Supplementary Figures

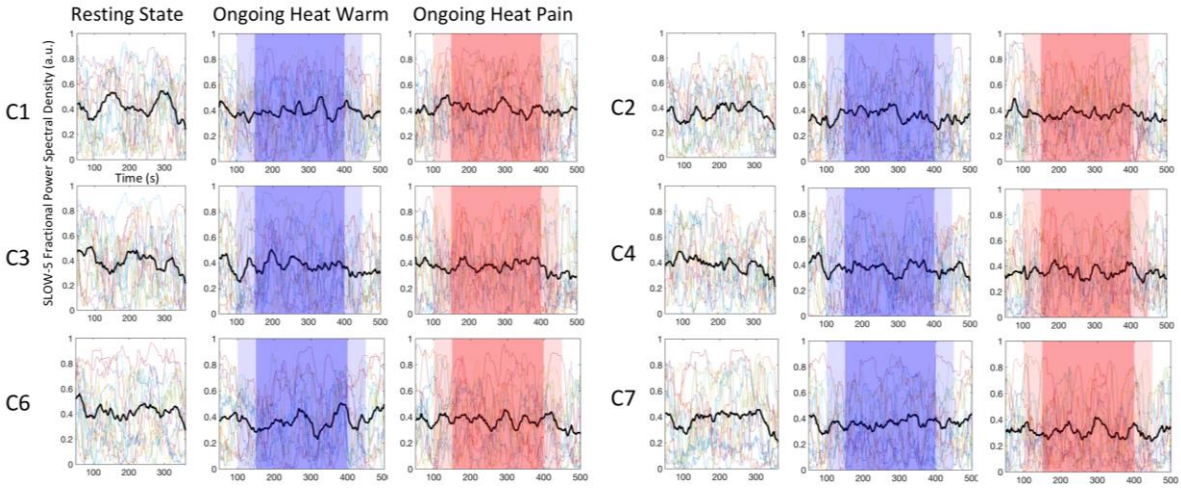

Figure S1. Healthy awake volunteers: Dynamic frequency analysis results of within-session slow-5 fractional power changes over mPFC in other channels. The slow-5 fractional power timecourses of the resting state session, ongoing innocuous heat stimulation session and ongoing noxious heat stimulation session of all participants (individual curves) and the mean changes averaged across participants (black bold curves).

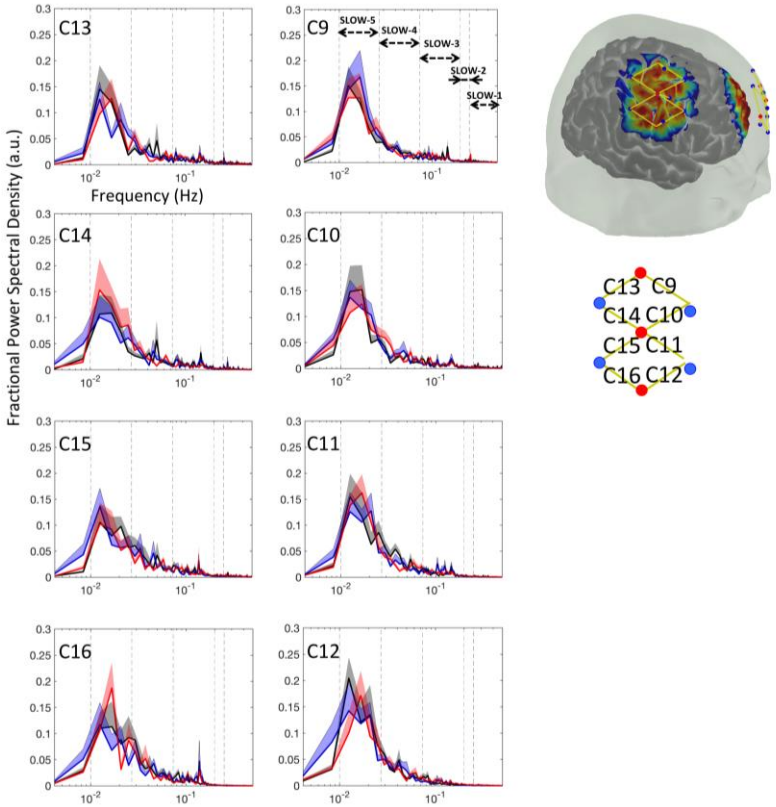

Figure S2. Healthy awake volunteers: Power spectral density analysis of contralateral somatosensory cortex signals during ongoing innocuous (heat warm) and noxious (heat pain) stimuli in healthy awake volunteers.

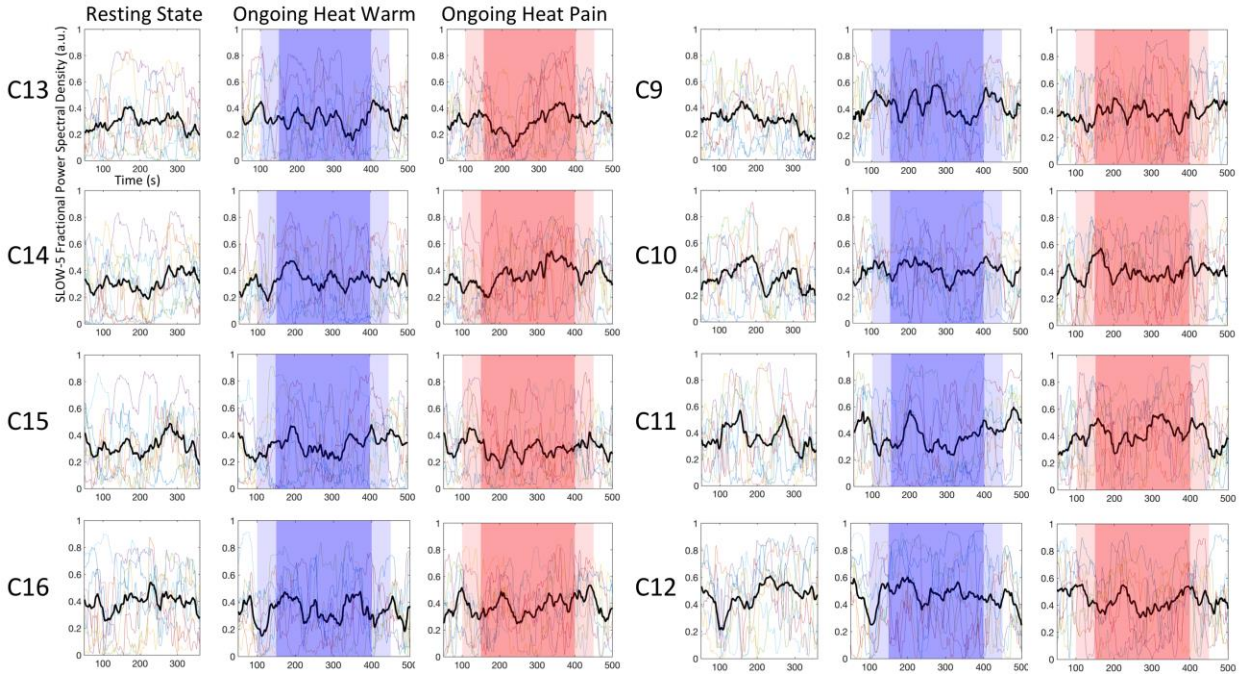

Figure S3. Healthy awake volunteers: Dynamic frequency analysis results of within-session slow-5 fractional power changes over contralateral S1. The slow-5 fractional power timecourses of the resting state session, ongoing innocuous heat stimulation session and ongoing noxious heat stimulation session of all participants (individual curves) and the mean changes averaged across participants (black bold curves).

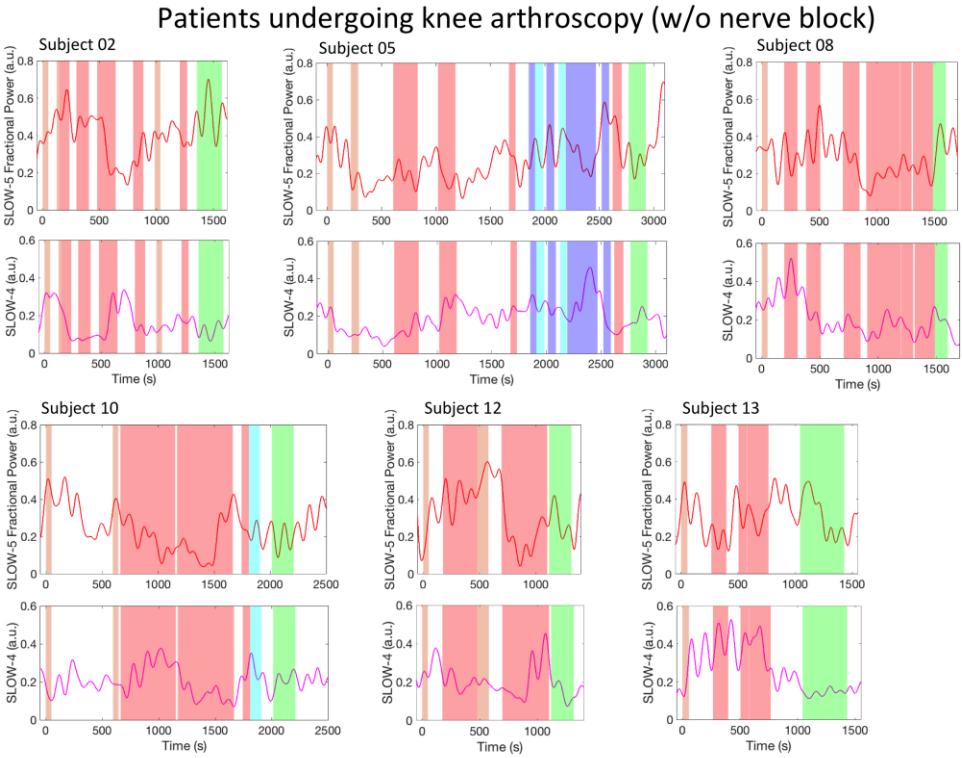

Figure S4. Anesthetized surgical patients: The slow-5 and slow-4 fractional power timecourses of channel C3 during the entire surgery of all patients.

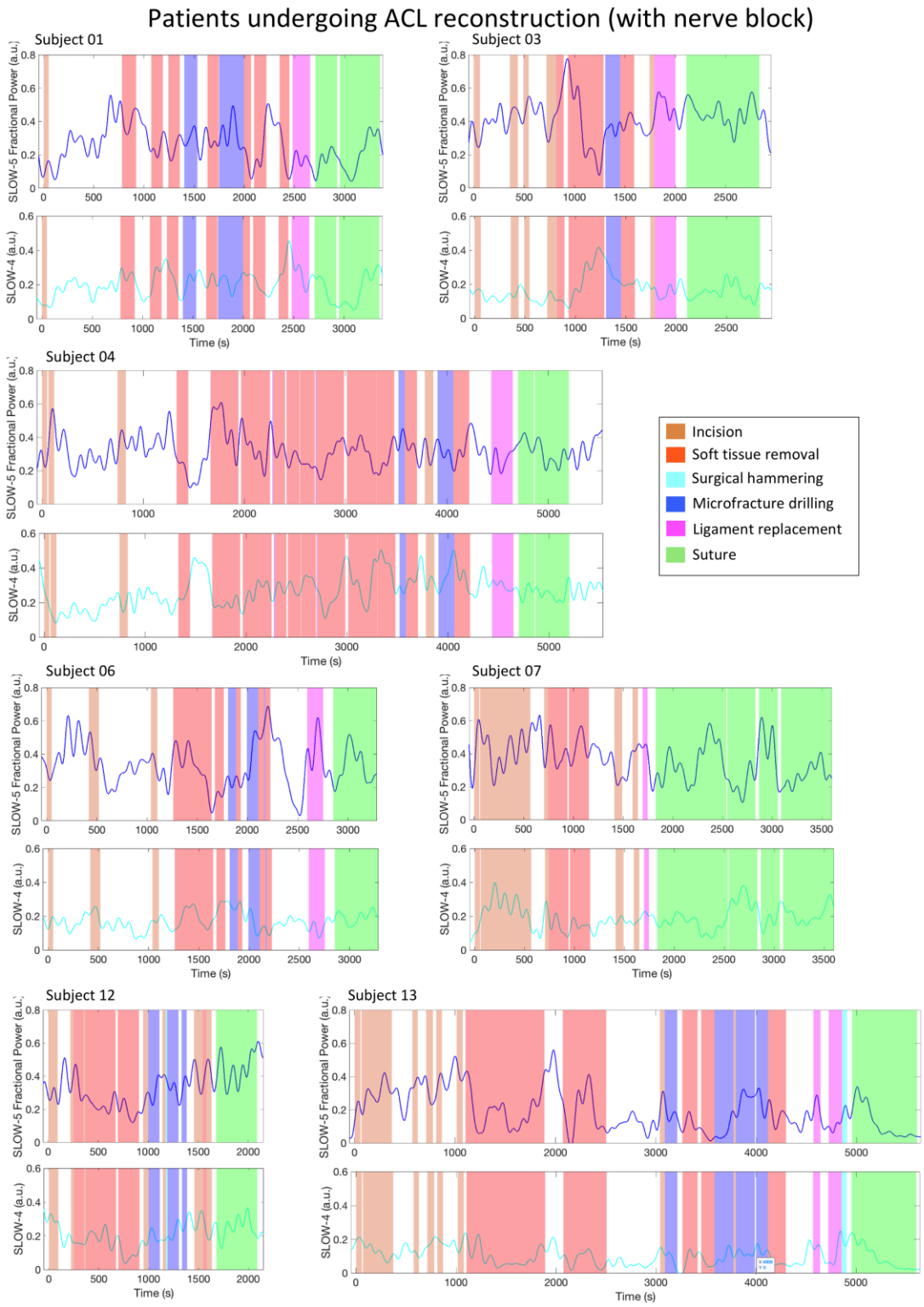

Figure S4 Continued.

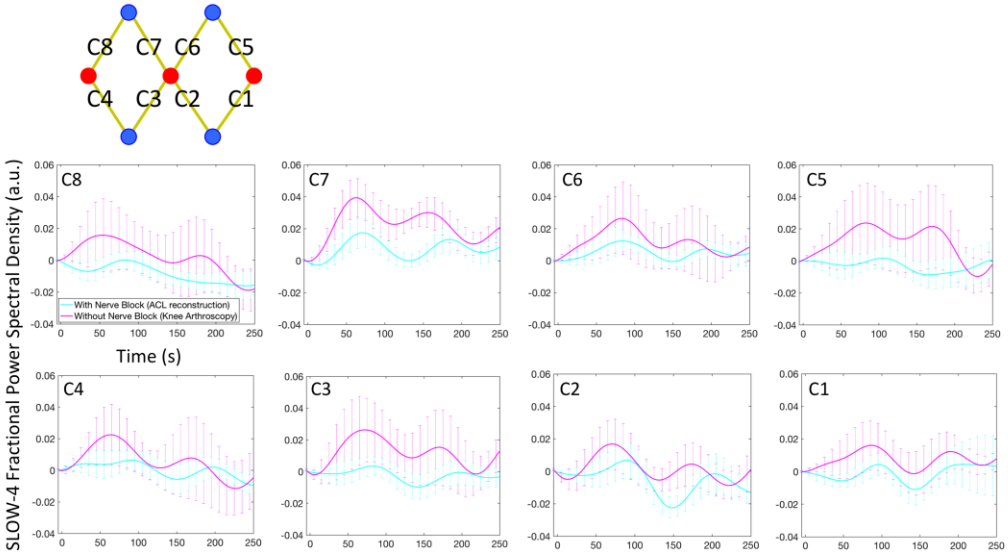

Figure S5. Anesthetized surgical patients: Slow-4 fractional power response function to recorded invasive surgical events in each frontopolar channel.

Supplementary Table

Patient	Weight (kg)	Midazolam (mg)	Fentanyl (mcg)	Sufentanil (mcg)	Propofol (mg)	Propofol infusion (mcg/kg/min)
Knee arthroscopy subgroup (without nerve block)						
P2	71.3	2	200	-	180	150
P5	78.2	2	-	30	200	-
P8	66.15	2	100	-	200	50
P10	63.6	2	-	-	250	-
P12	53.5	2	150	-	170	75
P13	70.8	2	150	-	250	325
ACL reconstruction subgroup (with nerve block)						
P1	71.3	2	75	-	150	25
P3	69	2	100	-	200	-
P4	51.8	2	100	-	150	50
P6	56.2	2	100	-	200	125
P7	38.8	2	100	-	200	-
P9	55.4	1	-	-	350	-
P11	92.6	2	200	-	40	80