

OLGA ANCZUKÓW, Ph.D.

Associate Professor, The Jackson Laboratory for Genomic Medicine,
Deputy Director, The Jackson Laboratory Cancer Center
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RESEARCH INTERESTS

My research program is centered on deciphering how dysregulation of alternative RNA splicing drives cancer and rare disease, and on translating this mechanistic understanding into novel RNA-targeted therapeutics. A central focus is defining how rewiring of the splicing program contributes to tumor initiation, progression, and therapeutic resistance — and what upstream signals corrupt the splicing machinery in malignant cells. By repositioning alternative splicing from a passive byproduct of oncogenesis to a central, druggable driver, my work is redefining how we understand, detect, and treat cancer and other splicing-driven disorders.

To address these questions, my lab employs patient-derived models alongside cutting-edge genomic technologies, including long-read RNA sequencing, single-cell transcriptomics, and spatial transcriptomics, to systematically identify oncogenic splicing factors, their downstream targets, and the upstream regulatory networks governing splicing fidelity in healthy and diseased tissues. Extending these insights to rare diseases and the biology of aging allows my program to interrogate how splicing dysregulation operates across a broad disease continuum, uncovering shared mechanisms and divergent vulnerabilities.

Critically, my program is committed to closing the gap between RNA biology and the clinic. By pioneering RNA-targeted therapeutic strategies — including splice-switching antisense oligonucleotides, small molecules targeting splicing factors, and RNA-based precision interventions — my lab aims to correct pathological splicing errors at their source. My unique expertise at the intersection of RNA biology, cancer, rare disease, and aging research positions my lab to develop innovative biomarkers and personalized RNA-based therapeutics with broad clinical impact — ultimately transforming splicing errors into an actionable frontier for precision medicine.

EDUCATION

Ph.D., Molecular Biology and Breast Cancer

Université Claude Bernard Lyon 1, Lyon, France

2008

M.S., Molecular Genetics and Breast Cancer

Ecole Normale Supérieure de Lyon and Université Claude Bernard Lyon 1, Lyon, France

2003

B.S., Molecular and Cellular Biology

Ecole Normale Supérieure de Lyon and Université Claude Bernard Lyon 1, Lyon, France

2001

ACADEMIC APPOINTMENTS

Associate Professor

The Jackson Laboratory for Genomic Medicine, CT, USA

2022-present

Deputy Director

NCI-Designated Jackson Laboratory Cancer Center, ME, USA

2026-present

Research Program Co-Leader

NCI-Designated Jackson Laboratory Cancer Center, ME, USA

2022-2026

Assistant Professor

The Jackson Laboratory for Genomic Medicine, CT, USA

2016-2022

Affiliated Faculty

Department of Genetics and Genome Sciences, University of Connecticut School of Medicine, CT, USA

2016-present

Investigator

Institute for Systems Genomics, University of Connecticut, CT, USA

2016-present

Senior Fellow

Cold Spring Harbor Laboratory, NY, USA

2013-2016

RESEARCH TRAINING

Postdoctoral Fellow

Cold Spring Harbor Laboratory, NY, USA

2008-2013

Graduate Research Assistant

CNRS UMR5201, Lyon, France

2003-2007

Visiting Scientist

Molecular Medicine Partnership Unit, EMBL-Heidelberg University, Germany

2005

Undergraduate Research Assistant

CNRS UMR5201, Lyon, France

2002-2003

Research Assistant

International Agency for Research on Cancer, WHO, Lyon, France

2002

Research Assistant

Human Molecular Genetics Laboratory, Medical School, Lyon, France

2001

HONORS & AWARDS

AACR, Annual Meeting, Program Committee Member

2026-2027

AACR, Annual Meeting, Invited Chair Major Symposium,

2026

AACR, Annual Meeting, Stress and Other Risk Factors in Aging and Cancer: An AACR Innovation Summit, Invited Moderator

2025

AACR, Annual Meeting, Invited Chair Major Symposium,

2023

V Foundation, V Scholar,

2018-2020

NIH/NCI, Career Transition Award, 'Pathway to Independence' K99/R00

2013-2019

RNA Society, Scaringe Young Scientist Postdoctoral Award

2015

AACR, Advances in Breast Cancer Research Conference, Scholar-in-Training Award

2015

Gordon Research Conference, Post-Transcriptional Gene Regulation Conference, Award

2014

Terri Brodeur Breast Cancer Foundation, Postdoctoral Fellowship Award

2013-2014

AACR, Advances in Breast Cancer Research Conference, Scholar-in-Training Award

2011

AACR, 101st Annual Meeting, Scholar-in-Training Award

2010

AACR, Advances in Breast Cancer Research Conference, Scholar-in-Training Award

2009

DOD Breast Cancer Research Program, Postdoctoral Fellowship Award (declined)

2009-2011

Susan Komen Breast Cancer Foundation, Postdoctoral Fellowship Award

2009-2011

French Foundation for Medical Research, Postdoctoral Fellowship Award

2008

Philippe Foundation, Postdoctoral Fellowship Award

2008

French Cancer Research Foundation 'ARC', Ph.D. Fellowship Award

2007

French Cancer Research Foundation 'Ligue Contre le Cancer', Ph.D. Fellowship Award

2004-2006

Michel d'Ornano Foundation, Undergraduate Fellowship Award

1998-2003

TRAINEES AND ADVISEES**Postdoctoral Fellows**

Name	Year(s)	Current placement
Hyeon Gu Kang, PhD	2023-present	Postdoctoral Fellow, The Jackson Laboratory for Genomic Medicine
Maeva Devoucoux, PhD	2022-present	Postdoctoral Fellow, The Jackson Laboratory for Genomic Medicine
Brittany Angola, PhD	2019-2023	Associate Research Scientist, The Jackson Laboratory for Genomic Medicine

Graduate students

Name	Year(s)	Current placement
Marcell Szabo	2025-present	MD/PhD student, Graduate Program Genetics and Developmental Biology University of Connecticut
Isha Walawalkar	2024-present	MD/PhD student, Graduate Program Genetics and Developmental Biology University of Connecticut
Holland Driscoll	2023-present	PhD student, Graduate Program Institute for System Genomics University of Connecticut
Ryan Englander, MD/PhD	2021-2025	Medical Student, University of Connecticut Health Center
Nathan Leclair, MD/PhD	2018-2022	Medical Resident, Radiation Oncology Program, Memorial Sloan Kettering Cancer Center
Laura Urbanski, MD/PhD	2017-2022	Medical writer, Apollo Medical Communications Inc

Rotation and Undergraduate students

Name	Year(s)	Program description
Marcell Szabo	2024	MD/PhD Graduate Program University of Connecticut, Lab Rotation
Tylor Brewster	2024	Graduate Program University of Connecticut, Lab Rotation
Allison Andrade	2024	Graduate Program University of Connecticut, Lab Rotation
Zengshuo Mo	2023	Graduate Program University of Connecticut, Lab Rotation
Isha Walawalkar	2022	MD/PhD Graduate Program University of Connecticut, Lab Rotation
Sadik Karma	2022	MD/PhD Graduate Program University of Connecticut, Lab Rotation
Sharon Yaqoob	2021	Graduate Program University of Connecticut, Lab Rotation
Eden Francoeur	2021	Graduate Program University of Connecticut, Lab Rotation
Nathan Hudson	2020	Graduate Program University of Connecticut, Lab Rotation
Renee Kinney	2019	The Jackson Laboratory Undergraduate Summer Program
Suleyman Bozal	2018	The Jackson Laboratory Undergraduate Summer Program
Young Jin Kim	2015	Graduate Program Cold Spring Harbor Laboratory and Stony Brook Medicine
Chitra Mohan	2014	Graduate Program Cold Spring Harbor Laboratory and Stony Brook University
Tobiloba Oni	2013	Graduate Program Cold Spring Harbor Laboratory and Stony Brook University
Nitin Shirole	2012	Graduate Program Cold Spring Harbor Laboratory and Stony Brook University

Chenle Hu	2012-2013	Cold Spring Harbor Laboratory Undergraduate Program
Chen Shen	2011	Graduate Program Cold Spring Harbor Laboratory and Stony Brook University
Martin Fan	2010	Cold Spring Harbor Laboratory Undergraduate Program
Ludivine Gouny	2007	Université Claude Bernard Lyon 1 Undergraduate Program
Marie-Joseph Salles	2006	Université Claude Bernard Lyon 1 Undergraduate Program
Sarah Triboulet	2006	Université Claude Bernard Lyon 1 Undergraduate Program

TEACHING RESPONSABILITIES

Course lecturer

- *Annual Short Course on Experimental Models of Human Cancer*, The Jackson Laboratory Bar Harbor, ME 2017-present
- *CSHL Summer 2024 Chromatin, Epigenetics & Gene Expression Course*, Cold Spring Harbor Laboratory, NY 2024
- *Career Development Workshop*, Cold Spring Harbor Laboratory, NY 2014
- *Grant Writing Workshop*, Cold Spring Harbor Laboratory, NY, 2013

Postdoctoral advisor

- Hyeon Gu Kang, PhD, The Jackson Laboratory 2023-present
Breast Cancer Award, The Jackson Laboratory Cancer Center
- Maeva Devoucoux, PhD, The Jackson Laboratory 2022-present
Brooks Scholar Award, The Jackson Laboratory Cancer Center
- Brittany Angola, PhD, The Jackson Laboratory 2019-2023
Brooks Scholar Award, The Jackson Laboratory Cancer Center
T32 Training Program in Precision Genetics of Aging, Alzheimer's Disease and Related Dementias
NSF Conference Award at the Annual RNA Society Meeting
FASEB Conference Award

Thesis advisor

- Marcell Szabo, University of Connecticut Health Center MD/PhD Graduate Program 2025-present
- Isha Walawalkar, University of Connecticut Health Center MD/PhD Graduate Program 2024-present
NIH/NIGMS F30 Award
T32 UConn/JAX-GM Training Program in Genomic Science
Poster Award at the Yale RNA Center Annual Retreat
- Holland Driscoll, University of Connecticut Institute for System Genomics PhD Graduate Program 2023-present
- Ryan Englander (co-mentored with Banchereau and Palucka), University of Connecticut 2021-2025
Health Center MD/PhD Graduate Program
NIH/NCI F30 Award
T32 Training Program Precision Genetics of Aging, Alzheimer's Disease and Related Dementias
FASEB Conference Award
- Nathan Leclair, University of Connecticut Health Center MD/PhD Graduate Program 2018-2022
Poster award at the UConn Institute for Systems Genomics Symposium
Poster award at the UConn Genetics and Developmental Biology Annual Retreat
Poster award at the Annual RNA Society Meeting

NSF Conference Award at the Annual RNA Society Meeting

Henderson Award for the best dissertation in the Biomedical Science PhD program at UConn

- Laura Urbanski, University of Connecticut Health Center MD/PhD Graduate Program 2017-2021
Poster award at the Jackson Laboratory Annual Symposium
Poster award at the UConn Genetics and Developmental Biology Annual Retreat

Thesis Committee Member

- Mohammad Toufiq, PhD Candidate (Palucka Lab, The Jackson Laboratory) 2026-present
- Marcel Szabo, MD/PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2025-present
- Kaitlin Girardini, PhD Candidate (Kanadia Lab, University of Connecticut) 2025
- Patrick Dischinger, PhD Candidate, (Steensma Lab, Van Andel Institute) 2025
- Hannah MacMillan, PhD Candidate, (Pai Lab, RNA Therapeutics Institute) 2024
- Megan Calendar, MD/PhD Candidate (Varn Lab, The Jackson Laboratory) 2024-present
- Isha Walawalkar, MD/PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2024-present
- Holland Driscoll, PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2023-present
- Sadik Sharma, MD/PhD Candidate (Wang Lab, The Jackson Laboratory) 2023-present
- Olivia Durham, PhD Candidate (Murphy Lab, UConn Health) 2022-present
- Omar Moustafa Fathy, MD/PhD Candidate (Murphy Lab) 2022-2025
- Ryan Englander, MD/PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2021-2025
- Eishani Sokolowski, PhD Candidate (Ucar Lab, The Jackson Laboratory) 2021-2024
- Patience Mukashyaka, PhD Candidate (Chuang Lab, The Jackson Laboratory) 2020-2023
- Shane Lawson, PhD Candidate (Graveley Lab, UConn Health) 2018-2023
- Menghan Du, PhD Candidate (Cheng Lab, The Jackson Laboratory) 2019-2020
- Alex Nesta, PhD Candidate (Beck Lab, The Jackson Laboratory) 2018-2022
- Nathan Leclair, MD/PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2018-2022
- Laura Urbanski, MD/PhD Candidate (Anczukow Lab, The Jackson Laboratory) 2017-2021

PROFESSIONAL SERVICE

National/International Peer Review Groups/Grant Study Sections

- Hevolution Foundation, Ad-hoc reviewer 2024
- Al Jalila Research Foundation, Ad-hoc reviewer 2023
- Lundbeck Foundation Fellowship Programme, Ad-hoc reviewer 2022
- The Hebrew University of Jerusalem, Ad-hoc reviewer 2022
- NIH T32 Training Program in Precision Genetics of Aging at JAX, Alzheimer's Disease and Related Dementias, Advisory Committee Member 2022-present
- NIH Cancer Molecular Pathobiology (CAMP) study section, Ad-hoc reviewer 2022
- Swiss National Science Foundation, Ad-hoc reviewer 2022
- NIH Cancer Molecular Pathobiology (CAMP) study section, Ad-hoc reviewer 2021
- Worldwide Cancer Research, Ad-hoc reviewer 2021
- MRC UKRI, Ad-hoc Reviewer 2021
- NIH T32 Training Program in Genomic Sciences at UConn/JAX-GM, Ad-hoc reviewer 2021
- NIH T32 Training Program in Precision Genetics of Aging at JAX, Alzheimer's Disease and Related Dementias, Ad-hoc reviewer 2021

- NIH Cancer Genetics (CG) study section, Ad-hoc reviewer 2020
- MRC UKRI, Ad-hoc Reviewer 2019
- Prostate Cancer UK, Ad-hoc Reviewer 2019
- Nanyang Technological University Singapore, Ad-hoc Reviewer 2019
- ERC Grants, Ad-hoc Reviewer 2018-2025
- Breast Cancer Now UK, Ad-hoc Reviewer 2018
- Breast Cancer Foundation NZ, Ad-hoc Reviewer 2018

Institutional Service

- The Jackson Laboratory Cancer Center, Deputy Director 2026-present
- The Jackson Laboratory Cancer Center, Research Program Co-leader 2022-2026
- The Jackson Laboratory Cancer Center, Leadership Program Member 2021-2022
- The Jackson Laboratory Aging Center, Member 2020-present
- The Jackson Laboratory Brand Council, Member 2020-2021
- The Jackson Laboratory Microscopy Core Facility, Faculty Partner 2019-present
- The Jackson Laboratory Review Grant Committee, *Ad hoc* Peer Reviewer 2017-present
- The Jackson Laboratory Cancer Center, Member 2016-present
- The Jackson Laboratory Scientific Advisory Council (elected by faculty peers), Member 2019-2020
- UConn Health Immunology Biology Graduate Program, Thesis Committee Member 2021-present
- UConn Health Genetics and Developmental Biology Graduate Program, Thesis Committee Member 2019-present
- UConn Health MD/PhD Graduate Program, Student Interviewer 2016-present
- UConn Health PhD Graduate Program, Student Interviewer 2016-present

Conference organization

- AACR 2027 Annual Symposium, Scientific Program Committee member 2026-2027
- The Mark Foundation for Cancer Research, Samuel Waxman Cancer Research Foundation, and Jackson Laboratory, *Aging and Cancer Symposium*, Conference co-organizer 2026
- The Jackson Laboratory, *Long-read sequencing workshop*, Conference co-organizer 2026
- The Mark Foundation for Cancer Research, Samuel Waxman Cancer Research Foundation, and Jackson Laboratory, *Aging and Cancer Workshop*, Conference co-organizer 2025
- The Jackson Laboratory, *Long-read sequencing workshop*, Conference co-organizer 2024
- FASEB, *RNA Processing in Cancer: From Bench to Bedside*, Conference co-organizer 2023
- Forbeck Forum *Therapeutic Targeting of mRNA Splicing in Cancer*, Conference co-organizer 2023
- American Association for Cancer Research Annual Meeting, Educational Committee member 2023
- The Jackson Laboratory, *In vivo Models of Aging and Cancer*, Conference co-organizer 2022
- The Jackson Laboratory, *Aging and Cancer Workshop*, Conference co-organizer 2021
- The Jackson Laboratory, *Cancer Center Annual Retreat*, Conference co-organizer 2020
- Beth Israel Deaconess Medical Center and The Jackson Laboratory, *Designing the Patient-Derived Model Platform of the Future Workshop*, Conference co-organizer 2018
- The Jackson Laboratory, *Faculty Retreat*, Conference co-organizer 2017-2018
- The Jackson Laboratory and UConn Health, *RNA biology journal club*, Seminar organizer 2017-present

Advisory Services

- Akari Therapeutics, Advisory Board Member 2025-present

- *NeoSpliceTx*, Advisory Board Member 2025-present
- *EntelioBio (formerly Caeruleus Genomic)*, Advisory Board Member 2024-present

Scientific Community Service/Outreach

- The Scientist Webinar, Invited Speaker 2025
- Terri Brodeur Breast Cancer Foundation, Annual Meeting, Invited Speaker 2021
- Terri Brodeur Breast Cancer Foundation, Newsletter, Featured Awardee 2019
- UConn Health MD/PhD Graduate Program, Invited Keynote Speaker 2019
- CT Junior Science and Humanities Symposium, UConn Health, Invited Keynote Speaker 2019
- Women in Science Mentorship Meeting, The Jackson Laboratory, Invited Speaker 2019
- Working in CT FOX61, The Jackson Laboratory, Invited Speaker 2018
- The Jimmy V Foundation Third Annual Celebration, Hartford, CT, Invited speaker 2017
- Beyond Genetics: Genomics in breast cancer, diagnosis, treatment and research, The Jackson Laboratory and the Connecticut Breast Health Initiative Inc., Farmington, CT, Invited speaker 2017
- The Jackson Laboratory Open House, Farmington, CT, Invited speaker 2017
- Connecticut Think Pink Event, The Jackson Laboratory, Farmington, CT, Invited speaker 2017
- Center of Excellence for Women in STEM, Bay Path University, MA, Invited speaker 2016

Journal Reviews

- Manuscript reviewer for *Cell*, *Nature*, *Science*, *Nature Aging*, *Nature Comm.*, *Nature Struct.Mol. Biol.*, *Molecular Cell*, *Cancer Cell*, *PNAS*, *Cell Reports*, *Science Advances*, *JCI*, *Elife*, *RNA Journal*, *Genome Research*, *PLOS Genetics*, *Cancer Research*, *Aging*, *PLOS One*, *PLOS Biology*, *Oncotarget*, etc. 2008-present

PROFESSIONAL MEMBERSHIPS

<i>AACR, Aging and Cancer Task Force</i> , Member	2023-present
<i>Faculty Opinions (F1000 prime)</i> , Faculty Member	2021-present
<i>Yale RNA Center</i> , Faculty Member	2018-present
<i>UConn Health Genetics and Developmental Biology Graduate Program</i> , Faculty Member	2017-present
<i>RNA Society</i> , Member	2011-present
<i>AACR</i> , Member	2009-present

RESEARCH SUPPORT

Current

The Waxman Institute at the Mark Foundation for Aging and Cancer Research PI: Anczukow, O., Germain, D. (Multi-PI) <i>Investigating the mechanisms of the bimodal age distribution of breast cancer</i>	07/01/2026–12/31/2028
The Jackson Laboratory Director's Innovation Award PI: Anczuków, O. <i>Developing a Modular Platform for Scalable Functional Interrogation of Disease-Associated Spliced Isoforms</i>	06/01/2026–05/31/2027
CDMRP Neurofibromatosis Research Program, NF240097 PI: Anczukow-Camarda, O., Vasudevan, H. (Multi-PI) <i>Mapping the RNA Splicing Landscape of NF1 and Its Impact on Neurofibromin Function Across Tissues</i>	08/01/2025–31/07/2028

NIH/NCI, P30 CA034196	07/01/2025–06/30/2030
PI: Palucka, K. (Co-investigator Anczuków, O.) <i>Cancer Center Support Grant</i>	
NIH/NIA, R33 AG080243	06/01/2025–05/31/2028
PI: Anczukow-Camarda, O., Chuang, J. (Multi-PI) <i>Building a spatial transcriptomics infrastructure for isoform profiling in aging pre-neoplastic tissues</i>	
NIH/NCI, R01 CA277495	05/01/2024–04/30/2029
PI: Lewis, R (Co-investigator Anczuków, O.) <i>Regulation of RBP function during EMT</i>	
NIH/AI, U19 AI142733-06	03/21/2024–02/28/2029
PI: Palucka AK (Co-investigator Anczuków, O.) <i>Modulation of Lung Immune Responses to Viral Infection</i>	
Hevolution Foundation, R21/R33 AGE-002	01/15/2023– 08/14/2028
PI: Anczukow-Camarda, O. Chuang, J. (Multi-PI) <i>Building a spatial transcriptomics infrastructure for isoform profiling in aging epithelial tissues</i>	
NIH/NCI, R01 CA248317	02/09/2021–01/31/2027
PI: Anczuków-Camarda, O. <i>MYC-regulated RNA Binding Protein Networks and Spliced Isoforms Driving Cancer</i>	

Pending

NIH/NCI, R01 CA304580	07/01/2025- 06/30/2031
PI: Anczuków-Camarda, O., LaBarge M. (MPI) <i>Mapping the RNA splicing landscape of DNA repair genes and its impact in breast aging and cancer</i>	
NIH/NCI, R33 CA315144	07/01/2026- 06/30/2029
PI: Anczuków-Camarda, O. <i>Advancing and Validating Single-Cell Long-Read Sequencing for Broad Adoption in Cancer Molecular Profiling</i>	
NIH/NIDDK, R01 DK150170	12/01/2026- 11/30/2031
PI: Korstanje R, Anczuków O (MPI) <i>Targeting splicing in kidney disease</i>	
NIH/NIDDK, R01 DK150211`	12/01/2026- 11/30/2031
PI: Stitzel M, Anczuków O (MPI) <i>Splicing determinants of islet dysfunction in T2D genetic risk and progression</i>	
V Foundation All Stars Pediatric Grant	08/15/2026- 08/14/2031
PI: Anczuków-Camarda, O. <i>Understanding and Targeting RNA Splicing in NF1-Driven Pediatric Tumors</i>	
NIH/NIGMS, R35 GM	01/01/2027- 12/31/2032
PI: Anczuków-Camarda, O. <i>Defining the role of ultraconserved poison exons in splicing factor regulation</i>	

Completed Research Support

NIH/NIGMS, R01 GM138541	07/01/2020–09/01/2025
PI: Anczuków-Camarda, O. <i>Mechanisms of post-transcriptional regulation of splicing factors</i>	
NIH/NIAMS, P50 AR070594	09/01/2022–05/31/2025
PI: Pascual, V. (Co-investigator Anczuków, O.) <i>Center for Lupus Research - Center for Lupus Research - Project 2</i>	

NIH/NIA, R21 AG080243	09/01/2023–11/31/2025
PI: Anczukow-Camarda, O., Chuang, J. (Multi-PI) <i>Building a spatial transcriptomics infrastructure for isoform profiling in aging pre-neoplastic tissues</i>	
Hevolution Foundation, R21 AGE-002	01/15/2023– 08/14/2025
PI: Anczukow-Camarda, O. Chuang, J. (Multi-PI) <i>Building a spatial transcriptomics infrastructure for isoform profiling in aging epithelial tissues</i>	
The Jackson Laboratory Cancer Center Fast Forward Award, P30 CA034196	04/15/2024–12/32/2024
PI: Anczuków, O. <i>Mapping transcriptomic changes associated with STAT2 isoforms in lung cancer cell lines</i>	
The Jackson Laboratory Cancer Center Award, P30 CA034196	09/01/2023–02/28/2024
PI: Anczuków, O. <i>Enhancing long-read single cell sequencing methods</i>	
The Scott R. MacKenzie Foundation	01/01/2023–12/31/2023
PI: Anczuków, O. <i>Identifying novel drivers of age-related breast cancers</i>	
The Jackson Laboratory Director's Innovation Award,	01/01/2022–12/31/2023
PI: Anczuków, O. and Hinson, JT. (Multi-PI) <i>Sex-dependent (epi)transcriptomic responses to the aging HFpEF heart</i>	
The Jackson Laboratory Cancer Center Fast Forward Award, P30 CA034196	12/01/2022–11/30/2023
PI: Anczuków, O. <i>Defining splicing alterations driven by hormones and metabolic stress in aged mammary tissues</i>	
NIH/NCI, R01 CA230031	06/05/2018–05/31/2023
PI: Chuang, J. (Co-investigator Anczuków, O.) <i>Quantitative Computational Methods to Accurately Measure Tumor Heterogeneity in Solid Tumors to Inform Development of Evolution-based Treatment Strategies</i>	
The Jackson Laboratory Cancer Center Fill the Gap Award, P30 CA034196	04/12/2022–03/31/2023
PI: Liu E., Anczuków, O. (Multi-PI) <i>RNA spliced isoforms in acquired resistance to chemotherapy for triple negative breast cancer</i>	
The Jackson Laboratory Cancer Center Fast Forward Award, P30 CA034196	05/01/2021–12/31/2022
PI: Anczuków, O. <i>The poison exon of oncogenic splicing factor TRA2B acts as a tumor suppressor lncRNA across multiple tumor types</i>	
Linda Tallen and David Paul Kane Education and Research Foundation	02/01/2022–10/31/2022
PI: Anczuków, O. <i>Identifying novel drivers of age-related breast cancers</i>	
The Jackson Laboratory Cancer Center Pilot Award, P30 CA034196	11/01/2020–11/30/2021
PI: Anczuków, O. and Ucar, D. (Multi-PI) <i>Age-related changes in transcriptional regulatory programs of mammary gland cells as a risk factor for breast cancer</i>	
NIH/AI, U19 AI142733-03	07/01/2021–10/09/2021
PI: Palucka, A. (Co-investigator Anczuków, O.) <i>Modulation of Lung Immune Responses to Viral Infection</i>	
Sanofi US Services, SANOFI-SRA-FY19-JFB	01/02/2019-07/30/2021
PI: Banchemreau, J. (Co-investigator Anczuków, O.) <i>Identification of Novel Therapeutic Targets in Triple Negative Breast Cancer and Ovarian Carcinoma through Long-Read Isoform Profiling</i>	
The Jackson Laboratory Cancer Center FF Award, P30 CA034196	11/16/2020–12/31/2020
PI: Anczuków, O. and Ucar, D. (Multi-PI)	

*Splicing alterations during aging and breast cancer***V Foundation, V2018-018**

10/01/2018–09/30/2020

PI: Anczuków, O.

*Uncovering Genomic Alterations in the Breast, Paving the Road to Early Cancer Detection and Prevention***The Jackson Laboratory Cancer Center Pilot Award, P30 CA034196**

03/01/2018–06/30/2019

PI: Anczuków, O.

*Developing models and tools to dissect the role of splicing factor TRA2 β in epithelial tumors***JAX-Purdue Pilot Award, DIF-FY18-OAC**

01/01/2018–08/31/2019

PI: Anczuków, O. and Solorio, L. (Multi-PI)

*The role of extracellular matrix driven splice variants in drug resistance and metastasis***NIH/NCI, R00 CA178206**

07/01/2016–06/30/2019

PI: Anczuków-Camarda, O.

*Role of Splicing Factors in Breast Cancer***Completed Research Support prior to 2016****NIH/NCI, K99 CA178206**

09/01/2013–06/30/2016

PI: Anczuków-Camarda, O.

*Role of Splicing Factors in Breast Cancer***Terri Brodeur Breast Cancer Foundation, 66810-101**

01/01/2013–12/31/2014

PI: Anczuków-Camarda, O.

*Measuring Transcriptome-wide Changes in Alternative Splicing in Cancer***Susan G. Komen for the Cure Foundation, KG091029**

06/04/2009–06/03/2012

PI: Anczukow-Camarda, O. and Krainer A.R.

*Role of Alternative Splicing in Epithelial Cell Transformation***French Foundation for Medical Research, SPE20070709581**

01/01/2008–12/31/2008

PI: Anczukow-Camarda, O.

*Role of Alternative Splicing Factors in Initiation and Progression of Human Breast Cancer***Cancer Research Foundation ‘Ligue Contre le Cancer’**

09/01/2006-31/12/2006

PI: Anczuków, O.

*Molecular consequences of mutations in breast cancer predisposing genes***Cancer Research Foundation ‘Ligue Contre le Cancer de Saône-et-Loire’**

09/01/2004-08/31/2006

PI: Anczuków, O.

*Molecular consequences of mutations in breast cancer predisposing genes***INVITED LECTURES AND SELECTED TALKS**

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| ▪ AACR Annual Meeting, San Diego, CA, Invited Talk | 2026 |
| ▪ AACR Annual Meeting, San Diego, CA, Invited Session Chair | 2026 |
| ▪ Distinguished Lectures in Cancer Research Seminar Series, Wistar Institute, Abramson Family Cancer Research Institute, University of Pennsylvania, Philadelphia, PA, Invited Lecture | 2026 |
| ▪ Distinguished Seminar Series, Department of Genetics at the Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, Invited Lecture | 2026 |
| ▪ NCI, RNA as Cancer Drivers, Biomarkers and Therapeutics Symposium, Bethesda, MA, Invited Lecture | 2026 |
| ▪ ISMB Annual Meeting, iRNA COSI, Washington DC, Invited Keynote | 2026 |

- RNA Society Annual Meeting, Montreal, Canada, Selected Talk 2026
- UK Genetics Society, RNA in Physiology and Disease, Newcastle, Invited Lecture 2026
- UConn RNA Salon, Storrs, CT, Invited Lecture 2026
- 7th International Conference on Aging and Cancer, Targeting common drivers of aging and cancer, International Center for Aging and Cancer, Haikou, China, Invited Talk 2025
- AACR, Stress and Other Risk Factors in Aging and Cancer: An AACR Innovation Summit, Pasadena, CA, Invited Talk 2025
- AACR, Stress and Other Risk Factors in Aging and Cancer: An AACR Innovation Summit, Pasadena, CA, Invited Session Chair 2025
- Oligo Therapeutic Society 2025 Annual Meeting, Budapest, Hungary, Invited Talk 2025
- MCFR, SWCRF, and JAX Aging and Cancer Workshop, Farmington, CT, Invited Talk 2025
- Dana Faber Cancer Institute, Seminars in Oncology Series, Boston, MA, Invited Lecture 2025
- Ohio State University, Molecular Life Science Seminar Series, Columbus, OH, Invited Lecture 2025
- CSHL Eukaryotic mRNA Processing Meeting, Cold Spring Harbor, NY, Invited Talk 2025
- GRC Synthetic Lethality Approaches in Oncology, Portland, ME, Invited Talk 2025
- University of Montreal, Montreal, Canada, Invited Lecture 2025
- Computational Medicine Program, Lineberger Comprehensive Cancer Center, University of North Carolina, Chapel Hill, NC, Invited Lecture 2025
- Broad Institute, Workshop on Splicing Factor Mutations and RNA Biology in Cancer, Cambridge, MA 2025
- Fred & Pamela Buffett Cancer Center, University of Nebraska Medical Center, Omaha, NE, Invited Lecture 2025
- Vanderbilt-Ingram Cancer Center, Nashville, TN, Invited Lecture 2024
- Boston University, Boston, MA, Invited Lecture 2024
- Waxman Foundation, Aging and Cancer Symposium, New York, NY 2024
- UPenn RNA Day, Philadelphia, PA, Invited Talk 2024
- New York Genome Center, New York, NY, Invited Talk 2024
- ASBMB Annual Meeting, San Antonio, TX, Invited Talk 2024
- Yale RNA Center, Annual Retreat, Yale, CT, Invited Talk 2023
- Forbeck Forum, Therapeutic Targeting of mRNA Splicing in Cancer, Pacific Groves, CA, Invited Talk 2023
- Harvard University, Cambridge, MA, Invited Lecture 2023
- CSHL Eukaryotic mRNA Processing Meeting, Cold Spring Harbor, NY, Invited Session Chair 2023
- The Jackson Laboratory Cancer Course, Bar Harbor, ME, Invited Lecture 2023
- AACR Annual Meeting, Orlando, FL, Invited Talk 2023
- AACR Pacbio Spotlight, Orlando, FL, Invited Talk 2023
- Weill Cornell Medicine, New York, NY, Invited Lecture 2023
- Keystone Symposia, Protein-RNA Interactions, Vancouver, Canada, Invited Talk 2023
- International Institute of Molecular and Cell Biology in Warsaw, Poland, Virtual, Invited Lecture 2023
- The Jackson Laboratory and Hartford Healthcare Cancer Institute Disparities in Breast Cancer Symposium, Farmington, CT, Invited Lecture 2023

- The Jackson Laboratory and Baylor College of Medicine Breast Center Symposium, Virtual 2022
- The Jackson Laboratory Cancer Course, Farmington, CT, Invited Talk 2022
- RNA Isoform Landscape of Cancer PacBio Webinar, Virtual, Invited Lecture 2022
- The Jackson Laboratory Long Read Sequencing Workshop, Farmington, CT, Invited Talk 2022
- NCI, RNA Biology Laboratory, Frederick, Bethesda, MA, Invited Lecture 2021
- RNA Society Annual Meeting, Singapore, Invited Talk 2021
- The Jackson Laboratory Cancer Course, Virtual, Invited Lecture 2021
- International Caparica Conference in Splicing, Caparica, Portugal, Invited Talk 2021
- Institute for Systems Genomics, University of Connecticut, CT, Invited Lecture 2021
- Splice Con 2021, 41st Steenbock Symposium, UW Madison, WI, Invited Lecture 2021
- Hebrew University of Jerusalem-Hadassah Medical School, Jerusalem, Israel, Invited Lecture 2021
- Centre de Recherche CHU de Québec, Université Laval, Québec, QC, Canada, Invited Lecture 2021
- Rosalind Franklin Centennial Symposium and Molecular and Cellular Sciences Seminar Series, Rosalind Franklin University of Medicine and Science, Chicago, IL, Invited Lecture 2021
- Center for Molecular Biology and Biotechnology, Florida Atlantic University, FL, Invited Lecture 2021
- UConn Health MD/PhD Program, Farmington, CT, Invited Lecture 2021
- Tufts University School of Medicine, Boston, MA, Invited Lecture 2020
- RNA Biology Symposium, Singapore, Singapore, Invited Lecture 2020
- The Jackson Laboratory Cancer Course, Virtual, Invited Lecture 2020
- Eppley Institute for Research in Cancer, University of Nebraska, Omaha, NE, Invited Lecture 2020
- University of Connecticut School of Medicine, Farmington, CT, Invited Lecture 2020
- University of Connecticut, Storrs, CT, Invited Lecture 2019
- Bermuda Principles Conference, Impact on RNA Processing & Disease, Bermuda, Invited Talk 2019
- The Jackson Laboratory Cancer Course, Bar Harbor, ME, Invited Lecture 2019
- Mercy Hospital, Portland, ME, Invited Lecture 2019
- RNA Society Annual Meeting, Krakow, Poland, Selected Talk 2019
- University of Florida, Gainesville, FL, Invited Lecture 2018
- Yale RNA Center, Yale, CT, Invited Talk 2018
- RNA Center Annual Retreat, Albany, NY, Invited Talk 2018
- The Jackson Laboratory Cancer Course, Bar Harbor, ME, Invited Talk 2018
- UConn Health, Genetics and Developmental Biology Department, Farmington, CT, Invited Lecture 2018
- Hartford Hospital, Sullivan Symposium, Hartford, CT, Invited Talk 2018
- The Jackson Laboratory Cancer Course, Bar Harbor, ME, Invited Talk 2017
- RNA Society Annual Meeting, Prague, Czech Republic, Selected Talk 2017
- Hallmarks of cancer: Focus on RNA international symposium, Prague, Czech Republic, Invited Talk 2017
- Beth Israel Deaconess Medical Center, Boston, MA, Invited Lecture 2017

- UConn Health Carole and Ray Neag Comprehensive Cancer Center, Farmington, CT, Invited Talk 2017
- GRC Post-Transcriptional Gene Regulation, Stowe, VT, Selected Talk 2016
- The Jackson Laboratory Cancer Center, Portland, ME 2016
- Inselspital, Universitätsspital Bern, Bern, Switzerland, Invited Lecture 2016
- Cancer Research UK Institute, Cambridge, UK, Invited Lecture 2016
- The Wistar Institute, Philadelphia, PA, Invited Lecture 2016
- The Jackson Laboratory for Genomic Medicine, Farmington, CT, Invited Lecture 2016
- The Lerner Research Institute at Cleveland Clinic, Cleveland, OH, Invited Lecture 2016
- University of Rochester Center for RNA Biology, Rochester, NY, Invited Lecture 2016
- CSHL Eukaryotic mRNA Processing Meeting, Cold Spring Harbor, NY, Selected Talk 2015
- RNA Society Annual Meeting, Madison, WI, Selected Talk 2015
- CSHL Biology of Cancer: Microenvironment, Metastasis & Therapeutics Meeting, Cold Spring Harbor, NY, Selected Talk 2015
- Memorial Sloan Kettering Cancer Center, New York, NY, Invited Lecture 2015
- Columbia University, New York, NY, Invited Lecture 2015
- Cambridge University, Cambridge, UK, Invited Lecture 2015
- Duke-NUS Medical School, Singapore, Invited Lecture 2015
- Stony Brook Medicine, Stony Brook, NY, Invited Lecture 2015
- Massachusetts General Hospital, Boston, MA, Invited Lecture 2015
- University of Pennsylvania, School of Veterinary Medicine, Philadelphia, PA, Invited Lecture 2015
- CSHL Asia RNA Biology Meeting, Suzhou, China, Selected Talk 2014
- Capital Medical University, Beijing, China, Invited Lecture 2014
- Annual Meeting of the RNA Society, Québec, Canada, Selected Talk 2014
- Cold Spring Harbor Laboratory, NY, Invited Lecture 2014
- CSHL Cancer Mechanisms and Therapeutics Meeting, Cold Spring Harbor, NY, Selected Talk 2013
- RNA Society Annual Meeting, Kyoto, Japan, Selected Talk 2011
- AACR Annual Meeting, Washington DC, Selected Talk 2010
- Human and Medical Genetics Society Annual Meeting, Montpellier, France, Selected Talk 2006

PUBLICATIONS

Peer-reviewed publications

1. Angarola BL*, Sharma S*, Katiyar N, Kang HG, Nehar-Belaid D, Park S, Gott R, Eryilmaz GN, LaBarge M, Palucka K, Chuang JH, Korstanje R, Ucar D#, **Anczuków O#** (2025). Comprehensive single-cell aging atlas of healthy mammary tissues reveals shared epigenomic and transcriptomic signatures of aging and cancer. *Nature Aging*, 5(1):122-143. PMID: 39587369. [PMC11754115](https://pubmed.ncbi.nlm.nih.gov/39587369/). *equal contribution. #**Corresponding author**.

OA Credit: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

2. Leclair NK, Brugiolo M, Park S, Devoucoux M, Urbanski L, Angarola BL, Yurieva M, **Anczuków O[#]** (2025). Antisense oligonucleotide-mediated TRA2 β poison exon inclusion induces the expression of a lncRNA with anti-tumor effect. *Nature Communication*, 16(1):1670. [PMC11829967](#). **#Corresponding author**.
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
3. Nesta A, Veiga DFT, Banchereau J, **Anczukow O**, Beck CR (2025). Alternative splicing of transposable elements in human breast cancer. *Mobile DNA*, 16(1):6. [PMC11846448](#).
OA CrediTL: Conceptualization, Supervision, Project administration, Writing – review & editing.
4. Horvath M, Kang HG, Wu T, Aiken E, Castaneda DC, Akkurt S, Marches F, **Anczuków O**, Palucka K, Oh J (2025). Host-specific bacterial modulation of airway gene expression and alternative splicing. *mSphere*, e00577-25. [PMID: 41165334](#).
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Writing – review & editing.
5. Rubinstein JC*, Domanskyi S*, Sheridan TB, Sanderson BJ, Park S, Kaster J, Li H, **Anczukow O**, Herlyn M, Chuang JH (2025). Spatiotemporal profiling defines persister and resistance signatures in targeted treatment of melanoma. *Cancer Research*, 85(5):987-1002. PMC11875961.
OA CrediTL: Funding acquisition, Supervision, Project administration, Writing – review & editing.
6. **Anczuków O[#]**, Allain F, Angarola BL, Black B, Brooks A, Cheng C, Conesa A, Crosse E, Guccione E, Lu SX, Neugebauer KM, Sehgal P, Song X, Tothova Z, Valcárcel J, Eyraas E, Weeks KM, Yeo GW, Thomas-Tikhonenko A[#] (2024). Steering research on mRNA splicing in cancer towards clinical translation. *Nature Reviews Cancer*. 24(12):887-905. PMCID: [PMC11698124](#). **#Corresponding author**.
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
7. Karlebach G, Steinhaus R, Danis D, Devoucoux M, **Anczuków O**, Sheynkman G, Seelow D, Robinson PN. (2024). Alternative splicing is coupled to gene expression in a subset of variably expressed genes. *npj Genomic Medicine*, Nov 4;9:54. [PMC11535429](#).
OA CrediTL: Conceptualization, Supervision, Project administration, Writing – review & editing.
8. Karginov TA, Ménoret A, Leclair NK, Chandiran K, Suarez-Ramirez JE, Karlinsey K, O'Neill RJ, Murphy PA, Adler AJ, Cauley LS, **Anczuków O**, Zhou B, Vella AT (2024). Autoregulated splicing of TRA2 β programs T cell fate in response to antigen-receptor stimulation. *Science*, 385(6714):eadj1979. [PMC11697694](#)
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Writing – review & editing.
9. Leclair NK, Chen WC, Zakimi Naomi, Choudhury A, Magill S, Shen E, Bulsara KR, Raleigh D[#], **Anczuków O[#]** (2024). RNA splicing as a biomarker and phenotypic driver of meningioma DNA methylation groups. *Neuro-oncology*, 26 (12): 2222–2236. [PMC11630566](#). **#Corresponding author**.
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

Commentary in Tosefsky K, Yip S. Splice of Life: How RNA is Rewriting the Meningioma Story (2024). *Neuro Oncol*. Sep 17;noae194. doi: 10.1093/neuonc/noae194. PMID: 39288142.

Neuro-Oncology Podcast: Alterations in RNA splicing between meningioma DNA methylation groups
<http://soc-neuro-onc.libsyn.com/alterations-in-rna-splicingbetween-meningioma-dna-methylation-groups>

10. Leclair NK, Chen WC, Zakimi Naomi, Raleigh D[#], **Anczuków O[#]** (2024). The RNA-binding protein IGF2BP1 regulates stability of mRNA transcribed from FOXM1 target genes in hypermitotic meningiomas. *Acta Neuropathologica*, 148(1):28. [PMC11343784](#). **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
11. Mukashyaka P, Kumar P, Mellert DJ, Nicholas S, Noorbakhsh J, Brugiolo M, **Anczukow O**, Liu ET, Chuang JH (2023). High-throughput deconvolution of 3D organoid dynamics at cellular resolution for cancer pharmacology with Cellos. *Nature Communication*, 14(1):8406. [PMC10730814](#).
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Writing – review & editing.
12. **Anczuków O[#]**, Airhart S, Chuang JH, Coussens LM, Kuchel GA, Korstanje R, Li S, Lucido AL, McAllister SS, Politi K, Polyak K, Ratliff T, Ren G, Trowbridge JJ, Ucar D, Palucka K[#] (2023). Challenges and opportunities for modeling aging and cancer. *Cancer Cell*, 41(4):641-645. [PMC10185379](#). **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
13. Bradley RK[#], **Anczuków O[#]** (2023). RNA splicing dysregulation and the hallmarks of cancer. *Nature Reviews Cancer*, 23(3):135-155. [PMC10132032](#). **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
14. Urbanski L, Brugiolo M, Park S, Angarola BL, Leclair NK, Palmer P, Keshari Sahu S, **Anczuków O[#]** (2022). MYC regulates a pan-cancer network of co-expressed oncogenic splicing factors. *Cell Reports* 41(8), 11704. [PMC9731204](#). **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
15. Leclair NK, **Anczuków O[#]** (2022). 'Poisoning' of the transcriptome by ultraconserved elements. *Nature Reviews Molecular Cellular Biology*. 23(12):777. [PMC9793964](#). **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
16. Jun Y*, Suh YS*, Park S, Kim JI, Lee S, Lee WP[#], **Anczuków O[#]**, Yang HK[#], Lee C[#] (2022). Comprehensive Analysis of Alternative Splicing in Gastric Cancer Identifies Epithelial-Mesenchymal Transition Subtypes Associated with Survival. *Cancer Research*, 15;82(4):543-555. [PMC9359730](#). *equal contribution, **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
17. Veiga DFT*, Nesta A*, Zhao Z, Deslattes May A, Huynh R, Rossi R, Wu TC, Palucka K, **Anczukow O[#]**, Beck CR[#] and Banchereau J[#] (2022). Long-read isoform sequencing reveals survival-associated splicing in breast cancer. *Sciences Advances*, 8(3):eabg6711. [PMC8769553](#). *equal contribution, **#Corresponding author.**
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
18. Miyano M*, Sayaman RW*, Shalabi S, Senapati P, Lopez JC, Angarola BL, Hinz S, Zirbes A, **Anczukow O**, Yee LD, Sedrak M, Stampfer MR, Seewaldt VE, LaBarge MA (2021). Breast specific molecular clocks comprised of *ELF5* expression and promoter methylation identify individuals susceptible to cancer initiation. *Cancer Prevention Research*, 14(8):779-794. [PMC8338914](#). *equal contribution.
OA CrediTL: Supervision, Project administration, Resources, Methodology, Writing – review & editing.

19. Angarola BL, **Anczuków O[#]** (2021). Splicing alterations in healthy aging and disease. *WIREs RNA*, 12(4):e1643. [PMC8195850](#). **#Corresponding author.**
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
20. Leclair NK, Brugiolo M, Urbanski L, Lawson S, Thakar K, Yurieva M, George J, Hinson JT, Cheng A, Graveley BR, **Anczuków O[#]** (2020). Poison exon splicing regulates a coordinated network of SR protein expression during differentiation and tumorigenesis. *Molecular Cell*, 80(4):648-665.e9. [PMC7680420](#). **#Corresponding author.**
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
21. Karlebach G, Hansen P, Veiga DFT, Steinhaus R, Danis D, Li S, **Anczuków O**, Robinson PN (2020). HBA-DEALS: accurate and simultaneous identification of differential expression and splicing using hierarchical Bayesian analysis. *Genome Biology*, 21, 171. [PMC7358203](#).
OA CreditL: Conceptualization, Writing – review & editing.
22. Sinnakannu JR, Kian Lee L, Cheng S, Li J, Yu M, Tan SP, Ong CCH, Li H, **Anczuków O**, Krainer ARK, Roca X, Rozen SG, Iqbal J, Yang H, Chuah C, S Ong ST (2020). SRSF1 mediates cytokine-induced tyrosine kinase inhibitor-resistance in chronic myeloid leukemia. *Leukemia*, Jul;34:1787-1798. [PMC7682023](#).
OA CreditL: Conceptualization, Resources, Methodology, Writing – review & editing.
23. Park S*, Brugiolo M*, Akerman M*, Das S*, Urbanski L, Geier A, Kesarwani AK, Fan M, Leclair NK, Lin KT, Hua L, Hu I, George J, Muthuswamy SK, Krainer AR[#], **Anczukow O[#]** (2019). Differential functions of splicing factors in mammary transformation and breast cancer metastasis. *Cell Reports*, 29(9), 2672-2688.e7. [PMC6936330](#). *equal contribution. **#Corresponding author.**
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – original draft, Writing – review & editing.
24. Urbanski L, Leclair NK, **Anczuków O[#]** (2018). Alternative-splicing defects in cancer: splicing regulators and their downstream targets, guiding the way to novel cancer therapeutics. *Wires RNA*, 9(4):e1476. [PMC6002934](#). **#Corresponding author.**
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
25. **Anczuków O** and Krainer AR (2016). Splicing-factor alterations in cancers. *RNA*, 22:1285-301. [PMC4986885](#)
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
26. **Anczuków O** and Krainer AR (2015). The spliceosome, a potential Achilles heel of MYC-driven tumors. *Genome Medicine*, 7:107. [PMC4618744](#).
OA CreditL: Conceptualization, Funding acquisition, Supervision, Project administration, Methodology, Writing – original draft, Writing – review & editing.
27. **Anczuków O***, Akerman M*, Cléry A, Wu J, Shen C, Shirole HN, Raimer A, Sun S, Jensen MA, Hua Y, Allain FHT, Krainer AR (2015). SRSF1-regulated alternative splicing in breast cancer. *Molecular Cell*, 60(1), 105-117. [PMC4597910](#). *equal contribution.
OA CreditL: Conceptualization, Investigation, Methodology, Validation, Visualization, Funding acquisition, Project administration, Writing – original draft, Writing – review & editing.

28. Cléry A, Sinha R, **Anczuków O**, Corrionero A, Moursy A, Daubner G, Valcárcel J, Krainer AR, Allain F (2013). Isolated pseudo-RNA-recognition motifs of SR proteins can regulate splicing using a noncanonical mode of RNA recognition. *PNAS*, 110:E2802-11. [PMC3725064](#).
OA CrediTL: Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing.
 29. Wu J, **Anczuków O**, Krainer AR, Zhang MQ, Zhang C (2013). OLego: Fast and sensitive mapping of spliced mRNA-Seq reads using small seeds. *Nucleic Acid Research*, 41:5149-5163. [PMC3664805](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing.
 30. **Anczuków O**, Rosenberg AZ, Akerman M, Das S, Zhan L, Karni R, Muthuswamy SK, Krainer AR. (2012). The splicing factor SRSF1 regulates apoptosis and proliferation to promote mammary epithelial cell transformation. *Nature Structural Molecular Biology*, 19:220-8. [PMC3272117](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Funding acquisition, Project administration, Supervision, Writing – original draft, Writing – review & editing.
 31. Das S, **Anczuków O**, Akerman M, Krainer AR. (2012). Oncogenic splicing factor SRSF1 is a critical transcriptional target of MYC. *Cell Reports*, 1:110–117. [PMC3334311](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Funding acquisition, Project administration, Supervision, Writing – original draft, Writing – review & editing.
 32. **Anczuków O**, Buisson M, Leone M, Coutanson C, Lasset C, Calender A, Sinilnikova OM, Mazoyer S. (2012). *BRCA2* Deep Intronic Mutation Causing Activation of a Cryptic Exon: Opening Towards a New Preventive Therapeutic Strategy. *Clinical Cancer Research*, 18:4903-4909. PMID: [22753590](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Funding acquisition, Project administration, Supervision, Writing – original draft, Writing – review & editing.
- Comment in:** Fackenthal JD, Lee Y, Olopade OI. (2012). Hidden dangers: a cryptic exon disrupts *BRCA2* mRNA. *Clinical Cancer Research*, 18(18):4865-7.
33. **Anczuków O**, Ware MD, Buisson M, Zetoune AB, Stoppa-Lyonnet D, Sinilnikova OM, Mazoyer S (2008). Does the nonsense-mediated mRNA decay mechanism prevent the synthesis of truncated BRCA1, CHK2, and p53 proteins? *Human Mutation*, 29:65-73. PMID: [17694537](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing.
 34. **Anczuków O**, Buisson M, Salles MJ, Triboulet S, Longy M, Lidereau R, Sinilnikova OM, Mazoyer S (2008). Unclassified Variants Identified in *BRCA1* Exon 11: Consequences on Splicing. *Genes, Chromosomes and Cancer*, 47:418-26. PMID: [18273839](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing.
 35. Zetoune AB, Fontaniere S, Magnin D, **Anczuków O**, Buisson M, Zhang CZ, Mazoyer S (2008). Comparison of nonsense-mediated mRNA decay efficiency in various murine tissues. *BMC Genetics*, 9:83. [PMC2607305](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing – review & editing.
 36. Buisson M, **Anczuków O**, Zetoune AB, Ware MD, Mazoyer S (2006). The 185delAG mutation in the *BRCA1* gene triggers translation reinitiation at a downstream AUG codon. *Human Mutation*, 27:1024-9. PMID: [16941470](#).
OA CrediTL: Conceptualization, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing.
 37. Sinilnikova OM, Ginolhac SM, Magnard C, Leone M, **Anczuków O**, Hughes D, Moreau K, Thompson D, Coutanson C, Hall J, Romestaing P, Gerard JP, Bonadona V, Lasset C, Goldgar DE, Joulin V, Venezia ND, Lenoir GM (2004). Acetyl-CoA carboxylase alpha gene and breast cancer susceptibility. *Carcinogenesis*, 25: 2417-24. PMID: [15333468](#).

OA CrediTL: Investigation, Methodology, Validation, Visualization, Writing – review & editing.

Pre-prints

1. Leclair NK, Brugiolo M, Walawalkar I, Yurieva M, Kang HG, Englander RP, Ryan M, Heffner C, McDonough JA, Skarnes WC, Murray S, **Anczuków O[#]** (2026). Splicing of ultraconserved poison exons controls mitotic fidelity and stem cell viability. *bioRxiv* 2026.05.19.726407. <https://doi.org/10.64898/2026.05.19.726407> . [PMC13228269](https://pubmed.ncbi.nlm.nih.gov/PMC13228269/). **#Corresponding author.**

OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

2. Cady MA, Aggarwa A, Stevers NO, Zakimi N, Kongpracha P, Liu I, Zhou Y, Mitschka S, Mirchia K, Leclair NK, Nguyen MP, Coukos JS, Braman BC, Shamdasani-Sen S, Choi B, Chantousti N, Hong C, Englander RP, Frankus J, Sinha D, Phillips JJ, Karner H, Liu SJ, Choudhury A, Krogan NJ, Costello JF, **Anczukow O**, Toedebusch C, Mazcko CN, Dickinson PJ, LeBlanc AK, Schmitt AM, Goodarzi H, Swaney DL, Raleigh DR (2026). A proteogenomic RNA processing mechanism drives sex differences in meningioma. *Research Square*, <https://doi.org/10.21203/rs.3.rs-9675139/v1>. [PMC13252561](https://pubmed.ncbi.nlm.nih.gov/PMC13252561/).

OA CrediTL: Conceptualization, Writing – editing.

3. Kang HG, Yurieva M, Brugiolo M, Chuang J, **Anczukow O[#]**. SpliceDecoder: A High-Throughput Tool for Guiding the Functional Interpretation of Differential Splicing Events. *bioRxiv* 2025.10.01.679902. <https://www.biorxiv.org/content/10.1101/2025.10.01.679902v1> [PMC12621892](https://pubmed.ncbi.nlm.nih.gov/PMC12621892/). **#Corresponding author.**

OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

4. Englander RP, Brugiolo M, Wu TC, Kostich M, Leclair NK, Park SH, Banchereau J, Yu P, Salner A, Banchereau R, Palucka K[#], **Anczuków O[#]** (2025). Intron retention regulates STAT2 function and predicts immunotherapy response in lung cancer. *bioRxiv* 2025.08.19.671121. [PMC12393442](https://pubmed.ncbi.nlm.nih.gov/PMC12393442/). **#Corresponding author.**

OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

5. Rao C, Svoboda RA, Southekal S, Vieira HM, Huisman DH, Chatterjee D, Guda C, Fisher KW, **Anczuków O**, Lewis RE. Post-transcriptional control of SRSF9 promotes the epithelial-to-mesenchymal transition (EMT) in colorectal cancer cells (2022). *bioRxiv* 2022.05.16.492181. <https://doi.org/10.1101/2022.05.16.492181>

OA CrediTL: Conceptualization, Supervision, Project administration, Resources, Methodology, Writing – review & editing.

6. Karlebach G, Veiga DFT, Deslattes Mays A, Kesarwani AK, Danis D, Kararigas G, Zhang XA, George J, Ananda G, Steinhaus R, Hansen P, Seelow D, Bizon C, Boyles R, Ball C, McMurry JA, Haendel MA, Yang J, Oprea T, Mukerji M, **Anczuków O**, Banchereau J, Robinson PN (2020). The impact of sex on alternative splicing. *bioRxiv* 490904. <https://doi.org/10.1101/490904>.

OA CrediTL: Conceptualization, Writing – review & editing.

Manuscripts in preparation

1. Angarola BL, Miyano M, Sayaman RW, Gott R, Korstnaje R, LaBarge MA[#], **Anczuków O[#]**. Splicing alterations in mammary cells during aging and cancer. *In preparation*. **#Corresponding author.**
2. Brugiolo M, Leclair NK, Cheng A, **Anczuków O[#]**. High throughput approaches for splicing modulation using small nuclear RNA. *In preparation*. **#Corresponding author.**
3. Leclair NK, Brugiolo M, Szabo M, Englander, R., Mirchia, K., Pekmezci, M., Vasudevan H[#], **Anczuków O[#]**. Alternative RNA Splicing Analysis Identifies Patterns Underlying Malignant Transformation And Therapeutic Response In Peripheral Nerve Tumors. *In preparation*. **#Corresponding author.**

4. Yurieva M, et al. Anczuków O[#]. Mapping positional preferences of RNA binding proteins motifs in RNA-sequencing data. *In preparation*. **#Corresponding author**.
5. Angarola BL, Cogut V, Anczukow O[#], Henning R[#], Korstanje R[#]. Renal RNA profiling in torpor mice shows large effects on gene expression and alternative splicing in the kidney. *In preparation*. **#Corresponding author**.

Book chapters and other journals

1. Angarola BL, Kang HG, Miyano MM, Devoucoux M, Park SH, Sayaman R, Gott R, Chuang JH, Korstanje R, LaBarge MA, **Anczukow O** (2026). Abstract SY02-03: Decoding RNA splicing: A molecular link between aging, inflammation and cancer. *Cancer Res* 15 April 2026; 86 (8_Supplement): SY02–03
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
2. Toufiq M, Marches G, Kang HG, Wu TC, Englander R, Keshavarz Shahbaz S, Yurieva M, Chen P, Peebles ME, Garcia-Sastre A, Schotsaert M, Chaussabel D, Palucka K, **Anczukow O** (2026). Abstract 2256: Age-related transcriptional and alternative splicing changes in lung progenitor cells predisposing to immune dysfunction. *Cancer Res* 1 April 2026; 86 (7_Supplement): 2256
OA CrediTL: Conceptualization, Funding acquisition, Supervision, Project administration, Resources, Methodology, Writing – review & editing.
3. Thiesen A, Akkurt S, Noorbakhsh J, Wu TC, Salner A, Yu P, Airhart S, **Anczukow O**, Korstanje R, Palucka K, Chuang JH (2026). Abstract 1204: Spatial multiomic characterization of spontaneous lung tumors in aged mice. *Cancer Res* 1 April 2026; 86 (7_Supplement): 1204.
OA CrediTL: Conceptualization, Supervision, Project administration.
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