



## Petr Džubák, M.D., Ph.D.



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Sex Male | Date of birth 22/06/1974 | Nationality Czech

### MAIN RESEARCH ACTIVITIES

Screening of the biological activities of the small molecules, method development and data analysis, identification of molecular targets, drug resistance; development of the new proteomic methods for clinical diagnostics (hepcidin analysis in haematological diseases; analysis of amyloid deposits and with amyloid associated proteins; identification of plasma/serum biomarkers cancer diseases; proteomics analysis of exhaled breath condensate at lung diseases (asthma, cystic fibrosis, cancer)).

### WORK EXPERIENCE

2008 – **Head of Laboratory of cell biology**

Laboratory of Experimental Medicine, Pediatric dpt., Faculty of Medicine and Dentistry, Palacky University in Olomouc, Czech Republic

2010 – **Leader of the research program – Chemical Biology and Experimental Therapeutics**

Institute of Molecular and Translational Medicine, Faculty of Medicine and Dentistry, Palacky University in Olomouc, Czech Republic, [www.imtm.cz](http://www.imtm.cz)

2014-2015 **Physician**

Department of Genetics, Faculty Hospital in Olomouc

2001 - **Physician, Paediatrician, board certified**

Department of Pediatrics, Faculty Hospital in Olomouc

### EDUCATION AND TRAINING

1994-2001 **General Medicine, M.D.**

Faculty of Medicine and Dentistry, Palacky University in Olomouc, Czech Republic.

2001-2007 **Doctoral student, Ph.D., thesis: "Plant derived anticancer drugs and their mechanisms of action."**

Laboratory of Experimental Medicine, Pediatric dpt., Faculty of Medicine and Dentistry, Palacky University in Olomouc, Czech Republic.

2003-2013 **Pediatrics - board certified**

Pediatric dpt., Faculty of Medicine and Dentistry, Palacky University in Olomouc, Czech Republic

**Training in:**

MALDI-TOF/TOF; LC-MALDI; LC-ESI-MS; MALDI Imaging; Proteinscape; Flow cytometry, operator of FACS Calibur and FACS ARIA II sorter; according to law 246/1992, Eligible to work with experimental animals, certificate No. 99/20003 – V3, CZ01932;  
June 2018 – Business Development Fundamentals, (Bio 2018, Boston)  
1-7/2002 - Internship, Wolverhampton University, Birmingham University, Pharmacology dpt., UK  
5-7/2008 - Internship, INSERM, Proteomic core facility, Rennes, France

PERSONAL SKILLS

Mother tongue(s) Czech

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Russian	A2	A2	A2	A2	A2

Organisational / managerial skills

- **Leadership** (currently responsible for a team of 20 people)
- **Co-founder** and share holder, IntellMed, s.r.o. (www.intellmed.cz): spin-off company focused on research, development and manufacturing of novel molecular diagnostics - >30 molecular diagnostics developed and introduced on the market, including several CE IVD certified.
- **Currently Supervisor** of 5 Ph.D. students, **member of Ph.D. committee** in
- Pediatrics, Faculty of Medicine and Dentistry, Palacky University in Olomouc.
- Molecular and Translational Medicine, Faculty of Medicine and Dentistry, Palacky University in Olomouc,
- 8 Ph.D., 8 M.Sc., and 5 Bc. students already defended their thesis, or diploma work.

ADDITIONAL INFORMATION

**Conferences** 2009 - Chairman of organising committee - Youth Scientific Forum –FEBS 2009, satellite meeting of 34th FEBS Meeting in Prague, Czech Republic.  
 2009 – Member of the Organising Committee, 34th FEBS Meeting in Prague, Czech Republic  
 2007 – 2017 – Member of the Organising Committee, III. – XIII. Symposium on Diagnostic, Predictive and Experimental Oncology, Olomouc, Czech Republic.

**Honours and awards** Palacky University, Faculty of Medicine, Dean’s Award for Best Student Scientific Work (2006)  
 Prix de Pharmacie 2007 Ambassade de France – Sanofi-aventis, Premier Prix (21. juin 2007)  
 Palacky University, Faculty of Medicine, Dean’s Award for Best Scientific Work (2017)

**Memberships** Czech Oncological Society, Czech Medical Association of J. E. Purkyne  
 Czech Society of Analytical Cytology  
 Active Member of American Association for Cancer Research (AACR)  
 Member of Society for Laboratory Automation and Screening (SLAS)  
 Czech Society for Biochemistry and Molecular Biology (FEBS adhering society), proteomics and bioinformatics section.  
 Czech Free & Open Bioinformatic Association (FOBIA)

**Peer-Reviewing** Regular reviewer for scientific journals (Journal of Proteomics, EJMCH), ad-hoc reviewer for granting agencies from Czech Republic (GACR, AZV, GAUK) and Slovakia Grant Agency  
 AZV ČR - Czech health research council, member of panel P03 Tumorous diseases (2020 – now)

**Publication** Author and co-author of more than 140 original investigations and review articles, 6 books chapters, 12 patents, utility models and other IP, more than 200 abstracts and/or oral presentations at meetings, >3590 citations, H-index 27, researcher id: D-2175-2013, ORCID ID: 0000-0002-3098-5969 full bibliography is available at <http://www.imtm.cz/users/petr-dzubak>.

145. SKOPELIDOU, V., P. HURNIK, L. TULINSKY, V. ŽIDLÍK, J. LENZ, P. DELONGOVA, H. HORNYCHOVA, P. FLODR, T. JELINEK, L. MURONOVA, D. HOLUB, P. DŽUBÁK, M. HAJDÚCH A unique case of AH-dominant type nodular pulmonary amyloidosis presenting as a spontaneous pneumothorax: a case report and review of the literature. *Pathology & Oncology Research* . 2023, 29, 1611390, ISSN: 1219-4956 , IF: 2.8, PMID: 37808084. Jimp
144. HRUBÁ, L., V. DAS, M. HAJDÚCH, P. DŽUBÁK Nucleoside-based anticancer drugs: mechanism of action and drug resistance. *Biochemical Pharmacology*. 2023, ISSN: 0006-2952 , IF: 5.8, PMID: 37567317. Jimp
143. I. IVASECHKO, A. LOZYNSKYI, J. SENKIV, P. ROSZCZENKO, Y. KOZAK, N. FINIUK, O. KLYUCHIVSKA, N. KASHCHAK, N. MANKO, Z. MASLYAK, D. LESYK, A. KARKHUT, S. POLOKVOVYCH, R. CZARNOMYSY, O. SZEWCZYK, A. KOZYTYSKIY, O. KARPENKO, D. KHYLUK, A. GZELLA, K. BIELAWSKI, A. BIELAWSKA, P. DŽUBÁK, S. GURSKÁ, M. HAJDÚCH, R. STOIKA, R. LESYK, Molecular design, synthesis and anticancer activity of new thiopyrano[2,3-d]thiazoles based on 5-hydroxy-1,4-naphthoquinone (juglone), *European Journal of Medicinal Chemistry*, 2023, 252, 115304, 0223-5234, IF: 7.088, PMID: 37001390. Jimp
142. T. OŽDIAN, J. VODICKA, J. DOSTÁL, D. HOLUB, J. VÁCLAVKOVÁ, M. JESETA, B. HAMERNÍKOVÁ, P. KOUŘILOVÁ, O. MALCHAR, V. DVORAK, P. HEJTMANEK, K. SOBKOVA, P. VENTRUBA, R. PILKA, P. DŽUBÁK, M. HAJDÚCH, Proteome Mapping of Cervical Mucus and Its Potential as a Source of Biomarkers in Female Tract Disorders, *International Journal of Molecular Sciences*, 2023, 24, 1038, 1422-0067, IF: 6.208, PMID: 36674559 Jimp
141. M. JURÁŠEK, J. ŘEHULKA, L. HRUBÁ, A. IVANOVA (NIKONENKO), S. GURSKÁ, O. MOKSHYNA, P. TROUSIL, K. HUML, P. POLISHCHUK, M. HAJDÚCH, P. DRAŠAR, P. DŽUBÁK, Triazole-based estradiol dimers prepared via CuAAC from 17 $\alpha$ -ethinyl estradiol with five-atom linkers causing G2/M arrest and tubulin inhibition, *Bioorganic Chemistry*, 2023, 131, 106334, 0045-2068, IF: 5.307, PMID: 36592487. Jimp
140. O. BOUŠKA, H. JAWOREK, V. KOUDELÁKOVÁ, K. KUBÁNOVÁ, P. DŽUBÁK, R. SLAVKOVSKÝ, B. ŠIŠKA, P. PAVLIŠ, J. VRBKOVÁ, M. HAJDÚCH, Evaluation of Non-Invasive Gargle Lavage Sampling for the Detection of SARS-CoV-2 Using rRT-PCR or Antigen Assay, *Viruses*, 2022, 14, 2829, 1999-4915, IF: 5.818, PMID: 36560833. Jimp
139. D. BARUCIC, S. KAUSHIK, J. KYBIC, J. STANKOVÁ, P. DŽUBÁK, M. HAJDÚCH, Characterization of drug effects on cell cultures from phase-contrast microscopy images, *Computers in Biology and Medicine*, 2022, 151, 106171, 0010-4825, IF: 6.698, PMID: 36306582. Jimp
138. J. GUTIERREZ, E. FERNANDEZ-MOREIRA, M. RODRIGUEZ, M. MIJARES, J. DE SANCTIS, S. GURSKÁ, P. DŽUBÁK, M. HAJDÚCH, J. BRUNO-COMENAREZ, L. ROJAS, D. DEFFIUX, L. POUYSEGU, S. QUIDEAU, J. CHARRIS, H. RAMIREZ, Novel 7-Chloro-(4-thioalkylquinoline) Derivatives: Synthesis and Antiproliferative Activity through Inducing Apoptosis and DNA/RNA Damage, *Pharmaceuticals*, 2022, 15, 1234, 1424-8247, IF: 5.215, PMID: 36297346. Jimp
137. L. BORKOVÁ, I. FRYDRYCH, B. VRÁNOVÁ, N. JAKUBCOVÁ, B. LIŠKOVÁ, P. DŽUBÁK, P. PAVLIŠ, M. HAJDÚCH, M. URBAN, Lupane derivatives containing various aryl substituents in the position 3 have selective cytostatic effect in leukemic cancer cells including resistant phenotypes, *European Journal of Medicinal Chemistry*, 2022, -, -, 0223-5234, IF: 7.088, PMID: 36283179. Jimp
136. C. YANG, L. POSTOVA SLAVETINSKA, M. FLEUTI, B. KLEPETAROVA, M. TICHÝ, S. GURSKÁ, P. PAVLIŠ, P. DŽUBÁK, M. HAJDÚCH, M. HOCEK, Synthesis of Polycyclic Hetero-Fused 7-Deazapurine Heterocycles and Nucleosides through C-H Dibenzothiophenation and Negishi Coupling, *Journal of the American Chemical Society*, 2022, -, -, 0002-7863, IF: 16.383, PMID: 36245092. Jimp
135. J. HODOŇ, I. FRYDRYCH, Z. TRHLÍKOVÁ, J. POKORNÝ, L. BORKOVÁ, S. BENICKÁ, M. VLK, B. LIŠKOVÁ, A. KUBÍČKOVÁ, M. MEDVEDÍKOVÁ, M. PISÁR, J. ŠAREK, V. DAS, A. LIGASOVÁ, K. KOBERNA, P. DŽUBÁK, M. HAJDÚCH, M. URBAN, Triterpenoid pyrazines and pyridines - Synthesis, cytotoxicity, mechanism of action, preparation of prodrugs, *European Journal of Medicinal Chemistry*, 2022, 243, 114777, 0223-5234, IF: 7.088, PMID: 36174412. Jimp
134. A. VRZALOVA, P. PECINKOVA, S. GURSKÁ, P. DŽUBÁK, M. SZOTKOWSKI, M. HAJDÚCH, S. MANI, Z. DVORAK, Mixture Effects of Tryptophan Intestinal Microbial Metabolites on Aryl Hydrocarbon Receptor Activity, *International Journal of Molecular Sciences*, 2022, 23, 10825, 1422-0067, IF: 6.208, PMID: 36142735. Jimp
133. J. ŘEHULKA, I. SUBTELNA, A. KRYSHCHYSHYN-DYLEVYCH, A. CHERNIENKO, A. IVANOVA, M. MATVEIEVA, P. POLISHCHUK, S. GURSKÁ, M. HAJDÚCH, O. ZAGRIJCHUK, P. DŽUBÁK, R. LESYK, Anticancer 5-arylidene-2-(4-hydroxyphenyl)aminothiazol-4(5H)-ones as tubulin inhibitors, *Archiv der Pharmazie*, 2022, -, -, 0365-6233 , IF: 4.613, PMID: 36109178. Jimp

132. Z. BLANCO, E. FERNANDEZ-MOREIRA, M. MIJARES, C. CELIS, G. MARTINEZ, J. DE SANCTIS, S. GURSKÁ, P. DŽUBÁK, M. HAJDÚCH, A. MIJOBA, Y. GARCIA, X. SERRANO, N. HERRERA, J. CORREA-ABRIL, Y. PARRA, J. ANGEL, H. RAMIREZ, J. CHARRIS, Synthesis, Leishmanicidal, Trypanocidal, Antiproliferative Assay and Apoptotic Induction of (2-Phenoxy-pyridin-3-yl)naphthalene-1(2 H)-one Derivatives, *Molecules*, 2022, 27, 5626, 1420-3049, IF: 4.927, PMID: 36080388. Jimp
131. E. SCHADICH, S. NYLEN, S. GURSKÁ, J. KOTULOVÁ, S. ANDRONATI, V. PAVLOVSKY, S. SOBOLEVA, P. POLISHCHUK, M. HAJDÚCH, **P. DŽUBÁK**, Activity of 1-aryl-4-(naphthalimidoalkyl) piperazine derivatives against *Leishmania major* and *Leishmania mexicana*, *Parasitology International*, 2022, 91, 102647, 1383-5769, IF: 2.106, PMID: 35985636. Jimp
130. S. ZELJKOVIC, E. SCHADICH, P. DŽUBÁK, M. HAJDÚCH, P. TARKOWSKI, Antiviral Activity of Selected Lamiaceae Essential Oils and Their Monoterpenes Against SARS-Cov-2, *Frontiers in Pharmacology*, 2022, -, -, 1663-9812, IF: 5.811, PMID: 35586050.130.
129. R. PAUN, D. DUMUT, A. CENTORAME, T. THURAISSINGAM, M. HAJDÚCH, M. MISTRÍK, P. DŽUBÁK, J. DE SANCTIS, D. RADZIOCH, M. TABRIZIAN, One-Step Synthesis of Nanoliposomal Copper Diethyldithiocarbamate and Its Assessment for Cancer Therapy, *Pharmaceutics*, 2022, 14, 640, 1999-4923. IF =
128. J. KOTULOVÁ, K. LÓNOVÁ, A. KUBÍČKOVÁ, J. VRBKOVÁ, P. KOUŘILOVÁ, M. HAJDÚCH, **P. DŽUBÁK**, 2-CI-IB-MECA regulates the proliferative and drug resistance pathways, and facilitates chemosensitivity in pancreatic and liver cancer cell lines, *International Journal of Molecular Medicine*, 2022, 49, 31, 1107-3756. IF =
127. L. HRUBÁ, P. POLISHCHUK, V. DAS, M. HAJDÚCH, **P. DŽUBÁK**, An identification of MARK inhibitors using high throughput MALDI-TOF mass spectrometry, *Biomedicine & Pharmacotherapy*, 2022, 146, 112549, 0753-3322. IF =
126. J. KOTULOVÁ, M. HAJDÚCH, **P. DŽUBÁK**, Current Adenosinergic Therapies: What Do Cancer Cells Stand to Gain and Lose?, *International Journal of Molecular Sciences*, 2021, 22, 12569, 1422-0067. IF =
125. M. RAFFAELE, K. KOVACOVICOVA, T. BIAGINI, O. LO RE, J. FROHLICH, S. GIALLONGO, J. NHAN, A. GIANNONE, D. CABIBI, M. IVANOV, A. TONCHEV, M. MISTRÍK, M. LACEY, P. DŽUBÁK, S. GURSKÁ, M. HAJDÚCH, J. BÁRTEK, T. MAZZA, V. MICALE, S. CURRAN, M. VINCIGUERRA, Nociceptin/orphanin FQ opioid receptor (NOP) selective ligand MCOPPB links anxiolytic and senolytic effects, *Geroscience*, 2021, 44, 463-483, 2509-2715. IF =
124. T. BUCHTOVÁ, Z. ŠKROTT, K. CHROMÁ, J. ŘEHULKA, P. DŽUBÁK, M. HAJDÚCH, D. LUKÁČ, S. ARAMPATZIS, J. BÁRTEK, M. MISTRÍK, Cannabidiol-induced activation of the metallothionein pathway impedes anticancer effects of disulfiram and its metabolite CuET, *Molecular Oncology*, 2021, -, -, 1574-7891. IF =
123. D. KODR, J. STANKOVÁ, M. RUMLOVA, P. DŽUBÁK, J. ŘEHULKA, T. ZIMMERMANN, I. KRIZOVA, S. GURSKÁ, M. HAJDÚCH, P. DRAŠAR, M. JURÁŠEK, Betulinic Acid Decorated with Polar Groups and Blue Emitting BODIPY Dye: Synthesis, Cytotoxicity, Cell-Cycle Analysis and Anti-HIV Profiling, *Biomedicines*, 2021, 9, 1104, 2227-9059. IF =
122. M. PORUBSKÝ, K. VYCHODILOVÁ, D. MILICEVIC, M. BUDESINKY, J. STANKOVÁ, P. DŽUBÁK, M. HAJDÚCH, J. HLAVÁČ, Cytotoxicity of Amino-BODIPY Modulated via Conjugation with 2-Phenyl-3-Hydroxy-4(1H)-Quinolinones, *ChemistryOpen*, 2021, 10, 1104-1110, 2191-1363. IF =
121. J. POKORNÝ, D. OLEJNÍKOVÁ, I. FRYDRYCH, B. LIŠKOVÁ, S. GURSKÁ, S. BENICKÁ, J. ŠAREK, J. KOTULOVÁ, M. HAJDÚCH, P. DŽUBÁK, M. URBAN, Substituted dienes prepared from betulinic acid - Synthesis, cytotoxicity, mechanism of action, and pharmacological parameters, *European Journal of Medicinal Chemistry*, 2021, 224, 113706, 0223-5234. IF =
120. M. PORUBSKÝ, S. GURSKÁ, J. STANKOVÁ, M. HAJDÚCH, P. DŽUBÁK, J. HLAVÁČ, AminoBODIPY Conjugates for Targeted Drug Delivery Systems and Real-Time Monitoring of Drug Release, *Molecular Pharmaceutics*, 2021, 18, 2385-2396, 1543-8384. 215 **IF - ??????**
119. P. PERLÍKOVÁ, A. KRAJCZYK, E. DOLEZELOVA, M. SLAPNICKOVA, N. MILISAVLJEVIC, L. POSTOVA SLAVETINSKA, E. TLOUŠŤOVÁ, S. GURSKÁ, P. DŽUBÁK, M. HAJDÚCH, A. ZIKOVA, M. HOCEK, Synthesis and Antitrypanosomal Activity of 6-Substituted 7-Methyl-7-deazapurine Nucleosides, *ACS Infectious Diseases*, 2021, 7, 917-926, 2373-8227 215 **IF - ??????**
118. MUDASANI, G., PAIDIKONDALA, K, GURSKA, S., MADDIRALA, S.J., DZUBAK, P., DAS, V. and GUNDLA, R. C-5 Aryl Substituted Azaspirooxindolinones Derivatives: Synthesis and Biological Evaluation as Potential Inhibitors of Tec Family Kinases. *European J. Org. Chem.* 2021, 4630–4640 (2021). 215 **IF - ??????**

117. RIMPELOVA, S., ZIMMERMANN, T., DRASAR, P. B., DOLENSKY, B., BEJCEK, J., KMONICKOVA, E., CIHLAROVA, P., GURSKA, S., KUKLIKOVA, L., HAJDUCH, M., RUMLOVA, T., OPLETAL, L., **DZUBAK, P.**, JURASEK, M. (2021) Steroid glycosides hyrcanoside and deglucohyrcanoside: On isolation, structural identification and anticancer activity. *Foods*, 10, 136. IF =
116. KODR, D., RUMLOVA, M., ZIMMERMAN, T., DZUBAK, P., DRASAR, P., JURASEK, M. (2020) Antitumor and anti-HIV derivatives of betulinic acid. *Chem. Listy*, 114 (10), 658-667. 215 IF - ?????
115. VÁCLAVKOVÁ, J., KOUŘILOVÁ, P., VRBKOVÁ, J., HOLUB, D., HAJDÚCH, M., **DŽUBÁK, P.** (2020) Proteomic analysis of exhaled breath condensate samples: High reproducibility of mass spectrometric measurements. *Chem. Listy*, 114 (7), 470-479. 215 IF - ?????
114. SCHADICH, E., KRYSHCHYSHYN-DYLEVYCH, A., HOLOTA, S., POLISHCHUK, P., DŽUBÁK, P., GURSKÁ, S., HAJDÚCH, M., LESYK, R. Assessing different thiazolidine and thiazole based compounds as antileishmanial scaffolds, (2020) *Bioorganic & Medicinal Chemistry Letters*, 30, 23, 0960-894X, IF: 2.572, PMID: 33091607.
113. FLEUTI, M., BARTOVA, K., POSTOVA SLAVETINSKA, L., TLOUŠŤOVÁ, E., TICHÝ, M., GURSKÁ, S., PAVLIŠ, P., DŽUBÁK, P., HAJDÚCH, M., HOCEK, M. (2020) Synthesis and Biological Profiling of Pyrazolo-Fused 7-Deazapurine Nucleosides, *The Journal of Organic Chemistry*, 85, 10539-10551, 0022-3263, IF: 4.335, PMID: 32692916.
112. DVOŘANOVÁ ŠTĚPÁNKOVÁ, J., KUGLER, M., HOLUB, J., SICHA, V., DAS, V., NEKVINDA, J., EL ANWAR, S., HAVRANEK, M., POSPISILOVA, K., FABRY, M., KRAL, V., MEDVEDÍKOVÁ, M., MATEJKOVA, S., LIŠKOVÁ, B., GURSKÁ, S., DŽUBÁK, P., BRYNDA, J., HAJDÚCH, M., GRUNER, B., ŘEZÁČOVÁ, P. (2020) Sulfonamido Carboranes as Highly Selective Inhibitors of Cancer-Specific Carbonic Anhydrase IX, *European Journal of Medicinal Chemistry*, 200, 112460, 0223-5234, IF: 5.572, PMID: 32505851.
111. YANG, C., POHL, R., TICHÝ, M., GURSKÁ, S., PAVLIŠ, P., DŽUBÁK, P., HAJDÚCH, M., HOCEK, M. (2020) Synthesis, Photophysical Properties, and Biological Profiling of Benzothieno-Fused 7-Deazapurine Ribonucleosides, *The Journal of Organic Chemistry-A European Journal*, 85, 8085-8101, 0022-3263, IF: 4.335, PMID: 32432875.
110. VESELOVSKA, L., KUDLOVÁ, N., GURSKÁ, S., LIŠKOVÁ, B., MEDVEDÍKOVÁ, M., HODEK, O., TLOUŠŤOVÁ, E., MILISAVLJEVIC, N., TICHÝ, M., PERLÍKOVÁ, P., MERTLIKOVA-KAISEROVA, H., TRYLCOVA, J., POHL, R., KLEPETAROVA, B., DŽUBÁK, P., HAJDÚCH, M., HOCEK, M. (2020) Synthesis and Cytotoxic and Antiviral Activity Profiling of All-Four Isomeric Series of Pyrindo-Fused 7-Deazapurine Ribonucleosides, *Chemistry*, 26, 13002-13015, 0947-6539, IF: 4.857, PMID: 32275109.
109. REHULKA, J., VYCHODILOVA, K., KREJCI, P., GURSKA, S., HRADIL, P., HAJDUCH, M., **DZUBAK, P.**, HLAVAC, J. (2020). Fluorinated derivatives of 2-phenyl-3-hydroxy-4(1H)-quinolinone as tubulin polymerization inhibitors. *European Journal of Medicinal Chemistry*, 192, 112176. <https://doi.org/10.1016/j.ejmech.2020.112176> 215 IF - ?????
108. VACLAVKOVA, J., OZDIAN, T., HAJDUCH, M., **DZUBAK, P.** (2020) Body Fluids as a Source of Proteomic Biomarkers of Various Diseases. *Chem. Listy*, 114(3), 209-215 IF - ?????
107. PORUBSKY, M., GURSKA, S., STANKOVA, J., HAJDUCH, M., DZUBAK, P., HLAVAC, J. (2019). Amino-BODIPY as the ratiometric fluorescent sensor for monitoring drug release or "power supply" selector for molecular electronics. *RSC Advances*, 9(43), 25075–25083. <https://doi.org/10.1039/c9ra03472b> IF-?????
106. VOLLER, J., BERES, T., ZATLOUKAL, M., DZUBAK, P., HAJDUCH, M., DOLEZAL, K., SCHMULLING, T., STRNAD, M. (2019). Anti-cancer activities of cytokinin ribosides. *Phytochemistry Reviews*, 18(4), 1101–1113. <https://doi.org/10.1007/s11101-019-09620-4>
105. **DŽUBÁK, P.**, GURSKÁ, S., BOGDANOVÁ, K., UHRIKOVA, D., KANJAKOVA, N., COMBET, S., KLUNDA, T., KOLÁŘ, M., HAJDÚCH, M., POLÁKOVÁ, M. Antimicrobial and cytotoxic activity of (thio)alkyl hexopyranosides, nonionic glycolipid mimetics, *Carbohydrate Research*, 2020, 488, 107905, IF: 1.873, PMID: 32004953.
104. GRUNER, B., BRYNDA, J., V. DAS, SICHA, V., ŠTĚPÁNKOVÁ, J., NEKVINDA, J., HOLUB, J., POSPISILOVA, K., FABRY, M., PACHL, P., KRAL, V., KUGLER, M., MAŠEK, V., MEDVEDÍKOVÁ, M., MATEJKOVA, S., NOVÁ, A., LIŠKOVÁ, B., GURSKÁ, S., DŽUBÁK, P., HAJDÚCH, M., ŘEZÁČOVÁ, P. Metallacarborane Sulfamides: Unconventional, Specific, and Highly Selective Inhibitors of Carbonic Anhydrase IX, *Journal of Medicinal Chemistry*, 2019, 62, 9560-9575, 0022-2623, IF: 6.054, PMID: 31568723.
103. NOWIKOW, C., FUERST, R., KAUDERER, M., DANK, C., SCHMID, W., HAJDÚCH, M., ŘEHULKA, J., GURSKÁ, S., MOKSHYNA, O., POLISHCHUK, P., ZUPKO, I., **DŽUBÁK, P.**, RINNER, U. Synthesis and biological evaluation of cis-restrained carbocyclic combretastatin A-4 analogs: Influence of the ring size and saturation on cytotoxic properties, *Bioorganic & Medicinal Chemistry*, 2019, 27, 115032, 0968-0896, IF: 2.802, PMID: 31401010.



102. D. HOLUB, P. FLODR, T. PIKA, P. FLODR, M. HAJDÚCH, **P. DŽUBÁK**, Mass Spectrometry Amyloid Typing Is Reproducible across Multiple Organ Sites, *Biomed Research International*, 2019, 2019, 3689091, 2314-6133, IF: 2.583, PMID: 30834260.
101. GHOSH, K., PERLIKOVA, P., HAVLICEK, V., YANG, C., POHL, R., TLOUSTOVA, E., HODEK, J., GURSKA, S., DZUBAK, P., HAJDUCH, M., HOCEK, M. (2018). Isomeric Naphtho-Fused 7-Deazapurine Nucleosides and Nucleotides: Synthesis, Biological Activity, Photophysical Properties and Enzymatic Incorporation to Nucleic Acids. *European Journal of Organic Chemistry*, 2018(37), 5092–5108. <https://doi.org/10.1002/ejoc.201800165>
100. TICHY, M., SMOLEN, S., DEINGRUBER, T., DZUBAK, P., POHL, R., SLAVETINSKA, L., P., HAJDUCH, M., HOCEK, M. (2018). Thienopyrrolo[2,3-d] pyrimidines, New Tricyclic Nucleobase Analogues: Synthesis and Biological Activities. *ChemistrySelect*, 3(31), 9144–9149. <https://doi.org/10.1002/slct.201802190> – IF???
99. DVORAN, M., VODICKA, J., DOSTAL, J., HAJDUCH, M., DZUBAK, P., PESKOVA, M., & PILKA, R. (2018). Implantation and diagnostics of endometrial receptivity. *Ceska Gynekologie*, 83(4), 291–298. (SCOPUS) Jsc
98. AGRAWAL, K., DAS, V., TABORSKA, N., GURSKY, J., DZUBAK, P., & HAJDUCH, M. (2018). Differential Regulation of Methylation-Regulating Enzymes by Senescent Stromal Cells Drives Colorectal Cancer Cell Response to DNA-Demethylating Epi-Drugs. *Stem Cells International*, 2018, 6013728. <http://doi.org/10.1155/2018/6013728>, IF - ????
97. TEMIRGAZIYEV, B. S., KUCAKOVA, K., BAIZHIGIT, Y. A., JURASEK, M., DZUBAK, P., HAJDUCH, M., ... ADEKENOV, S. M. (2018). Bioavailability and structural study of 20-hydroxyecdysone complexes with cyclodextrins. *Steroids*. <http://doi.org/10.1016/j.steroids.2018.11.007>, IF-????
96. KLOS, D., STASEK, M., LOVECEK, M., SKALICKY, P., VRBA, R., AUJESKY, R., ... DZUBAK, P. (2018). [Tumor cells transfer between the patient and laboratory animal as a basic methodological approach to the study of cancerogenesis and identification of biomarkers]. *Rozhledy v Chirurgii : Mesicnik Ceskoslovenske Chirurgicke Spolecnosti*, 95(12), 432–438. (SCOPUS) Jsc
95. KULTAN, J., KOLEK, V., DŽUBÁK, P., VÁCLAVKOVÁ, J., HAJDÚCH, M., & SZKORUPA, M. Možnosti neinvazivní detekce karcinomu plic. *Stud. Pneumol.Phthiseol.*, 2018, 78(3), 69–75. ISSN: 1213-810X (SCOPUS) Jsc
94. TOKARENKO, A., B. LIŠKOVÁ, S. SMOLEN, N. TÁBORSKÁ, M. TICHÝ, S. GURSKÁ, P. PERLÍKOVÁ, I. FRYDRYCH, E. TLOUŠŤOVÁ, P. ZNOJEK, H. MERTLIKOVA-KAISEROVA, L. POSTOVA SLAVETINSKA, R. POHL, B. KLEPETAROVA, N. KHALID, Y. WENREN, R. LAPOSA, P. DŽUBÁK, M. HAJDÚCH a M. HOCEK. Synthesis and Cytotoxic and Antiviral Profiling of Pyrrolo- and Furo-fused 7-Deazapurine Ribonucleosides. *Journal of Medicinal Chemistry*. 2018, 61(20), 9347-9359. ISSN 0022-2623. IF: 6.253. PMID: 30281308
93. BRIZA, T., J. KRALOVA, S. RIMPELOVA, M. HAVLIK, R. KAPLANEK, Z. KEJIK, P. MARTASEK, I. MIKULA, P. DŽUBÁK, M. HAJDÚCH, T. RUML a V. KRAL. Pentamethinium salts as ligands for cancer: Sulfated polysaccharide co-receptors as possible therapeutic target. *Bioorganic Chemistry*. 2018, -, -. ISSN 0045-2068. IF: 3.929. PMID: 30273836
92. KONC, J., M. TICHÝ, R. POHL, J. HODEK, P. DŽUBÁK a M. HOCEK. Sugar modified pyrimido[4,5-b]indole nucleosides: synthesis and antiviral activity. *MedChemComm*. 2018, 8(9), 1856-1862. ISSN 2040-2503. IF: 2.342. PMID: 30108897
91. JURÁŠEK, M., M. CERNOHORSKA, J. ŘEHULKA, V. SPIWOK, T. SULIMENKO, E. DRABEROVA, M. DARMOSTUK, S. GURSKÁ, I. FRYDRYCH, R. BURIÁNOVÁ, T. RUML, M. HAJDÚCH, P. BARTŮNĚK, P. DRABER, **P. DŽUBÁK**, P. DRAŠAR a D. SEDLÁK. Estradiol Dimer Inhibits Tubulin Polymerization and Microtubule Dynamics. *The Journal of Steroid Biochemistry and Molecular Biology*. 2018, 183, 68-79. ISSN 0960-0760. IF: 4.561. PMID: 29803726
90. MRAZKOVA, B., R. DZIJK, T. IMRICOVA, L. KYJACOVA, P. BARATH, P. DŽUBÁK, D. HOLUB, M. HAJDÚCH, Z. NAHACKA, L. ANDERA, P. HOLICEK, P. VASICOVA, O. SAPEGA, J. BARTEK, Z. HODNY Induction, regulation and roles of neural adhesion molecule L1CAM in cellular senescence. *Aging*. 2018, 10(3), 432-462. ISSN 1945-4589. IF: 4.867. PMID: 29615539
89. BÜRGLOVÁ, K., G. RYLOVÁ, A. MARKOS, H. PŘICHYŠTALOVÁ, M. SOURAL, M. PETRÁČEK, M. MEDVEDÍKOVÁ, G. TEJRAL, B. SOPKO, P. HRADIL, P. DŽUBÁK, M. HAJDÚCH a J. HLAVÁČ. Identification of Eukaryotic Translation Elongation Factor 1- $\alpha$  1 Gamendazole-Binding Site for Binding of 3-Hydroxy-4(1 H)-quinolinones as Novel Ligands with Anticancer Activity. *Journal of Medicinal Chemistry*. 2018, -, -. ISSN 0022-2623. IF: 6.259. PMID: 29498519
88. FLODR, P., P. FLODR, T. PIKA, J. VYMETAL, D. HOLUB, P. DŽUBÁK, M. HAJDÚCH a V. SCUDLA. Cardiac amyloidosis: from clinical suspicion to morphological diagnosis. *Pathology*. 2018, 50, 3, 261-268. ISSN 0031-3025. IF: 2.709. PMID: 29448998

87. POKORNÝ, J., S. KRAJČOVIČOVÁ, M. HAJDÚCH, M. HOLOUBEK, S. GURSKÁ, P. DŽUBÁK, T. VOLNÁ, I. POPA a M. URBAN. Triterpenic azines, a new class of compounds with selective cytotoxicity to leukemia cells CCRF-CEM. *Future Medicinal Chemistry*. 2018, 10(5), 483-491. ISSN 1756-8919. IF: 3.566. PMID:29424548
86. KRAJČOVIČOVÁ, S., J. STANKOVÁ, P. DŽUBÁK, M. HAJDÚCH, M. SOURAL a M. URBAN. A synthetic approach for the rapid preparation of BODIPY conjugates and their use in imaging of cellular drug uptake and distribution. *Chemistry*. 2018, -, -. ISSN 0947-6539. IF: 5.317. PMID: 29411907
85. ŘEHULKA, J., N. ANNADURAI, I. FRYDRYCH, P. DŽUBÁK, M. MILLER, M. HAJDÚCH a V. DAS. Peloruside A-Induced Cell Death in Hypoxia Is p53 Dependent in HCT116 Colorectal Cancer Cells. *Journal of Natural Products*. 2018, -, -. ISSN 0163-3864. IF: 3.281. PMID: 29400463
84. SESTAK, S., M. BELLA, T. KLUNDA, S. GURSKÁ, P. DŽUBÁK, F. WÖLS, I. WILSON, V. SLADEK, M. HAJDÚCH, M. POLÁKOVÁ a J. KONA. N-Benzyl Substitution of Polyhydroxypyrrolidines: The Way to Selective Inhibitors of Golgi  $\alpha$ -Mannosidase II. *ChemMedChem*. 2018, 13(4), 373-383. ISSN 1860-7179. IF: 3.225. PMID:29323461
83. CAMATEROS, P., KANAGARATHAM, C., NAJDEKR, L., HOLUB, D., VRBKOVÁ, J., COTÉ, L., FOURNIER, J., GOURDON, J., CREERY, D., OLIVENSTEIN, R., KOPRIVA, F., ADAM, T., FRIEDECKY, D., DZUBAK, P., HAJDUCH, M., RADZIOCH, D. Toll-Like Receptor 7/8 Ligand, S28463, Suppresses *Ascaris suum*-induced Allergic Asthma in Nonhuman Primates. *American Journal of Respiratory Cell and Molecular Biology*, 2018, 58(1), 55–65. <http://doi.org/10.1165/rcmb.2017-0184OC>
82. SKROT, Z., MISTRİK, M., ANDERSEN, K.K., FRIIS, S., MAJERA, D, GURSKY, J., OZDIAN, T, BARTKOVA, J., TURI, Z., MOUDRY, P., KRAUS, M., MICHALOVA, M., VACLAVKOVA, J., DZUBAK, P., VROBEL, I., POUCKOVA, P., SEDLACEK, J., MIKLOVICOVA, A., KUTT, A., LI, J., MATTOVA, J., DRIESSEN, C., DOU, Q.P., OLSEN, J., HAJDUCH, M., CVEK, B., DESHAIES, R. J., & BARTEK, J. Alcohol-abuse drug disulfiram targets cancer via p97 segregase adaptor NPL4. *Nature*, 2017, 552(7684). <http://doi.org/10.1038/nature25016>
81. MOJZIKOVA, R., KORALKOVA, P., HOLUB, D., SAXOVA, Z., POSPISILOVA, D., PROCHAZKOVA, D., DZUBAK, P., HORVATHOVA, M., DIVOKY, V. Two novel mutations (p.(Ser160Pro) and p.(Arg472Cys)) causing glucose-6-phosphate isomerase deficiency are associated with erythroid dysplasia and inappropriately suppressed hepcidin. *Blood Cells, Molecules, and Diseases*. 2017, <http://doi.org/10.1016/j.bcmd.2017.04.003>
80. KONC, J., TICHY, M., POHL, R., HODEK, J., DZUBAK, P., HAJDUCH, M., & HOCEK, M. Sugar modified pyrimido[4,5-b]indole nucleosides: synthesis and antiviral activity. *Med. Chem. Commun.*, 2017, 8(9), 1856–1862. <http://doi.org/10.1039/C7MD00319F>
79. REHULKA, J., ANNADURAI, N., FRYDRYCH, I., ZNOJEK, P., DZUBAK, P., NORTHCOTE, P., ... DAS, V. Cellular effects of the microtubule-targeting agent peloruside A in hypoxia-conditioned colorectal carcinoma cells. *Biochimica et Biophysica Acta (BBA) - General Subjects*, 2017, 1861(7), 1833–1843. <http://doi.org/10.1016/j.bbagen.2017.03.023>
78. ANNADURAI, N., K. AGRAWAL, P. DŽUBÁK, M. HAJDÚCH a V. DAS. Microtubule affinity-regulating kinases are potential druggable targets for Alzheimer's disease. *Cellular and Molecular Life Sciences*. 2017, -, -. ISSN 1420-682X. IF: 5.788. PMID: 28634681
77. OZDIAN, T., HOLUB, D., MACECKOVA, Z., VARANASI, L., RYLOVA, G., REHULKA, J., VACLAVKOVA, J., SLAVIK, H., MOUDRY, P., ZNOJEK, P., STANKOVA, J., de SANCTIS, J.B., HAJDUCH, M., **DZUBAK, P.** Proteomic profiling reveals DNA damage, nucleolar and ribosomal stress are the main responses to oxaliplatin treatment in cancer cells. *Journal of Proteomics*, 2017, 162, 73-85. (IF=3.914) ISSN 1874-3919, PMID: [28478306](https://pubmed.ncbi.nlm.nih.gov/28478306/)
76. PAJTAS, D., KONYA, K., KISS-SZIKSZAI, A., DZUBAK, P., PETHO, Z., VARGA, Z., PANYI, G., PATONAY, T. Optimization of the synthesis of Flavone-Amino Acid and Flavone-Dipeptide Hybrids via Buchwald-Hartwig Reaction, *Journal of Organic chemistry*, 2017, 82, 4578-87. IF: 4.849 ISSN 0022-3263, PMID: [28441016](https://pubmed.ncbi.nlm.nih.gov/28441016/)
75. TICHÝ, M., S. SMOLEN, E. TLOUŠŤOVÁ, R. POHL, T. OŽDIAN, K. HEJTMÁNKOVÁ, B. LIŠKOVÁ, S. GURSKÁ, P. DŽUBÁK, M. HAJDÚCH a M. HOCEK. Synthesis and Cytostatic and Antiviral Profiling of Thieno-Fused 7-Deazapurine Ribonucleosides. *Journal of Medicinal Chemistry*. 2017, 60, 2411-2424. ISSN 0022-2623. IF: 5.589. PMID: 28221790
74. ŠIDOVÁ, V., P. ZOUFALÝ, J. POKORNÝ, P. DŽUBÁK, M. HAJDÚCH, I. POPA a M. URBAN. Cytotoxic conjugates of betulinic acid and substituted triazoles prepared by Huisgen Cycloaddition from 30-azidoderivatives. *PLOS One*. 2017, 12(2), e0171621. ISSN 1932-6203 . IF: 3.057. PMID: 28158265

73. VOLLER, J., T. BERES, M. ZATLOUKAL, P. KAMINSKI, P. NIEMANN, K. DOLEZAL, P. DŽUBÁK, M. HAJDÚCH a M. STRNAD. neni pdf a dedi\_The natural cytokinin 2OH3MeOBAR induces cell death by a mechanism that is different from that of the "classical" cytokinin ribosides. *Phytochemistry*. 2017, 136, 156-164. ISSN 0031-9422 . IF: 2.779. PMID: 28153445
72. HOLUB, D., J. HOUDA, M. HAJDÚCH, D. POSPÍŠILOVÁ a **P. DŽUBÁK**. Stanovení hladiny hepcidinu-25 v séru pomocí SPE\_LC\_MS/MS metody. *Chemagazín*. 2016, 5, 8-10. ISSN 1210-7409. Jost
71. OŽDIAN, T., D. HOLUB, G. RYLOVÁ, J. VÁCLAVKOVÁ, M. HAJDÚCH a **P. DŽUBÁK**. Porovnání hmotnostně spektrometrických přístupů v proteomickém profilování léčiv. *Chemagazín*. 2016, 5, 8-11. ISSN 1210-7409. Jost
70. BORKOVÁ, L., R. ADÁMEK, P. KALINA, P. DRAŠAR, P. DŽUBÁK, S. GURSKÁ, J. ŘEHULKA, M. HAJDÚCH, M. URBAN a J. ŠAREK. Synthesis and Cytotoxic Activity of Triterpenoid Thiazoles Derived from Allobetulin, Methyl Betulonate, Methyl Oleanonate, and Oleanonic Acid. *ChemMedChem*. 2017, 12, 390-398. ISSN 1860-7179 . IF: 2.980. PMID: 28084676
69. AGRAWAL, K., V. DAS, M. OTMAR, M. KRECMEROVA, P. DŽUBÁK a M. HAJDÚCH. Cell-based DNA demethylation detection system for screening of epigenetic drugs in 2D, 3D, and xenograft models. *Cytometry A*. 2016, 91A, 133-143. ISSN 1552-4922 . IF: 3.465. PMID: 27911980
68. SCHADICH, E., P. DŽUBÁK a M. HAJDÚCH. Role of Salmonella Typhi Vi Antigen and Secretory Systems on Immune Response. *Current Pharmaceutical Design*. 2016, 22, 6251-6260. ISSN 1381-6128. IF: 3.052. PMID: 27573929
67. JURÁŠEK, M., **P. DŽUBÁK**, S. RIMPELOVA, D. SEDLÁK, P. KONEČNÝ, I. FRYDRYCH, S. GURSKÁ, M. HAJDÚCH, K. BOGDANOVÁ, M. KOLÁŘ, T. MÜLLER, E. KMONICKOVA, T. RUMML, J. HARMATHA a P. DRAŠAR. Trilobolide-steroid hybrids: Synthesis, cytotoxic and antimycobacterial activity. *Steroids*. 2017, 117(2017), 97-104. ISSN 0039-128X. IF: 2.513. PMID: 27543674
66. ŠIMKOVÁ, D., G. KHARAISHVILI, G. KOŘÍNKOVÁ, T. OŽDIAN, T. SUCHANKOVA-KLEPLOVA, T. SOUKUP, M. KRUPKA, A. GALANDÁKOVÁ, P. DŽUBÁK, M. JANÍKOVÁ, J. NAVRATIL, Z. KAHOUNOVA, K. SOUCEK a J. BOUCHAL. The dual role of asporin in breast cancer progression. *Oncotarget*. 2016, 7(32), 52045-52060. ISSN 1949-2553 . IF: 5.008. PMID: 27409832
65. BORKOVÁ, L., S. GURSKÁ, P. DŽUBÁK, R. BURIÁNOVÁ, M. HAJDÚCH, J. ŠAREK, I. POPA a M. URBAN. Lupane and 18 $\alpha$ -oleanane derivatives substituted in the position 2, their cytotoxicity and influence on cancer cells. *European Journal of Medicinal Chemistry*. 2016, 121, 120-131. ISSN 0223-5234 . IF: 3.902. PMID: 27236068
64. DAS, V., T. FÜRST, S. GURSKÁ, P. DŽUBÁK a M. HAJDÚCH. Reproducibility of Uniform Spheroid Formation in 384-Well Plates: The Effect of Medium Evaporation. *Journal of Biomolecular Screening*. 2016, 21(9), 923-30. ISSN 1087-0571. IF: 2.423. PMID: 27226477
63. HRUBY, M., K. AGRAWAL, O. POLICIANOVA, J. BRUS, J. SKOPAL, P. SVEC, M. OTMAR, P. DŽUBÁK, P. STEPANEK a M. HAJDÚCH. Biodegradable system for drug delivery of hydrolytically labile azanucleoside drugs. *Biomedical Papers of the Medical Faculty of the University Palacký, Olomouc, Czech Republic*. 2016, 160(2), 222-230. ISSN 1213-8118 . IF: 1.200. PMID: 27003313
62. PERLIKOVA, P., RYLOVA, G., NAUS, P., ELBERT, T., TLOUSTOVA, E., BROUDERIOUX, A., SLAVETINSKA, L.P., MOTYKA, K., DOLEZAL, D., ZNOJEK, P., NOVA, AL, HARVANOVA, M., DZUBAK, P., SILLER, M., HLAVAC, J., HAJDUCH, M., HOCEK, M. 7-(2-Thienyl)-7-Deazaadenosine (AB61), a New Potent Nucleoside Cytostatic with a Complex Mode of Action *MOLECULAR CANCER THERAPEUTICS*, 2016, 15, 922-37. (IF=5,683)
61. SCHADICH, E., HLAVAC, J., VOLNA, T., VARANSI, L., HAJDUCH, M., **DZUBAK, P.** Effects of Ginger Phenylpropanoids and Quercetin on Nrf2-ARE Pathway in Human BJ Fibroblasts and HaCaT Keratinocytes. *BIOMED RESEARCH INTERNATIONAL* 2016, (IF=2,134)
60. KONEČNÝ, P., S. GURSKÁ, P. ZNOJEK, E. SCHADICH, M. HAJDÚCH a **P. DŽUBÁK**. Reprofilování jako úspěšná strategie hledání nových léčiv. *Farmakologická léčba*. 2015, 4(10/2015), 12-18. ISSN 1805-398X.
59. SOURAL, M., HODON, J., DICKINSON, N.J., SIDOVA, V., GURSKA, S., DZUBAK, P., HAJDUCH, M., SAREK, J., URBAN, M.; Preparation of Conjugates of Cytotoxic Lupane Triterpenes with Biotin *BIOCONJUGATE CHEMISTRY* 2015, 26, 2563-70 (IF=3,5)
58. NAUS, P., CALETKOVA, O., PERLIKOVA, P., SLAVETINSKA, LP., TLOUSTOVA, E., HODEK, J., WEER, J., DZUBAK, P., HAJDUCH, M., HOCEK, M. Synthesis and biological profiling of 6-or 7-(het)aryl-7-deazapurine 4'-C-methylribonucleosides *BIOORGANIC & MEDICINAL CHEMISTRY*, 2015, 23, 7422-38 (IF=2,923)



57. KLECKA, M., SLAVETINSKA, LP., TLOUSTOVA, E., DZUBAK, P., HAJDUCH, M., HOCEK, M. Synthesis and cytostatic activity of 7-arylsulfanyl-7-deazapurine bases and ribonucleosides. *MEDCHEMCOMM*. 2015, 4, 576-580, IF (2014): 2.626
56. FUNK, P., MOTYKA, P., DZUBAK, P., ZNOJEK, P., GRUSKA, S., KUSZ, J., McMASTER, C., HAJDUCH, M., SOURAL, M. Preparation of 2-phenyl-3-hydroxyquinoline-4(1H)-one-5-carboxamides as potential anticancer and fluorescence agents. *RSC Advances*. 2015, 60, 48861-48867 IF (2014): 3.840
55. BORKOVÁ, L., L. JASILKOVA, J. ŘEHULKA, K. FRISONSOVA, M. URBAN, I. FRYDRYCH, I. POPA, M. HAJDÚCH, N.J. DICKINSON, M. VLK, **P. DŽUBÁK** a J. ŠAREK. Synthesis of cytotoxic 2,2-difluoro derivatives of dihydrobetulinic acid and allobetulin and study of their impact on cancer cells. *European Journal of Medicinal Chemistry*. 2015, 96(-), 482-490. ISSN 0223-5234. IF (2013): 3.432. PMID: 25942059
54. KAPLANEK, R., M. JAKUBEK, J. RAK, Z. KEJIK, M. HAVLIK, B.. DOLENSKY, I. FRYDRYCH, M. HAJDÚCH, M. KOLÁŘ, K. BOGDANOVA, J. KRALOVA, **P. DŽUBÁK** a V. KRAL. Caffeine-hydrazones as anticancer agents with pronounced selectivity toward T-lymphoblastic leukaemia cells. *Bioorganic Chemistry*. 2015, (-), -. ISSN 0045-2068. IF (2013): 2.141. PMID: 25912310
53. MALNUI, V., L. SLAVĚTÍNSKÁ, P. NAUŠ, P. DŽUBÁK, M. HAJDÚCH, J. STOLAŘÍKOVÁ, J. SNÁŠEL, I. PICOVÁ a M. HOCEK. 2-Substituted 6-(Het)aryl-7-deazapurine Ribonucleosides: Synthesis, Inhibition of Adenosine Kinases, and Antimycobacterial Activity. *ChemMedChem*. 2015, (-), -. ISSN 1860-7179. IF (2013): 3.046. PMID: 25882678
52. KAPLANEK, R., M. HAVLIK, B.. DOLENSKY, J. RAK, P. DŽUBÁK, P. KONEČNÝ, M. HAJDÚCH, J. KRALOVA a V. KRAL. Synthesis and biological activity evaluation of hydrazone derivatives based on a Troger's base skeleton. *Bioorganic and Medicinal Chemistry*. 2015, 23(7), 1651-1659. ISSN 0968-0896. IF (2013): 2.951. PMID: 25737088
51. BRIZA, T., J. KRALOVA, B. DOLENSKY, S. RIMPELOVA, Z. KEJIK, T. RUM, M. HAJDÚCH, P. DŽUBÁK, I. MIKULA, P. MARTASEK, P. POUCKOVA a V. KRAL. Striking antitumor activity of a methinium system with incorporated quinoxaline unit obtained by spontaneous cyclization. *Chembiochem*. 2015, 16(4), 555-558. ISSN 1439-4227. IF (2013): 3.060. PMID: 25630657
50. HOUDA, J., P. DŽUBÁK, E. KARASKOVA, D. HOLUB, D. VYDRA, D. MLCUCHOVA, M. HAJDÚCH, O. POZLER a D. POSPÍŠILOVÁ. Výskyt anemie a význam měření hladiny hepcidinu metodou ELISA u dětí s nespecifickými střevními záněty. *Česko-slovenská pediatrie*. 2014, 69(3), 137-147. ISSN 0069-2328.
49. KADRIC, J., MOTYKA, K., DZUBAK, P., HAJDUCH, M., SOURAL, M. Synthesis, cytotoxic activity, and fluorescence properties of a set of novel 3-hydroxyquinolin-4(1H)-ones. *TETRAHEDRON LETTERS* 2014, 55 (26), 3592-3595.
48. SPENEROVA, M., J. SROVNAL, J. POTĚŠIL, M. HAJDÚCH, V. MIHÁL a P. DŽUBÁK. Historie glukokortikoidní terapie v léčbě akutních leukémií u dětí. *Česko-slovenská pediatrie*. 2014, 69(6), 350-362. ISSN 0069-2328.
47. RYLOVÁ, G., T. OŽDIAN, L. VARANASI, M. SOURAL, J. HLAVÁČ, D. HOLUB, P. DŽUBÁK a M. HAJDÚCH. Affinity-Based Methods in Drug-Target Discovery. *Current Drug Targets*. 2015, 16(-), 1-17. ISSN 1389-4501. IF (2013): 3.597. PMID: 25410410
46. SNÁŠEL, J., P. NAUŠ, J. DOSTÁL, A. HNÍZDA, J. FANFRLÍK, J. BRYNDA, A. BOURDERIOUX, M. DUŠEK, H. DVOŘÁKOVÁ, J. STOLAŘÍKOVÁ, H. ZÁBRANSKÁ, R. POHL, P. KONEČNÝ, P. DŽUBÁK, I. VOTRUBA, M. HAJDÚCH, P. ŘEZÁČOVÁ, V. VEVERKA, M. HOCEK a I. PICOVÁ. Structural Basis for Inhibition of Mycobacterial and Human Adenosine Kinase by 7-Substituted 7-(Het)aryl-7-deazaadenine Ribonucleosides. *Journal of Medicinal Chemistry*. 2014, 57(20), 8268-8279. ISSN 0022-2623. IF (2013): 5.480. PMID: 25259627
45. POSPÍŠILOVÁ, D. - HOLUB, D. - ŽIDOVÁ, Z. - SULOVSÁ, L. - HOUDA, J. - MIHÁL, V. - HADAČOVÁ, I. - RADOVÁ, L. - DŽUBÁK, P. - HAJDÚCH, M. - DIVOKÝ, V. - HORVÁTHOVÁ, M. Hepcidin levels in Diamond-Blackfan anemia reflect erythropoietic activity and transfusion dependency. *Haematologica*. 2014, 99(7), e118-121. ISSN 0390-6078. IF (2013): 5.868. PMID: 24727814
44. JANSÁ, J., A. LYČKA, Z. PADELKOVA, M. GREPL, P. KONEČNÝ, M. HAJDÚCH a **P. DŽUBÁK**. New Imidazo[1,2-c]pyrimidin-5(6H)-Ones Derived from Cytosine: Synthesis, Structure, and Cytotoxic Activity. *Journal of Heterocyclic Chemistry*. 2014, -, -. ISSN 0022-152X. IF (2013): 0.873.
43. NAUS, P. - CALETKOVA, O. - KONECNY, P. - DZUBAK, P. - BOGDANOVA, K. - KOLAR, M. - VRBKOVA, J. SLAVETINSKA, L. - TLOUSTOVA, E. - PERLIKOVA, P. - HAJDUCH, M. - HOCEK, M. Synthesis, cytostatic, antimicrobial and anti-HCV activity of 6-substituted 7-(het)aryl-7-deazapurine ribonucleosides. *J Med Chem*. 2014, 57, 1097-110. (IF=5,447)

42. TYLECKOVA, J. - HRABAKOVA, R. – MAIRYCHOVA, K. – HALADA, P. – RADOVA, L. – DZUBAK, P. – HAJDUCH, M. – GADHER, S.J. – KOVAROVA, H. Cancer cell response to anthracyclines effects: mysteries of the hidden proteins associated with these drugs. *Int J Mol Sci.* 2012 Nov 22;13(12):15536-64. (IF=2,464)
41. PERLÍKOVÁ, P., P. KONEČNÝ, P. NAUŠ, J. SNÁŠEL, I. VOTRUBA, P. DŽUBÁK, I. PICHOVÁ, M. HAJDÚCH a M. HOCEK. 6-Alkyl-, 6-aryl- or 6-hetaryl-7-deazapurine ribonucleosides as inhibitors of human or MTB adenosine kinase and potential antimycobacterial agents. *MedChemComm.* 2013, 4(11), 1497-1500. ISSN 2040-2503. (IF=2,626)
40. JURÁŠEK, M., P. DŽUBÁK, D. SEDLÁK, H. DVOŘÁKOVÁ, M. HAJDÚCH, P. BARTŮNĚK a P. DRAŠAR. Preparation, preliminary screening of new types of steroid conjugates and their activities on steroid receptors. *Steroids.* 2013, 78(-), 356-361. ISSN 0039-128X. (IF=2,716)
39. POSPÍŠILOVÁ, D. - HOUDA, J. - HOLUB, D.- LUDÍKOVÁ, B.- MOJZÍKOVÁ, R. - POSPÍŠILOVÁ, P. - ŽIDOVÁ, Z.- KAPRALOVÁ, K. - HORVÁTHOVÁ, M. – HAJDÚCH, M. – DŽUBÁK, P. Význam stanovení hladiny hepcidinu v diagnostice vybraných typů anémií v dětském věku. *Transfusiology & Haematology Today / Transfuze a Hematologie Dnes.* 2012, roč. 18, č. 2, s. 58-65.
38. SPENEROVA, M, DZUBAK, P., SROVNAL, J., RADOVA, L., BURIANOVA, R., KONECNY, P., SALKOVA, S., NOVAK, Z., POSPISILOVA, D., STARY, J., BLAZEK, B., HAK, J., VOTAVA, T., TIMR, P., KAISEROVA, E., BUBANSKA, E., MIHAL, V., HAJDUCH, M. Combination of prednisolone and low dosed dexamethasone exhibits greater in vitro antileukemic activity than equiactive dose of prednisolone and overcomes prednisolone drug resistance in acute childhood lymphoblastic leukemia. *BIOMEDICAL PAPERS-OLOMOUC,* 2014, 158, 422-427, IF (2013): 1.661
37. KUDELA, M., PILKA, R., LUBUSKY, M., HEJTMANEK, P., DZUBAK, P., BRYCHTOVA, S. Prognostic importance of selected molecular immunohistochemical markers and DNA ploidy in endometrial cancer. *Eur J Gynaecol Oncol.* 2012;33(2):159-63. (IF=0,577)
36. URBAN, M., VLK, M., DZUBAK, P., HAJDUCH, M., SAREK, J. Cytotoxic heterocyclic triterpenoids derived from betulin and betulinic acid. *Bioorg Med Chem.* 2012 Jun 1;20(11):3666-74. (IF=2,338)
35. KOLLAREDDY, M., ZHELEVA, D., DZUBAK, P., BRAHMKSHATRIYA, PS., LEPSIK, M., HAJDUCH, M. Aurora kinase inhibitors: Progress towards the clinic. *Invest New Drugs.* 2012 Dec;30(6):2411-32. (IF=3,498)
34. BOURDERIOUX, A., NAUŠ, P., PERLIKOVA, P., POHL, R., PICHOVA, I., VOTRUBA, I., DZUBAK, P., KONECNY, P., HAJDCH, M., STRAY, KM., WANG, T., RAY, AS., FENG, JY., BIRKUS, G., CIHLAR, T., HOCEK, M. Synthesis and Significant Cytostatic Activity of 7-Hetaryl-7-deazaadenosines. *J Med Chem.* 2011 Aug 11;54(15):5498-5507. Epub 2011 Jul 11. (IF=5,248)
33. KUDELA, M., PILKA, R., LUBUSKY, M., HEJTMANEK, P., DZUBAK, P., BRYCHTOVA, S. Prognostic importance of selected molecular genetic immunohistochemical markers and DNA ploidy in endometrial cancer. *Ceska Gynekol.* 2011 Jun;76(3):194-9.
32. BRULIKOVA, L., **DZUBAK, P.**, HAJDUCH, M., HLAVAC, J. Synthesis of various 5-alkoxymethyluracil analogues and structure-cytotoxic activity relationship study. *Carbohydr Res.* 2011 Aug 5. [Epub ahead of print] PubMed PMID: 21864833. (IF=2,332)
31. SOURAL, M., HLAVAC, J., FUNK, P., DZUBAK, P., HAJDUCH, M. 2-phenylsubstituted-3-hydroxyquinolin-4(1H)-one-carboxamides: Structure-cytotoxic activity relationship study. *ACS Comb Sci.* 2011 Jan; 10 (39-44). (IF=3,636)
30. VOLLER, J. – ZATLOUKAL, M. – LENOBEL, R. – DOLEZAL, K. – BERES, T. – KRYSSTOF, V. – SPICHAL, L. – NIEMANN, P. – DZUBAK, P. – HAJDUCH, M. – STRNAD, M. Anticancer activity of natural cytokinins: a structure-activity relationship study. *Phytochemistry.* 2010 Aug;71(11-12):1350-9. (IF=3,150)
29. BRULIKOVA, L. – DZUBAK, P. – HAJDUCH, M. – LACHNITOVA, L. – KOLLAREDDY, M. – KOLAR, M. – BOGDANOVA, K. – HLAVAC, J. Synthesis of 5-[alkoxy-(4-nitro-phenyl)-methyl]-uridines and study of their cytotoxic activity. *Eur J Med Chem.* 2010 Sep;45(9):3588-94. (IF=3,193)
- 28 KOPRIVA, F. – DZUBAK, P. – POTESIL, J. – HAJDUCH, M. The anti-inflammatory effects of inhaled corticosteroids versus anti-leukotrienes on the lymphocyte P-glycoprotein (PGP) expression in asthmatic children. *J Asthma.* 2009 May;46(4):366-70. (IF=1,341)

- 27 STROHALM, M. – NOVAK, P. – POMPACH, P. – MAN, P. – KAVAN, D. – WITT, M. – DZUBAK, P. – HAJDUCH, M. – HAVLICEK, V. Utilization of high-accuracy FTICR-MS data in protein quantitation experiments. *J Mass Spectrom.* 2009 Nov;44(11):1565-70. (IF=3,411)
- 26 NAUS, P. – POHL, R. – VOTRUBA, I. – DZUBAK, P. – HAJDUCH, M. – AMERAL, R. – BIRKUS, G. – WANG, T. – RAY, A.S. – MACKMAN, R. – CIHLAR, T. – HOCEK, M. 6-(Het)aryl-7-deazapurine ribonucleosides as novel potent cytostatic agents. *J Med Chem.* 2010 Jan 14;53(1):460-70. (IF=5,207)
- 25 KORINKOVA, G. – CWIERTKA, K. – PAPRSKAROVA, M. – DZUBAK, P. – HAJDUCH, M. The radiosensitising effect of olomoucine derived synthetic cyclin-dependent kinase inhibitors. *Neoplasma.* 2010;57(2):161-9. (IF=1,449)
24. PAPRSKÁŘOVÁ, M. - KRYŠTOF, V. - JORDA, R. - DŽUBÁK, P. - HAJDÚCH, M. - WESIERSKA-GADEK, J. - STRNAD, M. Functional p53 in cells contributes to the anticancer effect of the cyclin-dependent kinase inhibitor roscovitine. *J Cell Biochem.* 2009 Jun 1;107(3):428-37. (IF2,935)
23. GUCKÝ, T. – FRYŠOVÁ, I. – SLOUKA, J. – HAJDÚCH, M. – DŽUBÁK, P. Cyclocondensation reaction of heterocyclic carbonyl compounds, Part XIII: Synthesis and cytotoxic activity of some 3,7-diaryl-5-(3,4,5-trimethoxyphenyl)pyrazolo[4,3-e][1,2,4]triazines. *Eur J Med Chem*, Jul 14 2008. ISSN: 0223-5234 IF (2007): 2.301
22. KOLLAREDDY, M. – DZUBAK, P. – ZHELEVA, D. – HAJDUCH, M. Aurora Kinases: Structure, Functions and Their Association with Cancer. *Biomedical Papers*, 2008, vol. 152, no. 1, s. 27-33.
21. SPACILOVA, L. - **DZUBAK, P.** - HAJDUCH, M. - KRUPKOVA, S. - HRADIL, P. - HLAVAC, J. Synthesis and cytotoxic activity of various 5-[alkoxy-(4-nitro-phenyl)-methyl]-uracils in their racemic form. *Bioorganic & Medicinal Chemistry Letters*, December 2007, vol. 17, no. 23, s. 6647-6650. IF=2,538
20. KRYSTOF, V. - CANKAR, P. - FRYSOVA, I. - SLOUKA, J. - KONTOPIDIS, G. - DZUBAK, P. - HAJDUCH, M. - SROVNAL, J. - de AZEVEDO, W.F. Jr., ORSAG, M. - PAPRSKAROVA, M. - ROLCIK, J. - LATR, A. - FISCHER, P.M. - STRNAD, M. 4-arylozo-3,5-diamino-1H-pyrazole CDK inhibitors: SAR study, crystal structure in complex with CDK2, selectivity, and cellular effects. *Journal of Medicinal Chemistry*, November 2006, vol. 49, no.22, s. 6500 - 6509. IF=4,926
19. VEPREK, P. - HAJDUCH, M. - DZUBAK, P. - KUKLIK, R. - POLAKOVA, J. - BEZOUSKA, K. Comblike dendrimers containing Tn antigen modulate natural killing and induce the production of Tn specific antibodies. *Journal of Medicinal Chemistry*, October 2006, vol. 49, no. 21, s. 6400 - 6407. IF=4,926
18. **DZUBAK, P.** - HAJDUCH, M. - VYDRA, D. - HUSTOVA, A. - KVASNICA, M. - BIEDERMANN, D. - MARKOVA, L. - URBAN, M. - SAREK, J. Pharmacological activities of natural triterpenoids and their therapeutic implications. *Natural Product Reports*, Jun 2006, vol. 23, no. 3, s. 394 – 411. IF=8,889
17. **DZUBAK, P.** - HAJDUCH, M. - GAZAK, R. - SVOBODOVA, A. - PSOTOVA, J. - WALTEROVA, D. - SEDMERA, P. - KREN, V. New derivatives of silybin and 2,3-dehydrosilybin and their cytotoxic and P-glycoprotein modulatory activity. *Bioorganic & Medicinal Chemistry*, Jun 2006, vol. 14, no.11, s. 3793-3810. IF=2.018
16. SKALNIKOVA, H. - HALADA, P. - DZUBAK, P. - HAJDUCH, M. - KOVAROVA, H. Protein Fingerprints of Anti-cancer Effects of Cyclin-dependent Kinase Inhibition: Identification of Candidate Biomarkers Using 2-D Liquid Phase Separation Coupled to Mass Spectrometry. *Technology in Cancer Research & Treatment*, August 2005, vol. 4, no. 4, s. 447-454. (IF=1,677)
15. URBAN, M. - SAREK, J. - TISLEROVA, I. - DZUBAK, P. - HAJDUCH, M. Influence of esterification and modification of A-ring in a group of lupane acids on their cytotoxicity. *Bioorganic & Medicinal Chemistry*, October 2005, vol. 13, no. 19, s. 5527-5535. IF=2.018
14. BIEDERMANN, D. - SAREK, J. - KLINOT, J. - HAJDUCH, M.; DZUBAK, P. Fluorination of betulinines and other triterpenoids with DAST. *Synthesis-Stuttgart*, May 2005, no. 7, s. 1157-1163. (IF=2,401)
13. KVASNICA, M. - SAREK, J. - KLINOTOVA, E. - DZUBAK, P. - HAJDUCH, M. Synthesis of phthalates of betulinic acid and betulin with cytotoxic activity. *Bioorganic & Medicinal Chemistry*, May 2005, vol. 13, no. 10, s. 3447-3454. IF=2.185

12. STRAKOVA, N. - EHRMANN, J. - DZUBAK, P. - BOUCHAL, J. - KOLAR, Z. The synthetic ligand of peroxisome proliferator-activated receptor-gamma ciglitazone affects human glioblastoma cell lines. *Journal of Pharmacology And Experimental Therapeutics*, June 2004, vol. 309, no. 3, s. 1239-1247. IF=4.337
11. **DZUBAK, P.** - SAREK, J. - CWIERTKA, K. - HAJDUCH, M. - VYDRA, D. Biologicke ucinky triterpenoidu: Protizanetlive, antimikrobialni, hepatoprotektivni, analgeticke a dalsi farmakologicke aktivity. (Biological activity of triterpenoids: antiinflammatory, antimicrobial, hepatoprotective, analgesic and others pharmacological activities). *Klinická Farmakologie*, 2004, vol. 18, s. 96-101.
10. HAJDUCH, M. - DZUBAK, P. - SAREK, J. Biologicke ucinky triterpenoidu: Protinadorova aktivita. (Biological activity of triterpenoids: Anticancer activity). *Klinická Farmakologie*, 2004, vol. 18, s. 14-21.
9. SAREK, J. – DZUBAK, P. – KLINOTOVA, E. – NOSKOVA, V. – KRECEK, V., KORINKOVA, G., THOMSON, J.O. – JANOSTAKOVA, A. – WANG, S. – PARSONS, S. – FISHER, P.M. – ZHELEV, N. – HAJDUCH, M. New lupane derived compounds with Pro-Apoptotic activity in cancer cells: Synthesis and structure – activity relationships. *Journal of Medicinal Chemistry*, 2003, vol. 46, 5402-5415. IF=4,566
8. KOVAROVA, H., HAJDUCH, M., LIVINGSTONE, M., DZUBAK, P., LEFKOVITS, I. Analysis of state-specific phosphorylation of protein by two-dimensional gel electrophoresis. *Journal of Chromatography B*, 2003, vol. 787, 53-61. IF=2,085)
7. COUFAL, O., HAJDUCH, M., VAGUNDOVA, M., ZALOUDIK, J., SVOBODA, M., KOUTNA, I., NOSKOVA, V., GOJOVA, L., DZUBAK, P., BOUCHAL, J., SKARDA, J. Biopsie nadoru – banalita, nebo zasadni vykon? (Tumour Biopsy – a Trivial Matter or Fundamental Procedure?) *Chirurgicke Rozhledy* 2002, vol. 81, 527-537.
6. NOSKOVA, V., DZUBAK, P., KUZMINA, G., LUDKOVA, A., STEHLIK, A., TROJANEC, R., JANOSTAKOVA, A., KORINKOVA, G., MIHAL, V., HAJDUCH, M. In vitro chemoresistance profile and expression/function of MDR associated proteins in resistant cell lines derived from CCRF-CEM, K562, A549 and MDA MB 231 parental cells. *Neoplasma* 2002, vol. 49, 418-425, 2002. IF=0,679
5. TROJANEC, R., SPACKOVA, K., CWIERTKA, K., DZUBAK, P., JANOSTAKOVA, A., KOLAR, Z., HOUSERKOVA, D., MIHAL, V., HAJDUCH, M. Amplifikace GENU Her-2/neu: Molekularni, bunecne a klinicke aspekty. (Amplification of the Her-2/neu gene: molecular, cellular and clinical aspects). *Klinicka Farmakologie a Farmacie*, 2002, vol. 16, 23-29.
4. KOVAROVA, H., HALADA, P., MAN, P., DZUBAK, P., HAJDUCH, M. Aplication of proteomics in the search for novel proteins associated with the anti-cancer effect of the synthetic cyclin-dependent kinases inhibitor, boheminine. *Technology in Cancer Research & Treatment*, 2002, vol. 1, 247-256.
3. THOMSON, J.O., DZUBAK, P., HAJDUCH, M. Prostate cancer and food supplement, PC-SPES. Minireview. *Neoplasma*, 2002, vol. 49, 69-74. IF=0,679
2. LUDKOVA, A., HAJDUCH, M., NOSKOVA, V., ZALOUDIK, J., KRAL, V., KLEIN, J., STEHLIK, D., FEKETOVA, G., TROJANEC, R., GOJOVA, L., DZUBAK, P., KASPAREK, I., BRAZINOVA, S., MIHAL, V., CWIERTKA, K., KOLEK, V., SAFAROVA, M., JANOSTAKOVA, A., PILKA, R., KUZMINA, G., KALA, M. Stredni hodnoty citlivosti na jednotlivu cytotatika u nadoru ruzneho histogenetickeho puvodu. (Mean values of in vitro chemosensitivities in tumors of different histogenetic origin to individual anti-cancer drugs). *Klinicka Onkologie*, 2000, vol. 2, 33-36.
1. SKARDA, J., HAJDUCH, M., BOUCHAL, J., NOSKOVA, V., LUDKOVA, A., DZUBAK, P., TICHY, T., KLEIN, J., KOLEK, V., KOLAR, Z., KRAL, V., MIHAL, V. Vztah medzi expresiou proteinov asociovanych s liekovou rezistanciou a vysledkami in vitro cytotoxickeho MTT testu u pacientov s NSCLC. (Correlation between expression of drug resistance associated proteins and results of cytotoxicity in vitro MTT-assay in NSCLC patients). *Klinicka Onkologie*, 2000, vol. 2, 55

## Invited lectures:

“HTS and HCA for Biochemical and cellular identification of candidate chemical probes and drugs, Part II.”  
High throughput, High Content Screening and Image Analysis in Drug Development 1st edition. Istituto Nazionale Tumori IRCCS “Fondazione G. Pascale”, 23.9.2019, Mercogliano, Italy.

Identification of tumor biomarkers in the breath condensate. 12. PragueONCO, 20. - 22. 1. 2021, Prague, Czech Republic.

## Book Chapters:

- [7] P. DŽUBÁK, Detection and quantification of cellular antigens using flow cytometry. In: Laboratory techniques in cellular and molecular medicine, 1. vyd, Olomouc: Univerzita Palackého v Olomouci, 2022, Chapter: 28, Pages: 209 - 213, ISBN: 978-80-244-6049-9. (online, pdf)
- [6] P. DŽUBÁK, Hmotnostní spektrometrie in Principy a využití vybraných analytických metod v laboratorní medicíně, 1. vyd, korigovaný dotisk, Olomouc: Univerzita Palackého v Olomouci, 2021, Chapter: 2.2, Pages: 34-42, ISBN: 978-80-244-3951-8.
- [5] DŽUBÁK, P., M. URBAN a M. HAJDÚCH. Vývoj nových léčiv. In: Molekulární medicína. 1. vyd. Praha: Galén, 2015. Kapitola 11, s. 469-472. ISBN: 978-80-7492-121-6.
- [4] CIBIČEK, N., J. VACEK, M. BERANEK, P. DŽUBÁK, Z. HEŘMANOVÁ, P. KOSINA, M. KUBALA, M. NOVÁK, B. PAPOUSKOVA, J. SROVNAL, J. VÁVROVÁ, J. VOSTALOVA, M. ZATLOUKALOVA a H. ŽIVNÁ. Hmotnostní spektrometrie. In: Principy a využití vybraných analytických metod v laboratorní medicíně. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2014. Kapitola 2.2, s. 34-40. ISBN: 978-80-244-3951-8.
- [3] CIBIČEK, N., J. VACEK, M. BERANEK, P. DŽUBÁK, Z. HEŘMANOVÁ, P. KOSINA, M. KUBALA, M. NOVÁK, B. PAPOUSKOVA, J. SROVNAL, J. VÁVROVÁ, J. VOSTALOVA, M. ZATLOUKALOVA a H. ŽIVNÁ. Elektrochemické metody, (bio)senzory a čipové platformy. In: Principy a využití vybraných analytických metod v laboratorní medicíně. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2014. Kapitola 2.3, s. 43-44. ISBN: 978-80-244-3951-8.
- [2] ŠAREK, J., M. KVASNICA, M. VLK, M. URBAN, P. DŽUBÁK a M. HAJDÚCH. The Potential of Triterpenoids in the Treatment of Melanoma. In: Research on Melanoma – A Glimpse into Current Directions and Future Trends. 1.vyd. Rijeka: InTech, 2011. Kapitola 7, s. 125-158. ISBN: 978-953-307-293-7.
- [1] HAJDUCH, M. - SKALNIKOVA, H. - HALADA, P. - VYDRA, D. - DZUBAK, P. - DZIECHCIARKOVA, M. - STRNAD, M. - RADZIOCH, D. - KOVAROVA, H. Cyclin-dependent kinase inhibitors and cancer: usefulness of proteomic approaches in assesment of the molecular mechanisms and efficacy of novel therapeutics. In Clinical Proteomics (Jennifer E. Van Eyk and Michael J. Dunn, eds.), John Wiley & Sons Inc., Jan 2008, p. 177, ISBN: 352731637X
- 

## Books:

- [1] DRABEK, J., J. BERKOVCOVA, P. DŽUBAK, M. HAJDUCH, M. KHOYLOU, V. KOUDELAKOVA, J. SROVNAL, M. STAŇKOVA a R. TROJANEC. Detekce nádorových



biomarkerů v molekulárně biologické laboratoři. 1. vyd. Olomouc: Univerzita Palackého v Olomouci, 2012. 144 s. ISBN: 978-80-244-3002-7.

## Patents, Utility models & other IP's :

### [10] FLUORESCENT DERIVATIVE FOR NON-CATALYTIC LABELING OF NUCLEIC ACID AND PEPTIDE COMPONENTS, PUV 2016-32558

1. Utility Model: CZ 30 136, Granted: 13. 12. 2016, Ownership: Palacky University, Olomouc, Inventors: [Jedináková Petra](#), [Hlaváč Jan](#), [Václavková Jana](#), [Konečný Petr](#), [Džubák Petr](#), [Hajdúch Marián](#)

Status: Available

### [9] METHOD OF DETERMINATION OF CANCER CELL DRUG SENSITIVITY TOWARDS AURORA KINASE INHIBITORS AND OVERCOMING THEIR RESISTANCE, Appl. EP 12816228.6

1. Patent: EP 2788504, Granted: 17. 8. 2016, Ownership: Palacky University Olomouc, Institute of Animal Physiology and Genetics AS CR, Inventors: Kollaredy Madhu, [Hajdúch Marián](#), [Džubák Petr](#), [Srovnal Josef](#), [Hrabáková](#), [Kovářová Hana](#)

Status: Available

### [8] CARBONIC ANHYDRASE INHIBITORS AND METHOD OF THEIR PRODUCTION, Priority Appl. CZ PV 2011-676

1. Patent: EP 2 771 015, Granted: 16. 3. 2016, Ownership: Institute of Organic Chemistry and Biochemistry AS CR, Institute of Molecular Genetics AS CR, Institute of Inorganic Chemistry AS CVR, Palacky University Olomouc, Inventors: Brynda Jiří, Cígler Petr, Gruner Bohumír, Maloy Řezáčová Pavlína, Mader Pavel, Šícha Václav, Bakardijev Mario, [Džubák Petr](#), [Hajdúch Marián](#)
2. Patent: US 9,290,529, Granted: 22. 3. 2016, Ownership: Institute of Organic Chemistry and Biochemistry AS CR, Institute of Molecular Genetics AS CR, Institute of Inorganic Chemistry AS CVR, Palacky University Olomouc, Inventors: Brynda Jiří, Cígler Petr, Gruner Bohumír, Maloy Řezáčová Pavlína, Mader Pavel, Šícha Václav, Bakardijev Mario, [Džubák Petr](#), [Hajdúch Marián](#)

Status: Available

### [7] CULTURE DISH, Priority Appl. CZ PUV 2015-31565, Priority Appl. CZ PVZ 2015-40394

1. Utility Model: CZ 28 806, Granted: 10. 11. 2015, Ownership: Palacky University Olomouc, Inventors: [Džubák Petr](#), [Hajdúch Marián](#)
2. Design: CZ 36 622, Granted: 28. 12. 2015, Ownership: Palacky University Olomouc, Inventors: [Džubák Petr](#), [Hajdúch Marián](#)
3. Registered Community Design: RCD 003039577-0001, Granted: 23. 3. 2016, Ownership: Palacky University Olomouc, Inventors: [Džubák Petr](#), [Hajdúch Marián](#)
4. Registered Community Design: RCD 003039577-0002, Granted: 23. 3. 2016, Ownership: Palacky University Olomouc, Inventors: [Džubák Petr](#), [Hajdúch Marián](#)

Status: Available

### [6] ASYMMETRIC TROGER BASES WITH HYDRAZONE GROUP AND THEIR USE IN THE TREATMENT OF ONCOLOGIC DISEASES, Priority Appl. CZ PV 2014-317

1. Patent: CZ 305 683, Granted: 23. 12. 2015, Ownership: Institute of Chemical technology Prague, Palacky University Olomouc, Institute of molecular genetics AS CR, Inventors: Rak Jakub, Kaplánek Robert, Štulcová Tereza, Drašar Pavel, Havlík Martin, Bříza Tomáš, [Džubák Petr](#), [Hajdúch Marián](#), [Konečný Petr](#), [Štěpánková Jana](#), Králová Jarmila, Král Vladimír

Status: Available

**[5] DIOXOCYCLOBUTENYL HYDRAZONES AND THEIR ANTICANCER ACTIVITY, Priority Appl. CZ PV 2014-321**

1. Patent: CZ 305 626, Granted: 2. 12. 2015, Ownership: Institute of Chemical technology Prague, Palacky University Olomouc, Institute of molecular genetics AS CR, Inventors: Havlík Martin, Kaplánek Robert, Dolenský Bohumil, Rak Jakub, Bříza Tomáš, [Džubák Petr](#), [Hajdúch Marián](#), [Konečný Petr](#), [Štěpánková Jana](#), Králová Jarmila, Král Vladimír

Status: Available

**[4] CAFFEINE-8-HYDRAZONES AS NOVEL CYTOSTATICS FOR THE TREATMENT OF ONCOLOGIC DISEASES, Priority Appl. CZ PV 2014-307**

1. Patent: CZ 305 625, Granted: 2. 12. 2015, Ownership: Institute of Chemical technology Prague, Palacky University Olomouc, Institute of molecular genetics AS CR, Inventors: Rak Jakub, Kaplánek Robert, Štulcová Tereza, Drašar Pavel, Havlík Martin, Bříza Tomáš, [Džubák Petr](#), [Hajdúch Marián](#), [Konečný Petr](#), [Štěpánková Jana](#), Králová Jarmila, Král Vladimír

Status: Available

**[3] CHOLYL HYDRAZONES AND THEIR USE IN THE TREATMENT OF TUMOR AND LEUKEMIA DISEASES, Priority Appl. CZ PV 2014-305**

1. Patent: CZ 305 607, Granted: 25. 11. 2015, Ownership: Institute of Chemical technology Prague, Institute of molecular genetics AS CR, Palacky University Olomouc, Inventors: Rak Jakub, Kaplánek Robert, Štulcová Tereza, Drašar Pavel, Havlík Martin, Bříza Tomáš, [Džubák Petr](#), [Hajdúch Marián](#), [Konečný Petr](#), [Štěpánková Jana](#), Králová Jarmila, Král Vladimír

Status: Available

**[2] BENZOTHAZOLE-SUBSTITUTED CYCLOBUT-3-ENE-1, 2-DIONE-3-HYDRAZONES AND THEIR USE IN THE TREATMENT OF VARIOUS TYPES OF LEUKEMIA AND TUMOUR DISEASES, Priority Appl. CZ PV 2014-306**

1. Patent: CZ 305 538, Granted: 14. 10. 2015, Ownership: Institute of Chemical Technology Prague, Palacky University Olomouc, Institute of Molecular Genetics AS CR, Inventors: Kaplánek Robert, Bříza Tomáš, Havlík Martin, Rak Jakub, Kejík Zdeněk, Krejčí Petr, [Džubák Petr](#), [Hajdúch Marián](#), [Štěpánková Jana](#), [Konečný Petr](#), Králová Jarmila, Král Vladimír

Status: Available

**[1] SUBSTITUTED 7-DEZAPURIN RIBONUCLEOSIDES, Priority Appl. CZ PV 2013-845**

1. Patent: CZ 305 466, Granted: 7. 9. 2015, Ownership: Institute of Organic Chemistry and Biochemistry AS CR, Palacky University Olomouc, Inventors: Hocek Michal, Nauš Petr, Caletková Olga, [Džubák Petr](#), [Hajdúch Marián](#)
2. Patent: AU 20142777740, Granted: 9. 6. 2016, Ownership: Institute of Organic Chemistry and Biochemistry AS CR, Palacky University Olomouc, Inventors: Hocek Michal, Nauš Petr, Caletková Olga, [Džubák Petr](#), [Hajdúch Marián](#)

3. Patent: US 9,586,986, Granted: **7. 3. 2017**, Ownership: Institute of Organic Chemistry and Biochemistry AS CR, Palacky University Olomouc, Inventors: Hocek Michal, Nauš Petr, Caletková Olga, Džubák Petr, Hajdúch Marián

Status: Available

Mentoring of the students:

Defended bachelor thesis:

- 1) Alžběta KAMENÍČKOVÁ - Monitorování účinku potenciálních protinádorových léčiv indukujících změny v buněčném cyklu
- 2) Jana POTOČKOVÁ - Chinolony a studium jejich biologických (cytotoxických) účinků.
- 3) Veronika SLABÁ – Hodnocení mitochondriálních funkcí na izolovaných mitochondriích po treatmentu kyselinou betulínovou a jejími deriváty
- 4) Hana VÁGNEROVÁ – Metabolická aktivace triterpenů s protinádorovou aktivitou
- 5) Kateřina LÓNOVÁ - Příprava a základní charakterizace nádorové linie rezistentní na inhibitory CDK

Defended diploma thesis:

- 1) Barbora PASTORKOVÁ – Identifikace molekulárních cílů protinádorových léčiv afinitní purifikací
- 2) Eliška RŮŽIČKOVÁ – Hodnocení biologické aktivity demetylačních léčiv
- 3) Jana VÁCLAVKOVÁ – Proteomický profil protinádorového účinku klinicky používaných rostlinných alkaloidů
- 4) Jiří ŘEHULKA – Proteomické profilování nádorové buněčné linie CEM ošetřené triterpenoidními látkami s protinádorovou aktivitou
- 5) Alžběta KAMENÍČKOVÁ – Target identification of potential antitumor drugs inducing changes in the cell cycle
- 6) Veronika SLABÁ – Detailní studium mitochondriálních funkcí u nádorových buněk po působení triterpenů s cytotoxickou aktivitou.
- 7) Jakub PŘICHYSTAL – Identifikace tumor-specifických mutovaných forem K-ras proteinu pomocí hmotnostní spektrometrie (2015)
- 8) Kateřina JEČMEŇOVÁ - Development and characterization of resistant cell lines to purine and pyrimidine cytotoxic drugs. (2019)

Defended dissertation thesis:

- 1) Michaela ŠPENEROVÁ – Mechanismy účinku protinádorových léčiv: molekulární mechanismy odpovědi na glukokortikoidy u dětské akutní lymfoblastické leukémie.
- 2) Petr KONEČNÝ – Screening of chemical compounds in vitro – Analysis of the biological activity of small molecules
- 3) Dušan HOLUB - Proteomics in translational and clinical research
- 4) Tomáš OŽDIAN - Nádorová proteomika v klinické a experimentální onkologii
- 5) Jiří ŘEHULKA - Nová protinádorová léčiva zasahující do buněčného cyklu
- 6) Gabriela RYLOVÁ - Identification of molecular targets of anticancer drugs by proteomic methods (2019)
- 7) Jana VÁCLAVKOVÁ - Identification of mechanisms of action of molecules with anticancer effect (2021)
- 8) Jana KOTULOVÁ - Adenosine receptor inhibitors, the development and optimization (2022)

Mentor of ongoing PhD students:

- 1) Lenka HRUBÁ - Mechanism of multidrug resistance (MDR) in cancer cells
- 2) Jarmila STANKOVÁ - Cytotoxic drugs molecular target identification by methods of cell biology and proteomics
- 3) Kateřina JEČMEŇOVÁ – Drug resistance mechanisms in cancer
- 4) Denisa KROUPOVÁ – Proteomic biomarkers of cancer and neurodegeneration
- 5) Pavlína BALATKOVÁ – Development of nanoparticles for therapeutic and biomarker purposes

ŘEŠENÉ PROJEKTY:

EU-OPENSURE DRIVE, H2020 - Driving forward long-term Sustainability of Excellence in Chemical Biology within Europe and beyond

ISIDOR – H2020 – Integrated Services for Infectious Disease Outbreak Research

TN0100013 Personalized Medicine – Diagnostics and Therapy

EF18\_046/0016118 Modernization of the National Infrastructure for Chemical Biology  
FR-T14/625 New derivatives of 5-azacytosine nucleosides like demethylating therapeutics: identification of clinical candidates and efficiency biomarkers.  
FW04020197 Nanoparticle formulation of copper dithiocarbamate for the cancer treatment  
GA19-08124S Cytostatic hetero-fused 7-deazapurine nucleosides, pharmacology, metabolism and mechanism of action.  
GP301/09/P433 Betulinic acid derivatives, identification of mechanism of anticancer action based on expression profiling.  
LM2018130 National Infrastructure for Chemical Biology  
LX22NPO5107 National institute for Neurological Research  
NS9951 Significance of hepcidin in the diagnosis and treatment of anemia in children  
NT14282 Looking for biomarkers of upper gastrointestinal tract tumors by the use of proteomic profiling.  
NV15-31984A Translational research and development of selective nucleotide kinase inhibitors for therapy of Alzheimer disease.  
NV16-31156A Application of proteomics, immunohistochemistry and new experimental approaches for amyloid typization  
NV16-32302A Pulmonary condensate: A promising source of proteomic biomarkers for non-invasive evaluation of pulmonary involvement in asthma and cystic fibrosis.  
NV18-08-00291 Biomarkers of endometrial receptivity A prospective multicenter study on proteomic biomarkers of endometrial receptivity in cervical mucus