OLGA ANCZUKÓW, Ph.D.

Associate Professor
The Jackson Laboratory for Genomic Medicine
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RESEARCH INTERESTS

My research aims to uncover how dysregulation of alternative RNA splicing contributes to cancer, and ultimately to translate this knowledge to develop innovative RNA-targeted therapeutics. My lab uses patient-derived models and RNA-sequencing to identify oncogenic splicing factors and their targets that drive tumor initiation, metastasis, and drug resistance, as well as upstream pathways that regulate these in healthy aging and in disease. My unique expertise in both RNA biology and cancer research allows me to connect these fields, and by combining innovative tools and interdisciplinary approaches to identify novel biomarkers and personalized drugs for cancer therapies.

ACADEMIC APPOINTMENTS

Associate Professor	
The Jackson Laboratory for Genomic Medicine, CT, USA	2022-present
Cancer Center Research Program Co-Leader	
The Jackson Laboratory for Genomic Medicine, CT, USA	2022-present
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	2016-present
Investigator	
Institute for Systems Genomics, University of Connecticut	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
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

RESEARCH SUPPORT

Current

NIH/NCI, R01 CA248317

02/09/2021 -01/31/2026

PI: Anczuków -Camarda, O.

MYC-regulated RNA Binding Protein Networks and Spliced Isoforms Driving Cancer

NIH/NIGMS, R01 GM138541

07/01/2020-04/30/2025

PI: Anczuków-Camarda, O.

Mechanisms of post-transcriptional regulation of splicing factors

NIH/NCI, R01 CA230031

06/05/2018-05/31/2023

Quantitative Computational Methods to Accurately Measure Tumor Heterogeneity in Solid Tumors to Inform Development of Evolution-based Treatment Strategies

NIH/NCI, P30 CA034196S1

04/01/2021-11/30/2024

PI: Palucka, K. (Co-investigator Anczuków, O.)

PI: Chuang, J. (Co-investigator Anczuków, O.)

Cancer Center Support Grant

The Jackson Laboratory Cancer Center Fast Forward Award, P30 CA034196

05/01/2021-12/31/2021

PI: Anczuków, O.

The poison exon of oncogenic splicing factor TRA2B acts as a tumor suppressor lncRNA across multiple tumor types

The Jackson Laboratory Director's Innovation Award,

01/01/2022-12/31/2023

PI: Anczuków, O. and Hinson, JT.

Sex-dependent (epi)transcriptomic responses to the aging HFpEF heart

Linda Tallen and David Paul Kane Education and Research Foundation

02/01/2022-01/31/2023

PI: Anczuków, O.

Identifying novel drivers of age-related breast cancers

The Jackson Laboratory Cancer Center Fill the Gap Award, P30 CA034196

04/12/2022-04/15/2023

PI: Liu E., Anczuków, O.

RNA spliced isoforms in acquired resistance to chemotherapy for triple negative breast cancer

Completed Research Support

The Jackson Laboratory Cancer Center Pilot Award, P30 CA034196

11/01/2020-11/30/2021

PI: Anczuków, O. and Ucar, D.

Age-related changes in transcriptional regulatory programs of mammary gland cells as a risk factor for breast cancer

NIH/AI, U19 AI142733-03

07/01/2021-10/09/2021

PI: Palucka, A. (Co-investigator Anczuków, O.)

Modulation of Lung Immune Responses to Viral Infection

Sanofi US Services, SANOFI-SRA-FY19-JFB

01/02/2019-07/30/2021

PI: Banchereau, J. (Co-investigator Anczuków, O.)

Identification of Novel Therapeutic Targets in Triple Negative Breast Cancer and Ovarian Carcinoma through Long-Read Isoform Profiling

The Jackson Laboratory Cancer Center FF Award, P30 CA034196

11/16/2020-12/31/2020

PI: Anczuków, O. and Ucar, D.

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 TRA2β in epithelial tumors

JAX-Purdue Pilot Award, DIF-FY18-OAC

01/01/2018-08/31/2019

PI: Anczuków, O. and Solorio, L.

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

HONORS & AWARDS

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

CVOlga Anczuków Ph D

C. V.	Olgu Anczukow, I n.D.
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
TEACHING AND MENTORING EXPERIENCE	
Course lecturer	

•	Annual Short Course on Experimental Models of Human Cancer, The Jackson Laboratory Bar Harbor, ME	2017-present
•	Career Development Workshop, Cold Spring Harbor Laboratory, NY	2014
•	Grant Writing Workshop, Cold Spring Harbor Laboratory, NY,	2013

Postdoctoral advisor

Brittany Angola, PhD, The Jackson Laboratory 2019-present Awarded Brooks Scholar Award, The Jackson Laboratory Awarded T32 Training Program in Precision Genetics of Aging, Alzheimer's Disease and Related Dementias Awarded NSF Conference Award at the 26th Annual RNA Society Meeting

Maeva Devoucoux, PhD, The Jackson Laboratory

2022-present

Thesis advisor

•	Ryan Englander (co-mentored with J. Banchereau and K. Palucka), University of Connecticut Health Center MD/PhD Graduate Program	2021-present
•	Nathan Leclair, University of Connecticut Health Center MD/PhD Graduate Program Awarded poster prize at the UConn Institute for Systems Genomics Symposium Awarded poster prize at the UConn Genetics and Developmental Biology Annual Retreat Awarded poster prize at the 26 th Annual RNA Society Meeting Awarded NSF Conference Award at the 26 th Annual RNA Society Meeting	2018-2022
•	Laura Urbanski, University of Connecticut Health Center MD/PhD Graduate Program Awarded poster prize at the Jackson Laboratory Annual Symposium Awarded poster prize at the UConn Genetics and Developmental Biology Annual Retreat	2017-2021

Graduate student mentor

•	Sharon Yaqoob, Graduate Program Genetics and Developmental Biology University of Connecticut	2021
•	Eden Francoeur, Graduate Program Genetics and Developmental Biology University of Connecticut	2021
•	Nathan Hudson, Graduate Program Genetics and Developmental Biology University of Connecticut	2020
•	Young Jin Kim, Graduate Program Cold Spring Harbor Laboratory and Stony Brook Medicine	2015
•	Chitra Mohan, Graduate Program Cold Spring Harbor Laboratory and Stony Brook University	2014
•	Tobiloba Oni, Graduate Program Cold Spring Harbor Laboratory and Stony Brook University	2013
•	Nitin Shirole, Graduate Program Cold Spring Harbor Laboratory and Stony Brook University	2012
•	Chen Shen, Graduate Program Cold Spring Harbor Laboratory and Stony Brook University	2011

Undergraduate student mentor

•	Renee Kinney, The Jackson Laboratory Undergraduate Summer Program	2019
•	Suleyman Bozal, The Jackson Laboratory Undergraduate Summer Program	2018

•	Chenle Hu, Cold Spring Harbor Laboratory High School and Undergraduate Program Semi-finalist of the Intel Science Talent Search	2012-2013
	Martin Fan, Cold Spring Harbor Laboratory Undergraduate Summer Program	2010
	Ludivine Gouny, Université Claude Bernard Lyon 1 Undergraduate Program	2007
•	Marie-Joseph Salles, Université Claude Bernard Lyon 1 Undergraduate Program	2006
•	Sarah Triboulet, Université Claude Bernard Lyon 1 Undergraduate Program	2006
PROF	ESSIONAL SERVICE	
Nation	al/International Peer Review Groups/Grant Study Sections	
•	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 Consolidator Grants, Ad-hoc Reviewer	2018
•	Breast Cancer Now UK, Ad-hoc Reviewer	2018
•	Breast Cancer Foundation NZ, Ad-hoc Reviewer	2018
•	Faculty Promotion Committee, Université Pierre et Marie Curie, Paris, France, Ad-hoc Reviewer	2016
Institu	tional Service	
	The Jackson Laboratory Cancer Center, Leadership Program Member	2021-present
•	The Jackson Laboratory Aging Center, Member	2020-present
	The Jackson Laboratory Brand Council, Member	2020-present
•	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 Genetics and Developmental Biology Graduate Program, Thesis Committee Member	r
	Eishani Sokolowski, PhD Candidate (Ucar Lab)	2021-present
	Ryan Englander, MD/PhD Candidate (Banchereau Lab)	2020-present
	Patience Mukashyaka, PhD Candidate (Chuang Lab)	2020-present
	Shane Lawson, PhD Candidate (Graveley Lab)	2018-present
	Alex Nesta, PhD Candidate (Beck Lab)	2018-2022

Nathan Leclair, MD/PhD Candidate (Anczukow Lab)

2018-2022

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Menghan Du, PhD Candidate (Cheng Lab)	2019-2020
Laura Urbanski, MD/PhD Candidate (Anczukow Lab)	2017-2021
 UConn Health MD/PhD Graduate Program, Student Interviewer 	2016-present
 UConn Health PhD Graduate Program, Student Interviewer 	2016-present
Conference organization	
■ The Jackson Laboratory, <i>In vivo Models of Aging and Cancer</i> , Conference co-organizer	2022
■ FASEB 2023, RNA Processing in Cancer: From Bench to Bedside, Conference co-organizer	2021-2023
■ The Jackson Laboratory, <i>Aging and Cancer Workshop</i> , 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 	d 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
Scientific Community Service/Outreach	
 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 Lab and the Connecticut Breast Health Initiative Inc., Farmington, CT, Invited speaker 	oratory 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 Nature Comm., Nature Struct.Mol. Biol., RNA Journal, Cell, PNAS, PLOS Biology, Genome Research, PLOS Genetics, Cancer Research, Aging, PLOS One, JCI, Elife, PLOS Biology, Oncotarget, Biomaterials.	2008-present
PROFESSIONAL MEMBERSHIPS	
Faculty Opinions (F1000 prime), Faculty Member	2021-present
Yale RNA Center, Faculty Member	2018-present
UConn Health Genetics and Developmental Biology Graduate Program, Faculty Member	2017-present
RNA Society, Member	2011-present
American Association for Cancer Research, Member	2009-present
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INVITED LECTURES AND SELECTED TALKS

26th Annual Meeting of the RNA Society, Singapore	2021
4th International Caparica Conference in Splicing, Caparica, Portugal	2021
Institute for Systems Genomics, University of Connecticut, CT	2021
Splice Con 2021, 41st Steenbock Symposium, UW Madison, WI	2021
The Hebrew University of Jerusalem-Hadassah Medical School, Jerusalem, Israel	2021
Centre de Recherche CHU de Québec, Université Laval, Québec, QC, Canada	2021
Rosalind Franklin Centennial Symposium and Molecular and Cellular Sciences Seminar Series, Rosalind Franklin University of Medicine and Science, Chicago, IL	2021
Center for Molecular Biology and Biotechnology, Florida Atlantic University, FL	2021
UConn Health MD/PhD Research Club, Farmington, CT	2021
Tufts University School of Medicine, Boston, MA	2020
6th RNA Biology Symposium, Singapore, Singapore	2020
Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, NE	2020
University of Connecticut School of Medicine, Farmington, CT	2020
University of Connecticut, Storrs, CT	2019
Bermuda Principles Conference Impact on RNA Processing & Disease, Bermuda	2019
Mercy Hospital, Portland, ME	2019
25nd Annual Meeting of the RNA Society, Krakow, Poland	2019
University of Florida, Gainesville, FL,	2018
Yale RNA Center, Yale, CT	2018
4th Annual RNA center retreat, Albany, NY	2018
UConn Health, Genetics and Developmental Biology Department, Farmington, CT	2018
Hartford Hospital, Sullivan Symposium, Hartford, CT	2018
22nd Annual Meeting of the RNA Society, Prague, Czech Republic	2017
Hallmarks of cancer: Focus on RNA international symposium, Prague, Czech Republic	2017
Beth Israel Deaconess Medical Center, Boston, MA	2017
UConn Health Carole and Ray Neag Comprehensive Cancer Center, Farmington, CT	2017
Post-Transcriptional Gene Regulation Gordon Research Conference, Stowe, VT	2016
The Jackson Laboratory Cancer Center, Portland, ME	2016
Inselspital, Universitätsspital Bern, Bern, Switzerland	2016
Cancer Research UK Institute, Cambridge, UK	2016
The Wistar Institute, Philadelphia, PA	2016
The Jackson Laboratory for Genomic Medicine, Farmington, CT	2016
The Lerner Research Institute at Cleveland Clinic, Cleveland, OH	2016
University of Rochester Center for RNA Biology, Rochester, NY	2016
Eukaryotic mRNA Processing, Cold Spring Harbor Laboratory, NY	2015
20th Annual Meeting of the RNA Society, Madison, WI	2015
Biology of Cancer: Microenvironment, Metastasis & Therapeutics, Cold Spring Harbor Laboratory, NY	2015
Memorial Sloan Kettering Cancer Center, New York, NY	2015
Columbia University, New York, NY	2015
Cambridge University, Cambridge, UK	2015
Duke-NUS Medical School, Singapore	2015
Stony Brook Medicine, Stony Brook, NY	2015

Massachusetts General Hospital, Charleston, MA	2015
School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA	2015
CSHL RNA Biology, Cold Spring Harbor Laboratory Asia, Suzhou, China	2014
Capital Medical University, Beijing, China	2014
19th Annual Meeting of the RNA Society, Québec, Canada	2014
Cold Spring Harbor Laboratory, NY	2014
Cancer Mechanisms and Therapeutics, Cold Spring Harbor Laboratory, NY	2013
16th Annual Meeting of the RNA Society, Kyoto, Japan	2011
AACR 101st Annual Meeting, Washington DC	2010
Human and Medical Genetics Society annual meeting, Montpellier, France	2006

PUBLICATIONS

Peer-reviewed publications

- 1. 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. PMID: 34903603. *equal contribution, #Corresponding author.
- 2. 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.
- 3. 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 Prev Res*, 14(8):779-794. PMID: 34140348. *equal contribution.
- 4. Angarola BL, **Anczuków O**[#] (2021). Splicing alterations in healthy aging and disease. *WIREs RNA*, 12(4):e1643. PMID: 33565261. *Corresponding author.
- 5. 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.
- 6. 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 Biol*, 21, 171. PMID: 32660516.
- 7. 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. PMID: 32051529.
- 8. 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.
- 9. 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. PMID: 29693319. Recommended in F1000prime. Top cited articles in 2020 from *Wires RNA*. *Corresponding author.

10. Anczuków O and Krainer AR (2016). Splicing-factor alterations in cancers. RNA, 22:1285-301. PM27530828.

- 11. **Anczuków O** and Krainer AR (2015). The spliceosome, a potential Achilles heel of MYC-driven tumors. *Genome Medicine*, 7:107. PM4618744.
- 12. **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. <u>PMC4597910</u>. *equal contribution.
- 13. 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. <u>PMC3725064</u>.
- 14. 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.
- 15. **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.
- 16. 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. <u>PMC3334311</u>.
- 17. **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: <u>22753590</u>.
 - **Comment in**: Fackenthal JD, Lee Y, Olopade OI. (2012). Hidden dangers: a cryptic exon disrupts *BRCA2* mRNA. *Clinical Cancer Research*, 18(18):4865-7.
- 18. **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: <u>17694537</u>.
- 19. **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.
- 20. 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.
- 21. 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: <u>16941470</u>.
- 22. 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.

Manuscripts submitted or in preparation

- 23. Urbanski L, Brugiolo M, Park S, Angarola BL, Leclair NK, Palmer P, Keshari Sahu S, **Anczuków O**[#] (2021). MYC regulates a pan-cancer network of co-expressed oncogenic splicing factors. *bioRxiv*. https://doi.org/10.1101/2021.11.24.469558. *Under review at Cell Reports*. *Corresponding author.
- 24. 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*. https://doi.org/10.1101/490904.

- 25. Angarola BL*, Katiyar N*, Sharma S, Gott R, Korstnaje R, Ucar D*, **Anczuków O***. Aging-driven remodeling of the transcriptomic and epigenetic landscape in mammary cells. *In preparation*. *equal contribution. *Corresponding author.
- 26. 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.
- 27. Leclair NK, Heffner C, Brugiolo M, Angarola BL, Urbanski L, Skarnes W, Hinson JT, Murray S, **Anczuków O***. Poison exons in SR proteins are essential for normal cell differentiation and embryogenesis. *In preparation*. *Corresponding author.
- 28. Leclair NK, Brugiolo M, Park S, Angarola BL, Urbanski L, **Anczuków O***. The poison exon of oncogenic splicing factor TRA2β acts as a tumor suppressor lncRNA across multiple tumor types. *In preparation*. *Corresponding author.
- 29. Leclair NK*, Angarola BL*, **Anczukow O***. Chapter 1 Aberrant RNA splicing and therapeutic reprogramming in cancer. '*RNA-based Mechanisms in Cancer*', Book chapter. *equal contribution. *Corresponding author.

Other journals and book chapters

- 30. Leclair NK, Urbanski L, Brugiolo M, Yurieva M, Graveley BR, Cheng A, **Anczuków O***. RNA-targeting approaches to modulate alternative RNA splicing in cancer. *Cancer Research*, 2021, 81 (13 Supplement), 1147-1147. *Corresponding author.
- 31. Mukashyaka P, Noorbakhsh J, Kumar P, Courtois E, **Anczukow O**, Robson P, Liu E, Chuang J. Intratumor heterogeneity quantification using 3D segmentation of organoids co-culture systems. *Cancer Research*, 2021, 81 (13 Supplement), 3144-3144.
- 32. Urbanski L, Angarola B, Brugiolo M, Yurieva M, Park S, **Anczukow O***. Abstract PD15-07: Myc regulates alternative splicing through a network of RNA binding proteins in breast cancer. *Cancer Research*, 2021, 81 (4 Supplement), PD15-07-PD15-07. **Corresponding author.
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