

Curriculum vitae

Date Prepared: August 15, 2024

Name and Titles: Ralph J. DeBerardinis, M.D. Ph.D
Investigator, Howard Hughes Medical Institute
Professor, Children’s Medical Center Research Institute at UT Southwestern
Medical Center
Robert L. Moody, Sr. Faculty Scholar
Joel B. Steinberg M.D. Distinguished Chair in Pediatrics
Sowell Family Scholar in Medical Research
Chief, Division of Pediatric Genetics and Metabolism
Director, Genetic and Metabolic Disease Program

Office Address: 5323 Harry Hines Blvd.
Room NL11.138B
Dallas, Texas 75390-8502

Work Phone: 214-648-2587

Work E-Mail: ralph.deberardinis@utsouthwestern.edu

Work Fax: 214-648-5517

Place of Birth: Chester, Pennsylvania

Education

Year	Degree (Honors)	Field of Study (Thesis advisor for PhDs)	Institution
1992	B.S. Summa cum laude	Biology	St. Joseph’s University
1998	Ph.D.	Cell and Molecular Biology, (Haig H. Kazazian, Jr. M.D.)	University of Pennsylvania
2000	M.D.	Medicine	University of Pennsylvania

Postdoctoral Training

Year(s)	Titles	Specialty/Discipline (Lab PI for postdoc research)	Institution
2000-2005	Residency	Pediatrics	Children’s Hospital of Philadelphia
2000-2005	Residency	Medical Genetics	Children’s Hospital of Philadelphia
2006-2007	Fellowship	Clinical Biochemical Genetics	Children’s Hospital of Philadelphia
2004-2007	Post-doc	Cancer Biology (Craig Thompson, M.D.)	University of Pennsylvania

Faculty Academic Appointments

Year(s)	Academic Title	Department	Academic Institution
2005-2007	Instructor	Pediatrics	University of Pennsylvania
2008-2012	Assistant Professor (primary)	Pediatrics	University of Texas Southwestern Medical Center
2008-2013	Assistant Professor (secondary)	Eugene McDermott Center for Human Growth and Development	University of Texas Southwestern Medical Center
2012 – 2013	Assistant Professor (primary)	Children’s Medical Center Research Institute	University of Texas Southwestern Medical Center
2012-2013	Assistant Professor (secondary)	Pediatrics	University of Texas Southwestern Medical Center
2013 – 2017	Associate Professor (primary)	Children’s Medical Center Research Institute	University of Texas Southwestern Medical Center
2013 – 2017	Associate Professor (secondary)	Department of Pediatrics	University of Texas Southwestern Medical Center
2013 – 2017	Associate Professor (secondary)	Eugene McDermott Center for Human Growth and Development	University of Texas Southwestern Medical Center
2017 - present	Professor (primary)	Children’s Medical Center Research Institute	University of Texas Southwestern Medical Center
2017 - present	Professor (secondary)	Department of Pediatrics	University of Texas Southwestern Medical Center
2017 - present	Professor (secondary)	Eugene McDermott Center for Human Growth and Development	University of Texas Southwestern Medical Center
2018 – present	Investigator		Howard Hughes Medical Institute

Current Licensure and Certification

Licensure

Medical License, Pennsylvania (expired)
 Medical License, Texas (active)

Board and Other Certification

American Board of Pediatrics (2004)
 American Board of Medical Genetics, Clinical Genetics (2005-2015)
 American Board of Medical Genetics, Clinical Biochemical Genetics (2007-present)

Honors and Awards

Year	Name of Honor/Award	Awarding Organization
1992	University Scholar	St. Joseph’s University

1992	Dean's Award for Highest Graduating GPA	St. Joseph's University
1992	Louis Marks Biological Studies Award	St. Joseph's University
1992	Alumni Association Award	St. Joseph's University
1994-2000	Franklin Scholar	University of Pennsylvania
1999	Roy G. Williams Award for Research in Basic Medical Sciences	University of Pennsylvania
2001	Seymour Warshaw Distinguished First Year Resident Award	Children's Hospital of Philadelphia
2003	Residency Graduation Address	Children's Hospital of Philadelphia
2003	Senior Resident Clinician Award	Children's Hospital of Philadelphia
2004	Medical Genetics T32 Award	University of Pennsylvania
2004-2008	Loan Repayment Program	National Institutes of Health
2005	Pediatric Scholars Program (K12)	Children's Hospital of Philadelphia
2007	Faculty Honor Roll	Children's Hospital of Philadelphia
2008	Travel Award	Society for Inherited Metabolic Disorders
2008	Neil Buist Award for the best presentation by a trainee at the annual meeting	Society for Inherited Metabolic Disorders
2008	William K. Bowes, Jr. Award in Medical Genetics	Harvard-Partners Center for Genetics and Genomics
2008	President's Research Council Distinguished Young Researcher Award	University of Texas Southwestern Medical Center
2008	Sowell Family Scholar in Medical Research	University of Texas Southwestern Medical Center
2010	Address to Oversight Committee of Cancer Prevention and Research Institute of Texas (CPRIT)	Cancer Prevention and Research Institute of Texas
2011	Clinical Investigator Award	Damon Runyon Cancer Research Foundation
2012	Research Mentor Award	Children's Medical Center – Dallas
2012	Keynote Address to Graduate Student Organization (elected by students)	University of Texas Southwestern Medical Center
2013	Elected to the American Society for Clinical Investigation	American Society for Clinical Investigation
2013	Joel B. Steinberg, M.D. Chair in Pediatrics (converted to Distinguished Chair in 2021)	University of Texas Southwestern Medical Center
2014	Invited by Penn Combined-Degree Students to present annual lecture	University of Pennsylvania Medical Scientist Training Program
2015	Chairperson, Metabolism and Cancer Section, 2016 American Association for Cancer Research Program Committee	American Association for Cancer Research

2016	Faculty Scholar	Howard Hughes Medical Institute
2016, 2018, 2019 – 2022	Named to “Best Doctors and Pediatric Specialists in Dallas.”	<i>D</i> Magazine
2017	Outstanding Investigator Award	National Cancer Institute
2017	Robert L. Moody, Sr. Faculty Scholar	Moody Foundation and Children’s Research Institute
2018	Investigator	Howard Hughes Medical Institute
2019	Edith and Peter O’Donnell Award in Medicine	The Academy of Medicine, Engineering and Science of Texas (TAMEST)
2019	Post-doctoral mentorship award	University of Texas Southwestern Medical Center
2020	Elected to the Association of American Physicians	Association of American Physicians
2020	Elected to the National Academy of Medicine	National Academy of Medicine
2021	Member, TAMEST	The Academy of Medicine, Engineering and Science of Texas (TAMEST)
2021	Paul Marks Prize for Cancer Research	Memorial Sloan Kettering Cancer Center
2023	Outstanding Investigator Award	National Cancer Institute

Appointments at Hospitals/Affiliated Institutions

<u>Past</u>			
Year(s)	Position Title	Department/Division	Institution
2005-2007	Attending Physician	Pediatrics/Biochemical Genetics	Children’s Hospital of Philadelphia
<u>Current</u>			
Year(s)	Position Title	Department/Division	Institution
2008-present	Attending Physician	Pediatrics/Genetics	Children’s Medical Center – Dallas

Other Professional Positions

Year(s)	Position Title	Institution
None		

Major Administrative/Leadership Positions

Year(s)	Position Title	Institution
2011 – 2014	Director, Medical Genetics Residency Program	University of Texas Southwestern Medical Center

2013 – 2014	Assistant Director, Genetics T32	University of Texas Southwestern Medical Center
2013 – present	Director, Genetic and Metabolic Disease Program	Children’s Medical Center Research Institute
2013 – present	Chief, Division of Pediatric Genetics and Metabolism, Department of Pediatrics	University of Texas Southwestern Medical Center
2018-2019	Chair, University Lecture Series Committee	University of Texas Southwestern Medical Center
2018 – present	Co-Director, Cellular Networks in Cancer Program, Simmons Comprehensive Cancer Center	University of Texas Southwestern Medical Center

Committee Service (*Member, unless noted otherwise*)

Year(s)	Name of Committee	Institution/Organization
1997	Cell and Molecular Biology Graduate Group Admissions Committee	University of Pennsylvania
2004	Intern Selection Committee	Children’s Hospital of Philadelphia
<u>UTSW</u>		
2008 – present	Medical Genetics Residency Program Education Executive Committee (chair, 2011 – present)	University of Texas Southwestern Medical Center
2009	Medical Students Subcommittee for Liaison Committee on Medical Education	University of Texas Southwestern Medical Center
2010 – present	High Impact/High Risk Grants Program Committee	University of Texas Southwestern Medical Center
2012	Compensation Committee	University of Texas Southwestern Medical Center - Department of Pediatrics
2012 – 2015	Steering Committee, Genetics T32	University of Texas Southwestern Medical Center
2011 – present	Institute for Innovations in Medical Technologies Advisory Committee	University of Texas Southwestern Medical Center
2012 - 2013	Institutional Biosafety Committee (IBC) and Biological and Chemical Safety Advisory Committee (BCSAC)	University of Texas Southwestern Medical Center
2013 – present	Steering committee, Medical Scientist Training Program	University of Texas Southwestern Medical Center
2013 – present	Steering committee, Genetics and Development Training Grant	University of Texas Southwestern Medical Center
2014 – 2016	Pediatric Neurology Division Chief Search Committee (Chair); resulted in successful recruitment of Dr. Berge Minassian	University of Texas Southwestern Medical Center

2014 – present	University Lecture Series Committee	University of Texas Southwestern Medical Center
2015 – 2018	Metabolomics and Disease Seminar Series, Chair of Organizing Committee	University of Texas Southwestern Medical Center
2015 – present	Pediatrics Promotion & Tenure Committee	University of Texas Southwestern Medical Center
2015 – present	Pediatrics Strategic Planning Committee	University of Texas Southwestern Medical Center
2016 – present	High Throughput Screening Core Oversight Committee	University of Texas Southwestern Medical Center
2017 – present	Governance Committee, Clinical Sequencing Laboratory	University of Texas Southwestern Medical Center
2018 – present	Leadership Committee, Simmons Comprehensive Cancer Center	University of Texas Southwestern Medical Center
2021 – 2022	Search Committee for Radiation Oncology Chairman (resulted in successful appointment of Robert Timmerman, M.D.)	University of Texas Southwestern Medical Center
2022	Six Year Strategic Plan, Chair of Research Committee	University of Texas Southwestern Medical Center
2022 – 2023	Health Professions Strategic Plan External Committee	University of Texas Southwestern Medical Center
<u>Hospital</u>		
	None	
<u>State/Regional</u>		
2008-present	Newborn Screening Advisory Committee	Texas Department of Health
2021-present	Mary Beth Maddox Award Committee	The Academies of Medicine, Engineering and Science of Texas
<u>National/International</u>		
2011 – present	Scientific Program Committee	American Association for Cancer Research
2012	Pediatrics Interest Group (Mentor)	American Physician-Scientist Association
2015	Chairperson, Metabolism and Cancer Section, 2016 American Association for Cancer Research Program Committee	American Association for Cancer Research
2016	Steering Committee, Cancer Progress Report	American Association for Cancer Research
2016 – present	Keystone Symposia Advisory Committee	Keystone Symposia
2019	Pezcoller Foundation-AACR International Award for Extraordinary Achievement in Cancer Research, Selection Committee	American Association for Cancer Research
2021	AACR Award for Outstanding Achievement in Basic Science Cancer Research	American Association for Cancer Research

2021	AACR G.H.A. Clowes Award for Outstanding Basic Cancer Research	American Association for Cancer Research
2022	Cell Biology Landmarks Advisory Board	Faculty Opinions
2023	Cancer Imaging and Theranostics Task Force	American Association for Cancer Research

Professional Societies

Dates	Society Name, member
2000 – present	American Academy of Pediatrics, member
2002 – present	American Society of Human Genetics, member
2004 – present	United Mitochondrial Disease Foundation, member
2007 – present	Society for Inherited Metabolic Disorders, member
2008 – present	American Association for Cancer Research, member
2009 – present	Society for Pediatric Research, member
2011 – present	American Society for Mass Spectrometry, member
2011 – present	American Association for Cancer Research, member
2012 – present	American Society for Clinical Investigation, member
2017 – present	The New York Academy of Sciences
2020 - present	The Association of American Physicians
2020 - present	The National Academy of Medicine
2021 – present	The Academies of Medicine, Engineering and Science of Texas

Scientific Advisory Boards

Dates	Organization
2012 – 2017	Peloton Therapeutics, Inc.
2013 - present	Agios Pharmaceuticals, Inc.
2013 - 2014	Vesalius Research Center
2016 – present	Oversight Committee, Proteomics and Metabolomics Core Facility (MD Anderson Cancer Center)
2016 – 2019	Chair of External Advisory Board, <i>KRAS</i> Multi-Investigator Grant (MD Anderson Cancer Center)
2017 – present	General Metabolics
2018 – present	Rutgers Cancer Institute of New Jersey
2020 - present	Vida Ventures
2021 - 2023	Nirogy Therapeutics
2021 – present	Droia Ventures
2021 – present	Atavistik Bioscience, Founder and SAB member
2021 – present	National Cancer Institute, Board of Scientific Counselors

Grant Review Activities

Year(s)	Name of Review Committee	Organization
2009 - 2010	Scientific review committee	North and Central Texas Clinical Sciences Institute
2009 - 2014	Children's Clinical Research Advisory Committee	Children's Medical Center-Dallas
2009 - present	American Cancer Society Individual Investigator Awards	UT Southwestern Cancer Center
2010	Intramural Grant Program (external reviewer)	University of Louisville
2010	Scientific review committee, external reviewer	United States – Israel Bi-National Science Foundation
2010 - present	High Impact/High Risk Grants Program	UT Southwestern Medical Center
2011 - 2012	Scientific review committee, external reviewer	Fonds Wetenschappelijk Onderzoek (Research Foundation, Flanders)
2011	Scientific review committee, external reviewer	Cancer Research UK
2012	Ad hoc reviewer, Cancer Etiology Study Section	National Institutes of Health/NCI
2013	Ad hoc reviewer, ZRG1 F09B-P (20)L Fellowships: Oncological Sciences	National Institutes of Health/NCI
2015	Sabin Family Foundation Fellows Award	University of Texas MD Anderson Cancer Center
2016	Ad hoc reviewer, ZRG1 OTC-X (55) R Metabolic Reprogramming in Immunotherapy	National Institutes of Health/NCI
2016	Ad hoc reviewer, SEP for Provocative Questions in Pediatric Cancer	National Institutes of Health/NCI
2017	Ad hoc reviewer, SEP for Provocative Questions in Pediatric Cancer	National Institutes of Health/NCI
2019	Ad hoc Reviewer, Director's Pioneer Award (DPI) Program	National Institutes of Health
2020 – present	Selection committee, Clinical Investigator Award	Damon Runyon Cancer Research Foundation
2022 – present	Hannah Gray Fellows Program	Howard Hughes Medical Institute
2023	Ad hoc Reviewer, ZRG1 BTC-D, Cancer Biology	National Institutes of Health/NCI

Editorial Activities

Year(s)	Journal Name
<u>Editor/Associate Editor</u>	
2015 – 2017	<i>Molecular Case Studies</i> , Cold Spring Harbor Press (Deputy Editor)
<u>Editorial Boards</u>	
2013 - 2016	<i>Oncogene</i> , Nature Publishing Group

2013 – 2019	<i>Cancer & Metabolism</i> , BioMed Central (Senior Editor)
2015 – present	<i>Cancer Discovery</i> , AACR
2014 – present	<i>EMBO Molecular Medicine</i> (Advisory Editorial Board)
2016 – 2021	<i>eLife</i> (Board of Reviewing Editors)
2020 - present	<i>Med</i> , Cell Press
2022 - present	<i>Annual Reviews of Cancer Biology</i>
<u>Ad Hoc Reviewer</u>	
	<i>Cell</i>
	<i>Science</i>
	<i>Nature</i>
	<i>New England Journal of Medicine</i>
	<i>Nature Cell Biology</i>
	<i>Nature Chemical Biology</i>
	<i>Nature Communications</i>
	<i>eLife</i>
	<i>Cancer Cell</i>
	<i>Cell Metabolism</i>
	<i>Molecular Cell</i>
	<i>Cell Stem Cell</i>
	<i>Current Biology</i>
	<i>Cell Reports</i>
	<i>Journal of Clinical Investigation</i>
	<i>Genes and Development</i>
	<i>Proceedings of the National Academy of Sciences – USA</i>
	<i>Journal of Clinical Oncology</i>
	<i>Cancer Research</i>
	<i>Journal of Biological Chemistry</i>
	<i>PLOS-Biology</i>
	<i>PLOS-Pathogens</i>
	<i>PLOS-One</i>
	<i>Cancer & Metabolism</i>
	<i>Molecular Cancer Therapeutics</i>
	<i>American Journal of Pathology</i>
	<i>British Journal of Cancer</i>
	<i>Brain Pathology</i>
	<i>Trends in Molecular Medicine</i>
	<i>Trends in Endocrinology and Metabolism</i>
	<i>Neoplasia</i>

	<i>BMC Cancer</i>
	<i>Gene</i>
	<i>Molecular Genetics and Metabolism</i>

Grant Support

<u>Present</u>	National Institutes of Health/National Cancer Institute – R35
	Human metabolic variation as a window into cancer initiation and progression.
	Principal Investigator
	\$600,000 9/1/2023 – 8/31/2024
	\$6,674,689 9/1/2023 – 8/31/2030
	Howard Hughes Medical Institute – HHMI Investigator
	HHMI Investigator – Funding is not associated with a specific project.
	Principal Investigator
	\$600,000 9/4/2022 – 8/31/2023
	\$4,000,000 9/4/2018 – 8/31/2025
	NIH – Project 3
	UTSW SPORE in Kidney Cancer (James Brugarolas – PI)
	Project Leader Project 3
	\$202,740 8/1/2022 – 7/31/2023
	\$7,025,250 8/1/2022 – 7/31/2027
	National Institutes of Health
	UTSW/MD Anderson SPORE in Lung Cancer (John Minna – PI)
	Project Leader Project 1
	\$40,402 9/1/2023 – 8/31/2024
	\$8,858,316.80 9/1/2020 – 8/31/2025
	National Institutes of Health/National Cancer Institute
	Cancer Center Support Grant (Carlos Arteaga – PI)
	Co-Leader
	\$16,297 08/01/2023 – 07/31/2024
	\$21,530,000 08/01/2021 – 07/31/2026
	Cancer Prevention and Research Institute of Texas
	Understanding Rewired Intracellular Metabolism in Acute Myeloid Leukemia
	Principal Investigator

	\$332,500	08/30/2023 – 08/29/2024
	\$1,050,000	08/30/2023 – 02/28/2025
	Baldrige Research Fund	
	\$300,000	03/01/2021 – no expiration
	Lawrence Steinberg Endowment	
	Joel B. Steinberg, M.D. Distinguished Chair in Pediatrics	
	\$49,023	12/16/2018 – no expiration
	Robert L. Moody, Sr. Faculty Scholar Endowment	
	Moody Faculty Scholar	
	\$500,000	10/1/2018 – no expiration

<u>Past</u>		
	Cancer Prevention and Research Institute of Texas -- MIRA	
	Metabolic enablers of melanoma progression (Sean Morrison – PI)	
	Co-investigator	
	\$1,429,836	8/31/2021 – 8/30/2023 (NCE)
	\$5,612,664.04	8/31/2018 – 8/30/2023
	National Institutes of Health/National Cancer Institute – R21	
	Cancer Center Support Grant	
	Co-investigator	
	No Funds Req	3/7/2018 – 2/28/2019
	No Funds Req	3/7/2018 – 2/28/2020
	National Institutes of Health/National Center for Advancing Translational Sciences – UL1	
	UTSW Center for Translational Medicine UL1 (KL2/TL1)	
	Co-Director of Core 1.	
	\$86,545	9/1/2018 – 4/30/2019
	\$482,398	9/23/2013 – 4/30/2019
	Once Upon a Time Foundation	
	Discovering and treating genetic metabolic diseases in children	
	Principal Investigator	
	\$250,000	3/1/2018 – 2/28/2019
	\$1,000,000	3/1/2016 – 2/28/2020

	Cancer Prevention and Research Institute of Texas – Independent Research Award
	Carbamoyl Phosphate Synthase-1: A new metabolic liability in non-small cell lung cancers
	Principal Investigator
	\$285,009 3/1/2018 – 2/28/2019
	\$855,022 3/1/2016 – 2/28/2019
	The Robert A. Welch Foundation – Research Award
	Compartmentation of pro-survival metabolic activities in the cancer cell peroxisome
	Principal Investigator
	\$80,000 6/1/2018 – 5/31/2019
	\$240,000 6/1/2016 – 5/31/2019
	NIH – Emory University Subcontract
	Signaling and Targeting of 6-Phosphogluconate Dehydrogenase in Human Cancers
	Subcontract Site PI (Jing Chen- PI)
	\$11,034 3/1/2018 – 2/28/2019
	\$ 55,170 4/15/2014 – 2/28/2019
	Cancer Prevention and Research Institute of Texas – MD Anderson Subcontract
	Exploiting molecular and metabolic dependencies to optimize personalized therapeutic approaches for melanomas
	Subcontract site PI (Michael Davies-PI)
	Subcontract: \$100,000 3/1/2018 – 8/28/2019
	Subcontract: \$300,000 3/1/2016 – 2/28/2019
	Cancer Prevention and Research Institute of Texas -- IIRA
	Mechanisms of melanoma metastasis
	Co-investigator
	\$284,882 12/1/2018 – 11/30/2019
	\$847,896 12/1/2016 – 11/30/2019
	National Institutes of Health/National Center for Advancing Translational Sciences – UL1
	UTSW Center for Translational Medicine UL1 (KL2/TL1)
	Co-Director of Core 1.
	\$86,545 9/1/2018 – 4/30/2019
	\$482,398 9/23/2013 – 4/30/2019

	National Institutes of Health/National Cancer Institute – R01
	Metabolic regulators of tumor cell growth
	Principal Investigator
	\$237,500 5/1/2016 – 4/30/2017
	\$1,037,500 7/1/2011 – 3/31/2016
	\$1,187,500 4/1/2016 – 4/30/2021 – relinquished 09/01/2017 to accept R35
	Howard Hughes Medical Institute – Faculty Scholar
	HHMI Faculty Scholar
	Principal Investigator
	\$100,000 11/1/2018 – 10/31/2018
	\$500,000 11/1/2016 – 10/31/2021 relinquished 11/1/2018 to accept HHMI Investigator
	V Foundation – Translational Research Award
	Translational studies in lung cancer metabolism: creating new paradigms in diagnosis and therapy
	Principal Investigator
	\$200,000 11/01/2015 – 10/31/2016
	\$600,000 11/01/2013 – 10/31/2016
	NIH- Core 1
	UT Southwestern Center for Translational Medicine –Core 1: Target Identification
	Co-Director Core 1
	\$94,393 5/1/2016 – 4/30/2017
	NIH – St. Jude Children’s Research Hospital
	Regulation of erythropoiesis by the miR-144/451 microRNA locus
	Subcontract Site PI (Mitchell Weiss- PI)
	\$42,142 9/1/2015 – 8/31/2016
	\$94,284 9/1/2015 – 8/31/2017
	National Institutes of Health/National Cancer Institute – Univ. of Cincinnati
	Metabolic Adaptive Responses in Cancer
	Subcontract PI (David Plas- PI)
	\$13,004 04/01/2016 – 03/31/2017
	\$65,020 04/01/2013 – 03/31/2018
	Cancer Prevention and Research Institute of Texas – Independent Research Award
	The metabolic phenome of human lung cancer
	Principal Investigator
	\$214,788 6/1/2015 – 11/30/2016

	\$632,282	4/1/2014 – 11/30/2016
	Cancer Prevention and Research Institute of Texas – Multi-Investigator Award	
	Novel MRI and MRS Methods for Imaging Cancer Metabolism	
	Co-PI of sub-project, “Metabolic Imaging of Hyperpolarized ¹³ C Substrates in Animal Models of Cancer,” with Matthew Merritt	
	\$204,150	8/1/2014 – 7/31/2015
	\$615,259	8/1/2014 – 7/31/2016
	National Institutes of Health/National Cancer Institute – R01	
	Defining the metabolic phenotype of low-grade gliomas in vivo	
	Co-Investigator (Elizabeth Maher- PI)	
	\$207,500	4/1/2016 – 3/31/2017
	\$1,037,500	4/1/2012 – 3/31/2017
	The Robert A. Welch Foundation – Research Award	
	Glutamine-dependent reductive carboxylation: a metabolic Achilles’ heel in cancer	
	Principal Investigator	
	\$100,000	6/1/2013 – 5/31/2014
	\$300,000	6/1/2013 – 5/31/2016
	National Institutes of Health/National Cancer Institute – Administrative Supplement	
	Research Supplement to Promote Diversity in Health-Related Research	
	Principal Investigator	
	\$44,033	7/1/2014 – 6/30/2016
	National Institutes of Health/NIGMS – T32	
	Medical Genetics Research Training Grant	
	Trainee	
	Fellow Salary Support	7/1/2003 – 6/30/2005
	National Institutes of Health/NICHHD – K12	
	CHOP Pediatric Scholars Program	
	Trainee	
	\$75,000	7/1/2005 – 6/30/2006
	National Institutes of Health/NIDDK – K08	
	Metabolic regulation in growth factor-dependent cells	
	Principal Investigator	
	\$123,400	7/1/2010 – 6/30/2011
	\$617,000	7/1/2006 – 6/30/2011
	American Cancer Society – Individual Research Grant	
	Glutamine-based anaplerosis (GBA): A key metabolic pathway in tumor cell growth	
	Principal Investigator	
	\$40,000	7/1/2008 – 6/30/2009

	National Institutes of Health – UL1
	Ex vivo flux profiling in congenital lactic acidosis syndromes
	Principal Investigator of Pilot Award
	\$25,000 4/1/2008 – 3/31/2009
	National Institutes of Health/NINDS – RC1
	Genotype and Metabolic Phenotype in Glioblastoma
	Co-Investigator
	\$318,472 9/30/2010 – 8/31/2011
	\$636,944 9/30/2009 – 8/31/2011
	Cancer Prevention and Research Institute of Texas – High Impact/High Risk Award
	Can glioblastoma growth be suppressed by targeting glutamine metabolism?
	\$95,000 4/1/2011 – 3/31/2012
	\$190,000 4/1/2010 – 3/31/2012
	National Institutes of Health/National Cancer Institute – Lung Cancer SPORE
	Identifying metabolic activities that drive transformation and tumorigenesis in lung cancer
	Principal Investigator of Seed Project
	\$20,000 4/1/2010 – 3/31/2011
	Janssen Pharmaceutica, N.V. - Sponsored Research Agreement
	Identification and Validation of Novel Tumor Metabolism Targets in Glutaminolysis
	Principal Investigator
	\$106,198 5/1/2011 – 4/30/2012
	\$215,000 5/1/2011 – 4/30/2013
	The Robert A. Welch Foundation – Research Award
	Dynamic nuclear polarization of small molecule metabolic probes: novel reagents for monitoring cancer cell metabolism.
	Principal Investigator
	\$60,000 6/1/2012 – 5/31/2013
	\$160,000 6/1/2010 – 5/31/2013
	Damon Runyon Cancer Research Foundation – Clinical Investigator Award
	Translational Studies in Cancer Metabolism
	Principal Investigator
	\$150,000 7/1/2013 – 6/30/2014
	\$450,000 7/1/2011 – 6/30/2014
	National Institutes of Health/National Cancer Institute – R21
	In vivo detection of 2-hydroxyglutarate in gliomas by spectroscopic MRI
	Co-Investigator (Changho Choi- PI)
	\$130,500 9/1/2012 – 8/31/2013

	\$239,250	9/26/2011 – 8/31/2013

Clinical Trials Activities

<u>Present</u>	STU 062010-157, An Investigation of Brain Tumor Metabolism in Patients Undergoing Surgical Resection (Co-Investigator)
	STU 062010-160, High Resolution Magnetic Resonance Imaging in Patients with Brain Tumors (Co-Investigator)
	STU 112014-001, Genetic regulators of metabolism and development in children (Principal Investigator)
	STU-2019-1061, An Investigation of Kidney and Urothelial Tumor Metabolism in Patients Undergoing Surgical Resection and Biopsy (Co-Investigator)
	STU 052018-031, Identification of Metabolic Phenotypes Associated with Melanoma Metastasis (Co-Investigator)

<u>Past</u>	None
-------------	------

Teaching Activities

Year(s)	Activity
<u>Medical and graduate school didactic and small group teaching</u>	
2007	Discussion Group Leader, <i>Genetic Foundations of Disease</i> , University of Pennsylvania School of Medicine
2007	Lecturer, <i>Inborn Errors of Metabolism</i> , Pediatrics Clerkship, University of Pennsylvania School of Medicine
2007	Lecturer, <i>Mitochondrial Diseases</i> , Medical Genetics I and II, Arcadia University, Master's Program in Genetic Counseling
2007	Lecturer, <i>Genetic Foundations of Disease</i> , University of Pennsylvania School of Medicine
2007	Lecturer, <i>Inborn Errors of Metabolism</i> , Children's Hospital of Philadelphia, Neonatal Physiology Lecture Series
2007	Discussion Group Leader, <i>Genetics in Medicine</i> , University of Pennsylvania School of Medicine
2007	Lecturer, <i>Genetic Basis of Metabolic Diseases</i> , University of Pennsylvania School of Nursing
2008 – 2014	Lecturer, <i>Genetics</i> (first-year medical students; Lewis Waber and Jonathan Cohen, course directors), University of Texas - Southwestern Medical School
2008 – present	Discussion Group Leader, <i>Genetics and Metabolism Cases</i> , Pediatrics Clerkship, University of Texas – Southwestern School of Medicine
2009	Discussion Leader, <i>Summer Graduate Student Workshop</i> (Wade Winkler, course director), University of Texas – Southwestern Medical Center

2009 - 2015	Lecturer, <i>Metabolism and Cancer</i> , Molecular Mechanisms in Cancer Biology, Cancer Biology Graduate Group (Jerry Shay, Kathlynn Brown and Elizabeth Martinez, course directors), University of Texas – Southwestern Medical Center
2009 - present	Lecturer, <i>Inborn Errors of Metabolism in Neonates: Basic Concepts and Guides to Therapy</i> . Neonatology Fellows' Physiology Conference (Luc Brion, course director), UT – Southwestern Medical Center
2010	Lecturer, <i>Metabolic Causes of Pediatric Liver Failure</i> . Pediatric Gastroenterology Fellows' Conference (Drew Feranchak, course director), UT – Southwestern Medical Center
2010 - present	Discussion Group Leader, <i>Ethics in Scientific Research</i> (Stuart Ravnik, course director), UT – Southwestern Medical Center
2011 - present	Lecturer, <i>Intermediary Metabolism in Tumor Cells</i> , Molecular Basis of Metabolic Regulation (Joyce Repa, course director), UT Southwestern Medical Center
2011 - 2013	Lecturer, <i>Cancer Metabolism</i> , Research in Clinical Nutrition (Master's Degree Students; Deborah Clegg, course director), UT Southwestern Medical Center
2012 - present	Coordinator, <i>Clinical Genetics Experience</i> , for Genetics and Development Graduate Students, UT Southwestern Medical Center (2012 -)
2012 - present	Lecturer, <i>Advanced Concepts in Metabolism and Cancer</i> , Cancer Biology II: Advanced Concepts in Cancer Biology (Sandeep Burma, course director), Cancer Biology Training Program, University of Texas – Southwestern Medical Center
2012 – 2015	Lecturer/Discussion Leader, Human Genetics (Andrew Zinn, course director), Genetics and Development graduate program, University of Texas – Southwestern Medical Center
2012 – 2014	Lecturer, <i>Integrated Metabolism</i> , Biochemistry (first-year medical students; Max Wynne and Rick Bruick, course directors), University of Texas – Southwestern Medical Center
2013 – present	Lecturer, <i>Amino acid and Nucleotide metabolism</i> , Biochemistry (first-year medical students; Max Wynne and Rick Bruick, course directors), University of Texas – Southwestern Medical Center
2014 – 2015	Lecturer, <i>Metabolic regulation in cancer</i> , Physical Biochemistry II (Jennifer Kohler, director), University of Texas Southwestern Medical Center
2014 – present	Lecturer, Control of Metabolism by Genetics and Epigenetics; Analysis of Metabolism with Tracers; Amino Acids and Nucleotides; Inborn errors of Metabolism; Cancer Metabolism. Imaging, Metabolism and Disease (Biomedical Engineering Ph.D. students; Craig Malloy, course director), University of Texas Southwestern Medical Center

Dissertation committees (*denotes chairman)

Graduated	Lane Jaeckle Santos, PhD (Genetics and Development; Mentor: Andrew R. Zinn; graduated 2009)
	Wu Xi, PhD (Integrative Biology; Mentor: Benjamin P. Tu; graduated 2011)
	Ramon Sun, PhD (external reviewer, Australian National University, graduated 2010)
	Maria Georgiadou, Ph.D. (external reviewer, Vesalius Institute of Biology, Katholique University-Leuven, mentor: Peter Carmeliet, graduated 2012).

	Ashlee Stiles, Ph.D.* (Genetics and Development; Mentor: David W. Russell; graduated 2013)
	Ling Cai, Ph.D. (Integrative Biology; Mentor: Benjamin P. Tu; graduated 2013)
	Rebecca Roos Britt, Ph.D.* (Cancer Biology; Mentor: John D. Minna)
	Lu Zhang* (Cancer Biology; Mentor: Jerry Shay)
	Annelies Quaegebeur (external reviewer, Vesalius Institute of Biology, Katholique University-Leuven, mentor: Peter Carmeliet).
	Gaurab Chakrabarti (Integrative Biology; Mentor: David Boothman)
	Sandeep Ganji* (Radiological Sciences; Mentor: Changho Choi)
	Mariam Ashmawy (Cancer Biology; Mentor: Jerry Shay)
	Banu Eskiocak* (Cancer Biology; Mentor: Michael White)
	Pallevi Srivastva (Biology, University of Texas at Dallas; Mentor: Hyuntae Yoo)
	Mindy Lee (Integrative Biology; Mentor: Beth Levine)
	Rubina Tuladhar (Cancer Biology; Mentor: Lawrence Lum)
	Keun Woo Ryu* (Genetics and Development; Mentor: Lee Kraus)
	Chensu Wang (Bioengineering; Mentors: Michael White and Jinming Gao)
	Ebony Flowers (Genetics and Development; Mentor: Thomas Carroll)
	Xi Wu (Integrative Biology; Mentor: Benjamin P. Tu)
	Eul Hyun (Christine) Suh (Biomedical Engineering; Mentor: A. Dean Sherry)
	Paul Yenerall* (Cancer Biology; Mentors: Ralf Kittler and John Minna)
	Jin Suk Park (Cancer Biology; Mentor: Gaudenz Danuser)
	Ross Weber (external reviewer, The Rockefeller University; Mentor: Kivanc Birsoy)
	Yu-Sun Yang (Integrative Biology; Mentor: Ben Tu)
	Chase Melick (Cancer Biology; Mentor: Jenna Jewell)
	Andrew Chung (Cancer Biology; Mentor: Hao Zhu)
	Nick Lesner (Genetics, Development and Disease; Mentor: Prashant Mishra)
	Aarin Jones (Genetics, Development and Disease; Mentor: Lee Kraus)
	Simanti Das* (Genetics, Development and Disease; Mentor: John Abrams)
	Guanqiao Ding (Integrative Biology; Mentor: Joseph Hill)
	McKenzie Patrick (Cancer Biology; Mentor: Jian Xu)
	Aiden Nguyen (Cancer Biology; Mentor; Elisabeth Martinez)
	Mona Li (Cancer Biology; Mentor: John Minna)
	Eliot Blatt (Cancer Biology; Mentor: Ganesh Raj)
	Abigail Watterson* (Genetics, Development and Disease; Mentor: Peter Douglas)
	Jiwon Song (Biomedical Engineering; Mentor: Jinming Gao)
	Tyron Chang (Genetics, Development and Disease; Mentor: Dustin Hancks)
	Marc Turgeon (external reviewer: The Institute of Cancer Research, United Kingdom; Mentor: George Poulgiannis)
	Madeleine Marlar-Peavey (Genetics, Development and Disease; Mentor: Jonathan Friedman)

	Ryan Reynolds (Genetics, Development and Disease; Mentor: Joel Elmquist)
In training	
	Milan Savani (Cancer Biology; Mentor: Sam McBrayer)
	Philip Brown* (Genetics, Development and disease; Mentor: Kim Reynolds)
	Claudette Fraire (Cancer Biology; Mentor: Kenneth Chen)
	Roy Garcia (Cancer Biology; Mentor: Maralice Conacci-Sorrell)
	Dohun Kim (Cancer Biology; Mentor: Gerta Hoxhaj)
	Cameron Menezes (Genetics, Development and Disease; Mentor: Prashant Mishra)
	Jerica Tan (Northwestern University; Mentor: Navdeep Chandel)
	Ryan Reynolds (Genetics, Development and Disease; Mentor: Joel Elmquist)
	Ashley Rowe* (Genetics, Development and Disease; Mentor: Katherine Wert)
<u>Qualifying examination committees (*denotes chairman)</u>	
2010	John Avila (Genetics and Development)
2010	Alejandro d’Brot* (Genetics and Development)
2010	Amanda Ruiz (Cancer Biology)
2011	Banu Eskiocak (Cancer Biology)
2012	Wei Guo (Genetics and Development)
2012	Win-Yin Chen* (Cancer Biology)
2013	Zachary Moore (Cancer Biology)
2013	Min He* (Genetics and Development)
2013	Chensu Wang (Biomedical Engineering)
2014	Shuyuan Zhang* (Cancer Biology)
2015	Yu-Sun Yang (Cancer Biology)
2019	Sojeong Jun (Genetics, Development and Disease)
2019	Austin Moore (Cancer Biology)
2022	Amy Whitaker (Genetics, Development and Disease)
2023	Ria Mukherji (Cancer Biology)
<u>Committees concerned with medical and graduate student education</u>	
2009 - present	Education Committee, UT Southwestern Medical Genetics Residency Program
<u>Graduate student rotations</u>	
2009	Tuyen Dang

2009	John Avila
2009	Andrew Mullen
2009	Kartik Rajagopalan
2010	Caroline Tao
2011	Chen-der Lee
2011	Pei-Hsuan Chen
2011	Christopher Hensley
2012	Xiaolei Shi
2014	Quinn Barrett
2015	Tracy Rosales
2016	Divya Bezwada
2016	Robert Harris
2018	Sherwin Kelekar
2019	Collette Lavigne
2022	Margaret Brecker Cervantes
2022	Roger Liang
2023	Victoria Yan
2023	Siyu Yin
<u>Medical student rotations</u>	
2012 - present	Organized Medical Genetics Elective for medical students; trains approximately 10 UT Southwestern medical students annually
2016	Sarah Doucette
2017	Kevin Li
2019	Eric Montgomery
2019	Lauren Friedrich
2019	Jordan Franklin
<u>Graduate student trainees</u>	
2009 - 2013	Andrew R. Mullen (Genetics and Development). Recipient of UT Southwestern Genetics T32. Thesis advisor. Current position: General Metabolics, LLC
2009 – 2014	Kartik Rajagopalan (MSTP student, Cancer Biology Track). Recipient of UT Southwestern Cancer Center training grant. Thesis advisor. Current position: Pulmonary Medicine Fellow, Columbia University
2011 – 2015	Pei-Hsuan Chen (Integrative Biology). Thesis advisor. Current position: Research Scientist, Dana Farber Cancer Institute.
2011 – 2015	Christopher Hensley (MSTP student, Cancer Biology Track). Recipient of UT Southwestern Pharmacological Sciences T32. Recipient of N.C.I. Administrative Supplement to Foster Diversity. Thesis advisor. Current position: Radiology resident, University of Pennsylvania.
2011	Wu Xi (Integrative Biology). Advisor for “Bench to Bedside” rotation.

2013 – 2017	Xiaolei Shi (Cancer Biology Track), Thesis advisor. Recipient of HHMI International Student Research Fellowship. Current position: Applying for internal medicine residency programs.
2016 – 2022	Tracy Rosales (Cancer Biology). Thesis advisor. Recipient of UT Southwestern CPRIT Training Grant.
2016 – 2021	Robert Harris (MSTP student, Genetics, Development and Disease Track). Current position: Medical Student.
2018 – 2022	Sherwin Kelekar (MSTP Student)
2016 – present	Divya Bezwada (Cancer Biology Track). Thesis Advisor. Recipient of F31 Award from N.C.I.
2022 – present	Margaret Brecker Cervantes
2022 – present	Roger Liang
2024 - present	Siyu Yin
<u>Postgraduate medical education (graduate & continuing medical education)</u>	
2008 – present	<u>Mentored Medical Genetics residents:</u> Natalie Hauser, M.D. Juan Jasso, M.D. Pavel Pichurin, M.D. Garrett Gotway, M.D. Saima Kayani, M.D. James Butler, M.D. Merry Lynn Mann, M.D. Markey McNutt, M.D., Ph.D. Jennifer Graham, M.D. Sushma Guptha, M.D. James Mayberry, M.D. Tuncay Delibasi, M.D. Panayotis Pachnis, M.D., Ph.D.
2009 – 2014	Isaac Marin-Valencia, M.D. Pediatrics Neurology resident; served as one of several research mentors. Won Pediatrics Research Award in 2012. Won S. Weir Mitchell Research Award of the American Academy of Neurology in 2015. Current position
2010	Garrett Gotway, M.D., Ph.D. (Pediatrics Resident; served as mentor for research elective)
2011	Alejandro de la Torre, M.D. (Pediatric Endocrinology Fellow; served as research advisor)
2012 – 2015	Ajla Wasti, M.D. (Pediatrics Hematology-Oncology Fellow; served as research mentor)

2012 – present	Organized Medical Genetics Elective for pediatrics residents. Will train approximately 5 pediatrics residents in Medical Genetics annually
2015 – 2017	Bridget Stuart, M.D., Ph.D. (Assistant Professor of Pediatrics; Chair of Mentoring Committee)
2016 – 2020	Alan Poole, M.D., Ph.D. (Pediatrics Critical Care Fellow; served as research mentor)
2018 – 2020	Kendra Johnston, MD (Pediatrics Hematology-Oncology Fellow; served as research mentor)
2018	Cissy Yong, M.D. (Urology trainee from Cambridge, UK; served as a research mentor)
2018 – present	Yuanyuan Zhang, M.D., Ph.D. (Radiation Oncology Resident, served as a research mentor)
2021 - present	Varun Sondhi, M.D., Ph.D. (Pulmonology Fellow, served as a research mentor)
2021 – present	Walter Chen, M.D., Ph.D. (Neonatology Fellow, served as a research mentor)
2023 – present	Cicero Willis (Cardiology Fellow, served as a research mentor)
<u>Postdoctoral trainees</u>	
2009 – 2012	Tzuling Cheng, Ph.D. (Current position: Senior Scientist, IDEAYA Biosciences)
2011-2016	Lei Jiang, Ph.D. Current position: Assistant Professor, City of Hope
2011 – 2013	Hien Nguyen, Ph.D. (recipient of funding from UT Southwestern Metabolism T32); currently at University of Massachusetts Mass School of Medicine Mass Spectrometry Center
2012 – present	Jiyeon Kim, Ph.D. (recipient of American Lung Association Fellowship). Current position: Assistant Professor, University of Illinois at Chicago
2013 – 2015	Lindsey Boroughs, Ph.D. (recipient of funding from UT Southwestern NCI T32; recipient of Ruth L. Kirschstein NRSA Individual Postdoctoral Fellowship/F32). Current position: Medical Science Liaison, Bristol-Meyers Squibb
2014 – 2016	Ling Cai, Ph.D. (recipient of AACR post-doctoral fellowship). Current position: Research scientist in UT Southwestern Quantitative Biomedical Research Center (primary) and Children’s Medical Center Research Institute.
2014 – 2016	Robert Egnatchik, Ph.D. (recipient of Ruth L. Kirschstein NRSA Individual Postdoctoral Fellowship/F32). Current position: Pepsi Co.
2015 – present	Brandon Faubert, Ph.D. (recipient of fellowship from the Canadian Institutes of Health Research (CIHR). Current position: Assistant Professor, University of Chicago.
2016 – present	Ashley Solmonson, Ph.D.
2016 – present	Fang Huang, Ph.D. (visiting scientist, Huazhong University of Science and Technology, China). Current position: Associate Professor and Attending Physician, Department of Thoracic Oncology, Huazhong University of Science and Technology, China
2016 – 2017	Kristell Oizel, Ph.D. (visiting scientist, University of Nantes, France)
2017 – 2022	Akash Kumar Kaushik, Ph.D. Current position: Pfizer
2017 – present	Wen Gu, Ph.D.
2017 – present	Thomas Rogers, Ph.D. (NIH K00 Award recipient). Current position: Amgen
2018 – present	Panayotis Pachnis, Ph.D. Current position : Pediatrics Resident, UT Southwestern

2018 – present	Aparna Rao, M.D. Current position: Assistant Professor, Peter MacCallum Department of Oncology, University of Melbourne, Australia
2020 – 2023	Amy Tarangelo, Ph.D.
2020 – present	Zheng Wu, Ph.D.
2020 – present	Phong Nguyen, Ph.D.
2021 – present	Trevor Tippets, Ph.D.
2023 – present	Eliot Blatt, Ph.D.
2024 – present	Tao Dao, Ph.D.
2024 – present	Karla Cano Hernandez, Ph.D.
2024 – present	Islam Alshamleh, Ph.D.

Selected Invited Lectures

Year(s)	Title	Location
<u>International</u>		
2007	<i>The Metabolism of Cell Proliferation</i> , Molecular Systems Biology Group	University of Coimbra, Coimbra, Portugal
2007	<i>Core Metabolism in Proliferating Glioblastoma Cells</i> , Necker-Enfantes Malades	Paris, France
2010	<i>Molecular basis for the reprogramming of cancer cell metabolism</i> . International Workshop for Translational Research on Malignant Gliomas.	Naples, Italy
2010	<i>Understanding mitochondrial metabolism in tumor growth</i> . Symposium on Cancer Metabolism, University of British Columbia.	Vancouver, Canada
2010	<i>Alternative metabolic strategies for growth in glioblastoma: glucose vs. glutamine for support of cell proliferation and tumorigenesis</i> . Metabolism and Cancer Progression, Keystone Symposium.	Vancouver, Canada
2010	<i>Mitochondrial metabolism in tumor cells: forgotten, but not gone</i> . Cancer and Metabolism: Pathways to the Future Conference	Edinburgh, Scotland
2011	<i>Core metabolism in tumor cells: analytical methods and biological implications</i> . McGill University	Montreal, Canada
2012	<i>Metabolic flux analysis in cancer biology</i> . Janssen Pharmaceuticals, Cancer Metabolism Group.	Beerse, Belgium
2012	<i>Mitochondrial metabolism and tumor cell growth</i> . Cell Symposia – Angiogenesis, Metabolic Regulation and Cancer Biology.	Leuven, Belgium

2013	<i>Cancer Cell metabolism</i> . British Columbia Cancer Agency Research Seminar Series	Vancouver, Canada
2013	<i>Decoding metabolic phenotypes in cancer</i> . Vesalius Research Institute Seminar Series	Leuven, Belgium
2013	<i>Cancer cell metabolism – Basic Biology and Translational Approaches</i> . Cancer Research UK – Cambridge Institute	Cambridge, UK
2014	<i>Metabolic Versatility in Cancer Cells</i> . Keystone Symposia on <i>Tumor Metabolism and Metabolism and Angiogenesis</i>	Whistler, BC, Canada
2014	<i>Probing Tumor Metabolism in Vivo</i> . Beatson International Cancer Conference, Cancer Research UK.	Glasgow, Scotland UK.
2014	<i>Metabolic heterogeneity in cancer</i> . Bart’s Cancer Institute – Cancer Research UK Centre of Excellence, Centre for Molecular Oncology	London, UK
2014	<i>Metabolic heterogeneity in cancer cells</i> . EMBO Workshop on Translational Advances in cancer cell imaging and metabolism.	Bilbao, Spain
2015	<i>Conventional and Unconventional Roles of Mitochondrial Enzymes in Tumor Cell Metabolism</i> . Keystone Symposium on <i>Integrating Metabolism and Tumor Biology</i> .	Vancouver, B.C., Canada
2015	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . 46 th Annual Symposium of the Princess Takamatsu Cancer Research Fund: “Onco-metabolomics: A New Clue to Understand Carcinogenesis, Cancer Biology and to Develop Novel Diagnostics and Therapeutics.	Tokyo, Japan
2016	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Keystone Symposium on <i>New Frontiers in Understanding Tumor Metabolism</i> .	Banff, Alberta, Canada
2016	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Fondation IPSSEN Conference on Tumor Metabolism.	San Pedro de Atacama, Chile
2016	<i>Metabolic outliers in human disease</i> . Company of Biologists Symposium	West Sussex, UK
2016	<i>Metabolic Phenotypes and Vulnerabilities in Cancer</i> . Beatson International Cancer Conference	Glasgow, UK
2016	<i>Metabolic Phenotypes and Vulnerabilities in Cancer</i> . Transcriptional and Metabolic Reprogramming in Cancer Symposium, MaRS Discovery District	Toronto, Ontario, Canada

2016	<i>Oncogenic control of mitochondrial metabolism in cancer cells and tumors.</i> Cold Spring Harbor – Asia conference on cancer metabolism	Suzhou, China
2016	<i>Metabolic heterogeneity in cancer cells and tumors.</i> Innovation Forum, Shanghai Jiao Tong University School of Medicine	Shanghai, China
2017	<i>Heterogeneous Metabolic Phenotypes and Liabilities in Human Cancer.</i> Keystone Symposium on Tumor Metabolism – Mechanisms and Targets	Whistler, BC, Canada
2017	<i>Heterogeneous Metabolic Phenotypes and Liabilities in Human Cancer.</i> Fusion Conference on Cell Death, Stress and Metabolism.	Cancun, Mexico
2017	<i>Understanding Metabolic Phenotypes in Cancer.</i> 2nd Australian Cancer and Metabolism Meeting (Keynote Lecture)	Melbourne, Australia
2017	<i>Understanding Metabolic Phenotypes in Cancer Cells and Tumors.</i> Inaugural Immunometabolism and Chronic Disease Conference	Coral Coast, Fiji
2017	<i>Understanding Metabolic Phenotypes and Liabilities in Human Cancer.</i> 1 st Francis Crick Institute International Cancer Conference	London, UK
2017	<i>Understanding Metabolic Phenotypes in Human Cancer.</i> MRC Institute of Genetics and Molecular Medicine, University of Edinburgh	Edinburgh, UK
2018	<i>Metabolic Dysregulation in Cancer and Other Diseases.</i> Lady Davis Institute, McGill University	Montreal, Canada
2018	<i>Metabolic Reprogramming in Human Tumors In Vivo.</i> Metabolism in Cancer and Stromal Cells Conference, Vesalius Institute of Biology Conference Series	Leuven, Belgium
2018	<i>Metabolic Dysfunction and Human Disease Phenotypes.</i> 1 st Conference on Precision Nutrition and Metabolism	Chania, Crete, Greece
2019	<i>Metabolic Dysfunction and Human Diseases.</i> Sick Kids Hospital	Toronto, Canada
2019	<i>Metabolic Enablers of Cancer Progression.</i> Keystone Symposia Cancer Metastasis: The Role of Metabolism, Immunity and the Microenvironment	Florence, Italy
2019	<i>Metabolic Perturbations and Human Disease</i> Nature Conference on Cellular Metabolism	Xiamen, China
2019	<i>Metabolic Anomalies and Tissue Dysfunction in Humans,</i> Fusion Conference	Puerto Vallarta, Mexico

2019	<i>Understanding Metabolic Phenotypes in Human Tumors</i> , CIG Symposium	Lausanne, Switzerland
2019	<i>50th Princess Takamatsu International Cancer Symposium</i>	Tokyo, Japan
2020	<i>Human tumor metabolism in vivo</i> . EACR Virtual Conference on Cancer Metabolism	Virtual
2020	<i>Metabolic Perturbations in disease and development</i> . Symposium on Inter-Organ Communication in Health and Disease	Virtual
2021	<i>Metabolic Phenotypes and Cancer Progression in Humans</i> . Beatson Institute Conference	Virtual
2021	<i>Metabolic Outliers In Human Disease</i> . Metabolism Down Under Seminar Series, Charles Perkins Centre, Sydney, Australia	Virtual
2021	<i>Metabolic Outliers In Human Disease</i> . ICVS Life and Health Sciences Research Institute, Braga, Portugal	Virtual
2021	<i>Cancer Metabolism in Patients: What Can We Learn from In Vivo Analysis?</i> Cancer Immunometabolism Conference (EMBO Workshop)	Sitges, Spain
2022	<i>Metabolic Outliers in Human Disease</i> . Dutch Translational Medicine	Virtual
2022	<i>Metabolic Outliers in Human Disease</i> . EMBL Symposium on Inter-Organ Communication	Virtual
2022	<i>Mendelian anomalies in human growth and development</i> . FUSION Conference on Metabolism in Health and Disease	Cancun, Mexico
2022	<i>Metabolic phenotypes and cancer progression in humans</i> . Lake Como Cancer Meeting	Lake Como, Italy
2022	<i>Tumor Metabolism and Cancer Progression in Humans</i> . European Association for Cancer Research (EACR) Cancer Metabolism Conference.	Bilbao. Spain
2022	<i>Inborn errors of metabolism as a window into human development</i> . Developmental Metabolism and the Origins of Health and Disease COB Workshop	East Sussex, UK
2022	<i>Metabolic outliers in human disease</i> . Cell Symposia: Multifaceted Mitochondria	Seville, Spain
2023	<i>Metabolic outliers in human disease</i> . McGill Research Institute Talk	Montreal, Canada

2023	<i>Metabolic Reprogramming and Cancer Progression in Patients</i> . Medicine at the Crick Series, ISCaM2023	London, UK
2023	<i>Metabolic assessments of Mendelian diseases – diagnosis and discovery</i> . Medicine at the Crick Series.	London, UK
2024	<i>Metabolism in situ</i> . Keystone Symposia: Tumor Metabolism	Banff, Canada
<u>National</u>		
2008	<i>Regulation of cellular metabolism by manipulating signal transduction pathways: Akt and c-Myc promote an anabolic phenotype favoring cell growth</i> . Society for Inherited Metabolic Disorders	Asilomar, CA
2008	<i>Is cancer a disease of abnormal cellular metabolism?</i> Medical Genetics Grand Rounds, Harvard Medical School – Partners Center for Genetics and Genomics.	Boston, MA
2009	<i>Towards an oncogene-metabolism signaling network in cancer: a pathway to new strategies for diagnosis and treatment</i> . Genentech Cancer Metabolism Group	San Francisco, CA
2009	<i>Tumor metabolism: What should we look for and how can we see it?</i> American Association for Cancer Research Annual Meeting	Denver, CO
2009	<i>Signal transduction and the metabolism of tumor cell growth: How do the rich keep getting richer?</i> American Aging Association Annual Meeting	Scottsdale, AZ
2009	<i>Integrating signal transduction and metabolism in cancer</i> . Novartis Cancer Metabolism Group	Cambridge, MA
2009	<i>The versatility of glutamine in tumor cell growth and survival</i> . 5 th International Conference on Tumor Cell Metabolism	Louisville, KY
2009	<i>Can we exploit tumor metabolism to find and fight cancer? An old question with new legs</i> . GlaxoSmithKline Cancer Metabolism Group	Upper Providence, PA
2010	<i>The Warburg effect, the truncated TCA cycle, and other metabolic targets in tumor cells</i> . Pfizer Center for Integrative Biology and Biotherapeutics	Pearl River NY
2011	<i>The role of the mitochondria in tumor cell growth</i> . Department of Biological Chemistry, Johns Hopkins University School of Medicine	Baltimore, MD

2011	<i>Cancer metabolism: fundamental principles and therapeutic implications.</i> Metabolism and Human Disease Symposium (sponsored by Pfizer), NY Academy of Sciences	New York, NY
2011	<i>Mitochondrial metabolism in the survival and growth of cancer cells.</i> American Association for Cancer Research Annual Meeting.	Orlando, FL
2011	<i>Adventures in Tumor Metabolism: Applying principles of intermediary metabolism to tumor cell growth in vitro and in vivo.</i> Division of Genetics, The Children's Hospital of Philadelphia	Philadelphia, PA
2011	<i>Basic and translational studies in tumor cell metabolism.</i> Agios Pharmaceuticals	Cambridge, MA
2011	<i>Cancer metabolism – updates and therapeutic targets.</i> GlaxoSmithKline, Cancer Metabolism Group	Upper Providence, PA
2011	<i>The mitochondria and tumor cell growth.</i> Society for Neuro-Oncology Annual Meeting	Garden Grove CA
2011	<i>Mitochondrial metabolism and tumor cell growth.</i> Eppley Cancer Institute, University of Nebraska Medical Center	Omaha, NE
2012	<i>Metabolic Outliers in Cancer.</i> Elkin Seminar Series, Emory University	Atlanta, GA
2012	<i>Modes of mitochondrial metabolism in tumor cell growth.</i> Pfizer Oncology Research	La Jolla, CA
2012	<i>Cancer cell metabolism in culture, mice and humans.</i> University of Pennsylvania, Department of Cancer Biology	Philadelphia, PA
2012	<i>Probing cancer cell metabolism in culture and in vivo.</i> Cell Signaling Seminar Series, Washington University in St. Louis	St. Louis, MO
2012	<i>Understanding the importance of mitochondrial metabolism for cancer.</i> American Association for Cancer Research Annual Meeting.	Chicago, IL
2012	<i>The indispensability of mitochondrial metabolism in cell growth and tumorigenesis.</i> Vanderbilt Institute of Chemical Biology	Nashville, TN
2012	<i>The Versatility of Mitochondrial Metabolism in Tumor Cell Growth.</i> United Mitochondrial Disease Foundation, Mitochondrial Medicine symposium.	Bethesda, MD
2012	<i>Intermediary Metabolism and Cancer: Cell Biology and Translational Opportunities.</i>	Ithaca, NY

	Cancer Biology Seminar Miniseries. Cornell University	
2012	<i>Cancer Metabolism: Biological Insights and Translational Opportunities.</i> Van Andel Research Institute	Grand Rapids, MI
2012	<i>Analyzing Tumor Cell Metabolism In Culture and In Vivo.</i> NCI-Sponsored workshop on Metabolic Reprogramming of the Immune Response in the Tumor Microenvironment	Rockville, MD
2012	<i>Cancer Metabolism: Approaches, Insights, and Opportunities.</i> Department of Pharmacology and Cancer Biology, Duke University Medical Center	Durham, NC
2012	<i>Cancer Metabolism. Inflammation, Cancer and Metabolism.</i> Banbury Center of Cold Spring Harbor Laboratory.	Cold Spring Harbor, NY
2012	<i>Diversity of Metabolic Pathways in Cancer Cell Growth.</i> Massachusetts General Hospital Cancer Center.	Boston, MA
2013	<i>Metabolic Imaging in Cancer: What Should We Look For?</i> AACR-SNMMI Joint Conference on State-of-the-Art Molecular Imaging in Cancer Biology and Therapy.	San Diego, CA
2013	<i>Cancer Metabolism: Cell Biology and Translational Opportunities.</i> Cancer & Blood Diseases Institute, Cincinnati Children's Hospital	Cincinnati, OH
2013	<i>Cancer Metabolism: Analytical Approaches and Translational Opportunities.</i> Lewis-Sigler Institute/Princeton University	Princeton, NJ
2013	<i>Measuring metabolism in vivo.</i> Keystone Symposium on Tumor Metabolism	Keystone, CO
2013	<i>Cancer Metabolism: Cell Biology and Translational Opportunities.</i> Department of Biochemistry and Biophysics, University of Rochester.	Rochester, NY
2013	<i>Biochemical Paths to Cancer Cell Growth.</i> Department of Biochemistry Seminar Series, University of Utah.	Salt Lake City, UT
2013	<i>The Krebs Cycle and Tumor Growth.</i> American Association for Cancer Research Annual Meeting.	Washington, DC
2013	<i>Metabolic Pathway Analysis in Cancer.</i> American Society for Biochemistry and	Boston, MA

	Molecular Biology/Experimental Biology, Annual Meeting.	
2013	<i>Metabolic Complexity in Cancer Cells and Tumors.</i> Children's Hospital Boston, Department of Pediatrics Hematology/Oncology Seminar Series	Boston, MA
2013	<i>Mitochondrial metabolism in cancer.</i> FASEB conference on Mitochondrial Biogenesis and Dynamics in Health, Disease and Aging.	Big Sky, MT
2013	<i>Metabolomics and Metabolic Flux Analysis.</i> 54 th Annual Short Course on Medical and Experimental Mammalian Genetics	Bar Harbor, ME
2013	<i>Systematic analysis of cancer metabolism in culture and in vivo.</i> Department of Genetics and Complex Diseases, Harvard School of Public Health	Boston, MA
2013	<i>Metabolomics of cancer cell lines and tumors.</i> Metabolomics Summit, Agios Pharmaceuticals, Inc.	Cambridge, MA
2013	<i>Cancer Metabolism: Cell Biology and Translational Opportunities.</i> Center for Childhood Cancer Research, Children's Hospital of Philadelphia	Philadelphia, PA
2014	<i>Understanding metabolic heterogeneity in cancer.</i> American Association for Cancer Research Annual Meeting	San Diego, CA
2014	<i>Metabolic Versatility in Cancer Cells.</i> Memorial Sloan-Kettering Cancer Center	New York, NY
2014	<i>Understanding metabolic heterogeneity in cancer.</i> Southern Illinois University	Marion, IL
2014	<i>Understanding metabolic heterogeneity in cancer.</i> Koch Institute for Integrative Cancer Research, Massachusetts Institute of Technology	Cambridge, MA
2014	<i>Metabolic Outliers in Human Disease,</i> University of Pennsylvania Combined-Degree Program	Philadelphia, PA
2014	<i>Metabolic Heterogeneity in Cancer Cells,</i> Stable Isotope Resolved Metabolomics Symposium	Lexington, KY
2014	<i>Metabolic Versatility in Cancer,</i> BMC Symposium on Metabolism, Diet and Disease	Washington, DC
2014	<i>Metabolomics and Metabolic Flux Analysis.</i> 55 th Annual Short Course on Medical and Experimental Mammalian Genetics	Bar Harbor, ME

2014	<i>Using stable isotopes to analyze metabolic reprogramming in cancer</i> , International Council on Magnetic Resonance in Biological Systems, Annual Meeting	Dallas, TX
2014	<i>Cancer Metabolism – Cell Biology and Translational Opportunities</i> . University of Pennsylvania, Department of Pharmacology	Philadelphia, PA
2014	<i>Metabolic Heterogeneity in Cancer</i> . St. Jude Research Hospital, Annual Biomedical Science Symposium.	Memphis, TN
2014	<i>Metabolic Heterogeneity in Cancer</i> . University of California at Berkeley, Department of Nutrition and Toxicology.	Berkeley, CA
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Yale University	New Haven, CT
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . AACR, Society for Nuclear Medicine and Molecular Imaging, National Meeting	San Diego, CA
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Institute for Cancer Genetics, Columbia University	New York, NY
2015	<i>Decoding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Abramson Family Cancer Research Institute at the University of Pennsylvania	Philadelphia, PA
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . American Association for Cancer Research, Annual Meeting	Philadelphia, PA
2015	<i>Approaches to understanding tumor metabolism</i> . SUNY Stony Brook Cancer Center	Stony Brook, NY
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Department of Pharmacology, Weill Cornell School of Medicine	New York, NY
2015	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . AACR Special Conference on Cancer Metabolism	Bellevue, WA
2015	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Salk Institute	La Jolla, CA
2015	<i>Metabolomics and Metabolic Flux Analysis</i> . 56 th Annual Short Course on Medical and Experimental Mammalian Genetics. Jackson Laboratory	Bar Harbor, ME

2015	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Metabolic Signaling & Disease: From Cell to Organism. Cold Spring Harbor Symposium	Cold Spring Harbor, NY
2015	<i>Metabolomics and Metabolic Flux Analysis</i> . 24 th Annual Short Course on Experimental Models of Human Cancer. Jackson Laboratory	Bar Harbor, ME
2015	<i>Metabolic Heterogeneity in Cancer</i> . Banbury Conference on Tumor Cell Metabolism.	Cold Spring Harbor, NY
2016	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Cancer Biology Training Program, University of Colorado Denver – Anschutz Medical Campus	Aurora, CO
2016	<i>Understanding Metabolic Phenotypes in Cancer Cells and Tumors</i> . Stanford University	Stanford, CA
2016	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Cancer Center Seminar Series, Case Western Reserve University	Cleveland, OH
2016	<i>Cancer Metabolism</i> , International VHL Symposium	Boston, MA
2016	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . American Association for Cancer Research, Annual Meeting	New Orleans, LA
2016	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Department of Biochemistry and Molecular Genetics Seminar Series, University of Illinois-Chicago	Chicago, IL
2016	<i>Shared Themes of Metabolic Regulation</i> . American Diabetes Association, National Meeting	New Orleans, LA
2016	<i>Analyzing cancer metabolism in vivo</i> . Cold Spring Harbor Laboratories, Course on Metabolomics	Cold Spring Harbor, NY
2016	<i>Metabolomics and Metabolic Flux Analysis</i> . 57 th Annual Short Course on Medical and Experimental Mammalian Genetics	Bar Harbor, ME
2016	<i>Oncogenic Control of Mitochondrial Metabolism in Cancer Cells and Tumors</i> . The PI3K-mTOR-PTEN Network in Health and Disease Symposium.	Cold Spring Harbor, NY
2016	<i>Cancer Metabolism</i> . Forbeck Scholars' Retreat	Lake Geneva, WI
2016	<i>Establishing metabolic phenotypes and liabilities in cancer</i> . University of Michigan, Cancer Biology Graduate Program	Ann Arbor, MI

2017	<i>The role of metabolic reprogramming in understanding and treating cancer.</i> Pediatric Grand Rounds, The Children's Hospital of Philadelphia	Philadelphia, PA
2017	<i>Understanding metabolic phenotypes and liabilities in cancer cells and tumors.</i> University of Washington Department of Biochemistry Seminar Series.	Seattle, WA
2017	<i>Metabolic Phenotypes and Liabilities in Human Lung Cancer.</i> H Foundation Basic Science Symposium, Northwestern University	Chicago, IL
2017	<i>Metabolic Phenotypes and Liabilities in Human Lung Cancer.</i> Washington University in St. Louis	St. Louis, MO
2017	<i>Metabolic Phenotypes and Liabilities in Cancer.</i> Targeting Cancer Metabolism and Signaling, New York Academy of Sciences	New York, NY
2017	<i>Genetically-encoded metabolic alterations in human disease.</i> Metabolomics Course, Cold Spring Harbor Laboratories	Cold Spring Harbor, NY
2017	<i>Metabolic phenotypes and liabilities in human cancer.</i> National Cancer Institute, National Institutes of Health	Bethesda, MD
2017	<i>Metabolic phenotypes and liabilities in human cancer.</i> FASEB Conference on Glucose Transporters	Snowmass, CO
2017	<i>Metabolomics and Metabolic Flux Analysis.</i> 58 th Annual Short Course on Medical and Experimental Mammalian Genetics	Bar Harbor, ME
2017	<i>Understanding metabolic phenotypes and liabilities in human cancer.</i> Frontiers in Cancer Prevention, Research and Therapy symposium. Huntsman Cancer Institute, University of Utah	Salt Lake City, UT
2017	<i>Heterogeneity of metabolic phenotypes and liabilities in human cancer.</i> AGBT Precision Health Conference.	Scottsdale, AZ
2017	<i>Assessing Tumor Metabolism in Vivo.</i> MD Anderson Cancer Center Symposium on Cancer Research.	Houston, TX
2017	<i>Understanding metabolic phenotypes in human cancer.</i> American Society of Human Genetics Annual Meeting	Orlando, FL
2018	<i>Metabolic Complexity in Cancer Cells and Tumors.</i> Keystone Symposium on Cancer Metabolism	Snowbird, UT

2018	<i>Understanding Metabolic Phenotypes in Human Cancer</i> . 14 th Annual UCLA Stem Cell Symposium	Los Angeles, CA
2018	<i>Metabolic Heterogeneity and Liabilities in Cancer</i> . University of California – San Francisco	San Francisco, CA
2018	<i>Metabolic Heterogeneity in Human Cancer</i> . 2 nd Pediatric Precision Oncology Conference	Scottsdale, AZ
2018	<i>Human Tumor Metabolism In Vivo</i> , 4 th Sanford-Burnham-Prebys Medical Discovery Institute Cancer Metabolism Symposium	La Jolla, CA
2018	<i>Metabolic Complexity in Cancer Cells and Tumors</i> . Cold Spring Harbor Labs, Cancer Mechanisms and Models Conference	Cold Spring Harbor, NY
2018	<i>Metabolic Reprogramming in Human Tumors In Vivo</i> . 30 th Anniversary AACR Special Conference Convergence: Artificial Intelligence, Big Data and Prediction in Cancer	Newport, RI
2018	<i>Keynote Lecture: “Metabolic Dysfunction and Human Disease Phenotypes”</i> Cell Symposia: Metabolites as Signaling Molecule	Seattle, WA
2019	<i>Metabolic Outliers in Cancer and Other Human Diseases</i> . Gordon Conference on Metabolomics in Human Health and Disease	Ventura, CA
2019	<i>Metabolic Perturbations and Human Disease</i> . Keystone Symposia Conference Tumor Metabolism	Keystone, CO
2019	<i>Metabolic Complexity in Cancer Cells and Tumors</i> . 2 nd Nature MSKCC Conference “The Tumor Cell Plasticity, Progression and Therapy.”	New York, NY
2019	<i>Analyzing tumor metabolism in patients</i> . AACR Annual Meeting	Atlanta, GA
2019	Department of Laboratory Medicine and Pathology Grand Rounds Seminar	Minneapolis, MN
2019	<i>Metabolic Reprogramming in Human Tumors in Vivo</i> . ASPHO Conference	New Orleans, LA
2019	<i>Metabolic Dysregulation and Human Disease Phenotypes</i> . NYAS Cancer Metabolism and Signaling	New York, NY

2019	<i>Mitochondria and Cancer Metabolism</i> . CSHL Mechanisms of Metabolic Signaling	Cold Spring Harbor, NY
2019	<i>Metabolic dysfunction in human diseases</i> . Van Andel Symposium	Grand Rapids, MI
2019	<i>Metabolomics and Human Disease</i> . Human and Mammalian Genetics and Genomics: The 60th McKusick Short Course	Bar Harbor, ME
2019	<i>Metabolic Dysregulation and Human Disease Phenotypes</i> . Frontier in Metabolism Mechanisms of Metabolic Disease	Madison, WI
2019	<i>Using stable isotopes to identify and understand metabolic phenotypes in human cancer</i> . Biology of Cancer: Microenvironment and Metastasis	Cold Spring Harbor, NY
2019	<i>The impact of metabolic dysfunction in human diseases</i> . University of Chicago's Committee- Cancer Biology Seminar Series	Chicago, IL
2020	<i>Metabolomics in the Assessment of Human Diseases</i> . Human and Mammalian Genetics and Genomics: The 61st McKusick Short Course	Bar Harbor, ME
2020	<i>Metabolic phenotypes and cancer progression in humans</i> . Mechanisms & Models of Cancer	Cold Spring Harbor, NY
2020	<i>Metabolic phenotypes and liabilities in human cancer</i> . Cancer Institute of New Jersey	New Brunswick, NJ
2020	<i>Metabolic phenotypes and cancer progression in humans</i> . St. Jude Cancer Biology Program	Memphis, TN
2020	<i>Metabolic phenotypes and liabilities in human cancer</i> . AACR Meeting on Cancer Epigenetics and Metabolism	Philadelphia, PA
2020	<i>Metabolic phenotypes and cancer progression in humans</i> . Beth Israel Deaconess Medical Center	Boston, MA
2020	<i>Metabolic phenotypes and liabilities in human cancer</i> . Indiana University Cancer Center Grand Rounds	Indianapolis, IN
2020	<i>Metabolic phenotypes and cancer progression in humans</i> . University of Illinois – Chicago Costa Symposium	Chicago, IL

2020	<i>Metabolic phenotypes and cancer progression in humans.</i> University of Massachusetts Molecular, Cell and Cancer Biology	Worcester, MA
2020	<i>Metabolic phenotypes and liabilities in human cancer.</i> University of Kentucky's Markey Cancer Center Research Seminar	Lexington, KY
2020	<i>Metabolic phenotypes and liabilities in human cancer.</i> Boston Children's Department of Pathology Seminar	Boston, MA
2020	<i>Metabolic phenotypes and liabilities in human cancer.</i> Third Rock Ventures	Boston, MA
2020	<i>Metabolic phenotypes and liabilities in human cancer.</i> Winship Cancer Institute at Emory University	Druid Hills, GA
2020	<i>Metabolic Reprogramming in Human Cancer: Insights into Mechanisms and Opportunities for New Therapies.</i> 2020 AACC Annual Scientific Meeting & Clinical Lab Expo	Fairfax, VA
2021	<i>Metabolic phenotypes and liabilities in human disease.</i> Pediatric Heme/Onc Research Seminar series - Boston Children's	Boston, MA
2021	<i>Compartmentalized Metabolism in Physiological States of Growth.</i> Keystone Symposia on Tumor Metabolism and the Microenvironment	Breckenridge, CO
2021	<i>Metabolic Reprogramming in Human Tumors In Vivo.</i> Sidney Kimmel Cancer Center at Thomas Jefferson University Grand Rounds	Philadelphia, PA
2021	<i>Metabolic perturbations and their role in human disease.</i> Stanford University Frontiers in Biology Seminar Series	Stanford, CA
2021	<i>Metabolic Transitions and Anomalies in Development.</i> Keystone Symposia on Metabolic Decisions in Development and Disease	Santa Fe, NM
2021	<i>Assessing cancer metabolism in human tumors in vivo.</i> ASCI/AAP Disrupting the Science of Medicine	Chicago IL

2021	<i>Understanding Metabolism to Treat Human Disease.</i> Pfizer Frontiers in Human Disease Symposium 2021	Virtual
2021	<i>Metabolomics.</i> McKusick Short Course on Human and Mammalian Genetics and Genomics. Jackson Laboratories.	Virtual
2021	<i>The Developmental Consequences of Metabolic Defects.</i> Integrating Nutrition and Metabolism Across Scales, HHMI/Janelia Conference	Virtual
2021	<i>Metabolic Outliers In Human Disease.</i> Cincinnati Children's Hospital	Virtual
2021	<i>Guanosine Triphosphate Links MYC-dependent Metabolic and Ribosome Programs in Small-cell Lung Cancer.</i> IASLC 2021 Hot Topic Meeting: Small Cell Lung Cancer	Virtual
2021	<i>Metabolic Reprogramming in Human Disease.</i> Cold Spring Harbor Laboratories Seminar Series	Virtual
2021	<i>Metabolic reprogramming in human disease.</i> University of Pittsburgh Medical Center-Hillman Cancer Center Basic & Translational Research Seminar	Virtual
2022	<i>Human Metabolic Outliers.</i> Agios- Genetically Defined Diseases Learning Series	Virtual
2022	<i>Metabolic reprogramming in human cancer.</i> Georgetown-Lombardi Oncology Grand Rounds	Virtual
2022	<i>Human tumor metabolism & cancer progression.</i> Forbeck Forum: Diet and Metabolic Therapeutics in Cancer- Towards a Molecular Understanding	Pacific Grove, CA
2022	<i>Human Metabolic Outliers.</i> The Science of Childhood Cancer Lecture Series; St. Jude	Virtual
2022	<i>Metabolic reprogramming in cancer and other diseases.</i> Paul Marks Prize Symposium	New York City, NY
2022	<i>Metabolic outliers in human disease: deep metabolic phenotyping in mendelian diseases.</i> University of Rochester Grand Rounds	Virtual
2022	<i>Metabolic Outliers in Human Disease.</i> American Society of Biochemistry and Molecular Biology	Philadelphia, PA
2022	<i>Metabolic Outliers in Human Disease: deep metabolic phenotyping in Mendelian Disorders.</i> Northwestern University, David W. Cugell Honorary Lectureship, Internal Medicine Grand Rounds	Virtual

2022	<i>Metabolic Phenotypes and Liabilities in Human Cancer</i> . University of Alabama – Birmingham, O’Neal Research Seminar	Virtual
2022	<i>Metabolic Outliers in Human Disease: deep metabolic phenotyping in Mendelian Disorders</i> . Children’s Hospital of Philadelphia, Michael Palmieri Lectureship in Metabolism, Pediatrics Grand Rounds	Philadelphia, PA
2022	<i>Metabolic phenotypes and cancer progression in humans</i> . Academy of Kidney Cancer Investigators	Virtual
2022	<i>Metabolic Phenotypes and Liabilities in Human Cancer</i> . Susan Swerling Lecture, Dana Farber Cancer Institute	Virtual
2022	<i>Metabolic Phenotypes and Liabilities in Human Cancer</i> . Weill-Cornell Cancer Metabolism and Inflammation Symposium	New York, NY
2022	<i>Application of cancer metabolism studies to lung cancer</i> . Hawaii Lung Cancer Summit, 2022 RET Summit	Kona, HI
2022	<i>Metabolomics and Disease Phenotypes</i> . Human and Mammalian Genetics and Genomics: The 63 rd McKusick Short Course	Bar Harbor, ME
2022	<i>Metabolic Dependencies in Tumors in Humans</i> . Tumor Metabolism by Keystone Symposia on Molecular and Cellular Biology	Keystone, CO
2022	<i>Metabolic Outliers in Human Disease</i> . ICG Seminar Series	New York, NY
2022	<i>Metabolic Phenotypes and Liabilities in Human Cancer</i> . World Molecular Imaging Congress	Miami, FL
2022	<i>Metabolic outliers in human disease</i> . Kazazian Memorial, Department of Genetic Medicine Symposium	Baltimore, MD
2022	<i>Metabolic outliers in human diseases</i> . Department of Molecular Metabolism Distinguished Lecture Series, Public Health Seminar at Harvard	Boston, MA
2023	<i>Metabolic perturbation in human disease</i> . UCLA CTSI Speaker Series	Los Angeles, CA
2023	<i>Metabolic Perturbation and Its Role in Human Disease</i> . TransMed Symposium at UNC	Chapel Hill, NC
2023	<i>Metabolomics & Human Diseases</i> . The 64 th McKusick Short Course.	Bar Harbor, ME

2023	<i>Metabolic Outliers & Human Disease.</i> Cedars-Sinai Seminar	Los Angeles, CA
2023	<i>Metabolic Reprogramming and Cancer Progression in Patients.</i> Cancer Mechanisms and Models at Salk Institute	La Jolla, CA
2023	<i>Metabolic Reprogramming and Human Cancer Progression.</i> MSK Cell Biology Seminar	New York, NY
2023	<i>Metabolic Reprogramming in Cancer and Other Diseases.</i> Biochemistry and Molecular Pharmacology Seminar	New York, NY
2023	<i>Metabolism and Cancer Progression in Patients.</i> Molecular Mechanisms of Lung Disease Conference	Chicago, IL
2023	<i>Metabolic Reprogramming and Cancer Progression in Patients.</i> AACR Brain Cancer Special Conference	Minneapolis, MN
2023	<i>Metabolic Outliers and Human Disease.</i> Rosewell Park Comprehensive Cancer Center	Buffalo, NY
2024	<i>Metabolic Reprogramming and Cancer Progression in Patients.</i> OU Department of Oncology Science Seminar Series	Oklahoma City, OK
2024	<i>Overarching Perspectives on Metabolism.</i> Miami Symposium on Human Metabolism	Miami, FL
2024	<i>Metabolic Dysfunction and its Impact on Human Diseases.</i> Biochemistry Seminar Series, University of Wisconsin	Madison, WI
2024	<i>Metabolic Outliers and Human Disease.</i> 5 th Simpson-Querrey Institute for Epigenetics Symposium, Northwestern University	Chicago, IL
2024	<i>Metabolic variation and human diseases.</i> Duke University Seminar Series	Durham, NC
2024	<i>Tumor Metabolism and Cancer Progression in Patients.</i> 2024 Molecular Therapeutics MTx, UC Berkeley	Berkeley, CA
2024	<i>Metabolic Outliers in Human Disease.</i> Genetech Lecture	San Francisco, CA
2024	<i>Metabolic Outliers and Human Disease.</i> Seminar at University of Florida, College of Medicine	Gainesville, FL
<u>Regional/Local</u>		
2008	<i>Brick by Brick: Metabolism, Signal Transduction and Tumor Cell Growth.</i> Harold C. Simmons Comprehensive Cancer Center Scientific Retreat	Dallas, TX

2009	<i>The Texas Newborn Screening Program. The 41st Annual Kenneth C. Haltalin Pediatrics for the Practitioner Seminar</i>	Dallas, TX
2009	<i>Tumor metabolism in the 21st Century: new opportunities for imaging and therapy in cancer.</i> University of Texas – Southwestern Medical Center School of Medicine, Pediatrics Grand Rounds	Dallas, TX
2010	<i>Cancer therapy based on integrated understanding of cancer genetics and metabolism.</i> UT Southwestern Medical Center Advanced Imaging research Center, Symposium and Training XVIII: Intermediary Metabolism and Cancer	Dallas, TX
2010	<i>Multidisciplinary studies in tumor metabolism: Metabolic targets in glioblastoma.</i> CPRIT Innovations Conference.	Austin, TX
2011	<i>Methods and mechanisms in tumor cell metabolism: what should we look for and how can we see it?</i> Department of Systems Biology, M.D. Anderson Cancer Center	Houston, TX
2011	<i>Fueling the fire in cancer: how tumors cells grow and survive stress.</i> Texas Genetics Society.	Dallas, TX
2011	<i>Metabolic mechanisms of tumor cell growth: when good pathways go bad.</i> First Annual Postdoctoral Science Symposium, MD Anderson Cancer Center.	Houston, TX
2011	<i>A novel pathway of glutamine metabolism fuels growth in cancer cells with defective mitochondria.</i> CPRIT Innovations Conference	Austin, TX
2012	<i>Tumor metabolism: Methods and Pathways.</i> Peloton Therapeutics, Inc	Dallas, TX
2012	<i>Basic and Translational Studies in Cancer Cell Metabolism.</i> Baylor Medical Center, Institute for Metabolic Disease	Dallas, TX
2012	<i>Cancer Metabolism.</i> Keynote address for Graduate Student Organization poster competition, UT Southwestern.	Dallas, TX
2012	<i>Metabolic flux in cancer cells and tumors.</i> CPRIT Innovations Conference	Austin, TX
2012	<i>Cancer Metabolism.</i> American Physician-Scientist Association South Regional Meeting.	Dallas, TX

2012	<i>Cancer Metabolism – New Insights from Basic and Translational Studies.</i> Pediatrics Grand Rounds, M.D. Anderson Cancer Center.	Houston, TX
2012	<i>Cancer Cell Metabolism – Basic and Translational Studies.</i> University of Texas – Health Sciences Center at San Antonio	San Antonio, TX
2013	<i>Cancer, Stem Cells and Metabolism.</i> Texas Association of Advisors to the Health Professions, annual meeting	Dallas, TX
2013	<i>Cancer Metabolism – Insights and Opportunities.</i> Endocrinology Grand Rounds, UT Southwestern Medical Center	Dallas, TX
2013	<i>Cancer Metabolism – Biological Insights and Translational Opportunities.</i> Texas A&M, Department of Biochemistry and Biophysics	College Station, TX
2013	<i>Cancer and Metabolism,</i> University of North Texas – Health Science Center, Molecular Biology Current Topic Seminars	Fort Worth, TX
2014	<i>Decoding Metabolic Phenotypes in Cancer,</i> James T. Willerson MD Cardiovascular Lecture, UT Houston	Houston, TX
2014	<i>Metabolic Heterogeneity in Cancer,</i> Keynote lecture, “Metabolism in Cancer” Symposium, Department of Cancer Systems Imaging, M.D. Anderson Cancer Center	Houston, TX
2014	<i>Cancer Metabolism: Basic Biology and Translational Opportunities.</i> Department of Nutritional Sciences	Austin, TX
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors.</i> Baylor University, Department of Chemistry	Waco, TX
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors.</i> Medical Scientist Training Program, UT Health Sciences Center at San Antonio	San Antonio, TX
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors.</i> Department of Biochemistry and Cell Biology, Texas Tech University	Lubbock, TX
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors.</i> Blaffer Lecture, University of Texas MD Anderson Cancer Center	Houston, TX
2015	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors.</i> Molecular and	Houston, TX

	Cellular Biology Seminar Series, Baylor College of Medicine	
2016	<i>Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Department of Biology, Southern Methodist University	Dallas, TX
2016	<i>Understanding Metabolic Heterogeneity in Cancer Cells and Tumors</i> . Department of Experimental Therapeutics, University of Texas MD Anderson Cancer Center	Houston, TX
2016	<i>Metabolic phenotypes and vulnerabilities in cancer</i> . Proteomics and Metabolomics Program, University of Texas MD Anderson Cancer Center	Houston, TX
2017	<i>The role of metabolic reprogramming in understanding and treating cancer</i> . Pediatric Grand Rounds, UT Southwestern	Dallas, TX
2019	<i>Metabolic Dysfunction and Human Disease Phenotypes</i> . University Lecture Series, UT Southwestern	Dallas, TX
2019	<i>Metabolism and human disease phenotypes</i> . Baylor College of Medicine	Houston, TX
2019	<i>Metabolic Heterogeneity and Liabilities in Lung Cancer</i> American Thoracic Society Conference	Dallas, TX
2019	<i>Metabolic Phenotypes and Liabilities in Human Cancer</i> . Greehey Distinguished Lecture	San Antonio, TX
2019	<i>Metabolic dysfunction and human diseases</i> . TAMU Genetics Talk	College Station, TX
2020	<i>Finding and Fixing Metabolic Defects in Human Disease</i> . President's Lecture, UT Southwestern	Dallas, TX
2021	<i>Metabolic Anomalies in Human Cancer and Other Diseases</i> . Regenerative Medicine Virtual Seminar Series, UT Southwestern	Virtual
2021	<i>Metabolic Outliers: What Do They Teach Us About Human Development and Disease?</i> Hamon Center Conference, UT Southwestern	Virtual
2022	<i>The role of metabolic reprogramming in human cancer and monogenic diseases</i> . University of Texas, Austin- Department of Nutritional Sciences Graduate Student Association Seminar	Austin, TX
2023	<i>Metabolic reprogramming and kidney cancer progression</i> . American Association for Cancer Research Special Conference: Advances in Kidney Cancer Research	Austin, TX

Technological and Other Scientific Innovations

Innovation
Patent, if any, pending or awarded /If described in print/on web, provide citation
Kazazian HH Jr, Ostertag EM and <u>DeBerardinis RJ</u> . Compositions and Methods of Use of Mammalian Retrotransposons. U.S. Patent Application No. 10/216,122. Filed 9/02.

Service to the Community

Year(s)	Role	Organization or institution
2008 - present	Working committee on Texas Newborn Screening Program	Texas Department of Health
2012	Faculty member for panel discussion on advanced diagnostic techniques in genetics	Texas Department of Health

Bibliography

Peer-Reviewed Publications

From Google Scholar: Over 73,000 total citations; h-index 110

Original Research Articles

1.	Mallow EB, Harris A, Salzman N, Russell JP, <u>DeBerardinis RJ</u> , Ruchelli E and Bevins CL. Human enteric defensins: gene structure and developmental expression. <i>J Biol Chem</i> 271, 4038-4045 (1996). PMID 8626737.
2.	Moran JV, Holmes SE, Naas TP, <u>DeBerardinis RJ</u> , Boeke JD and Kazazian HH. High frequency retrotransposition in cultured mammalian cells. <i>Cell</i> 87, 917-927 (1996). PMID 8945518.
3.	Sassaman DM, Dombroski BA, Moran JV, Kimberland ML, Naas TP, <u>DeBerardinis RJ</u> , Gabriel A, Swergold GD and Kazazian HH. Many human L1s are capable of retrotransposition. <i>Nature Genetics</i> 16, 37-43 (1997). PMID 9140393.
4.	*Naas TP, * <u>DeBerardinis RJ</u> , Moran JV, Ostertag EM, Kingsmore SF, Seldin MF, Hayashizaki Y, Martin SL and Kazazian HH. An actively-retrotransposing, novel subfamily of mouse L1 elements. <i>EMBO J</i> 17, 590-597 (1998). PMID 9430649 PMC 1170408.
5.	<u>DeBerardinis RJ</u> and Kazazian HH. Full-length L1 elements have retrotransposed into the same 1 kb region of the human and gorilla genomes. <i>J Mol. Evol.</i> 47, 292-301 (1998). PMID 9732456.
6.	<u>DeBerardinis RJ</u> , Goodier JL, Ostertag EM and Kazazian HH. Rapid amplification of a retrotransposon subfamily is evolving the mouse genome. <i>Nature Genetics</i> 20, 288-290 (1998). PMID 9086550.
7.	Moran JV, <u>DeBerardinis RJ</u> and Kazazian HH. Exon shuffling by L1 retrotransposition. <i>Science</i> 283, 1530-1534 (1999). PMID 10066175.

8.	<u>DeBerardinis RJ</u> and Kazazian HH. Analysis of the promoter from an expanding mouse retrotransposon subfamily. <i>Genomics</i> 56, 317-323 (1999). PMID 10087199
9.	Ostertag EM, Prak ET, <u>DeBerardinis RJ</u> , Moran JV and Kazazian HH. Determination of L1 retrotransposition kinetics in cultured cells. <i>Nucleic Acids Res</i> 28, 1418-1423 (2000). PMID 10684937 PMC 111040.
10.	Ostertag EM, <u>DeBerardinis RJ</u> , Goodier JL, Zhang Y, Yang N, Gerton GL and Kazazian HH Jr. A mouse model of human L1 retrotransposition. <i>Nature Genetics</i> 32, 655-60 (2002). PMID 12415270.
11.	Buzzai M, Bauer DE, Jones RG, <u>DeBerardinis RJ</u> , Hatzivassiliou G, Elstrom RL and Thompson CB. The glucose dependence of Akt-transformed cells can be reversed by pharmacologic activation of fatty acid beta-oxidation. <i>Oncogene</i> 24:4165-4173 (2005). PMID 15806154.
12.	<u>DeBerardinis RJ</u> , Lum JJ and Thompson CB. Phosphatidylinositol 3-kinase-dependent modulation of CPT1A expression plays a critical role in regulating lipid metabolism during cell growth. <i>J. Biol. Chem.</i> 281:37372-37380 (2006). PMID 17030509.
13.	Lum JJ, Bui T, Covello KL, <u>DeBerardinis RJ</u> , Simon MC and Thompson CB. The transcription factor HIF-1 α plays a critical role in growth factor-dependent regulation of both aerobic and anaerobic glycolysis. <i>Genes Dev</i> 21:1037-1049 (2007). PMID 17437992 PMC 1855230.
14.	Buzzai M, Jones RG, Amaravadi R, Lum JJ, <u>DeBerardinis RJ</u> and Thompson CB. Systemic treatment with the antidiabetic drug metformin selectively impairs p53-deficient tumor cell growth in vivo. <i>Cancer Research</i> 67:6745-6752 (2007). PMID 17638885.
15.	<u>DeBerardinis RJ</u> , Mancuso A, Daikhin E, Nissim I, Yudkoff M, Wehrli S and Thompson CB. Beyond aerobic glycolysis: Transformed cells can engage in glutamine metabolism that exceeds the requirement for protein and nucleotide synthesis. <i>PNAS USA</i> 104:19345-19350 (2007). PMID 18032601 PMC 2148292.
16.	<u>DeBerardinis RJ</u> , Coughlin CR 2nd and Kaplan P. Penicillamine therapy in pediatric cystinuria: experience from a cohort of American children. <i>J Urol</i> 180:2620-2623 (2008). PMID 18951580 PMC 2762344.
17.	Wise DR, <u>DeBerardinis RJ</u> , Mancuso A, Sayed N, Zhang X-Y, Pfeiffer HK, Nissim I, Daikhin E, Yudkoff M, McMahon SB and Thompson CB. Myc regulates a transcriptional program that stimulates mitochondrial glutaminolysis and leads to glutamine addiction. <i>PNAS USA</i> 105:18782-18787 (2008). PMID 19033189 PMC 2596212.
18.	Yang C, Sudderth J, Dang T, Bachoo RG, McDonald JG and <u>DeBerardinis RJ</u> . Glioblastoma cells require glutamate dehydrogenase to survive impairments of glucose metabolism or Akt signaling. <i>Cancer Research</i> 69: 7986-7993 (2009). PMID 19826036 PMC 2764330.
19.	Krawczyk CM, Jones RG, Sun J, Holowka T, Jung E, <u>DeBerardinis RJ</u> , Cross JR, Thompson CB and Pearce EJ. Toll-like receptor induced changes in glycolytic metabolism regulate dendritic cell activation. <i>Blood</i> 115: 4742-4749 (2010). PMID 20351312 PMC 2890190.
20.	Simsek T, Kocabas F, Zheng J, <u>DeBerardinis RJ</u> , Mahmoud AI, Olson EN, Schneider JW, Zhang CC and Sadek HA. The distinct metabolic profile of hematopoietic stem cells reflects their location in a hypoxic niche. <i>Cell Stem Cell</i> 7:380-390 (2010). PMID 20804973 PMC 4159713
21.	Rakheja D, Mitui M, Boriack RL, <u>DeBerardinis RJ</u> . Isocitrate dehydrogenase 1/2 mutational analyses and 2-hydroxyglutarate measurements in Wilms tumors. <i>Pediatric Blood & Cancer</i> 56:379-383 (2011). PMID 21225914.

22.	Yamasaki T, Tran TA, Oz O, Raj G, Schwarz RE, <u>DeBerardinis RJ</u> , Zhang X and Brugarolas J. Exploring a Glycolysis Inhibitor for the Treatment of a Tumor Deficient for a TCA Cycle Enzyme. <i>Nature Rev Urol</i> 8, 165-171 (2011). PMID 21304509 PMC 3055922.
23.	Kucejova B, Sunny N, Nguyen A, Hallac R, Fu X, Pena-Llopis S, Mason RP, <u>DeBerardinis R</u> , Xie X-J, DeBose-Boyd R, Kodibagkar V, Burgess S and Brugarolas J. Uncoupling oxygen sensing from hypoxia signaling in the liver results in hypoketotic hypoglycemic death. <i>Oncogene</i> 30:2147-60 (2011). PMID 21217781 PMC 3135264.
24.	Cheng T, Sudderth J, Yang C, Mullen AR, Jin ES and <u>DeBerardinis RJ</u> . Pyruvate carboxylase catalyzes an alternative metabolic strategy allowing tumor cells to escape glutamine dependence. <i>PNAS USA</i> 108: 8674-8679 (2011). PMID 21555572 PMC 3102381.
25.	Choi C, Ganji SK, <u>DeBerardinis RJ</u> , Dimitrov IE, Pascual JM, Bachoo R, Malloy CR, Mickey BE and Maher EA. Measurement of glycine in the human brain in vivo by 1H-MRS at 3T: Application in brain tumors. <i>Magn Reson Med</i> 66:609-618 (2011). PMID 21394775 PMC 3139742.
26.	Frezza C, Zheng L, Folger O, Rajagopalan KN, MacKenzie ED, Jerby, L, Micaroni M, Chaneton B, Hedley A, Kalna G, Pollard PJ, Tomlinson IPM, Watson, DG, <u>DeBerardinis RJ</u> , Shlomi T, Ruppin E and Gottlieb E. Haem oxygenase is synthetically lethal with the mitochondrial tumor suppressor fumarate hydratase. <i>Nature</i> 477: 225-228 (2011). PMID 21849978.
27.	Gribouval O, Morinière V, Pawtowski A, Arrondel C, Sallinen SL, Saloranta C, Clericuzio C, Viot G, Tantau J, Blesson S, Cloarec S, Machet MC, Chitayat D, Thauvin C, Laurent N, Sampson JR, Bernstein JA, Clemenson A, Prieur F, Daniel L, Levy-Mozziconacci A, Lachlan K, Alessandri JL, Cartault F, Rivière JP, Picard N, Baumann C, Delezoide AL, Belar Ortega M, Chassaing N, Labrune P, Yu S, Firth H, Wellesley D, Bitzan M, Alfares A, Braverman N, Krogh L, Tolmie J, Gaspar H, Doray B, Majore S, Bonneau D, Triaux S, Loirat C, David A, Bartholdi D, Peleg A, Brackman D, Stone R, <u>Deberardinis R</u> , Corvol P, Michaud A, Antignac C and Gubler MC. <i>Human Mutation</i> 33: 316-326 (2011). PMID 22095942.
28.	Mullen AR, Wheaton WW, Jin ES, Chen P-S, Sullivan LB, Cheng T, Yang Y, Linehan WM, Chandel NS and <u>DeBerardinis RJ</u> . Reductive carboxylation supports growth in tumour cells with defective mitochondria. <i>Nature</i> 481:385-388 (2011). PMID 22101431 PMC 3262117.
29.	Choi C, Ganji SK, <u>DeBerardinis RJ</u> , Hatanpaa KJ, Rakheja D, Kovacs Z, Yang X-L, Mashimo T, Raisanen JM, Marin-Valencia I, Pascual JM, Madden CJ, Mickey BE, Malloy CR, Bachoo R and Maher EA. Noninvasive detection of 2-hydroxyglutarate by magnetic resonance spectroscopy in patients with IDH-mutated malignant gliomas. <i>Nature Medicine</i> 18: 624-629 (2012). PMID: 22281806 PMC 3615719
30.	Marin-Valencia I, Cho S, Yang C, Mashimo T, Yang X-L, Rajagopalan KN, Vemireddy V, Cai L, Good L, Tu BP, Hatanpaa K, Mickey BE, Pascual JM, Maher EA, Malloy CR, <u>*DeBerardinis RJ</u> and <u>*Bachoo RM</u> . Analysis of tumor metabolism reveals mitochondrial glucose oxidation in genetically diverse, human glioblastomas in the mouse brain in vivo. <i>Cell Metabolism</i> 15: 827-837 (2012). PMID: 22682223 PMC 3372870.
31.	Wauson EM, Zaganjor E, Lee A-Y, Guerra ML, Ghosh AB, Bookout AL, Chambers CP, Jivan A, McGlynn K, Hutchison MR, <u>DeBerardinis RJ</u> and Cobb MH. The G protein-coupled taste receptor T1R1/T1R3 regulates mTORC1 and autophagy. <i>Molecular Cell</i> 47: 1-12 (2012). PMID: 22959271 PMC 3749915.
32.	Marin-Valencia I, Cho SK, Rakheja D, Hatanpaa KJ, Kapur P, Mashimo T, Jindal A, Vemireddy V, Good LB, Raisanen J, Sun X, Mickey B, Choi C, Takahashi M, Togao O, Pascual JM, <u>DeBerardinis RJ</u> , Maher EA, Malloy CR and Bachoo RM. Glucose metabolism via the pentose phosphate pathway, glycolysis, and citric acid cycle in an orthotopic mouse

	model of human brain tumors. <i>NMR in Biomedicine</i> 25: 1177-1186 (2012). PMID: 22383401 PMC 3670098.
33.	Maher EA, Marin-Valencia I, Bachoo RM, Mashimo T, Raisanen J, Hatanpaa KJ, Jindal A, Choi C, Jeffrey FM, Madden C, Mathews D, Pascual JM, Mickey BE, Malloy CR and <u>DeBerardinis RJ</u> . Metabolism of [U-13C]glucose in Human Brain Tumors In Vivo. <i>NMR in Biomedicine</i> 25: 1234-1244 (2012). PMID: 22419606 PMC 3406255
34.	Harrison C, Yang C, Jindal A, <u>DeBerardinis RJ</u> , Hooshyar MA, Merritt ME, Sherry AD and Malloy CR. Comparison of kinetic models for analysis of pyruvate-to-lactate exchange by hyperpolarized 13C NMR. <i>NMR in Biomedicine</i> 25: 1286-1294 (2012). PMID: 22451442 PMC 3469722
35.	Kocabas F, Mahmoud AI, Susic D, Porrello ER, Chen R, Garcia JA, <u>DeBerardinis RJ</u> and Sadek HA. The hypoxic epicardial and subepicardial microenvironment. <i>J Cardiovasc Transl Res</i> 5: 654-665 (2012). PMID: 22566269
36.	Hitosugi T, Zhou L, Elf S, Fan J, Kang H-B, Seo JH, Shan C, Dai Q, Zhang L, Xie J, Gu T-L, Jin P, Aleckovic M, LeRoy G, Kang Y, Sudderth JA, <u>DeBerardinis RJ</u> , Chen J et al. Phosphoglycerate mutase 1 coordinates glycolysis and biosynthesis by controlling intracellular levels of 3-phosphoglycerate and 2-phosphoglycerate. <i>Cancer Cell</i> 22, 585-600 (2012). PMID: 23153533 PMC 3500524
37.	Hamanaka RB, Glasauer A, Hoover P, Yang S, Blatt H, Mullen AR, Getsios S, Gottardi CJ, <u>DeBerardinis RJ</u> , Lavker RM and Chandel NS. Mitochondrial ROS regulate epidermal differentiation and hair follicle development. <i>Science Signaling</i> 6(261):ra8. doi: 10.1126/scisignal.2003638 (2013). PMID: 23386745 PMC 4017376
38.	Kocabas F, Zheng J, Thet S, <u>DeBerardinis RJ</u> , Zhang CC and Sadek HA. Meis1 Regulates the Metabolic Phenotype and Oxidant Defense of Hematopoietic Stem Cells. <i>Blood</i> 120:4963-4972 (2012). PMID: 22995899 PMC 3525021
39.	Anso E, Mullen AR, Felsher DW, <u>Deberardinis RJ</u> and Chandel NS. Metabolic changes in cancer cells upon inactivation of MYC. <i>Cancer & Metabolism</i> 1:7 (2013).
40.	Faubert B, Boily G, Izreig S, Griss T, Chambers CP, Fuerth B, Dong Z, Dupuy F, Viollet B, Mamer O, Avizonis D, <u>DeBerardinis RJ</u> , Seigel P and Jones RG. AMPK is a tumour suppressor that regulates cellular metabolic reprogramming. <i>Cell Metabolism</i> 17:113-124 (2013).
41.	Choi C, Ganji S, Hulsey K, Kovacs Z, Pichumani K, Dimitrov I, Mendelsohn D, Mickey B, Malloy C, Bachoo R, <u>DeBerardinis RJ</u> and Maher EA. A comparative study of short- and long-TE 1H-MRS at 3T for in-vivo detection of 2-hydroxyglutarate in brain tumors. <i>NMR Biomedicine</i> 26:1242-1250 (2013). PMID: 23592268 PMC 3733061
42.	Sullivan L, Martinez E, Mullen AR, Nguyen H, Dufour E, Sudarshan S, Yang Y, Linehan WM, Licht JD, <u>DeBerardinis RJ</u> and Chandel NS. The proto-oncometabolite fumarate binds glutathione to amplify ROS-dependent signaling. <i>Molecular Cell</i> 51:1-13 (2013). PMID: 23747014 PMC 3775267
43.	De Bock K, Georgiadou M, Schoors S, Kuchnio A, Cantelmo AR, Wong BW, Quaegebeur A, Ghesquière B, Cauwenberghs S, Eelen G, Phng L-K, Betz I, Tembuyser B, Brepoels K, Welti J, Geudens I, Segura I, Cruys B, Bifari F, Decimo I, Blanco R, Wyns S, Vangindertael J, Rocha S, Collins R, Munck S, Daelemans D, Imamura H, Devlieger R, Rider M, Van Veldhoven PP, Schuit F, Bartrons R, Hofkens J, Fraisl P, Telang S, <u>DeBerardinis RJ</u> , Schoonjans L, Vinckier S, Chesney J, Gerhardt H, Dewerchin M and Carmeliet P. Role of PFKFB3-driven glycolysis in vessel sprouting. <i>Cell</i> 154: 651-663 (2013). PMID: 23911327
44.	Nguyen HP, Chandel NS, <u>DeBerardinis RJ</u> * and Schug KA*. Hydrophilic interaction liquid chromatography coupled with MS/MS to detect and quantify dicarboxyethyl glutathione, a

	metabolic biomarker of the fumarate hydratase deficient cancer cell. <i>J Sep Sci</i> 36:3303-9 (2013). doi: 10.1002/jssc.201300602 PMID: 23963958
45.	Choi C, Ganji SK, Madan A, Hulsey KM, An Z, Zhang S, Pinho MC, <u>DeBerardinis RJ</u> , Bachoo RM and Maher EA. In vivo detection of citrate in brain tumors by 1H MRS at 3T. <i>Magn Reson Med</i> (2013). doi: 10.1002/mrm.24946 PMID: 24123337 PMC 4236907
46.	Martín-Rufián M, Nascimento-Gomes R, Higuero A, Crisma AR, Campos-Sandoval JA, Gómez-García MC, Cardona C, Cheng T, Lobo C, Segura JA, Alonso FJ, Szeliga M, Albrecht J, Curi R, Márquez J, Colquhoun A, DeBerardinis RJ and Matés JM. Both GLS silencing and GLS2 overexpression synergize with oxidative stress against proliferation of glioma cells. <i>J Mol Med</i> 92:277-290 (2013). PMID: 24276018 PMC 4327995
47.	Kim H, Pecot CV, Kim J, Larsen JE, Mendiratta S, Seo BY, Kim J, Eskioçak B, Chung H, McMillan E, Zubovych I, Wu S, DeBrabander J, Komurov K, Posner BA, Brekken R, Sood AK, <u>DeBerardinis RJ</u> , Roth MG, Minna JD and White MA. Systematic Identification of Molecular Subtype-selective Vulnerabilities in Non-Small Cell Lung Cancer. <i>Cell</i> 155:552-566 (2013). PMID: 24243015 PMC 3836195
48.	Witney T, Carroll L, Alam I, Chandrashekan A, Sala R, Harris R, <u>DeBerardinis R</u> , Agarwal R and Aboagye. ¹⁸ F-N-(methyl(2-fluoroethyl)-1H-[1,2,3]triazole-4-yl))glucosamine positron emission tomography expounds modulation of glycogen synthesis during the non-proliferative state of cancer cells. <i>Cancer Research</i> 74:1319-1328 (2014).
49.	Wang Y, Zhou K, Huang G, Hensley C, Huang X, Ma X, <u>DeBerardinis RJ</u> , Sumer BD and Gao J. A universal strategy for cancer-specific imaging by nonlinear amplification of tumor microenvironment signals. <i>Nature Materials</i> 13: 204-212. (2013).
50.	Zheng J, Lu Z, Kocabas F, Bottcher RT, Costell M, Kang X, Liu X, <u>DeBerardinis RJ</u> , Wang Q, Chen G, Sadek H and Zhang CC. Profilin-1 is essential for retention and metabolism of hematopoietic stem cells in bone marrow. <i>Blood</i> 123: 992-1001 (2014). PMID: 24385538 PMC3924932
51.	Yang C, Harrison C, Jin ES, Chuang DT, Sherry AD, Malloy CR, Merritt ME and <u>DeBerardinis RJ</u> . Simultaneous steady-state and dynamic ¹³ C NMR can differentiate alternative routes of pyruvate metabolism in living cancer cells. <i>J Biol Chem</i> 289:6212-6224 (2014). PMID: 24415759 PMC 3937686
52.	Mullen AR, Hu Z, Shi X, Jiang L, Boroughs LK, Kovacs Z, Boriack R, Rakheja D, Sullivan LB, Linehan WM, Chandel NS and <u>DeBerardinis RJ</u> . Oxidation of alpha-ketoglutarate is required for reductive carboxylation in cancer cells with mitochondrial defects. <i>Cell Reports</i> 7:1679-1690 (2014). PMID: 24857658 PMC 4057960
53.	Lanning NJ, Looyenga BD, Kauffman AL, Niemi NM, Sudderth J, <u>DeBerardinis RJ</u> and MacKeigan JP. A mitochondrial RNAi screen defines cellular bioenergetic determinants and identifies an adenylate kinase as a key regulator of ATP levels. <i>Cell Reports</i> 7(3):907-917 (2014). PMID: 24767988 PMC 4046887
54.	Yang C, Jiang L, Zhang H, Shimoda LA, <u>DeBerardinis RJ</u> and Semenza GL. Analysis of Hypoxia-induced Metabolic Reprogramming. <i>Methods in Enzymology</i> 542:425-455 (2014).
55.	Shan C, Elf S, Kang H-B, Zhang L, Hitosugi T, Zhou L, Seo JH, Xie J, Tucker M, Gu T-L, <u>DeBerardinis RJ</u> , Wu S, Li Y, Mao H, Lonial S, Arellano ML, Khoury HJ, Khuri FR, Lee BH, Ye K, Boggon TJ, He C, Kang S, Fan J and Chen J. Lysine acetylation activates 6-phosphogluconate dehydrogenase to promote tumor growth. <i>Molecular Cell</i> 55:552-565 (2014). PMID: 25042803 PMC 4142084
56.	Srivastava N, Kollipara RK, Singh DK, Sudderth J, Nguyen H, Wang S, Minna JD, Mangelsdorf DJ, <u>DeBerardinis RJ</u> and Kittler R. Inhibition of Cancer Cell Proliferation by

	PPAR-gamma is mediated by a metabolic switch that increases reactive oxygen species levels. <i>Cell Metabolism</i> 20:650-661 (2014). PMID: 25264247 PMC 4191999
57.	Jiang L, Xiao L, Sugiura H, Aktar A, Kuro-o M, * <u>DeBerardinis RJ</u> and *Boothman DA. Metabolic reprogramming during TGFb1-induced epithelial-to-mesenchymal transition. <i>Oncogene</i> 34:3908-3916 (2014).
58.	Cetinbas N, Daugaard M, Mullen A, Rotblat B, Lopez A, Li A, <u>DeBerardinis RJ</u> , Hajee S and Sorensen PH. Loss of the tumor suppressor Haxe1 leads to ROS-dependent glutamine addiction. <i>Oncogene</i> 34:4005-4010 (2014). PMID: 25284589 PMC 4387113
59.	Yang C, Ko B, Hensley CT, Jiang L, Wasti AT, Lumata L, Mitsche M, Merritt ME and <u>DeBerardinis RJ</u> . Glutamine oxidation maintains the TCA cycle and cell survival during impaired mitochondrial pyruvate transport. <i>Molecular Cell</i> 56:414-424 (2014). PMID: 25458842 PMC 4268166
60.	Schell JC, Olson KA, Jiang L, Hawkins AJ, Van Vranken JG, Xie J, Earl EG, Egnatchik RA, DeBerardinis RJ and Rutter J. A role for the mitochondrial pyruvate carrier as a repressor of the Warburg Effect and colon cancer cell growth. <i>Molecular Cell</i> 56:400-413 (2014). PMID: 25458841 PMC 4268416
61.	Mashimo T, Pichumani K, Vemireddy V, Hatanpaa KJ, Singh D, Sirasanagandla S, Nannepaha S, Piccirillo S, Kovacs Z, Foong C, Huang Z, Barnett S, Mickey BE, DeBerardinis RJ, Tu BP, Maher EA and Bachoo RM. Acetate is a bioenergetic substrate for human glioblastoma and brain metastases. <i>Cell</i> 159:1603-1614 (2014). PMID: 25525878 PMC 4374602
62.	Moreno KX, Satapati S, <u>DeBerardinis RJ</u> , Malloy CR, Burgess SC and Merritt ME. Real-time estimates of hepatic gluconeogenesis using hyperpolarized [2- ¹³ C]dihydroxyacetone. <i>J Biol Chem</i> 289:35859-35867 (2014).
63.	Curtis MM, Hu Z, Klimko C, Narayanan S, <u>DeBerardinis RJ</u> and Sperandio V. Bacteroides thetaiotaomicron exacerbates enteric infection through modification of the metabolic landscape. <i>Cell Host Microbe</i> 16:759-769 (2014). PMID: 25498343 PMC 4269104
64.	Moore Z, Chakrabarti G, Luo X, Ali A, Hu Z, Fattah FJ, Vemireddy R, <u>DeBerardinis RJ</u> , Brekken RA, Boothman DA. NAMPT inhibition sensitizes pancreatic adenocarcinoma cells to tumor-selective, PAR-independent metabolic catastrophe and cell death induced by β-lapachone. <i>Cell Death Dis.</i> 2015 Jan 15;6(1):e1599. doi: 10.1038/cddis.2014.564. PMID: 25590809; PMCID: PMC4669762.
65.	Stalneck C, Ulrich S, Li Y, Ramachandran S, <u>DeBerardinis RJ</u> , McBrayer MK, Cerione RA and Erickson JW. Mechanism by which the benzophenanthridinone 968 inhibits glutamine metabolism in transformed cells. <i>PNAS</i> 112:394-399 (2014). PMID: 25548170 PMC 4299208
66.	Baek G, Tse YF, Hu Z, Cox D, Bubholtz N, McCue P, Yeo C, White MA, <u>DeBerardinis RJ</u> , Knudsen ES and Witkiewicz AK. MCT4 defines a glycolytic subtype of pancreatic cancer with poor prognosis and unique metabolic dependencies. <i>Cell Reports</i> 9:2233-2249 (2014). PMID: 25497091
67.	Jin L, Li D, Alesi GN, Fan J, Kang HB, Lu Z, Boggon TJ, Jin P, Yi H, Wright ER, Duong D, Seyfried NT, Egnatchik R, <u>DeBerardinis RJ</u> , Magliocca KR, He C, Arellano ML, Khoury HJ, Shin DM, Khuri FR and Kang S. Glutamate dehydrogenase 1 signals through antioxidant glutathione peroxidase 1 to regulate redox homeostasis and tumor growth. <i>Cancer Cell</i> 27:257-270 (2015). PMID: 25670081 PMC 4325424
68.	Pichumani K, Mashimo T, Baek H-M, Ratnakar J, Mickey B, <u>DeBerardinis RJ</u> , Maher EA, Bachoo RM, Malloy CR and Kovacs Z. Conditions for ¹³ C NMR detection of 2-hydroxyglutarate in tissue extracts from IDH-mutated gliomas. <i>Analytical Biochem</i> 481:4-6 (2015). PMID: 25908561 PMC 4458399

69.	Lumata L, Yang C, Ragavan M, Carpenter N, <u>DeBerardinis RJ</u> and Merritt ME. Hyperpolarized ¹³ C magnetic resonance and its use in metabolic assessment of cultured cells and perfused organs. <i>Methods in Enzymology</i> 561:73-106 (2015).
70.	Rajagopalan KN, Egnatchik RA, Calvaruso MA, Wasti AT, Padanad MS, Boroughs LK, Ko B, Hensley CT, Acar M, Hu Z, Jiang L, Pascual JM, Scaglioni PP and <u>DeBerardinis RJ</u> . Metabolic plasticity maintains proliferation in pyruvate dehydrogenase-deficient cells. <i>Cancer & Metabolism</i> 3:7 (2015). PMID: 26137220 PMC 4487196
71.	Lin A-P, Abbas S, Kim S-W, Ortega M, Bouamar H, Escobedo Y, Varadarajan P, Qin Y, Sudderth J, Schulz E, Deutsch A, Mohan S, Ulz P, Neumeister P, Rakheja D, Gao X, Hinck A, Weintraub S, DeBerardinis R, Sill H, Dahia P, and Aguiar R. D2HGDH influences α -KG levels and dioxygenases function by modulating IDH2. <i>Nature Communications</i> 6:7768 (2015). PMID: 26178471 PMC 4515030
72.	Montal ED, Dewi R, Bhalla K, Ou L, Hwang BJ, Ropell AE, Gordon C, Liu WJ, <u>DeBerardinis RJ</u> , Sudderth J, Twaddel W, Boros LG, Shroyer KR, Duraisamy S, Drapkin R, Powers RS, Rohde JM, Boxer MB, Wong KK and Giron GD. PEPCK Coordinates the Regulation of Central Carbon Metabolism to Promote Cancer Cell Growth. <i>Molecular Cell</i> 60:571-583 (2015) PMID: 26481663 PMC 4656111
73.	Herranz D, Ambesi-Impiombato A, Sudderth J, Sanchez-Martin M, Belver L, Tosello V, Xu L, Wendorff AA, Castillo M, Haydu E, Marquez J, Mates JM, Kung AL, Rayport S, Cordon-Cardo C, <u>DeBerardinis RJ</u> and Ferrando AA. Metabolic reprogramming induces resistance to anti-NOTCH1 therapies in acute lymphoblastic leukemia. <i>Nature Medicine</i> 21:1182-1189 (2015).
74.	Peña C, Saatcioglu D, Nakada Y, Wong K-K, DeBerardinis RJ, Miller D, Lea J, Brekken R, Cuevas I, Aloisio G and Castrillon DH. LKB1 loss promotes endometrial cancer progression via CCL2-dependent recruitment of macrophages. <i>J Clin Invest</i> 125:4063-4076 (2015) PMID: 26413869 PMC 4639978
75.	DeNicola G, Chen P-H, Mullarkey E, Sudderth JA, Hu Z, Wu D, Tang H, Xie Y, Asara JM, Huffman KE, Wistuba II, Minna JD, <u>DeBerardinis RJ</u> and Cantley LC. NRF2 regulates serine biosynthesis in non-small cell lung cancer. <i>Nature Genetics</i> 47:1475-1481 (2015). PMID: 26482881 PMC4721512
76.	Wang C, Wang Y, Li Y, Bodemann B, Zhao T, Ma X, Huang G, Hu Z, DeBerardinis RJ, White MA and Gao J. A nanobuffer reporter library for fine-scale imaging and perturbation of endocytic organelles. <i>Nature Communications</i> 6:8524 (2015). PMID: 26437053 PMC 4600749
77.	Piskounova E, Agathocleous M, Hu Z, Mann SE, Zhao Z, Leitch AM, Johnson TM, <u>DeBerardinis RJ</u> and Morrison SJ. Reversible metabolic changes in human melanoma cells enable distant metastasis. <i>Nature</i> 527:186-191 (2015).
78.	Lin R, Elf S, Shan C, Kang H-B, Ji Q, Zhou L, Hitosugi T, Zhang L, Zhang S, Seo JH, Xie J, Tucker M, Gu T-L, Sudderth J, Jiang L, Mitsche M, DeBerardinis R, Wu S, Li Y, Mao H, Peng Chen, Wang D, Chen Z, Hurwitz S, Lonial S, Arellano M, Khoury H, Khuri F, Lee B, Lei Q, Brat DJ, Ye K, Boggon T, He C, Kang S, Fan J and Chen J. 6-phosphogluconate dehydrogenase links oxidative PPP, lipogenesis and tumor growth by inhibiting LKB1-AMPK signaling. <i>Nature Cell Biology</i> 17:1484-1496 (2015). PMID: 26479318 PMC 4628560
79.	Chakrabarti G, Moore ZR, Luo X, Ilcheva M, Ali A, Padanad M, Zhou Y, Xie Y, Burma S, Scaglioni PP, Cantley LC, <u>DeBerardinis RJ</u> , Kimmelman AC, Lyssiotis CA, Boothman DA. Targeting glutamine metabolism sensitizes pancreatic cancer to PARP-driven metabolic catastrophe induced by beta-lapachone. <i>Cancer & Metabolism</i> 3:12 (2015).

80.	Griss T, Vincent EE, Egnatchik R, Chen J, Faubert B, Viollet B, <u>DeBerardinis RJ</u> and Jones RG. Metformin antagonizes cancer cell proliferation by suppressing mitochondrial-dependent biosynthesis. <i>PLoS Biology</i> 13:e1002309 (2015). PMID: 26625127 PMC 4666657
81.	Lou T-F, Sethuraman D, Dospoy P, Srivastava P, Kim HS, Kim J, Ma X, Chen P-H, Huffman KE, Frink RE, Larsen JE, Lewis C, Um S-W, Kim D-H, Ahn, J-M, <u>DeBerardinis RJ</u> , White MA, Minna JD and Yoo H. Cancer-specific production of N-acetylaspartate via NAT8L overexpression in non-small cell lung cancer and its potential as a circulating biomarker. <i>Cancer Prevention Res</i> 9:43-52 r(2015).
82.	Chakrabarti G, Silvers MA, Ilcheva M, Liu Y, Moore ZR, Luo X, Gao J, Anderson G, Liu L, Sarode V, Gerber DE, Burma S, <u>DeBerardinis RJ</u> , Gerson SL and Boothman DA. Tumor-selective use of DNA base excision repair inhibition in pancreatic cancer using the NQO1 bioactivatable drug, β -lapachone. <i>Sci Rep</i> 5:17066 (2015). PMID: 26602448 PMC 4658501
83.	Martínez-Reyes I, Diebold LP, Kong H, Schieber M, Huang H, Hensley CT, Mehta MM, Wang T, Santos JH, Woychik R, Dufour E, Spelbrink JN, Weinberg SE, Zhao Y, <u>DeBerardinis RJ</u> and Chandel NS. TCA cycle and mitochondrial membrane potential are necessary for diverse biological functions. <i>Molecular Cell</i> 61:199-209 (2016). PMID: 26725009 PMC 4724312
84.	Hensley CT, Faubert B, Yuan Q, Lev-Cohain N, Jin E, Kim J, Jiang L, Ko B, Skelton R, Loudat L, Wodzak M, Klimko C, McMillan E, Butt Y, Ni M, Oliver D, Torrealba J, Malloy CR, Kernstine K, Lenkinski RE and <u>DeBerardinis RJ</u> . Metabolic heterogeneity in human lung tumors. <i>Cell</i> 164:681-694 (2016). PMID: 26853473 PMC 4752889
85.	Bajwa G, <u>DeBerardinis RJ</u> , Shao B, Hall B, Farrar JD and Gill MA. Critical role of glycolysis in human plasmacytoid dendritic cell antiviral responses. <i>J Immunology</i> 196:2004-2009 (2016). PMID: 26826244 PMC 4761472
86.	Padanad MS, Konstantinidou G, Venkateswaran N, Melegari M, Rindhe S, Mitsche M, Yang C, Batten K, Huffman KE, Liu J, Tang X, Rodriguez-Canales J, Kalhor N, Shay JW, Minna JD, McDonald J, Wistuba II <u>DeBerardinis RJ</u> and Scaglioni PP. Fatty acid oxidation mediated by Acyl-CoA Synthetase Long Chain 3 is required for mutant KRAS lung tumorigenesis. <i>Cell Reports</i> 16: 30895-6 (2016). PMID: 27477280 PMC 4981512
87.	Pichumani K, Mashimo T, Vemireddy V, Kovacs Z, Ratnakar J, Mickey B, Malloy CR, DeBerardinis RJ, Bachoo RM and Maher EA. Hepatic gluconeogenesis influences ¹³ C enrichment in lactate in human brain tumors during metabolism of [1,2- ¹³ C]acetate. <i>Neurochemistry International</i> 97:133-136 (2016).
88.	Jiang L, Shestov A, Swain, P, Yang C, Parker SJ, Wang QA, Terada LS, Adams ND, McCabe MT, Pietrak B, Schmidt S, Metallo, CM, Dranka BP, Schwartz B and <u>DeBerardinis RJ</u> . Reductive carboxylation supports redox homeostasis during anchorage-independent growth. <i>Nature</i> 532:255-258 (2016). PMID: 27049945 PMC 4860952
89.	Eskiocak U, Ramesh V, Gill JG, Zhao Z, Yuan SW, Wang M, Vandergriff T, Shackleton M, Quintana E, Johnson TM, <u>DeBerardinis RJ</u> , Morrison SJ. Synergistic effects of ion transporter and MAP kinase pathway inhibitors in melanoma. <i>Nature Communications</i> 7:12336 (2016). PMID: 27545456 PMC 4996948
90.	Ouyang Q, Nakayama T, Baytas O, Davidson SM, Yang C, Schmidt M, Lizarraga SB, Mishra S, Ei-Quessny M, Niaz S, Gul Butt M, Imran Murtaza S, Javed A, Chaudhry HR, Vaughan DJ, Hill RS, Partlow JN, Yoo SY, Lam AN, Nasir R, Al-Saffar M, Barkovich AJ, Schwede M, Nagpal S, Rajab A, <u>DeBerardinis RJ</u> , Housman DE, Mochida GH, Morrow EM. Mutations in mitochondrial enzyme GPT2 cause metabolic dysfunction and neurological disease with developmental and progressive features. <i>PNAS USA</i> 113: E5598-5607 (2016). PMID: 27601654 PMC5035873

91.	Goveia J, Pircher A, Conradi L-C, Kalucka J, Lagani V, Dewerchin M, Eelen G, <u>DeBerardinis RJ</u> , Wilson I and Carmeliet P. Meta-analysis of clinical metabolic profiling studies in cancer: challenges and opportunities. <i>EMBO Mol Med</i> 8:1134-1142 (2016). PMID: 27601137 PMC 5048364
92.	Cetinbas NM, Sudderth J, Harris RC, Cebeci A, Negri G, Yilmaz OH, <u>DeBerardinis RJ</u> and Sorensen PH. Glucose-dependent anaplerosis in cancer cells is required for cellular redox balance in the absence of glutamine. <i>Sci Reports</i> 6:32606(2016).
93.	Zhang ZZ, Lee EE, Sudderth J, Yue Y, Zia A, Glass D, <u>DeBerardinis RJ</u> and Wang RC. Glutathione depletion, pentose phosphate pathway activation, and hemolysis in erythrocytes protecting cancer cells from vitamin C-induced oxidative stress. <i>J Biol Chem</i> 291:22861-22867 (2016). PMID: 27660392 PMC 5087709
94.	Nakada Y, Canseco DC, Thet S, Abdisalaam S, Asaithamby A, Santos CX, Shah A, Zhang H, Faber JE, Kinter MT, Szweda LI, Xing C, <u>DeBerardinis R</u> , Oz O, Lu Z, Zhang C, Kimura W and Sadek HA. Hypoxemia induces adult mammalian heart regeneration. <i>Nature</i> 541(7636):222-227 (2016). PMID: 27798600
95.	Fan J, Lin R, Xia S, Chen D, Elf SE, Liu S, Pan Y, Xu H, Qian Z, Wang M, Shan C, Zhou L, Lei QY, Li Y, Mao H, Lee BH, Sudderth J, <u>DeBerardinis RJ</u> , Zhang G, Owonikoko T, Gaddh M, Arellano ML, Khoury HJ, Khuri FR, Kang S, Doetsch PW, Lonial S, Boggon TJ, Curran WJ, Chen J. Tetrameric Acetyl-CoA Acetyltransferase 1 is Important for Tumor Growth. <i>Molecular Cell</i> 64:859-874 (2016). PMID: 27867011 PMC 5135630
96.	Jiang L, Boufersaoui A, Rakheja D, Guevara G, Hu Z and <u>DeBerardinis RJ</u> . Quantitative metabolic flux analysis reveals an unconventional pathway of fatty acid synthesis in cancer cells deficient for the mitochondrial citrate transport protein. <i>Metabolic Engineering</i> 43:198-207 (2017). PMID: 27856334 PMC 5429990
97.	Hasan M, Gonugunta VK, Dobbs N, Ali A, Palchik G, Calvaruso MS, <u>DeBerardinis RJ</u> and Yan N. Chronic innate immune activation of TBK1 suppresses mTORC1 activity and dysregulates cellular metabolism. <i>PNAS USA</i> 114:746-751 (2016). PMID: 28069950 PMC 5278463
98.	Menon D, Salloum D, Bernfeld E, Gorodetsky E, Akselrod A, Frias MA, Sudderth J, Chen PH, <u>DeBerardinis R</u> , Foster DA. Lipid Sensing by mTOR via de novo Synthesis of Phosphatidic Acid. <i>J Biol Chem</i> 292:6303-6311 (2017) PMID: 28223357 PMC 5391759
99.	Kim J, Hu Z, Cai L, Li K, Choi E, Faubert B, Bezwada D, Rodriguez-Canales J, Villalobos P, Lin Y-F, Ni M, Huffman KE, Girard L, Byers LA, Unsal-Kacmaz K, Peña CG, Heymach JV, Wauters E, Vansteenkiste J, Castrillon DH, Chen BPC, Wistuba I, Lambrechts D, Xu J, Minna JD and <u>DeBerardinis RJ</u> . CPS1 maintains pyrimidine pools and DNA synthesis is KRAS/LKB1-mutant lung cancer cells. <i>Nature</i> 546:168-172 (2017). PMID: 28538732 PMC 5472349
100.	Cheshkov S, Dimitrov IE, Jakkamsetti V, Good L, Kelly D, Rajasekaran K, <u>DeBerardinis RJ</u> , Pascual JM, Sherry AD, Malloy CR. Oxidation of [U- ¹³ C]glucose in the human brain at 7T under steady state conditions. <i>Magn Reson Med</i> 78:2065-2071 (2017). PMID: 28112825 PMC 5522773
101.	Beg MS, Huang X, Silvers MA, Gerber DE, Bolluyt J, Sarode V, Fattah F, <u>Deberardinis RJ</u> , Merritt ME, Xie XJ, Leff R, Laheru D, Boothman DA. Using a novel NQO1 bioactivatable drug, beta-lapachone (ARQ761), to enhance chemotherapeutic effects by metabolic modulation in pancreatic cancer. <i>J Surg Oncol</i> 116:83-88 (2017). PMID: 28346693 PMC 5509448
102.	Eskiocak B, McMillan E, Mendiratta S, Kollipara R, Zhang H, Humphries C, Wang C, Garcia-Rodriguez J, Ding M, Zaman A, Rosales T, Eskiocak U, Smith MP, Sudderth J, Komurov K, <u>DeBerardinis RJ</u> , Wellbrock C, Davies MA, Wargo JA, Yu Y, De Brabander JK, Williams

	NS, Chin L, Rizos H, Long GV, Kittler R, White M. Biomarker accessible and chemically addressable mechanistic subtypes of BRAF melanoma. <i>Cancer Discovery</i> 7:832-851 (2017). PMID: 28455392 PMC 5540806
103.	Tarasenko TN, Pacheco SE, Koenig MK, Gomez-Rodriguez J, Kapnick SM, Diaz F, Zerfas PM, Barca E, Sudderth J, <u>DeBerardinis RJ</u> , Covian R, Balaban RS, DiMauro S, McGuire PJ. Cytochrome c oxidase activity is a metabolic checkpoint that regulates cell fate decisions during T cell activation and differentiation. <i>Cell Metab</i> 25:1254-1268 (2017). PMID: 28591633 PMC 5562283
104.	Liu X, Zhang, Ni M, Cao H, Signer RAJ, Li D, Li M, Gu Z, Hu Z, Dickerson KE, Weinberg SE, <u>DeBerardinis RJ</u> , Zhou F, Shao Z, Xu J. Regulation of mitochondrial biogenesis in erythropoiesis by mTORC1-mediated protein translation. <i>Nat Cell Biol</i> 19:626-638 (2017). PMID: 28504707 PMC 5771482
105.	Zhang Y, Udayakumar D, Cai L, Hu Z, Kapur P, Kho EY, Pavía-Jiménez A, Fulkerson M, de Leon AD, Yuan Q, Dimitrov IE, Yokoo T, Ye J, Mitsche MA, Kim H, McDonald JG, Xi Y, Madhuranthakam AJ, Dwivedi DK, Lenkinski RE, Cadeddu JA, Margulis V, Brugarolas J, DeBerardinis RJ, Pedrosa I. Addressing metabolic heterogeneity in clear cell renal cell carcinoma with quantitative Dixon MRI. <i>JCI Insight</i> 2:pii:94278 (2017). PMID: 28768909 PMC 5543910
106.	Schell JC, Wisidagama DR, Bensard C, Zhao H, Wei P, Tanner J, Flores A, Mohlman J, Sorensen LK, Earl CS, Olson KA, Miao R, Waller TC, Delker D, Kanth P, Jiang L, <u>DeBerardinis RJ</u> , Bronner MP, Li DY, Cox JE, Christofk HR, Lowry WE, Thummel CS, Rutter J. Control of intestinal stem cell function and proliferation by mitochondrial pyruvate metabolism. <i>Nat Cell Biol</i> 19:1027-1036 (2017). PMID: 28812582 PMC 6137334
107.	Agathocleous M, Meacham CE, Burgess RJ, Piskounova E, Zhao Z, Crane GM, Cowin BL, Bruner E, Murphy MM, Chen W, Spangrude GJ, Hu Z, <u>DeBerardinis RJ</u> , Morrison SJ. Ascorbate regulates haematopoietic stem cell function and leukaemogenesis. <i>Nature</i> 549:476-481 (2017). PMID: 28825709 PMC 5910063
108.	Faubert B, Li KY, Cai L, Hensley CT, Kim J, Zacharias LG, Yang C, Do QN, Doucette S, Burguete D, Li H, Huet G, Yuan Q, Wigal T, Butt Y, Ni M, Torrealba J, Oliver D, Lenkinski RE, Malloy CR, Wachsmann JW, Young JD, Kernstine K, <u>DeBerardinis RJ</u> . Lactate Metabolism in Human Lung Tumors. <i>Cell</i> 171:358-371 (2017). PMID: 28985563 PMC 5684706
109.	Silvers MA, Deja S, Singh N, Egnatchik RA, Sudderth J, Luo X, Beg MS, Burgess SC, <u>DeBerardinis RJ</u> , Boothman DA, Merritt ME. The NQO1 bioactivatable drug, b-lapachone, alters the redox state of NQO1+ pancreatic cancer cells, causing perturbation in central carbon metabolism. <i>J Biol Chem</i> 292:18203-1821 (2017). PMID: 28916726 PMC 5672043
110.	Shi X, Tasdogan A, Huang F, Hu Z, Morrison SJ and <u>DeBerardinis RJ</u> . The abundance of metabolites related to protein methylation correlates with the metastatic capacity of human melanoma xenografts. <i>Science Advances</i> 3(11):eaao5268. (2017). PMID: 29109980 PMC 5665593
111.	Cai L, Li Q, Du L, Yun J, Xie Y, <u>DeBerardinis RJ</u> and Xiao G. Genomic Regression Analysis of Coordinated Expression. <i>Nat Commun</i> 8:2187 (2017). PMID: 29259170 PMC 5736603
112.	Hawk MA, Gorsuch CL, Fagan P, Lee C, Kim SE, Hamann JC, Mason JA, Weigel KJ, Tsegaye MA, Shen L, Shuff S, Zuo J, Hu S, Jiang L, Chapman S, Levy WM, <u>DeBerardinis RJ</u> , Overholtzer M, Schafer ZT. RIPK1-mediated induction of mitophagy compromises the viability of extracellular-matrix-detached cells. <i>Nat Cell Biol</i> 20:272-284 (2018). PMID: 29459781

113.	Flowers EM, Sudderth J, Zacharias L, Mernaugh G, Zent R, <u>DeBerardinis RJ</u> , Carroll TJ. Lkb1 deficiency confers glutamine dependency in polycystic kidney disease. <i>Nat Commun</i> 9:814 (2018). PMID: 29483507 PMC 5827653
114.	Zhang Z, Zi Z, Lee EE, Zhao J, Contreras DC, South AP, Abel ED, Chong BF, Vandergriff T, Hosler GA, Scherer PE, Mettlen M, Rathmell JC, <u>DeBerardinis RJ</u> , Wang RC. Differential glucose requirement in skin homeostasis and injury identifies a therapeutic target for psoriasis. <i>Nature Medicine</i> 24:617-627 (2018) PMID: 29662201 PMC 6095711
115.	McMillan EA, Ryu MJ, Diep CH, Mendiratta S, Clemenceau JR, Vaden RM, Kim JH, Motoyaji T, Covington KR, Peyton M, Huffman K, Wu X, Girard L, Sung Y, Chen PH, Mallipeddi PL, Lee JY, Hanson J, Voruganti S, Yu Y, Park S, Sudderth J, DeSevo C, Muzny DM, Doddapaneni H, Gazdar A, Gibbs RA, Hwang TH, Heymach JV, Wistuba I, Coombes KR, Williams NS, Wheeler DA, MacMillan JB, <u>Deberardinis RJ</u> , Roth MG, Posner BA, Minna JD, Kim HS, White MA. Chemistry-first approach for nomination of personalized treatment in lung cancer. <i>Cell</i> 173: 864-878 (2018). PMID: 29681454 PMC 5935540
116.	Ryu, KW, Nandu T, Kim J, Challa S, <u>DeBerardinis RJ</u> and Kraus WL. Metabolic regulation of transcription through compartmentalized NAD ⁺ biosynthesis. <i>Science</i> 360:6389. (2018). PMID: 29748257
117.	Dutchak PA, Estill-Terpack SJ, Plec AA, Zhao X, Yang C, Chen J, Ko B, <u>DeBerardinis RJ</u> , Yu Y, Tu BP. Loss of a negative regulator of mTORC1 induces aerobic glycolysis and altered fiber composition in skeletal muscle. <i>Cell Reports</i> 23:1907-1914 (2018)
118.	Huang F, Ni M, Chalishazar M, Huffman KE, Kim J, Cai L, Shi X, Cai F, Zacharias LG, Ireland AS, Li K, Gu W, Kaushik AK, Liu X, Gazdar AF, Oliver TG, Minna JD, Hu Z and <u>DeBerardinis RJ</u> . Inosine Monophosphate Dehydrogenase Dependence in a Subset of Small Cell Lung Cancers. <i>Cell Metabolism</i> 28:1-14 (2018). PMID: 30043754 PMC 6125205
119.	Courtney K, Bezwada D, Mashimo T, Pichumani K, Vemireddy V, Funk A, Wimberly J, McNeil SS, Kapur P, Lotan Y, Margulis V, Cadeddu JA, Pedrosa I, <u>DeBerardinis RJ</u> , Malloy CR, Bachoo RM and Maher EA. Isotope Tracing of Human Clear Cell Renal Cell Carcinoma Demonstrates Suppressed Glucose Oxidation In Vivo Human clear cell renal cell carcinomas suppress glucose oxidation in vivo. <i>Cell Metabolism</i> 28:793-800 (2018).
120.	Updegraff BL, Zhou X, Guo Y, Padanad MS, Chen PH, Yang C, Sudderth J, Rodriguez-Tirado C, Girard L, Minna JD, Mishra P, <u>DeBerardinis RJ</u> , O'Donnell KA. Transmembrane Protease TMPRSS11B Promotes Lung Cancer Growth by Enhancing Lactate Export and Glycolytic Metabolism. <i>Cell Reports</i> 25:2223-2233 (2018) PMID: 30463017 PMC 6338450
121.	Rodan LH, Anyane-Yeboah K, Chong K, Klein Wassink-Ruiter JS, Wilson A, Smith L, Kothare SV, Rajabi F, Blaser S, Ni M, <u>DeBerardinis RJ</u> , Poduri A, Berry GT. Gain-of-function variants in the ODC1 gene cause a syndromic neurodevelopmental disorder associated with macrocephaly, alopecia, dysmorphic features, and neuroimaging abnormalities. <i>Am J Med Genet A</i> 176: 2554-2560 (2018). PMID: 30475435
122.	Fischer GM, Jalali A, Kircher DA, Lee WC, McQuade JL, Haydu LE, Joon AY, Reuben A, de Macedo MP, Carapeto FCL, Yang C, Srivastava A, Ambati CR, Sreekumar A, Hudgens CW, Knighton B, Deng W, Ferguson SD, Tawbi HA, Glitza IC, Gershenwald JE, Vashisht Gopal YN, Hwu P, Huse JT, Wargo JA, Futreal PA, Putluri N, Lazar AJ, <u>DeBerardinis RJ</u> , Marszalek JR, Zhang J, Holmen SL, Tetzlaff MT, Davies MA. Molecular profiling reveals unique immune and metabolic features of melanoma brain metastases. <i>Cancer Discovery</i> 9:628-645 (2019)
123.	DeVorkin L, Pavey N, Carleton G, Comber A, Ho C, Lim J, McNamara E, Huang H, Kim P, Zacharias LG, Mizushima N, Saitoh T, Akira S, Beckham W, Lorzadeh A, Moksa M, Cao Q, Murthy A, Hirst M, <u>DeBerardinis RJ</u> , Lum JJ. Autophagy regulation of metabolism is required for CD8 ⁺ T cell anti-tumor immunity. <i>Cell Reports</i> 9:27:502-513 (2019). PMID: 30970253

124.	Ni M, Solmonson A, Pan C, Yang C, Li D, Notzon A, Cai L, Guevara G, Zacharias LG, Faubert B, Vu H, Jiang L, Ko B, Morales NM, Pei J, Dias do Vale G, Rakheja D, Grishin NV, McDonald JG, Gotway GK, McNutt MC, Pascual JM and <u>DeBerardinis RJ</u> . Functional assessment of Lipoyltransferase-1 deficiency in cells, mice and humans. <i>Cell Reports</i> 27(5):1376-1386 (2019). PMID: 31043737
125.	Vriens K, Christen S, Parik S, Broekaert D, Yoshinaga K, Talebi A, Dehairs J, Escalona-Noguero C, Schmieder R, Cornfield T, Charlton C, Romero-Pérez L, Rossi M, Rinaldi G, Orth MF, Boon R, Kerstens A, Kwan SY, Faubert B, Méndez-Lucas A, Kopitz CC, Chen T, Fernandez-Garcia J, Duarte JAG, Schmitz AA, Steigemann P, Najimi M, Hägebarth A, Van Ginderachter JA, Sokal E, Gotoh N, Wong KK, Verfaillie C, Derua R, Munck S, Yuneva M, Beretta L, <u>DeBerardinis RJ</u> , Swinnen JV, Hodson L, Cassiman D, Verslype C, Christian S, Grünewald S, Grünewald TGP, and Fendt SM. Evidence for an alternative fatty acid desaturation pathway increasing cancer plasticity. <i>Nature</i> 566(7744): 403–406 (2019). PMID: 30728499
126.	Fischer GM, Jalali A, Kircher DA, Lee WC, McQuade JL, Haydu LE, Joon AY, Reuben A, de Macedo MP, Carapeto FCL, Yang C, Srivastava A, Ambati CR, Sreekumar A, Hudgens CW, Knighton B, Deng W, Ferguson SD, Tawbi HA, Glitza IC, Gershenwald JE, Vashisht Gopal YN, Hwu P, Huse JT, Wargo JA, Futreal PA, Putluri N, Lazar AJ, <u>DeBerardinis RJ</u> , Marszalek JR, Zhang J, Holmen SL, Tetzlaff MT, and Davies MA. Molecular Profiling Reveals Unique Immune and Metabolic Features of Melanoma Brain Metastases. <i>Cancer Discovery</i> 9(5): 628–645 (2019). PMID: 30787016 PMID: PMC6497554
127.	DeVorkin L, Pavey N, Carleton G, Comber A, Ho C, Lim J, McNamara E, Huang H, Kim P, Zacharias LG, Mizushima N, Saitoh T, Akira S, Beckham W, Lorzadeh A, Moksa M, Cao Q, Murthy A, Hirst M, <u>DeBerardinis RJ</u> , Lum JJ. Autophagy Regulation of Metabolism Is Required for CD8+ T Cell Anti-tumor Immunity. <i>Cell Reports</i> 9;27 (2):502-513 (2019). PMID: 30970253
128.	Galan-Cobo A, Sitthideatphaiboon P, Qu X, Poteete A, Pisegna MA, Tong P, Chen PH, Boroughs LK, Rodriguez MLM, Zhang W, Parlati F, Wang J, Gandhi V, Skoulidis F, <u>DeBerardinis RJ</u> , Minna JD, and Heymach JV. LKB1 and KEAP1/NRF2 pathways cooperatively promote metabolic reprogramming with enhanced glutamine dependence in KRAS-mutant lung adenocarcinoma. <i>Cancer Research</i> 79(13):3251-3267 (2019). PMID: 31040157
129.	Ni M, Solmonson A, Pan C, Yang C, Li D, Notzon A, Cai L, Guevara G, Zacharias LG, Faubert B, Vu HS, Jiang L, Ko B, Morales NM, Pei J, Vale G, Rakheja D, Grishin NV, McDonald JG, Gotway GK, McNutt MC, Pascual JM, <u>DeBerardinis RJ</u> . Functional Assessment of Lipoyltransferase-1 Deficiency in Cells, Mice, and Humans. <i>Cell Reports</i> 27(5):1376-1386 (2019). PMID: 31042466
130.	Chalishazar MD, Wait SJ, Huang F3, Ireland AS, Mukhopadhyay A, Lee Y, Schuman S, Guthrie MR, Berrett K, Vahrenkamp J, Hu Z, Kudla M, Modzelewska K, Wang G, Ingolia NT, Gertz J, Lum DH, Cosulich SC, Bomalaski JS, <u>DeBerardinis RJ</u> , Oliver TG. MYC-driven small cell lung cancer is metabolically distinct and vulnerable to arginine depletion. <i>Clinical Cancer Research</i> 25(16):5107-5121 (2019). PMID: 31164374
131.	Gu Z, Liu Y, Cai F, Patrick M, Zmajkovic J, Cao H, Zhang Y, Tasdogan A, Chen M, Qi L, Liu X, Li K, Lyu J, Dickerson KE, Chen W, Ni M, Merritt ME, Morrison SJ, Skoda RC, <u>DeBerardinis RJ</u> , Xu J. Loss of EZH2 Reprograms BCAA Metabolism to Drive Leukemic Transformation. <i>Cancer Discovery</i> (2019) PMID: 31189531
132.	Hsieh MH, Choe JH, Gadhvi J, Kim YJ, Arguez MA, Palmer M, Gerold H, Nowak C, Do H, Mazambani S, Knighton JK, Cha M, Goodwin J, Kang MK, Jeong JY, Lee SY, Faubert B,

	Xuan Z, Abel ED, Scafoglio C, Shackelford DB, Minna JD, Singh PK, Shulaev V, Bleris L, Hoyt K, Kim J, Inoue M, <u>DeBerardinis RJ</u> , Kim TH, Kim JW. p63 and SOX2 Dictate Glucose Reliance and Metabolic Vulnerabilities in Squamous Cell Carcinomas. <i>Cell Reports</i> 28(7):1860-1878 (2019). PMID: 31412252
133.	Cai L, Luo D, Yao B, Yang DM, Lin S, Girard L, <u>DeBerardinis RJ</u> , Minna JD, Xie Y, Xiao G. Systematic Analysis of Gene Expression in Lung Adenocarcinoma and Squamous Cell Carcinoma with a Case Study of <i>FAM83A</i> and <i>FAM83B</i> . <i>Cancers (Basel)</i> . 2019 Jun 25;11(6):886. doi: 10.3390/cancers11060886. PMID: 31242643; PMCID: PMC6627508.
134.	Kofuji S, Hirayama A, Eberhardt AO, Kawaguchi R, Sugiura Y, Sampetean O, Ikeda Y, Warren M, Sakamoto N, Kitahara S, Yoshino H, Yamashita D, Sumita K, Wolfe K, Lange L, Ikeda S, Shimada H, Minami N, Malhotra A, Morioka S, Ban Y, Asano M, Flanary VL, Ramkissoon A, Chow LML, Kiyokawa J, Mashimo T, Lucey G, Mareninov S, Ozawa T, Onishi N, Okumura K, Terakawa J, Daikoku T, Wise-Draper T, Majd N, Kofuji K, Sasaki M, Mori M, Kanemura Y, Smith EP, Anastasiou D, Wakimoto H, Holland EC, Yong WH, Horbinski C, Nakano I, <u>DeBerardinis RJ</u> , Bachoo RM, Mischel PS, Yasui W, Suematsu M, Saya H, Soga T, Grummt I, Bierhoff H, Sasaki AT. IMP dehydrogenase-2 drives aberrant nucleolar activity and promotes tumorigenesis in glioblastoma. <i>Nature Cell Biology</i> 21(8):1003-1014 (2019). PMID: 31371825
135.	Venkateswaran N, Lafita-Navarro MC, Hao YH, Kilgore JA, Perez-Castro L, Braverman J, Borenstein-Auerbach N, Kim M, Lesner NP, Mishra P, Brabletz T, Shay JW, <u>DeBerardinis RJ</u> , Williams NS, Yilmaz OH, Conacci-Sorrell M. MYC promotes tryptophan uptake and metabolism by the kynurenine pathway in colon cancer. <i>Genes & Development</i> 33(17-18):1236-1251 (2019). PMID: 31416966
136.	Hsieh MH, Choe JH, Gadhvi J, Kim YJ, Arguez MA, Palmer M, Gerold H, Nowak C, Do H, Mazambani S, Knighton JK, Cha M, Goodwin J, Kang MK, Jeong JY, Lee SY, Faubert B, Xuan Z, Abel ED, Scafoglio C, Shackelford DB, Minna JD, Singh PK, Shulaev V, Bleris L, Hoyt K, Kim J, Inoue M, <u>DeBerardinis RJ</u> , Kim TH, Kim JW. p63 and SOX2 Dictate Glucose Reliance and Metabolic Vulnerabilities in Squamous Cell Carcinomas. <i>Cell Reports</i> 28(7):1860-1878 (2019). PMID: 31412252 PMCID: PMC7048935
137.	Vashisht Gopal YN, Gammon S, Prasad R, Knighton B, Pisaneschi F, Roszik J, Feng N, Johnson S, Pramanik S, Sudderth J, Sui D, Hudgens C, Fischer GM, Deng W, Reuben A, Peng W, Wang J, McQuade JL, Tetzlaff MT, Di Francesco ME, Marszalek J, Piwnica-Worms D, <u>DeBerardinis RJ</u> , Davies MA. A Novel Mitochondrial Inhibitor Blocks MAPK Pathway and Overcomes MAPK Inhibitor Resistance in Melanoma. <i>Clinical Cancer Research</i> 25(21):6429-6442 (2019). PMID: 31439581 PMCID: PMC6825560
138.	Gao X, Zhao L, Liu S, Li Y, Xia S, Chen D, Wang M, Wu S, Dai Q, Vu H, Zacharias L, <u>DeBerardinis R</u> , Lim E, Metallo C, Boggon TJ, Lonial S, Lin R, Mao H, Pan Y, Shan C, Chen J. γ -6-Phosphogluconolactone, a Byproduct of the Oxidative Pentose Phosphate Pathway, Contributes to AMPK Activation through Inhibition of PP2A. <i>Molecular Cell</i> 76(6):857-871 (2019). PMID: 31586547 PMCID: PMC6925637
139.	Chen PH, Cai L., Huffman K., Yang C., Kim J, Faubert B, Boroughs LK, Ko B, Sudderth J, McMillan EA, Girard L., Chen D, Peyton M, Shields MD, Yao B, Shames D, Kim HS, Timmons B, Sekine I, Britt R, Weber S, Byers LA, Heymach JV, Chen J, White MA, Minna JD, Xiao G, <u>DeBerardinis RJ</u> . Metabolic Diversity in Human Non-Small Cell Lung Cancer Cells. <i>Molecular Cell</i> 76(5):838-851 (2019). PMID: 31564558 PMCID: PMC6898782
140.	Hao YH, Lafita-Navarro MC, Zacharias L, Borenstein-Auerbach N, Kim M, Barnes S, Kim J, Shay J, <u>DeBerardinis RJ</u> , Conacci-Sorrell M. Induction of LEF1 by MYC activates the WNT

	pathway and maintains cell proliferation. <i>Cell Commun Signal</i> 17(1):129 (2019). PMID: 31623618 PMCID: PMC6798382
141.	Ma EH, Verway MJ, Johnson RM, Roy DG, Steadman M, Hayes S, Williams KS, Sheldon RD, Samborska B, Kosinski PA, Kim H, Griss T, Faubert B, Condotta SA, Krawczyk CM, <u>DeBerardinis RJ</u> , Stewart KM, Richer MJ, Chubukov V, Roddy TP, Jones RG. Metabolic Profiling Using Stable Isotope Tracing Reveals Distinct Patterns of Glucose Utilization by Physiologically Activated CD8 ⁺ T Cells. <i>Immunity</i> 51(5):856-870 (2019). PMID: 31747582
142.	Luengo A, Abbott KL, Davidson SM, Hosios AM, Faubert B, Chan SH, Freinkman E, Zacharias LG, Mathews TP, Clish CB, <u>DeBerardinis RJ</u> , Lewis CA, Vander Heiden MG. Reactive metabolite production is a targetable liability of glycolytic metabolism in lung cancer. <i>Nature Communications</i> 10(1):5604 (2019). PMID: 31811141 PMCID: PMC6898239
143.	Tasdogan A, Faubert B, Ramesh V, Ubellacker JM, Shen B, Solmonson A, Murphy MM, Gu Z, Gu W, Martin M, Kasitinon SY, Vandergriff T, Mathews TP, Zhao Z, Schadendorf D, <u>DeBerardinis RJ</u> , Morrison SJ. Metabolic heterogeneity confers differences in melanoma metastatic potential. <i>Nature</i> 577(7788):115-120 (2020). PMID: 31853067 PMCID: PMC6930341
144.	Kernstine KH, Faubert B, Do QN, Rogers TJ, Hensley CT, Cai L, Torrealba J, Oliver D, Waschmann JW, Lenkinski RE, Malloy CR, <u>Deberardinis RJ</u> . Does Tumor FDG-PET-Avidity Represent Enhanced Glycolytic Metabolism in Non-Small Cell Lung Cancer? <i>Annals of Thoracic Surgery</i> 109(4):1019-1025 (2020). PMID: 31846640 PMCID: PMC7370816
145.	Lee MH, <u>DeBerardinis RJ</u> , Wen X, Corbin IR, Sherry AD, Malloy CR, Jin ES. Active pyruvate dehydrogenase and impaired gluconeogenesis in orthotopic hepatomas of rats. <i>Metabolism</i> (2020). PMID: 31672442 PMCID: PMC6892165
146.	Park JS, Burckhardt CJ, Lazcano R, Solis LM, Isogai T, Li L, Chen CS, Gao B, Minna JD, Bachoo R, <u>DeBerardinis RJ</u> and Danuser G. Mechanical regulation of glycolysis via cytoskeleton architecture. <i>Nature</i> 578:621-626 (2020). PMID: 32051585 PMCID: PMC7210009
147.	Lesner NP, Gokhale AS, Kota K, <u>DeBerardinis RJ</u> , Mishra P. α -ketobutyrate links alterations in cystine metabolism to glucose oxidation in mtDNA mutant cells. <i>Metab Eng</i> 60:157-167 (2020). PMID: 32330654 PMCID: PMC7310915
148.	Tiwari V, Daoud EV, Hatanpaa KJ, Gao A, Zhang S, An Z, Ganji SK, Raisanen JM, Lewis CM, Askari P, Baxter J, Levy M, Dimitrov I, Thomas BP, Pinho MC, Madden CJ, Pan E, Patel TR, <u>DeBerardinis RJ</u> , Sherry AD, Mickey BE, Malloy CR, Maher EA, Choi C. Glycine by MR spectroscopy is an imaging biomarker of glioma aggressiveness. <i>Neuro Oncol</i> (2020) Jul 7;22(7):1018-1029. PMID: 32055850 PMCID: PMC7339885
149.	Issaq SH, Mendoza A, Kidner R, Rosales TI, Duvieu DY, Heske CM, Rohde JM, Boxer MB, Thomas CJ, <u>DeBerardinis RJ</u> , Helman LJ. EWS-FLI1-regulated serine synthesis and exogenous serine are necessary for Ewing sarcoma cellular proliferation and tumor growth. <i>Mol Cancer Ther</i> (2020) Jul;19(7):1520-1529. PMID: 32371575 PMCID: PMC7335326
150.	Kim J, Lee HM, Cai F, Ko B, Yang C, Lieu EL, Muhammad N, Rhyne S, Li K, Haloul M, Gu W, Faubert B, Kaushik AK, Cai L, Kasiri S, Marriam U, Nham K, Girard L, Wang H, Sun X, Kim J, Minna JD, Unsal-Kacmaz K, <u>DeBerardinis RJ</u> . The hexosamine biosynthesis pathway is a targetable liability in KRAS/LKB1 mutant lung cancer. <i>Nature Metabolism</i> (2020) Dec;2(12):1401-1412. PMID: 33257855 PMCID: PMC7744327
151.	Nowinski SM, Solmonson A, Rusin SF, Maschek JA, Bensard CL, Fogarty S, Jeong MY, Lettlova S, Berg JA, Morgan JT, Ouyang Y, Naylor BC, Paulo JA, Funai K, Cox JE, Gygi SP, Winge DR, <u>DeBerardinis RJ</u> , Rutter J. Mitochondrial fatty acid synthesis coordinates

	oxidative metabolism in mammalian mitochondria. <i>Elife</i> . 2020 Aug 17;9:e58041. doi: 10.7554/eLife.58041. PMID: 32804083; PMCID: PMC7470841.
152.	Xiong N, Gao X, Zhao H, Cai F, Zhang FC, Yuan Y, Liu W, He F, Zacharias LG, Lin H, Vu HS, Xing C, Yao DX, Chen F, Luo B, Sun W, <u>DeBerardinis RJ</u> , Xu H, Ge WP. Using arterial-venous analysis to characterize cancer metabolic consumption in patients. <i>Nat Commun</i> . 2020 Jun 23;11(1):3169. doi: 10.1038/s41467-020-16810-8. PMID: 32576825; PMCID: PMC7311411.
153.	Zhang B, Chen Y, Shi X, Zhou M, Bao L, Hatanpaa KJ, Patel T, <u>DeBerardinis RJ</u> , Wang Y, Luo W. Regulation of branched-chain amino acid metabolism by hypoxia-inducible factor in glioblastoma. <i>Cell Mol Life Sci</i> . 2021 Jan;78(1):195-206. doi: 10.1007/s00018-020-03483-1. Epub 2020 Feb 22. PMID: 32088728.
154.	Stender S, Zaha VG, Malloy CR, Sudderth J, <u>DeBerardinis JR</u> , Park JM. Assessment of Rapid Hepatic Glycogen Synthesis in Humans using Dynamic ¹³ C Magnetic Resonance Spectroscopy. <i>Hepatol Commun</i> . 4(3):425-433 (2020) DOI: 10.1056/NEJMcibr1914890 PMID: 32101671
155.	Valente LJ, Tarangelo A, Li AM, Naciri M, Raj N, Boutelle AM, Li Y, Mello SS, Biegging-Rolett K, <u>DeBerardinis RJ</u> , Ye J, Dixon SJ, Attardi LD. p53 deficiency triggers dysregulation of diverse cellular processes in physiological oxygen. <i>J Cell Biol</i> . 2020 Nov 2;219(11):e201908212. doi: 10.1083/jcb.201908212. PMID: 32886745; PMCID: PMC7594498.
156.	Lafita-Navarro MC, Perez-Castro L, Zacharias LG, Barnes S, <u>DeBerardinis RJ</u> , Conacci-Sorrell M. The transcription factors aryl hydrocarbon receptor and MYC cooperate in the regulation of cellular metabolism. <i>J Biol Chem</i> . 2020 Aug 28;295(35):12398-12407. doi: 10.1074/jbc.AC120.014189. Epub 2020 Jul 1. PMID: 32611766; PMCID: PMC7458811.
157.	Oizel K, Yang C, Renoult O, Gautier F, Do QN, Joalland N, Gao X, Ko B, Vallette F, Ge WP, Paris F, <u>DeBerardinis RJ</u> , Pecqueur C. Glutamine uptake and utilization of human mesenchymal glioblastoma in orthotopic mouse model. <i>Cancer Metab</i> . 2020 Aug 10;8:9. doi: 10.1186/s40170-020-00215-8. PMID: 32789014; PMCID: PMC7416393.
158.	Gerber DE, Putnam WC, Fattah FJ, Kernstine KH, Brekken RA, Pedrosa I, Skelton R, Saltarski JM, Lenkinski RE, Leff RD, Ahn C, Padmanabhan C, Chembukar V, Kasiri S, Kallem RR, Subramaniyan I, Yuan Q, Do QN, Xi Y, Reznik SI, Pelosof L, Faubert B, <u>DeBerardinis RJ</u> , Kim J. Concentration-dependent Early Antivascular and Antitumor Effects of Itraconazole in Non-Small Cell Lung Cancer. <i>Clin Cancer Res</i> . 2020 Nov 15;26(22):6017-6027. doi: 10.1158/1078-0432.CCR-20-1916. Epub 2020 Aug 26. PMID: 32847935; PMCID: PMC7669726.
159.	Shah KN, Shah PN, Mullen AR, Chen Q, Southerland MR, Chirra B, <u>DeBerardinis RJ</u> , Cannon CL. N-Acetyl cysteine abrogates silver-induced reactive oxygen species in human cells without altering silver-based antimicrobial activity. <i>Toxicol Lett</i> . 2020 Oct 10;332:118-129. doi: 10.1016/j.toxlet.2020.07.014. Epub 2020 Jul 10. PMID: 32659471; PMCID: PMC7643162.
160.	Ahmed S, <u>DeBerardinis RJ</u> , Ni M, Afroz B. Vitamin B6-dependent epilepsy due to pyridoxal phosphate-binding protein (PLPBP) defect - First case report from Pakistan and review of literature. <i>Ann Med Surg (Lond)</i> . 2020 Dec 1;60:721-727. doi: 10.1016/j.amsu.2020.11.079. PMID: 33425341; PMCID: PMC7779953.
161.	Huang F, Huffman KE, Wang Z, Wang X, Cai F, Yang C, Cai L, Shih T, Zacharias LG, Chung A, Yang Q, Chalishazar MD, Ireland AS, Stewart, CA, Cargill K, Girard L, Liu Y, Ni M, Xu, J, Wu X, Zhu H, Drapkin B, Oliver TG, Byers LG, Gazdar AF, Minna JD and <u>DeBerardinis RJ</u> . Guanosine triphosphate couples oncogenic MYC's metabolic and ribosome

	programs. <i>J Clin Invest</i> 2021 Jan 4;131(1):e139929. PMID: 33079728 PMCID: PMC7773395
162.	Ni M, Afroze B, Xing C, Pan C, Shao Y, Cai L, Cantarel BL, Pei J, Grishin NV, Hewson S, Knight D, Mahida S, Michel D, Tarnopolsky M, Poduri A, Rotenberg A, Sondheimer N and <u>DeBerardinis RJ</u> . A pathogenic <i>UFSP2</i> variant in an autosomal recessive form of pediatric neurodevelopmental anomalies and epilepsy. <i>Genetics in Medicine</i> 2021 Jan 20. PMID: 33473208
163.	Kilgour MK, MacPherson S, Zacharias LG, Ellis AE, Sheldon RD, Liu EY, Keyes S, Pauly B, Carleton G, Allard B, Smazynski J, Williams KS, Watson PH, Stagg J, Nelson BH, <u>DeBerardinis RJ</u> , Jones RG, Hamilton PT, Lum JJ. 1-Methylnicotinamide is an immune regulatory metabolite in human ovarian cancer. <i>Science Advances</i> 2021 Jan 20;7(4):eabe1174. doi: 10.1126/sciadv.abe1174. PMID: 33523930; PMCID: PMC7817098.
164.	de Los Santos-Jiménez J, Campos-Sandoval JA, Márquez-Torres C, Urbano-Polo N, Brøndegaard D, Martín-Rufián M, Lobo C, Peñalver A, Gómez-García MC, Martín-Campos J, Cardona C, Castilla L, da Costa Souza F, Cheng T, Segura JA, Alonso FJ, Curi R, Colquhoun A, <u>DeBerardinis RJ</u> , Márquez J, Matés JM. Glutaminase isoforms expression switches microRNA levels and oxidative status in glioblastoma cells. <i>J Biomed Sci.</i> 2021 Feb 20;28(1):14. doi: 10.1186/s12929-021-00712-y. PMID: 33610185; PMCID: PMC7897386.
165.	Cai L, Liu H, Huang F, Fujimoto J, Girard L, Chen J, Li Y, Zhang YA, Deb D, Stastny V, Pozo K, Kuo CS, Jia G, Yang C, Zou W, Alomar A, Huffman K, Papari-Zareei M, Yang L, Drapkin B, Akbay EA, Shames DS, Wistuba II, Wang T, Johnson JE, Xiao G, <u>DeBerardinis RJ</u> , Minna JD, Xie Y, Gazdar AF. Cell-autonomous immune gene expression is repressed in pulmonary neuroendocrine cells and small cell lung cancer. <i>Commun Biol.</i> 2021 Mar 9;4(1):314. doi: 10.1038/s42003-021-01842-7. PMID: 33750914.
166.	Conn CS, Yang H, Tom HJ, Ikeda K, Osés-Prieto JA, Vu H, Oguri Y, Nair S, Gill RM, Kajimura S, <u>DeBerardinis RJ</u> , Burlingame AL, Ruggero D. The major cap-binding protein eIF4E regulates lipid homeostasis and diet-induced obesity. <i>Nat Metab.</i> 2021 Feb;3(2):244-257. doi: 10.1038/s42255-021-00349-z. Epub 2021 Feb 18. PMID: 33619378.
167.	Johnston K, Pachnis P, Tasdogan A, Faubert B, Zacharias LG, Vu HS, Rodgers-Augustyniak L, Johnson A, Huang F, Ricciardio S, Zhao Z, Mathews TP, Watt T, Leavey P, <u>DeBerardinis RJ</u> . Isotope tracing reveals glycolysis and oxidative metabolism in childhood tumors of multiple histologies. <i>Med</i> 2021 2:395-410.
168.	Ni M, Black LF, Pan C, Vu H, Pei J, Ko B, Cai L, Solmonson A, Yang C, Nugent KM, Grishin NV, Xing C, Roeder E, <u>DeBerardinis RJ</u> . Metabolic impact of pathogenic variants in the mitochondrial glutamyl-tRNA synthetase <i>EARS2</i> . <i>J Inherit Metab Dis.</i> 2021 Jul;44(4):949-960. doi: 10.1002/jimd.12387. Epub 2021 Apr 27. PMID: 33855712; PMCID: PMC9219168.
169.	Tran DH, Kesavan R, Rion H, Soflae MH, Solmonson A, Bezwada D, Vu HS, Cai F, Phillips JA 3rd, <u>DeBerardinis RJ</u> , Hoxhaj G. Mitochondrial NADP ⁺ is essential for proline biosynthesis during cell growth. <i>Nat Metab.</i> 2021 Apr;3(4):571-585.
170.	Cai L, Liu H, Minna J, <u>DeBerardinis RJ</u> , Xiao G, Xie, Y. Assessing Consistency Across Functional Screening Datasets in Cancer Cells. <i>Bioinformatics.</i> 2021 Jun 3;btab423. doi: 10.1093/bioinformatics/btab423 PMID: 34081116
171.	Ahmed S, Ni M, <u>DeBerardinis RJ</u> , Habib A, Akbar F, Afroze B. Clinico-Pathological and Molecular Spectrum of Biotinidase Deficiency- Experience from a Lower Middle-Income Country. <i>Clin Lab.</i> 2021 Jun 1;67(6). doi 10.7754/Clin.Lab.2020.200937 PMID: 34107619

172.	Baytas O, Davidson SM, DeBerardinis RJ, Morrow EM. Mitochondrial enzyme GPT2 regulates metabolic mechanisms required for neuron growth and motor function in vivo. <i>Hum Mol Genet.</i> 2021 Sep 14;ddab269. Doi:10.1093/hmg/ddab269 PMID: 34519342
173.	Suh EH, Geraldes CFGC, Chirayil S, Faubert B, Ayala R, <u>DeBerardinis RJ</u> , Sherry AD. Detection of glucose-derived D- and L-lactate in cancer cells by the use of a chiral NMR shift reagent. <i>Cancer Metab</i> 9(1):38. doi: 10.1186/s40170-021-00267-4. (2021) PMID: 34742347. PMCID: PMC8571830
174.	Elias R, Tcheuyap VT, Kaushik AK, Singla N, Gao M, Reig Torras O, Christie A, Mulgaonkar A, Woolford L, Stevens C, Kettimuthu KP, Pavia-Jimenez A, Boroughs LK, Joyce A, Dakanali M, Notgrass H, Margulis V, Cadeddu JA, Pedrosa I, Williams NS, Sun X, DeBerardinis RJ, Öz OK, Zhong H, Seshagiri S, Modrusan Z, Cantarel BL, Kapur P, Brugarolas J. A renal cell carcinoma tumorgraft platform to advance precision medicine. <i>Cell Rep.</i> 37(8):110055. (2021) Doi:10.1016/j.celrep.2021.110055 PMID: 34818533
175.	Liao C, Glodowski CR, Fan C, Liu J, Mott KR, Kaushik A, Vu H, Locasale JW, McBrayer SK, <u>DeBerardinis RJ</u> , Perou CM, Zhang Q. Integrated Metabolic Profiling and Transcriptional Analysis Reveals Therapeutic Modalities for Targeting Rapidly Proliferating Breast Cancers. <i>Cancer Res</i> 82(4):665-680. (2022) PMID:34911787
176.	Parida PK, Marquez-Palencia M, Nair V, Kaushik AK, Kim K, Sudderth J, Quesada-Diaz E, Cajigas A, Vemireddy V, Gonzalez-Ericsson PI, Sanders ME, Mobley BC, Huffman K, Sahoo S, Alluri P, Lewis C, Peng Y, Bachoo RM, Artega CL, Hanker AB, <u>DeBerardinis RJ</u> , Malladi S. Metabolic Diversity within breast cancer brain-tropic cells determines metastatic fitness. <i>Cell Metab.</i> 34(1):90-105.e7 (2022) PMID: 34986341
177.	Aurora AB, Khivansara V, Leach A, Gill JG, Martin Sandoval M, Yang C, Kasitinon SY, Bezwada D, Gu W, Mathews TP, Zhao Z, <u>DeBerardinis RJ</u> , Mossison SJ. Loss of Glucose 6-phosphate dehydrogenase function increases oxidative stress and glutaminolysis in metastasizing melanoma cells. <i>Proc National Acad Sci U S A</i> 119(6):e2120617119. (2022) PMID: 35110412
178.	MacPherson S, Keyes S, Kilgour MK, Smazynski J, Chan V, Sudderth J, Turcotte T, Devlieger A, Yu J, Huggler KS, Cantor JR, <u>DeBerardinis RJ</u> , Siatskas C, Lum JJ. Clinically relevant T cell expansion media activate distinct metabolic programs uncoupled from cellular function. <i>Mol Ther Methods Clin Dev.</i> 24:380-393. (2022) PMID: 35284590
179.	Chen R, Wang J, Gradinaru I, Vu H, Geboers S, Naidoo J, Ready JM, Williams NS, <u>DeBerardinis RJ</u> , Ross EM, Collins JJ. A male-derived nonribosomal peptide pheromone controls female schistosome development. <i>Cell</i> 185(9):1506-1520.e17 (2022) PMID: 35385487
180.	Solmonson A, Faubert B, Gu W, Rao A, Cowdin MA, Mendez-Monte I, Kelekar S, Rogers TJ, Pan C, Guevara G, Tarangelo A, Zacharias LG, Martin-Sandoval MS, Do D, Pachnis P, Dumesnil D, Mathews T, Tasdogan A, Pham A, Cai L, Zhao Z, Ni M, Cleaver O, Sadek HA, Morrison SJ, <u>DeBerardinis RJ</u> . Compartmentalized metabolism supports midgestation mammalian development. <i>Nature</i> 604(7905):349-353. (2022) PMID: 35388219
181.	Zhang R, Chen D, Fan H, Wu R, Tu J, Zhang FQ, Wang M, Zheng H, Qu C, Elf SE, Faubert B, He Y, Bissonnette MB, Gao X, <u>DeBerardinis RJ</u> , Chen J. Cellular signals converge at the NOX ₂ -SHP-2 axis to induce reductive carboxylation in cancer cells. <i>Cell Chem Biol.</i> S2451-9456(22)00127-1. (2022) PMID: 35429459
182.	Zhang B, Peng H, Zhou M, Bao L, Wang C, Cai F, Zhang H, Wang J, Niu Y, Chen Y, Wang Y, Hatanpaa K, Copland JA, <u>DeBerardinis RJ</u> , Wang Y, Luo W. Targeting BCAT1 combined with α -ketoglutarate triggers metabolic synthetic lethality in glioblastoma. <i>Cancer Res.</i> Canres.3868.2021. (2022) PMID: 35499760

183.	Meng D, Yang Q, Jeong MH, Curukovic A, Tiwary S, Melick Ch, Lama-Sherpa TD, Wang H, Huerta-Rosario M, Urquhart G, Zacharias LG, Lewis C, <u>DeBerardinis RJ</u> , Jewell JL. SNAT7 regulates m TORC1 via micropinocytosis. <i>Proc Natl Acad Sci U S A</i> 119(20):e2123261119. (2022) PMID: 35561222
184.	Chen J, LaGue E, Li J, Yang C, Hackett EP, Mendoza M, Alger JR, <u>DeBerardinis RJ</u> , Corbin IR, Billingsley KL, Park JM. Profiling Carbohydrate Metabolism in Liver and Hepatocellular Carcinoma with [¹³ C]-Glycerate Probes. <i>Anal Sens</i> 1:196-202 (2022). PMID: 35693130
185.	Kaymak I, Luda KM, Duimstra LR, Ma EH, Longo J, Dahabieh MS, Faubert B, Oswald BM, Watson MJ, Kitchen-Goosen SM, DeCamp LM, Compton SE, Fu Z, <u>DeBerardinis RJ</u> , Williams KS, Sheldon RD, Jones RG. Carbon source availability drives nutrient utilization in CD8+ T cells. <i>Cell Metabolism</i> doi: 10.1016/j.cmet.2022.07.012 (2022). PMID: 35981545
186.	Shi DD, Savani MR, Levitt MM, Wang AC, Endress JE, Bird CE, Buehler J, Stopka SA, Regan MS, Lin YF, Puliyappadamba VT, Gao W, Khanal J, Evans L, Lee JH, Guo L, Xiao Y, Xu M, Huang B, Jennings RB, Bonal DM, Martin-Sandoval MS, Dang T, Gattie LC, Cameron AB, Lee S, Asara JM, Kornblum HI, Mak TW, Looper RE, Nguyen QD, Signoretti S, Gradl S, Sutter A, Jeffers M, Janzer A, Lehrman MA, Zacharias LG, Mathews TP, Losman JA, Richardson TE, Cahill DP, <u>DeBerardinis RJ</u> , Ligon KL, Xu L, Ly P, Agar NYR, Abdullah KG, Harris IS, Kaelin WG Jr, McBrayer SK. De novo pyrimidine synthesis is a targetable vulnerability in IDH mutant glioma. <i>Cancer Cell</i> doi: 10.1016/j.ccell.2022.07.011 (2022). PMID: 35985343
187.	Pachnis P, Wu Z, Faubert B, Tasdogan A, Gu W, Shelton S, Solmonson A, Rao AD ¹ , Kaushik AK, Rogers TJ, Ubellacker JM, LaVigne CA, Yang C, Ko B, Ramesh V, Sudderth J, Zacharias LG, Martin-Sandoval MS, Do D, Mathews TP, Zhao Z, Mishra P, Morrison SJ, <u>DeBerardinis RJ</u> . In vivo isotope tracing reveals a requirement for the electron transport chain in glucose and glutamine metabolism by tumors. <i>Science Advances</i> 8:eabn9550 (2022).
188.	Kilgour MK, MacPherson S, Zacharias LG, LeBlanc J, Babinszky S, Kowalchuk G, Parks S, Sheldon RD, Jones RG, <u>DeBerardinis RJ</u> , Hamilton PT, Watson PH, Lum JJ. Principles of reproducible metabolite profiling of enriched lymphocytes in tumors and ascites from human ovarian cancer. <i>Nature Protocols</i> 2022. doi: 10.1038/s41596-022-00729-z. PMID: 35986218
189.	Nie M, Chen N, Pang H, Jiang T, Jiang W, Tian P, Yao L, Chen Y, <u>DeBerardinis RJ</u> , Li W, Yu Q, Zhou C, Hu Z. Targeting acetylcholine signaling modulates persistent drug tolerance in EGFR-mutant lung cancer and impedes tumor relapse. <i>J Clin Invest.</i> 132:e160152 (2022). PMID: 36048538
190.	Cai L, <u>DeBerardinis RJ</u> , Xiao G, Minna JD, Xie Y. A Pan-Cancer Assessment of <i>RBI/ TP53</i> Co-Mutations. <i>Cancers (Basel)</i> 14:4199 (2022). PMID: 36077736
191.	Lesner NP, Wang X, Chen Z, Frank A, Menezes CJ, House S, Shelton SD, Lemoff A, McFadden DG, Wansapura J, <u>DeBerardinis RJ</u> , Mishra P. Differential requirements for mitochondrial electron transport chain components in the adult murine liver. <i>Elife.</i> 2022 Sep 26;11:e80919 (2022). PMID: 36154948
192.	Hahn AW, Menk AV, Rivadeneira DB, Augustin RC, Xu M, Li J, Wu X, Mishra AK, Gide TN, Quek C, Zang Y, Spencer CN, Menzies AM, Daniel CR, Hudgens CW, Nowicki T, Haydu LE, Khan MAW, Gopalakrishnan V, Burton EM, Malke J, Simon JM, Bernatchez C, Putluri N, Woodman SE, Gopal Y N V, Guerrieri R, Fischer GM, Wang J, Wani KM, Thompson JF, Lee JE, Hwu P, Ajami N, Gershenwald JE, Long GV, Scolyer RA, Tetzlaff MT, Lazar AJ, Schadendorf D, Wargo JA, Kirkwood JM, <u>DeBerardinis RJ</u> , Liang H, Futreal A, Zhang J, Wilmott JS, Peng W, Davies MA, Delgoffe GM, Najjar YG, McQuade JL. Obesity is associated with altered tumor metabolism in metastatic melanoma. <i>Clin Cancer Res.</i> doi: 10.1158/1078-0432.CCR-22-2661 (2022). PMID: 36166093

193.	Wei P, Bott AJ, Cluntun AA, Morgan JT, Cunningham CN, Schell JC, Ouyang Y, Ficarro SB, Marto JA, Danial NN, <u>DeBerardinis RJ</u> , Rutter J. Mitochondrial pyruvate supports lymphoma proliferation by fueling a glutamate pyruvate transaminase 2-dependent glutaminolysis pathway. <i>Science Advances</i> 8:eabq0117 (2022). PMID: 36179030
194.	Lyu J, Liu Y, Gong L, Chen M, Madanat YF, Zhang Y, Cai F, Gu Z, Cao H, Kaphle P, Kim YJ, Kalkan FN, Stephens H, Dickerson KE, Ni M, Chen W, Patel P, Mims AS, Borate U, Burd A, Cai SF, Yin CC, You MJ, Chung SS, Collins RH, <u>DeBerardinis RJ</u> , Liu X, Xu J. Disabling Uncompetitive Inhibition of Oncogenic IDH Mutations Drives Acquired Resistance. <i>Cancer Discovery</i> doi: 10.1158/2159-8290.CD-21-1661 (2022). Online ahead of print. PMID: 36222845
195.	Patrick M, Gu Z, Zhang G, Wynn RM, Kaphle P, Cao H, Vu H, Cai F, Gao X, Zhang Y, Chen M, Ni M, Chuang DT, <u>DeBerardinis RJ</u> , Xu J. Metabolon formation regulates branched-chain amino acid oxidation and homeostasis. <i>Nature Metabolism</i> doi: 10.1038/s42255-022-00689-4. Online ahead of print (2022). PMID: 36443523
196.	Kaushik AK, Tarangelo A, Broughs LK, Ragavan M, Zhang Y, Wu CY, Li X, Ahumada K, Chiang JC, Tcheuyap VT, Saatchi F, Do QN, Yong C, Rosales T, Stevens C, Rao AD, Faubert B, Pachnis P, Zacharias LG, Vu H, Cai F, Mathews TP, Genovese G, Slusher BS, Kapur P, Sun X, Merritt M, Brugarolas J, <u>DeBerardinis RJ</u> . In vivo characterization of glutamine metabolism identifies therapeutic targets in clear cell renal cell carcinoma. <i>Science Advances</i> 8:eabp8293 (2022). PMID: 36525494
197.	Chen Z, Bordieanu B, Kesavan R, Lesner NP, Venigalla SSK, Shelton SD, <u>DeBerardinis RJ</u> , Mishra P. Lactate metabolism is essential in early-onset mitochondrial myopathy. <i>Science Advances</i> 2023 Jan 4;9(1):eadd3216. doi: 10.1126/sciadv.add3216. Epub 2023 Jan 4. PMID: 36598990; PMCID: PMC9812384.
198.	De Los Santos-Jiménez J, Rosales T, Ko B, Campos-Sandoval JA, Alonso FJ, Márquez J, <u>DeBerardinis RJ</u> , Matés JM. Metabolic Adjustments following Glutaminase Inhibition by CB-839 in Glioblastoma Cell Lines. <i>Cancers (Basel)</i> . 2023 Jan 15;15(2):531. doi: 10.3390/cancers15020531. PMID: 36672480; PMCID: PMC9856342.
199.	Webb BD, Nowinski SM, Solmonson A, Ganesh J, Rodenburg RJ, Leandro J, Evans A, Vu HS, Naidich TP, Gelb BD, <u>DeBerardinis RJ</u> , Rutter J, Houten SM. Recessive pathogenic variants in <i>MCAT</i> cause combined oxidative phosphorylation deficiency. <i>Elife</i> . 2023 Mar 7;12:e68047. doi: 10.7554/eLife.68047. PMID 36881526; PMCID: PMC9991045
200.	Huffman KE, Li LS, Carstens R, Park H, Girard L, Avila K, Wei S, Kollipara R, Timmons B, Sudderth J, Bendris N, Kim J, Villalobos P, Fujimoto J, Schmid S, <u>DeBerardinis RJ</u> , Wistuba I, Heymach J, Kittler R, Akbay EA, Posner B, Wang Y, Lam S, Kliewer SA, Mangelsdorf DJ, Minna JD. Glucocorticoid mediated inhibition of LKB1 mutant non-small cell lung cancers. <i>Front Oncol</i> . 2023 Mar 23;13:1025443. PMID: 37035141. PMCID: PMC10078807
201.	Ahmed MS, Farag AB, Boys IN, Wang P, Menendez-Montes I, Nguyen NUN, Eitson JL, Ohlson MB, Fan W, McDougal MB, Mar K, Thet S, Ortiz F, Kim SY, Solmonson A, Williams NS, Lemoff A, <u>DeBerardinis RJ</u> , Schoggins JW, Sadek HA. FDA approved drugs with antiviral activity against SARS-CoV-2: From structure-based repurposing to host-specific mechanisms. <i>Biomed Pharmacother</i> . 2023 Mar 28;162:114614. doi: 10.1016/j.biopha.2023.114614. PMID: 37068330
202.	Cai L, <u>DeBerardinis RJ</u> , Xie Y, Minna JD, Xiao G. A Comparative Study of Neuroendocrine Heterogeneity in Small Cell Lung Cancer and Neuroblastoma. <i>Mol Cancer Res</i> . 2023 May 31:OF1-OF13. doi: 10.1158/1541-7786.MCR-23-0002. Epub ahead of print. PMID: 37255415.

203.	Ahmed MS, Farag AB, Boys IN, Wang P, Menendez-Montes I, Nguyen NUN, Eitson JL, Ohlson MB, Fan W, McDougal MB, Mar K, Thet S, Ortiz F, Kim SY, Solmonson A, Williams NS, Lemoff A, <u>DeBerardinis RJ</u> , Schoggins JW, Sadek HA. FDA approved drugs with antiviral activity against SARS-CoV-2: From structure-based repurposing to host-specific mechanisms. <i>Biomed Pharmacother</i> . 2023 Jun;162:114614. doi: 10.1016/j.biopha.2023.114614. Epub 2023 Mar 28. PMID: 37068330; PMCID: PMC10043961.
204.	Parida PK, Marquez-Palencia M, Ghosh S, Khandelwal N, Kim K, Nair V, Liu XZ, Vu HS, Zacharias LG, Gonzalez-Ericsson PI, Sanders ME, Mobley BC, McDonald JG, Lemoff A, Peng Y, Lewis C, Vale G, Halberg N, Arteaga CL, Hanker AB, <u>DeBerardinis RJ</u> , Malladi S. Limiting mitochondrial plasticity by targeting DRP1 induces metabolic reprogramming and reduces breast cancer brain metastases. <i>Nat Cancer</i> . 2023 Jun;4(6):893-907. doi: 10.1038/s43018-023-00563-6. Epub 2023 May 29. PMID: 37248394.
205.	Cai L, <u>DeBerardinis RJ</u> , Xiao G, Minna JD, Xie Y. Dissecting molecular, pathological, and clinical features associated with tumor neural/neuroendocrine heterogeneity. <i>iScience</i> . 2023 May 28;26(6):106983. doi: 10.1016/j.isci.2023.106983. PMID: 37378310; PMCID: PMC10291506.
206.	Blatt EB, Parra K, Neeb A, Buroni L, Bogdan D, Yuan W, Gao Y, Gilbreath C, Paschalis A, Carreira S, <u>DeBerardinis RJ</u> , Mani RS, de Bono JS, Raj GV. Critical role of antioxidant programs in enzalutamide-resistant prostate cancer. <i>Oncogene</i> . 2023 Jun 24. doi: 10.1038/s41388-023-02756-w. Epub ahead of print. PMID: 37355762.
207.	Gopalkrishnan A, Wang N, Cruz-Rangel S, Kassab AY, Shiva S, Kurukulasuriya C, Monga SP, <u>DeBerardinis RJ</u> , Kiselyov K, Duvvuri U. Lysosomal mitochondrial interaction promotes tumor growth in squamous cell carcinoma of the head and neck. <i>bioRxiv</i> [Preprint]. 2023 Jun 26:2023.06.25.546311. doi: 10.1101/2023.06.25.546311. PMID: 37425842; PMCID: PMC10326999.
208.	Qian Y, Galan-Cobo A, Guijarro I, Dang M, Molckentine D, Poteete A, Zhang F, Wang Q, Wang J, Parra E, Panda A, Fang J, Skoulidis F, Wistuba II, Verma S, Merghoub T, Wolchok JD, Wong KK, <u>DeBerardinis RJ</u> , Minna JD, Vokes NI, Meador CB, Gainor JF, Wang L, Reuben A, Heymach JV. MCT4-dependent lactate secretion suppresses antitumor immunity in LKB1-deficient lung adenocarcinoma. <i>Cancer Cell</i> . 2023 Jul 10;41(7):1363-1380.e7. doi: 10.1016/j.ccell.2023.05.015. Epub 2023 Jun 15. PMID: 37327788.
209.	Ahmed S, Akbar F, <u>DeBerardinis RJ</u> , Ni M, Afroze B. Evaluation of the clinical, biochemical, and genetic presentation of neonatal and adult-onset 5,10-Methylene-tetrahydrofolate reductase (MTHFR) deficiency in patients from Pakistan. <i>J Pediatr Endocrinol Metab</i> . 2023 Jul 13. doi: 10.1515/jpem-2023-0083. Epub ahead of print. PMID: 37440674.
210.	Cai F, Bezwada D, Cai L, Mahar R, Wu Z, Chang MC, Pachnis P, Yang C, Kelekar S, Gu W, Brooks B, Ko B, Vu HS, Mathews TP, Zacharias LG, Martin-Sandoval M, Do D, Oaxaca KC, Jin ES, Margulis V, Malloy CR, Merritt ME, <u>DeBerardinis RJ</u> . Comprehensive isotopomer analysis of glutamate and aspartate in small tissue samples. <i>Cell Metab</i> . 2023 Oct 3;35(10):1830-1843.e5. doi: 10.1016/j.cmet.2023.07.013. Epub 2023 Aug 22. PMID: 37611583; PMCID: PMC10732579.
211.	Mukherjee A, Bezwada D, Greco F, Zandbergen M, Shen T, Chiang CY, Tasdemir M, Fahrman J, Grapov D, La Frano MR, Vu HS, Faubert B, Newman JW, McDonnell LA, Nezi L, Fiehn O, <u>DeBerardinis RJ</u> , Lengyel E. Adipocytes reprogram cancer cell metabolism by diverting glucose towards glycerol-3-phosphate thereby promoting metastasis. <i>Nat Metab</i> . 2023 Sep;5(9):1563-1577. doi: 10.1038/s42255-023-00879-8. Epub 2023 Aug 31. PMID: 37653041.

212.	Ocaña MC, Bernal M, Yang C, Caro C, Domínguez A, Vu HS, Cárdenas C, García-Martín ML, <u>DeBerardinis RJ</u> , Quesada AR, Martínez-Poveda B, Medina MÁ. New insights in the targets of action of dimethyl fumarate in endothelial cells: effects on energetic metabolism and serine synthesis in vitro and in vivo. <i>Commun Biol</i> . 2023 Oct 25;6(1):1084. doi: 10.1038/s42003-023-05443-4. PMID: 37880317; PMCID: PMC10600195.
213.	Bartman CR, Faubert B, Rabinowitz JD, <u>DeBerardinis RJ</u> . Metabolic pathway analysis using stable isotopes in patients with cancer. <i>Nat Rev Cancer</i> . 2023 Dec;23(12):863-878. doi: 10.1038/s41568-023-00632-z. Epub 2023 Oct 31. PMID: 37907620.
214.	Nawas AF, Solmonson A, Gao B, <u>DeBerardinis RJ</u> , Minna JD, Conacci-Sorrell M, Mendelson CR. IL-1 β mediates the induction of immune checkpoint regulators IDO1 and PD-L1 in lung adenocarcinoma cells. <i>Cell Commun Signal</i> . 2023 Nov 20;21(1):331. doi: 10.1186/s12964-023-01348-1. PMID: 37985999; PMCID: PMC10658741.
215.	Miller JW, Faubert BM, Mathews TP, Waters JK, <u>DeBerardinis RJ</u> , Kernstine KH. Metabolic signatures of thymomas: potential biomarkers and treatment targets. <i>Eur J Cardiothorac Surg</i> . 2024 Feb 1;65(2):ezad394. doi: 10.1093/ejcts/ezad394. PMID: 38011656; PMCID: PMC10882262.
216.	Wei H, Weaver YM, Yang C, Zhang Y, Hu G, Karner CM, Sieber M, <u>DeBerardinis RJ</u> , Weaver BP. Proteolytic activation of fatty acid synthase signals pan-stress resolution. <i>Nat Metab</i> . 2024 Jan;6(1):113-126. doi: 10.1038/s42255-023-00939-z. Epub 2024 Jan 2. PMID: 38167727; PMCID: PMC10822777.
217.	Feng Q, Bennett Z, Grichuk A, Pantoja R, Huang T, Faubert B, Huang G, Chen M, <u>DeBerardinis RJ</u> , Sumer BD, Gao J. Severely polarized extracellular acidity around tumour cells. <i>Nat Biomed Eng</i> . 2024 Mar 4. doi: 10.1038/s41551-024-01178-7. Epub ahead of print. PMID: 38438799.
218.	Cai L, Gao Y, <u>DeBerardinis RJ</u> , Acquah-Mensah G, Aidinis V, Beane JE, Biswal S, Chen T, Concepcion-Crisol CP, Grüner BM, Jia D, Jones R, Kurie JM, Lee MG, Lindahl P, Lissanu Y, Lorz Lopez MC, Martinelli R, Mazur PK, Mazzilli SA, Mii S, Moll H, Moorehead R, Morrissey EE, Ng SR, Oser MG, Pandiri AR, Powell CA, Ramadori G, Santos Lafuente M, Snyder E, Sotillo R, Su KY, Taki T, Taparra K, Xia Y, van Veen E, Winslow MM, Xiao G, Rudin CM, Oliver TG, Xie Y, Minna JD. A Lung Cancer Mouse Model Database. <i>bioRxiv</i> [Preprint]. 2024 May 14:2024.02.28.582577. doi: 10.1101/2024.02.28.582577. PMID: 38464291; PMCID: PMC10925271.
219.	Calhoon D, Sang L, Bezwada D, Kim N, Basu A, Hsu SC, Pimentel A, Brooks B, La K, Serrano AP, Cassidy DL, Cai L, Toffessi-Tcheuyap V, Margulis V, Cai F, Brugarolas J, Weiss RJ, <u>DeBerardinis RJ</u> , Birsoy K, Garcia-Bermudez J. Glycosaminoglycan-mediated lipoprotein uptake protects cancer cells from ferroptosis. <i>bioRxiv</i> [Preprint]. 2024 May 13:2024.05.13.593939. doi: 10.1101/2024.05.13.593939. PMID: 38765991; PMCID: PMC11101130.
220.	Venkateswaran N, Garcia R, Lafita-Navarro MC, Hao YH, Perez-Castro L, Nogueira PAS, Solmonson A, Mender I, Kilgore JA, Fang S, Brown IN, Li L, Parks E, Lopes Dos Santos I, Bhaskar M, Kim J, Jia Y, Lemoff A, Grishin NV, Kinch L, Xu L, Williams NS, Shay JW, <u>DeBerardinis RJ</u> , Zhu H, Conacci-Sorrell M. Tryptophan fuels MYC-dependent liver tumorigenesis through indole 3-pyruvate synthesis. <i>Nat Commun</i> . 2024 May 20;15(1):4266. doi: 10.1038/s41467-024-47868-3. PMID: 38769298; PMCID: PMC11106337.
221.	Tran DH, Kim D, Kesavan R, Brown H, Dey T, Soflaee MH, Vu HS, Tasdogan A, Guo J, Bezwada D, Al Saad H, Cai F, Solmonson A, Rion H, Chabatya R, Merchant S, Manales NJ, Tcheuyap VT, Mulkey M, Mathews TP, Brugarolas J, Morrison SJ, Zhu H, <u>DeBerardinis RJ</u> , Hoxhaj G. De novo and salvage purine synthesis pathways across tissues and tumors. <i>Cell</i> .

	2024 Jul 11;187(14):3602-3618.e20. doi: 10.1016/j.cell.2024.05.011. Epub 2024 May 31. PMID: 38823389; PMCID: PMC11246224.
222.	Wang X, Menezes CJ, Jia Y, Xiao Y, Venigalla SSK, Cai F, Hsieh MH, Gu W, Du L, Sudderth J, Kim D, Shelton SD, Llamas CB, Lin YH, Zhu M, Merchant S, Bezwada D, Kelekar S, Zacharias LG, Mathews TP, Hoxhaj G, Wynn RM, Tambar UK, <u>DeBerardinis RJ</u> , Zhu H, Mishra P. Metabolic inflexibility promotes mitochondrial health during liver regeneration. <i>Science</i> . 2024 Jun 14;384(6701):eadj4301. doi: 10.1126/science.adj4301. Epub 2024 Jun 14. PMID: 38870309; PMCID: PMC11232486.
223.	Wu Z, Bezwada D, Cai F, Harris RC, Ko B, Sondhi V, Pan C, Vu HS, Nguyen PT, Faubert B, Cai L, Chen H, Martin-Sandoval M, Do D, Gu W, Zhang Y, Zhang Y, Brooks B, Kelekar S, Zacharias LG, Oaxaca KC, Patricio JS, Mathews TP, Garcia-Bermudez J, Ni M, <u>DeBerardinis RJ</u> . Electron transport chain inhibition increases cellular dependence on purine transport and salvage. <i>Cell Metab</i> . 2024 Jul 2;36(7):1504-1520.e9. doi: 10.1016/j.cmet.2024.05.014. Epub 2024 Jun 13. PMID: 38876105; PMCID: PMC11240302.
224.	Bezwada D, Perelli L, Lesner NP, Cai L, Brooks B, Wu Z, Vu HS, Sondhi V, Cassidy DL, Kasitonon S, Kelekar S, Cai F, Aurora AB, Patrick M, Leach A, Ghandour R, Zhang Y, Do D, McDaniel P, Sudderth J, Dumesnil D, House S, Rosales T, Poole AM, Lotan Y, Woldu S, Bagrodia A, Meng X, Cadeddu JA, Mishra P, Garcia-Bermudez J, Pedrosa I, Kapur P, Courtney KD, Malloy CR, Genovese G, Margulis V, <u>DeBerardinis RJ</u> . Mitochondrial complex I promotes kidney cancer metastasis. <i>Nature</i> . 2024 doi: 10.1038/s41586-024-07812-3. Online ahead of print.

Reviews, Chapters, Monographs and Editorials

1.	Lum JJ, <u>DeBerardinis RJ</u> and Thompson CB. Autophagy in metazoans: cell survival in the land of plenty. <i>Nat Rev Cell Mol Biol</i> 6, 439-448 (2005). PMID 15928708
2.	<u>DeBerardinis RJ</u> , Lum JJ, Hatzivassiliou G, Thompson CB. The biology of cancer: metabolic reprogramming that fuels growth and proliferation. <i>Cell Metab</i> 7:11-20 (2008). PMID 18177721. Top 5 most-cited articles, 2006-2011. Top 10 reviews 2005-2015, as chosen by readers of <i>Cell Metabolism</i>.
3.	<u>DeBerardinis RJ</u> , Sayed N, Ditsworth D and Thompson CB. Brick by brick: metabolism and tumor cell growth. <i>Curr Opin Genet Dev</i> 18:54-61 (2008). PMID 18387799 PMC 2476215.
4.	<u>DeBerardinis RJ</u> . Is cancer a disease of abnormal cellular metabolism? New angles on an old idea. <i>Genet Med</i> 10:767-777 (2008). PMID 18941420 PMC 2782690.
5.	<u>DeBerardinis RJ</u> and Cheng T. Q's next: the diverse functions of glutamine in metabolism, cell biology and cancer. <i>Oncogene</i> 29:313-324 (2010). PMID 19881548 PMC 2809806.
6.	Rakheja D and <u>DeBerardinis RJ</u> . The expanded newborn screening: a review for the pediatric pathology fellow. <i>Pediatr Devel Pathol</i> (2010). PMID 20233065.
7.	Marin-Valencia I and <u>DeBerardinis RJ</u> . Targeting metabolic flexibility in cancer cells: straighten up and die right. <i>Cell Cycle</i> 10:188 (2011). PMID 21239880.
8.	Shanware N, Mullen AR, <u>DeBerardinis RJ</u> and Abraham RT. Glutamine: pleiotropic roles in tumor growth and stress resistance. <i>J Mol Med</i> 89: 229-236 (2011). PMID 21301794.
9.	Kurhanewicz J, Vigneron DB, Brindle K, Chekmenev EY, Comment A, Cunningham CH, <u>DeBerardinis RJ</u> , Green GG, Leach MO, Rajan SS, Rizi RR, Ross BD, Warren WS and Malloy CR. Analysis of cancer metabolism by imaging hyperpolarized nuclei: prospects for translation to clinical research. <i>Neoplasia</i> 13:81-97 (2011). PMID 21403835 PMC 3033588.

10.	Rajagopalan KN and DeBerardinis RJ. Role of glutamine in cancer: therapeutic and imaging implications. <i>J Nucl Med</i> 52:1005-1008 (2011). PMID 21680688 PMC 3337771.
11.	DeBerardinis RJ. Serine metabolism in cancer: some tumors take the road less traveled. <i>Cell Metabolism</i> 14: 285-286 (2011). PMID 21907134 PMC 3172581
12.	DeBerardinis RJ. Good neighbours in the tumour stroma reduce oxidative stress. <i>Nature Cell Biol</i> 14: 235-236 (2012). PMID: 22344034
13.	DeBerardinis RJ* and Thompson CB*. Metabolism and disease: what metabolic outliers teach us about biology and pathology. <i>Cell</i> 148: 1132-1144 (2012). PMID: 22424225 PMC 3337773
14.	Jiang L and DeBerardinis RJ. When More Is Less. <i>Nature</i> 489:511-512 (2012). PMID:23018962
15.	DeBerardinis RJ. Mitochondrial Power Play in Lymphoma. <i>Cancer Cell</i> 22:423-424 (2012). PMID: 23079653 PMC 3495163
16.	Mullen AR and DeBerardinis RJ. Genetically-defined metabolic reprogramming in cancer. <i>Trends in Endocrinol & Metab.</i> 23: 552-559 (2012). PMID: 22858391 PMC 3466334
17.	Hensley CT, Wasti AT and DeBerardinis RJ. Glutamine and cancer: cell biology, physiology and clinical opportunities. <i>J Clin Invest</i> 3678-3684 (2013). PMID: 23999442 PMC 3754270
18.	Kim J and DeBerardinis RJ. Silencing a metabolic oncogene. <i>Science</i> 340:558-559 (2013).
19.	DeBerardinis RJ. Q&A: Targeting metabolism to diagnose and treat cancer. <i>Cancer Metab</i> 2:5 (2014) PMID: 24581008 PMC 3937820
20.	Hensley CT and DeBerardinis RJ. In vivo analysis of lung cancer metabolism: nothing like the real thing. <i>Journal of Clinical Investigation</i> 125:495-497 (2015). PMID: 25607834 PMC 4319439
21.	Boroughs LK and DeBerardinis RJ. The expanding repertoire of metabolic pathways that promote cancer cell survival and growth. <i>Nat Cell Biol</i> 17:351-359 (2015). PMID: 25774832 PMC 4939711
22.	Egnatchik RA and DeBerardinis RJ. Growth in the fat lane. <i>Nature</i> 520:165-166 (2015). PMID: 25830890
23.	Erez A and DeBerardinis RJ. Metabolic dysregulation in monogenic disorders and cancer – finding method in the madness. <i>Nat Rev Cancer</i> 15:440-448 (2015). PMID: 26084394
24.	DeBerardinis RJ and Mardis ER. From “N of 1” to N of More. <i>Cold Spring Harbor Molecular Case Studies</i> 1: a000521 (2015). PMID: 27148572 PMC 4850895
25.	Hirschey MD, DeBerardinis RJ, Diehl AM, Drew JE, Frezza C, Green MF, Jones LW, Ko YH, Le A, Lea MA, Locasale JW, Longo VD, Lyssiotis CA, McDonnell E, Mehrmohamadi M, Michelotti G, Muralidhar V, Murphy MP, Pedersen PL, Poore B, Raffaghello L, Rathmell JC, Sivanand S, Vander Heiden MG, Wellen KE; Target Validation Team. Dysregulated metabolism contributes to oncogenesis. <i>Semin Cancer Biol</i> 35: Suppl:S129-50 (2015). PMID: 26454069 PMC 4656121
26.	Block KI, Gyllenhaal C, Lowe L, ... DeBerardinis RJ, et al. Designing a broad-spectrum integrative approach for cancer prevention and treatment. <i>Semin Cancer Biol</i> 35: Suppl:S276-304 (2015). PMID: 26590477 PMC 4819002
27.	DeBerardinis RJ and Chandel NS. Fundamentals of cancer metabolism. <i>Science Advances</i> 2:e1600200 (2016). PMID: 27386546 PMC 4928883
28.	Egnatchik RA and DeBerardinis RJ. Liposuction: extracellular fat removal promotes proliferation. <i>Cell Chemical Biology</i> 23:431-432 (2016). PMID: 27105278
29.	DeBerardinis RJ. Proliferating cells conserve nitrogen to support growth. <i>Cell Metabolism</i> 23:431-432 (2016). PMID: 27304492

30.	Kim J and DeBerardinis RJ. Blocking fatty acid synthesis reduces lung tumor growth in mice. <i>Nature Medicine</i> 22:1077-1078 (2016). PMID: 27711061
31.	Faubert B and DeBerardinis RJ. Analyzing tumor metabolism in vivo. <i>Ann Rev Cancer Biol</i> 1: 99-117 (inaugural issue, 2017).
32.	Vander Heiden MG and DeBerardinis RJ. Understanding the intersections between metabolism and cancer biology. <i>Cell</i> 168:657-669 (2017). PMID: 28187287 PMC 5329766
33.	Metallo CM and DeBerardinis RJ. Engineering approaches to study cancer metabolism. <i>Metab Eng</i> 43(Pt. B):93 (2017). PMID: 28918847
34.	Fischer GM, Vashisht Gopal YN, McQuade JL, Peng W, DeBerardinis RJ, Davies MA. Metabolic strategies of melanoma cells: Mechanisms, interactions with the tumor microenvironment and therapeutic implications. <i>Pigment Cell Melanoma Res</i> 31:11-30 (2018). PMID: 29049843 PMC 5742019
35.	Galluzzi L, Vitale I, Aaronson SA, ... DeBerardinis RJ ... and Kroemer G. Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. <i>Cell Death Differ</i> 25:486-541 (2018) PMID: 29362479 PMC 5864239
36.	Solomonson AD, DeBerardinis RJ. Lipoic acid metabolism and mitochondrial redox regulation. <i>J Biol Chem</i> 293: 7522-7530 (2018) PMID: 29191830 PMC 5961061
37.	Kaushik A and DeBerardinis RJ. Applications of metabolomics to study cancer metabolism. <i>BBA – Reviews on Cancer</i> 1870: 2-14 (2018) PMID: 29702206 PMC 6193562
38.	Faubert B, DeBerardinis RJ and Minna JD. AIF: an acquired metabolic liability in lung cancer. <i>Cell Research</i> 29(8):607-608 (2019). PMID: 31267018
39.	Kim J and DeBerardinis RJ. Mechanisms and implications of metabolic heterogeneity in cancer. <i>Cell Metabolism</i> 30(3):434-446 (2019).
40.	Rao AD and DeBerardinis RJ. Metabolic vulnerability in tumours illuminated. <i>Nature</i> 575(7782):296-297 (2019).
41.	DeBerardinis RJ and Chandel NS. We need to talk about the Warburg effect. <i>Nature Metabolism</i> 2:127-129 (2020)
42.	DeBerardinis RJ. Tumor microenvironment, metabolism and immunotherapy. <i>New Engl J Med</i> 382:869-871 (2020).
43.	Faubert B, Solomonson A and DeBerardinis RJ. Metabolic Reprogramming and Cancer Progression. <i>Science</i> 368(6487):eaaw5473 (2020).
44.	Rogers T and DeBerardinis RJ. Metabolic Plasticity of Neutrophils: Relevance to Pathogen Responses and Cancer. <i>Trends Cancer</i> 7:700-713 (2021)
45.	Faubert B, Tasdogan A, Morrison SJ, Mathews TP, DeBerardinis RJ. Stable isotope tracing to assess tumor metabolism in vivo. <i>Nat Protocols</i> 16(11):5123-5145 (2021)
46.	DeBerardinis RJ and Keshari KR. Metabolic analysis as a driver for discovery, diagnosis and therapy. <i>Cell</i> 85(15):2678-2689 (2022). PMID: 35839759
47.	Ahmed S, Siddiqui A, DeBerardinis RJ, Ni M, Gu Lai W, Cai F, Vu HS, Afroze B. L-2-hydroxyglutaric aciduria - review of literature and case series. <i>Ann Med Surg (Lond)</i> . 2023 Apr 4;85(4):712-717. doi: 10.1097/MS9.0000000000000326. PMID: 37113859; PMCID: PMC10129278.
48.	Bartman CR, Faubert B, Rabinowitz JD, DeBerardinis RJ. Metabolic pathway analysis using stable isotopes in patients with cancer. <i>Nat Rev Cancer</i> . 2023 Dec;23(12):863-878. doi: 10.1038/s41568-023-00632-z. Epub 2023 Oct 31. PMID: 37907620.
49.	Blatt EB, DeBerardinis RJ. Glutamine antagonists may KEAP lung cancer in check. <i>Sci Adv</i> . 2024 Mar 29;10(13):ead07808. doi: 10.1126/sciadv.ado7808. Epub 2024 Mar 27. PMID: 38536918; PMCID: PMC10971402.

Books/Textbooks

1.	<u>DeBerardinis RJ</u> , Sondheimer N, Payan I and Ficicioglu C. Metabolism. In <i>The Philadelphia Guide: Inpatient Pediatrics</i> . Frank G, Shah SS, Catalozzi MC, Zaoutis LB (eds). Malden, MA: Blackwell Publishing. 2005.
2.	<u>DeBerardinis RJ</u> . (Section editor), with Deardorff MA, Zackai EH, Smith K, Sondheimer N, Adams D and Venditti CP. Genetics and Metabolism. In <i>Comprehensive Pediatric Hospital Medicine</i> . Zaoutis LB and Chiang VW (eds). Philadelphia, PA: Mosby/Elsevier. 2007.
3.	<u>DeBerardinis RJ</u> and Thompson CB. Metabolism of Cell Growth and Proliferation. In <i>Molecular Basis of Cancer</i> , 3 rd edition. Mendelsohn J, Howley PM, Israel MA, Gray JW and Thompson CB (eds). Philadelphia, PA: Saunders. 2008.
4.	<u>DeBerardinis RJ</u> , Saitta S. Metabolic Diseases. In <i>The 5-Minute Pediatric Consult</i> , 5 th edition. Schwartz MW (ed). Philadelphia, PA: Lippincott, Williams and Wilkins. 2008.
5.	<u>DeBerardinis RJ</u> . Acute Metabolic Dysfunction. In <i>Rudolph's Pediatrics</i> , 22 nd Edition. Rudolph CD, Rudolph AM, Lister GE, First LR and Gershon AA (eds). New York, NY: McGraw-Hill. 2011.
6.	Malloy CR, Maher E, Marin-Valencia I, Mickey BE, <u>DeBerardinis RJ</u> and Sherry AD. Carbon-13 Nuclear Magnetic Resonance for Analysis of Metabolic Pathways. In <i>Methodologies for Metabolomics: Experimental Strategies and Techniques</i> . Cambridge, UK: Cambridge University Press. 2012.
7.	<u>DeBerardinis RJ</u> . Analyzing Metabolism in Biological Systems. In <i>Navigating Metabolism</i> . New York, NY: Cold Spring Harbor Press. 2014.

Case Reports

1.	<u>DeBerardinis RJ</u> , Conforto C, Russell K, Kaplan J, Kollros PR, Zackai EH and Emanuel BS. Myoclonus in a patient with a deletion of the ϵ -sarcoglycan locus on chromosome 7q21. <i>American J Med Genet</i> 121A, 31-36 (2003). PMID 12900898.
2.	<u>DeBerardinis RJ</u> , Medne L and Zackai EH. DiGeorge syndrome in a patient with isochromosome 18p born to a diabetic mother. <i>Am J Med Genet</i> 138, 155-159 (2005). PMID 16114050.
3.	Rogers R, <u>DeBerardinis R</u> , Klesse L, Margraf L, Boriack R and Rakheja D. Wilms tumor in a child with L-2-hydroxyglutaric aciduria. <i>Pediatr Devel Pathol</i> 13:408-411 (2010). PMID 20064066.
4.	Abou Haidar L, Pachnis P, Gotway GK, Ni M, <u>DeBerardinis RJ</u> , McNutt MC. Partial N-acetyl glutamate synthase deficiency presenting as postpartum hyperammonemia: Diagnosis and subsequent pregnancy management. <i>JIMD Rep</i> . 2023 Sep 7;64(6):403-409. doi: 10.1002/jmd2.12388. PMID: 37927481; PMCID: PMC10623101.
5.	Abou Haidar L, Harris RC, Pachnis P, Chen H, Gotway GK, Ni M, <u>DeBerardinis RJ</u> . Novel pathogenic UQCRC2 variants in a female with normal neurodevelopment. <i>Cold Spring Harb Mol Case Stud</i> . (2023). Epub ahead of print. PMID: 37709555.

Letters to the Editor

1.	None
----	------

Proceedings of Meetings

1.	DeBerardinis RJ. 2010 Keystone Symposium: Metabolism and Cancer Progression. <i>Future Oncol</i> 6:893-895 (2010).
2.	Cable J, Finley L, Tu BP, Patti GJ, Oliver TG, Vardhana S, Mana M, Ericksen R, Khare S, DeBerardinis R, Stockwell BR, Edinger A, Haigis M, Kaelin W. Leveraging insights into cancer metabolism-a symposium report. <i>Ann N Y Acad Sci.</i> 1462(1):5-13 (2020).

Clinical Practice Guidelines

1.	Gotway G, Pichurin P, Waber L and DeBerardinis R. <i>Handbook for the Care of Patients with Inborn Errors of Metabolism.</i> These internal practice guidelines are distributed to clinical geneticists, neonatologists, pediatricians, and emergency physicians in the UT Southwestern system.
----	---

Non-peer reviewed scientific or medical publications/materials in print or other media

1.	Script consultation for television program “ER.”
2.	Cell Press Webinar: <i>Metabolomics: Following the Carbons that Fuel Cancer</i> (May, 2014)
3.	Conversations series: <i>Targeting Disease Through Metabolism.</i> <i>Cell</i> 165:1561-1562 (2016).
4.	<i>NIH funding imperative for crucial life-saving research.</i> Op-Ed for Philadelphia Inquirer; published online April 14, 2017 and in print April 18, 2017.
5.	Interview on National Public Radio: North Texas Researchers Find a New Screening Process for Rare Genetic Diseases. May 20, 2019. Audio: https://www.keranews.org/post/north-texas-researchers-find-new-screening-process-rare-genetic-diseases
6.	Interview on training and careers in Medical Genetics for “Specialty Series” podcast, recorded December 20, 2021



Signature:

Date of signature: July 23, 2024