Table S1. Scaling exponents.

	$\gamma$	β	ξ	$\alpha$	δ
Yeast	2.8(2)	2.4(1)	1.8(2)	1.2(2)	0.32(6)
Fly	3.1(2)	2.2(4)	0.8(5)	0.8(7)	0.0(3)
Human	2.8(1)	2.3(1)	1.5(3)	1.3(2)	0.0(1)

Distributional exponents  $(p(k) \sim k^{-\gamma}, p(b) \sim b^{-\beta})$  were estimated using the maximum likelihood method of [90]. Other exponents  $(C \sim k^{-\xi}, b \sim k^{\alpha}, n \sim k^{-\delta})$  were estimated using nonlinear regression. Due to the relatively small sizes of the data sets, there is considerable uncertainty in these estimates.