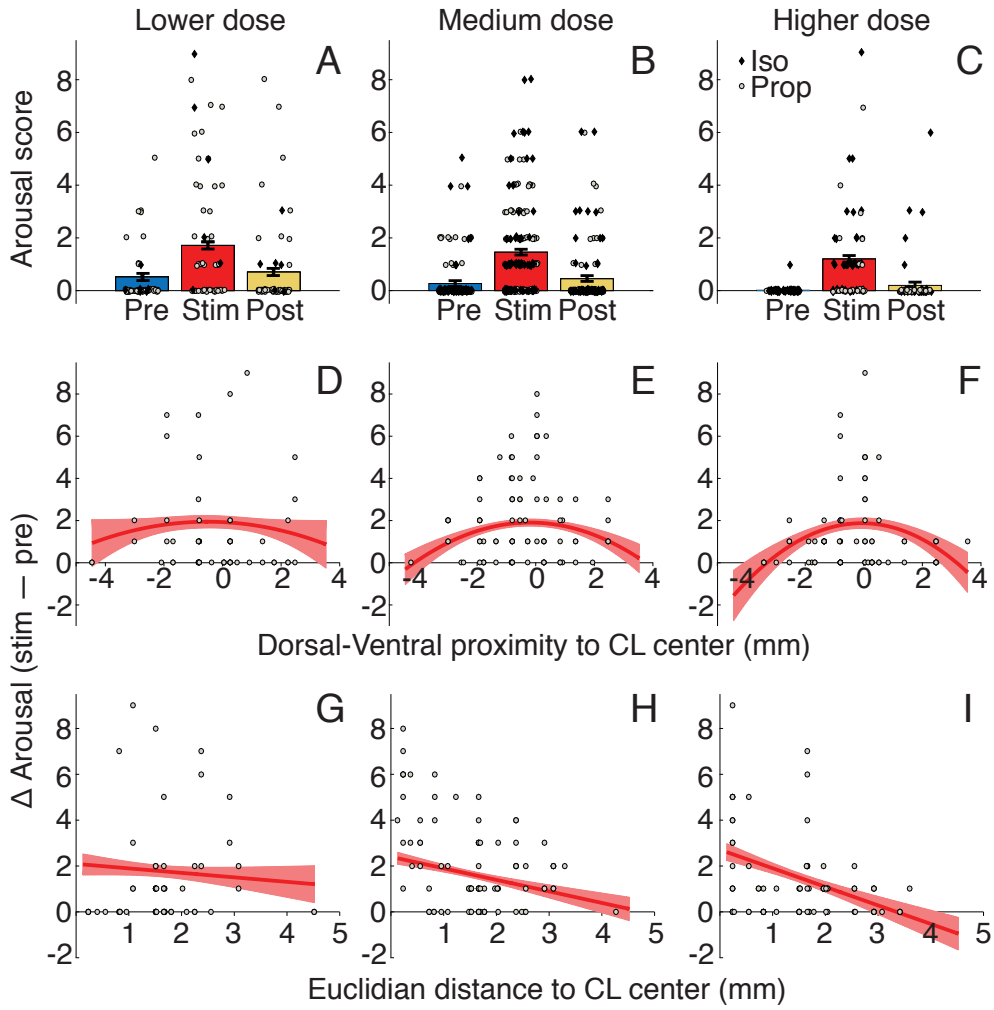

Figure S1. Stimulation effects on arousal did not significantly differ for different anesthetics or doses. Related to Figure 1. (**A-C)** Population mean arousal score (±SE) from both monkeys prior to (blue), during (red), and after (yellow) thalamic stimulation at (**A**) lower, (**B**) medium and (**C**) higher anesthetic doses in our experimental range. Individual stimulation events under isoflurane (diamonds) and propofol (circles) shown. Stimulation effects on arousal occur irrespective of dose; although the interaction is not significant, effects are slightly stronger at lower doses in our experimental range. (**D-F**) Change in stimulation-induced arousal (stim – pre) as a function of dorsal-ventral distance from CL center at (**D**) lower, (**E**) medium and (**F**) higher doses in our experimental range. Circles represent individual stimulation events. Red curve indicates quadratic fit (±SE). Proximity to CL has a slightly stronger effect under higher doses of anesthesia (i.e., stimulating array may need to be closer to CL center to induce arousal at higher doses), but the interaction is not significant. (**G-I**) Change in stimulation-induced arousal (stim – pre) as a function of Euclidian distance from CL center at (**G**) lower, (**H**) medium and (**I**) higher doses in our experimental range. Circles represent individual stimulation events. Red curve indicates linear fit (±SE). Proximity to CL is significantly predictive of arousal score regardless of dose. The effect is slightly stronger under higher doses of anesthesia, but the interaction is not significant.

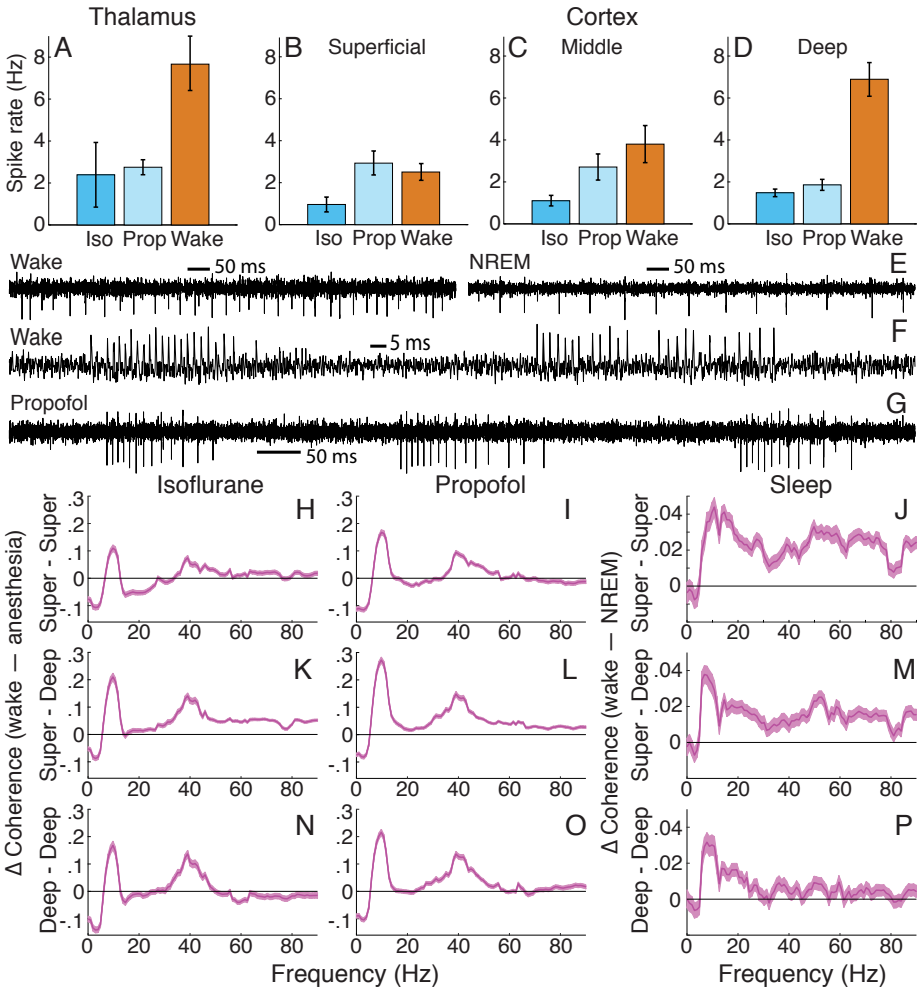

Figure S2. Propofol and isoflurane had similar effects on spiking activity and intracolumnar interactions, consistent with light NREM sleep effects. Related to Figures 2 and 3. (**A-D**) Spike rate of neurons recorded during isoflurane (Iso, blue), propofol (Prop, light blue) and wakefulness (Wake, orange) for (**A**) central lateral thalamic, (**B**) superficial cortical, (**C**) middle cortical and (**D**) deep cortical neurons. No significant differences were found between anesthetics. (**E-G**) Sample high-pass filtered traces of fast-spiking CL neurons across different states. (**E**) Example of CL neuron tonically firing at high spike rate during wakefulness (M = 59.32 Hz), and reduced spike rate in sleep (M = 38.70 Hz). (**F**) Example of fast-spiking (M = 52.83 Hz) CL neuron bursting during wakefulness. Interspike interval commonly 1-2 ms within a burst, and 12-50 ms between bursts. (**G**) Example of CL neuron bursting during propofol anesthesia. (**H-P**) Population coherence difference between wakefulness and anesthesia, positive when wake > anesthesia (error bars show 95% confidence intervals of T-tests at each frequency), or difference between wakefulness and NREM sleep, positive when wake > sleep (error bars show 95% confidence intervals). Average difference of all contact pairs (cortical areas combined) for: superficial cortical layers relative to (**H**) isoflurane, (**I**) propofol and (**J**) sleep; between superficial and deep layers relative to (**K**) isoflurane, (**L**) propofol and (**M**) sleep; for deep layers relative to (**N**) isoflurane, (**O**) propofol and (**P**) sleep.

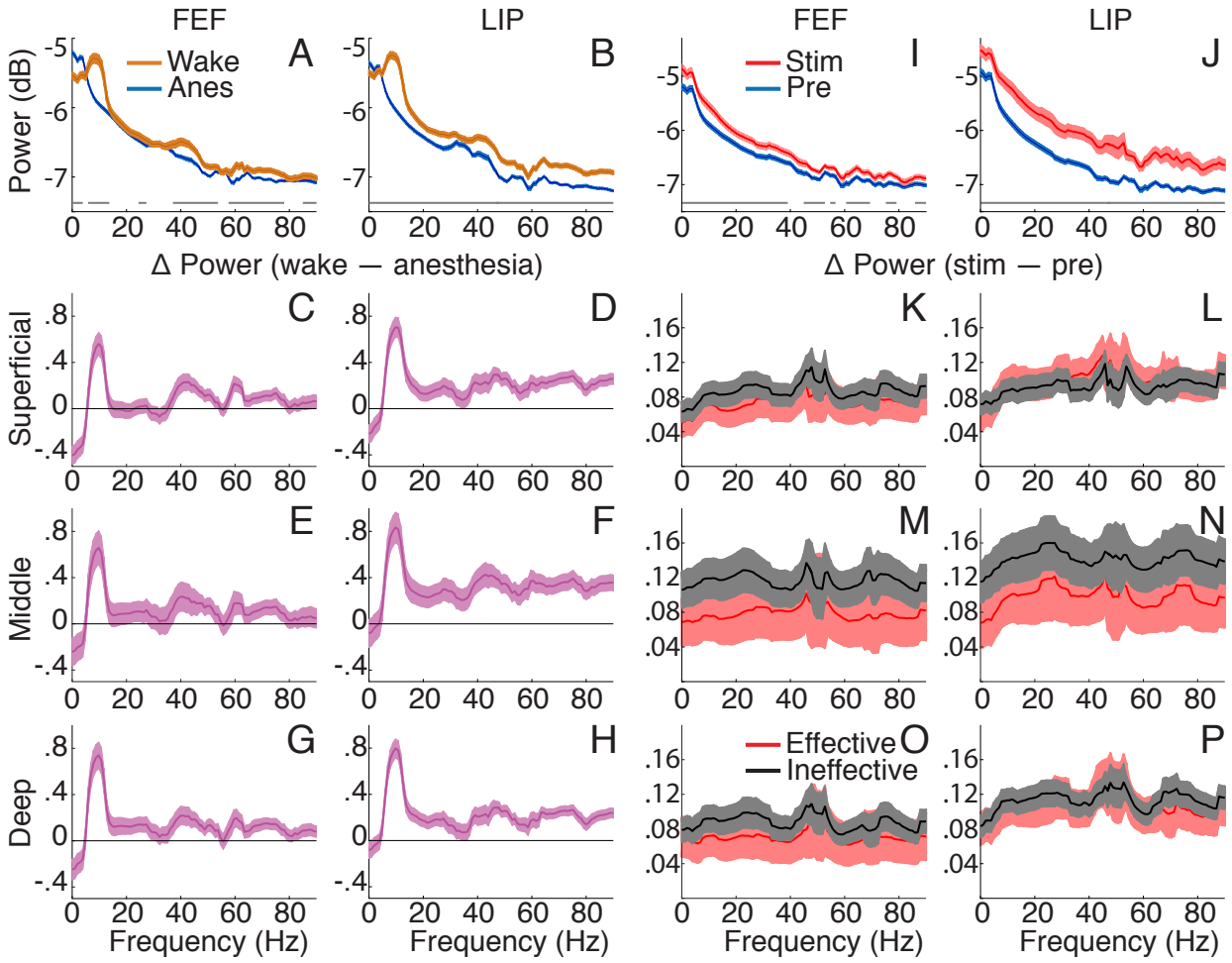

Figure S3. Cortical power correlates poorly with arousal. Related to Figures 3 and 4. Effects were not consistent between state (wake vs anesthesia) and stimulation (effective vs ineffective), and thus power is a poor predictor of behavioral arousal. (**A**) Population FEF and (**B**) LIP power spectra for wakefulness (orange) and anesthesia (blue). Average of all contacts across cortical layers. Line thickness indicates 95% confidence intervals. Gray lines show frequencies with significant differences between spectra (Holm's-corrected T-tests). (**C-H**) Population power difference between wakefulness and anesthesia. Positive when wake > anesthesia. Error bars indicate 95% confidence intervals of T-tests at each frequency. Average of all contacts for: superficial (**C**) FEF and (**D**) LIP; middle (**E**) FEF and (**F**) LIP; deep (**G**) FEF and (**H**) LIP. (**I**) Population FEF and (**J**) LIP power with 95% confidence intervals under anesthesia prior to (blue) and during effective stimulation (red). Average across all cortical layers. (**K-P**) Population power difference between effective (red) and ineffective (black) stimulations. Positive when stim > pre. Error bars indicate 95% confidence intervals. Average of all contacts for: superficial (**K**) FEF and (**L**) LIP; middle (**M**) FEF and (**N**) LIP; deep (**O**) FEF and (**P**) LIP.

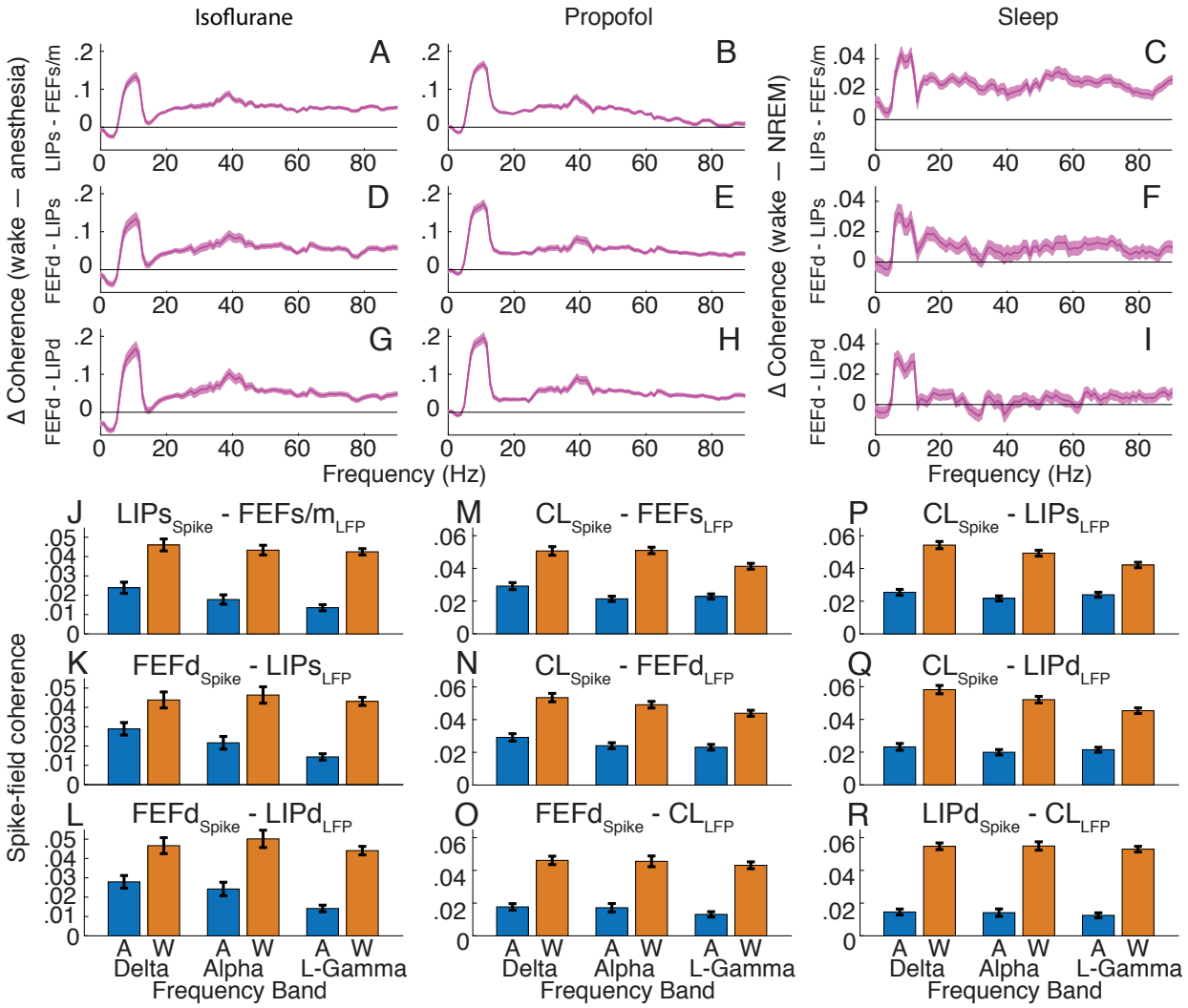

Figure S4. Propofol, isoflurane, and light NREM sleep had similar influences on cross-area interactions. Related to Figure 4. (**A-I**) Population average LFP-LFP coherence difference between wakefulness and anesthesia, positive when wake > anesthesia (error bars indicate 95% confidence intervals of T-tests at each frequency), or difference between wakefulness and sleep, positive when wake > sleep (error bars indicate 95% confidence intervals). Average difference of all contact pairs for: superficial LIP and superficial/mid FEF relative to (**A**) isoflurane, (**B**) propofol and (**C**) sleep; deep FEF and superficial LIP relative to (**D**) isoflurane, (**E**) propofol and (**F**) sleep; and deep FEF and deep LIP relative to (**G**) isoflurane, (**H**) propofol and (**I**) sleep. (**J-R**) Spike-field coherence (±SE) at delta (0-4 Hz), alpha (8-15 Hz) and low gamma (30-60 Hz) frequencies during wakefulness (W, orange) and anesthesia (A, blue). Average of all contact pairs for: (**J**) superficial LIP spikes and superficial/middle FEF LFPs; (**K**) deep FEF spikes and superficial LIP LFPs; (**L**) deep FEF spikes and deep LIP LFPs; (**M**) CL spikes and superficial FEF LFPs; (**N**) CL spikes and deep FEF LFPs; (**O**) deep FEF spikes and CL LFPs; (**P**) CL spikes and superficial LIP LFPs; (**Q**) CL spikes and deep LIP LFPs; and (**R**) deep LIP spikes and CL LFPs.

Wake v Anes intracolumnar coherence						Stimulation intracolumnar coherence					
M14	Data	Band	β_1	T	p_{adj}	M19	Data	Band	β_1	T	p_{adj}
C ~ β_0 + β_1*State + β_2*Area	**Sup ⇔ Sup** N_{Wake} = 4326 N_{Anes} = 5959 DF = 10282	δ	-0.104	-28.08	$<1.0x10^{-10}$	CDiff (stim – pre) ~ β_0 + β_1*StimEffect + β_2*DoseCode + β_3*Anes + β_4*Area	**Sup ⇔ Sup** N_{Effect} = 845 $N_{Ineffect}$ = 1544 DF = 2384	δ	-0.002	-0.30	1.000
		θ	0.002	0.43	1.000			θ	0.009	1.18	1.000
		α	0.076	20.86	$<1.0x10^{-10}$			α	0.017	2.44	0.119
		β	-0.028	-10.23	$<1.0x10^{-10}$			β	-0.004	-0.85	1.000
		γ_l	0.014	5.91	$1.7x10^{-8}$			γ_l	0.020	5.24	$1.8x10^{-6}$
		γ_h	-0.003	-1.07	0.937			γ_h	0.003	0.77	1.000
	Sup ⇔ Deep N_{Wake} = 4196 N_{Anes} = 4529 DF = 8722	δ	-0.073	-22.78	$<1.0x10^{-10}$		**Sup ⇔ Deep** N_{Effect} = 826 $N_{Ineffect}$ = 1805 DF = 2626	δ	0.006	0.82	1.000
		θ	0.086	23.29	$<1.0x10^{-10}$			θ	0.032	4.83	$1.3x10^{-6}$
		α	0.154	41.79	$<1.0x10^{-10}$			α	0.045	7.31	$<1.0x10^{-10}$
		β	0.020	10.05	$<1.0x10^{-10}$			β	0.021	5.42	$7.3x10^{-6}$
		γ_l	0.054	25.12	$<1.0x10^{-10}$			γ_l	0.032	10.45	$<1.0x10^{-10}$
		γ_h	0.034	23.02	$<1.0x10^{-10}$			γ_h	0.023	7.50	$<1.0x10^{-10}$
	Deep ⇔ Deep N_{Wake} = 4378 N_{Anes} = 4316 DF = 8691	δ	-0.102	-26.66	$<1.0x10^{-10}$		**Deep ⇔ Deep** N_{Effect} = 699 $N_{Ineffect}$ = 1484 DF = 2178	δ	0.069	7.75	$<1.0x10^{-10}$
		θ	0.053	12.70	$<1.0x10^{-10}$			θ	0.070	9.04	$<1.0x10^{-10}$
		α	0.105	26.04	$<1.0x10^{-10}$			α	0.083	11.79	$<1.0x10^{-10}$
		β	-0.002	-0.62	1.000			β	0.034	7.93	$<1.0x10^{-10}$
		γ_l	0.036	11.87	$<1.0x10^{-10}$			γ_l	0.008	2.21	0.190
		γ_h	-0.004	-1.19	0.937			γ_h	0.005	1.58	0.681

Table S1. Statistical results for intracolumnar cortical coherence in wakefulness and anesthesia, as well as during effective and ineffective thalamic stimulations. Related to Figure 3. Analyses with model 14 and 19 performed for: delta (δ) = 0-4 Hz; theta (θ) = 4-8 Hz; alpha (α) = 8-15 Hz; beta (β) = 15-30; low gamma (γ_l) = 30-60 Hz; and high gamma (γ_h) = 60-90 Hz for coherence pairs within/between different layers of cortical areas. Reported statistics are the slope (β_1), T statistic (T) and Holm's adjusted p-value (p_{adj}) for the parameter of interest (β_1*State or β_1*StimEffect). Significant effects ($p < 0.05$) show frequency bands where coherence is significantly different for wakefulness relative to anesthesia (Wake v Anes intracolumnar coherence), or for effective relative to ineffective stimulations (Stimulation intracolumnar coherence).

Wake v Anes cortical and subcortical power						Stimulation cortical power					
M15 & 17	Data	Band	β_1	T	p_{adj}	M20	Data	Band	β_1	T	p_{adj}
$S \sim \beta_0 + \beta_1$*State + β_2*Area	**Sup** N_{Wake} = 793 N_{Anes} = 881 DF = 1671	δ	-0.264	-9.26	<1.0x10^{-10}	SDiff (stim – pre) ~ $\beta_0 + \beta_1$*StimEffect + β_2*DoseCode + β_3*Anes + β_4*Area	**Sup** N_{Effect} = 241 $N_{Ineffect}$ = 756 DF = 856	δ	-0.173	-2.20	0.290
		θ	0.257	8.57	<1.0x10^{-10}			θ	-0.110	-1.34	1.000
		α	0.424	14.04	<1.0x10^{-10}			α	-0.077	-0.91	1.000
		β	0.078	3.35	0.003			β	-0.122	-1.38	1.000
		γ_l	0.127	5.32	7.2x10^{-7}			γ_l	-0.011	-0.13	1.000
		γ_h	0.156	8.67	<1.0x10^{-10}			γ_h	-0.107	-1.20	1.000
	Mid N_{Wake} = 294 N_{Anes} = 635 DF = 632	δ	-0.143	-3.34	0.003		**Mid** N_{Effect} = 91 $N_{Ineffect}$ = 299 DF = 343	δ	-0.513	-3.61	0.006
		θ	0.385	8.61	<1.0x10^{-10}			θ	-0.531	-3.56	0.007
		α	0.493	11.15	<1.0x10^{-10}			α	-0.514	-3.28	0.018
		β	0.167	5.06	2.7x10^{-6}			β	-0.531	-3.13	0.028
		γ_l	0.207	5.92	3.7x10^{-8}			γ_l	-0.388	-2.45	0.193
		γ_h	0.206	8.13	<1.0x10^{-10}			γ_h	-0.483	-3.00	0.040
	Deep N_{Wake} = 709 N_{Anes} = 764 DF = 1470	δ	-0.120	-4.23	9.8x10^{-5}		**Deep** N_{Effect} = 184 $N_{Ineffect}$ = 726 DF = 779	δ	-0.141	-1.58	0.803
		θ	0.411	13.82	<1.0x10^{-10}			θ	-0.203	-2.23	0.290
		α	0.525	17.37	<1.0x10^{-10}			α	-0.188	-2.03	0.341
		β	0.156	7.03	<1.0x10^{-10}			β	-0.218	-2.17	0.290
		γ_l	0.148	6.25	4.3x10^{-9}			γ_l	-0.126	-1.33	1.000
		γ_h	0.176	10.48	<1.0x10^{-10}			γ_h	-0.216	-2.26	0.290
$S \sim \beta_0 + \beta_1$*State	**CL** N_{Wake} = 684 N_{Anes} = 1403 DF = 2085	δ	-0.415	-14.94	<1.0x10^{-10}						
		θ	0.374	13.05	<1.0x10^{-10}						
		α	0.486	17.00	<1.0x10^{-10}						
		β	-0.180	-7.70	<1.0x10^{-10}						
		γ_l	-0.290	-10.94	<1.0x10^{-10}						
		γ_h	-0.042	-2.74	0.006						

Table S2. Statistical results for cortical and thalamic power in wakefulness and anesthesia, and for cortical power with effective and ineffective thalamic stimulations. Related to Figures 3, 4, and S3. Analyses with model 15, 17 and 20 performed for: delta (δ) = 0-4 Hz; theta (θ) = 4-8 Hz; alpha (α) = 8-15 Hz; beta (β) = 15-30 Hz; low gamma (γ_l) = 30-60 Hz; and high gamma (γ_h) = 60-90 Hz for different layers of cortical areas and for thalamus. Reported statistics are the slope (β_1), T statistic (T) and Holm's adjusted p-value (p_{adj}) for the parameter of interest (β_1*State or β_1*StimEffect). Significant effects ($p < 0.05$) show frequency bands where power is significantly different for wakefulness relative to anesthesia (Wake v Anes cortical and subcortical power), or for effective relative to ineffective stimulations (Stimulation cortical power).

Wake v Anes corticocortical LFP-LFP coherence						**Stimulation corticocortical LFP-LFP coherence**						**Wake v Anes corticocortical spike-field coherence**					
M16	Data	Band	β_1	T	p_{adj}	M21	Data	Band	β_1	T	p_{adj}	M18	Data	Band	β_1	F	p_{adj}
$C \sim \beta_0 + \beta_1$*State	**LIP_S ⇔ $FEF_{S/M}$** N_{Wake} = 3934 N_{Anes} = 3664 DF = 7524	δ	-0.012	-6.91	$<1.0x10^{-10}$	CDiff (stim – pre) ~ $\beta_0 + \beta_1$*StimEffect + β_2*DoseCode + β_3*Anes	**LIP_S ⇔ $FEF_{S/M}$** N_{Effect} = 1258 $N_{Ineffect}$ = 3397 DF = 2794	δ	-0.021	-4.05	$8.6x10^{-4}$	spikeFC ~ $\beta_0 + \beta_1$*State + γ_{neuron}*(1)	**LIP_S ⇔ $FEF_{S/M}$** N_{Wake} = 30 N_{Anes} = 30 DF = 57.43	δ	0.022	27.26	$1.8x10^{-5}$
		θ	0.070	32.30	$<1.0x10^{-10}$			θ	0.002	0.49	1.000			θ	0.024	42.17	$1.7x10^{-7}$
		α	0.103	41.80	$<1.0x10^{-10}$			α	0.026	6.87	$1.5x10^{-10}$			α	0.026	53.29	$8.4x10^{-9}$
		β	0.045	50.98	$<1.0x10^{-10}$			β	0.002	0.83	1.000			β	0.027	154.39	$<1.0x10^{-10}$
		γ_l	0.061	46.64	$<1.0x10^{-10}$			γ_l	0.012	4.45	$1.5x10^{-4}$			γ_l	0.029	161.93	$<1.0x10^{-10}$
		γ_h	0.027	19.48	$<1.0x10^{-10}$			γ_h	0.008	3.03	0.027			γ_h	0.030	155.71	$<1.0x10^{-10}$
	FEF_D ⇔ LIP_S N_{Wake} = 2634 N_{Anes} = 1816 DF = 4410	δ	-0.015	-7.64	$<1.0x10^{-10}$		**FEF_D ⇔ LIP_S** N_{Effect} = 598 $N_{Ineffect}$ = 1974 DF = 1613	δ	-0.026	-2.92	0.032		**FEF_D ⇔ LIP_S** N_{Wake} = 44 N_{Anes} = 74 DF = 114.08	δ	0.015	8.04	0.005
		θ	0.092	28.34	$<1.0x10^{-10}$			θ	0.009	1.18	1.000			θ	0.026	19.76	$6.4x10^{-5}$
		α	0.118	31.12	$<1.0x10^{-10}$			α	0.027	3.97	0.001			α	0.025	21.23	$6.3x10^{-5}$
		β	0.039	30.06	$<1.0x10^{-10}$			β	-0.012	-3.10	0.024			β	0.027	71.84	$<1.0x10^{-10}$
		γ_l	0.071	41.86	$<1.0x10^{-10}$			γ_l	-0.001	-0.41	1.000			γ_l	0.029	116.59	$<1.0x10^{-10}$
		γ_h	0.044	32.50	$<1.0x10^{-10}$			γ_h	-0.014	-3.44	0.008			γ_h	0.028	123.53	$<1.0x10^{-10}$
	FEF_D ⇔ LIP_D N_{Wake} = 2083 N_{Anes} = 1947 DF = 3968	δ	-0.013	-6.04	$1.6x10^{-9}$		**FEF_D ⇔ LIP_D** N_{Effect} = 523 $N_{Ineffect}$ = 2094 DF = 1666	δ	-0.019	-2.14	0.226		**FEF_D ⇔ LIP_D** N_{Wake} = 45 N_{Anes} = 75 DF = 115.19	δ	0.019	12.59	0.001
		θ	0.082	27.24	$<1.0x10^{-10}$			θ	-0.003	-0.37	1.000			θ	0.031	20.33	$6.4x10^{-5}$
		α	0.108	31.65	$<1.0x10^{-10}$			α	0.001	0.14	1.000			α	0.026	20.78	$6.4x10^{-5}$
		β	0.047	39.02	$<1.0x10^{-10}$			β	-0.011	-3.01	0.027			β	0.031	66.96	$<1.0x10^{-10}$
		γ_l	0.069	41.25	$<1.0x10^{-10}$			γ_l	-0.009	-2.47	0.109			γ_l	0.030	114.38	$<1.0x10^{-10}$
		γ_h	0.047	33.31	$<1.0x10^{-10}$			γ_h	-0.013	-3.36	0.010			γ_h	0.029	145.27	$<1.0x10^{-10}$

Table S3. Statistical results for cross-area corticocortical coherence in wakefulness and anesthesia, as well as during effective and ineffective stimulations. Related to Figures 4 and S4. Analyses with models 16, 21 and 18 performed for: delta (δ) = 0-4 Hz; theta (θ) = 4-8 Hz; alpha (α) = 8-15 Hz; beta (β) = 15-30 Hz; low gamma (γ_l) = 30-60 Hz; and high gamma (γ_h) = 60-90 Hz for different pairs of contacts between FEF and LIP (deep (D), superficial (S), and middle (M) layers). Reported statistics are the slope (β_1), T statistic (T) and Holm's adjusted p-value (p_{adj}) for the parameter of interest (β_1*State or β_1*StimEffect). Significant effects ($p < 0.05$) show frequency bands where coherence is significantly different for wakefulness relative to anesthesia (Wake vs Anes corticocortical LFP-LFP or spike-field coherence), or for effective relative to ineffective stimulations (Stimulation corticocortical LFP-LFP coherence).

Wake v Anes thalamocortical LFP-LFP coherence						Wake v Anes thalamocortical spike-field coherence											
M16	Data	Band	β_1	T	p_{adj}	M18	Data	Band	β_1	F	p_{adj}	M18	Data	Band	β_1	F	p_{adj}
$C \sim \beta_0 + \beta_1$*State	**CL ⇔ FEF$_S$** N_{Wake} = 3446 N_{Anes} = 9315 DF = 12531	δ	0.030	20.68	<1.0x10^{-10}	spikeFC ~ $\beta_0 + \beta_1$*State + + γ_{neuron}*(1)	**CL ⇔ FEF$_S$** N_{Wake} = 95 N_{Anes} = 154 DF = 496.63	δ	0.021	47.95	<1.0x10^{-10}	spikeFC ~ $\beta_0 + \beta_1$*State + + γ_{neuron}*(1)	**FEF$_D$ ⇔ CL** N_{Wake} = 45 N_{Anes} = 74 DF = 116.27	δ	0.028	75.75	<1.0x10^{-10}
		θ	0.084	59.83	<1.0x10^{-10}			θ	0.029	154.65	<1.0x10^{-10}			θ	0.029	88.22	<1.0x10^{-10}
		α	0.097	64.15	<1.0x10^{-10}			α	0.030	167.69	<1.0x10^{-10}			α	0.028	46.28	4.7x10^{-9}
		β	0.045	57.72	<1.0x10^{-10}			β	0.024	156.47	<1.0x10^{-10}			β	0.030	100.97	<1.0x10^{-10}
		γ_l	0.065	66.28	<1.0x10^{-10}			γ_l	0.018	112.75	<1.0x10^{-10}			γ_l	0.030	126.02	<1.0x10^{-10}
		γ_h	0.027	22.74	<1.0x10^{-10}			γ_h	0.015	85.46	<1.0x10^{-10}			γ_h	0.030	134.45	<1.0x10^{-10}
	CL ⇔ LIP$_S$ N_{Wake} = 5282 N_{Anes} = 10478 DF = 15466	δ	0.027	24.40	<1.0x10^{-10}		**CL ⇔ LIP$_S$** N_{Wake} = 93 N_{Anes} = 155 DF = 682.34	δ	0.029	135.27	<1.0x10^{-10}		**LIP$_D$ ⇔ CL** N_{Wake} = 62 N_{Anes} = 80 DF = 139.67	δ	0.040	215.05	<1.0x10^{-10}
		θ	0.123	83.19	<1.0x10^{-10}			θ	0.028	159.64	<1.0x10^{-10}			θ	0.041	105.97	<1.0x10^{-10}
		α	0.150	89.64	<1.0x10^{-10}			α	0.028	223.56	<1.0x10^{-10}			α	0.041	141.49	<1.0x10^{-10}
		β	0.031	26.12	<1.0x10^{-10}			β	0.023	228.67	<1.0x10^{-10}			β	0.040	249.93	<1.0x10^{-10}
		γ_l	0.058	54.91	<1.0x10^{-10}			γ_l	0.018	188.59	<1.0x10^{-10}			γ_l	0.040	305.65	<1.0x10^{-10}
		γ_h	0.031	34.47	<1.0x10^{-10}			γ_h	0.018	199.69	<1.0x10^{-10}			γ_h	0.040	267.00	<1.0x10^{-10}
	CL ⇔ FEF$_D$ N_{Wake} = 3561 N_{Anes} = 5675 DF = 9074	δ	-0.001	-0.612	0.541		**CL ⇔ FEF$_D$** N_{Wake} = 94 N_{Anes} = 130 DF = 616.41	δ	0.024	67.50	<1.0x10^{-10}						
		θ	0.086	48.14	<1.0x10^{-10}			θ	0.028	171.18	<1.0x10^{-10}						
		α	0.086	47.65	<1.0x10^{-10}			α	0.025	144.29	<1.0x10^{-10}						
		β	0.040	49.62	<1.0x10^{-10}			β	0.024	181.38	<1.0x10^{-10}						
		γ_l	0.054	58.00	<1.0x10^{-10}			γ_l	0.021	181.10	<1.0x10^{-10}						
		γ_h	0.042	45.84	<1.0x10^{-10}			γ_h	0.021	247.87	<1.0x10^{-10}						
	CL ⇔ LIP$_D$ N_{Wake} = 5806 N_{Anes} = 9581 DF = 15029	δ	0.024	21.69	<1.0x10^{-10}		**CL ⇔ LIP$_D$** N_{Wake} = 93 N_{Anes} = 155 DF = 384.64	δ	0.035	125.98	<1.0x10^{-10}						
		θ	0.147	94.76	<1.0x10^{-10}			θ	0.032	181.38	<1.0x10^{-10}						
		α	0.161	102.90	<1.0x10^{-10}			α	0.032	183.38	<1.0x10^{-10}						
		β	0.042	39.74	<1.0x10^{-10}			β	0.029	220.95	<1.0x10^{-10}						
		γ_l	0.072	60.78	<1.0x10^{-10}			γ_l	0.024	189.16	<1.0x10^{-10}						
		γ_h	0.022	19.19	<1.0x10^{-10}			γ_h	0.022	171.24	<1.0x10^{-10}						

Table S4. Statistical results for thalamocortical LFP-LFP and spike-field coherence in wakefulness and anesthesia. Related to Figures 4 and S4. Analyses with models 16 and 18 performed for: delta (δ), theta (θ), alpha (α), beta (β), low gamma (γ_l), and high gamma (γ_h) for all contact pairs between thalamus and superficial (S) or deep (D) cortical layers in FEF or LIP. Reported statistics are the slope (β_1), T statistic (T) and Holm's adjusted p-value (p_{adj}) for the parameter of interest (β_1*State). Significant effects ($p < 0.05$) show frequency bands where coherence is significantly different for wakefulness relative to anesthesia.