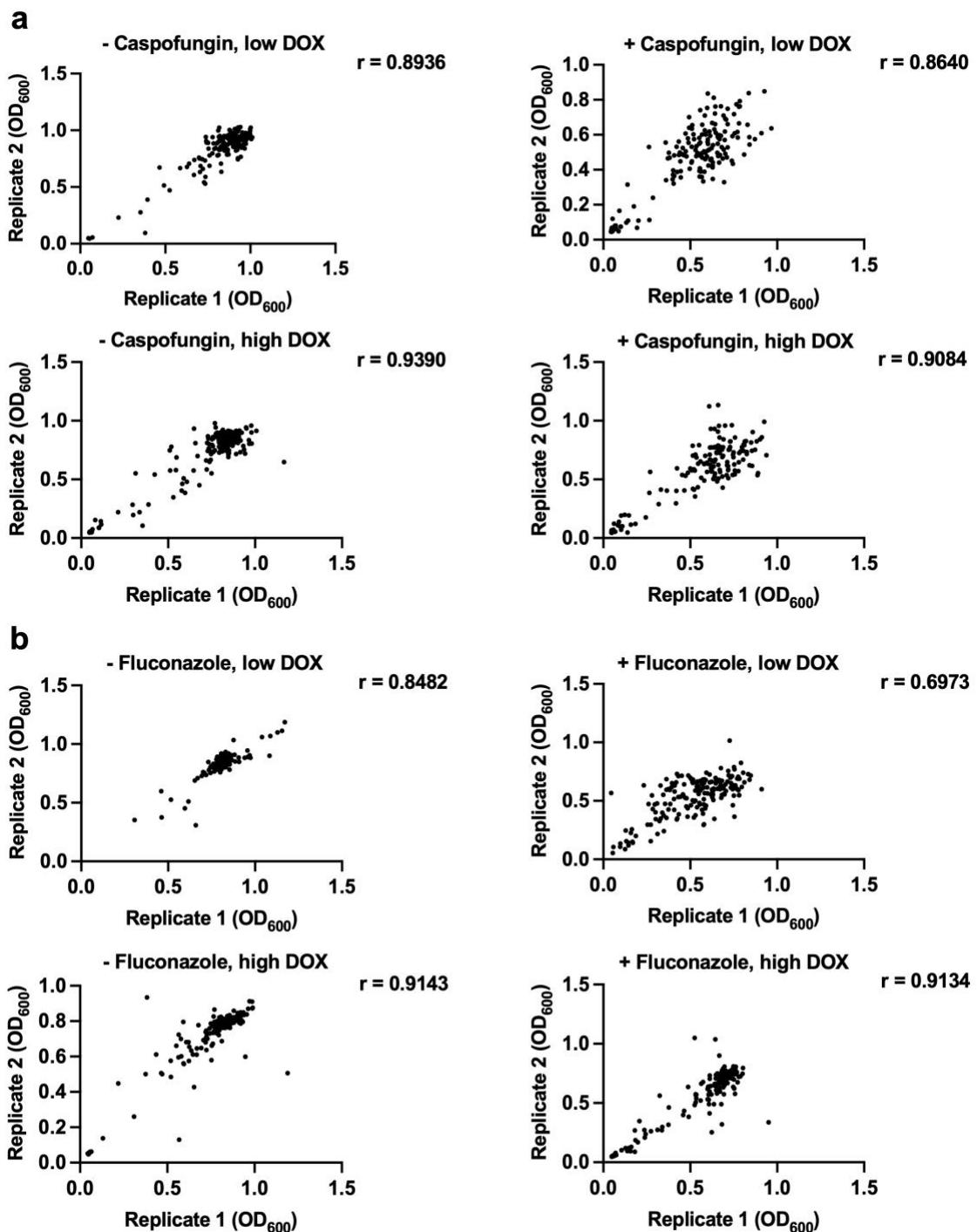


**Supplemental information**

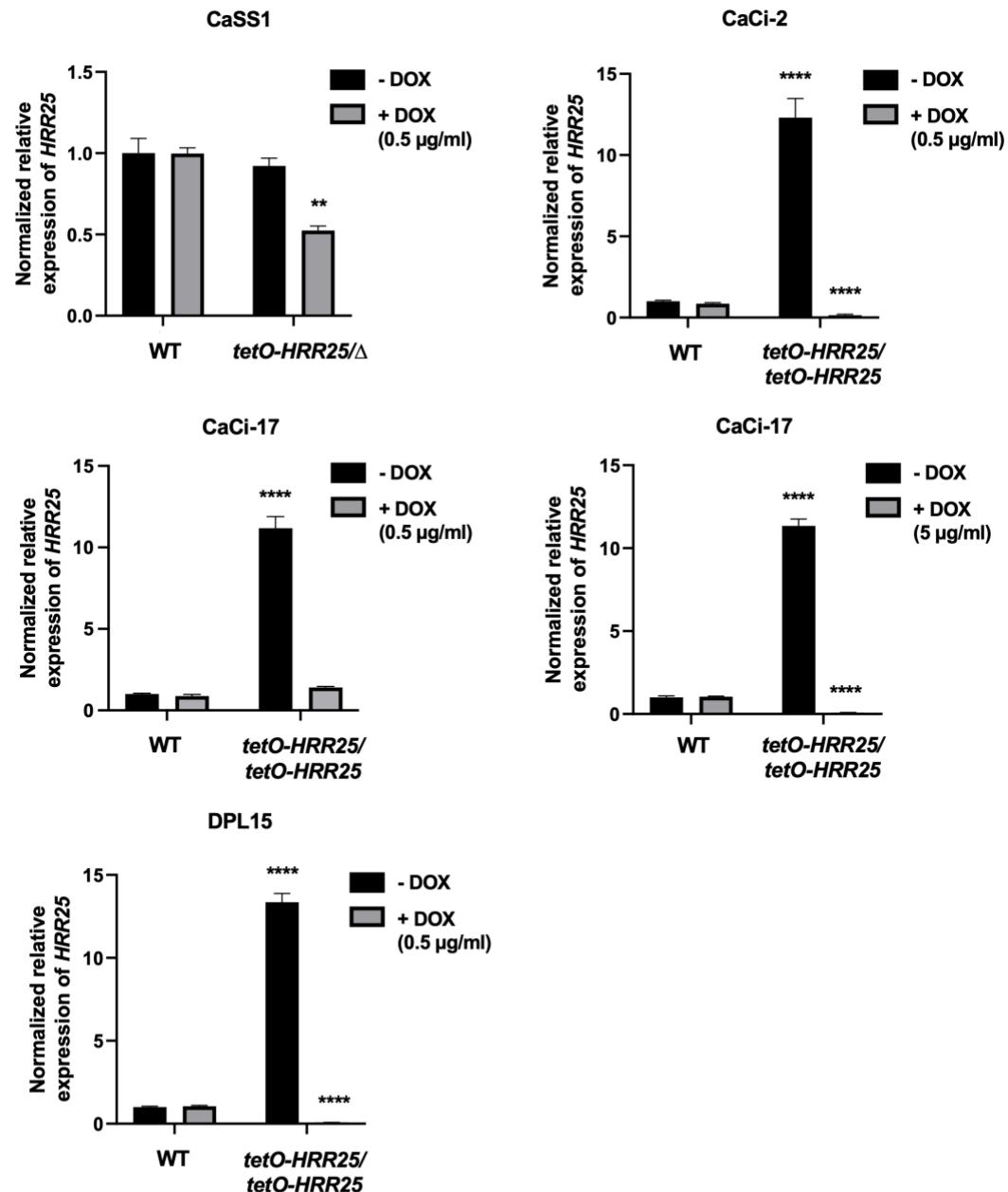
**Functional analysis of the *Candida albicans*  
kinome reveals Hrr25 as a regulator  
of antifungal susceptibility**

**Yunjin Lee, Sean D. Liston, Dongyeob Lee, Nicole Robbins, and Leah E. Cowen**

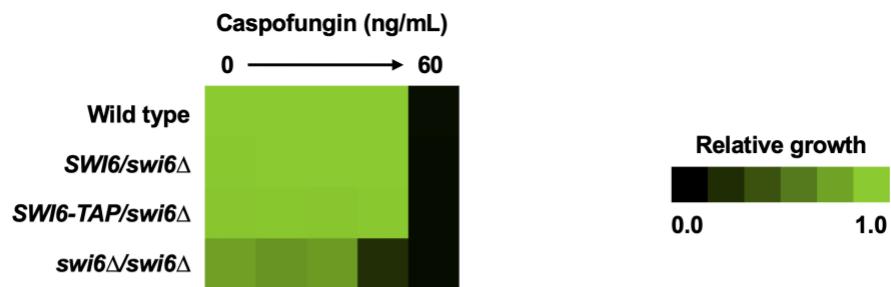
**Figure S1. Scatter plots and Pearson correlation values for technical duplicates in the caspofungin (a) and fluconazole (b) susceptibility screens (related to Figure 2).** Each point represents a strain. The correlation coefficient ( $r$ ) for each condition was assessed using GraphPad Prism.



**Figure S2. *HRR25* transcript levels are depleted upon treatment with doxycycline (DOX) (related to Figure 3).** Strains were grown in the absence or presence of DOX (0.5 µg/ml or 5 µg/ml) overnight, subcultured into fresh medium of the same condition, and grown to mid-log phase. Target gene transcript levels were normalized to *ACT1* and *TEF1*. Data are means +/- S.E.M for technical triplicates. Expression was compared to the wild-type no-DOX control and significance was determined by 2-way ANOVA (Tukey's test). Asterisks indicate level of significance (\*\*P-value < 0.01, \*\*\*\*P-value < 0.0001). Testing was repeated as an independent biological replicate to confirm results.



**Figure S3. TAP-tagged version of *C. albicans* Swi6 is functional (related to Figure 4).** Dose-response assays were performed in YPD with a two-fold dilution gradient of caspofungin. Growth ( $OD_{600}$ ) was measured after 24 hours at 30°C. Optical densities were averaged for duplicate measurements and normalized to the no-drug wild-type control. Testing was repeated as an independent biological replicate to confirm results.



**Table S1. Strains and plasmids used in this study (related to STAR methods).**

Strain/Plasmid	Description	Source
CaLC6106 (CaSS1)	<i>ura3::imm434/ura3::imm434 his3::hisG/his3::hisG</i> <i>leu2::tetRGAL4AD-URA/LEU2</i>	(Roemer et al., 2003)
CaLC79 (CaCi-2)	Clinical isolate	(White, 1997)
CaLC91 (CaCi-17)	Clinical isolate	(White, 1997)
CaLC990 (DPL15)	Clinical isolate, <i>FKS1<sup>T1922C</sup>/FKS1<sup>T1922C</sup></i>	(Park et al., 2005)
CaLC7462	<i>TAR-tetO-HRR25::NAT/TAR-tetO-HRR25::NAT</i>	This study
CaLC8121	<i>TAR- tetO-HRR25/TAR- tetO-HRR25</i>	This study
CaLC8125	<i>FKS1<sup>T1922C</sup>/FKS1<sup>T1922C</sup> TAR- tetO-HRR25/TAR- tetO-HRR25</i>	This study
CaLC1588	<i>ura3::limm434/ura3 ::limm434 arg4::hisG/arg4::hisG</i> <i>his1::hisG/his1::hisG swi4::hisG/swi4::ARG4</i> <i>swi6::URA3/swi6::HIS1</i>	(Hussein et al., 2011)
CaLC1594 (CB420)	<i>ura3::limm434/ura3 ::limm434 arg4::hisG/arg4::hisG</i> <i>his1::hisG/his1::hisG (HIS+ URA3+ARG4+)</i>	(Hussein et al., 2011)
CaLC239 (SN95)	<i>arg4/arg4 his1/his1 URA3/ura3::imm434</i> <i>IRO1/iro1::imm434</i>	(Noble and Johnson, 2005)

CaLC3393	<i>arg4 /arg4 his1 /his1 URA3/ura3::imm434 IRO1/iro1::imm434 SWI6/SWI6-TAP-ARG4</i>	(Xie et al., 2017)
CaLC8115	<i>arg4/arg4 his1/his1 URA3/ura3::imm434 IRO1/iro1::imm434 HRR25-6his3Flag-SAT1/HRR25-6his3Flag-SAT1</i>	This study
CaLC7471	<i>arg4 /arg4 his1 /his1 URA3/ura3::imm434 IRO1/iro1::imm434 HRR25-6his3Flag-SAT1/HRR25-6his3Flag-SAT1 SWI6/SWI6-TAP-ARG4</i>	This study
CaLC3786	<i>arg4/arg4 his1/his1 URA3/ura3::imm434 IRO1/iro1::imm434 hsp90::FRT CaTAR-FRT::TetO-HSP90, HSF1/HSF1-TAP-ARG4</i>	(Veri et al., 2018)
pLC1041	pV1393 with sgRNA targeting CaHRR25 promoter, amp <sup>R</sup> nat <sup>R</sup>	(Caplan et al., 2020)
pLC1081	<i>C. albicans</i> CAS9 vector pV1093	(Liu and Myers, 2017; Min et al., 2016)

**Table S2. Primers used in this study (related to STAR methods).**

Primer ID	Sequence (5' to 3')
oLC1988	CCTCCAATTCGTCAAGAAGG
oLC1989	CCGATCTTGTAAACATCTTGC
oLC2285	GACCTTGAGATAACCAATTG
oLC2286	CAGCTTGAATGGAAACGTAG
oLC4714	TCGTTTCTGATGGGCTTTTC
oLC5850	TTCTTTGGTTTTTTTTTTTTGTCGTTGCTTAAGGAAACAGCTATGACCAGT
oLC5851	TACGACCAATACGGTATTCCTTACCAACTCTTAAATCCATCGACTATTATATTGTATG
oLC5852	GGGACAATTCAAGTCAAGTC
oLC5853	GGCTTCATATTCCAATTGTGG
oLC6141	GAGTGGTGGTGTGGTATTTC
oLC6142	CACGATGAATAAACATCTGGC
oLC6926	AAGAAAGAAAGAAAACCAGGAGTGAA
oLC6927	ACAAATATTAAACTCGGGACCTGG
oLC6928	GCGGCCGCAAGTGATTAGACT
oLC6929	GCAGCTCAGTGATTAAGAGTAAAGATGG
oLC6942	CTAATTACGTGTGTATGGATC
oLC8270	AGAATCAAAGCCTGAAGAGTCAAATCTGAACAATCATAAAAATTGAAAACAGTTCAAC AACTTTATATAATATTAATGCtcgtatgaattcgagctcg

oLC9125	TCAACTGAATCAAAATTATAGTGGCACTAAATCTGCTCAACCACAAGCCCCAACACCTC CtCAACAAGGcAATCCtGCATGGCTTggtcgacggatcccc
oLC9126	CCACAACAAGGTAATCCAGCCAATTAAAAATAGTTACGCAAGTC
oLC9127	GCTGGATTACCTGTTGGGTTTAGAGCTAGAAATAGCAAGTTAAA
oLC9129	ATCTTACCATGGCAAGGATTGAAAGCC
oLC9130	GAAGATGGTGAACCAATTCAAATGGTGC