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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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Authors

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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 : column vector; distance along x axis moved for event
  YM_cm : column vector; distance along y axis moved for event
  MoveQuality : column vector; data quality for event; good data = 1
  MoveComment : column vector; comment number (if any) for event
  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, break start, in ms
  Dur_ms : column vector; duration of photobeam event, in ms
OffOn_ms : column vector; duration of photobeam break stop time for event_{i} to photobeam start time for event_{i+1}, in ms (photobeam interevent interval)

XP_cm : column vector; drift corrected x position for event_{i}
YP_cm : column vector; drift corrected y position for event_{i}
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)
Ycoord : 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
PerCagelnt : 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
DC_ChowQuality : DC chow data quality (1 = good data) for this day
DC_ChowComment : DC chow comment number (if any) for this day
LC_ChowQuality : LC chow data quality (1 = good data) for this day
LC_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
DC_MoveComment : DC movement comment number (if any) for this day
LC_MoveQuality : LC movement data quality (1 = good data) for this day
LC_MoveComment : LC movement comment number (if any) for this day
MEQuality : load beam data quality (1 = good data) for this day
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEComment</td>
<td>load beam comment number (if any) for this day</td>
</tr>
<tr>
<td>PEQuality</td>
<td>photobeam data quality (1 = good data) for this day</td>
</tr>
<tr>
<td>PEComment</td>
<td>photobeam comment number (if any) for this day</td>
</tr>
<tr>
<td>LEQuality</td>
<td>lickometer data quality (1 = good data) for this day</td>
</tr>
<tr>
<td>LEComment</td>
<td>lickometer comment number (if any) for this day</td>
</tr>
<tr>
<td>NestQuality</td>
<td>nest data quality (1 = good data) for this day</td>
</tr>
<tr>
<td>NestComment</td>
<td>nest comment number (if any) for this day</td>
</tr>
</tbody>
</table>