

Základní údaje o školiteli doktorského studia v biomedicině na 3. LF UK

Oborová rada:	Preventivní medicína	
Příjmení, jméno, tituly:	Doc. RNDr. Pavel Souček, CSc.	
Adresa pracoviště:	Laboratoř toxikogenomiky Centrum toxikologie a zdravotní bezpečnosti Státní zdravotní ústav Šrobárova 48, Praha 10 - 100 42	
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Odborné zaměření: (maxim. 254 znaků)	Biochemie a toxikologie, farmakogenomika	
Výzkumné zaměření: (maxim. 254 znaků)	molecular toxicology, carcinogenesis, epidemiology and genetics of cancer, genotyping, phenotyping of biotransformation enzymes, study of their structure and function, mechanism of action of anticancer drugs	
Jména doktorandů, kteří ukončili úspěšně studium pod vedením školitele:	Jméno	Rok obhajoby
	Název doktorské práce	
	1. Ing. Miluše Hubáčková, PhD, 2013	
	2. Ing. Ivona Hlavatá, PhD, 2013	
	3. MUDr. Beatrice Mohelníková-Duchoňová, PhD, 2012	
	4. MUDr. David Vrána, PhD, 2011 (PS konzultant)	
	5. Mgr. Eliška Kondrová, PhD, 2008	
	6. Mgr. Jana Šarmanová-Stříbrná, PhD, 2004	
Témata doktorských prací pro akademický rok 2014/2015:	1. Úloha signální dráhy oxysterolů v rozvoji solidních nádorů 2. 3.	
Klinický kontext: (pro uchazeče o kombinovaný klinický výcvik)	Obory chirurgické:	
	Obory vnitřního lékařství:	
	Obory preventivní:	
	Obory další:	
Kontext programů rozvoje UK (PRVOUK)	<input type="checkbox"/> P02 - Environmentální výzkum <input type="checkbox"/> P27 - Komplexní onkologický program <input type="checkbox"/> P28 - Stomatologická onemocnění, výskyt, mechanismy, prevence, léčba, interakce <input type="checkbox"/> P31 - Iničiální stadia diabetes mellitus, metabolických a nutričních poruch <input type="checkbox"/> P32 - Poruchy reprodukčního zdraví a zdravého startu do života <input type="checkbox"/> P33 - Komplexní poranění a funkční poruchy páteře, pánve, končetin a synkopicky blízkých orgánů a struktur (morfologie, biomechanika, diagnostika a léčba) <input type="checkbox"/> P34 - Psychoneurofarmakologický výzkum <input type="checkbox"/> P35 - Kardiovaskulární výzkumný program <input type="checkbox"/> P38 - Biologické aspekty zkoumání lidského pohybu <input type="checkbox"/> Další (specifikovat):	
Seznam publikací v časopisech s IF za posledních 5 let :		

1. Vrana D, Novotny J, Holcatova I, Hlavata I, Soucek P. (2010) CYP1B1 gene polymorphism modifies pancreatic cancer risk but not survival. *Neoplasma* 57(1):15-9. IF = 1.449
2. Mohelnikova-Duchonova B, Vrana D, Holcatova I, Ryska M, Smerhovsky Z, Soucek P. (2010) CYP2A13, ADH1B and ADH1C Gene Polymorphisms and Pancreatic Cancer Risk. *Pancreas*, 39(2):144-148. IF = 2.607
3. Chou YC, Chung YT, Liu TY, Wang SY, Chau GY, Chi CW, Soucek P, Krausz KW, Gelboin HV, Lee CH, Ueng YF. (2010) The oxidative metabolism of dimemorfan by human cytochrome P450 enzymes. *J Pharmacol Sci*, 99(2):1063-77. IF = 2.260
4. Naccarati A, Pardini B, Polakova V, Smerhovsky Z, Vodickova L, Soucek P, Vrana D, Holcatova I, Ryska M, Vodicka P. (2010) Genotype and haplotype analysis of TP53 gene and the risk of pancreatic cancer: an association study in the Czech Republic. *Carcinogenesis* 31(4):666-70. IF = 5.402
5. Mateju M, Stribrna J, Zikan M, Kleibl Z, Janatova M, Kormunda S, Novotny J, Soucek P, Petruzela L, Pohlreich P. (2010) Population-based study of BRCA1/2 mutations: Family history based criteria identify minority of mutation carriers. *Neoplasma* 57(3):280-5. IF = 1.449
6. Méplán C, Hughes DJ, Pardini B, Naccarati A, Soucek P, Vodickova L, Hlavatá I, Vrána D, Vodicka P, Hesketh JE. (2010) Genetic variants in selenoprotein genes increase risk of colorectal cancer. *Carcinogenesis* 31(6):1074-9. IF = 5.402
7. Soucek P, Susova S, Mohelnikova-Duchonova B, Gromadzinska J, Morawiec-Sztandera A, Vodicka P, Vodickova L (2010) Polymorphisms in xenobiotic-metabolizing enzymes and the risk of head and neck squamous cell carcinoma in the Slavic population of the central Europe. *Neoplasma* 57(5):415-21. IF = 1.449
8. Hlavata I, Vrana D, Smerhovsky Z, Pardini B, Naccarati B, Vodicka P, Novotny J, Mohelnikova-Duchonova B, Soucek P. (2010) Association between exposure-relevant polymorphisms in *CYP1B1*, *EPHX1*, *NQO1*, *GSTM1*, *GSTP1*, and *GSTT1* and risk of colorectal cancer in a Czech population. *Oncol Rep*, 24(5):1347-53. IF = 1.686
9. Mohelnikova-Duchonova B, Havranek O, Hlavata I, Foretová L, Kleibl Z, Pohlreich P, Soucek P. (2010) *CHEK2* gene alterations in the forkhead-associated domain, 1100delC and del5395 do not modify the risk of sporadic pancreatic cancer. *Cancer Epidemiology*, 34(5):656-658. IF = 1.182
10. Hanova M, Stetina R, Vodickova L, Vaclavikova R, Hlavac P, Smerhovsky Z, Naccarati A, Polakova V, Soucek P, Kuricova M, Manini P, Kumar R, Hemminki K, Vodicka P. (2010) Modulation of DNA repair capacity and mRNA expression levels of XRCC1, hOGG1 and XPC genes in styrene-exposed workers. *Toxicol Appl Pharmacol*, 248(3):194-200. IF = 3.993
11. Mohelníková-Duchoňová B, Souček P. Role membránových transportérů v chemorezistenci karcinomu pankreatu při terapii gemcitabinem. *Klin Onkol*. 2010;23(5):306-10. Review, in Czech.
12. Souček P: Význam genetických polymorfismů enzymů metabolizujících léčiva u nádorových onemocnění. In: *Metabolismus léčiv a jiných xenobiotik* (Ed. Skálová L. a kolektiv), vydalo Karolinum v Praze 2010, s.116-122, Monography in Czech.
13. Hanova M, Vodickova L, Vaclavikova R, Smerhovsky Z, Stetina R, Hlavac P, Naccarati A, Slyskova J, Polakova V, Soucek P, Kumar R, Hemminki K, Vodicka P. DNA damage, DNA repair rates and mRNA expression levels of cell cycle genes (TP53, p21CDKN1A, BCL2 and BAX) with respect to occupational exposure to styrene. *Carcinogenesis* 2011;32(1):74-9. IF = 5.702
14. Mohelnikova-Duchonova B, Marsakova L, Vrana D, Holcatova I, Ryska M, Smerhovsky Z, Slamova A, Schejbalova M, Soucek P. Superoxide Dismutase and NAD(P)H Quinone Oxidoreductase Polymorphisms and Pancreatic Cancer Risk. *Pancreas* 2011;40(1):72-78. IF = 2.386
15. Soucek P, Kondrova E, Hermanek J, Stopka P, Boumendjel A, Ueng YF, Gut I. New model system for testing effects of flavonoids on doxorubicin-related formation of hydroxyl radicals. *Anti-cancer Drugs* 2011;22(2):176-84. IF = 2.407
16. Hughes D, Hlavatá I, Soucek P, Pardini B, Naccarati A, Vodickova L, O'Morain C, Vodicka P. Ornithine Decarboxylase G316A Genotype and Colorectal Cancer Risk. *Colorectal Dis* 2011;13(8):860-4. IF = 2.927
17. Hughes DJ, Hlavatá I, Soucek P, Pardini B, Naccarati A, Vodickova L, Jenab M, O'Morain C, and Vodicka P. Variation in the Vitamin D receptor gene is not associated with Colorectal Cancer in the Czech Republic. *Journal of Gastrointestinal Cancer* 2011;42(3):149-54. no IF
18. Ueng YF, Chen CC, Chung YT, Liu TY, Chang YP, Lo WS, Murayama N, Yamazaki H, Souček P, Chau GY, Chi CW, Chen RM, Li DT. Mechanism-based inhibition of cytochrome P450 (CYP)2A6 by chalapensin in recombinant systems, in human liver microsomes and in mice in vivo. *Br J Pharmacol* 2011;163(6):1250-62. IF = 4.409
19. Havranek O, Spacek M, Hubacek P, Mocikova H, Benesova K, Soucek P, Trneny M, Kleibl Z. No association between the TP53 codon 72 polymorphism and risk or prognosis of Hodgkin and non-Hodgkin lymphoma. *Leuk Res* 2011;35(8):1117-9. IF = 2.923
20. Mohelnikova-Duchonova B, Soucek P, The Role of Membrane Transporters in Cellular Resistance of Pancreatic Carcinoma to Gemcitabine and Erlotinib. In: *Horizons in Cancer Research, Volume 46*, (H.S. Watanabe ed.), NOVA Science Publishers Inc., NY, USA, 2012.
21. Hubackova M, Vaclavikova R, Ehrlichova M, Mrhalova, Kodet R, Kubackova K, Vrána D, Gut I, Soucek P. Association of

- superoxide dismutases and NAD(P)H oxidoreductases with prognosis of patients with breast carcinomas. *Int J Cancer* 2012;130(2):338-348. IF = 6.198
22. Hlavata I, Mohelnikova-Duchonova B, Vaclavikova R, Liska V, Pitule P, Novak P, Bruha J, Vycital O, Holubec L, Treska V, Vodicka P, Soucek P. The role of ABC transporters in progression and clinical outcome of colorectal cancer. *Mutagenesis* 2012;27(2):187-96. IF = 3.500
 23. Houlston RS; members of COGENT. COGENT (COLOrectal cancer GENEtics) revisited. *Mutagenesis* 2012;27(2):143-51. IF = 3.500
 24. Mohelnikova-Duchonova B, Oliverius M, Honsova E, Soucek P. Evaluation of reference genes and normalization strategy for quantitative real-time PCR in human pancreatic carcinoma. *Dis Markers* 2012;32(3):203-10. IF = 2.140
 25. Otová B, Ojima I, Václavíková R, Hrdý J, Ehrlichová M, Souček P, Vobořilová J, Němcová V, Zanardi I, Horský S, Kovář J, Gut I. Second-generation taxanes effectively suppress subcutaneous rat lymphoma: role of disposition, transport, metabolism, in vitro potency and expression of angiogenesis genes. *Invest New Drugs*. 2012; 30:991–1002. IF = 3.498
 26. Kubrycht J, Sigler K, Souček P. Virtual interactomics of proteins from biochemical standpoint. *Mol Biol Int*. 2012;2012:976385. no IF
 27. Ehrlichová M, Ojima I, Chen J, Václavíková R, Němcová-Fürstová V, Vobořilová J, Simek P, Horský S, Souček P, Kovář J, Brabec M, Gut I. Transport, metabolism, cytotoxicity and effects of novel taxanes on the cell cycle in MDA-MB-435 and NCI/ADR-RES cells. *Naunyn Schmiedebergs Arch Pharmacol*. 2012;385(10):1035-48. IF = 2.147
 28. Vaclavikova R, Ehrlichova M, Hlavata I, Pecha V, Kozevnikovova R, Trnkova M, Adámek J, Edvardsen H, Kristensen VN, Gut I and Soucek P. Detection of frequent ABCB1 polymorphisms by high-resolution melting curve analysis and their effect on breast carcinoma prognosis. *Clin Chem Lab Med* 2012;50(11):1999–2007. IF = 3.009
 29. Lo WS, Lim YP, Chen CC, Hsu CC, Souček P, Yun CH, Xie W, Ueng YF. A dual function of the furanocoumarin chalepensis in inhibiting Cyp2a and inducing Cyp2b in mice: the protein stabilization and receptor-mediated activation. *Arch Toxicol*. 2012; 86(12):1927-38. IF = 5.215
 30. Slyskova J, Korenkova V, Collins AR, Prochazka P, Vodickova L, Svec J, Lipska L, Levy M, Schneiderova M, Liska V, Holubec L, Kumar R, Soucek P, Naccarati A, Vodicka P. Functional, genetic and epigenetic aspects of base and nucleotide excision repair in colorectal carcinomas. *Clin Cancer Res*. 2012; 18(21):5878-5887. IF = 7.837
 31. Campa D, Rizzato C, Capurso G, Giese N, Funel N, Greenhalf W, Soucek P, Gazouli M, Pezzilli R, Pasquali C, Talar-Wojnarowska R, Cantore M, Andriulli A, Scarpa A, Jamroziak K, Fave GD, Costello E, Khaw KT, Heller A, Key TJ, Theodoropoulos G, Malecka-Panas E, Mambrini A, Bambi F, Landi S, Pedrazzoli S, Bassi C, Pacetti P, Piepoli A, Tavano F, di Sebastiano P, Vodickova L, Basso D, Plebani M, Fogar P, Büchler MW, Bugert P, Vodicka P, Boggi U, Neoptolemos JP, Werner J, Canzian F. Genetic susceptibility to pancreatic cancer and its functional characterisation: The PANcreatic Disease ReseArch (PANDoRA) consortium. *Dig Liver Dis*. 2013; 45(2):95-9. IF = 2.889
 32. Campa D, Rizzato C, Bauer AS, Werner J, Capurso G, Costello E, Talar-Wojnarowska R, Jamroziak K, Pezzilli R, Gazouli M, Khaw KT, Key TJ, Bambi F, Mohelnikova-Duchonova B, Heller A, Landi S, Vodickova L, Theodoropoulos G, Bugert P, Vodicka P, Hoheisel J, Delle Fave G, Neoptolemos J, Soucek P, Buchler MW, Giese NA, Canzian F. Lack of replication of seven pancreatic cancer susceptibility loci identified in two Asian populations. *Cancer Epidemiol Biomarkers Prev*. 2013; 22(2):320-3. IF = 4.324
 33. Nilsson R, Antić R, Berni A, Dallner G, Dettbarn G, Gromadzinska J, Joksić G, Lundin C, Palitti F, Prochazka G, Rydzynski K, Segerbäck D, Souček P, Tekle M, Seidel A. Exposure to polycyclic aromatic hydrocarbons in women from Poland, Serbia and Italy - relation between PAH metabolite excretion, DNA damage, diet and genotype (the EU DIEPHY project). *Biomarkers*. 2013;18(2):165-73. IF = 2.522
 34. Rizzato C, Campa D, Pezzilli R, Soucek P, Greenhalf W, Capurso G, Talar-Wojnarowska R, Heller A, Jamroziak K, Khaw KT, Key TJ, Bambi F, Landi S, Mohelnikova-Duchonova B, Vodickova L, Büchler MW, Bugert P, Vodicka P, Neoptolemos JP, Werner J, Hoheisel JD, Bauer AS, Giese N, Canzian F. ABO blood groups and pancreatic cancer risk and survival: Results from the PANcreatic Disease ReseArch (PANDoRA) consortium. *Oncol Rep*. 2013;29(4):1637-44. IF = 2.191
 35. Brynychová V, Hlaváč V, Ehrlichová M, Václavíková R, Pecha V, Trnková M, Wald M, Mrhalová M, Kubáčková K, Pikus T, Kodet R, Kovář J, Souček P. Importance of transcript levels of caspase-2 isoforms S and L for breast carcinoma progression. *Future Oncol* 2013; 9(3):427-38. IF = 2.611
 36. Hlaváč V, Brynychová V, Václavíková R, Ehrlichová M, Vrána D, Pecha V, Koževnikovová R, Trnková M, Gatěk J, Kopperová D, Gut I, Souček P. The expression profile of ABC transporter genes in breast carcinoma. *Pharmacogenomics* 2013; 14(5):515-29. IF = 3.450
 37. Mohelnikova-Duchonova B, Brynychova V, Oliverius M, Honsova E, Kala Z, Muckova K, Soucek P. Differences in transcript levels of ABC transporters between pancreatic adenocarcinoma and non-neoplastic tissues. *Pancreas* 2013; 42(4):707-16. IF = 3.008
 38. Ehrlichova M, Mohelnikova-Duchonova B, Hrdy J, Brynychova V, Mrhalova M, Kodet R, Rob L, Pluta M, Gut I, Soucek P, Vaclavikova R. The association of taxane resistance genes with the clinical course of ovarian carcinoma. *Genomics*.

2013; 102(2):96-101. IF = 2.793

39. Kubrycht J, Sigler K, Soucek P, Hudecek J. Structures composing protein domains. *Biochimie*. 2013; 95(8):1511-24. IF = 3.123
40. Mohelnikova-Duchonova B, Brynychova V, Hlavac V, Kocik M, Oliverius M, Hlavsa J, Honsova E, Mazanec J, Kala Z, Melichar B, Soucek P. The association between the expression of solute carrier transporters and the prognosis of pancreatic cancer. *Cancer Chemother Pharmacol*. 2013; 72(3):669-82. IF = 2.571
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42. Souček P: A.4.1. Použití tkáňových modelů ve farmakogenetice nádorových onemocnění, *In: Experimentální chirurgie - nové technologie v medicíně. I. díl: Experimentální chirurgie* (Ed. Liška V., Rosenberg J. a kol.) vydala Univerzita Karlova v Praze, Lékařská fakulta v Plzni, 2013 s. 96-118, Monography in Czech.
43. Flanagan L, Schmid J, Ebert M, Soucek P, Kunicka T, Liska V, Bruha J, Neary P, Dezeeuw N, Tommasino M, Jenab M, Prehn JH, Hughes DJ. Fusobacterium nucleatum associates with stages of colorectal neoplasia development, colorectal cancer and disease outcome. *Eur J Clin Microbiol Infect Dis*. 2014;33(8):1381-1390. IF₂₀₁₃ = 2.544
44. Kunická T, Souček P. Importance of ABCC1 for cancer therapy and prognosis. *Drug Metab Rev*. 2014; 46(3):325-342. IF₂₀₁₃ = 6.286
45. Kunická T, Václavíková R, Hlaváč V, Vrána D, Pecha V, Rauš K, Trnková M, Kubáčková K, Ambruš M, Vodičková L, Vodička P, Souček P. Non-coding polymorphisms in nucleotide binding domain 1 in *ABCC1* gene associate with transcript level and survival of patients with breast cancer. *Plos One* 2014;9(7):e101740. IF₂₀₁₃ = 3.534
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47. Mohelnikova-Duchonova B, Melichar B, Soucek P. FOLFOX/FOLFIRI pharmacogenetics: the call for a personalized approach in colorectal cancer therapy. *World J Gastroenterol* 2014; 14;20(30):10316-10330. IF₂₀₁₃ = 2.433
48. Wolpin BM, Rizzato C, Kraft P, Kooperberg C, Petersen GM, Wang Z, Arslan AA, Beane-Freeman L, Bracci PM, Buring J, Canzian F, Duell EJ, Gallinger S, Giles GG, Goodman GE, Goodman PJ, Jacobs EJ, Kamineni A, Klein AP, Kolonel LN, Kulke MH, Li D, Malats N, Olson SH, Risch HA, Sesso HD, Visvanathan K, White E, Zheng W, Abnet CC, Albanes D, Andreotti G, Austin MA, Barfield R, Basso D, Berndt SI, Boutron-Ruault MC, Brotzman M, Büchler MW, Bueno-de-Mesquita HB, Bugert P, Burdette L, Campa D, Caporaso NE, Capurso G, Chung C, Cotterchio M, Costello E, Elena J, Funel N, Gaziano JM, Giese NA, Giovannucci EL, Goggins M, Gorman MJ, Gross M, Haiman CA, Hassan M, Helzlsouer KJ, Henderson BE, Holly EA, Hu N, Hunter DJ, Innocenti F, Jenab M, Kaaks R, Key TJ, Khaw KT, Klein EA, Kogevinas M, Krogh V, Kupcinskis J, Kurtz RC, LaCroix A, Landi MT, Landi S, Le Marchand L, Mambrini A, Mannisto S, Milne RL, Nakamura Y, Oberg AL, Owzar K, Patel AV, Peeters PH, Peters U, Pezzilli R, Piepoli A, Porta M, Real FX, Riboli E, Rothman N, Scarpa A, Shu XO, Silverman DT, Soucek P, Sund M, Talar-Wojnarowska R, Taylor PR, Theodoropoulos GE, Thornquist M, Tjønneland A, Tobias GS, Trichopoulos D, Vodicka P, Wactawski-Wende J, Wentzensen N, Wu C, Yu H, Yu K, Zeleniuch-Jacquotte A, Hoover R, Hartge P, Fuchs C, Chanock SJ, Stolzenberg-Solomon RS, Amundadottir LT. Genome-wide association study identifies multiple susceptibility loci for pancreatic cancer. *Nat Genet*. 2014; 46(9):994-1000. IF₂₀₁₃ = 29.648
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