

Curriculum Vitae

Personal information **Alain Bizzini**

Work experience

3/2021-present:

Clinical reviewer (80%)

Swissmedic, Bern, Switzerland

- Scientific and clinical evaluation of industry drug applications, with a specific focus in infectious diseases
- Scientific advice meetings

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10/2018-present:

Attending physician in infectious diseases (20%)

Infectious diseases service, Hospital network Neuchâtel (RHNe), Switzerland

- In- and outpatient hospital consultations for general infectious diseases

10/2018-2/2021:

Head of the clinical microbiology department

Admed laboratory foundation, Neuchâtel, Switzerland

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- Biomedical and administrative management of a microbiological laboratory
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5/2016-9/2018:

Attending physician in infectious diseases

Infectious diseases service, Lausanne University Hospital (CHUV), Switzerland

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- Inpatient hospital consults with emphasis on immunocompromised hematology-oncology patients
- Supervised infectious diseases interns and residents

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4/2014-4/2016:

Fellowship in infectious diseases

Infectious diseases service, CHUV, Lausanne, Switzerland

- Rotations in the various sectors of infectious diseases (general consultations, transplantation, septic surgery, immunocompromised ward, outpatient clinic)

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12/2012-4/2014:

Residency in internal medicine

Department of internal medicine, CHUV, Lausanne, Switzerland

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12/2011-11/2012:

Internship in infectious diseases

Service of infectious diseases, CHUV, Lausanne, Switzerland

1/2009-11/2011:

Residency in microbiology (FAMH)

Laboratory of Microbiology, CHUV, Lausanne, Switzerland

- Rotations in bacteriology, mycology, mycobacteriology, parasitology, molecular diagnostics, serology

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4/2008-12/2008:

Internship in internal medicine

Department of internal medicine, CHUV, Lausanne, Switzerland

1/2007-3/2008:

Postdoctoral research fellow

Laboratory of Microbiology, University Hospital Center, Caen, France

2002-2006:
program student

Swiss National Science Foundation MD-PhD

Department of Fundamental Microbiology, University of Lausanne, Switzerland

Education and training

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2015:
diseases (FMH)

Swiss Board certification in Infectious

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2012:
Medical microbiology (FAMH)

Swiss Federal Diploma of specialist in

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2006:

MD-PhD Thesis

Department of Fundamental Microbiology, University of Lausanne, Switzerland

2001:
regulation

Certificate in signalisation and cellular

Faculty of Science, University of Lausanne, Switzerland

2000:

Swiss Federal Diploma in Medicine

Faculty of Medicine, University of Lausanne, Switzerland

1999:
biology

Certificate in cellular and molecular

Faculty of Science, University of Lausanne, Switzerland

Additional information

Publications

Peer-Reviewed Articles

1. Dvorak S, **Bizzini A**. *Streptococcus anginosus* and *Coxiella burnetii* vascular graft co-infection. *IDCases*, **2020**, 19:e00697.
2. Riat A, Neofytos D, Coste A, Harbarth S, **Bizzini A**, Grandbastien B, Pugin J, Lamothe F. First case of *Candida auris* in Switzerland: discussion about preventive strategies. *Swiss Medical Weekly*, **2018**, 26:148.
3. Ballo MK, Rtimi S, Kiwi J, Pulgarin C, Entenza JM, **Bizzini A**. Fungicidal activity of copper-sputtered flexible surfaces under dark and actinic light against azole-resistant *Candida albicans* and *Candida glabrata*. *J Photochem Photobiol B*, **2017**, 29(174):229-234.
4. Ballo MK, Rtimi S, Pulgarin C, Hopf N, Berthet A, Kiwi J, Moreillon P, Entenza JM, **Bizzini A**. In vitro and in vivo effectiveness of an innovative silver-copper nanoparticle coating of catheters to prevent methicillin-resistant *Staphylococcus aureus* infection. *Antimicrobial Agents and Chemotherapy*, **2016**, 60(9):5349-56.
5. Ballo MK, Rtimi S, Mancini S, Kiwi J, Pulgarin C, Entenza JM, **Bizzini A**. Bactericidal activity and mechanism of action of copper-sputtered flexible surfaces against multidrug-resistant pathogens. *Applied Microbiology and Biotechnology*, **2016**, 100(13):5945-53.
6. Rtimi S, Ballo MK, Laub D, Pulgarin C, Entenza JM, **Bizzini A**, Sanjines R, Kiwi J. Duality in the *Escherichia coli* and methicillin resistant *Staphylococcus aureus* reduction mechanism under actinic light on innovative co-sputtered surfaces. *Applied Catalysis A: General*, **2015**, 498: 185-191.
7. **Bizzini A**, Péter O, Baud D, Edouard S, Meylan P, Greub G. Evaluation of a new serological test

for the detection of anti-Coxiella and anti-Rickettsia antibodies. *Microbes and Infection*, **2015**, 17(11-12):811-6.

8. Ladjouzi R, **Bizzini A**, Van Schaik W, Zhang X, Rincé A, Benachour A, Hartke A. Loss of antibiotic tolerance in Sod-deficient mutants is dependent on the energy source and arginine catabolism in enterococci. *Journal of Bacteriology*, **2015**, 197(20):3283-93.
9. Rochat L, **Bizzini A**, Senn N, Bochud PY, Genton B, De Vallière S. Acute schistosomiasis: a risk underestimated by travelers and a diagnosis frequently missed by general practitioners – a cluster analysis of 42 travelers. *The Journal of Travel Medicine*, **2015**, 22(3):168-173.
10. Rochat L, **Bizzini A**, Senn N, Bochud PY, De Vallière S, Genton B. Schistosomiase aigue au retour de voyage. Enseignements tirés d'une cohorte de 42 voyageurs exposés. *Revue Médicale Suisse*, **2015**, 11(473):1017-1022.
11. Rio L, Hartke A, **Bizzini A**. The effect of inoculum size on selection of in vitro resistance to vancomycin, daptomycin and linezolid in methicillin-resistant *Staphylococcus aureus*. *Microbial Drug Resistance*, **2014**, 20(6):539-43.
12. Entenza JM, Bétrisey B, Manuel O, Giddey M, Sakwinska O, Laurent F, **Bizzini A**. Rapid detection of *Staphylococcus aureus* strains with reduced susceptibility to vancomycin by isothermal microcalorimetry. *The Journal of Clinical Microbiology*, **2014**, 52(1):180-6.
13. Longo G, Alonso-Sarduy L, Marques Rio L, **Bizzini A**, Trampuz A, Notz J, Dietler G, Kasas S. Rapid detection of bacterial resistance to antibiotics using AFM cantilevers as nano-mechanical sensors. *Nature nanotechnology*, **2013**, 8(7): 522-526.
14. Ladjouzi R, **Bizzini A**, Lebreton F, Sauvageot N, Rincé A, Benachour A, Hartke A. Analysis of the tolerance of pathogenic *Enterococci* and *Staphylococcus aureus* to cell wall active antibiotics. *The Journal of Antimicrobial Chemotherapy*, **2013**, 68(9): 2083-2091.
15. Longo G, Rio LM, Trampuz A, Dietler G, **Bizzini A**, Kasas S. Antibiotic-induced modifications of the stiffness of bacterial membranes. *The Journal of Microbiological Methods*, **2013**, 93(2):80-84
16. Clauss M, Furustrand U, **Bizzini A**, Trampuz A, Ilchmann T. Biofilm formation by staphylococci on fresh, fresh-frozen and processed human and bovine bone grafts. *European Cells and Materials*, **2013**, 25:159-66.
17. Clerc O, Prod'homme G, Vogne C, **Bizzini A**, Calandra T, Greub G. Impact of MALDI-TOF MS on the clinical management of patients with Gram-negative bacteremias: a prospective observational study. *Clinical infectious diseases*, **2013**, 56(8):1101-7.
18. Zhao C, **Bizzini A**, Zhang X, Sauvageot N, Hartke A. Mutations in msrA and msrB, encoding epimer-specific methionine sulfoxide reductases, affect differently expression of glycerol-catabolic operons in *Enterococcus faecalis*. *Microbiology*, **2013**, 159(3):615-20.
19. Rio L, Kusiak-Nejman E, Trampuz A, Kiwi J, **Bizzini A**. Comparative methods to assess the viability of *Staphylococcus aureus* on copper-sputtered polyester bactericidal surfaces. *Applied and environmental microbiology*, **2012**, 78(23):8176-82.
20. Longo G, Marques-Rio L, Roduit C, Trampuz A, **Bizzini A (equally contributing last author)**, Dietler G, Kasas S. Force volume and stiffness tomography investigation on the dynamics of stiff material under bacterial membranes. *Journal of Molecular Recognition*, **2012**, 25(5):278-84.
21. **Bizzini A**, Marchetti O, Meylan P. Response to: Lack of intra-laboratory reproducibility in using Platelia *Aspergillus* enzyme immunoassay test for detection of *Aspergillus* galactomannan antigen. *Transplant Infectious Diseases*, **2012**, 14(3):332.
22. Moreillon P, **Bizzini A**, Giddey M, Vouillamoz J, Entenza JM. Vancomycin-intermediate *Staphylococcus aureus* selected during vancomycin therapy of experimental endocarditis are not detected by culture-based diagnostic procedures and persist after treatment arrest. *The Journal of Antimicrobial Chemotherapy*, **2012**, 67(3):652-60.
23. Baud D, **Bizzini A (equally contributing first author)**, Jaton K, Achdari C, Prod'homme G, Greub G. *Pasteurella multocida* zoonotic ascending infection: an unusual cause of tuboovarian abscess. *Vector-Borne and Zoonotic Diseases*, **2012**, 12(1):84-5
24. **Bizzini A**, Jaton K, Romo D, Bille J, Prod'homme G, Greub G. Matrix-assisted laser desorption ionization-time

of flight mass spectrometry as an alternative to 16S rRNA gene sequencing for identification of difficult-to-identify bacterial strains. *The Journal of Clinical Microbiology*, **2011**, 49(2):693-6

25. Rigottier-Gois L, Alberti A, Houel A, Taly JF, Palcy P, Manson J, Pinto D, Matos RC, Carrilero L, Montero N, Tariq M, Karsens H, Repp C, Kropec A, Budin-Verneuil A, Benachour A, Sauvageot N, **Bizzini A**, Gilmore MS, Bessi res P, Kok J, Huebner J, Lopes F, Gonzalez-Zorn B, Hartke A, Serror P. Large-Scale screening of a targeted *Enterococcus faecalis* mutant library identifies envelope fitness factors. *Plos One*, **2011**, 6(12):e29023.
26. **Bizzini A**, Greub G. MALDI-TOF MS, a revolution in clinical microbial identification. *Clinical Microbiology and Infection*, **2010**, 16(11):1614-9.
27. **Bizzini A**, Durussel C, Bille J, Greub G, Prod'hom G. Performance of matrix-assisted laser desorption ionization-time of flight mass spectrometry for identification of bacterial strains routinely isolated in a clinical microbiology laboratory. *The Journal of Clinical Microbiology*, **2010**, 48(5):1549-54.
28. Trampuz A, Steinh rken J, Clauss M, **Bizzini A**, Furustrand U, U kay I, Peter R, Bille J, Borens O. New methods for the diagnosis of implant-associated infections. *Revue M dicale Suisse*, **2010**, 6(243):731-4.
29. Prod'hom G, **Bizzini A**, Durussel C, Bille J, Greub G. Matrix-assisted laser desorption ionization-time of flight mass spectrometry for direct bacterial identification from positive blood culture pellets. *The Journal of Clinical Microbiology*, **2010**, 48(4):1481-3.
30. **Bizzini A**, Zhao C, Budin-Verneuil A, Sauvageot N, Giard JC, Auffray Y, Hartke A. Glycerol is metabolized in a complex and strain dependent manner in *Enterococcus faecalis*. *The Journal of Bacteriology*, **2010**, 192(3):779-85.
31. **Bizzini A**, Entenza JM, Michielin O, Arnold I, Erni B, Moreillon P. A single mutation in the Enzyme I of the sugar phosphotransferase system confers penicillin tolerance to *Streptococcus gordonii*. *Antimicrobial Agents and Chemotherapy*, **2010**, 54(1):259-66.
32. **Bizzini A**, Zhao C, Auffray Y, Hartke A. The *Enterococcus faecalis* superoxide dismutase is essential to its tolerance to vancomycin and penicillin. *The Journal of Antimicrobial Chemotherapy*, **2009**, 64(6):1196-202.
33. **Bizzini A**, Entenza JM, Moreillon P. Loss of penicillin tolerance by inactivating the carbon catabolite repression determinant *ccpA* in *Streptococcus gordonii*. *The Journal of Antimicrobial Chemotherapy*, **2007**, 59(4): 607-615.
34. **Bizzini A**, Majcherzyk PA, Beggah-M ller S, Soldo B, Entenza JM, Gaillard M, Moreillon P, Lazarevic V. Effects of the phosphoglucosaminidase deficiency on cell wall properties and fitness of *Streptococcus gordonii*. *Microbiology*, **2007**, 153(2): 490-498.
35. **Bizzini A**, Beggah-M ller S, Moreillon P, Entenza JM. Lack of *in vitro* biofilm formation does not attenuate the virulence of *Streptococcus gordonii* in experimental endocarditis. *FEMS Immunology and Medical Microbiology*, **2006**, 48(3): 419-23.
36. Loeliger B, Caldelari I, **Bizzini A**, Stutzmann Meier P, Majcherzyk PA, Moreillon P. Antibiotic-dependent correlation between drug-induced killing and loss of luminescence in *Streptococcus gordonii* expressing luciferase. *Microbial Drug Resistance*, **2003**, 9(2):123-31.

Book Chapter

1. Moreillon P, **Bizzini A**, Que YA. Infective endocarditis in the elderly. In Pathy J, Morley J, Sinclair A (eds.), Principles and practice of geriatric medicine, 4th ed, John Wiley & sons, New York, **2006**.

Projects

Memberships

Other Relevant Information