

CURRICULUM VITAE

Michael J. Imperiale

Arthur F. Thurnau Professor

Department of Microbiology and Immunology

University of Michigan

1150 West Medical Center Drive

5724 Medical Science Building II

Ann Arbor, MI 48109-5620

imperial@umich.edu

Nationality:

USA

Education:

B.A.	Columbia University	1976
M.A.	Columbia University	1978
M.Phil.	Columbia University	1979
Ph.D.	Columbia University (Biological Sciences)	1981

Professional Experience and Positions:

Ph.D. Fellow, Department of Biological Sciences, Columbia University	1976-1981
Postdoctoral Fellow, Laboratory of Molecular Cell Biology, The Rockefeller University	1981-1984
Assistant Professor, Department of Microbiology and Immunology, University of Michigan Medical School	1984-1990
Associate Professor, Department of Microbiology and Immunology, University of Michigan Medical School	1990-1996
Acting Chair, Department of Microbiology and Immunology, University of Michigan Medical School	1994
Director, Cancer Biology Training Program, University of Michigan Comprehensive Cancer Center	1994-2015
Director, Molecular Oncology Program, University of Michigan Comprehensive Cancer Center	1995-1997
Professor, Department of Microbiology and Immunology, University of Michigan Medical School	1996-present
Director, Virology Program, Center for Gene Therapy, University of Michigan	1998-1999
Co-Director, Cancer Genetics and Virology Program, University of Michigan Comprehensive Cancer Center	1999-2003
Associate Director, Center for Gene Therapy, University of Michigan	1999-2001
Chair, Institutional Biosafety Committee, University of Michigan	2000-2008
Co-Director, Center for Gene Therapy, University of Michigan	2001-2002
Interim Chair, Department of Microbiology and Immunology, University of Michigan Medical School	2003-2004

Associate Chair, Department of Microbiology and Immunology, University of Michigan Medical School	2007-2021
Director, Doctoral Program in Cancer Biology, University of Michigan	2010-2015
Adjunct Professor, University Courses Division, University of Michigan	2015-present
Associate Vice President for Research – Research Policy and Compliance, University of Michigan	2017-2022

Awards and Honors:

New York State Regents Scholarship	1972-1976
Faculty Fellowship, Columbia University	1976-1981
National Research Service Training Grant, NIH	1978-1979
Damon Runyon-Walter Winchell Cancer Fund Postdoctoral Fellowship	1981-1983
NIH Postdoctoral Fellowship	1983-1984
Arthur F. Thurnau Assistant Professor of Microbiology and Immunology, Department of Microbiology and Immunology, University of Michigan	1984-1990
Junior Faculty Research Award, American Cancer Society	1985-1988
Scholarship, VIIth International Congress of Virology, Edmonton, Canada	1987
Faculty Research Award, American Cancer Society	1988-1993
Arthur F. Thurnau Professor, University of Michigan	1990-present
Faculty Recognition Award, University of Michigan	2000
Medical Student Award for Teaching Excellence, University of Michigan Medical School	2000
Leadership Development Program, Healthcare Leadership Institute, Stephen M. Ross School of Business, University of Michigan	2006-2007
Leadership in Health Award, University of Michigan Comprehensive Cancer Center	2007
Jack Lapidus Research Lecture, Department of Urology, University of Michigan Medical School	2007
Distinguished Faculty Achievement Award, University of Michigan	2009
Chair, Division S, American Society for Microbiology	2009-2010
Fellow, American Academy of Microbiology	2010-present
Fellow, American Association for the Advancement of Science	2011-present
League of Educational Excellence, University of Michigan Medical School	2012
Linkage Leadership Academy, University of Michigan Medical School	2014
Academic Leadership Program, Big Ten Academic Alliance (formerly Committee on Institutional Cooperation)	2014-2015
Endowment for the Basic Sciences Recognition Award, University of Michigan Medical School	2015
Rackham Distinguished Graduate Mentor Award, University of Michigan	2016
Endowment for the Basic Sciences Teaching Award in Microbiology and Immunology, University of Michigan Medical School	2016
Keynote Address, 2019 Convocation & Commencement Ceremony, Van Andel Institute Graduate School	2019
Sunnylands Alumnus	2020

Plenary Speaker, DNA Tumour Virus Meeting 2022 2022

Professional Advisory Activities:

Scientific Consultant, Covalent Technology Corporation, Ann Arbor, MI 1985-1987
University of Michigan Presidential Initiatives Fund 1987-1988
Special Reviewer, Experimental Virology Study Section, NIH 1988-1991
Scientific Consultant, Virogen Laboratories, Inc., Ann Arbor, MI 1988
Expert Witness, Oakland County Prosecutor's Office, Pontiac, MI 1989
NIH Reviewers Reserve 1990-1994
Children's Leukemia Foundation of Michigan Medical Advisory Committee 1990-1993
NCI Site Visit Team, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY 1991
Consultant, Washtenaw County Public Defender's Office, Ann Arbor, MI 1991
Consultant, Stephen T. Rabaut, Attorney-At-Law, Roseville, MI 1991
Lung Cancer SPORE Study Section, NCI 1992
Expert Witness, Wayne County Prosecutor's Office, Detroit, MI 1992
American Cancer Society Scientific Advisory Committee on Virology and Molecular Genetics 1993-1996
Special Reviewer, Virology Study Section, NIH 1994
Expert Witness, Crawford County Prosecutor's Office, Grayling, MI and Richard P. Zipser, Attorney at Law (jointly retained by prosecuting and defense attorneys) 1994
NCI Site Visit Teams: SUNY at Stony Brook, Stony Brook, NY; Princeton University, Princeton, NJ 1995
Special Reviewer, Experimental Virology Study Section, NIH 1995
Scientific Advisory Board, Introgen Therapeutics, Inc., Austin, TX 1995-2004
National Gene Vector Laboratories Steering Committee, NIH 1995-2006
NCI Site Visit Team, University of Alabama, Birmingham, AL 1996
Initial Review Group, Subcommittee C, Basic and Preclinical Sciences, NCI 1996
NIDR Special Emphasis Panel, Bethesda, MD 1997
Financial Affairs Committee, American Society of Gene Therapy 1997-2000
NCI Teleconference Program Project Review, University of Alabama, Birmingham, AL 1998
NCI Division of Basic Sciences, Laboratory of Metabolism and Basic Research Laboratory, Intramural Site Visit, Bethesda, MD 1998
Initial Review Group, Subcommittee C, Basic and Preclinical Sciences, NCI 1998
NIDCR Special Emphasis Panel, Mechanisms of Oral Carcinogenesis, Bethesda, MD 1999
NCI Site Visit Team, University of Pennsylvania, Philadelphia, PA 1999
NCI Program Project Review, University of Alabama, Birmingham, AL 1999
NCI Teleconference Program Project Review, University of Pennsylvania, 1999

Philadelphia, PA	
California Cancer Research Program, Biomedical C Review Committee, San Francisco, CA	2000
NIDCR Special Emphasis Panel Teleconference Review, Johns Hopkins University, Baltimore, MD	2000
NCI Site Visit Team, SUNY at Stony Brook, Stony Brook, NY	2000-2001
NCI Initial Review Group, Subcommittee C (Basic and Preclinical Sciences), Bethesda, MD	2000-2001
Consultant, O.D. 260, Inc., Boise, ID	2001-2008
California Cancer Research Program, Biomedical C Review Committee (Vice Chair), San Francisco, CA	2002
NHLBI Program Project Review, Baylor University (held at Columbia, MD)	2002
Abstract Selection Committee, Adenovirus and Herpesvirus Vectors, American Society of Gene Therapy	2002
Viral Gene Transfer Vectors Committee, American Society of Gene Therapy (Chair, 2002-2004)	2002-2005
Virology Advisory Board, Onyx Pharmaceuticals, Inc., Richmond, CA	2002-2004
National Gene Vector Laboratories Prioritization Committee, NIH	2002-2006
Abstract Selection Committee, Viral Oncology, American Association for Cancer Research	2003
Abstract Selection Committee, Adenovirus Vectors, American Society of Gene Therapy (Chair, 2004-2005)	2003-2005
Gene and Drug Delivery Study Section, NIH	2004-2006
Gene Therapy Steering Committee, Muscular Dystrophy Association	2004-2006
NCI Program Project Cluster Review, NIH	2004
NCI Cancer Center Core Grant Site Visit, University of Pennsylvania	2004
NCI Program Project Cluster Review, NIH	2005
Committee for a New Government-University Partnership for Science and Security, National Research Council	2005-2007
National Science Advisory Board for Biosecurity (Presidentially Commissioned Advisory Board; Security Clearance), Department of Health and Human Services (Chair, Working Group on Outreach and Education, 2008-2014)	2005-2014
NCI Special Emphasis Panel, Molecular Oncology 2, NIH	2006
Key Opinion Leaders Board, International AIDS Vaccine Initiative, New York, NY	2006-2008
Infectious Diseases Committee, American Society of Gene Therapy	2006-2009
Committee on Biodefense, American Society for Microbiology	2006-2009
Virology B Study Section (ad hoc), NIH	2008
NIAID Special Emphasis Panel, NIH	2008
National Academy of Sciences/Royal Society/Organisation for Economic Co-operation and Development Planning Committee for a Study on Synthetic Biology	2008-2009
NIH Special Emphasis Panel, Special Topics in Biological Sciences	2009
NCI Special Emphasis Panel, Loan Repayment Program, NIH	2009
NIH Special Emphasis Panel/Scientific Review Group 2009/10 ZRG1 IDM-	2009

C (58) R	
Consultant, Cedars-Sinai Medical Center, Los Angeles, CA	2009-2010
Committee on Education on Dual Use Issues in the Life Sciences, National Research Council	2009-2010
NIH Special Emphasis Panel, Partnerships for Biodefense, NIAID	2010
Committee on Ethical and Societal Issues in National Security Applications of Emerging Technologies, National Research Council	2011-2013
Member, VIRA Study Section, NIH	2011-2015
Consultant, International Affairs Division, American Society for Microbiology	2013
External Advisory Committee, Oncology T32 Grant, Baylor College of Medicine	2013-2016, 2019-present
Board of Directors, Van Andel Institute Graduate School, Grand Rapids, MI	2014-2019
Committee on Science, Technology and Law, National Academies	2014-2019
International Organising Committee, ICGEB DNA Tumour Virus Meeting 2015	2015
Planetary Protection Subcommittee, National Aeronautics and Space Administration	2015-2017
Committee on Strategies for Identifying and Addressing Biodefense Vulnerabilities Posed by Synthetic Biology, National Academies of Sciences, Engineering, and Medicine (Chair; Security Clearance)	2016-2018
External Advisory Board, Tumor Virology Training Program, Pennsylvania State University	2016-present
Scientific Programme Committee, DNA Tumour Virus Conference, Birmingham, England	2017
Ethics Committee, American Society for Microbiology	2017-present
Co-organizer, Harnessing Transformational Technologies Webinar Series, Los Alamos National Laboratory and Committee on Science, Technology, and Law, National Academies of Science, Engineering, and Medicine	2019-present
Focal Point Expert, InterAcademy Partnership Biosecurity Working Group	2020-present
Organisation for Economic Co-operation and Development - Global Science Forum Expert Group on Research Norms, Standards, and Integrity	2021-2022
NASEM Committee on Protecting Critical Technologies for National Security in an Era of Openness and Competition	2021-2022
Subcommittee on Elections, American Academy of Microbiology	2022-present
Consultant, Gilead Sciences, Inc., Foster City, CA	2022
Consultant, Via Nova Therapeutics, Oakland, CA	2023

Other Professional Activities:

Associate Director, Graduate Program in Cellular and Molecular Biology, University of Michigan	1990-1995
Director, Cellular Biotechnology Training Program, University of Michigan	1992-1994
Editorial Boards:	

<i>Virology</i>	1995-2015
<i>Journal of Virology</i>	1996-2006
<i>Gene Therapy</i>	1997-2008
Editor, <i>Journal of Virology</i>	2006-2015
Associate Editor, <i>PLoS Pathogens</i>	2009-2014
Editor, <i>mBio</i>	2010-2019
Section Editor, <i>PLoS Pathogens</i>	2014-2015
Editor-in-Chief, <i>mSphere</i> (Founding Editor-in-Chief, 2015)	2015-2025
Editorial Board, <i>Virology</i>	2017-2020
Editorial Advisory Board, <i>mBio</i>	2019-2022
Ad hoc reviewer for <i>Science</i> , <i>Proceedings of the National Academy of Sciences</i> , <i>Nature Reviews: Cancer</i> , <i>Nature Communications</i> , <i>Molecular and Cellular Biology</i> , <i>Journal of Biological Chemistry</i> , <i>PLoS ONE</i> , <i>Journal of Clinical Investigation</i> , <i>Cell Host and Microbe</i> , <i>Nature Protocols</i> , <i>Clinical Microbiology Reviews</i> , <i>Molecular Therapy</i> , <i>Oncogene</i> , <i>Journal of Immunology</i> , <i>Journal of Cell Biology</i> , <i>Journal of Infectious Diseases</i> , <i>Cancer Research</i> , <i>Transplantation</i> , <i>Journal of Cellular Physiology</i> , <i>Cell Growth and Differentiation</i> , <i>Journal of General Virology</i> , <i>Virus Research</i> , <i>Journal of Neurovirology</i> , <i>Journal of Gene Medicine</i> , <i>Journal of Medical Microbiology</i> , <i>Emerging Infectious Diseases</i> , <i>Nucleic Acids Research</i> , <i>Infectious Agents and Cancer</i> , <i>International Journal of Cancer</i> , <i>Neoplasia</i> , <i>Gene</i> , <i>Biochimica et Biophysica Acta</i> , <i>Human Gene Therapy</i> , <i>Current Medicinal Chemistry</i> , <i>Journal of Virological Methods</i> , <i>American Journal of Transplantation</i> , <i>Journal of Clinical Virology</i> , <i>Head and Neck</i> , <i>American Journal of Pathology</i> , <i>Asian Journal of Andrology</i> , <i>International Journal of Urology</i> , <i>Journal of Medical Virology</i> , <i>Environmental Practice</i> , <i>Translational Research</i> , <i>eLife</i> , <i>Trends in Biotechnology</i> , <i>Health Security</i> , <i>Viruses</i>	1981-present
Co-Chair, Cell Cycle Regulation Session, Small DNA Tumor Virus Meeting, Madison, WI	1996
Co-Chair, Post Transcriptional Regulation Session, ICRF 1997 Tumour Virus Meeting on Papovaviruses, Papillomavirus, and Adenoviruses, Cambridge, England	1997
Convener, Workshop on Small DNA Animal Viruses, ASV 18 th Annual Meeting, Amherst, MA	1999
Session Chair, Malignant Mesothelioma – Therapeutic Options and Role of SV40: An Update, Chicago, IL	2001
Session Chair, Intracellular Trafficking of Viruses, American Society of Gene Therapy 6 th Annual Meeting, Washington, DC	2003
International Scientific Committee, ICGEB DNA Tumour Virus Meeting, Trieste, Italy	2003
Co-Chair, Virions/Vectorology/Gene Therapy Session, ICGEB DNA Tumour Virus Meeting, Trieste, Italy	2003
Session Co-Chair, Adenovirus Biology and Disease Applications, American Society of Gene Therapy 7 th Annual Meeting, Minneapolis, MN	2004

Session Chair, Intracellular Responses to Viral Infection, American Society of Gene Therapy 7 th Annual Meeting, Minneapolis, MN	2004
Session Co-Chair, Adenovirus Vectors: Vector Technologies, American Society of Gene Therapy 8 th Annual Meeting, St. Louis, MO	2005
Session Co-Chair, The Infectious Cycle, DNA Tumour Virus Meeting 2005, Cambridge, England	2005
Co-Chair, Panel Discussion on Extant Personnel Reliability Programs, NSABB Public Consultation Meeting on Personnel Reliability, Bethesda, MD	2009
Discussion Leader, Regulation of Nuclear Functions, Gordon Research Conference on Viruses and Cells, Lucca, Italy	2011
Session Co-Chair, Viral Pathogenesis and Therapy, ICGEB DNA Tumour Virus Meeting, Trieste, Italy	2011
Session Co-Chair, Cellular Transformation I, Emerging Oncogenic Viruses Meeting, San Pietro in Bevagna, Italy	2012
Session Co-Chair, Viral Pathogenesis and Therapy, DTV 2012: The DNA Tumour Virus Meeting, Montreal, Canada	2012
Session Co-Chair, Virus Life Cycle, DNA Tumour Virus Meeting 2013, Birmingham, UK	2013
Session Chair, A Complex Partnership (Virus Host Interactions), 33 rd Annual Meeting of the American Society for Virology, Fort Collins, CO	2014
Session Chair, Adenoviruses, XVI th International Congress of Virology, Montréal, Quebec, Canada	2014
Session Co-Chair, DNA Damage and Cell Growth, ICGEB DNA Tumour Virus Meeting 2015, Trieste, Italy	2015
Discussion Leader, Virus Structure and Entry, Gordon Research Conference on Viruses and Cells, Lucca, Barga, Italy	2017
Session Co-Chair, Virus Host Interactions II, DNA Tumour Virus Conference, Birmingham, England	2017
Session Co-Chair, Gene Expression II, DNA Tumour Virus Meeting, Cambridge, England	2022

Invited Presentations

- "SV40 T antigen-host interactions," Department of Immunology and Microbiology, Wayne State University, Detroit, MI, March 4, 1986.
- "Viral-host interactions in transformation by SV40," University of Rochester, Rochester, NY, April 11, 1987.
- "Regulation of RNA processing in adenovirus," Wayne State University, Detroit, MI, January 23, 1989.
- "Analysis of SV40 transformation resistant cell lines," DNA Tumor Virus Meeting, Cold Spring Harbor, NY, August 10, 1988.
- "Post-transcriptional regulation of adenovirus gene expression," University of Pittsburgh, Pittsburgh, PA, November 2, 1989.

- "Post-transcriptional regulation of adenovirus gene expression," Laboratory of Tumor Virus Biology, NIH, Bethesda, MD, December 6, 1989.
- "Analysis of SV40 large T mutants in the RB binding region," DNA Tumor Virus Meeting, Cambridge, England, July 27, 1989.
- "Forensic use of DNA typing," Wayne State University Law School, Detroit, MI, January 31, 1992.
- "Interactions of SV40 large T antigen with a 185 kD host protein," DNA Tumour Virus Meeting, Cambridge, England, August 1, 1991.
- "SV40 large T antigen and the cellular proteins it touches," Department of Physiology and Biophysics, University of Chicago, Chicago, IL, May 4, 1993.
- "Post-transcriptional regulation of HIV gene expression," Department of Molecular Genetics, Wayne State University, Detroit, MI, October 21, 1993.
- "Deregulation of normal cell growth control by SV40 large T antigen," Signal Transduction Group, Parke-Davis, Ann Arbor, MI, December 14, 1993.
- "Regulation of mRNA 3' end processing in adenovirus," DNA Tumor Virus Meeting, Cold Spring Harbor, NY, August 20, 1994.
- "The biology of adenovirus and its use as a vector," Department of Thoracic Surgery, M.D. Anderson Cancer Center, Houston, TX, February 16, 1995.
- "Positional effects on 3' end processing in the adenovirus major late transcription unit," 1996 Small DNA Tumor Virus Meeting, Madison, WI, July 10, 1996.
- "Effect of BKV large T antigen on cell cycle regulation," 1996 Small DNA Tumor Virus Meeting, Madison, WI, July 10, 1996.
- "Is BK virus a co-factor in human cancer?," Workshop on Possible Role of SV40 in Human Cancer, Bethesda, MD, January 27, 1997.
- "Increase in free E2F independent of BKV large T antigen-retinoblastoma family interactions," ICRF 1997 Tumour Virus Meeting on Papovaviruses, Papillomavirus, and Adenoviruses, Cambridge, England, July 16, 1997.
- "Novel mechanism of cell cycle disruption by BK virus T antigen," Eighty-ninth Annual Meeting of the American Association for Cancer Research, New Orleans, LA, April 1, 1998.
- "Life cycle and basic biology of adenovirus," First Annual Meeting of the American Society of Gene Therapy, Seattle, WA, May 28, 1998.
- "The adenovirus L1 52/55 kDa protein is required for DNA packaging," The 1998 Molecular Biology of Small DNA Tumor Viruses Meeting, Madison, WI, July 17, 1998.
- "Expression and function of the adenovirus L1 52/55 kDa protein," Department of Genetics, University of Georgia, Athens, GA, March 24, 1999.
- "Life cycle and basic biology of adenovirus," American Society of Gene Therapy 2nd Annual Meeting, Washington, DC, June 9, 1999.
- "Induction of apoptosis and Rb protein degradation by BKV T antigen," American Society for Virology 18th Annual Meeting, Amherst, MA, July 11, 1999.
- "Function of the L1 52/55 kDa protein in adenovirus infection," Genzyme Corporation, Framingham, MA, October 15, 1999.

- “Life cycle and basic biology of adenovirus,” American Society of Gene Therapy 3rd Annual Meeting, Denver, CO, May 31, 2000.
- “J Domain-Mediated Induction of Apoptosis by BKV Large T Antigen,” The 2000 Molecular Biology of DNA Tumor Viruses Conference, Madison, WI, July 10, 2000.
- “Biology of Prostate Cancer Cells,” St. Mary’s Health Care Services, Evansville, IN, July 25, 2000
- “Possible Role of BK Virus in Prostate Cancer,” American Cancer Society, Vanderburgh County Unit, Evansville, IN, July 26, 2000.
- “Gene Therapy on Trial?”, Panelist, 3rd Annual Public Health Symposium, Genetics in Public Health: Connecting Research, Education, Practice, & Community, University of Michigan, Ann Arbor, MI, September 18, 2000.
- “JC and BK: Associations with Cancer,” Symposium on Viruses and Cancer: New Associations, Fred Hutchinson Cancer Research Center, Seattle, WA, October 18, 2000.
- “Developing an SV40 Tumor Vaccine,” Malignant Mesothelioma – Therapeutic Options and Role of SV40: An Update, Chicago, IL, April 20, 2001.
- “Selective Packaging of Adenovirus Chromosomes,” ASM Conference on Viral Gene Vectors, Banff, Alberta, Canada, April 27, 2001
- “A Role for the Adenovirus IVa2 protein in Viral DNA Packaging,” DNA Tumour Viruses and Cell Cycle Regulation in Cancer, Cambridge, England, July 28, 2001.
- “Understanding Adenovirus DNA Packaging with an Eye Towards Improved Vector Design,” Onyx Pharmaceuticals, Richmond, CA, January 30, 2002.
- “Adenovirus DNA Packaging: Basic Science and Applications for Vector Development,” GenVec, Inc., Gaithersburg, MD, February 21, 2002.
- “Understanding and Manipulating Adenovirus DNA Packaging,” Gene Therapy Center, University of Alabama, Birmingham, AL, March 14, 2002.
- “DNA Encapsidation in Adenovirus,” Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, MI, May 21, 2002.
- “Adenovirus: The Next Five Years,” ASM Conference on Gene Therapy: The Next Five Years, Banff, Alberta, Canada, February 27, 2003.
- “BKV Infection of Humans and Human Cells,” First International Symposium on Polyomaviruses and Human Diseases: Basic and Clinical Perspectives, Florence, Italy, May 8, 2003.
- “The Relationship Between Adenovirus Capsid Assembly and DNA Packaging,” American Society for Microbiology 103rd General Meeting, Washington, DC, May 21, 2003.
- “Using Serotype Specificity as an Approach to Helper Dependent Adenovirus Vector Development,” American Society of Gene Therapy 6th Annual Meeting, Washington, DC, June 6, 2003.
- “Interaction of BKV with the Human Urinary Tract,” ICGEB DNA Tumour Virus Meeting, Trieste, Italy, July 15, 2003.
- “Role of the IVa2 Protein in Adenovirus Assembly,” ICGEB DNA Tumour Virus Meeting, Trieste, Italy, July 17, 2003.

- “Role of the IVa2 Protein in Adenovirus Assembly and Packaging,” FASEB Summer Conference on Virus Assembly, Saxtons River, VT, July 6, 2004.
- “BKV Infection of the Urinary Tract,” Medical College of Ohio, Toledo, OH, November 4, 2004.
- “BKV, Renal Transplantation, and Prostate Cancer,” Henry Ford Hospital, Detroit, MI, December 2, 2004.
- “Viral Factors Involved in Adenovirus Assembly and Encapsidation,” EMBO Workshop on The Structural Basis of Papovavirus Virology, Siena, Italy, April 13, 2005.
- “Association of BKV with Early Stages of Prostate Cancer,” EMBO Workshop on The Structural Basis of Papovavirus Virology, Siena, Italy, April 15, 2005.
- “The interaction of BK virus and the host cell,” DNA Tumour Virus Meeting 2005, Cambridge, England, July 23, 2005.
- “Packaging of the Adenovirus Chromosome into Capsids,” Department of Microbiology and Immunology, Penn State College of Medicine, Hershey, PA, September 29, 2005.
- “Biosecurity and the IBC,” Workshop on Bioscience Oversight: Where are we and Where Should we Go? Program on Science and Global Security, Princeton University, Princeton, NJ, December 2, 2005.
- “Biosecurity Challenges in the Post-9/11 World: The Role of the NSABB,” AAAS Annual Meeting, St. Louis, MO February 18, 2006.
- “Association of BKV with Early Stages of Prostate Cancer,” First International Workshop on Viral Oncology Research, Padova, Italy, April 28, 2006.
- “Characterization of the adenovirus IVa2 protein interaction with the virus packaging sequence,” DNA Tumor Viruses Meeting 2006, Salk Institute, La Jolla, CA July 15, 2006.
- “Adenovirus assembly and DNA packaging,” University of Western Ontario, London, ON, Canada, September 14, 2006.
- “Defining dual use research of concern,” Bioethics and Biodefense Meeting, Johns Hopkins School of Advanced International Studies, February 5, 2007.
- “What is Dual Use Science of Concern,” ASM Biodefense Meeting, Washington, DC, February 28, 2007.
- “The Adenovirus IVa2 Protein: Link Between Capsid Assembly and Genome Packaging,” University of Massachusetts Medical School, April 26, 2007.
- “Interactions of the Adenovirus IVa2 Protein With the Packaging Sequence,” Fourth International Workshop on the Structural Biology of Small DNA Viruses 2007, Siena, Italy, May 13, 2007.
- “Acute and Persistent Viral Infections of the Urinary Tract,” Jack Lapidus Research Lecture, Department of Urology, University of Michigan Medical School, June 12, 2007.
- “Studies of the Adenovirus IVa2 Protein,” ICGEB DNA Tumour Virus Meeting, Trieste, Italy, July 20, 2007.
- “BK Virus Interactions with the Host Cell,” IVth International Conference on Polyomaviruses and Human Disease, Barcelona, Spain, October 2, 2007.

- “Report of the Committee on a New Government-University Partnership for Science and Security,” Transparency in Current and Emerging Approaches to Biosecurity, Arlington, VA, October 19, 2007.
- “BKV and Prostate Cancer: Are They Linked?” ASM Conference on Manipulation of Nuclear Processes by DNA Viruses, Charleston, SC, March 4, 2008.
- “Various Outcomes of BKV Infection,” Emory University, Atlanta, GA, April 15, 2008.
- “Addressing Biosecurity Concerns Related to the Synthesis of Select Agents,” U.S. Government Roundtable on Development of a Synthetic Nucleic Acid Screening Framework, Rockville, MD, September 12, 2008.
- “Association of BKV with Proliferative Inflammatory Atrophy in the Prostate,” 2nd International Symposium on Viral Oncology, Philadelphia, PA, September 26, 2008
- “Dual Use Education at the University of Michigan,” American Association for the Advancement of Science, Washington, DC, November 21, 2008.
- “Outcomes of BKV Infection,” Louisiana State University, Shreveport, LA, December 2, 2008.
- “What is Dual Use Research and Why Should I Care?” American Chemical Society International Undergraduate Research Experience Program, Washington, DC April 11, 2009.
- “Dual Use Research in the Life Sciences,” Center for Ethics and Humanities in the Life Sciences, Michigan State University, East Lansing, MI, April 15, 2009.
- “BKV Versus the Host Cell,” School of Pharmacy, University of Colorado Denver, Denver, CO, May 14, 2009.
- “BK Virus and the Host Cell,” Department of Immunology and Microbiology, Wayne State University, Detroit, MI, May 19, 2009.
- “Dual Use Research: An Update on the National Science Advisory Board for Biosecurity,” Institutional Biosafety Committees: Promoting Optimal Practice Now and in the Future, Arlington, VA, June 26, 2009.
- “Enhancing Personnel Reliability among Individuals with Access to Select Agents,” Institutional Biosafety Committees: Promoting Optimal Practice Now and in the Future, Arlington, VA, June 26, 2009.
- “Biosecurity and Synthetic Biology,” Opportunities and Challenges in the Emerging Field of Synthetic Biology, Washington, DC, July 10, 2009.
- “Molecular Biology of DNA Tumor Viruses: Insights into BK Virus Replication,” American Society for Virology 28th Annual Meeting, Vancouver, BC, Canada, July 12, 2009.
- “Interrelationships Between BKV and PML Nuclear Bodies,” The DNA Tumour Virus Meeting 2009, Oxford, England, July 18, 2009.
- “NSABB Working Group on Synthetic Genomics Recommendations,” FBI Synthetic Biology Conference: Building Bridges Around Building Genomes, San Francisco, CA, August 4, 2009.
- “Dual Use Issues in Microbiology,” Bacillus-ACT 2009: The International Bacillus anthracis, B. cereus, and B. thuringiensis Conference, Santa Fe, NM, August 31, 2009.
- “Concepts and Definitions,” Workshop on Dual Use Education in the Life Sciences, Polish Academy of Sciences, Warsaw, Poland, November 16, 2009.

- “Intracellular Encounters During BKV Infection,” Department of Microbiology and Molecular Genetics, University of California, Irvine, March 3, 2010.
- “Interactions of BKV with the Host Cell,” Department of Molecular Genetics and Microbiology, Stony Brook University, Stony Brook, NY, April 12, 2010.
- “Arrival of BKV in the Nucleus,” American Society for Microbiology General Meeting, San Diego, CA, May 14, 2010.
- “Nuclear Effectors of BKV Replication,” Emerging Oncogenic Viruses, San Pietro in Bevagna, Manduria, Italy, June 4, 2010.
- “Strategies for Addressing the Challenge of Dual Use Research: Recommendations of the US National Science Advisory Board for Biosecurity,” Microbiology, Genomics, and Beyond: Regulating Dual Use Technology into the 21st Century, Wellcome Trust, London, England, September 17, 2010.
- “BKV Encounters Inside the Nucleus,” Department of Biochemistry, McGill University, Montreal, Quebec, Canada, November 11, 2010.
- “BKV Meets the Nucleus,” Department of Medical Microbiology and Immunology, University of Toledo, Toledo, OH, December 1, 2010.
- “BKV vs. The Cell: The Battle for the Nucleus,” Department of Microbiology and Immunology, Pennsylvania State University, March 1, 2011.
- “Biosecurity Considerations Related to Dual Use Research,” International Engagement: Responsible Science for a Safe and Secure Society, Kuwait City, Kuwait, March 16, 2011.
- “A University’s Role in Promoting Safe Science,” Safety By Design Conference, National Institutes of Health, Bethesda, MD, April 5, 2011.
- “Interactions of BK Virus with the Cellular DNA Damage Response,” ICGEB DNA Tumour Virus Meeting, Trieste, Italy, July 20, 2011.
- “Interaction of BK Virus with Nuclear Pathways,” Mechanisms of viral host cell manipulation: From plants to humans, Bamberg, Germany, October 4, 2011.
- “BK Virus vs. The Cell: The Battle for the Nucleus,” Duke Mini-symposium on Viral Oncology and AIDS Malignancy, Duke University, December 2, 2011.
- “BK Virus vs. The Cell: The Battle for the Nucleus,” Medical College of Wisconsin, February 21, 2012.
- “Nuclear Factors Affecting BKPyV Replication,” MedImmune, Gaithersburg, MD, February 28, 2012.
- “BK Virus vs. The Cell: The Nuclear Battlefield,” Biogen Idec, Cambridge, MA, March 8, 2012.
- “Bird Flu Experiments and Publication: The Recommendation to Redact,” Dual-Use Research and Biosecurity: Implications for Science, Governance and the Law, The Hague Institute for Global Justice, The Hague, The Netherlands, March 12, 2012.
- “Misuse of Microbes: Should Clinical Labs be Concerned?” American Society for Clinical Laboratory Science – Michigan Annual Meeting, Plymouth, MI, April 20, 2012.
- “Responsible Advancement of Science: Minimizing the Risks,” FBI Conference on The Three I’s (IRBs, IBCs, and IACUCs) and Bioethics and Biosecurity. Tempe, AZ, May 1, 2012.

- “Distinct Contributions of ATM and ATR to BK Polyomavirus Infection,” Emerging Oncogenic Viruses Meeting, San Pietro in Bevagna, Italy, June 1, 2012.
- “Roles of ATM- and ATR-mediated DNA Damage Responses During Lytic BK Polyomavirus Infection,” DTV 2012: The DNA Tumour Virus Meeting, Montreal, Canada, July 18, 2012.
- “Manipulation of Nuclear Pathways by BK Polyomavirus,” McMaster University, Hamilton, Ontario, Canada, November 7, 2012.
- “The DNA Damage Response and BKPyV Infection,” Novartis Institutes for BioMedical Research, Emeryville, CA, December 5, 2012.
- “The NSABB Perspective: Lessons Learned,” ASM Biodefense Meeting, Washington, DC, February 25, 2013.
- “Genetics of BKPyV Replication,” Michigan State University, East Lansing, MI, March 26, 2013.
- “Biosafety and Biosecurity in the Clinical Microbiology Laboratory,” American Society for Clinical Laboratory Science – Michigan Annual Meeting, East Lansing, MI, April 5, 2013.
- “Control of BK Polyomavirus Replication,” University of Nebraska, Lincoln, NE, May 31, 2013.
- “Regulation of Archetype BKPyV Replication by the Viral miRNA,” DNA Tumour Virus Meeting, Birmingham, England, July 25, 2013.
- “BKPyV and the Host DNA Damage Response,” 21st Annual Virology Colloquium, University of North Carolina – Chapel Hill, Chapel Hill, NC, October 1, 2013.
- “Controlling BK Polyomavirus Replication: Viral and Host Factors,” University of Michigan, December 10, 2013.
- “Viral and Cellular Determinants of BKPyV Infection,” University of Arizona, Tucson, AZ, March 21, 2014.
- “Scientific and Ethical Considerations of Synthetic Biology,” Ahead Of The Curve:^[1]_{SEP} Anticipating Ethical, Legal, and Societal Issues Posed by Emerging Weapons Technologies, University of Notre Dame, South Bend, IN, April 22, 2014.
- “Routing of BKPyV from the Plasma Membrane to the Nucleus,” Emerging Oncogenic Viruses Meeting, San Pietro in Bevagna, Italy, June 6, 2014.
- “Viral and Host Determinants of BKPyV Replication,” 33rd Annual Meeting of the American Society for Virology, Fort Collins, CO, June 23, 2014.
- “Balancing Science and the First Amendment,” Panel Discussion, 3rd Influenza Research and Development Conference, Boston, MA, July 10, 2014.
- “Role of the Polyomavirus microRNA,” XVIth International Congress of Virology, Montreal, Quebec, Canada, July 30, 2014
- “How Do We Study Viruses,” Panel Discussion, Risks and Benefits of Gain-of-Function Research: A Symposium, National Academy of Sciences, Washington, DC, December 15, 2014.
- “What Controls BKPyV Replication?” University of California, Irvine, CA, April 22, 2015.
- “A Re-examination of BKPyV Entry and Trafficking,” ICGEB DNA Tumour Virus Meeting 2015, Trieste, Italy, July 23, 2015.

“A Virus’ Path to the Nucleus,” University of Nebraska – Lincoln, Lincoln, NE, September 15, 2015.

“A Virus’ Intracellular Journey to the Nucleus,” Wayne State University, Detroit, MI, October 12, 2015.

“BK Polyomavirus: The Route to the Nucleus,” Loyola University, Chicago, IL, May 26, 2016.

“Understanding the BKPyV miRNA,” Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Italy, June 18, 2016.

“The importance of virology at a time of great need and great jeopardy (starting with a human polyomavirus),” Wright State University, Dayton, OH, September 12, 2016.

“Control of, and Regulation by, the BKPyV miRNA,” 6th European Congress of Virology, Hamburg, Germany, October 19, 2016 (Keynote Speaker).

“Movement of BK Polyomavirus Through the Cell,” University of Pennsylvania, Philadelphia, PA, November 30, 2016.

“BKPyV Vesicular Trafficking,” DNA Tumour Virus Conference, Birmingham, England, July 21, 2017.

“Getting BKPyV Through the Cytoplasm,” Keynote Speaker, Tumor Virology Training Program Annual Retreat, Penn State College of Medicine, Hershey, PA, August 31, 2017.

“Movement of BKPyV Through the Cytoplasm,” Seattle Children’s Research Institute, University of Washington, Seattle, WA, September 15, 2017.

"Emerging Biotechnology and Dual Use," ASM Biothreats Conference, Baltimore, MD, February 12, 2018.

"Controlling BK Polyomavirus Replication," Hillman Cancer Center, University of Pittsburgh, May 8, 2018.

"Control of BKPyV mRNA and miRNA expression," 5th Workshop on Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Italy, June 2, 2018.

"Biodefense in the Age of Synthetic Biology," Biological Weapons Convention Meeting of Experts, Geneva, Switzerland, August 9, 2018.

Invited Discussant, Ditchley Foundation Conference on The intersection of machine learning and genetic engineering: what should be our check list for society and state as we blast off? Oxfordshire, England, February 7-9, 2019

"The Perils of Science to Create Pathogens: Controlling Biosafety and Biosecurity Threats," Consortium on Law and Values in Health, Environment, & the Life Sciences, University of Minnesota, Minneapolis, MN, February 28, 2019.

"Biodefense in the Age of Synthetic Biology," Board on Chemical Sciences and Technology, National Academies of Science, Engineering, and Medicine, Washington, DC, March 7, 2019.

"Incentives and Impediments to Research Integrity," 6th World Congress on Research Integrity, Hong Kong, June 3, 2019.

"Establishing a Cell Culture Model of BKPyV Persistence," ICGEB DNA Tumour Virus Meeting 2019, Trieste, Italy, July 10, 2019.

- Invited Discussant, Special Dialogue on Foreign Interference in U.S. Universities, Annenberg Foundation Trust, St. Michaels, MD, August 12-14, 2019.
- “The Transition from Persistent BKPyV Infection to Lytic Replication,” Midwest Virology Symposium, The Ohio State University, Columbus, OH, October 12, 2019.
- “Remote Research Misconduct Procedures,” Joint presentation with Naomi Schrag (Columbia University) and Daniel Wainstock (Harvard Medical School), Association of Research Integrity Officers Annual Meeting (Remote Session), October 30, 2020.
- “Control of BKPyV Replication: From Persistence to Reactivation,” Department of Microbiology, University of Alabama at Birmingham, January 26, 2021 (Remote Session).
- “Studying BK Polyomavirus Persistence and Replication in a Cell Culture Model,” George O'Brien Kidney Center Basic Science Seminar, Division of Nephrology, Department of Internal Medicine, University of Michigan Medical School, March 2, 2021 (Remote Session).
- “BK Polyomavirus Persistence and Reactivation,” Genetics, Genomics, and Bioinformatics Ph.D. Program, University of California, Riverside, May 5, 2021 (Remote Session).
- “76 Days,” Panel discussion, Sponsored by U-M China Ongoing Perspectives Series, University of Michigan, Ann Arbor, MI, October 8, 2021 (Remote Session).
- “Biology of SARS-CoV-2 and the COVID-19 Pandemic,” Kundan Vidya Mandir, Ludhiana, India, April 21, 2022 (Remote Session).
- “Investigating the Role of BKPyV Small T Antigen During the Viral Life Cycle,” 6th Meeting on Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Italy, June 9, 2022.
- “BK Polyomavirus: Historical Overview and Recent Discoveries,” Gilead Sciences, Inc., Foster City, CA, July 15, 2022.
- “Controlling BKPyV Replication and Persistence,” DNA Tumour Virus Meeting 2022 (Plenary Speaker), July 27, 2022.
- “Cellular Targets of the BKPyV miRNA: a Tale of Ups and Downs,” Midwest HPV and PyV Symposium, Indianapolis, IN, October 22, 2022.

Professional Organizations

Sigma Xi
American Society for Microbiology
American Society for Virology
American Association for the Advancement of Science

Research Interests:

Virus replication
Virus-host cell interactions
Science policy

Publications:

1. Sproviero, J.F., Imperiale, M.J., and Zauderer, M. (1980). Clonal analysis of F₁ hybrid helper T cells restricted to parental or F₁ hybrid major histocompatibility determinants. *J. Exp. Med.* 152:920-930.
2. Zauderer, M., Sproviero, J., Cosenza, H., and Imperiale, M.J. (1980). Cooperation subsets of antigen-specific helper T cells. In: "Regulatory T Lymphocytes" (B. Pernis and H. Vogel, eds.), Academic Press, New York, pp. 185-200.
3. Sproviero, J.F., Imperiale, M.J., and Zauderer, M. (1981). Clonal analysis of F₁ hybrid helper T cells: I-A subregion-encoded hybrid determinants restrict the activity of Keyhole Limpet Hemocyanin-specific helper T cells. *J. Exp. Med.* 154:1255-1260.
4. Zauderer, M., Sproviero, J.F., and Imperiale, M.J. (1981). Limits to T cell participation in the network. In: "The Immune System" (I. Lefkovits and C.M. Steinberg, eds.), S. Karger, Basel, 2:19-23.
5. Imperiale, M.J., Faherty, D.A., Sproviero, J.F., and Zauderer, M. (1982). Functionally distinct helper T cells enriched under different culture conditions cooperate with different B cells. *J. Immunol.* 129:1843-1848.
6. Feldman, L.T., Imperiale, M.J., and Nevins, J.R. (1982). Activation of early adenovirus transcription by the herpesvirus immediate early gene: Evidence for a common cellular control factor. *Proc. Natl. Acad. Sci. USA* 79:4952-4956.
7. Imperiale, M.J., Feldman, L.T., and Nevins, J.R. (1983). Activation of gene expression by adenovirus and herpesvirus regulatory genes acting in trans and by a cis-acting adenovirus enhancer element. *Cell* 35:127-136.
8. Imperiale, M.J., and Nevins, J.R. (1983). Definition of an adenoviral cis-acting enhancer element and an early promoter responding to trans induction. In: "Enhancers and Eukaryotic Gene Expression" (Y. Gluzman and T. Shenk, eds.), Cold Spring Harbor Laboratory, Cold Spring Harbor, pp. 152-156.
9. Nevins, J.R., Imperiale, M.J., Feldman, L.T., and Kao, H.-T. (1984). Role of the adenovirus transforming gene (E1A) in the general control of gene expression. *Transplantation Proceedings* 16:438-440.
10. Imperiale, M.J., Kao, H.-T., Feldman, L.T., Nevins, J.R., and Strickland, S. (1984). Common control of the heat shock gene and early adenovirus genes: Evidence for a cellular E1A-like activity. *Mol. Cell. Biol.* 4:867-874.
11. Imperiale, M.J., and Nevins, J.R. (1984). Adenovirus 5 E2 transcription unit: An E1A-inducible promoter with an essential element that functions independently of position or orientation. *Mol. Cell. Biol.* 4:875-882.
12. McDevitt, M.A., Imperiale, M.J., Ali, H., and Nevins, J.R. (1984). Requirement of a downstream sequence for generation of a poly(A) addition site. *Cell* 37:993-999.
13. Nevins, J.R., Imperiale, M.J., Kao, H.-T., Strickland, S., and Feldman, L.T. (1984). Detection of an adenovirus E1A-like activity in mammalian cells. *Curr. Top. Microbiol. Immunol.* 113:15-19.

14. Nevins, J.R., Imperiale, M.J., Kao, H.-T., and Feldman, L.T. (1984). Role of the adenovirus E1A gene product in transcriptional activation. In: "Cancer Cells: Oncogenes and Viral Genes" (G.F. VandeWoude, A.J. Levine, W.C. Topp, and J.D. Watson, eds.), Cold Spring Harbor Laboratory, Cold Spring Harbor, pp. 533-538.
15. Nevins, J.R., Imperiale, M.J., Feldman, L.T., and Kao, H.-T. (1984). Cis and trans acting regulation of early adenovirus transcription. In: "Transfer and Expression of Eukaryotic Genes" (H.S. Ginsberg and H. Vogel, eds.), Academic Press, New York, pp. 239-245.
16. Imperiale, M.J., Hart, R.P., and Nevins, J.R. (1985). An enhancer-like element in the adenovirus E2 promoter contains sequences essential for uninduced and E1A induced transcription. *Proc. Natl. Acad. Sci. USA* 82:381-385.
17. Ryan, K.W., Christensen, J.B., Imperiale, M.J., and Brockman, W.W. (1985). Isolation of a simian virus 40 T antigen-positive, transformation-resistant cell line by indirect selection. *Mol. Cell. Biol.* 5:3577-3582.
18. Rutila, J.E., Imperiale, M.J., and Brockman, W.W. (1986). Replication and transformation functions of in vitro generated simian virus 40 large T antigen mutants. *J. Virol.* 58:526-535.
19. Imperiale, M.J. and Nevins, J.R. (1986). Transcriptional and post-transcriptional regulation of viral gene expression. In: "Adenovirus DNA: The Viral Genome and Its Expression" (W. Doerfler, ed.), Martinus Nijhoff, Boston, pp. 129-160.
20. Kovesdi, I., Reichel, R., Imperiale, M.J., Hart, R., and Nevins, J.R. (1986). Sequences and factors involved in E1A-mediated transcription activation. In: "Cancer Cells: DNA Tumor Viruses, Control of Gene Expression and Replication" (P.A. Sharp, M. Botchan, and T. Grodzicker, eds.), Cold Spring Harbor Laboratory, Cold Spring Harbor, pp. 197-201.
21. Brockman, W.W., Christensen, J.B., Ryan, K.W., Souwaidane, M., and Imperiale, M.J. (1987). Fate and expression of simian virus 40 DNA after introduction into murine cells under non-selective conditions. *Virology* 158:118-125.
22. Friedman, D.I., Imperiale, M.J., and Adhya, S. (1987). RNA 3' end formation in the control of gene expression. *Ann. Rev. Genet.* 21:453-488.
23. Hales, K.H., Birk, J.M., and Imperiale, M.J. (1988). Analysis of adenovirus type 2 L1 RNA 3' end formation in vivo and in vitro. *J. Virol.* 62:1464-1468.
24. Rutila, J.E., Christensen, J.B., and Imperiale, M.J. (1989). Viral growth, origin binding, and p53 binding properties of simian virus 40 large T antigen transformation and replication mutants. *Oncogene Res.* 4:303-310.
25. DeZazzo, J.D. and Imperiale, M.J. (1989). Sequences upstream of AAUAAA influence poly(A) site selection in a complex transcription unit. *Mol. Cell. Biol.* 9:4951-4961.
26. Jog, P., Joshi, B., Dhamankar, V., Imperiale, M.J., Rutila, J., and Rundell, K. (1990). Mutational analysis of the simian virus 40 small-t antigen. *J. Virol.* 64:2895-2900.
27. DeZazzo, J.D., Kilpatrick, J.E., and Imperiale, M.J. (1991). Involvement of long terminal repeat U3 sequences overlapping the transcriptional control region in human immunodeficiency virus type 1 mRNA 3' end formation. *Mol. Cell. Biol.* 11:1624-1630.

28. Imperiale, M.J. and DeZazzo, J.D. (1991). Poly(A) site choice in retroelements: Déjà vu all over again? *New Biologist* 3:531-537.
29. DeZazzo, J.D., Falck-Pedersen, E., and Imperiale, M.J. (1991). Sequences regulating temporal poly(A) site switching in the adenovirus major late transcription unit. *Mol. Cell. Biol.* 11:5977-5984.
30. Kohrman, D.C. and Imperiale, M.J. (1992). Simian virus 40 large T antigen stably complexes with a 185-kilodalton host protein. *J. Virol.* 66:1752-1760.
31. Silverstein, G.H., Kohrman, D.C., Christensen, J.B., Brockman, W.W., and Imperiale, M.J. (1992). An SV40 transformation revertant due to a host mutation: Isolation and complementation analysis. *Virology* 187:723-733.
32. Wilson-Gunn, S.I., Kilpatrick, J.E., and Imperiale, M.J. (1992). Regulated adenovirus mRNA 3' end formation in a coupled in vitro transcription-processing system. *J. Virol.* 66:5418-5424.
33. DeZazzo, J.D., Scott, J.M., and Imperiale, M.J. (1992). Relative roles of signals upstream of AAUAAA and promoter proximity in regulation of human immunodeficiency virus type 1 mRNA 3' end formation. *Mol. Cell. Biol.* 12:5555-5562.
34. Yu, C.-L., Prochownik, E.V., Imperiale, M.J., and Jove, R. (1993). Attenuation of serum inducibility of immediate early genes by oncoproteins in tyrosine kinase signaling pathways. *Mol. Cell. Biol.* 13:2011-2019.
35. Ohno, T., Gordon, D., San, H., Pompili, V.J., Imperiale, M.J., Nabel, G.J., and Nabel, E.G. (1994). Gene therapy for vascular smooth muscle cell proliferation after arterial injury. *Science* 265:781-784.
36. Christensen, J.B. and Imperiale, M.J. (1995). Inactivation of the retinoblastoma susceptibility protein is not sufficient for the transforming function of the conserved region 2-like domain of simian virus 40 large T antigen. *J. Virol.* 69:3945-3948.
37. Imperiale, M.J., Akusjärvi, G., and Leppard, K.N. (1995). Post-transcriptional control of adenovirus gene expression. In: "The Molecular Repertoire of Adenoviruses" (W. Doerfler and P. Böhm, eds.), Springer-Verlag, Berlin. *Curr. Topics Microbiol. Immunol.* 199/II:139-171.
38. Gilmartin, G.M., Hung, S.-L., DeZazzo, J.D., Fleming, E.S., and Imperiale, M.J. (1996). Sequences regulating poly(A) site choice within the adenovirus major late transcription unit influence the interaction of constitutive processing factors with the pre-mRNA. *J. Virol.* 70:1775-1783.
39. Harris, K.F., Christensen, J.B., and Imperiale, M.J. (1996). BK virus large T antigen: interactions with the retinoblastoma family of tumor suppressor proteins and effects on cellular growth control. *J. Virol.* 70:2378-2386.
40. Gustin, K.E., Lutz, P., and Imperiale, M.J. (1996). Interaction of the adenovirus L1 52/55-kilodalton protein with the IVa2 gene product during infection. *J. Virol.* 70:6463-6467.
41. Scott, J.M. and Imperiale, M.J. (1996). Reciprocal effects of splicing and polyadenylation on human immunodeficiency virus type 1 pre-mRNA processing. *Virology* 224:498-509.

42. Parker, S.F., Felzien, L.K., Perkins, N.D., Imperiale, M.J., and Nabel, G.J. (1997). Distinct domains of adenovirus E1A interact with specific cellular factors to differentially modulate human immunodeficiency virus transcription. *J. Virol.* 71:2004-2012.
43. Scott, J.M. and Imperiale, M.J. (1997). Promoter-proximal poly(A) sites are processed efficiently, but the RNA products are unstable in the nucleus. *Mol. Cell. Biol.* 17:2127-2135.
44. Qin, L., Ding Y., Pahud, D.R., Chang, E., Imperiale, M.J., and Bromberg, J.S. (1997). Promoter attenuation in gene therapy: IFN γ and TNF α inhibit transgene expression. *Hum. Gene Therapy* 8:1851-1862.
45. Harris, K.F., Christensen, J.B., Radany, E.H., and Imperiale, M.J. (1998). Novel mechanisms of E2F induction by BK virus large T antigen: requirement of both the pRb binding and J domains. *Mol. Cell. Biol.* 18:1746-1756.
46. Gustin, K.E. and Imperiale, M.J. (1998). Encapsidation of viral DNA requires the adenovirus L1 52/55 kilodalton protein. *J. Virol.* 72:7860-7870.
47. Harris, K.F., Chang, E., Christensen, J.B., and Imperiale, M.J. (1998). BK virus as a potential co-factor in human cancer. *Dev. Biol. Stand.* 94:81-91.
48. Xie, Y.C., Hwang, C., Overwijk, W., Zeng, Z., Eng, M.H., Mulé, J.J., Imperiale, M.J., Restifo, N.P., and Sanda, M.G. (1999). Induction of tumor antigen-specific immunity in vivo by a novel vaccinia vector encoding safety-modified simian virus 40 T antigen. *J. Natl. Cancer Inst.* 91:169-175.
49. Akoi, K., Barker, C., Danthinne, X., Imperiale, M.J., and Nabel, G.J. (1999). Efficient generation of recombinant adenoviral vectors by Cre-lox recombination in vitro. *Mol. Med.* 5:224-231.
50. D'Errico, J.A., Ouyang, H., Berry, J.E., MacNeil, R.L., Strayhorn, C., Imperiale, M.J., Harris, N.L., Goldberg, H., and Somerman, M.J. (1999). Immortalized cementoblasts and periodontal ligament cells in culture. *Bone* 25:39-47.
51. Ramharack, R., Bocan, T.M.A., Imperiale, M.J., and Spahr, M.A. (1999). Recombinant adenovirus vector mediated expression of lipoprotein (a) [Lp(a)] in rabbit plasma. *Biochim. Biophys. Acta* 1438:322-328.
52. Imperiale, M.J. (1999). Processing mRNA 3' ends in vitro. In: "Methods in Molecular Biology: Vol. 118: RNA-Protein Interaction Protocols" (S. R. Haynes, ed.), Humana Press, Totowa, New Jersey, pp.433-440.
53. Imperiale, M.J. (2000). The human polyomaviruses, BKV and JCV: Molecular pathogenesis of acute disease and potential role in cancer. *Virology* 267:1-7.
54. Zhang, W. and Imperiale, M.J. (2000). Interaction of the adenovirus IVa2 protein with viral packaging sequences. *J. Virol.* 74:2687-2693.
55. Imperiale, M.J. (2000). Molecular biology of adenovirus gene therapy vectors. In: "Viral Vectors: Gene Therapy and Basic Science," (A. Cid-Arregui and A.M. García Carrancá, eds.), Eaton, Natick, MA, pp. 119-128.
56. Danthinne, X. and Imperiale, M.J. (2000). Production of first generation adenovirus vectors: a review. *Gene Ther.* 7:1707-1714.

57. Imperiale, M.J., Pass, H.I., and Sanda, M.G. (2001). Prospects for an SV40 vaccine. *Sem. Cancer Biol.* 11:81-85.
58. Zhang, W., Low, J.A., Christensen, J.B., and Imperiale, M.J. (2001). Role for the adenovirus IVa2 protein in packaging of viral DNA. *J. Virol.* 75:10446-10454.
59. Imperiale, M.J. (2001). The human polyomaviruses: an overview. In: "Human Polyomaviruses: Molecular and Clinical Perspectives," (K. Khalili and G.L. Stoner, eds.), Wiley-Liss, New York, pp. 53-71.
60. Ahuja, D., Karow, D.S., Kilpatrick, J.E., and Imperiale, M.J. (2001). RNA polymerase II-dependent positional effects on mRNA 3' end processing in the adenovirus major late transcription unit. *J. Biol. Chem.* 276:41825-41831.
61. Imperiale, M.J. (2001). Oncogenic transformation by the human polyomaviruses. *Oncogene* 20:7917-7923.
62. Boulis N.M., Turner, D.E., Imperiale, M.J., and Feldman, E.L. (2002). Neuronal survival following remote adenovirus gene delivery. *J. Neurosurg. Spine* 96:212-219.
63. Boulis, N.M., Willmarth, N.E., Song, D.K., Feldman, E.L., and Imperiale, M.J. (2003). Intraneural colchicine inhibition of adenoviral and adeno-associated viral vector remote spinal cord gene delivery. *Neurosurgery* 52:381-387.
64. Zhang, W. and Imperiale, M.J. (2003). Requirement of the adenovirus IVa2 protein for virus assembly. *J. Virol.* 77:3586-3594.
65. Garcea, R.L. and Imperiale, M.J. (2003). Simian virus 40 infection of humans. *J. Virol.* 77:5039-5045.
66. Boulis, N.M., Noordmans, A.J., Song, D.K., Imperiale, M.J., Rubin, A., Leone, P., During, M. and Feldman, E.L. (2003). Adeno-associated viral vector gene expression in the adult rat spinal cord following remote vector delivery. *Neurobiol. Dis.* 14:535-541.
67. Imperiale, M.J. and Kochanek, S. (2004). Adenovirus vectors: biology, design, and production. In: W. Doerfler and P. Böhm (eds.): *Adenoviruses: Model and Vectors in Virus-Host Interactions* (Springer, Berlin), *Curr. Topics Microbiol. Immunol.* 273:335-357.
68. Noordmans, A.J., Song, D.K., Noordmans, C.J., Garrity-Moses, M., During, M.J., Fitzsimons, H.L., Imperiale, M.J., and Boulis, N.M. (2004). Adeno-associated viral glutamate decarboxylase expression in the lateral nucleus of the rat hypothalamus reduces feeding behavior. *Gene Ther.* 11:797-804.
69. Low, J., Humes, H.D., Szczypka, M., and Imperiale, M.J. (2004). BKV and SV40 infection of human kidney tubular epithelial cells in vitro. *Virology* 323:182-188.
70. Das, D., Shah, R.B., and Imperiale, M.J. (2004). Detection and expression of human BK virus sequences in neoplastic prostate tissues. *Oncogene* 23:7031-7046.
71. McConnell, M.J. and Imperiale, M.J. (2004). Biology of adenovirus and its use as a vector for gene therapy. *Hum. Gene Ther.* 15:1022-1033.
72. Vincent, A.M., Feldman, E.L., Song, D.K., Jung, V., Schild, A., Zhang, W., Imperiale, M.J., and Boulis, N.M. (2004). Adeno-associated viral insulin-like growth factor expression protects motor neurons in vitro. *Neuromol. Med.* 6, 79-86.

73. Perez-Romero, P., Tyler, R.E., Abend, J.R., Dus, M., and Imperiale, M.J. (2005). Analysis of the interaction of the adenovirus L1 52/55 kDa and IVa2 proteins with the packaging sequence *in vivo* and *in vitro*. *J. Virol.* 79:2366-2374.
74. Liu, J.K., Teng, Q., Garrity-Moses, M., Federici, T., Tanase, D., Imperiale, M.J., and Boulis, N.M. (2005). A novel peptide defined through phage display for therapeutic protein and vector neuronal targeting. *Neurobiol. Dis.* 19:407-418.
75. McCabe, M.T., Low, J.A., Daignault, S., Imperiale, M.J., Wojno, K.J., and Day, M.L. (2006). Inhibition of DNA methyltransferase activity prevents tumorigenesis in a mouse model of prostate cancer. *Cancer Res.* 66:385-392.
76. McConnell, M.J., Hanna, P.C., and Imperiale, M.J. (2006). Cytokine response and survival in mice immunized with an adenovirus expressing *B. anthracis* protective antigen domain 4. *Infect. Immun.* 74:1009-1015.
77. Low, J.A., Magnuson, B., Tsai, B., and Imperiale, M.J. (2006). Identification of gangliosides GD1b and GT1b as receptors for BK virus. *J. Virol.* 80:1361-1366.
78. Perez-Romero, P., Gustin, K.E., and Imperiale, M.J. (2006). Dependence of the encapsidation function of the adenovirus L1 52/55 kDa protein on its ability to bind the packaging sequence. *J. Virol.* 80:1965-1971.
79. McCabe, M.T., Low, J.A., Imperiale, M.J., and Day, M.L. (2006). Human polyomavirus BKV transcriptionally activates DNA methyltransferase 1 through the pRb/E2F pathway. *Oncogene* 25: 2727-2735.
80. McConnell, M.J., Danthinne, X., and Imperiale, M.J. (2006). Characterization of a permissive epitope insertion site in adenovirus hexon. *J. Virol.* 80:5361-5370.
81. Das, D. and Imperiale, M.J. (2006) BK virus and human tumors. In: M. Tognon (ed.): *Viral Oncogenesis, Research Signpost, Trivandrum, Kerala, India*, pp. 1-26.
82. Perez-Romero, P. and Imperiale, M.J. (2006). Assaying protein-DNA interactions *in vivo* and *in vitro* using chromatin immunoprecipitation and electrophoretic mobility shift assays. In: W.S.M. Wold and A.E. Tollefson (eds.): *Methods in Molecular Medicine, Vol. 131: Adenovirus Methods and Protocols, Second Edition, vol. 2: Ad Proteins, RNA, Lifecycle, Host Interactions, and Phylogenetics*, Humana Press, Totowa, NJ, pp. 123-139.
83. Imperiale, M.J. and Major, E.O. (2007). Polyomaviruses. In: D.M. Knipe, P.M. Howley, D.E. Griffin, R.A. Lamb, M.A. Martin, B. Roizman, and S.E. Straus (eds.): *Fields Virology, 5th Edition*, Lippincott Williams & Wilkins, Philadelphia.
84. McConnell, M.J., Hanna, P.C., and Imperiale, M.J. (2007). Adenovirus-based prime-boost immunization for rapid vaccination against anthrax. *Mol. Ther.* 15:203-210.
85. Abend, J.R., Low, J.A., and Imperiale, M.J. (2007). Inhibitory effect of gamma interferon on BK virus gene expression and replication. *J. Virol.* 81:272-279.
86. Tyler, R.E., Ewing, S. G., and Imperiale, M.J. (2007). Formation of a multiple protein complex on the adenovirus packaging sequence by the IVa2 protein. *J. Virol.* 81:3447-3454. (Featured in Spotlight section)
87. Imperiale, M.J. (2007). Gene therapy and biosecurity. *Mol. Ther.* 15:648-649.

88. Ewing, S.G., Byrd, S.A., Christensen, J.B., Tyler, R.E., and Imperiale, M.J. (2007) Ternary complex formation on the adenovirus packaging sequence by the IVa2 and L4 22 kDa proteins. *J. Virol.* 81:12450-12457.
89. National Research Council (2007). *Science and Security in a Post 9/11 World: A Report Based on Regional Discussions Between the Science and Security Communities*. Committee on a New Government-University Partnership for Science and Security. Committee on Science, Technology, and Law. Washington, DC: The National Academies Press.
90. Das, D., Wojno, K., and Imperiale, M.J. (2008). BKV as a cofactor in the etiology of prostate cancer in its early stages. *J. Virol.* 82:2705-2714.
91. Imperiale, M.J. (2008). Keeping adenovirus away from the liver. *Cell Host Microbe* 3:119-120.
92. Abend, J.R. and Imperiale, M.J. (2008). Transforming growth factor beta-mediated regulation of BK virus gene expression. *Virology* 378:6-12.
93. Christensen, J.B., Byrd, S.A., Walker, A.K., Strahler, J.R., Andrews, P.C., and Imperiale, M.J. (2008). Presence of the adenovirus IVa2 protein at a single vertex of the mature virion. *J. Virol.* 82:9086-9093.
94. Tseng-Rogenski, S.S., Arredouani, M.S., Escara-Wilke, J.F., Neeley, Y.C., Imperiale, M.J., and Sanda, M.G. (2009). A safety-modified SV40 Tag developed for human cancer immunotherapy. *Drug Des. Devel. Ther.* 6:17-24.
95. Casadevall, A., Ehrlich, S.A., Franz, D.R., Imperiale, M.J., and Keim, P.S. (2008). Biodefense research: a win-win challenge. *Biosecur. Bioterror.* 6:291-292.
96. Das, D. and Imperiale, M.J. (2009). Transformation by polyomaviruses. In: B. Damania and J.M. Pipas (eds.): *DNA Tumor Viruses*, Springer, New York, pp. 25-52.
97. Jiang, M., Abend, J.R., Tsai, B., and Imperiale, M.J. (2009). Early events during BK virus entry and disassembly. *J. Virol.* 83:1350-1358.
98. Jiang, M., Abend, J.R., Johnson, S.F., and Imperiale, M.J. (2009). The role of polyomaviruses in human disease. *Virology* 384:266-273. (One of Top-10 most cited articles in *Virology*, 2008-2010)
99. Mahon, C., Liang, B., Tikhanovich, I., Abend, J.R., Imperiale, M.J., Nasheuer, H.P., and Folk, W.R. (2009) Restriction of human polyomavirus BKV DNA replication in murine cells and extracts. *J. Virol.* 83:5708-5717.
100. Abend, J.R., Joseph, A.E., Das, D., Campbell-Cecen, D.B., and Imperiale, M.J. (2009). A truncated T antigen expressed from an alternatively spliced BK virus early mRNA. *J. Gen. Virol.* 90:1238-1245.
101. Enquist, L.W.; Editors of the *Journal of Virology*. (2009). *Virology in the 21st century*. *J. Virol.* 83:5296-5308.
102. Abend, J.R., Jiang, M., and Imperiale, M.J. (2009). BK virus and human cancer: Innocent until proven guilty. *Sem. Cancer Biol.* 19:252-260.

103. Franz, D.R., Ehrlich, S.A., Casadevall, A., Imperiale, M.J., and Keim, P.S. (2009). The “nuclearization” of biology is a threat to health and security. *Biosecur. Bioterror.* 7:243-244.
104. Abend, J.A., Low, J.A., and Imperiale, M.J. (2010). Global effects of BKV infection on gene expression in human primary kidney epithelial cells. *Virology* 397:73-79.
105. Swimm, A.I., Bornmann, W, Jiang, M., Imperiale, M.J., Lukacher, A.E., and Kalman, D. (2010). Abl-family tyrosine kinases regulate sialylated ganglioside receptors for polyomavirus. *J. Virol.* 84:4243-4251.
106. Casadevall, A. and Imperiale, M.J. (2010). Destruction of microbial collections in response to select agent and toxin list regulations. *Biosecur. Bioterror.* 8:151-154.
107. National Research Council (2010). *Challenges and Opportunities for Education About Dual Use Issues in the Life Sciences.* Committee on Education on Dual Use Issues in the Life Sciences, Board on Life Sciences, Division on Earth and Life Studies. Washington, DC: The National Academies Press.
108. Broekema, N.M., Abend, J.R., Bennett, S.M., Butel, J.S., Vanchiere, J.A., and Imperiale, M.J. (2010). A system for the analysis of BKV non-coding control regions: application to clinical isolates from an HIV/AIDS patient. *Virology* 407:368–373.
109. Jiang, M., Entezami, P., Gamez, M., Stamminger, T., and Imperiale, M.J. (2011). Functional reorganization of promyelocytic leukemia nuclear bodies during BK virus infection. *mBio* 2(1):e00281-10. doi:10.1128/mBio.00281-10.
110. Engleberg, N.C. and Imperiale, M.J. (2011). *Vaccines 2011.* An interactive learning program for M1 students. <http://www.med.umich.edu/lrc/vaccines/>.
111. Imperiale, M.J. and Enquist, L.W. (2011). What’s in a name? *J. Virol.* 85:5245.
112. Norkin, L.C., Johne, R., Buck, C. Allander, T., Atwood, W., Garcea, R., Imperiale, M., Major, E., and Ramqvist, T. (2011). Taxonomical developments in the family Polyomaviridae. *Arch. Virol.* 156:1627-1634.
113. Imperiale, M.J. and Casadevall, A. (2011). Bioterrorism: Lessons learned since the anthrax mailings. *mBio* 2(6):e00232-11. doi:10.1128/mBio.00232-11.
114. Broekema, N.M. and Imperiale, M.J. (2012). Efficient propagation of archetype BK and JC polyomaviruses. *Virology* 422:235-241.
- 115a. Berns, K.I., Casadevall, A., Cohen, M.L., Ehrlich, S.A., Enquist, L.W., Fitch, J.P., Franz, D.R., Fraser-Liggett, C.M., Grant, C.M., Imperiale, M.J., Kanabrocki, J., Keim, P.S., Lemon, S.M., Levy, S.B., Lumpkin, J.R., Miller, J.F., Murch, R., Nance, M.E., Osterholm, M.T., Relman, D.A., Roth, J.A., and Vidaver, A.K. (2012). Policy: adaptations of avian flu virus are a cause for concern. *Nature* 482:153-154.
- 115b. Berns, K.I., Casadevall, A., Cohen, M.L., Ehrlich, S.A., Enquist, L.W., Fitch, J.P., Franz, D.R., Fraser-Liggett, C.M., Grant, C.M., Imperiale, M.J., Kanabrocki, J., Keim, P.S., Lemon, S.M., Levy, S.B., Lumpkin, J.R., Miller, J.F., Murch, R., Nance, M.E., Osterholm, M.T., Relman, D.A., Roth, J.A., and Vidaver, A.K. (2012). Public health and biosecurity. Adaptations of avian flu virus are a cause for concern. *Science* 335:660-661.

116. Jiang, M. and Imperiale, M.J. (2012). Design stars: how small DNA viruses remodel the host nucleus. *Future Virol.* 7:445-459.
117. Imperiale, M.J. and Hanna, M.G. III. (2012). Biosafety considerations of mammalian-transmissible H5N1 influenza. *mBio* 3(2):e00043-12. doi:10.1128/mBio.00043-12.
118. Bennett, S.M., Broekema, N.B., and Imperiale, M.J. (2012). BK polyomavirus: emerging pathogen. *Microbes Infect.* 14:672-683.
119. Imperiale, M.J. (2012). Dual-use research after the avian influenza controversy. *B. Atom. Sci.* <http://thebulletin.org/web-edition/op-eds/dual-use-research-after-the-avian-influenza-controversy>.
120. Jiang, M., Zhao, L., Gamez, M., and Imperiale, M.J. (2012). Roles of ATM and ATR-mediated DNA damage responses during lytic BK polyomavirus infection. *PLoS Pathog.* 8(8): e1002898. doi:10.1371/journal.ppat.1002898.
121. Christensen, J.B., Ewing, S.G., and Imperiale, M.J. (2012). Identification and characterization of a DNA binding domain on the adenovirus IVa2 protein. *Virology* 433:124–130.
122. Broekema, N.M. and Imperiale, M.J. (2013). miRNA regulation of BK polyomavirus replication during early infection. *Proc. Natl. Acad. Sci. USA* 110:8200-8205.
123. Bennett, S.M., Jiang, M., and Imperiale, M.J. (2013). Role of cell type-specific ER-associated degradation in polyomavirus trafficking. *J. Virol.* 87:8843-8852.
124. DeCaprio, J.A., Imperiale, M.J., and Major, E.O. (2013). Polyomaviruses. In: D.M. Knipe, P.M. Howley, J.I. Cohen, D.E. Griffin, R.A. Lamb, M.A. Martin, V.R. Racaniello, and B. Roizman (eds.): *Fields Virology*, 6th Edition, Lippincott Williams & Wilkins, Philadelphia.
125. Casadevall, A., Enquist L., Imperiale, M.J., Osterholm, M., Relman, D.A., and Keim, P. (2013). Redaction of sensitive data in the publication of dual use research of concern. *mBio* 5(1):e00991-13. doi:10.1128/mBio.00991-13.
126. National Research Council (2014). National Research Council. *Emerging and Readily Available Technologies and National Security A Framework for Addressing Ethical, Legal, and Societal Issues*. Washington, DC: The National Academies Press.
127. Imperiale, M.J. (2014). Polyomavirus miRNAs: the beginning. *Curr. Opin. Virol.* 7:29-32.
128. Casadevall, A., Dermody, T.S., Imperiale, M.J., Sandri-Goldin, R.M., and Shenk, T.E. (2014). On the need for a national board to assess dual use research of concern (DURC). *J. Virol.* 88:6535-6537.
129. Casadevall A, Imperiale MJ. (2014). Risks and benefits of gain-of-function experiments with pathogens of pandemic potential, such as influenza virus: a call for a science-based discussion. *mBio* 5(4):e01730-14. doi:10.1128/mBio.01730-14.
130. Casadevall A, Howard D, Imperiale MJ. (2014). An epistemological perspective on the value of gain-of-function experiments involving pathogens with pandemic potential. *mBio* 5(5):e01875-14. doi:10.1128/mBio.01875-14.

131. Casadevall A. and Imperiale, M.J. (2014). Reply to “A brain drain due to increased regulation of influenza virus research is highly speculative.” *mBio* 5(5):e01860-14. doi:10.1128/mBio.01860-14.
132. Dermody, T.S., Casadevall, A., Imperiale, M.J., Sandri-Goldin, R.M., and Shenk, T. (2014). The decision to publish an avian H7N1 influenza virus gain-of-function experiment. *mBio* 5(5):e01985-14. doi:10.1128/mBio.01985-14.
133. Casadevall A, Howard D, Imperiale MJ. (2014). Reply to “Can limited scientific value of potential pandemic pathogen experiments justify the risks?” *mBio* 5(5):e02053-14. doi:10.1128/mBio.02053-14.
134. Casadevall A, Howard D, Imperiale MJ. (2014). Reply to “Valuing knowledge: a reply to the epistemological perspective on the value of gain-of-function experiments.” *mBio* 5(5):e02054-14. doi:10.1128/mBio.02054-14.
135. Casadevall A, Howard D, Imperiale MJ. (2014). The apocalypse as a rhetorical device in the influenza virus gain-of-function debate. *mBio* 5(5):e02062-14. doi:10.1128/mBio.02062-14.
136. Imperiale, M.J. and Casadevall, A. (2014). The vagueness and costs of the pause on gain-of-function (GOF) experiments on pathogens with pandemic potential including influenza virus. *mBio* 5(6):e02292-14. doi:10.1128/mBio.02292-14.
137. Bennett, S.M., Zhao, L., Bosard, C., and Imperiale, M.J. (2015). Role of a nuclear localization signal on the minor capsid proteins VP2 and VP3 in BKPyV nuclear entry. *Virology* 474:110-116.
138. Imperiale, M.J. and Jiang, M. (2015). What DNA viral genomic rearrangements tell us about persistence. *J. Virol.* 89:1948-1950.
139. Duprex, W.P., Fouchier, R.A.M., Imperiale, M.J., Lipsitch, M., and Relman, D.A. (2015). Gain-of-function experiments: time for a real debate. *Nature Rev. Microbiol.* 13:58-64. doi:10.1038/nrmicro3405.
140. Imperiale M.J. and Casadevall, A. (2015). The importance of virology at a time of great need and great jeopardy. *mBio* 6(2):e00236-15.
141. Verhalen B., Justice, J.L., Imperiale, M.J., and Jiang, M. (2015). Viral DNA replication-dependent DNA damage response activation during BK polyomavirus infection. *J. Virol.* 89:5032-5039.
142. Imperiale, M.J. and Casadevall, A. (2015). A new synthesis for dual use research of concern. *PLoS Med* 12(4): e1001813. doi:10.1371/journal.pmed.1001813.
143. Verhaegen, M.E., Mangelberger, D., Harms, P.W., Vozheiko, T.D., Weick, J.W., Wilbert, D.M., Saunders, T.L., Ermilov, A.N., Bichakjian, C.K., Johnson, T.M., Imperiale, M.J., and Dlugosz, A.A. (2015). Merkel cell polyomavirus small T antigen is oncogenic in transgenic mice. *J. Inv. Dermatol.* 135, 1415–1424.
144. Casadevall, A., Dermody, T.S., Imperiale, M.J., Sandri-Goldin, R.M., and Shenk, T.E. (2015). Dual-use research of concern (DURC) review at American Society for Microbiology journals. *mBio* 6(4):e01236-15. doi:10.1128/mBio.01236-15.

145. Justice, J.L., Verhalen, B., Kumar, R., Lefkowitz, E.J., Imperiale, M.J., and Jiang, M. (2015). Quantitative proteomic analysis of enriched nuclear fractions from BK polyomavirus-infected primary renal proximal tubule epithelial cells. *J. Proteome Res.*, 14:4413-4424.
146. Imperiale, M.J. (2015). ASM launches mSphere. *mSphere* 1(1):e00006-15. doi:10.1128/mSphere.00006-15.
147. Imperiale, M.J. (2015). A fortuitous journey from a model system to a human pathogen. *PLoS Pathog* 11(12): e1005313. doi:10.1371/journal.ppat.1005313
148. Zhao, L., Marciano, A.T., Rivet, C.R., and Imperiale, M.J. (2016). Caveolin- and clathrin-independent entry of BKPyV into primary human proximal tubule epithelial cells. *Virology* 492:66-72.
149. Imperiale, M.J. and Casadevall, A. (2016). Zika virus focuses the gain-of-function debate. *mSphere* 1(2):e00069-16. doi:10.1128/mSphere.00069-16.
150. Casadevall, A., Bertuzzi, S., Buchmeier, M., Davis, R., Drake, H., Fang, F., Gilbert, F., Goldman, B. Imperiale, M.J., Matsumura, P., McAdam, A., Pasetti, M., Sandri-Goldin, R., Silhavy, T., Rice, L., Young, J., and Shenk, T. (2016). ASM journals eliminate impact factor information from journal websites. *mSphere* 1(4):e00184-16. (Published simultaneously in eight American Society for Microbiology journals)
151. Imperiale, M.J., Shenk, T, and Bertuzzi, S. (2016). mSphereDirect: author-initiated peer review of manuscripts. *mSphere* 1(6):e00307-16. doi:10.1128/mSphere.00307-16.
152. Zhao, L. and Imperiale, M.J. (2017). Identification of Rab18 as an essential host factor for BKPyV infection using a whole genome RNA interference screen. *mSphere* <https://doi.org/10.1128/mSphereDirect.00291-17>.
153. Imperiale, M.J. (2017). How should I submit to *mSphere*: Traditional, expedited, or mSphereDirect? *mSphere* 2:e00419-17. <https://doi.org/10.1128/mSphere.00419-17>.
154. Goetsch, H.E., Zhao, L., Gnegy, M., Imperiale, M.J., Love, N.G. and Wigginton, K.R. (2018). The fate of urinary tract virus BK human polyomavirus in source-separated urine. *Appl. Environ. Microbiol.* 84:e02374-17.
155. Imperiale, M.J. and Casadevall, A. (2018). A new approach to evaluating the risk-benefit equation for dual use and gain of function research of concern. *Front. Bioeng. Biotechnol.* 6:21. doi: 10.3389/fbioe.2018.00021.
156. Imperiale, M.J. (2018). Re-creation of horsepox virus. *mSphere* 3:e00079-18. <https://doi.org/10.1128/mSphere.00079-18>.
157. Imperiale, M.J. (2018). JC polyomavirus: Let's please respect privacy. *J. Virol.* doi:10.1128/JVI.00561-18
158. Imperiale, M.J., Howard, D., and Casadevall, A. (2018). The silver lining in gain-of-function experiments with pathogens of pandemic potential. *Methods Mol. Biol.* 1836:575-587.
159. Imperiale, M.J., Blader, I., Bradford, P., D'Orazio, S., Duprex, W.P., Ellermeier, C.D., Fernandez-Sesma, A., McMahon, K., Mitchell, A., Pasetti, M.F., and Tringe, S. (2018).

- Completion of an experiment. *mSphere* 3:e0067818. <https://doi.org/10.1128/mSphere.00678-18>.
160. Ye, Y., Zhao, L., Imperiale, M.J., and Wigginton, K.R. (2019). Integrated cell culture-mass spectrometry method for infectious human virus monitoring. *Environ. Sci. Technol. Lett.* 6:407-412.
161. Mitchell, A., Blader, I., Bradford, P., D'Orazio, S., Duprex, W.P., Ellermeier, C.D., Fernandez-Sesma, A., Imperiale, M.J., McMahon, K., Pasetti, M.F., and Tringe, S. (2019). *mSphere of Influence: the view from the microbiologists of the future*. *mSphere* 4:e00348-19. <https://doi.org/10.1128/mSphere.00348-19>.
162. Zhao, L. and Imperiale, M.J. (2019). Establishing RPTE-derived cell lines expressing hTERT for studying BK polyomavirus. *Microbiol. Resour. Announc.*, 8:e01129-19. <https://doi.org/10.1128/MRA.01129-19>. Also posted to bioRxiv doi: <https://doi.org/10.1101/766675>.
163. DiEuliis, D., Ellington, A.D., Gronvall, G.K., and Imperiale, M.J. (2019). Does biotechnology pose new catastrophic risks?. In: Inglesby, T., Adalja, A. (eds) *Global Catastrophic Biological Risks*. *Curr. Top. Microbiol. Immunol.*, 424:107-119.
164. Imperiale, M.J. (2020). Pandemics and people. *mSphere* 5:e0041020. <https://doi.org/10.1128/mSphere.00410-20>.
165. Sáenz Robles, M.T., Cantalupo, P.G., Duray, A.M., Freeland, M., Murkowski, M., van Bokhoven, A., Stephens-Shields, A.J., Pipas, J.M., and Imperiale, M.J. (2020). Analysis of viruses present in urine from patients with interstitial cystitis. *Virus Genes* 56: 430-438. <https://doi.org/10.1007/s11262-020-01767-z>.
166. Imperiale, M.J. (2020). Recurring themes. *mSphere* 5:e0063320. <https://doi.org/10.1128/mSphere.00633-20>.
167. Schloss, P., Junior, M., Alvania, R., Arias, C., Bäumlner, A., Casadevall, A., Detweiler, C., Drake, H., Gilbert, J., Imperiale, M.J., Lovett, S., Maloy, S., McAdam, A., Newton, I., Sadowsky, M., Sandri-Goldin, R., Silhavy, T., Tontono, P., Young, J., Cameron, C., Cann, I., Fuller, A.O., and Kozik, A.J. (2020). The ASM journals committee values the contributions of black microbiologists. *mSphere* 5:e00719-20. <https://doi.org/10.1128/mSphere.00719-20>. (Published simultaneously in sixteen American Society for Microbiology journals)
168. Imperiale, M.J. and Casadevall, A. (2020). Re-thinking gain of function experiments in the context of the COVID-19 pandemic. *mBio* 11:e01868-20. <https://doi.org/10.1128/mBio.01868-20>.
169. Zou, W., Vue, G.S., Assetta, B., Manza, H., Atwood, W.J., and Imperiale, M.J. (2020). Control of archetype BK polyomavirus miRNA expression. *J. Virol.* 95:e01589-20. <https://doi.org/10.1128/JVI.01589-20>. (Chosen by Editors as a Spotlight Article)
170. Andrade, M.J., Vue, G.S., and Imperiale, M.J. (2021). The polyomavirus episteme: A database for researchers. *Microbiol. Resour. Announc.* 10:e00108-21. <https://doi.org/10.1128/MRA.00108-21>.

171. Zou, W. and Imperiale, M.J. (2021). Biology of polyomavirus miRNA. *Frontiers Microbiol.* 2021 Apr 6;12:662892. doi: 10.3389/fmicb.2021.662892.
172. Casadevall, A., Weiss, S., and Imperiale, M.J. (2021). Can science help resolve the controversy on the origins of the SARS-CoV-2 pandemic? *mBio* 12:e01948-21. <https://doi.org/10.1128/mBio.01948-21>.
173. Zhao, L. and Imperiale, M.J. (2021). A cell culture model of BK polyomavirus persistence, genome recombination, and reactivation. *mBio* 12:e02356-21. <https://doi.org/10.1128/mBio.02356-21>.
174. Engleberg, N.C., DiRita, V.J., and Imperiale, M.J. (2021). *Schaechter's Mechanisms of Microbial Disease*, 6th Edition. Wolters Kluwer, Philadelphia.
175. Nomburg, J., Zou, W., Frost, T.C., Datta, C., Vasudevan, S., Starrett, G.J., Imperiale, M.J., Meyerson, M., and DeCaprio, J.A. (2022). Long-read sequencing reveals complex patterns of wraparound transcription in polyomaviruses. *PLoS Pathog* 18(4): e1010401. <https://doi.org/10.1371/journal.ppat.1010401>.
176. DeCaprio, J.A., Imperiale, M.J., and Hirsch, H. (2022). Polyomaviridae. In: P.M. Howley, D.M. Knipe, B.A. Damania, J.I. Cohen (eds.): *Fields Virology*, 7th Edition, Volume 2: DNA Viruses, Wolters Kluwer, Philadelphia, pp. 1-44.
177. Global Science Forum Expert Group on Research Norms, Standards, and Integrity, Organisation for Economic Cooperation and Development (2022). Integrity and security in the global research ecosystem (Report). https://www.oecd-ilibrary.org/science-and-technology/integrity-and-security-in-the-global-research-ecosystem_1c416f43-en
178. Imperiale, M.J. and Casadevall, A. (2022). Thinking about social media, scientific information, and public communication. *mSphere* <https://doi.org/10.1128/msphere.00422-22>.
179. Committee on Protecting Critical Technologies for National Security in an Era of Openness and Competition. (2022). *Protecting U.S. Technological Advantage*. The National Academies Press. <https://doi.org/10.17226/26647>.
180. Imperiale, M.J., Casadevall, A., Goodrum, F.D., and Schultz-Cherry, S. (2022). Virology in peril and the greater risk to science. *mSphere*, *mBio*, and *J. Virol.* <https://doi.org/10.1128/msphere.00607-22>, <https://doi.org/10.1128/mbio.03339-22>, <https://doi.org/10.1128/jvi.01847-22>.
181. Goodrum, F., Lowen, A., Ladkawala, S., Alwine, J., Casadevall, A., Imperiale, M. and 150 other authors. (2023). Virology under the microscope – A call for rational discourse. *mSphere*, *J. Virol*, and *mBio* <https://doi.org/10.1128/msphere.00034-23>, <https://doi.org/10.1128/jvi.00089-23>, <https://doi.org/10.1128/mbio.00188-23>.