Curriculum vitae Joanna Kopecka

Personal details
Born in Wroclaw (Poland)
Nationality: Italian, Polish
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ORCID ID: 0000-0003-3612-3953; Scopus ID: 35208646100; Researcher ID: K-3343-2018

Educations
2013 PhD in Molecular Medicine University of Turin, Italy.
Final dissertation: Chemoresistance and immunoresistance – molecular basis and new therapeutic approaches.
2008 Master in Molecular Biology
Faculty of Biotechnology, University of Wroclaw, Poland
2006 Bachelor in Biotechnology
Faculty Natural Sciences, University of Wroclaw, Poland

Professional experiences and current position
2023 - 2026 Temporary Researcher (RTD B) Department of Oncology, University of Turin, Italy
2018 – 2023 Temporary Researcher (RTD A) Department of Oncology, University of Turin, Italy
2017– 2018 Post-doctoral fellow, Dept. of Oncology, University of Turin; research focus: new therapeutic approaches for pleural malignant mesothelioma treatment
2016-2017 Post-doctoral fellow of the "Fondazione Umberto Veronesi", Dept. of Oncology, University of Turin; research focus: new therapies of resistant breast cancer
2013-2016 Post-doctoral fellow of the "Italian Fundation for Cancer Research" (FIRC), at the Dept. of Oncology, University of Turin; research focus: correlation between endoplasmic reticulum stress response and response to chemotherapy and immune system
November – December 2013 Visiting scientist, University of Nice Sophia Antipolis (Laboratory of Transporters Imaging in Radiotherapy and Oncology, Prof. Thierry Pourcher lab); research focus: imaging techniques for theranostic purpose on animal models bearing chemoresistant tumors
October-November 2011 Visiting scientist, NCCR Neuro Center for Proteomics, ETH, Zurich, Switzerland (Institute of Molecular Systems Biology, Dr. Bernd Wollscheid lab), research focus: chemo-immunoresistant and chemo-immunosensitive cancer cells

***Participation to Directive Boards of Scientific Societies and/or Institutions*:**
From 2023 participation to young directive boards of AICC/ECTS (Italian Association for Cells Culture/Italian branch of the European Tissue Culture Society)

Honors
2022 Best oral presentation Award Italian Society of Biochemistry Group "Tumor Biochemistry"
2010 Best poster Award Society of Cell Culture/European Tissue Culture

Teaching activity:
From 2018 Professor of Biochemistry, Faculty of Medicine, University of Turin, Italy

Research main topics
chemoresistance, immunoresistance, cancer metabolism, stem cells, inflammation, ER stress, new cancer models, new therapeutic approaches.

Main projects as PI:
2013-2016: Targeting endoplasmic reticulum stress proteins to overcome chemoresistance and immunoresistance in cancer cells.
2016-2017: New combinatorial therapies to reverse resistance to doxorubicin in breast cancer.
2018-2020: Dissecting the interplay between ABCB1, ABCC1 and ABCA1 to induce chemo-immunosensitization.
2021-2023: Creazione di avatars di laboratorio per migliorare la terapia del mesotelioma pleurico in Piemonte.

Bibliometry (2009-present) (*www.scopus.com*)
78 publication in international pre-reviewed journals

First author: 19
Last author: 10
H-index = 32
Citations = 2386

10 Best publications

1. SKP2 drives the sensitivity to neddylation inhibitors and cisplatin in malignant pleural mesothelioma.
Salaroglio IC, Belisario DC, Bironzo P, Ananthanarayanan P, Ricci L, Digiovanni S, Fontana S, Napoli F, Sandri A, Facolmatà C, Libener R, Comunanza V, Grosso F, Gazzano E, Leo F, Taulli R, Bussolino F, Righi L, Papotti MG, Novello S, Scagliotti GV, Riganti C, Kopecka J.
J Exp Clin Cancer Res. 2022 Feb 23;41(1):75. doi: 10.1186/s13046-022-02284-7.
IF=12.658

2. Hypoxia as a driver of resistance to immunotherapy.
Kopecka J, Salaroglio IC, Perez-Ruiz E, Sarmento-Ribeiro AB, Saponara S, De Las Rivas J, Riganti C.
Drug Resist Updat. 2021 Dec;59:100787. doi: 10.1016/j.drup.2021.100787. Review.
IF=22.841

3. Phospholipids and cholesterol: Inducers of cancer multidrug resistance and therapeutic targets.
Kopecka J, Trouillas P, Gašparović AČ, Gazzano E, Assaraf YG, Riganti C.
Drug Resist Updat. 2020 Mar;49:100670. doi: 10.1016/j.drup.2019.100670.
IF=22.841

4. Potential Diagnostic and Prognostic Role of Microenvironment in Malignant Pleural Mesothelioma.
Salaroglio IC, Kopecka J*, Napoli F, Pradotto M, Maletta F, Costardi L, Gagliasso M, Milosevic V, Ananthanarayanan P, Bironzo P, Tabbò F, Cartia CF, Passone E, Comunanza V, Ardissone F, Ruffini E, Bussolino F, Righi L, Novello S, Di Maio M, Papotti M, Scagliotti GV, Riganti C.
J Thorac Oncol. 2019 Aug;14(8):1458-1471. doi: 10.1016/j.jtho.2019.03.029.
*co-first author
IF=20.121

5. Increasing intratumor C/EBP-β LIP and nitric oxide levels overcome resistance to doxorubicin in triple negative breast cancer.
Salaroglio IC, Gazzano E, Abdullrahman A, Mungo E, Castella B, Abd-Elrahman GEFA, Massaia M, Donadelli M, Rubinstein M, Riganti C, Kopecka J.
J Exp Clin Cancer Res. 2018 Nov 27;37(1):286. doi: 10.1186/s13046-018-0967-0.
IF=12.658

6. The ATP-binding cassette transporter A1 regulates phosphoantigen release and Vγ9Vδ2 T cell activation by dendritic cells.
Castella B, Kopecka J*, Sciancalepore P, Mandili G, Foglietta M, Mitro N, Caruso D, Novelli F, Riganti C, Massaia M.
Nat Commun. 2017 Jun 5;8:15663. doi: 10.1038/ncomms15663.
co-first author
IF= 17.694

7. PERK induces resistance to cell death elicited by endoplasmic reticulum stress and chemotherapy.
Salaroglio IC, Panada E, Moiso E, Buondonno I, Provero P, Rubinstein M, Kopecka J*, Riganti C.
Mol Cancer. 2017 May 12;16(1):91. doi: 10.1186/s12943-017-0657-0.
*co-last author
IF= 41.444

8. Two repeated low doses of doxorubicin are more effective than a single high dose against tumors overexpressing P-glycoprotein.
Riganti C, Gazzano E, Gulino GR, Volante M, Ghigo D, Kopecka J.
Cancer Lett. 2015 May 1;360(2):219-26. doi: 10.1016/j.canlet.2015.02.008.
IF= 9.756

9. LDL-masked liposomal-doxorubicin reverses drug resistance in human cancer cells.
Kopecka J, Campia I, Olivero P, Pescarmona G, Ghigo D, Bosia A, Riganti C.
J Control Release. 2011 Jan 20;149(2):196-205. doi: 10.1016/j.jconrel.2010.10.003.
IF= 11.467

iNOS activity is necessary for the cytotoxic and immunogenic effects of doxorubicin in human colon cancer cells.
10. De Boo S, Kopecka J*, Brusa D, Gazzano E, Matera L, Ghigo D, Bosia A, Riganti C.
Mol Cancer. 2009 Nov 19;8:108. doi: 10.1186/1476-4598-8-108.
*co-first author

IF= 41.444

15 more relevant publication in the last 5 yrs (2018-2022)

1. Mitochondrial ROS drive resistance to chemotherapy and immune-killing in hypoxic non-small cell lung cancer.
Salaroglio IC, Belisario DC, Akman M, La Vecchia S, Godel M, Anobile DP, Ortone G, Digiovanni S, Fontana S, Costamagna C, Rubinstein M, Kopecka J, Riganti C.
J Exp Clin Cancer Res. 2022 Aug 11;41(1):243. doi: 10.1186/s13046-022-02447-6.
IF=12.658

2. The role of extracellular vesicles in the transfer of drug resistance competences to cancer cells.
Xavier CPR, Belisario DC, Rebelo R, Assaraf YG, Giovannetti E, Kopecka J, Vasconcelos MH.
Drug Resist Updat. 2022 Apr 5;62:100833. doi: 10.1016/j.drup.2022.100833.
IF=22.841

3. SKP2 drives the sensitivity to neddylation inhibitors and cisplatin in malignant pleural mesothelioma.
Salaroglio IC, Belisario DC, Bironzo P, Ananthanarayanan P, Ricci L, Digiovanni S, Fontana S, Napoli F, Sandri A, Facolmatà C, Libener R, Comunanza V, Grosso F, Gazzano E, Leo F, Taulli R, Bussolino F, Righi L, Papotti MG, Novello S, Scagliotti GV, Riganti C, Kopecka J.
J Exp Clin Cancer Res. 2022 Feb 23;41(1):75. doi: 10.1186/s13046-022-02284-7.
IF=12.658

4. Hypoxia as a driver of resistance to immunotherapy.
Kopecka J, Salaroglio IC, Perez-Ruiz E, Sarmento-Ribeiro AB, Saponara S, De Las Rivas J, Riganti C.
Drug Resist Updat. 2021 Dec;59:100787. doi: 10.1016/j.drup.2021.100787. Review.
IF=22.841

5. Glabratephrin reverses doxorubicin resistance in triple negative breast cancer by inhibiting P-glycoprotein.
Abd-Ellatef GEF, Gazzano E, El-Desoky AH, Hamed AR, Kopecka J, Belisario DC, Costamagna C, S Marie MA, Fahmy SR, Abdel-Hamid AZ, Riganti C.
Pharmacol Res. 2022 Jan;175:105975. doi: 10.1016/j.phrs.2021.105975.
IF=10,334

6. Multifunctional thiosemicarbazones targeting sigma receptors: in vitro and in vivo antitumor activities in pancreatic cancer models.
Niso M*, Kopecka J*, Abatematteo FS, Berardi F, Riganti C, Abate C.
Cell Oncol (Dordr). 2021 Dec;44(6):1307-1323. doi: 10.1007/s13402-021-00638-5.
*co-first author
IF= 7.051

7. Cancer immunotherapy resistance based on immune checkpoints inhibitors: Targets, biomarkers, and remedies.
Pérez-Ruiz E, Melero I, Kopecka J, Sarmento-Ribeiro AB, García-Aranda M, De Las Rivas J.
Drug Resist Updat. 2020 Dec;53:100718. doi: 10.1016/j.drup.2020.100718.
IF=22.841

8. Small Nucleolar RNAs Determine Resistance to Doxorubicin in Human Osteosarcoma.
Godel M, Morena D, Ananthanarayanan P, Buondonno I, Ferrero G, Hattinger CM, Di Nicolantonio F, Serra M, Taulli R, Cordero F, Riganti C, Kopecka J.
Int J Mol Sci. 2020 Jun 24;21(12):4500. doi: 10.3390/ijms21124500.
IF=6.208

9. Insights into P-Glycoprotein Inhibitors: New Inducers of Immunogenic Cell Death.
Kopecka J, Godel M, Dei S, Giampietro R, Belisario DC, Akman M, Contino M, Teodori E, Riganti C.
Cells. 2020 Apr 22;9(4):1033. doi: 10.3390/cells9041033.
IF= 7.666

10. Phospholipids and cholesterol: Inducers of cancer multidrug resistance and therapeutic targets.
Kopecka J, Trouillas P, Gašparović AČ, Gazzano E, Assaraf YG, Riganti C.
Drug Resist Updat. 2020 Mar;49:100670. doi: 10.1016/j.drup.2019.100670.
IF=22.841

11. HIF-1α is over-expressed in leukemic cells from TP53-disrupted patients and is a promising therapeutic target in chronic lymphocytic leukemia.
Griggio V, Vitale C, Todaro M, Riganti C, Kopecka J, Salvetti C, Bomben R, Bo MD, Magliulo D, Rossi D, Pozzato G, Bonello L, Marchetti M, Omedè P, Kodipad AA, Laurenti L, Del Poeta G, Mauro FR, Bernardi R, Zenz T, Gattei V, Gaidano G, Foà R, Massaia M, Boccadoro M, Coscia M.
Haematologica. 2020 Apr;105(4):1042-1054. doi: 10.3324/haematol.2019.217430.
IF= 11.047

12. Potential Diagnostic and Prognostic Role of Microenvironment in Malignant Pleural Mesothelioma.
Salaroglio IC, Kopecka J*, Napoli F, Pradotto M, Maletta F, Costardi L, Gagliasso M, Milosevic V, Ananthanarayanan P, Bironzo P, Tabbò F, Cartia CF, Passone E, Comunanza V, Ardissone F, Ruffini E, Bussolino F, Righi L, Novello S, Di Maio M, Papotti M, Scagliotti GV, Riganti C.
J Thorac Oncol. 2019 Aug;14(8):1458-1471. doi: 10.1016/j.jtho.2019.03.029.
*co-first author
IF=20.121
13. Hyaluronated liposomes containing H2S-releasing doxorubicin are effective against P-glycoprotein-positive/doxorubicin-resistant osteosarcoma cells and xenografts.
Gazzano E, Buondonno I, Marengo A, Rolando B, Chegaev K, Kopecka J, Saponara S, Sorge M, Hattinger CM, Gasco A, Fruttero R, Brancaccio M, Serra M, Stella B, Fattal E, Arpicco S, Riganti C.
Cancer Lett. 2019 Aug 1;456:29-39. doi: 10.1016/j.canlet.2019.04.029.
IF= 9.756
14. Increasing intratumor C/EBP-β LIP and nitric oxide levels overcome resistance to doxorubicin in triple negative breast cancer.
Salaroglio IC, Gazzano E, Abdullrahman A, Mungo E, Castella B, Abd-Elrahman GEFA, Massaia M, Donadelli M, Rubinstein M, Riganti C, Kopecka J.
J Exp Clin Cancer Res. 2018 Nov 27;37(1):286. doi: 10.1186/s13046-018-0967-0.
IF=12.658
15. Loss of C/EBP-β LIP drives cisplatin resistance in malignant pleural mesothelioma.
Kopecka J, Salaroglio IC, Righi L, Libener R, Orecchia S, Grosso F, Milosevic V, Ananthanarayanan P, Ricci L, Capelletto E, Pradotto M, Napoli F, Di Maio M, Novello S, Rubinstein M, Scagliotti GV, Riganti C.
Lung Cancer. 2018 Jun;120:34-45. doi: 10.1016/j.lungcan.2018.03.022.
IF= 6.081