

Curriculum Vitae

Sébastien Boutin Dr., Ph.D.
d.o.b. November 09th, 1985, in Cholet, France

University Education

2009-2013 PhD student at the Université Laval, Canada
2008-2009 Master degree (second year) at Rennes university, France
2007 - 2008 Master degree (first year) at Poitiers university, France
2004-2007 Licence degree in Biology: speciality in ecology and evolution. Poitiers university, France

Scientific Career

Since 2022 Junior Group leader “Lung Microbiome” at the Department of Infectious Diseases and microbiology, University Hospital Schleswig Holstein, Lübeck.
Since 2021 Coordination of the Disease-spanning working-group Microbiome-metagenome (DZL)
2020-2022 Junior Group leader “Microbiome” at the Translational Lung Research Center Heidelberg.
Since 2019 Principal investigator in the German Center for Lung Research (DZL).
2014-2019 Research assistant at the Department of Infectious Diseases, University Hospital Heidelberg.
2013-2014 Post-doctoral Fellowship at the Université Laval, Canada

Awards and Honors

2019 ECFS Young Fellows Travel Award
2012 Best presentation award (2nd position) : 15ème édition du colloque annuel du Centre Interuniversitaire de Recherche sur le Saumon Atlantique (CIRSA). (100 CAD).
2011 Travel award: Canadian Society of ecology and evolution (CSEE), 2011 (500 CAD)
2009-2012 RAQ-FONCER scholarships (10500 CAD/year)

Citation Record

Total citations: 4,137; h-index:30; h-index since 2019: 29 (Google Scholar July 8th, 2024)

Top-10 selected Publications

Tony-Odigie A, Dalpke AH, **Boutin S**, Yi B. Airway commensal bacteria in cystic fibrosis inhibit the growth of *P. aeruginosa* via a released metabolite. **Microbiol Res.** 2024 Jun;283:127680. doi: [10.1016/j.micres.2024.127680](https://doi.org/10.1016/j.micres.2024.127680).

Chung J, **Boutin S**, Frey DL, Joachim C, Mall MA, Sommerburg O. Nasal lavage microbiome, but not nasal swab microbiome, correlates with sinonasal inflammation in children with cystic fibrosis. **J Cyst Fibros.** 2024 Mar;23(2):226-233. doi: [10.1016/j.jcf.2023.12.011](https://doi.org/10.1016/j.jcf.2023.12.011).

Schaupp L, Addante A, Völler M, Fentker K, Kuppe A, Bardua M, Duerr J, Piehler L, Röhmel J, Thee S, Kirchner M, Ziehm M, Lauster D, Haag R, Gradzielski M, Stahl M, Mertins P, **Boutin S**, Graeber SY, Mall MA. Longitudinal effects of elexacaftor/tezacaftor/ivacaftor on sputum viscoelastic properties, airway infection and inflammation in patients with cystic fibrosis. **Eur Respir J.** 2023 Aug 3;62(2):2202153. doi: [10.1183/13993003.02153-2022](https://doi.org/10.1183/13993003.02153-2022).

Mirhakkak MH, Chen X, Ni Y, Heinekamp T, Sae-Ong T, Xu LL, Kurzai O, Barber AE, Brakhage AA, **Boutin S**, Schäuble S, Panagiotou G. Genome-scale metabolic modeling of *Aspergillus fumigatus* strains reveals growth dependencies on the lung microbiome. **Nat Commun.** 2023 Jul 20;14(1):4369. doi: [10.1038/s41467-023-39982-5](https://doi.org/10.1038/s41467-023-39982-5).

Anderson AC, von Ohle C, Frese C, **Boutin S**, Bridson C, Schoilew K, Peikert SA, Hellwig E, Pelz K, Wittmer A, Wolff D, Al-Ahmad A. The oral microbiota is a reservoir for antimicrobial resistance: resistome and phenotypic resistance characteristics of oral biofilm in health, caries, and periodontitis. **Ann Clin Microbiol Antimicrob.** 2023 May 13;22(1):37. doi: [10.1186/s12941-023-00585-z](https://doi.org/10.1186/s12941-023-00585-z).

Frey DL, Bridson C, Dittrich S, Graeber SY, Stahl M, Wege S, Herth F, Sommerburg O, Schultz C, Dalpke A, Mall MA, **Boutin S**. Changes in Microbiome Dominance Are Associated With Declining Lung Function and Fluctuating Inflammation in People With Cystic Fibrosis. **Front Microbiol.** 2022 May 13;13:885822. doi: [10.3389/fmicb.2022.885822](https://doi.org/10.3389/fmicb.2022.885822).

Metzger MI, Graeber SY, Stahl M, Sommerburg O, Mall MA, Dalpke AH, **Boutin S**. A Volatile and Dynamic Longitudinal Microbiome Is Associated With Less Reduction in Lung Function in Adolescents With Cystic Fibrosis. **Front Cell Infect Microbiol.** 2021 Dec 6;11:763121. doi: [10.3389/fcimb.2021.763121](https://doi.org/10.3389/fcimb.2021.763121).

Frey DL, **Boutin S**, Dittrich SA, Graeber SY, Stahl M, Wege S, Herth FJF, Sommerburg O, Schultz C, Mall MA, Dalpke AH. Relationship between airway dysbiosis, inflammation and lung function in adults with cystic fibrosis. **J Cyst Fibros.** 2021 Sep;20(5):754-760. doi: [10.1016/j.jcf.2020.12.022](https://doi.org/10.1016/j.jcf.2020.12.022).

Graeber SY, **Boutin S**, Wielpütz MO, Joachim C, Frey DL, Wege S, Sommerburg O, Kauczor HU, Stahl M, Dalpke AH, Mall MA. Effects of Lumacaftor-Ivacaftor on Lung Clearance Index, Magnetic Resonance Imaging, and Airway Microbiome in Phe508del Homozygous Patients with Cystic Fibrosis. **Ann Am Thorac Soc.** 2021 Jun;18(6):971-980. doi: [10.1513/AnnalsATS.202008-1054OC](https://doi.org/10.1513/AnnalsATS.202008-1054OC).

Schmitt FCF, Lipinski A, Hofer S, Uhle F, Nusschag C, Hackert T, Dalpke AH, Weigand MA, Brenner T, **Boutin S**. Pulmonary microbiome patterns correlate with the course of the disease in patients with sepsis-induced ARDS following major abdominal surgery. **J Hosp Infect.** 2020 Apr 24:S0195-6701(20)30203-6. doi: [10.1016/j.jhin.2020.04.028](https://doi.org/10.1016/j.jhin.2020.04.028).