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Dr. Kucharíková works as an assistant professor at the Faculty of Health and Social Sciences, Department of Research Techniques used in Laboratory. She teaches following subjects: Microbiology, Applied research, Research in Laboratory Medicine and How to write a good Research paper. Currently, she works as a researcher at the new building of Clinical and Research disciplines situated within University hospital of Trnava. Her research areas are dedicated to biofilm formation caused by pathogenic yeasts, namely *Candida albicans* and *Candida glabrata* and pathogenic bacterial species *Staphylococcus aureus* and *Staphylococcus epidermidis*. Moreover, she is interested in emerging problems related to increased resistance to antibiotics and antifungal agents.

Date of birth: 1983

Doctoral degree: 2010 (Faculty of Natural Sciences, Comenius University in Bratislava, Slovakia), 2011 (KU Leuven, Belgium)

## Research papers

1. Rogiers Ona., Holtappels M., Siala W., Lamkanfi M., Van Bambeke F., Lagrou K., Van Dijck P. and **Kucharíková S. (2018)** Anidulafungin increases anti-bacterial activity of tigecycline in polymicrobial *Candida albicans-Staphylococcus aureus* biofilms on intraperitoneally implanted foreign bodies. Accepted for publication in *Journal of Antimicrobial Chemotherapy*. doi: 10.1093/jac/dky246.
2. Vande Velde G., **Kucharíková S.**, Van Dijck P. and Himmelreich U. (2018) Bioluminescence imaging increases *in vivo* screening efficiency for antifungal activity against device-associated *Candida albicans* biofilms. Accepted for publication in *International Journal of Antimicrobial Agents* 52(1). 42-51.
3. Holtappels M, Swinnen E, De Groef L, Wuyts J, Moons L, Lagrou K, Van Dijck P, **Kucharíková S. (2017)** Antifungal Activity of Oleylphosphocholine on *In Vitro* and *In Vivo* *Candida albicans* Biofilms. *Antimicrobial Agents and Chemotherapy* 62(1). doi: 10.1128/AAC.01767-17.
4. Cools TL, Vriens K, Struyfs C, Verbandt S, Ramada MHS, Brand GD, Bloch C Jr, Koch B, Traven A, Drijfhout JW, Demuyser L, **Kucharíková S**, Van Dijck P, Spasic D, Lammertyn J, Cammue BPA, Thevissen K. (2017) The antifungal plant defensin HsAFP1 is a phosphatidic acid-interacting peptide inducing membrane permeabilization. *Frontiers in Microbiology* 8:2295. doi: 10.3389/fmicb.
5. Cools TL, Struyfs C, Drijfhout JW, **Kucharíková S**, Lobo Romero C, Van Dijck P, Ramada MHS, Bloch C Jr, Cammue BPA, Thevissen K. (2017) A linear 19-Mer plant defensin-derived

peptide acts synergistically with caspofungin against *Candida albicans* biofilms. *Frontiers in Microbiology* 8:2051. doi: 10.3389/fmicb.

6. Kong EF, Tsui C, **Kucharíková S**, Van Dijck P, Jabra-Rizk MA. (2017) Modulation of *Staphylococcus aureus* response to antimicrobials by the *Candida albicans* quorum sensing molecule farnesol. *Antimicrobial Agents and Chemotherapy* 61(12). doi: 10.1128/AAC.01573-17.
7. Siala W, **Kucharíková S**, Braem A, Vleugels J, Tulkens PM, Mingeot-Leclerq MP, Van Dijck P, Van Bambeke F. (2016) The antifungal caspofungin increases fluoroquinolone activity against *Staphylococcus aureus* biofilms by inhibiting N-acetylglucosamine transferase. *Nature Communications* 7:13286. 2016.
8. Kong EF, Tsui C, **Kucharíková S**, Andes D, Van Dijck P, Jabra-Rizk MA. (2016) Commensal Protection of *Staphylococcus aureus* against Antimicrobials by *Candida albicans* Biofilm Matrix. *MBio* 7(5):e01365-16. doi: 10.1128/mBio.01365-16.
9. Peeters E, Hooyberghs G, Robijns S, Waldrant K, De Weerd A, Delattin N, Liebens V, **Kucharíková S**, Tournu H, Verstraeten N, Dovgan B, Girandon L, Fröhlich M, De Brucker K, Van Dijck P, Michiels J, Cammue BP, Thevissen K, Vanderleyden J, Van der Eycken E, Steenackers HP. (2016) Modulation of the substitution pattern of 5-aryl-2-aminoimidazoles allows fine-tuning of their anti-biofilm activity spectrum and toxicity. Accepted in *Antimicrobial Agents and Chemotherapy*. 2016. pii: AAC.00035-16.
10. Gerits E, **Kucharíková S**, Van Dijck P, Erdtmann M, Krona A, Lövenklev M, Fröhlich M, Dovgan B, Impellizzeri F, Braem A, Vleugels J, Robijns SC, Steenackers HP, Vanderleyden J, De Brucker K, Thevissen K, Cammue BP, Fauvart M, Verstraeten N, Michiels J. (2016) Antibacterial activity of a new broad-spectrum antibiotic covalently bound to titanium surfaces. *Journal of Orthopaedic Research*. doi: 10.1002/jor.23238.
11. Formosa-Dague C, Feuillie C, Beaussart A, Derclaye S, **Kucharíková S**, Lasa I, Van Dijck P, Dufrière YF. (2016) Sticky Matrix: Adhesion Mechanism of the Staphylococcal Polysaccharide Intercellular Adhesin. *ACS Nano* 10(3):3443-52.
12. **Kucharíková S**, Gerits E, De Brucker K, Braem A, Ceh K, Majdič G, Španič T, Pogorevc E, Verstraeten N, Tournu H, Delattin N, Impellizzeri F, Erdtmann M, Krona A, Lövenklev M, Knezevic M, Fröhlich M, Vleugels J, Fauvart M, de Silva WJ, Vandamme K, Garcia-Forgas J, Cammue BP, Michiels J, Van Dijck P, Thevissen K. (2016) Covalent immobilization of antimicrobial agents on titanium prevents *Staphylococcus aureus* and *Candida albicans* colonization and biofilm formation. *Journal of Antimicrobial Chemotherapy* 71(4):936-45.
13. El-Kirat-Chatel S., Beaussart A., Derclaye S., Alsteens D., **Kucharíková S.**, Van Dijck P., Dufrière. (2015) Force nanoscopy of hydrophobic interactions in the fungal pathogen *Candida glabrata*. *ACS Nano* 9(2):1648-55.
14. **Kucharíková S.**, Vande Velde G., Himmelreich U. and Van Dijck P. (2015) *Candida albicans* biofilm development on medically-relevant foreign bodies in a mouse subcutaneous model followed by bioluminescence imaging. *J Vis Exp* 95. doi: 10.3791/52239.
15. Kong E.\*, **Kucharíková S.\***, Van Dijck P., Peters B. M., Shirtliff M. E., Jabra-Rizk M. A. (2015). Clinical implications of oral candidiasis: host tissue damage and disseminated bacterial disease. *Infect Immun* 83(2):604-13. \* equal contribution.

16. **Kucharíková S.**, Neirinck B., Sharma S., Vleugels J., Lagrou K. and Van Dijck P. (2015) *In vivo Candida glabrata* biofilm development on foreign body in a rat subcutaneous model. *J Antimicrob Chemother* 70(3):846-56
17. De Cremer K., Delattin N., De Brucker K., Peeters A., Kucharíková S., Gerits E., Verstraeten N., Michiels J., Van Dijck P., Cammue B. P., Thevissen K. (2014) Oral administration of the broad-spectrum antibiofilm compound toremifene inhibits *Candida albicans* and *Staphylococcus aureus* biofilm formation *in vivo*. *Antimicrob Agents Chemother* 58(12):7606-10.
18. Vande Velde G., **Kucharíková S.**, Van Dijck P. and Himmelreich U. (2014) Bioluminescence imaging of fungal biofilm development in live animals. *Methods Mol Biol* 1098, 153-167.
19. Vande Velde G., **Kucharíková S.\***, Schrevels S., Himmelreich U. and Van Dijck P. (2014) Towards non-invasive monitoring of pathogen-host interactions during biofilm formation by *Candida albicans* using *in vivo* bioluminescence. *Cellular Microbiology* 16(1)115-130. \* **equal contribution**
20. Beaussart A., Herman P., El-Kirat-Chatel S., Lipke P.N., **Kucharíková S.**, Van Dijck P. and Dufrière. (2013) Single-cell force spectroscopy of the medically-important *Staphylococcus epidermidis*-*Candida albicans* interaction. *Nanoscale* 5(22):10894-900.
21. **Kucharíková S.**, Spriet I., Maertens J., Van Dijck P. and Lagrou K. Activities of systemically administered echinocandins against *in vivo* mature *Candida albicans* biofilms developed in a subcutaneous rat model. (2013) *Antimicrob Agents Chemother* 57(5), 2365-2368, 2013.
22. Beaussart A., Alsteens D., El-Kirat-Chatel S., Lipke P.N., **Kucharíková S.**, Van Dijck P. and Dufrière. (2012) Single-molecule imaging and functional analyses of Als adhesins and mannans during *Candida albicans* morphogenesis. *ACS Nano* 6(12) 10950-10964.
23. Bink A.\* **Kucharíková S.\***, Vleugels J., Neirinck B. Van Dijck P., Cammue B. P.A. and Thevissen K. (2012) The non-steroidal anti-inflammatory drug Diclofenac potentiates the *in vivo* activity of Caspofungin against *Candida albicans* biofilms. *J Infect Dis* 206(11) 1790-1797. \* **equal contribution**
24. Shahrooei M., Hira V., Khodaparast L., Khodaparast L., Stijlemans B., **Kucharíková S.**, Burghout P., Hermans P. and Van Eldere J. (2012) Vaccination with SesC decreases *Staphylococcus epidermidis* biofilm formation. *Infect Immun* 80, 3660-3668.
25. Fiori A., **Kucharíková S.**, Govaert G., Cammue B. P. A., Thevissen K. and Van Dijck P. (2012) The heat-induced molecular disaggregase Hsp104 of *Candida albicans* plays a role in biofilm formation and pathogenicity in the worm infection model. *Eukaryotic Cell* 11(8), 1012-1020.
26. Bink A., Govaert G., Vandenbosch D., **Kucharíková S.**, Coenye T., Nelis H., Van Dijck P., Cammue B. P.A. and Thevissen K. (2012) Efg1 Protects *Candida albicans* Biofilms to Miconazole *In vitro* and *In vivo*. *J Med Microbiol* 61(Pt 6), 813–819.
27. **Kucharíková S.**, Tournu H., Lagrou K., Van Dijck P. and Bujdáková H. (2011) Detailed comparison of *Candida albicans* and *Candida glabrata* biofilms under different conditions and its susceptibility to echinocandins. *J Med Microbiol* 60, 1261–1269.
28. **Kucharíková S.**, Tournu H., Holtappels M. Van Dijck P., Lagrou K. (2010) *In vivo* efficacy of anidulafungin against mature *Candida albicans* biofilms in a novel rat model of catheter-associated candidiasis. *Antimicrob Agents Chemother* 54 (10):4474-4475.

29. Nailis H., **Kucharíková S.**, Řičicová M., Van Dijck P., Deforce D., Nelis H. and Coenye T. (2010) Real-time PCR expression profiling of genes encoding potential virulence factors in *Candida albicans* biofilms: identification of model-dependent and -independent gene expression. *BMC Microbiology* 10: 114 doi: 10.1186/1471-2180-10-114
30. Řičicová M.\*, **Kucharíková S.\***, Tourneau H.\*, Hendrix J., Bujdáková H., Van Eldere J., Lagrou K. and Van Dijck P. (2010) *Candida albicans* biofilm formation in a new *in vivo* rat model. *Microbiology* 156 (Pt3): 909-919. \* **equal contribution**
31. **Kucharíková S.**, Van Dijck P., Lisalová M. and Bujdáková H. (2010) Effect of antifungals on itraconazole resistant *Candida glabrata*. *Cent Eur J Biol* 5(3): 318-323.
32. Borecká-Melkusová S., Moran G. P., Sullivan D. J., **Kucharíková S.**, Chorvát Jr D., Bujdáková H. (2009) The expression of genes involved in the ergosterol biosynthesis pathway in *Candida albicans* and *Candida dubliniensis* biofilms exposed to fluconazole. *Mycoses* 52:118-128.
33. Helena Bujdáková, Ema Paulovičová, Silvia Borecká-Melkusová, Juraj Gašperík, **Soňa Kucharíková**, Anna Kolečka, Claudia Lell, Dorte B. Jensen, Reinhard Würzner, Dušan Chorvát and Iva Pichová. (2008) Partial purification and immunological characterization of the 45 kDa cell surface antigen of *Candida albicans* and investigation of its potential role in adherence. *J Med Microbiol* 57:1466-1472.

#### **Oral presentation at foreign conferences**

1. **Kucharíková S.**, Jabra-Rizk M.A. & Van Dijck P. (2016) *Candida albicans* biofilm formation and its interaction with bacteria. Seminár na pozvanie od Prof. Françoise Van Bambeke. UCL, Brussels.
2. **Kucharíková S.** & Van Dijck P. (2015) *In vivo Candida glabrata* biofilm development on foreign body in a rat subcutaneous model. 3rd Workshop on Bacterial and Fungal Biofilms, Antwerp, Belgium.
3. **Kucharíková S.**, Jabra-Rizk M.A. & Van Dijck P. (2015) *Staphylococcus epidermidis* is able to induce *Candida albicans* biofilm tolerance to echinocandins. 25th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark.
4. **Kucharíková S.**, Kong E., Van Dijck P. & Jabra-Rizk M.A. (2015) Ability of *Candida albicans* to induce *Staphylococcus aureus* biofilm tolerance to vancomycin. 4th European Congress on Microbial Biofilms (Eurobiofilms), Brno, Czech Republic.
5. **Kucharíková S.**, Kong E., Jabra-Rizk M. A. and Van Dijck P. (2014) *Candida albicans* – *Staphylococcus aureus* dual species biofilms on mucosal surface. 2nd meeting of Belgian Interdisciplinary Biofilm Research (BIBR), Louvain-la-Neuve, Belgium.
6. **Kucharíková S.**, Jabra-Rizk M. A. & Van Dijck P. (2014) Ability of *Staphylococcus epidermidis* to induce *Candida albicans* biofilm tolerance to echinocandins. Meeting of ESCMID Study Group for Biofilms (ESGB): Biofilm-based Healthcare-associated Infections: from Microbiology to Clinics, Rome, Italy.

7. **Kucharíková S.**, Fiori A. and Van Dijck P. (2014) Als3 peptides as novel antibiofilm molecules. 4th International meeting on Antimicrobial peptides (IMAP) 2014, Graz, Austria.
8. **Kucharíková S.** & Van Dijck P. (2013) Yeast Biofilm models. Eurobiofilms 2013, Ghent, Belgium.
9. **Kucharíková S.** & Van Dijck P. Biofilm models: Models to study *Candida spp.* biofilm. (2014) Summer School on Molecular and physiological regulation of medical and environmental microbial biofilms, Vaalbeek, Belgium.
10. **Kucharíková S.**, Lagrou K., Van Dijck P. (2013) Strategies to fight mature *C. albicans* biofilm developed in a rat subcutaneous model. Symposium on “Health Care associated fungal infections: epidemiology and prevention” organized by Belgian Society of Human and Animal Mycology, Ophain Espace Delgoutte, Belgium.
11. **Kucharíková S.**, Vande Velde G., Schrevels S., Himmelreich U., Van Dijck P. (2013) Non-invasive bioluminescence imaging of mature *Candida albicans* biofilms developed in a subcutaneous mouse model. 1st meeting of Belgian Interdisciplinary Biofilm Research (BIBR), Louvain-la-Neuve, Belgium.
12. **Kucharíková S.** and Bujdáková H. (2005) The effect of subinhibitory concentrations of antifungal agents on cell surface hydrophobicity and biofilm formation in *Candida glabrata*. 7th European Congress of Chemotherapy and Infection, Florence, Italy.

#### Poster presentations at foreign conferences

1. Holtappels M., Swinnen E., De Groef L., Wuyts J., Moons L., Lagrou K., Van Dijck P. & **Kucharíková S.** (2018) The antifungal activity of oleylphosphocholine (OIPC) on *in vitro* and *in vivo* *Candida albicans* biofilms. 14th ASM Conference on Candida and Candidiasis, Rhode Island, Providence, USA.
2. Rogiers O., Van Dijck P. & **Kucharíková S.** (2018) The *in vivo* efficiency of anidulafungin and tigecycline against dual species *Candida albicans* – *Staphylococcus aureus* polymicrobial catheter-associated peritonitis. 14th ASM Conference on Candida and Candidiasis, Rhode Island, Providence, USA.
3. Rogiers O., Van Dijck P. & **Kucharíková S.** (2017) The *in vivo* efficiency of anidulafungin and tigecycline against polymicrobial catheter-associated peritonitis. 7th FEBS Advanced Lecture Course Human Fungal Pathogens: Molecular Mechanisms of Host-Pathogen Interactions and Virulence, La Colle sur Loup, France.
4. **Kucharíková S.**, Vande Velde G., Jacobsen I., Himmelreich U., Brock M. and Van Dijck P. (2016) Bioluminescence imaging of *Candida glabrata* biofilm development. 13th ASM Conference on Candida and Candidiasis, Seattle, USA.
5. Siala W., **Kucharíková S.**, Tulkens P.M., Van Dijck P. & Van Bambeke F. (2015) The antifungal caspofungin (CAS) increases moxifloxacin (MXF) activity against *Staphylococcus aureus* biofilms *in vitro* or in a mouse subcutaneous model. 4th European Congress on Microbial Biofilms (Eurobiofilms), Brno, Czech Republic.
6. **Kucharíková S.**, Vande Velde G., Jacobsen I., Himmelreich U., Brock M. & Van Dijck P. (2015) Bioluminescence imaging of *Candida glabrata* adhesion and biofilm formation. 7th Congress on Trends in Medical Mycology. Lisbon, Portugal.

7. **Kucharíková S.** & Van Dijck P. (2014) Mature *Candida glabrata* biofilm development in a subcutaneous rat model. 12th ASM Conference on Candida and Candidiasis. New Orleans, USA.
8. **Kucharíková S.**, Fiori A., Wächtler B., Beaussart A., Hube B., Dûfrene Y., Schymkowitz J., Rousseau F. and Van Dijck P. (2013) Novel class of peptides based on induced aggregation of *Candida albicans* Als3 protein reduced mature biofilm development, adhesion and invasion to human epithelial cell lines. VIB Seminar 2013, Blankenberge, Belgium.
9. Patrick, Van Dijck, **Kucharíková S.**, Subotic A., Schrevens S., Stynen B, Vande Velde G., Himmelreich U. & Tournu H. (2013) Molecular tools to investigate fungal pathogenicity. BSMM (British society for medical mycology meeting), Newcastle, UK.
10. Schrevens S., Vande Velde G., **Kucharíková S.**, Himmelreich U., Van Dijck P. (2013) *In vivo* bioluminescent imaging of *Candida albicans* biofilms on polyurethane catheter pieces in a subcutaneous mouse model. 5th FEBS Advanced Lecture Course Human Fungal Pathogens: Molecular Mechanisms of Host-Pathogen Interactions and Virulence, La Colle sur Loup, France.
11. Van Dijck P., **Kucharíková S.**, Wächtler B., Beaussart A., Schymkowitz J., Rousseau F., Dûfrene Y., Hube B. and Fiori A. (2013) Induced aggregation of the *Candida albicans* Als3 protein by Als3-specific peptides reduces mature biofilm development, adhesion and invasion of human epithelial cells. 5th FEBS Advanced Lecture Course Human Fungal Pathogens: Molecular Mechanisms of Host-Pathogen Interactions and Virulence, La Colle sur Loup, France.
12. Van Dijck P., **Kucharíková S.**, Tournu, H., Van De Velde G., Schrevens S., Beaussart A., Dufre ne Y., Fiori A., and Himmelreich U. (2013) Novel tools to study biofilm formation in live animals and Als3 peptides as novel antibiofilm molecules. ISSY (International specialized symposium on yeast) meeting in Slovakia, Star  Lesn , Slovakia.
13. Van Dijck P., Kuchar kov  S., Oliveira N., Schrevens S., Math  M., Rosa CA. And Tournu H. (2013) Diversity of pathogenic *Candida* strains in biofilm formation. Sinbio (International symposium on biodiversity); Lavras, Brazil.
14. Van Dijck P., **Kuchar kov  S.**, Van De Velde G., Schrevens S., Mathe L., Beaussart A., Dufre ne Y., Fiori A., Himmelreich U. & Tournu, H. (2013) Novel tools to study biofilm formation in live animals and Als3 peptides as novel antibiofilm molecules. Eurobiofilms 2013, Ghent, Belgium.
15. Vande Velde G., **Kuchar kov  S.**, Schrevens S., Van Dijck P., Himmelreich U. (2013) Bioluminescence imaging of *in vivo* *Candida albicans* biofilm formation. WMIC 2013, Savannah, USA.
16. **Kuchar kov  S.**, Spriet I., Maertens J., Lagrou K. and Van Dijck P. (2012) Caspofungin and anidulafungin are effective against *in vivo* catheter-associated candidiasis developed in a subcutaneous biofilm model. 11th ASM Conference on Candida and Candidiasis. San Francisco, USA.
17. Tournu H., Huang H., **Kuchar kov  S.**, Jabra-Rizk MA, De Borggraeve WM., Luo L., Luyten W., Van Dijck P. (2012) Search for novel antifungal molecules active against *Candida* species biofilms. ICAR Lisbon.
18. Fiori A., **Kuchar kov  S.**, Schymkowitz J., Rousseau F., Wächtler B., Hube B. and Van Dijck P. (2011) Novel anti-Als3 peptides. 25th International Conference ON Yeast Genetics and Molecular Biology, Olsztyn-Kortowo, Poland.
19. **Kuchar kov  S.**, Fiori A., Waechtler B., Hube B., Rousseau F., Schymkovitz J. & Van Dijck P. (2011) Novel class of peptides based on induced aggregation of *Candida albicans* Als3 protein reduced mature biofilm development, adhesion and invasion to human epithelial cell lines. 4th FEBS Advanced Lecture Course Human Fungal Pathogens:

Molecular Mechanisms of Host-Pathogen Interactions and Virulence, La Colle sur Loup, France.

20. Vande Velde G., **Kucharíková S.**, Himmelreich U., Van Dijck P. (2011) Can combined BLI and MRI assist in non-invasively evaluating novel antifungals against *Candida albicans* biofilms *in vivo*? World Molecular Imaging Congress, San Diego, CA, USA.
21. Shahrooei M., Hira V., Stijlemans B., **Kucharíková S.**, Heremans H., Merckx R., Van Dijck P., Hermans P.W.M, Van Eldere J. (2009) Immunization against SesC reduces *S. epidermidis* biofilm formation. 19th ECCMID/ESCMID, Helsinki.
22. **Kucharíková S.**, Řičicová M., Tournu H., Lagrou K. and Van Dijck P. (2009) Analysis of *in vitro* and *in vivo* *Candida albicans* biofilm formation. Eurobiofilms 2009, Rome, Italy.
23. Řičicová M., Tournu H., **Kucharíková S.**, Van Eldere J., Lagrou K., Van Dijck P. (2009) Assessing *Candida* biofilm formation in a new *in vivo* nonvascular model“. ISHAM, Tokyo, Japan.
24. Řičicová M., Lagrou K., **Kucharíková S.**, Van Eldere J., Tournu H. and Van Dijck P. (2008) Unexpected results on *Candida albicans* biofilm formation in a new *in vivo* subcutaneous model. 48th Annual ICCAC®/IDSA 46th Annual Meeting, Washington DC, USA.
25. Řičicová M., **Kucharíková S.**, Tournu H., Lagrou K., and Van Dijck P. (2008) *Candida albicans* biofilm formation in a new *in vivo* subcutaneous model. 9th ASM Conference on *Candida* and Candidiasis, New York, USA.
26. **Kucharíková S.** & Bujdáková H. (2007) The effect of medium, glucose and pH on formation of *Candida glabrata* biofilm *in vitro*, growth and morphology. 32nd FEBS Congress Molecular Machines, Vienna, Austria.
27. **Kucharíková S.**, Lisalová M and Bujdáková H. (2007) Antifungal activity of azoles, amphotericin B, 5-fluorocytosine and echinocandins on cell surface hydrophobicity and *in vitro* model of *Candida glabrata* biofilm formation. 2nd FEBS Advanced Lecture Course Human Fungal Pathogens: Molecular Mechanisms of Host-Pathogen Interactions and Virulence, La Colle sur Loup, France.
28. Borecká S., Kolečka A., **Kucharíková S.**, Chorvát D., Gašperík J. and Bujdáková H. (2007) Biofilm formation in clinical isolates of *Candida albicans* and *C. dubliniensis*; modulation of *ERG* gene expression by fluconazole treatment. 3rd Trends in Medical Mycology, Torino Italy.
29. **Kucharíková S.**, Chorvát D., Lisalová M. and Bujdáková H. (2007) The efficiency of different antifungals on cell surface hydrophobicity and biofilm formation in *Candida glabrata*. 24th Congress of the Czechoslovak Society for Microbiology, Liberec, Czech republic.
30. Borecká-Melkusová S., Moran G. P., **Kucharíková S.**, Chorvát D., Bujdáková H., Sullivan D. (2007) Differential resistance gene expression in *Candida albicans* and *Candida dubliniensis* biofilms exposed to fluconazole. 35th Annual Conference on Yeasts, Smolenice Castle, Slovakia.
31. **Kucharíková S.** & Bujdáková H. (2006) The efficiency of antifungal agents on biofilm formation in clinically important fungal pathogen *Candida glabrata*. Central European Symposium on Antimicrobial Resistance, The High Tatras. Slovakia.
32. Bujdáková H., Paulovičová E., Melkusová S., Gašperík J., Máchová E., **Kucharíková S.** (2006) Purification and characterization of immunologically active *Candida albicans* surface antigen. 16th Congress of the International Society for Human and Animal Mycology, Paris, France.
33. Melkusová S., **Kucharíková S.** & Bujdáková H. (2005) Participation of the CR3- related protein in *Candida albicans* and *Candida dubliniensis* at biofilm formation. on 2nd FEBS Advanced Lecture Course - Human Fungal Pathogens, La Colle sur Loup, France.

### Research grants – main investigator

1. FWO postdoctoral grant 12D3516 N (2015-2018) “*Candida albicans-Staphylococcus epidermidis* dual-species biofilm development: Molecular characterization of their interaction and investigation of the role of small secreted molecules in this process”.
2. FWO postdoctoral grant 12D3516 N (2012-2015) “*Candida albicans-Staphylococcus aureus* dual-species biofilm: Molecular characterization of their interaction with a focus on methionine metabolism”.
3. KU Leuven Postdoctoral grant, PDMK/11/089 (2011-2012) s názvom: “Development of novel antimicrobial peptides to combat *Candida albicans* biofilm formation”.
4. FWO Krediet aan Naavorser grant 1527216N (2015)“Zebrafish embryos as a unique model host organism to study *in vivo* *Candida albicans* biofilm development” na kúpu systému “Microfluidics”.
5. Pfizer W1189957 (2014) research grant “Comparison of echinocandins against *in vivo* *Candida albicans* biofilms”.
6. ESCMID research grant 2013 (European Society of Clinical Microbiology and Infectious Diseases) “First study dedicated to detailed characterization of mature *Candida glabrata* biofilm development in a subcutaneous rat model and its susceptibility to fluconazole and echinocandin drugs (micafungin, caspofungin and anidulafungin)”.
7. CREA 13/008, KU Leuven research grant (2013) s názvom: “Zebrafish as a novel model host for morphological and undiscovered immunological characteristics of *in vivo* *Candida albicans* biofilms”.
8. Research grant (2008) from Comenius University in Bratislava UK/183/2008
9. Research project Action Austria-Slovakia for doctoral students (2007) ”Interaction of mammalian immune cells with *Candida albicans* biofilms”
10. FEMS research grant (2007): “*In vivo* *Candida albicans* biofilm formation in a rat subcutaneous model”.
11. Research grant 4/2006 (2006) of Faculty of Natural Sciences, Comenius University in Bratislava.