

Feb 23, 2022

## SESSION 1: NUCLEIC ACIDS

1. P. Chudy\*, P. Nguyen, D. Klóska, J. Kochan, L. Muchova, D. Cysewski, A. Grochot-Przęczek, K. Szade, A. Szade, A. Józkwicz, W. Nowak, W. Krzeptowski  
**Is there a link between heme oxygenase-1 and replication stress?**

2. P. Czarnota\*, A. Kania, K. Murzyn  
**Application of the LSTM neural networks for genes essentiality prediction in Bacteria**

3. M. González-González\*, G. Bras, M. Rapala-Kozik  
**Possible lung fibroblast-to-myofibroblast transition upon contact with *Candida albicans* biofilm**

4. B. Janusz, S. M. Elnagdy, D. M. Ghaith, V. Savini, J. Międzobrodzki, M. Kosecka-Strojek\*  
**Characterization of clinical methicillin-resistant *Staphylococcus aureus* strains from Italy and Egypt.**

5. A. Kania\*, K. Sarapata  
**Matrix representations combined with the Discrete Fourier Transform in biological sequences studies**

6. K. Kwiecień\*, P. Kwiecińska  
**The impact of DGAT1 deficiency on epidermal transcriptomic landscape**

7. M. Melnykova\*, E. Nieboga, A. M. Grabiec  
***Porphyromonas gingivalis* and IL-1 $\beta$  differentially modulate mRNA turnover and stability in gingival fibroblasts**

8. D. Robak, G. Ylla\*  
**Novel tool for annotating piRNA clusters**



# POSTER SESSION

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## SESSION 1: NUCLEIC ACIDS

9. S. Turek, K. Nit, A. Muszyńska, P. Łabaj, Z. Madeja, S. Bobis-Wozowicz\*

**Impact of hypoxia on human induced pluripotent stem cells transcriptome**

10. M. Wolska-Gębarzewska, M. Michalik, A. Podbielska-Kubera, A. Samet,  
J. Międzobrodzki, M. Kosecka-Strojek\*

**The emerging problem of linezolid-resistant *Staphylococcus* in Poland**



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## SESSION 1: PROTEINS

11. A. Bednarek\*, D. Satala, M. Rapala-Kozik, M. Bukowski, A. Kozik

**Characteristics of the interaction between glyceraldehyde-3-phosphate dehydrogenase (GAPDH) of *Candida albicans* and *Candida glabrata* and the protein of human extracellular matrix – vitronectin**

12. D. Bryzek\*, A. Gasiorek, E. Dobosz, J. Potempa, J. Koziel

**Host proteases as potent NETs inducers during aseptic inflammation**

13. J. Budziaszek\*, M. Pilarczyk-Zurek, T. Swoboda, I. Kern-Zdanowicz, I. Sitkiewicz, J. Koziel

**Identification of proteases produced by *Streptococcus anginosus***

14. E. Dobosz\*, N. Walicka, A. Gasiorek, J. Koziel

**The mechanism of posttranslational modification of MCP-1 induced by infection with periodontal pathogens**

15. A. Golda\*, E. Dobosz, M. Wadowska, P. Kosikowska-Adamus, J. Koziel

**The antiviral activity of temporin analogues against Herpes simplex virus**

16. I. Guevara-Lora\*, M. Sordyl, A. Niewiarowska-Sendo, G. Braś, E. Korbut, J. Podgorska, M. Malczewska-Malec, A. Kozik

**The role of bradykinin in lipid metabolism – an ally or an enemy?**

17. A. Jacuła\*, M. Madej, K. Mikruta, B. Potempa, J. Potempa

**The role of hemagglutinin/adhesin domains of *Porphyromonas gingivalis***



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18. J. Kowalczyk, U. Jankowska, K. Kłodawska, M. Zych, J. Burczyk, P. Malec\*

**Ubiquitin and ubiquitinated proteins in cell walls of *Scenedesmus obliquus* 633 as identified by immunochemistry and LC/MS/MS proteomics**

19. O. Kwapisz, J. Górka, M. Głuc, A. Gruca, J. Kotlinowski, J. Jura, K. Miękus\*

**The influence of the MCP1P1 protein on the level and function of N-cadherin**

20. K. Kwaśnica\*, M. Gabruk

**How to remodel photosynthetic membranes with CURTs**

21. K. Leja\*, A. K. Banaś

**Uncovering the mystery of AT4G25290 – a novel *Arabidopsis thaliana* protein**

22. K. Lorencik\*, M. Sarewicz, R. Ekiert, A. Osyczka

**ActA mobile domain' heme is the only donor of electrons for aa3 oxidase in ACIII - aa3 supercomplex**

23. M. Łuszczynski, M. Gabruk\*

**How does tomato synthesize its chlorophyll? Focus on the light dependent step**

24. B. Mielecki\*, R. Pietras, A. Osyczka

**Interaction of ferredoxin and cytochrome b6f studied with EPR spectroscopy**

25. K. Mikruta\*, M. Madej, A. Jacuła, S. Glatt, M. Rawski, B. van den Berg, J. Potempa

**Structural and functional characterization of interaction between RagAB peptide transporter and TonB**

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26. W. Ogrodzińska\*, M. Gabruk

**The complicated relation between light dependent protochlorophyllide oxidoreductase in *Synechocystis* and the lipids**

27. P. Piłat\*, M. Wilamowski, J. Jura

**Determination of cellular functions and localization of N4BP1 protein and identification its binding partners**

28. K. Sarad\*, I. Kraszewska, U. Jankowska, B. Skupień-Rabian, A. Babler, J. Dulak, R. Kramann, A. Jaźwa-Kusior

**Analysis of paracrine signalling between mesenchymal and senescent endothelial cells**

29. M. Sobczyk, M. Wawro, J. Kochan\*

**Analysis of the ability of the KHNYN protein to form droplets as a result of liquid-liquid phase separation**

30. A. Solecka\*, W. Sowińska, M. Wawro, J. Kochan, A. Kasza

**Regulation of signaling pathways by ZC3H12B**

31. W. Sowińska, M. Wawro, A. Solecka, A. Kasza\*

**IL-1 $\beta$  - dependent regulation of ZC3H12B activity**



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32. M. Surowiec\*, E. Wronowska, J. Karkowska-Kuleta, D. Satała, M. Zawrotniak, M. Rapała-Kozik

**Determining the role of fungal adhesin on interaction of *Candida albicans* with human lung epithelial cells**

33. K. Szczęśniak\*, D. Mizgalska, M. Bochtler, J. Potempa

**Protein exchange without commission**

34. P. Worsztynowicz\*, D. Satała, M. Bukowski, A. Kozik

**Enolase on the *Candida albicans* cell wall as a receptor for human kininogen: mapping the binding sites**

35. T. Żądło, B. Władyka, M. Bukowski\*

**Effect of tenpn toxin on the growth of pathogenic bacteria**

36. A. Żelazna\*, D. Satała, M. Bukowski, A. Kozik

**Interaction of *Candida albicans* and *Candida tropicalis* phosphoglycerate mutase with human high molecular weight kininogen**



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## SESSION 2: CELLS

37. M. Adamski\*, A. Kamiński

**Effects of cyanobacterial toxin cylindrospermopsin and its decomposition products on antioxidant properties of glutathione**

38. A. Barzowska\*, B. Pucelik, M. Dawidowski, A. Czarna

**Searching for molecular target(s) of AC27 compound**

39. O. Wiecheć-Cudak, A. Bienia, A. Murzyn, D. Robak, M. Szczygieł, D. Szczygieł, A. Kozińska, R. Sitko, M. Zubko, M. Serda, M. Krzykawska-Serda\*

**Pancreatic Ductal Adenocarcinoma (PDAC) in multi-module therapy based on gemcitabine with hyperthermia in combination with gold nanorods or calcitriol**

40. M. Kedra, A. Adamska, M. Bojko\*

**Preliminary biochemical characterization of coltsfoot (*Tussilago farfara L.*) and Turk's cap lily (*Lilium martagon L.*) callus culture**

41. P. Broda\*, A. Liszka, K. Nawrot-Chorabik, J. J. Łyczakowski\*

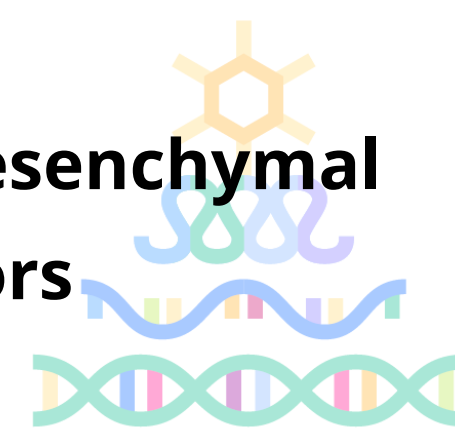
**Primary cell wall hemicelluloses of *Picea abies* - synthesis and structure**

42. P. Cierniak, A. Łabędź-Masłowska, E. Zuba-Surma\*

**Examining biological properties of adipose tissue-derived mesenchymal stem/ stromal cells obtained from healthy and diabetic donors**

43. A. Drzał\*, G. Dziurman, A. Delalande, Ch. Pichon, J. Swakoń, M. Elas

**Breast cancer radiosensitization using oxygen microbubbles and metabolic effects**



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44. A. Ferenc\*, N. Pydyn, J. Kadłuczka, P. Major, E. Kuś, T. Hutsch, A. Budzyński, J. Jura, J. Kotlinowski

**The role of monocyte chemoattractant protein-induced protein 1 in liver fibrosis and activation of hepatic stellate cells**

45. M. Garczyk\*, J. Litewka, A. A. Kusiak, B. Nowicka, M. A. Jakubowska, P. E. Ferdek

**The role of retinoids in pancreatic stellate cells**

46. J. Gorka\*, P. Marona, O. Kwapisz, J. Rys, J. Jura, K. Miekus

**The lack of RNase activity of MCP1P1 increases migration of clear cell renal cell carcinoma cells by influencing on Rho GTPase, IL1 $\beta$  and Focal Adhesion Kinase**

47. M. Kudrycka\*, B. Bugara, M. Durbas, H. Rokita

**PHLDA1 silencing affects tyrosine kinases pathways in human neuroblastoma**

48. K. Kulig\*, J. Karkowska-Kuleta, M. Rąpała-Kozik, A. Kozik

**The functional properties of extracellular vesicles of two different *Candida albicans* strains**

49. A. Uchańska, K. Kwiecień, B. Grygier, P. Kwiecińska\*

**A metabolic shift in neutrophils lacking DGAT1 inhibits their proinflammatory activity**

50. A. Lewandowska\*, W. Krzeszowiec, H. Gabryś

**The role of proton pumps in phototropin signaling leading to chloroplast movement responses**





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51. K. Makuch\*, J. Hryc, M. Markiewicz

**Different placement and orientation of lutein and zeaxanthin in lipid membranes – in silico explanation**

52. D. Michalczyk-Wetula\*, I. Jasiejko, J. Kania, A. Borońska, E. Petelenz, D. Latowski, S. W. Pintscher, P. M. Płonka

**Metalome of slime molds - manganese accumulation in plasmodium and other structures of their life cycle**

53. D. Mizgalska\*, S. Malicki, B. Chruścińska-Smaga, J. Potempa

**Development of diagnostic aptamers for periodontopathogens**

54. K. Mokrzyński\*, O. Krzysztyńska-Kuleta, M. Sarna, T. Sarna

**Resveratrol and Ascorbic Acid protect human keratinocytes against PM2.5 phototoxicity**

55. A. A. Murzyn, M. Szczygieł, D. Szczygieł, M. Krzykawska-Serda\*

**Immunocompetent and reproductable mouse model of orthotopic pancreatic cancer**

56. M. Myszka, K. Kaziród, P. Podkalicka, O. Mucha, J. Dulak, A. Łoboda\*

**The effect of hydrogen sulfide on the dystrophic muscles – in vivo study on the mdx model of Duchenne muscular dystrophy**

57. W. Ogar, K. Rola, P. Osyczka, E. Latkowska\*

**Lipid peroxidation and glutathione production in relation to intracellular content of heavy metals in epigeic lichen *Cladonia rei***



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58. M. Orpel, E. Karnas, E. K. Zuba-Surma\*

**Developing of human iPS-derived cardiac cell line in vitro models for studying an impact of extracellular vesicles in heart repair - preliminary report**

59. A. Kopacz, D. Kloska, D. Klimczyk, M. Kopec, A. Jozkowicz, A. Piechota-Polanczyk\*

**NRF2 transcriptional activity influences colonic estrogen receptors**

60. M. Pilarczyk-Zurek\*, J. Folkert, J. Kozieł

**The role of Regnase-1 in the progression of Inflammatory Bowel Disease**

61. M. Pudełek\*, J. Czyż

**Cooperation of ABC efflux systems accounts for the doxorubicin-resistance of T98G glioblastoma multiforme cells**

62. M. Rąpała\*, M. Pudełek, J. Dąbrowski, Z. Madeja

**Anticancer potential of the manganese porphyrin and sodium ascorbate in cell culture in vitro**

63. M. J. Sabat\*

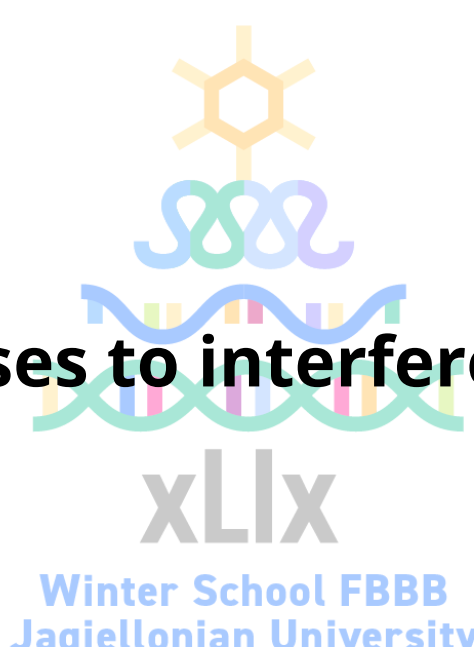
**Factors of skeletal muscle fatigue and excessive vulnerability to fatigue in mitochondrial diseases in the light of systems biology**

64. A. Schuster\*, A. M. Grabiec

**Pathogenic oral bacteria modulate gingival fibroblast responses to interferons**

65. M. Smolarz\*, M. Zawrotniak, M. Rąpała-Kozik

**Interaction of *C. albicans* with neutrophils - yeast dominance on the battlefield or neutrophils adaptation?**



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66. J. Sopol\*, M. Sarna, M. Elas

**Analysis of the effect of pigmentation of melanoma cells on spheroid formation**

67. D. Szczygieł, M. Szczygieł\*, N. Synowiec, R. Zuziak, P. M. Płonka

**Analysis of tumor necrosis as a paraneoplastic factor**

68. O. Szpara\*, M. Bojko

**Effect of different concentrations of sea salt on growth and photosynthesis quantum yield in *Phaeodactylum tricornutum* (Preliminary results)**

69. W. Szukała\*, A. Lichawska-Cieślar, J. Jura

**Loss of myeloid MCP1 promotes a proallergic phenotype in the skin**

70. K. Trzos\*, N. Pydyn, J. Kozieł, M. Pilarczyk-Żurek, A. Ferenc, J. Jura, J. Kotlinowski

**Analysis of primary biliary cholangitis in *Mcp1* knock out mice after pharmacological treatment**

71. J. Wasylewicz\*, A. Liszka, D. Latowski, J. Łyczakowski\*

**Role of light signalling in plant cell wall biosynthesis**

72. E. Wronowska\*, M. Gonzalez-Gonzalez, I. Guevara-Lora, M. Rapała-Kozik

**Effect of yeast-bacterial biofilm on the condition of epithelial cells (BEAS-2B) in a two- and three-dimensional lung epithelial models**

73. N. Wroński, E. Madej, J. Gogola-Mruk, A. Ptak, A. Wolnicka-Głubisz\*

**CRISPR/CAS9-mediated knockout of RIPK4 imparts remarkable antiproliferative response in human melanoma cells in 3D in vitro and in vivo**



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74. M. Zawrotniak\*, M. Smolarz, M. Rąpała-Kozik

**The yeast-neutrophil war – mechanisms of interaction between *C. albicans* and neutrophils**

75. A. Gąsiorek\*, E. Dobosz, T. Hutsch, J. Koziel

**The role of MCPIP-1 in gingival keratinocytes during alveolar bone remodeling**

