

**Surname, Name, Titles: GALLO Jiří, prof., MUDr., Ph.D.**

**Date of birth:** 5. 2. 1966

Department of Orthopedics, University Hospital Olomouc, and Faculty of Medicine and Dentistry, Palacký University (PU) Olomouc, I. P. Pavlova 6, 775 20 Olomouc, Czech Republic

#### **UNDERGRADUATE EDUCATION**

1984–1990 Military Medical Academy in Hradec Králové; MUDr.

#### **POSTGRADUATE EDUCATION**

- Specialization in Orthopaedics and Traumatology, 1st degree, Institute for Continual Medical Education (ICME), Prague, 1994
- Specialization in Orthopaedics and Traumatology, 2nd degree, ICME, Prague, 1999
- Ph.D. in surgery, Faculty of Medicine and Dentistry, PU Olomouc, 2003
- Habilitation („Docent“ title), surgery, Faculty of Medicine and Dentistry, PU Olomouc, 2008
- Professor of Orthopaedics, Charles University in Prague, 2013

#### **PRESENT HOSPITAL AND FACULTY POSITION**

Head, Department of Orthopaedics, University Hospital Olomouc, Faculty of Medicine and Dentistry, PU Olomouc

#### **TEACHING ACTIVITIES**

1. Tutor – Faculty of Medicine and Dentistry, PU Olomouc
2. Mentor of 5 Ph.D. students who successfully graduated from the Faculty of Medicine and Dentistry, PU Olomouc

#### **MEMBERSHIPS**

AAOS, CSOT (Czech Society for Orthopaedics and Traumatology – 2017–2018 chairperson), CMA (Czech Medical Academy), EBJIS, EFORT, EORS, MSIS, ORS, SFB, SICOT

#### **MAIN RESEARCH INTERESTS**

1. Pathogenesis of aseptic loosening and periprosthetic osteolysis
2. Prosthetic joint infection
3. Osteoarthritis

**AUTHOR OR CO-AUTHOR: 77 papers + 3 letters to the editor in journals with IF** and 73 papers in peer-reviewed journals without IF

**Citations in WOS: 947** (*WOS Core Collection; without self-citations*); **H index=16**

**3 MOST FREQUENTLY QUOTED PAPERS** (*source: WOS Core Collection citations*):

1. Gallo, J., Holinka, M., Moucha, C. S.: Antibacterial surface treatment for orthopaedic implants. *International Journal of Molecular Sciences*, 15: 13849-13880, 2014. (**117 SCI hints**)
2. Gallo, J., Goodman, S.B., Kontinen, Y., Wimmer, M., Holinka, M.: Osteolysis around total knee arthroplasty. A review of pathogenetic mechanisms. *Acta Biomaterialia*, 9(9): 8046-8058, 2013. (**100 SCI hints**)
3. Gallo, J., Kolar, M., Dendis, M., Loveckova, Y., Sauer, P., Zapletalova, J., Koukalova, D.: Culture and PCR analysis of joint fluid in the diagnosis of prosthetic joint infection. *New Microbiologica*, 31(1):97-104, 2008. (**86 SCI hints**)

#### **RESEARCH PROJECTS (2015–2019)**

1. Investigator of IGA MH CR project No. NT14267 (2013–2015): The influence of joint fluid composition on formation of lubricating film in THA.
2. Co-investigator of the TA CR project No. TD020094 (2014–2015): Sensor technology for health care for aging and disabled population.
3. Co-investigator of the TA CR project No. TA04010100 (2014–2017): Tribological coatings with improved corrosion protection for orthopaedics and trauma applications.
4. Investigator of the IGA MH CR project No. NV15-27726A (2015–2018): Technologies of nano-tubes and nano-silver for antibacterial surface treatment of orthopaedic implants.
5. Investigator of the IGA MH CR project No. NV16-31852A (2016–2019): Prediction for reoperation in patients with THA and TKA based on immunogenetic signature: development of risk calculator for routine clinical practice.
6. Co-investigator of the IGA MH CR project No. NV17-29680A (2017–2020): Materials loaded with newly discovered antibacterial compounds lipophosphonoxins for the treatment of musculoskeletal infections.

7. Co-investigator of the TA CR project No. TH04020318 (2019–2022): Joint implant with a bioactive antibacterial and antibiofilm layer preventing infection and supporting its osteointegration.
- Certificate of merit of the minister of health for research and development in 2015 (realization of grant no. NT11049 Gene expression profiling of the periprosthetic tissues: first step toward time-dependent analysis of periprosthetic osteolysis)

#### LIST OF SELECTED PAPERS (2015–2019)

1. Fargašová, A., Balzerová, A., Pucek, R., Htoutou Sedláková, M., Bogdanová, K., Gallo, J., Kolář, M., Ranc, V., Zbořil, R.: Detection of Prosthetic Joint Infection Based on Magnetically Assisted Surface Enhanced Raman Spectroscopy. *Analytical Chemistry*, 89(12):6598-6607, 2017. (IF 2017: 6,042)
2. Dýšková, T., Gallo, J., Kriegová, E.: The role of the chemokine system in tissue response to prosthetic by-products leading to periprosthetic osteolysis and aseptic loosening. *Frontiers in Immunology*, 8:1026, 2017. (IF 2017: 5,511)
3. Kriegova, E., Manukyan, G., Mikulkova, Z., Gabcova, G., Kudelka, M., Gajdos, P., Gallo, J.\*: Gender-related differences observed among immune cells in synovial fluid in knee osteoarthritis. *Osteoarthritis and Cartilage*, 26(9):1247-1256, 2018. (IF 2017: 5,454)
4. Pechancova, R., Pluháček, T., Gallo, J., Milde, D.: Study of chromium species release from metal implants in blood and joint effusion: Utilization of HPLC-ICP-MS. *Talanta*, 185:370-377, 2018. (IF 2017: 4,244)
5. Fillerova, R., Gallo, J., Radvansky, M., Kraiczova, V., Kudelka, M., Kriegova, E.: Excellent diagnostic characteristics for ultra-fast gene profiling of DEFA1-IL1B-LTF in the detection of prosthetic joint infections. *Journal of Clinical Microbiology*, 55(9):2686-2697, 2017. (IF 2017: 4,054)
6. Kuba, M., Gallo, J., Pluháček, T., Hobza, M., Milde, D.: Content of distinct metals in periprosthetic tissues and pseudosynovial joint fluid in patients with total joint arthroplasty. *Journal of Biomedical Research Part B: Applied Biomaterials*, 107(2):454-462, 2019. (IF 2017: 3,373)
7. Vaculova, J., Gallo, J.\*, Hurnik, P., Motyka, O., Dvorackova, J., Goodman, S. B.: Low intra-patient variability of histomorphological findings in periprosthetic tissues from revised joint arthroplasties. *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 106(5):2008-2018, 2018. (IF 2017: 3,373)
8. Galandáková, A., Ulrichová, J., Langová, K., Hanáková, A., Vrbka, M., Hartl, M., Gallo, J.\*: Characteristics of synovial fluid required for optimization of lubrication fluid for biotribological experiments. *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 105B(APR):1422-1431, 2017. (IF 2017: 3,373)
9. Diaz-Ledezma, C., Espinosa-Mendoza, R., Gallo, J., Glaudemans, A., Gómez-García, F., Goodman, S., Kaminek, M., Le Roux, T. L. B., Llinás, A., Nieslanikova, E., Quinn, L., Sculco, P., Svoboda, M.: General Assembly, Diagnosis, Imaging: Proceedings of International Consensus on Orthopedic Infections. *Journal of Arthroplasty*, 34(2S):S215-S223, 2019. (IF 2017 = 3.339)
10. Nečas, D., Vrbka, M., Rebenda, D., Gallo, J., Galandáková, A., Wolfová, L., Křupka, I., Hartl, M.: In situ observation of lubricant film formation in THR considering real conformity: The effect of model synovial fluid composition. *Tribology International*, 117:206-216, 2018. (IF 2017: 3,246)

\*corresponding author