Philipp Christian Münch, MSc, PhD (cand.)

Personal Informations: Born in Coburg, Germany on Machr 14th, 1988, German citizenship
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ACADEMIC

PhD (Cand.) (Medicine), 04/2015 - ongoing
University of Munich, Germany

Master of Science in Epidemiology, 10/2012 - 09/2014
Major in Molecular and Clinical Epidemiology
University of Munich, Germany

Bachelor of Science / Engineer of Bioprocessinformatics, 10/2008 - 09/2012
University of Applied Sciences Weihenstephan, Germany

CAREER

Graduate Research Associate 04/2015 - ongoing
Computational Biology of Infection Research
Helmholtz Centre for Infection Research, Brunswick, Germany

Guest Researcher 04/2015 - ongoing
AG Stecher, Bacteriology
Max-von-Pettenkofer Institute, University of Munich, Munich, Germany

Graduate Research Associate 04/2015 - 12/2015
German Center for Infection Research (DZIF), &
Computational Biology of Infection Research
Helmholtz Centre for Infection Research, Brunswick, Germany

Graduate Research Associate 04/2015 - 12/2015
Computational Biology of Infection Research
Helmholtz Centre for Infection Research, Brunswick, Germany

Graduate Research Associate (stipend) 04/2014 - 12/2014
Algorithmic Bioinformatics
Heinrich-Heine University Dusseldorf, Dusseldorf, Germany

Graduate Research Associate 09/2012 - 03/2014
Algorithmic Bioinformatics
Heinrich-Heine University Dusseldorf, Dusseldorf, Germany

Research Assistant 01/2012 - 03/2012
Computational Genomics and Epidemiology
Max Planck Institute for Informatics, Saarbrücken, Germany

Research Assistant 06/2011 - 12/2011
Research Unit of Molecular Epidemiology
German Research Center for Environmental Health, Munich, Germany

Research Assistant 08/2010 - 02/2011
Computational Genomics and Epidemiology
Max Planck Institute for Informatics, Saarbrücken, Germany

SKILLS

Programming Languages: Python, Java, R, Matlab
Web Backend Technologies: R-Studio Shiny, PHP, MySQL
Software Engineering: Version control
Software: Git, Vim, VirtualEnv, Docker
Laboratory: Validated knowledge of annex 1 paragraph 3 TierSchVersV of Germany

MEMBERSHIPS

German Society for Epidemiology (DGEpi), *Member*
German Society for Infectiology (DGI), *Member*

COMMUNITY SERVICE

Hospital of Coburg, *alternative service* 08/2007 - 04/2008

PUBLICATIONS

Bai, Y.*, Müller, D.B.*, Srinivas, G.*, Garrido-Oter, R.*, Potthoff, E., Rott, M., Dombrowski, N., Münch, P.C., Spaepen, S., Remus-Emsermann, M. and Hüttel, B., 2015. Functional overlap of the Arabidopsis leaf and root microbiota. **Nature**. IF: 38.1[1]

Bulgarelli, D., Garrido-Oter, R., Münch, P.C., Weiman, A., Dröge, J., Pan, Y., McHardy, A.C. and Schulze-Lefert, P., 2015. Structure and function of the bacterial root microbiota in wild and domesticated barley. **Cell host & microbe**, 17(3), pp.392-403. IF: 12.3

Hacquard, S.*, Kracher, B.*, Hiruma, K., Münch, P.C., Garrido-Oter, R., Thon, M.R., Weimann, A., Damm, U., Dallery, J.F., Hainaut, M. and Henrissat, B., 2016. Survival trade-offs in plant roots during colonization by closely related beneficial and pathogenic fungi. **Nature communications**, 7. IF: 11.3

Brugiroux, S., Beutler, M., Carina, P., Garzetti, D, Ruscheweyh, H., Ring, D., Diehl, M., Herp, S., Loetscher, Y., Hussain, S., Bunk, B., Pukall, R., Huson, D., Münch, P.C., McHardy, A.C., McCoy, K. , Macpherson, A., Loy A., Clavel, T., Berry, T. Genome-guided design of a novel defined mouse microbiota that confers colonization resistance against Salmonella enterica serovar Typhimurium. **Nature microbiology** IF: NA

Kloetgen, A., Münch, P.C., Borkhardt, A., Hoell, J.I. and McHardy, A.C., 2014. Biochemical and bioinformatic methods for elucidating the role of RNAprotein interactions in posttranscriptional regulation. **Briefings in functional genomics**, IF: 3.1

Krause, S., Bremges, A., Münch, P.C., McHardy, A.C., Laboratory cultivation of acidophilic nanoorganisms. Physiological and bioinformatic dissection of a stable laboratory co-culture. **bioRxiv** IF: NA

Duggimpudi, S., Maney S.K., Kloetgen, A., Münch, P.C., Hezaveh, K., Shaikalishahi, H., Hoyer W., McHardy, A.C., Lang, P.A., Borkhardt, A., Hoell, J.I., 2017. Musashi 2 regulates Interleukin-6 signaling through its RNA-binding activity. *(submitted)*

Münch, P.C., Stecher, B., McHardy, A.C., EDEN: evolutionary dynamics within environments *(under revision)*

[1] impact factors updated on Sep. 2016

Münch, P.C.*, Goeser, F.*, Krmer, B., McHardy, A.C., Lutz, P., Kaczmarek, D., Finnemann, C., Nischalke, H., Geffers, R., Parcina, M., Strassburg, C.P., Hrauf, A., McHardy, A.C., Nattermann, J., Bekeredjian-Ding, I., Spengler, U., Specific alterations of the intestinal microbiome in autoimmune hepatitis show partially liver disease-specific patterns being also related to the extent of liver parenchymatous tissue remodeling *(in prepreation)* IF: NA

* joint first-authorship