

Selected publications

Original articles

- Ramírez-Zavala B, Hoffmann A, Krüger I, Schwanfelder S, Barker KS, Rogers PD, **Morschhäuser J** (2024)
Probing gene function in Candida albicans wild-type strains by Cas9-facilitated one-step integration of two dominant selection markers: a systematic analysis of recombination events at the target locus
mSphere 9:e00388-24
- Ramírez-Zavala B, Krüger I, Schwanfelder S, Barker KS, Rogers PD, **Morschhäuser J** (2024)
The zinc cluster transcription factor Znc1 regulates Rta3-dependent miltefosine resistance in Candida albicans
mSphere 9:e00270-24
- Ramírez-Zavala B, Betsova D, Schwanfelder S, Krüger I, Mottola A, Krüger T, Kniemeyer O, Brakhage AA, **Morschhäuser J** (2023)
Multiple phosphorylation sites regulate the activity of the repressor Mig1 in Candida albicans
mSphere 8:e0054623
- Oneissi M, Cruz MR, Ramírez-Zavala B, Lindemann-Perez E, **Morschhäuser J**, Garsin DA, Perez JC (2023)
Host-derived reactive oxygen species trigger activation of the Candida albicans transcription regulator Rtg1/3
PLoS Pathog 19:e1011692
- Ramírez-Zavala B, Krüger I, Wollner A, Schwanfelder S, **Morschhäuser J** (2023)
The Ypk1 protein kinase signaling pathway is rewired and not essential for viability in Candida albicans
PLoS Genet 19:e1010890
- Doorley LA, Rybak JM, Berkow EL, Zhang Q, **Morschhäuser J**, Rogers PD (2022)
Candida parapsilosis Mdr1B and Cdr1B are drivers of Mrr1-mediated clinical fluconazole resistance
Antimicrob Agents Chemother 66:e0028922
- Ramírez-Zavala B, Krüger I, Dunker C, Jacobsen ID, **Morschhäuser J** (2022)
The protein kinase Ire1 has a Hac1-independent essential role in iron uptake and virulence of Candida albicans
PLoS Pathog 18:e1010283
- Omran RP, Ramírez-Zavala B, Tebung WA, Yao S, Feng J, Law C, Dumeaux V, **Morschhäuser J**, Whiteway M (2022)
The zinc cluster transcription factor Rha1 is a positive filamentation regulator in Candida albicans
Genetics 220:iyab155
- Ramírez-Zavala B, Mottola A, Krüger I, **Morschhäuser J** (2021)
A suppressor mutation in the β -subunit Kis1 restores functionality of the SNF1 complex in Candida albicans snf4 Δ mutants
mSphere 6:e00929-21
- Mottola A, Ramírez-Zavala B, Hünninger K, Kurzai O, **Morschhäuser J** (2021)
The zinc cluster transcription factor Czf1 regulates cell wall architecture and integrity in Candida albicans
Mol Microbiol 116:483-497
- Mottola A, Schwanfelder S, **Morschhäuser J** (2020)
Generation of viable Candida albicans mutants lacking the “essential” protein kinase Snf1 by inducible gene deletion
mSphere 5:e00805-20
- Mayr E-M, Ramírez-Zavala B, Krüger I, **Morschhäuser J** (2020)
A zinc cluster transcription factor contributes to the intrinsic fluconazole resistance of Candida auris
mSphere 5:e00279-20

Ruben S, Garbe E, Mogavero S, Albrecht-Eckardt D, Hellwig D, Häder A, Krüger T, Gerth K, Jacobsen ID, Elshafee O, Brunke S, Hünninger K, Kniemeyer O, Brakhage AA, **Morschhäuser J**, Hube B, Vylkova S, Kurzai O, Martin R (2020)

Ahr1 and Tup1 contribute to the transcriptional control of virulence-associated genes in Candida albicans

mBio 11:e00206-20

Mottola A, **Morschhäuser J** (2019)

An intragenic recombination event generates a Snf4-independent form of the essential protein kinase Snf1 in Candida albicans

mSphere 4:e00352-19

Popp C, Ramírez-Zavala B, Schwanfelder S, Krüger I, **Morschhäuser J** (2019)

Evolution of fluconazole-resistant Candida albicans strains by drug-induced mating competence and parasexual recombination

mBio 10:e02740-18

Ramírez-Zavala B, Manz H, Englert F, Rogers PD, **Morschhäuser J** (2018)

A hyperactive form of the zinc cluster transcription factor Stb5 causes YOR1 overexpression and beauvericin resistance in Candida albicans

Antimicrob Agents Chemother 62:e01655-18

Allert S, Förster TM, Svensson C-M, Richardson JP, Pawlik T, Hebecker B, Rudolphi S, Juraschitz M, Schaller M, Blagojevic M, **Morschhäuser J**, Figge MT, Jacobsen ID, Naglik JR, Kasper L, Mogavero S, Hube B (2018)

Candida albicans-induced epithelial damage mediates translocation through intestinal barriers

mBio 9:e00915-18

Hampe IAI, Friedman J, Edgerton M, **Morschhäuser J** (2017)

An acquired mechanism of antifungal drug resistance simultaneously enables Candida albicans to escape from intrinsic host defenses

PLoS Pathog 13:e1006655

Popp C, Hampe IAI, Hertlein T, Ohlsen K, Rogers PD, **Morschhäuser J** (2017)

Competitive fitness of fluconazole-resistant clinical Candida albicans strains

Antimicrob Agents Chemother 61:e00584-17

Ramírez-Zavala B, Mottola A, Haubenreißer J, Schneider S, Allert S, Brunke S, Ohlsen K, Hube B, **Morschhäuser J** (2017)

The Snf1-activating kinase Sak1 is a key regulator of metabolic adaptation and in vivo fitness of Candida albicans

Mol Microbiol 104:989-1007

Ene IV, Lohse MB, Vladu AV, **Morschhäuser J**, Johnson AD, Bennett RJ (2016)

Phenotypic profiling reveals that Candida albicans opaque cells represent a metabolically specialized cell state compared to default white cells

mBio 7:e01269-16

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Systematic genetic screen for transcriptional regulators of the Candida albicans white-opaque switch

Genetics 203:1679-1692

Tebung WA, Choudhury BI, Tebbji F, **Morschhäuser J**, Whiteway M (2016)

Rewiring of the Ppr1 zinc cluster transcription factor from purine catabolism to pyrimidine biogenesis in the Saccharomycetaceae

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Schneider S, **Morschhäuser J** (2015)

Induction of Candida albicans drug resistance genes by hybrid zinc cluster transcription factors

Antimicrob Agents Chemother 59:558-569

Ramírez-Zavala B, Mogavero S, Schöller E, Sasse C, Rogers PD, **Morschhäuser J** (2014)

SAGA/ADA complex subunit Ada2 is required for Cap1-, but not Mrr1-mediated upregulation of the Candida albicans multidrug efflux pump MDR1

Antimicrob Agents Chemother 58:5102-5110

Pannanusorn S, Ramírez-Zavala B, Lünsdorf H, Agerbert B, **Morschhäuser J**, Römling U (2014)

Characterization of biofilm formation and the role of BCR1 in clinical isolates of Candida parapsilosis

Eukaryot Cell 13:438-451

Ramírez-Zavala B, Weyler M, Gildor T, Schmauch C, Kornitzer D, Arkowitz R, **Morschhäuser J** (2013)

Activation of the Cph1-dependent MAP kinase signaling pathway induces white-opaque switching in Candida albicans

PLoS Pathog 9:e1003696

Schillig R, **Morschhäuser J** (2013)

Analysis of a fungus-specific transcription factor family, the Candida albicans zinc cluster proteins, by artificial activation

Mol Microbiol 89:1003-1017

Dunkel N, Hertlein T, Franz R, Reuß O, Sasse C, Schäfer T, Ohlsen T, **Morschhäuser J** (2013)

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Eukaryot Cell 12:520-528

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Inducible and constitutive activation of two polymorphic promoter alleles of the Candida albicans multidrug efflux pump MDR1

Antimicrob Agents Chemother 56:4490-4494

Schubert S, Popp C, Rogers PD, **Morschhäuser J** (2011)

Functional dissection of a Candida albicans zinc cluster transcription factor, the multidrug resistance regulator Mrr1

Eukaryot Cell 10:1110-1121

Schubert S, Barker KS, Znaidi S, Schneider S, Dierolf F, Dunkel N, Aid M, Boucher G, Rogers PD, Raymond M, **Morschhäuser J** (2011)

Regulation of efflux pump expression and drug resistance by the transcription factors Mrr1, Upc2, and Cap1 in Candida albicans

Antimicrob Agents Chemother 55:2212-2223

Mogavero S, Tavanti A, Senesi S, Rogers PD, **Morschhäuser J** (2011)

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- Heilmann CJ, Schneider S, Barker KS, Rogers PD, **Morschhäuser J** (2010)
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A transcription factor regulatory cascade controls secreted aspartic protease expression in Candida albicans
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A gain-of-function mutation in the transcription factor Upc2p causes upregulation of ergosterol biosynthesis genes and increased fluconazole resistance in a clinical Candida albicans isolate
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- Ramírez-Zavala B, Reuß O, Park Y-N, Ohlsen K, **Morschhäuser J** (2008)
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Multiple cis-acting sequences mediate upregulation of the MDR1 efflux pump in a fluconazole-resistant clinical Candida albicans isolate
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Infect Immun 71:5344-5354
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Mol Microbiol 46:269-280

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Mol Microbiol 44:1351-1366
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Transcriptional regulators Cph1p and Efg1p mediate activation of the Candida albicans virulence gene SAP5 during infection
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Review articles

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Regulation of white-opaque switching in Candida albicans

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