vector in CF Airway. 5th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology, Supplement 6 p 247 (1991)

63. Carter BJ. Adeno-associated Virus Vectors. National Hemophilia Foundation/NHLBI Workshop on Gene Therapy for Hemophilia, NIH, Bethesda, March 18-19 1992. Abstracts p 25-26 (1992).
64. Owens RA, Weitzman MD, Kyostio SRM, Carter BJ. Characterization of a Series of Mutant Adeno-associated Virus Rep Proteins. American Society for Virology 11th Annual Meeting, (1992).
65. Flotte T, Afione S, Solow, Carter B. Expression of CFTR from AAV Vectors. 6th Annual North American Cystic Fibrosis Conference, Washington, DC. Pediatric Pulmonology Supplement 8 p 237 (1992).
66. Egan ME, Flotte TR, Zeitlin PL, Carter BJ, Guggino WB. Defective Regulation of Outwardly Rectifying Chloride Channels is Corrected in CF Airway Epithelial Cells after Insertion of the Transmembrane Regulator. 6th Annual North American Cystic Fibrosis Conference, Washington, DC. Pediatric Pulmonology Supplement 8 p 237 (1992).
67. Flotte TR, Solow R, Afione SA, Conrad C, Zeitlin PL, Carter BJ. In Vivo CFTR Gene Transfer with Adeno-associated Virus (AAV) Vectors. 6th Annual North American Cystic Fibrosis Conference, Washington, DC. Abstracts Late Breaking Science Session (1992).
68. Carter B, Flotte T, Afione S, Solow R, Egan M, Zeitlin P, Guggino W. Gene Transfer into Pulmonary Epithelial Cells for Cystic Fibrosis. NIDDK Symposium on the Impact of Molecular Genetics on the Treatment of Genetic Diseases, National Institutes of Health, Bethesda, MD, October 1. Abstracts p25 (1992)
69. Carter B, Flotte T, Afione S, Solow R, Zeitlin P, McGrath S. Adeno-associated Virus Vectors for Gene Transfer. Abstracts, Keystone Scientific Symposia Meeting on Genetically Targeted Research and Therapeutics: Antisense and Gene Therapy. Keystone CO, April (1993)
70. Flotte TR, Afione SA, Solow R, Conrad C, McGrath SA, Zeitlin PL, Guggino WB, Carter BJ. In Vivo Gene Transfer with Adeno-associated Virus Vectors. American Review of Respiratory Disease 147:A544 (1993)
71. Weitzman MD, Owens RA, Kyostio SRM, Carter BJ. Interaction of Wild Type and Mutant Adeno-associated Virus (AAV) Rep Proteins on AAV Hairpin DNA. American Society for Virology Annual Meeting, Davis, CA, July. Abstracts p A125 (1993)
72. Carter B, Flotte T, Afione S, Solow R, Egan M, Zeitlin P, Guggino W. Adeno-associated Virus Vectors for In Vivo Gene Transfer. Annual Meeting of the Laboratory of Cell Biology, Bethesda, MD August 22-28 (1993)
73. Flotte TR, Conrad C, Afione SA, Solow R, Zeitlin PL, Guggino WB, Carter BJ. Stable In Vivo CFTR Gene Expression from an AAV Vector. 7th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology Supplement 9 p 74 (1993).

74. Kearns W, Afione S, Cutting G, Carter B, AAV-CFTR Vectors Integrate at Multiple Chromosomal Sites in a CF Bronchial Epithelial Cell Line. 7th Annual North American Cystic Fibrosis Conference, Dallas. Pediatric Pulmonology Supplement 9 p242 (1993).
75. Conrad C, Zeitlin P, Carter B, Guggino W, Flotte T. Immunodetection of Epitope-Tagged Recombinant CFTR after In Vivo Gene Transfer with an AAV Vector. 7th Annual North American Cystic Fibrosis Conference, Dallas, T. Pediatric Pulmonology, Supplement 9 p242 (1993).
76. Carter B, Flotte T, Afione S, Solow R, Egan M, Zeitlin P, Guggino W. Adeno-associated Virus Vectors for In Vivo Gene Transfer. 5th Parvovirus Workshop, Crystal river, FL. November 10-14 (1993)
77. Carter B, Flotte T, Afione S, Guggino W. Adeno-associated Virus Vectors for In Vivo Gene Transfer. Abstracts, Keystone Scientific Symposia Meeting on Gene Therapy, Copper mountain CO, Jan 15-22, Abstracts in J Cellular Biochemistry Suppl 18A p 214 (1994).
78. Conrad C, Afione S, Guggino W, Carter B, Flotte T. Administration of AAV-CFTR Vectors to the Airway Epithelium of Non-human Primates is Safe and Efficacious. Abstracts, American Lung Association and American Thoracic Society International Conference, Boston MA May 22-25. American Journal of Respiratory and Critical Care Medicine, 149:A236 (1994).
79. Kearns WG, Afione S, Fulmer SB, Caruso J, Pearson PL, Flotte T, Cutting GR. Recombinant AAV Vectors Demonstrate Episomal Expression in Immortalized Bronchial Epithelial cells. American society of Human Genetics Annual Meeting (1994).
80. Carter B, Flotte T, Afione S, Solow R, Egan M, Zeitlin P, Guggino W. Adeno-associated Virus Vector Gene Transfer in Vivo. Abstracts of meeting on Gene Therapy and Immunotherapy of Cancer, Ein Gedi, Israel Feb 23- Mar 3, 1994. Cancer Gene Therapy 1: 19 (1994).
81. Afione S, Conrad C, Adams R, Carter B, Flotte T. AAV-CFTR Vector Rescue in Rhesus Monkeys. 8th Annual North American Cystic Fibrosis Conference, Orlando, FL. Pediatric Pulmonology Supplement 10 p 220 (1994)
82. Flotte T, Conrad C, Afione S, Reynolds T, Allen S, Barraza-Ortiz X, Debelak D, Adams R, Guggino W, Carter BJ. Dose-response Relationships and Immunologic Implications of Airway Surface delivery of AAV-CFTR vectors in Rabbits and Rhesus Monkeys. 8th Annual North American Cystic Fibrosis Conference, Orlando, FL. Abstracts, Late-Breaking Science session. (1994)
83. Carter B, Reynolds T, Guggino W, Flotte T. Adeno-associated Virus Vectors for In Vivo Gene Transfer. Keystone Scientific Symposia Meeting on Ribozymes: Basic Science and

Therapeutic Implications, Breckenridge CO, Jan 5-10, 1995. J. Cellular Biochemistry Supplement 19A, P 206, (1995)

84. Flotte TR, Conrad C, Reynolds T, Afione S, Adams R, Guggino WB, Carter BJ. Preclinical Evaluation of AAV Vectors Expressing the Human CFTR cDNA. Keystone Scientific Symposia on Gene Therapy, Keystone CO, April (1995)
85. Carter BJ. Gene Therapy for Cystic Fibrosis with AAV Vectors. IBC Gene Therapy Conference, Bethesda, MD, May (1995)
86. Conrad CK, Beck S, Adams R, Guggino WB, Carter BJ, Flotte TR. Repeated dosing of AAV-CFTR to the Airways of Rabbits and Rhesus Macaques. American Thoracic Society International Conference, Seattle, May, 1995. American Journal of Respiratory and Critical Care Medicine 151:A669 (1995).
87. Afione SA, Conrad CK, Adams R, Kearns WG, Reynolds TC, Guggino WB, Cutting GR, Carter BJ, Flotte TR. Fate of AAV vector DNA *in vivo* after gene transfer to primate bronchial epithelium. 1995 American Thoracic Society International Conference, Seattle, May, 1995. American Journal of Respiratory and Critical Care Medicine 151:A670 (1995).
88. Wagner JA, Daifuku R, Moran NL, Kouyama K, Palmer J, Norbash A, Harkins A, Davies Z, Reynolds T, Guggino WB, Moss RB, Wine JJ, Carter BJ, Flotte TR, Gardner P. Clinical Protocol: Evaluation of Adeno-associated Mediated Gene Transfer of CFTR in the Maxillary Sinus of CF patients with Anstrotomies. 9th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology Supplement 12 p 227 (1995)
89. Afione S, Kearns W, Conrad C, Allen S, Reynolds T, Carter B, Guggino W, Cutting G, Flotte T. Episomal Persistence of Rep-deleted AAV Vectors In Vitro and In Vivo. 9th Annual North American Cystic Fibrosis Conference, Dallas, TX. Pediatric Pulmonology. Supplement 12 p 2208(1995)
90. Carter BJ. AAV: After 30 Years What do we Know? Plenary Talk, NIDDK Workshop on AAV Vectors: Gene Transfer into Quiescent cells, NIH, Bethesda, MD Dec 6 1995.
91. Carter BJ. AAV Vectors. 10th International Biotechnology Symposium, Sydney Australia, August. Abstracts p 54 (1996)
92. Afione SA, Conrad CA, Kearns WG, Chunduru S, Adams R, Reynolds TC, Guggino WB, Cutting GR, Carter BJ, Flotte TR. Distribution and Rescue Studies of an AAV-CFTR Vector in Rhesus Macaques. Forum 1996: Gene Therapy Sponsored by Center for Biologics Evaluation and Research, FDA and National Cancer institute, NIH, Bethesda MD July 11-12, Abstracts p138 (1996).
93. Flotte TR, Zeitlin PL, Afione SA, Daifuku R, Wagner MH, Beck S, Conrad C, Allen SA, Wetzell R, Sullivan K, Taylor G, Reynolds TC, Rosenstein BJ, Carter BJ, Guggino WB,

Phase I Clinical trial of an AAV-CFTR Vector in Adult Cystic Fibrosis (CF) patients. Gene Therapy Meeting, Cold Spring Harbor NY September (1996).

94. Flotte T, Zeitlin P, Daifuku R, Afione S, Allen S, Beck S, Schweibert E, Reynolds T, Wagner M, Brass-Ernst L, Taylor G, Wetzel R, Sullivan K, Friborg S, Goodwin S, Rosenstein BJ, Carter BJ, Guggino WB. A Phase I Study of AAV-CFTR administration in Adult CF Patients. Plenary session, 10th Annual North American Cystic Fibrosis Conference, Orlando, FL (1996)
95. Flotte TR, Afione S, Beck S, Allen S, Daifuku R, Schwiebert E, Conrad C, Reynolds T, Wetzel R, Taylor G, Rosenstein BJ, Zeitlin PL, Carter B, Guggino WB. Phase I trial of AAV-CFTR Gene Transfer in Adult CF Patients with Mild Disease. 10th Annual North American Cystic Fibrosis Conference, Orlando, FL. Pediatric Pulmonology Supplement 13 p 236 (1996).
96. Wagner JA, Moran NL, Messner AH, Daifuku R, Kouyama K, Desch J, Norbash A, Harkins A, Conrad C, Friborg S, Reynolds T, Guggino WB, Moss RB, Wine JJ, Carter BJ, Flotte TR, Gardner P. Safety of Delivery of Adeno-associated Mediated Gene Transfer of CFTR in the Maxillary Sinus of CF patients with Anstrotomies. 10th Annual North American Cystic Fibrosis Conference, Orlando, FL. Pediatric Pulmonology Supplement 13 p 237 (1996).
97. Flotte T, Zeitlin P, Daifuku R, Afione S, Allen S, Beck S, Schweibert E, Reynolds T, Wagner M, Brass-Ernst L, Taylor G, Wetzel R, Sullivan K, Friborg S, Humphries M, Chestnut K, Goodwin S, Rosenstein BJ, Carter BJ, Guggino WB. A Phase I Study of AAV-CFTR administration in Adult Cystic Fibrosis Patients. The American Pediatric Society/The Society for Pediatric Research Annual Meeting, (1997)
98. Wagner JA, Moran NL, Messner AH, Daifuku R, Desch J, Norbash A, Conrad C, Nepomuceno I, Manley S, Friborg S, Reynolds T, Guggino WB, Moss RB, Wine JJ, Carter BJ, Flotte TR, Gardner P. Efficient and Persistent Gene Transfer of CFTR in the Maxillary Sinus of CF patients with Anstrotomies. 11th Annual North American Cystic Fibrosis Conference, Nashville, TN. Pediatric Pulmonology Supplement 14 p 267 (1997).
99. Lynch CM, Quinton TJ, Lupton SD, Carter BJ. Fate of AAV genomes in proliferating cells in the absence of helper adenovirus. 7th International Parvovirus Workshop, Heidelberg, Germany Sept 307 (1997).
100. Weiner SM, Hoyt RF, Safer B, Carter BJ, Quinton T, Lynch C. Manometry-guided Hepatobiliary Administration of Recombinant Adeno-associated Virus. 1st Annual Meeting of American Society of Gene Therapy, Seattle WA. Abstracts p48a (1998)
101. Wagner JA, Messner AH, Friborg S, Reynolds T, Guggino WB, Moss RB, Wine JJ, Carter BJ, Flotte T, Gardner P. A Phase II, Double-blind, Randomized, Placebo-controlled, Clinical trial of tgAAVCF in the Maxillary Sinus of CF Patients. 12th Annual North American Cystic Fibrosis Conference, Seattle WA. Pediatric Pulmonology Supplement 1 p 223 (1998).

102. Wagner JA, Messner AH, Moral ML, Guggino WB, Flotte T, Wine JJ, Carter BJ, Batson EP, Moss RB, Gardner P.A. A Phase II, Double-blind, Randomized, Placebo-controlled, Clinical trial of tgAAVCF using Maxillary Sinus delivery in CF Patients with Anstrotomies. 13th Annual North American Cystic Fibrosis Conference, Seattle WA. Pediatric Pulmonology Supplement 19 p 223 (1999).
103. Carter BJ. AAV Vectors. Meeting in Gene Therapy, delivering the Medicines of the 21st century, (Sponsored by Nature Biotechnology), Mayflower Hotel, Washington DC Nov 7-9 (1999).
104. McDonald RJ, Raabe OG, Carter BJ, Reynolds TC, Lynch CM. Safety of aerosol administration of tgAAVCF vector for CF gene therapy in the non-human primate. American Thoracic Society Annual Conference. (2000).
105. Thompson S, Hobbs C, Hahn F, Carter B, Lynch C. Multidose Inhalation Toxicity Study of tgAAVCF in Non-Human primates. Abstracts of Third Annual meeting of the American Society of Gene Therapy, Molecular Therapy 1:S76 (2000).
106. Reynolds T, Moss R, Waltz D, Ramsey B, Carter B, Aitkin M. A Phase I Study of Aerosolized Administration of tgAAVCF to CF Patients with Mild Lung Disease. Abstracts of Third Annual meeting of the American Society of Gene Therapy, Molecular Therapy 1:S145 (2000)
107. Carter BJ, Munson K, Burstein HB, Peluso R, Gerard C, Guggino W, Flotte T, Moss R. AAV-CFTR gene therapy for cystic fibrosis: Retrospect and prospect. Seventeenth Annual North American Cystic Fibrosis Conference, Pediatric Pulmonology S25:159-160 (2003).
108. Zhang N, Yan Z, Gerard CJ, Munson K, Yan Z, Godwin S, Zabner J, Peluso R, Carter B, Engelhardt JE. Intracellular barriers to rAAV-mediated CFTR correction in the CF airway can be overcome using proteosome-modulating agents. Seventeenth Annual North American Cystic Fibrosis Conference, Pediatric Pulmonology S25:160-162 (2003).
109. Zhang N, Karp P, Yan Z, Peluso R, Carter B, Engelhardt JE. 2004. Dual Therapeutic Utility of Proteosome Modulating Agents for Pharmacogeno-Gene Therapy of Cystic Fibrosis Airway. ASGCT Ann Mtg. Molecular Therapy 9:S287
110. Ding W, Zhang N, Yan Z, Peluso R, Carter B, Engelhardt JE. 2004. Intracellular Trafficking Patterns of rAAV-2 Demonstrate Significant Cell-Type Specificity. ASGCT Ann Mtg. Molecular Therapy 9:S287
111. Munson K, Tatalick LM, Smith CJ, Fischer AC, Anklesaria P, Carter BJ, Guggino WB. 2004. Comparison of AAV2 and AAV2/5 CFTR vectors in the Lungs of Cynomolgus Macaques. ASGCT Ann Mtg. Molecular Therapy 9:S185.
112. Carter B, Burstein HB, Tatalick L, Anklesaria P. Development of the AAV Gene Delivery Platform. Eurogenethy 2. Langen, Germany. April, 2004.

113. Munson K, Tatalick L, Smith C, Fischer A, Anklesaria P, Carter B, Guggino W. Comparison of AAV2 and AAV2/5 CFTR vectors in the Lungs of Cynomolgus Macaques. Abstracts of Eighteenth Annual North American Cystic Fibrosis Conference, St. Louis MI, 2004. *Pediatric Pulmonology* S27:258 (2004)
114. Munson K, Tatalick L, Yan Z, Anklesaria P, Carter B, Engelhardt J. 2004. Enhancement of rAAV Pulmonary Transduction with Proteasome Modulating Agents. Abstracts of Eighteenth Annual North American Cystic Fibrosis Conference, St. Louis, MI, 2004. *Pediatric Pulmonology* S27:258 (2004)
115. Zhang L, Dutzar B, Munson K, Carter B, Engelhardt JF. Functional Comparison of Four CFTR rAAV Vectors with Alternative Transcriptional Elements in Cell Lines and Polarize Human Airway Epithelia. *Molecular Therapy* 11:S47 (2005).
116. Mease P, Hobbs K, Chalmers A, El-Gabalawy H, Keystone E, Brookman A, Furst D, Pate G, Anklesaria P, Heald A, Carter B. A Phase I dose-escalation study of intra-articular administration of a recombinant adeno-associated virus vector containing the TNFR:Fc fusion gene in inflammatory arthritis. *Proceedings of 13th Annual Congress of the European Society of Gene Therapy*, p113 (2005).
117. Mease P, Hobbs K, Chalmers A, El-Gabalawy H, Keystone E, Brookman A, Furst D, Pate G, Anklesaria P, Heald A, Carter B. Clinical studies of study of intra-articular administration of a recombinant adeno-associated virus vector containing the TNFR:Fc fusion gene in inflammatory arthritis. 11th Parvovirus Workshop, Les Diablerets, Switzerland, Aug-Sept. Abs p73. (2006).
118. McBride JL, Harper SQ, Staber PD, Martins IH, Burstein H, Peluso RW, Polisky B, Carter BJ, Davidson BL. Non-allele specific RNA interference in the CAG140 knock-in mouse model of Huntington's disease. *ASGCT Ann Mtg. Molecular Therapy* 13:S159 (2006).
119. McBride JL, Harper SQ, Staber PD, Martins IH, Burstein H, Peluso RW, Polisky B, Carter BJ, Davidson BL. Viral delivery of shRNAs as a potential therapy for Huntington's disease. *ASGCT Ann Mtg. Molecular Therapy* 14: S24 (2007).
120. Bainbridge JW, Rubin GS, Fitzke FW, Holder GE, Stockman A, Bhattacharya SS, Carter BJ, Moore AT, Ali RR. Clinical trial of gene therapy for early onset retinal dystrophy caused by defects in RPE65. *ARVO Annual meeting, Florida, April* (2008).
121. McBride JL, Boudreau RL, Martins I, Staber PS, Carter BJ, Burstein H, Ojeda S, Davidson BL. Long-term delivery of a Huntington-specific shRNA causes toxicity in the brain. *ASGCT Ann Mtg. Molecular Therapy* 17:S149-150 (2009).
122. Boudreau RL, McBride JL, Martins I, Shen S, Xing Y, Carter BJ, Davidson BL.

Application of therapeutic artificial miRNAs in the CNS: Non-allele specific silencing of mutant and wildtype Huntingtin demonstrates therapeutic efficacy in Huntington's disease mice. ASGCT Mtg. Molecular Therapy 17:S163-164 (2009).

123. Carter BJ. Gene Therapy for Hemophilia. Japan Society of Gene Therapy, Abstracts p85, (2015).
124. Bunting S, Zhang L, Xie L, Bullens S, Mahimkar R, Fong S, Sandza K, Colosi, P, Vehar G, Carter B. Human Factor VIII expression and normalization of bleeding following AAV gene therapy in a double knockout mouse model of hemophilia. American Society of Hematology, 57th Annual Meeting, Orlando, FL, Dec 4-6, (2015).
125. Carter B. Gene Therapy for Hemophilia. The 6th International Collaboration forum of Gene therapy for genetic disease. Tokyo, January 21, (2016).
126. Mahimkar R, Bunting S, Vehar G, Carter B. Quantification of human FVIII and estimation of its molecular weight: Potential applications in gene therapy for hemophilia. 19th Annual Meeting of the American Society for Gene and Cell Therapy, Washington DC, May 4-7, (2016)
127. Bunting S, Zhang L, Xie L, Bullens S, Mahimkar R, Fong S, Sandza K, Colosi, P, Long S, Vehar G, Carter B. Human Factor VIII expression and normalization of bleeding following AAV gene therapy in mouse. Japan Society of Hemostasis and Thrombosis, Annual Meeting, Tokyo, Japan, June (2016).
128. Bunting S, Zhang L, Xie L, Bullens S, Mahimkar R, Fong S, Sandza K, Harmon D, Yates B, Handyside B, Sihn CR, Galicia N, Tsuruda L, O'Neill CA, Bagri A, Colosi, P, Long S, Vehar G, Carter B. Gene therapy with Valoctocogene Roxaparvovec (BMN 270) results in therapeutic levels of FVIII in mice and primates and normalization of bleeding in hemophiliac mice. 20th Annual Meeting of the American Society of Gene and Cell Therapy, Chicago, IL, May 16-19, (2018).
129. Fong S, Handyside B, Sihn CR, Zhang L, Xie L, Murphy R, Galicia N, Yaters B, Minto W, Harmon D, Ru Y, Yu K, The potential for induction of ER stress response by an AAV5-based construct of B-deleted domain FVIII is dependent on the strength of the hepatic specific promoter. American Society of Gene and Cell Therapy, Annual Meeting, Chicago, IL, May 16-19, (2018).
130. Yates B, Vitelli C, Minto W, Harmon D, Xie L, Zhang L, Murphy R, Akeefe H, Woloszynek J, Colosi P, Carter B, Bullens S, Fong S, Bunting S. Bio-distribution and expression of Valoctocogene Roxaparvovec, an AAV5-based construct of B-domain deleted FVIII in mouse liver. American Society of Gene and Cell Therapy, Annual Meeting, Chicago, IL, May 16-19, (2018).

131. Bunting S, Zhang L, Xie L, Bullens S, Mahimkar R, Fong S, Sandza K, Harmon D, Yates B, Handyside B, Sihn CR, Galicia N, Tsuruda L, O'Neill CA, Bagri A, Colosi, P, Long S, Vehar G, Carter B. Therapeutic levels of human FVIII in mice and primates and normalization of bleeding in hemophiliac mice following gene therapy with BMN 270. 11th Annual Congress of the European Association of Hemophilia and Allied Disorders, Madrid, Spain, Feb 7-9, (2018)