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Age-related changes in cerebellar and hypothalamic function accompany non-microglial immune gene expression, altered synapse organization, and excitatory amino acid neurotransmission deficits

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DATA KEY FOR MATLAB home cage monitoring data files

These files can be read by MATLAB R6 or later versions. Each file represents one-day-one-mouse worth of data. Each file contains a single structure (MouseDayStruct) containing the following fields:

All times are reported in milliseconds from midnight of the day that the system was started unless otherwise specified

ExpName : experiment name

ExpRndName : experiment round name (identifies system cage rack)

Rnd : round (identifies system cage rack)
Run : identifies if longitudinal experiment

Sys : data collection system (usually same as cage rack)

Enc : enclosure (specific cage within the rack)

ExpDay : day from placing mice into the home cage system

Date : date mm/dd/yyyy

Mouse : mouse ID number

GroupCode : mouse cohort code

GroupName : mouse cohort name

meData : structure containing the above fields as well as the following

information for load cell data

MoveOnCumCT ms : column vector; movement start times for event, in ms

MoveOnOn ms : not used

XM_cm
 YM_cm
 column vector; distance along x axis moved for event_i
 MoveQuality
 column vector; distance along y axis moved for event_i
 column vector; data quality for event_i; good data = 1
 column vector; comment number (if any) for event_i

PosOnCumCT_ms : not used PosOffCumCT_ms : not used

PosDur_ms : column vector; movement event; duration in ms

XP_cm : column vector; drift corrected x position for event;

YP_cm : column vector; drift corrected y position for event;

PosQuality : column vector; data quality for positions; good data = 1

PosComment : column vector; comment number (if any) for event;

peData : structure containing above fields as well as the following

information for photobeam data

OnCumCT_ms : column vector; photobeam break start time for event; in ms
OffCumCT_ms : column vector; photobeam break stop time for event; in ms
OnOn_ms : column vector; photobeam duration from event; break start to

event_{i+1} break start, in ms

Dur ms : column vector; duration of photobeam event_i, in ms

OffOn ms : column vector; duration of photobeam break stop time for

event; to photobeam start time for event; in ms (photobeam

interevent interval)

XP_cm : column vector; drift corrected x position for event; YP_cm : column vector; drift corrected y position for event;

Quality : column vector; data quality for photobeam breaks; good data = 1

Comment : column vector; comment number (if any) for event_i
PosQuality : column vector; data quality for positions; good data = 1
PosComment : column vector; comment number (if any) for event_i

leData : structure containing above fields as well as information for

lickometer data; organization identical to that of peData

nestData : structure containing above fields as well as information for nest

position

Xcoord : user-provided visual x coordinate of nest (x = 1-3)Yccord : user-provided visual y coordinate of nest (y = 1-7)

CoordXPlim_cm : user x coordinate of nest potential range CoordYPlim_cm : user y coordinate of nest potential range

PredXPlim_cm : predicted x coordinate of nest (generated during state analysis)
PredYPlim_cm : predicted y coordinate of nest (generated during state analysis)

UserXPlim_cm : not implemented UserYPlim cm : not implemented

LimitsType : limit type (only 'coord' supported)

CoordQuality : data quality for nest, good data = 1

CoordComment : data comment number (if any) for nest

PredQuality : data quality for nest prediction (generated during state analysis)

PredComment : data comment number (if any) for nest prediction

sysData : structure containing above fields as well as information for

system operation

SysStartMT : system start time, military time
SysStopMT : system stop time, military time

SystemStartCumCT_hrs: system start time, hours from midnight of start day
SystemStopCumCT_hrs: system stop time, hours from midnight of start day
LightStartState : 1 if lights on, 0 if lights off when system started
LightsOffCumCT_hrs : time for lights off, hours from midnight of start day
LightsOnCumCT_hrs : time for lights on, hours from midnight of start day
LightsOffCumCT_ms : time for lights off, ms from midnight of start day
LightsOnCumCT ms : time for lights on, ms from midnight of start day

StartStopQuality : successful system start, good data = 1

StartStopComment : data comment number (if any) for system start
LightsQuality : lights confirmed by system sensor, good data = 1

LightsComment : data comment number (if any) for lighting

sumData : structure containing above fields as well as summary data for

this mouse, this day

StartAge days : mouse age on this day (in days)

StartBW_g : mouse body weight at experiment start (g) EndBW_g : mouse body weight at experiment finish (g)

AvgBW_g : mouse average body weight (g)

DeltaBW g : change in mouse body weight over experiment (g)

Length_cm : mouse length (often not input)
Chow_g : mouse chow intake (g) for this day
DC_Chow_g : mouse dark cycle chow (g) for this day
LC_Chow_g : mouse light cycle chow (g) for this day

FeedingCoeff_mgs : feeding coefficient (grams ingested/photobeam break duration)

ChowType : not used

Liquid_g : mouse water intake (g) for this day
DC_Liquid_g : mouse dark cycle water (g) for this day
LC Liquid g : mouse light cycle water (g) for this day

LickingCoeff mgl : licking coefficient (grams ingested/lickometer on duration)

LiquidType : not used

Move_m : mouse movement (m) for this day

DC_move_m : mouse dark cycle movement (m) for this day
LC_move_m : mouse light cycle movement (m) for this day
PerCageInt : percent of cage area crossed by mouse for this day

GenQuality : general experiment quality (1 = good data) for this day
GenComment : general experiment comment number (if any) for this day

ChowQuality : quality of feeding data (1 = good data) for this day
ChowComment : feeding comment number (if any) for this day
CC_ChowQuality : DC chow data quality (1 = good data) for this day
CC_ChowQuality : DC chow comment number (if any) for this day
CC_ChowQuality : LC chow data quality (1 = good data) for this day
CC_ChowComment : LC chow comment number (if any) for this day

FeedingCoeffQuality: feeding coefficient quality (1 = good data) for this day FeedingCoeffComment: feeding coefficient comment number (if any) for this day

LiquidQuality : quality of drinking data (1 = good data) for this day
LiquidComment : drinking comment number (if any) for this day
DC_LiquidQuality : DC drinking data quality (1 = good data) for this day
DC_LiquidComment : DC drinking comment number (if any) for this day
LC_LiquidQuality : LC drinking data quality (1 = good data) for this day
LC_LiquidComment : LC drinking comment number (if any) for this day
LickingCoeffQuality : drinking coefficient quality (1 = good data) for this day
LickingCoeffComment: drinking coefficient comment number (if any) for this day

MoveQuality : quality of movement data (1 = good data) for this day

MoveComment : movement comment number (if any) for this day

DC_MoveQuality : DC movement data quality (1 = good data) for this day

CC_MoveQuality : LC movement data quality (1 = good data) for this day

CC_MoveComment : LC movement data quality (1 = good data) for this day

CC_MoveComment : LC movement comment number (if any) for this day

MEQuality : load beam data quality (1 = good data) for this day

MEComment : load beam comment number (if any) for this day
PEQuality : photobeam data quality (1 = good data) for this day
PEComment : photobeam comment number (if any) for this day
LEQuality : lickometer data quality (1 = good data) for this day
LEComment : lickometer comment number (if any) for this day
NestQuality : nest data quality (1 = good data) for this day
NestComment : nest comment number (if any) for this day