Curriculum Vitae

	PERSONAL INFORMATION
Name and surname	Andreja Ambriović Ristov
Academic title	PhD, Senior Scientist
Scientific Personal Identification Number	173311
Year and institution of PhD obtained	1997, Faculty of Science, University of Zagreb
Address	Bijenička 54, 10000 Zagreb, Croatia
Phone	+385 1 4571 240
	+385 1 4561 177
E-mail	Andreja.Ambriovic.Ristov@irb.hr
Personal web page	http://www.irb.hr/eng/People/Andreja-Ambriovic-Ristov
Citizenship Date and place of birth	Croatian 28-10-1967
	20-10-1907
	WORK EXPERIENCE
Date (from – until)	November, 2014-
Institution	<i>Ruđer Bošković Institute</i> Senior Scientist
Position	Head of the Laboratory for Cell Biology and Signalling, 2016-
	Head of the Division of Molecular Biology, 2016-
Work field	Oncology, Virology, Molecular biology
Date (from – until)	April, 2009-November 2014
Institution	Ruđer Bošković Institute
Position	Senior Associated Researcher
Work field	Oncology, Virology, Molecular Biology
	May, 2001-April, 2009
	Ruđer Bošković Institute
Position	Associated Researcher Oncology, Virology, Molecular biology
Work field	Cheology, Vilology, Molecular biology
Date (from – until)	April, 1997-May, 2001
Institution	Ruđer Bošković Institute
Position Work field	Postdoc Virology, Immunology, Oncology, Molecular Biology
Date (from – until)	May, 1993 – April, 1997
Institution Position	Ruđer Bošković Institute PhD student
Work field	Virology, Immunology, Oncology, Molecular Biology
Data (from watil)	January 1001 May 1002
Date (from – until) Institution	January, 1991-May, 1993 Ruđer Bošković Institute
Position	Master of Science student
Work field	Virology, cell biology, immunology

Date (from – until)

February - December, 1990 Institution Croatian Veterinary Institute Position Assistant Work field Analytical chemistry

EDUCATION

	EDOCATION
Date Place Institution Title of qualification awarded	April, 1997 Zagreb, Croatia Faculty of Science, University of Zagreb Ph.D. (biology)
Date Place Institution Title of qualification awarded	May, 1993 Zagreb, Croatia Faculty of Science, University of Zagreb M.Sc. (biology)
Date Place Institution Title of qualification awarded	November, 1989 Zagreb, Croatia Faculty of Pharmacy and Biochemistry, University of Zagreb B.Sc. (clinical chemistry)
	TRAINING
Year Place Institution Subject and skills covered	March – August 2001. postdoc fellowship INRA Maisons-Alfort, France Ecole Nationale Veterinaire D'Alfort, 7 avenue du General de Gaulle, 94704 Maisons Alfort, France Molecular biology, Virology
Year Place Institution Subject and skills covered	June, 2000, FEBS short term fellowship Maisons-Alfort, France Ecole Nationale Veterinaire D'Alfort, 7 avenue du General de Gaulle, 94704 Maisons Alfort, France Molecular biology, Virology
Year Place Institution Subject and skills covered	October-December, 1996; September-October, 1999; French Government Fellowships Maisons-Alfort, France Ecole Nationale Veterinaire D'Alfort, 7 avenue du General de Gaulle, 94704 Maisons Alfort, France Molecular biology, Virology
	LANGUAGES
MOTHER TONGUE ENGLISH LANGUAGE	Croatian
Speaking	Fluent

Speaking Fluent Writing Fluent Reading Fluent

2

Language French Speaking Fluent Writing Intermediate Reading Fluent

RESEARCH AND OTHER PROJECTS

(2020-2024) HRZZ Research Project "Integrin αVβ5-associated Focal and Reticular Adhesions in Melanoma" Role on the project: Leader

(2014-2018) HRZZ Research Project "Molecular mechanisms of chemosensitisation of human breast carcinoma and melanoma cell lines by silencing of integrins" Role on the project: Leader

(2016-2017) Proof of Concept (POC6) Croatian Agency for SMEs, Innovations and Investments (HAMAG-BICRO) "VirusHunter - identifying new potentially pathogen viruses" Role on the project: **Co-worker**

(2015-2018) HRZZ Installation Research Project "Understanding cell entry pathway of Adenovirus type 26: way of improving vaccine vectors"

Role on the project: Co-worker

(2014-2015): bilateral project with Germany "Sensitization of melanoma and glioma cells to alkylating drugs by integrin $\alpha\nu\beta3$, $\alpha\nu\beta5$, a3B1 and a4B1 silencing" Role on the project: Leader

(2013-2016) FP7-REGPOT project "Enhancement of the Innovation Potential in SEE through New Molecular Solutions in Research and Development" leader dr. sc. Oliver Vugrek Role on the project: **Co-worker**

(2012-2013) bilateral project with Germany "Platinum compounds: Drug-induced stress responses and mechanisms of drugresistance" Institute for toxicology, Heinrich Heine University Düsseldorf, Düsseldorf, Germany

Role on the project: Co-worker

(2008-2009) bilateral project with Germany ",Molecular mechanisms that deterimines cell sensitivity to platinum compounds" Institut for toxicology, Johannes Gutenberg University, Mainz, Germany Role on the project: **Co-worker**

(2007-2013) Ministry of Science, Education and Sports, "Increase of adenovirus transduction efficacy and resistance to cytostatics" Role on the project: Leader

(2007-2013) Ministry of Science, Education and Sports, "Cell response to cytotoxic agents and resistance development " Role on the project: Co-worker

(2007-2010) Technological project awarded by Ministry of Science, Education and Sports, "Regeneration of knee articular cartilage" Role on the project: Leader

(2004-2006) Integrated action: Ministry of Science, Education and Sports and French Government: COGITO, "Adenovirus retargeting to aminopeptidase N and potential use in gene therapy of cystic fibrosis" Role on the project: **Leader**

(2002-2004) NATO Science Program, Collaborative linkage grant, "Human adenovirus type 5 retargeted on aminopeptidase N" Role on the project: Leader

(1990-1995) Ministry of Science, Education and Sports Science and Technology "The investigation of cell resistance to genotoxic agents" Role on the project: **Co-worker**

(1998-2000) Ministry of Science, Education and Sports, Young researcher grant "Vector vaccines against pseudorabies virus" Role on the project: **Leader**

(1996-2002) Ministry of Science, Education and Sports, Cell response to physical, chemical and biological noxa Role on the project: **Co-worker**

TEACHING

Course leader **"Gene therapy"**, graduate Studies programme in Molecular Biotechnology, Faculty of Food Technology and Biotechnology, University of Zagreb, 2008-

Lecturer **"Gene therapy – gene transfer"**, joint study of the University of Zagreb and the University of Orleans in the field of Molecular Biotechnology, 2009-

Course co-leader **"Methods in molecular biology and medicine"**, PhD Studies in Molecular Biosciences, University of Osijek, University of Dubrovnik and Ruđer Bošković Institute, 2007-

Course co-leader **"Molecular principles of genetic engineering"**, PhD Study in Veterinary Sciences, University of Zagreb, 2009-

Lecturer of several methods in educational project **"Methodological Courses in Biology and Medicine"**, Ruđer Bošković Institiute, 2003-2013

Course Leader "Molecular basis of Gene Therapy" PhD Studies in Biology, Faculty of Science, University of Zagreb, 2002-

MENTORSHIP OF DEFENDED DOCTORAL AND MASTER DISSERTATIONS AND TRAINING OF YOUNG RESEARCHERS AND SCIENTISTS

Doctoral dissertations:

1) <u>Ana Dekanić</u>, "The effect of dilencing of integrin subunits a in human melanoma cells on sensitivity to antitumour drugs and motility", 2019

2) <u>Nikolina Stojanović</u>, "Integrin $\alpha\nu\beta$ 3-mediated drug resistance in human tongue squamous cell carcinoma", 2014

2) <u>Dragomira Majhen</u>, "Augmentation of adenovirus transduction: Changing expression of natural receptors and retargeting to new ones", Faculty of Science University of Zagreb, 2008

4) Tihana De Zan, in progress

Master dissertation:

1) <u>Dragomira Majhen</u>, "Adenovirus type 5 retargeting on amniopeptidase N", Faculty of Science University of Zagreb, 2005

Diploma thesis:

1) Marija Tomić, "The role of adhesion proteins in the resistance of prostate carcinoma cell line DU145 to ionizing radiation", Faculty of Food Technology and Biotechnology, University of Zagreb, 2020

2) Isabela Pehar, "The role of adhesion proteins in the resistance of prostate carcinoma cell line LNCaP to ionizing radiation", Faculty of Food Technology and Biotechnology, University of Zagreb, 2020

3) Zrinka Vitković, "Adhesome characterisation in triple negative breast carcinoma cell line MDA-MB-231 upon stable silencing of integrin subunit av", Faculty of Science, University of Zagreb, 2018.

4) Kristina Čuljak, "Characterisation of adhesome in tongue squamous carcinoma cells Cal27 upon de novo expression of integrin $\alpha\nu\beta3$ », Faculty of Science, University of Zagreb, 2018

5) Christine Supina, "Combined effect of cilengitide and paclitaxel in triple negative breast cancer and melanoma cells", Faculty of Science, University of Zagreb, 2018

6) Nebojša Vujnović, "Combined effect of tyrosine kinase inhibitors and antitumor drugs in human melanoma cells", Faculty of Science, University of Zagreb, 2017

7) Delphine Sedda, "Knockdown of the integrin subunit alpha V in MDA-MB-435S cells decreases sensitivity to cisplatin", Masters "Science of Life", Orleans, France, 2017

8) <u>Ivan Faraho</u>, "Differential proteome analysis of Cal27 and Cal27-2B1 human tongue squamous cell carcinoma cell lines", Faculty of Science, University of Zagreb, 2015

9) <u>Alen Kovačević</u>, "Proteomic analysis of human breast cancer cells MDA-MB-435S after silencing integrin alpha", Faculty of Science, University of Zagreb, 2015

10) <u>Kristijan Pažur</u>, "Disulfide bonds in retargeting motifs RGD or NGR inserted into the adenovirus type 5", Faculty of Science, University of Zagreb, 2013

11) <u>Krešimir Ferenčak</u>, "Effect of integrin αv or $\alpha 4$ silencing on sensitivity of human breast cancer cells to vincristine and paclitaxel", Faculty of Science, University of Zagreb, 2013

12) <u>Buger Tvrtko</u>, "Vincristine cell resistance is accompanied by changes in integrin expression and adenovirus transduction efficiency", Faculty of Science, University of Zagreb, 2012

13) <u>Dekanić Ana</u>, "Influence of integrin $\alpha\nu\beta$ 3 and $\alpha\nu\beta$ 5 silencing on sensitivity of tumor cells to cisplatin", Faculty of Science, University of Zagreb, 2012

14) <u>Irena Bardak</u>, "Influence of $\alpha\nu\beta3$ and $\alpha\nu\beta5$ integrin silencing on attachment, internalization and transduction with adenoviral vectors", Faculty of Science, University of Zagreb, 2011

15) <u>Dunja Vukić</u>, "Increased Ad5-mediated transgene expression in cisplatin-resistant human laryngeal carcinoma cells", Faculty of Pharmacy and Biochemistry, University of Zagreb, 2010

16) <u>Tea Špeljko</u>, "The influence of the coxsackie adenovirus receptor expression on integrin expression in human rhabdomyosarcoma cell line", Faculty of Science, University of Zagreb, 2010

17) <u>Tihana Jelušić</u>, "Retargeting adenovirus type 5 to integrin $a4\beta1$ ", Faculty of Science, University of Zagreb, 2009

18) <u>Nikolina Stojanović</u>, "αvβ3 integrin mediated drug resistance in human tongue squamous cell carcinoma", Faculty of Science, University of Zagreb, 2009

VISITS TO FOREIGN RESEARCH AND EDUCATION INSTITUTIONS

Visiting professor (duration 1 month) year 2020/2021: University of Torino, Italy. Visiting professor (duration 1 month) year 2019/2020: University of Torino, Italy. Visiting professor (duration 1 month) year 2018/2019: University of Torino, Italy. Visiting professor (duration 1 month) year 2016/2017: University of Torino, Italy. Visiting professor (duration 1 month) year 2013/2014: University of Orleans, France. Visiting professor (duration 1 month) year 2010/2011: University of Orleans, France. A book "Methods in molecular biology" (Editor in chief Andreja Ambriović-Ristov) has received the Josip Juraj Strossmayer award, as the best publication achievement in science in Croatia in 2007

The award of director of Ruđer Bošković Institute for contribution in Institute development and common prosperity", 2004

ORGANIZATIONAL SKILLS AND COMPETENCES

Participation in organisation of several workshops of Innomol project, FP7-REGPOT-2012-2013-1: Enhancement of the Innovation Potential in SEE through new Molecular Solutions in Research and Development (InnoMol), (project leader dr. sc. Oliver Vugrek) 2013 - 2016

President, organiser and co-editor of Book of Abstracts of FEMS supported Summer School "Power of Viral Vectors in Gene Therapy and Basic Research" organised by Croatian Microbiological Society, French Society for Gene and Cell Therapy, German Society for Gene Therapy and Spanish Society for Gene and Cell Therapy, Primošten, Croatia, 17 – 20 September 2014

President, organiser and co-editor of Book of Abstracts of the international FEMS workshop "Adenoviruses - Basic Biology to Gene Therapy", Zadar, Croatia, September 24-25, 2008

Member of Organising committee and co-editor of Book of Abstracts of "50 years of molecular biology in Croatia", Zagreb, Croatia, 2008

Member of Organising committee and co-editor of Book of Abstracts of "45 years of molecular biology in Croatia", Zagreb, Croatia, 2003

The founder and director of educational project "Methodological Courses in Biology and Medicine" 2003-2013

Editor in chief "Methods in molecular biology" with a participation of 119 authors from all parts of Croatia, 2007

Coordinator of "Young Scientists", section of Croatian Society for Natural Sciences, 1993-1994.

MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

Membership:

Croatian Society for Biochemistry and Molecular Biology (thus member of Federation of European Biochemical Societies, FEBS)

Croatian Microbiological Society (thus member of Federation of European Microbiological Societies, FEMS)

Croatian Society of Genetic Engineers

Croatian Association for Cancer Research (thus member of European Association for Cancer Research, EACR)

Croatian Genetic Society

Member of Scientific Council of the Government of the Republic of Croatia 2020-

Panel Member for The Foundation for Science and Technology (Portuguese: Fundação para a Ciência e a Tecnologia) Biological Sciences, Biodiversity and Ecosystems Panel in the R&D Units Evaluation 2017.

Head of the Laboratory for Molecular Biology and Signalling, 2016-

Head of the Division of Molecular Biology, 2016-

Member of Commission for the structural funds, Ruđer Bošković Institute, 2012-

Member of Council for economy, Ruđer Bošković Institute, 2012-2014

Vicepresident of Croatian Society of Genetic Engineers, 2009-2011

PUBLICATIONS AND SCIENTOMETRICS

https://scholar.google.hr/citations?user=HIrwzkIAAAAJ&hl=hr&oi=ao

41/42 publications indexed in Web of Science/Scopus, 583/617 citations, h-index 14/14; Google Scholar, 964 citations, h-index 17 (July, 2020)

LIST OF PUBLICATIONS:

Samaržija I., Dekanić A., Humphries J.D., Paradžik M., Stojanović N., Humphries M.J., <u>Ambriović-Ristov A.</u> Integrin Crosstalk Contributes to the Complexity of Signalling and Unpredictable Cancer Cell Fates. **Cancers** (Basel). Jul 15;12(7):E1910. doi: 10.3390/cancers12071910, 2020.

Paradžik M., Humphries J.D., Stojanović N., Nestić D., Majhen D., Dekanić A., Samaržija I., Sedda D., Weber I., Humphries M.J., <u>Ambriović-Ristov A.</u> KANK2 Links $aV\beta5$ Focal Adhesions to Microtubules and Regulates Sensitivity to Microtubule Poisons and Cell Migration. **Frontiers in Cell and Developmental Biology**, Mar 3;8:125. doi: 10.3389/fcell.2020.00125, 2020.

Stojanovic N., Dekanic A., Paradzik M., Majhen D., Ferencak K., Ruscic J., Bardak I., Supina C., Tomicic M.T., Christmann M., Osmak M., <u>Ambriovic-Ristov A.</u> Differential effects of integrin av knockdown and cilengitide on sensitisation of triple-negative breast cancer and melanoma cells to microtubule poisons, **Molecular Pharmacology**, 94(6):1334-1351, 2018

Pinterić M., Podgorski I.I., Sobočanec S., Popović Hadžija M., Paradžik M., Dekanić A., Marinović M., Halasz M., Belužić R., Davidović G., <u>Ambriović-Ristov A.</u>, Balog T. De novo expression of transfected sirtuin 3 enhances susceptibility of human MCF-7 breast cancer cells to hyperoxia treatment, **Free Radical Research**, 52(6):672-684, 2018.

Christmann M., Diesler K., Majhen D., Steigerwald C., Berte N., Freund H., Stojanović N., Kaina B., Osmak M., <u>Ambriović-Ristov A.</u>*, Tomicic M.T.* Integrin $\alpha V\beta 3$ silencing sensitizes malignant glioma cells to temozolomide by suppression of homologous recombination repair, **Oncotarget**, 8(17): 27754-27771, 2017.

Stojanovic N., Brozovic A., Majhen D., Herak Bosnar M., Fritz G., Osmak M., <u>Ambriovic-Ristov A.</u> Integrin $\alpha\nu\beta$ 3 expression in tongue squamous carcinoma cells Cal27 confers anticancer drug resistance through loss of pSrc(Y418), **Biochimica et Biophysica Acta** 1863: 1969–1978, 2016.

Ruščić J. *, <u>Ambriović-Ristov A.*</u>, Majhen D., Kolundžija S., Barut M., Benihoud K., Krajačić M. Manipulating adenoviral vector ion-exchange chromatography: Hexon versus fiber. **Journal of Separation Science**, 39(22): 4299-4304, 2016.

Steiner I., Stojanovic N., Bolje A., Brozovic A., Polancec D., <u>Ambriovic-Ristov A.</u>, Radic Stojkovic M., Piantanida I., Eljuga D., Kosmrlj J., Osmak M. Discovery of 'click' 1,2,3triazolium salts as potential anticancer drugs, **Radiology and Oncology**, 2016. doi:10.1515/raon-2016-0027

Vajs J., Steiner I., Brozovic A., Pevec A., <u>Ambriović-Ristov A.</u>, Matković M., Piantanida I., Urankar D., Osmak M., Košmrlj J. The 1, 3-diaryltriazenido(p-cymene)ruthenium(II) complexes with a high in vitro anticancer activity. **Journal of inorganic biochemistry**. 153: 42-48, 2015.

Majhen D., Stojanović N., Vukić D., Pichon C., Leduc C., Osmak M., <u>Ambriović-</u> <u>Ristov A.</u> Increased Adenovirus Type 5 Mediated Transgene Expression Due to RhoB Downregulation, **PLoS One**, 9(1): e86698, 2014.

Brozovic A., Stojanović N., <u>Ambriović-Ristov A</u>., Brozović Krijan A., Polanc S., Osmak M. 3-Acetyl-bis(2-chloro-4-nitrophenyl) triazene is a potent antitumor agent that induces oxidative stress and independently activates the stress-activated protein kinase/c-Jun NH2-terminal kinase pathway. **Anti-Cancer Drugs**, 25(3): 289-295, 2014.

Brozovic A., Vuković L., Polančac D.S., Arany I., Köberle B., Fritz G., Fiket Z., Majhen D., <u>Ambriović-Ristov A.</u>, Osmak M. Endoplasmic reticulum stress is involved in the response of human laryngeal carcinoma cells to carboplatin but is absent in carboplatin-resistant cells. **PLoS One**, 8(9): e76397, 2013.

Arbanasić H., Galov A., <u>Ambriović-Ristov A.</u>, Grizelj J., Arsenos G., Marković B., Dovenski T., Vince Silvijo., Curik I. Extensive polymorphism of the major histocompatibility complex DRA gene in Balkan donkeys: perspectives on selection and genealogy. **Animal Genetics**, 44(6): 711-716, 2013.

Stojanović N., Urankar D., Brozović A., <u>Ambriović-Ristov A.</u>, Osmak M., Košmrlj J. Design and Evaluation of Biological Activity of Diazenecarboxamide-extended Cisplatin and Carboplatin Analogues. **Acta chimica Slovenica**, 60(2): 368-374, 2013.

Majhen D., Richardson J., Vukelić B., Dodig I., Cindrić M., Benihoud K., <u>Ambriović-Ristov A.</u> The disulfide bond of an RGD4C motif inserted within the HI loop of the adenovirus type 5 fiber protein is critical for retargeting to av-integrins. **Journal of Gene Medicine**, 14(12): 788-797, 2012.

Majhen D., Stojanović N., Špeljko T., Brozović A., De Zan T., Osmak M., <u>Ambriović-Ristov A</u>. Increased expression of the coxsackie and adenovirus receptor downregulates alpha v beta 3 and alpha v beta 5 integrin expression, reduces cell adehesion and migration. **Life Sciences**, 89(7-8): 241-249, 2011.

Brozovic A., <u>Ambriović-Ristov A</u>., Osmak M. The relationship between cisplatininduced reactive oxygen species, glutathione and BCL-2, and resistance to cisplatin. **Critical reviews in toxicology**, 40(4): 347-359, 2010.

Majhen D., Brozovic A., Buger T., Gabrilovac J., Osmak M., <u>Ambriović-Ristov A.</u> Vincristine-resistant human laryngeal carcinoma cells demonstrate increased Rous sarcoma virus promoter activity. **Life sciences**, 87(15/16): 468-474, 2010.

Čubrić Čurik V., Feligini M., Ferenčaković M., Džidić A., Salajpal K., <u>Ambriović-Ristov</u> <u>A.</u>, Ćetković H., Majhen D., Čurik I. Sequence polymorphism of PrP exon 3 gene in Istrian and crossbred sheep. **Italian journal of animal science**. 8(S3): 86-88, 2009.

Majhen D., Nemet J., Richardson J., Gabrilovac J., Hajsig M., Osmak M., Eloit M., <u>Ambriović-Ristov A.</u> Differential role of $\alpha\nu\beta3$ and $\alpha\nu\beta5$ integrins in internalization and transduction efficacies of wild type and RGD4C fiber-modified adenoviruses. **Virus Research**. 139(1): 64-73, 2009.

Brozović A., Majhen D, Roje V., Mikac N., Jakopec S., Fritz G., Osmak M., <u>Ambriović-Ristov A.</u> $\alpha\nu\beta3$ integrin mediated drug resistance in human laryngeal carcinoma cells is caused by glutathione dependent elimination of drug induced reactive oxidative species. **Molecular Pharmacology**. 74: 298-306, 2008.

Žaja R., Munić V., Sauerborn Klobučar R., <u>Ambriović-Ristov A</u>., Smital T. Cloning and molecular characterization of apical efflux transporters (ABCB1, ABCB11 and ABCC2) in rainbow trout (Oncorhynchus mykiss) hepatocytes. **Aquatic Toxicology**, 90(4): 322-332, 2008.

Čimbora-Zovko T., <u>Ambriović-Ristov A</u>., Lončarek J., Osmak M. Altered cell-cell adhesion in cisplatin-resistant human carcinoma cells: A link between β - catenin/plakoglobin ratio and cisplatin resistance, **European Journal of Pharmacology** 558(1-3): 27-36, 2007.

Majhen D., <u>Ambriović-Ristov, A.</u> Adenoviral vectors-how to use them in cancer gene therapy, **Virus Research**, 119: 121-133, 2006.

Majhen D., Gabrilovac J., Eloit M., Richardson J., <u>Ambriović-Ristov A</u>. Disulfide bond formation in NGR fiber-modified adenovirus is essential for retargeting to aminopeptidase N. **Biochemical and Biophysical Research Communications**. 348: 278-287, 2006.

Ambriović-Ristov, A., Osmak, M. Integrin-mediated drug resistance. **Current Signal Transduction Therapy**, 1: 227-237, 2006.

Breljak D., <u>Ambriović-Ristov A</u>., Kapitanović S., Čačev T.; Gabrilovac J. Comparison of three RT-PCR-based methods for relative quantification of mRNA, **Food Technology and Biotechnology**, 43: 379-388, 2005.

Gabrilovac J., Breljak D., Čupić B., Ambriović-Ristov A. Regulation of aminopeptidase N (EC 3.4.11.2.; APN; CD13) by interferon γ on the HL-60 cell line, **Life Sciences**, 76: 2681-2697, 2005.

<u>Ambriović-Ristov</u> <u>A</u>., Gabrilovac J., Čimbora-Zovko T., Osmak M. Increased adenoviral transduction efficacy in human laryngeal carcinoam cells resistant to cisplatin isassociated with increased expression of integrin $\alpha\nu\beta$ 3 and coxsackie adenovirus receptor, **International Journal of Cancer**, 110: 660-667, 2004.

Vuković L., <u>Ambriović-Ristov A</u>., Čimbora-Zovko T., Ćetković H., Brozović A., Majhen D., Osmak M.: Expression of apoptotic genes in low, clinically relevant levels of drug resistance, **Periodicum Biologorum**, 106: 173-177, 2004.

<u>Ambriović-Ristov A</u>., Mercier S., Eloit M. Shortening adenovirus type 5 fiber shaft decreases the efficiency of post binding steps in CAR-expressing and non-expressing cells, **Virology**, 312: 425-433, 2003.

Šprem M., Babić D., Abramić M., Vrhovec I., Škrk J., Miličić D., <u>Ambriović Ristov A</u>., Kalafatić D., Osmak M. Glutathione and Glutathione S-Transferases as Early Markers for Ovarian Carcinomas: Case Series, **Croatian Medical Journal**, 42: 624-629, 2001.

Monteil M., Le Pottier M. F., <u>Ambriović Ristov A</u>., Cariolet R., L'Hospitalier R., Klonjkowski B., Eloit M. Single inoculation of replication-defective adenovirus-vectored vaccines at birth in piglets with maternal antibodies induces high level of antibodies and protection against pseudorabies, **Vaccine**, 18: 1738-1742, 2000.

Osmak M., Bordukalo T., <u>Ambriović Ristov A</u>., Jernej B., Košmrlj J., Polanc S. Diazenes as modificators of drug-resistance in tumor cells, **Neoplasma**, 47: 390-395, 2000.

Osmak M., Nikšić D., Brozović A., <u>Ambriović Ristov A</u>., Vrhovec I., Škrk J. Drug resistant tumour cells have incresed levels of tumor markers for invasion and metastasis, **Anticancer Research**, 19: 3193-3198, 1999.

Chetboul V., Adam M., Deprez I., <u>Ambriović A</u>., Rosenberg D., Crespeau F., Saana M., Pham I., Eloit M., Adnot S., Pouchelon JL. Expression of biologically active atrial natriuretic factor following intrahepatic injection of a replication-defective adenoviral vector in dogs, **Human Gene Therapy**, 10(2):281-290, 1999.

Osmak M., Brozović A., <u>Ambriović-Ristov A</u>, Hadžija M., Pivčević B., Smital T. Inhibition of apoptosis is the cause of resistance to doxorubicin in human breast adenocarcinoma cells, **Neoplasma**, 45: 223-230, 1998.

Ambriović Ristov A., Osmak M., Delić V.: DNA Vaccines, **Periodicum biologorum**, 100(3): 331-338. 1998.

<u>Ambriović A</u>., Adam M., Monteil M., Paulin D., Eloit M. Efficacy of replicationdefective adenovirus vectored vaccines: Protection following intramuscular injection is linked to promoter efficiency in muscle representative cells, **Virology** 238: 327-335, 1997.

Osmak M., Babić D., Abramić M., <u>Ambriović A</u>., Miličić D., Eljuga D., Vuković L. Glutathione S-transferase activity as an early marker for malignant tumors of corpus uteri, **Neoplasma**, 44: 324328, 1997.

<u>Ambriović A.</u>, Novak Despot D.: Identification of glycoproteins gE and gC of the pseudorabies virus strain B-Kal 68 by SDS-PAGE and monoclonal antibodies, **Periodicum Biologorum**, 97(4): 257-262, 1995.

Osmak M., Miljanić S., <u>Ambriović A.</u>, Kapitanović S.: Characterization of human primary lung fibroblasts exposed to repeated low doses of gamma rays, **Periodicum Biologorum**, 97(3), 229-234, 1995.

Editor of the book:

Metode u molekularnoj biologiji (*Methods in Molecular Biology*), editor in chief **Andreja Ambriović Ristov**, Editors: Andreja Ambriović Ristov, Anamaria Brozović, Branka Bruvo Mađarić, Helena Ćetković, Maja Herak Bosnar, Dubravka Hranilović, Silva Katušić Hećimović, Nevenka Meštrović Radan, Snježana Mihaljević, Neda Slade i Dušica Vujaklija; Institut Ruđer Bošković, Zagreb, 2007.

Invited Talks and Congress Presentations

International 2019

A COST Action CA15214: The workshop on Mechanobiology in Migrating Cells, April, 2019, Coimbra, Portugal

Talk: "The av-integrin adhesome affects melanoma cell migration and sensitivity to microtubule poisons"

2018

ABCD Meeting: Signal Transduction in Cancer, 22-24 November, 2018, Turin, Italy Talk: Characterisation of integrin aV-dependent adhesome in melanoma cell line MDA-MB-435S

A COST Action CA15214: Mechanobiology of cells and tissues in health and disease, 8-9 November, 2018, Ljubljana, Slovenia

Talk: Characterisation of the integrin ov-dependent adhesome in MDA-MB-435S melanoma cells

2014

Summer School Power of Viral Vectors in Gene Therapy and Basic Science, Primošten, Croatia Talk: What we can learn about adenovirus biology from infection of cancer cells resistant to chemotherapeutics?

The 9th Annual Workshop in System Biology Theme: Biomarkers, University of Skövde, Skövde, Sweden

Talk: Integrin $\alpha\nu\beta$ 3-mediated resistance of tumor cells to chemotherapeutic drugs

2009

9th International Adenovirus Meeting, Dobogóko, Hungary.

Talk: Changes in promoter activity in human laryngeal carcinoma cells resistant to vincristine are responsible for increased adenoviral transgene expression.

2008

Adenoviruses: Basic Biology to Gene Therapy, Zadar, Croatia.

Talk 1 : Integrin $\alpha\nu\beta$ 3: link between resistance to cisplatin and adenovirus transduction efficacy. Talk 2: General Properties of Adenoviruses : Virus Structure and its Molecular Biology.

2005

Target Definition & Vector Design for Molecular Medicine, Cold Spring Harbor Laboratory, USA. Talk: Vector for Tumor Gene Therapy through Inhibition of Angiogenesis: Adenoviruses Bearing NGR Motifs in the HI-Loop of Adenovirus Fiber Protein Bind Aminopeptidase N and αvβ3 Integrins.

1st Central European Forum for Microbiology (CEFORM), Keszthely, Hungary. Talk: Vector for Tumor Gene Therapy through Inhibition of Angiogenesis: Adenovirus Bearing NGR Motifs in the HI-Loop of Adenovirus Fiber Protein Bind Aminopeptidase N and avβ3 Integrin.

2004

XII Annual Congress of the European Society of Gene Therapy, Tampere, Finland. Talk: Vector for Tumor Gene Therapy through Inhibition of Angiogenesis: Adenoviruses Bearing NGR Motifs in the HI-Loop of Adenovirus Fiber Protein Bind Aminopeptidase N and αvβ3 Integrins.

National

2019

Symposium of The Croatian Academy of Sciences and Arts: "Apoptosis and tumors", March, 2019 Talk: "Integrins and apoptosis in tumor cells"

2018

The fifth meeting of the Croatian Association for Cancer Research (with international participation), November, 2018, Zagreb, Croatia Talk: "Characterisation of Integrin av-dependent Adhesome in Tumor Cells"

2014

1st Croatian Virus Workshop, Basic and Translational Virus Research, Rijeka, Croatia

Talk: Increased Adenovirus type 5 mediated transgene expression due to RhoB downregulation

2012

5th Congress of Croatian Microbiological Society with international participation, Primošten, Croatia.

Talk: The disulfide bond of an RGD4C motif inserted within the HI loop of adenovirus type 5 fiber protein is critical for retargeting to av-integrins.

2010

10th Congress of the Croatian Society of Biochemistry and Molecular Biology with international participation, Opatija, Croatia.

Talk: Role of integrin avβ3 in tumor drug resistance and adenovirus mediated gene delivery.

2008

Congress of the Croatian Society of Biochemistry and Molecular Biology with international participation, Osijek, Croati.

Talk: "av β 3 Integrin mediated drug-resistance in human laryngeal and tongue squamous carcinoma cells"

2005

Second Congress of Croatian Geneticists with international participation, Brač, Croatia.

Talk: "Expression of $\alpha\nu\beta$ 3 integrin in human laryngeal carcinoma cell line induces drug-resistance to cisplatin, mitomycin C, doxorubicin and nitric oxide"

2004

3rd Congress of Croatian Microbiological Society, Poreč, Croatia.

Talk: Vector for Tumor Gene Therapy through Inhibition of Angiogenesis: Adenoviruses Bearing NGR Motifs in the HI-Loop of Adenovirus Fiber Protein Bind Aminopeptidase N and avβ3 Integrins .

2003

45 years of Molecular Biology in Croatia, Zagreb, Croatia.

Talk: Increased adenoviral transduction efficacy in human laryngeal carcinoma cells resistant to cisplatin is associated with increased expression of $\alpha\nu\beta$ 3 and Coxsackie adenovirus receptor.

2000

Annual meeting of Croatian immunological Society, Zagreb, Croatia.

Talk: "Imunizacija replikacijski-defektnim adenovirus-vektorskim vakcinama u prisutnosti majčinskih protutijela"

Talks in foreign institutions:

2016

Department of Molecular Biotechnology and Health Sciences, University of Torino Talk: Integrin $\alpha\nu\beta$ 3-mediated resistance of tumor cells to chemotherapeutic drugs

2014

University Medical Center Mainz, Department of Toxicology, Mainz, Germany Talk: Integrin-mediated drug resistance of tumor cells against chemoteherapeutic drugs

2010

Centre de biophysique moléculaire - UPR 4301, Orleans, France Talk: The interplay of drug resistant tumors, integrins and adenoviruses

2007

Ecole Nationale Veterinaire D'Alfort, 7 avenue du General de Gaulle, 94704 Maisons Alfort, France Talk: Adenovirus, integrins and cancer

2004

Ecole Nationale Veterinaire D'Alfort, 7 avenue du General de Gaulle, 94704 Maisons Alfort, France Talk: Human adenovirus type 5 retargeted on aminopeptidase N: a vector for tumor gene therapy through inhibition of angiogenesis

Word, Excel, Power Point, Corel, Photoshop

OTHER IMPORTANT SKILLS AND COMPETENCES

I was the founder and director of educational project "Methodological courses in biology and medicine" (2003-2013), therefore, I have a significant experience in organisation. In 10 years I have organized 36 courses with the number of participants limited to 8 per group, giving a total of 288 attendees. Courses are self-sustained, financed from course fees and the cumulative economic effect is more than 140 000 Euro.

I am also the Editor in chief of the book "Methods in molecular biology" with contributions from 119 authors from Ruđer Bošković Institute and University which has been accepted as a regular textbook by the University in Zagreb. The publication of this book was supported by donations and a loan from Ruđer Bošković Institute. The loan has been succesfully covered by income from sales and the cumulative economic effect is more than 16 000 Euro.

Technical skills and competences: cell culture, production of monoclonal antibodies, isolation of stable transfectants, transient transfections, gene silencing, confocal microscopy, immunofluorescence microscopy, flow cytometry, Western blot, Southern blot, Northern blot, PCR, RT-PCR, Real Time PCR, cloning into plasmid vectors, construction of replication defective adenoviruses, production and gene transfer using replication defective adenoviruses, migration and invasion measurement in cell culture, measurement of cell adhesion, measurement of apoptosis, MTT test.

ADDITIONAL INFORMATION AND NOTES

Participation in TV show "Third element", subject: Gene therapy Croatian Radiotelevision, 2014

Popular lecture "Genetically modified people" Društvo za promociju znanosti i kritičkog mišljenja - Skeptici u pubu, Zagreb, Croatia, 2013

Popular lecture "Gene therapy" Klub samoborskih studenata, Ljetna tvornica znanosti i Gradska knjižnica Samobor, Croatia, 2013

Popular lecture "Gene therapy of first clinical trial to first gene therapy drug approved for use in EU"

Croatian Society for Biotechnology, 2013

Participation in TV show, subject: book "Methods in molecular biology" Croatian Radiotelevision, 2008

Participation in TV show, subject: "Methodological Courses in Biology and Medicine" Croatian Radiotelevision, 2008

Participation in TV show "Scientific panel discussion", subject: viral diseases, Croatian Radiotelevision, 2004 <u>Ad hoc Reviewer</u>: Molecular Therapy, Oncotarget, BMC Cancer, Gene Therapy, Biochonjugate Chemistry, Biomaterials, Biomedical and Environmental Sciences, Journal of Proteomics, Central European Cancer Communication, Plos One, Life Sciences, Journal of Biology, Viral Immunology, Virus Research, International Journal of Biochemistry and Molecular Biology, Gene, Acta Pharmaceutica, Mini-Reviews in Medicinal Chemistry, Greek National Action (Greek government projects).

Referees:

Prof. Martin J. Humphries, Wellcome Centre for Cell-Matrix Research, Faculty of Biology, Medicine & Health, University of Manchester, Manchester M13 9PT, England, UK

Jonathan D. Humphries, PhD, Wellcome Centre for Cell-Matrix Research, Faculty of Biology, Medicine & Health, University of Manchester, Manchester M13 9PT, England, UK

Prof. Paola Defilippi, Molecular Biotechnology Center, University of Torino, Via Nizza 52, Turin 10126, Italy

Maja T Tomičić, PhD, Department of Toxicology, University Medical Center Mainz / Mainz, Germany

Prof. Chantal Pichon, Centre de Biophysique Moléculaire, CNRS UPR 4301, University of Orléans, Orléans, France

Prof. Gerhard Fritz, Institute of Toxicology, Medical Faculty, Heinrich Heine University Düsseldorf, 40225, Düsseldorf, Germany

Prof. Bernd Kaina, Department of Toxicology, University Medical Center of the Johannes Gutenberg University Mainz, Obere Zahlbacher Strasse 67, 55131 Mainz, Germany

Prof. Marc Eloit, Institut Pasteur, Laboratory of Pathogen Discovery, Biology of Infection Unit, Inserm U1117, Paris, France and Alfort National Veterinary School, UMR 1161 Virology ENVA, INRA, ANSES, Maisons-Alfort, France

Prof. Karim Benihoud, CNRS UMR 8203, Vectorologie et thérapeutiques anti-cancéreuses, Gustave Roussy, 114 rue Edouard Vaillant, 94805 Villejuif Cedex, France and Univ Paris-Sud, 15 rue Georges Clémenceau, 91405 Orsay Cedex, France