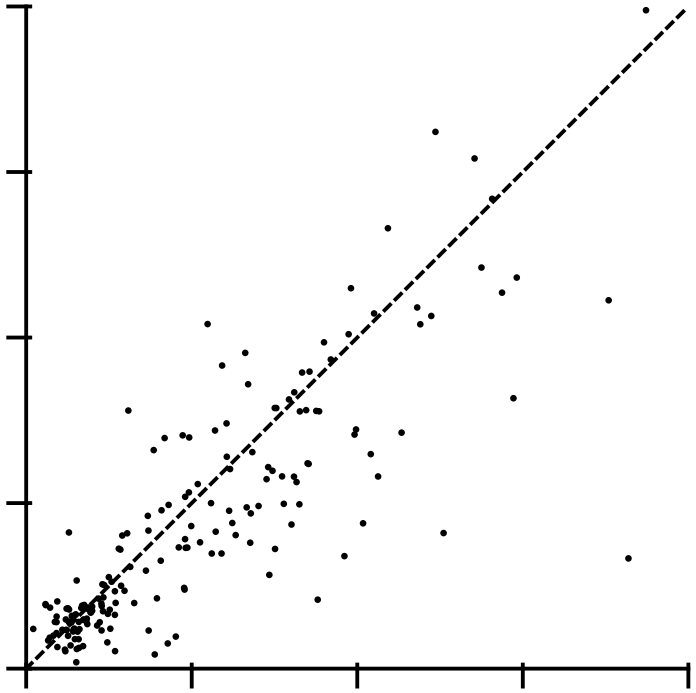
```
(***Note: Values for generating these plots are embedded within the raw data set,
which is too large to upload onto the public data repository***)

controlColor = Black;

v1Color = RGBColor["#ff1f5b"];

lpColor = RGBColor["#009ade"];

lmColor = RGBColor["#f28522"];

dateMouseListControl =
  {{"011622", "Mouse22550"}, {"011822", "Mouse22550"}, {"012322", "Mouse22549"},
   {"012622", "Mouse22549"}, {"021022", "Mouse22549"}, {"010522", "Mouse22599"},
   {"021022", "Mouse22599"}, {"021422", "Mouse22599"}, {"033122", "Mouse22544"},
   {"040122", "Mouse22562"}, {"040322", "Mouse22544"}, {"040322", "Mouse22562"}};

dateMouseListV1axons = {{"112221", "Mouse22485"}, {"112321", "Mouse22485"},
    {"120321", "Mouse22485"}, {"120821", "Mouse22517"}, {"121321", "Mouse22485"},
    {"010122", "Mouse22547"}, {"011222", "Mouse22501"}, {"011622", "Mouse22504"},
    {"011822", "Mouse22504"}, {"012322", "Mouse22575"}, {"012722", "Mouse22575"},
    {"013122", "Mouse22504"}, {"021022", "Mouse22504"}, {"021222", "Mouse22575"},
    {"032222", "Mouse22506"}, {"032622", "Mouse22506"}, {"040422", "Mouse22506"}};

dateMouseListLPaxons =
  {{"020122", "Mouse22413"}, {"020922", "Mouse22413"}, {"021422", "Mouse22413"},
   {"012622", "Mouse22514"}, {"012822", "Mouse22514"}, {"020122", "Mouse22514"},
   {"021122", "Mouse22519"}, {"021122", "Mouse22535"}, {"021522", "Mouse22535"},
   {"021722", "Mouse22519"}, {"030122", "Mouse22513"}, {"030222", "Mouse22521"},
   {"030722", "Mouse22513"}, {"030822", "Mouse22521"}, {"030822", "Mouse22519"},
   {"031522", "Mouse22513"}, {"031522", "Mouse22521"}, {"031922", "Mouse22521"},
   {"032022", "Mouse22519"}, {"032222", "Mouse22513"}, {"040622", "Mouse22513"}};

dateMouseListLMaxons = {{"022022", "Mouse22563"},
    {"022222", "Mouse22563"}, {"031722", "Mouse22539"}, {"031722", "Mouse22570"},
    {"032022", "Mouse22539"}, {"032022", "Mouse22570"}, {"032322", "Mouse22539"},
    {"032522", "Mouse22539"}, {"041022", "Mouse22407"}, {"041522", "Mouse22407"}};

(**************************)

(*******************************************)
(*******Generate plots in Figure 5E****************)
(*******************************************)

pairedROIsControl =
  Table[ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
      dateMouseListControl[[n, 1]], "/", dateMouseListControl[[n, 2]],
      "/PairedAnalysis/", dateMouseListControl[[n, 1]], "_", dateMouseListControl[[n, 2]],
      "_pairedROIs.txt"], "List"], {n, 1, Length[dateMouseListControl]}];

pairedROIsV1axons =
  Table[ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
      dateMouseListV1axons[[n, 1]], "/", dateMouseListV1axons[[n, 2]],
      "/PairedAnalysis/", dateMouseListV1axons[[n, 1]], "_", dateMouseListV1axons[[n, 2]],
      "_pairedROIs.txt"], "List"], {n, 1, Length[dateMouseListV1axons]}];
```

```
In[•]:= pairedROIsLPaxons =
          Table[ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
              dateMouseListLPaxons[[n, 1]], "/", dateMouseListLPaxons[[n, 2]],
              "/PairedAnalysis/", dateMouseListLPaxons[[n, 1]], "_", dateMouseListLPaxons[[n, 2]],
              "_pairedROIs.txt"], "List"], {n, 1, Length[dateMouseListLPaxons]}];

In[•]:= pairedROIsLMaxons =
          Table[ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
              dateMouseListLMaxons[[n, 1]], "/", dateMouseListLMaxons[[n, 2]],
              "/PairedAnalysis/", dateMouseListLMaxons[[n, 1]], "_", dateMouseListLMaxons[[n, 2]],
              "_pairedROIs.txt"], "List"], {n, 1, Length[dateMouseListLMaxons]}];

In[•]:= (***Import CRFs for all paired ROIs to compute global response averages***)

In[•]:= (*****)

In[•]:= allResponsesBeforeControl = Flatten[Table[
            Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
                    dateMouseListControl[[n, 1]], "/", dateMouseListControl[[n, 2]], "/Session1",
                    "/VisStimResults/", dateMouseListControl[[n, 1]], "_", dateMouseListControl[[
                     n, 2]], "_Session1", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
                2]], {roi, pairedROIsControl[[n]]}], {n, 1, Length[dateMouseListControl]}]];

In[•]:= allResponsesAfterControl = Flatten[Table[
            Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
                    dateMouseListControl[[n, 1]], "/", dateMouseListControl[[n, 2]], "/Session2",
                    "/VisStimResults/", dateMouseListControl[[n, 1]], "_", dateMouseListControl[[
                     n, 2]], "_Session2", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
                2]], {roi, pairedROIsControl[[n]]}], {n, 1, Length[dateMouseListControl]}]];

In[•]:= pairedRespControl =
          Partition[Riffle[allResponsesBeforeControl, allResponsesAfterControl], 2];

In[•]:= maxValControl = 4;

In[•]:= minValControl = 0;
```

In[ ]:=
```
Show[ListPlot[pairedRespControl,
  PlotRange → {{minValControl, maxValControl}, {minValControl, maxValControl}},
  AspectRatio → 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0],
  PlotStyle → {controlColor, PointSize[0.01]},
  FrameTicks → {{LinTicks[minValControl, maxValControl, MajorTickLength → {0, .03},
      MinorTickLength → {0, 0}], None}, {LinTicks[minValControl, maxValControl,
      MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}}, Axes → False,
  TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}}],
 Plot[x, {x, minValControl, maxValControl}, PlotStyle → {Black, Thick, Dashed}]]
```

Out[ ]=



In[ ]:=
```
diffsControl = Table[(pairedRespControl[[n, 2]] - pairedRespControl[[n, 1]]),
   {n, 1, Length[pairedRespControl]}];
```

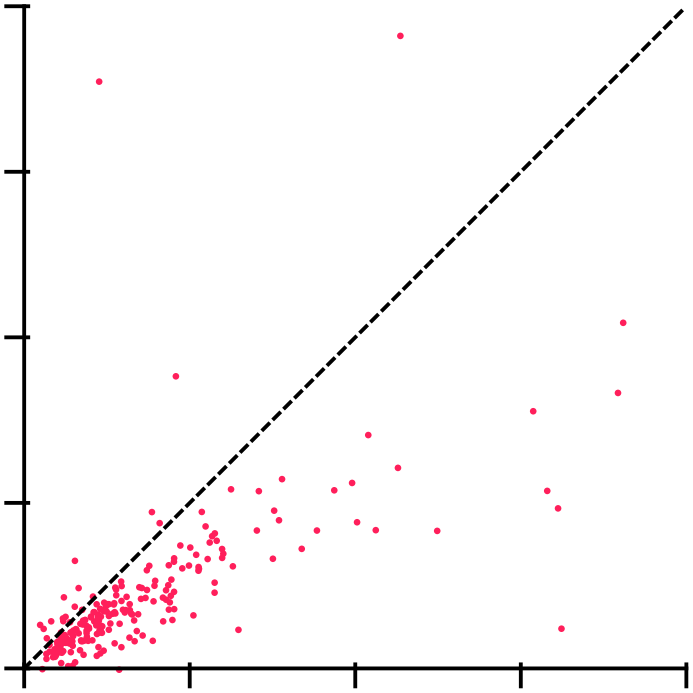
In[ ]:=
```
(*****)
```

In[ ]:=
```
allResponsesBeforeV1axons = Flatten[Table[
    Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
          dateMouseListV1axons[[n, 1]], "/", dateMouseListV1axons[[n, 2]], "/Session1",
          "/VisStimResults/", dateMouseListV1axons[[n, 1]], "_", dateMouseListV1axons[[
           n, 2]], "_Session1", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
       2]], {roi, pairedROIsV1axons[[n]]}], {n, 1, Length[dateMouseListV1axons]}]];
```

In[ ]:=
```
allResponsesAfterV1axons = Flatten[Table[
    Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
          dateMouseListV1axons[[n, 1]], "/", dateMouseListV1axons[[n, 2]], "/Session2",
          "/VisStimResults/", dateMouseListV1axons[[n, 1]], "_", dateMouseListV1axons[[
           n, 2]], "_Session2", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
       2]], {roi, pairedROIsV1axons[[n]]}], {n, 1, Length[dateMouseListV1axons]}]];
```

```
In[•]:= pairedRespV1axons =
          Partition[Riffle[allResponsesBeforeV1axons, allResponsesAfterV1axons], 2];

In[•]:= maxValV1axons = 4;

In[•]:= minValV1axons = 0;

In[•]:= Show[ListPlot[pairedRespV1axons,
          PlotRange → {{minValV1axons, maxValV1axons}, {minValV1axons, maxValV1axons}},
          AspectRatio → 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0],
          PlotStyle → {v1Color, PointSize[0.01]},
          FrameTicks → {{LinTicks[minValV1axons, maxValV1axons, MajorTickLength → {0, .03},
              MinorTickLength → {0, 0}], None}, {LinTicks[minValV1axons, maxValV1axons,
              MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}}, Axes → False,
          TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}}],
        Plot[x, {x, minValV1axons, maxValV1axons}, PlotStyle → {Black, Thick, Dashed}]]
```

Out[•]=



```
In[•]:= diffsV1axons = Table[(pairedRespV1axons[[n, 2]] - pairedRespV1axons[[n, 1]]),
          {n, 1, Length[pairedRespV1axons]}];

In[•]:= (*****)

In[•]:= allResponsesBeforeLPaxons = Flatten[Table[
            Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
                  dateMouseListLPaxons[[n, 1]], "/", dateMouseListLPaxons[[n, 2]], "/Session1",
                  "/VisStimResults/", dateMouseListLPaxons[[n, 1]], "_", dateMouseListLPaxons[[
                   n, 2]], "_Session1", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
              2]], {roi, pairedROIsLPaxons[[n]]}], {n, 1, Length[dateMouseListLPaxons]}]];
```

In[•]:=
```
allResponsesAfterLPaxons = Flatten[Table[
    Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
          dateMouseListLPaxons[[n, 1]], "/", dateMouseListLPaxons[[n, 2]], "/Session2",
          "/VisStimResults/", dateMouseListLPaxons[[n, 1]], "_", dateMouseListLPaxons[[
           n, 2]], "_Session2", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
       2]], {roi, pairedROIsLPaxons[[n]]}], {n, 1, Length[dateMouseListLPaxons]}]];
```

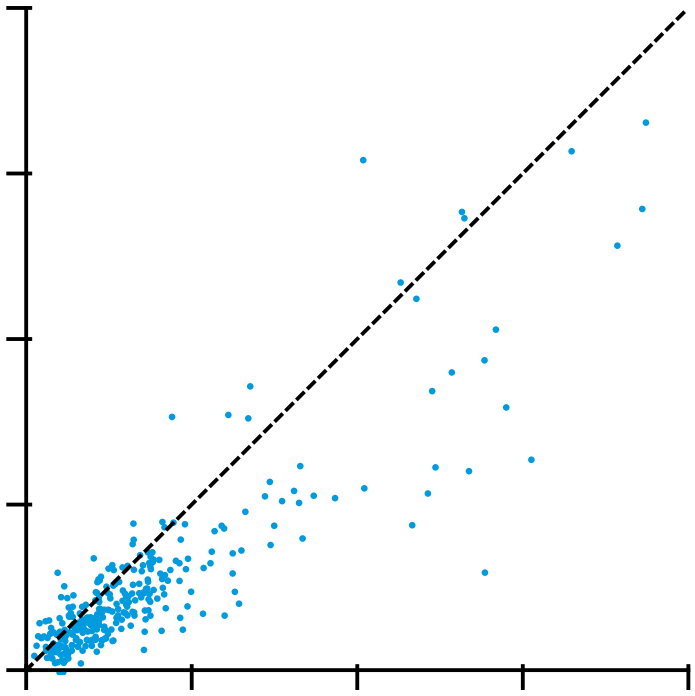
In[•]:=
```
pairedRespLPaxons =
  Partition[Riffle[allResponsesBeforeLPaxons, allResponsesAfterLPaxons], 2];
```

In[•]:=
```
maxValLPaxons = 4;
```

In[•]:=
```
minValLPaxons = 0;
```

In[•]:=
```
Show[ListPlot[pairedRespLPaxons,
  PlotRange → {{minValLPaxons, maxValLPaxons}, {minValLPaxons, maxValLPaxons}},
  AspectRatio → 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0],
  PlotStyle → {lpColor, PointSize[0.01]},
  FrameTicks → {{LinTicks[minValLPaxons, maxValLPaxons, MajorTickLength → {0, .03},
      MinorTickLength → {0, 0}], None}, {LinTicks[minValLPaxons, maxValLPaxons,
      MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}}, Axes → False,
  TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}}],
 Plot[x, {x, minValLPaxons, maxValLPaxons}, PlotStyle → {Black, Thick, Dashed}]]
```

Out[•]=

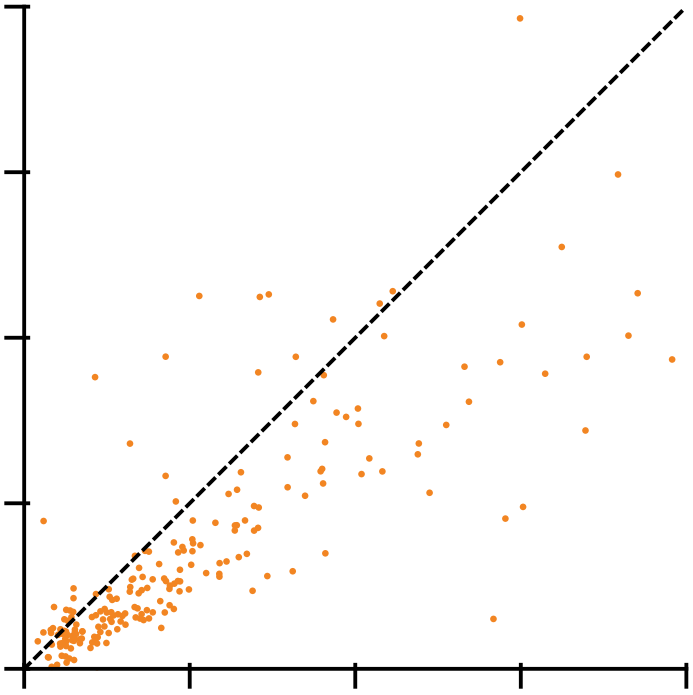


In[•]:=
```
diffsLPaxons = Table[(pairedRespLPaxons[[n, 2]] - pairedRespLPaxons[[n, 1]]),
   {n, 1, Length[pairedRespLPaxons]}];
```

In[•]:=
```
(*****)
```

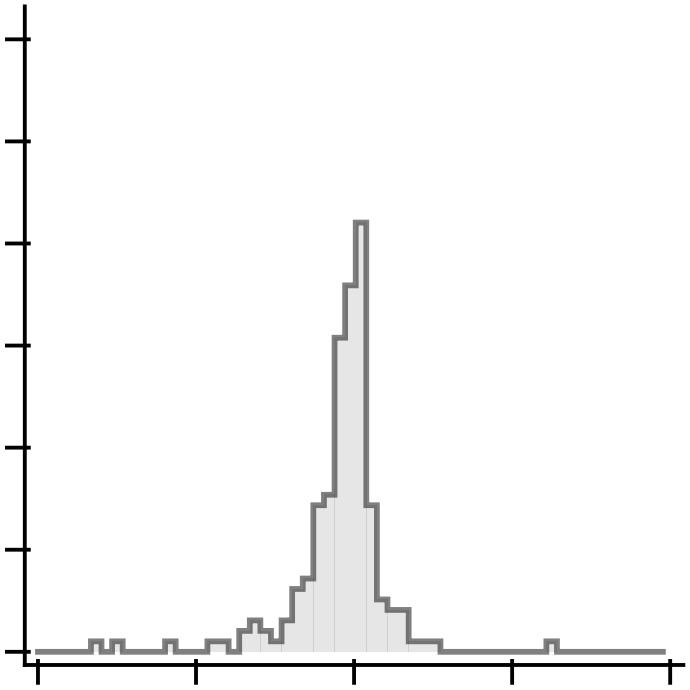
```
In[ ]:= allResponsesBeforeLMaxons = Flatten[Table[
          Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
                  dateMouseListLMaxons[[n, 1]], "/", dateMouseListLMaxons[[n, 2]], "/Session1",
                  "/VisStimResults/", dateMouseListLMaxons[[n, 1]], "_", dateMouseListLMaxons[[
                   n, 2]], "_Session1", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
              2]], {roi, pairedROIsLMaxons[[n]]}], {n, 1, Length[dateMouseListLMaxons]}]];

In[ ]:= allResponsesAfterLMaxons = Flatten[Table[
          Mean /@ Table[(ToExpression /@ Import[StringJoin["S:/Imaging/Garrett/FMB208_2PRig/",
                  dateMouseListLMaxons[[n, 1]], "/", dateMouseListLMaxons[[n, 2]], "/Session2",
                  "/VisStimResults/", dateMouseListLMaxons[[n, 1]], "_", dateMouseListLMaxons[[
                   n, 2]], "_Session2", "_", "crf_ROI", ToString[roi], ".txt"], "List"])[[All,
              2]], {roi, pairedROIsLMaxons[[n]]}], {n, 1, Length[dateMouseListLMaxons]}]];

In[ ]:= pairedRespLMaxons =
          Partition[Riffle[allResponsesBeforeLMaxons, allResponsesAfterLMaxons], 2];

In[ ]:= maxValLMaxons = 4;

In[ ]:= minValLMaxons = 0;

In[ ]:= Show[ListPlot[pairedRespLMaxons,
          PlotRange → {{minValLMaxons, maxValLMaxons}, {minValLMaxons, maxValLMaxons}},
          AspectRatio → 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0],
          PlotStyle → {lmColor, PointSize[0.01]},
          FrameTicks → {{LinTicks[minValLMaxons, maxValLMaxons, MajorTickLength → {0, .03},
              MinorTickLength → {0, 0}], None}, {LinTicks[minValLMaxons, maxValLMaxons,
              MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}}, Axes → False,
          TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}}],
        Plot[x, {x, minValLMaxons, maxValLMaxons}, PlotStyle → {Black, Thick, Dashed}]]
```

Out[ ]=



```
In[•]:= diffsLMaxons = Table[(pairedRespLMaxons[[n, 2]] - pairedRespLMaxons[[n, 1]]),
          {n, 1, Length[pairedRespLMaxons]}];

In[•]:= (**********************************************************)

In[•]:= (************)

In[•]:= bin = 2 * InterquartileRange[diffsControl] * (Length[diffsControl]^(-1/3))

Out[•]= 0.134024

In[•]:= hfn = ($MachineEpsilon + #2) / Total[#2] &;

In[•]:= h = Histogram[{diffsControl}, {-4, 4, bin}, hfn,
          ChartStyle → (Directive[#, AbsoluteThickness[3]] & /@ {controlColor}),
          PerformanceGoal → "Speed", PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= h2 = Histogram[{diffsControl}, {-4, 4, bin}, hfn,
          ChartStyle → {{controlColor}, Directive[Opacity[0.1], EdgeForm[]]},
          PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= hline = h /. rec : {({{_Rectangle}} | {}) ..} :→
           Line[Flatten[rec, 2] /. _[{x_, y_}, {X_, Y_}, ___] :→ Sequence[{x, Y}, {X, Y}]];

In[•]:= histModIndexControl = Show[hline, h2, PlotRange → {{-4, 4}, {0, 0.3}}, FrameTicks →
          {{LinTicks[0, 0.3, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
           {LinTicks[-4, 4, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
        Axes → False, TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}},
        AspectRatio -> 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

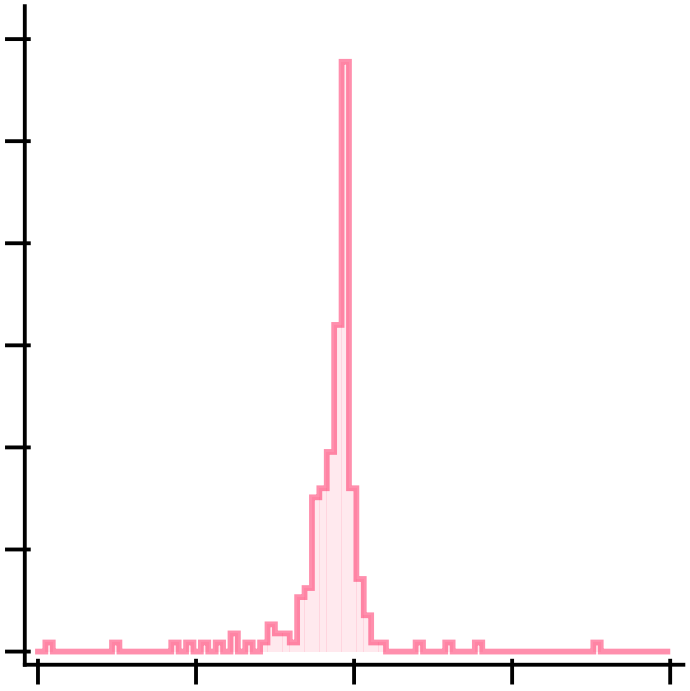
Out[•]=



```
In[•]:= bin = 2 * InterquartileRange[diffsV1axons] * (Length[diffsV1axons]^(-1/3));

In[•]:= hfn = ($MachineEpsilon + #2) / Total[#2] &;
```

```
In[•]:= h = Histogram[{diffsV1axons}, {-4, 4, bin}, hfn,
          ChartStyle → (Directive[#, AbsoluteThickness[3]] & /@ {v1Color}),
          PerformanceGoal → "Speed", PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= h2 = Histogram[{diffsV1axons}, {-4, 4, bin}, hfn, ChartStyle →
           {{v1Color}, Directive[Opacity[0.1], EdgeForm[]]}, PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= hline = h /. rec : {({{_Rectangle}} | {}) ..} :→
           Line[Flatten[rec, 2] /. _[{x_, y_}, {X_, Y_}, ___] :→ Sequence[{x, Y}, {X, Y}]];

In[•]:= histModIndexV1axons = Show[hline, h2, PlotRange → {{-4, 4}, {0, 0.3}}, FrameTicks →
          {{LinTicks[0, 0.3, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
           {LinTicks[-4, 4, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
         Axes → False, TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}},
         AspectRatio -> 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

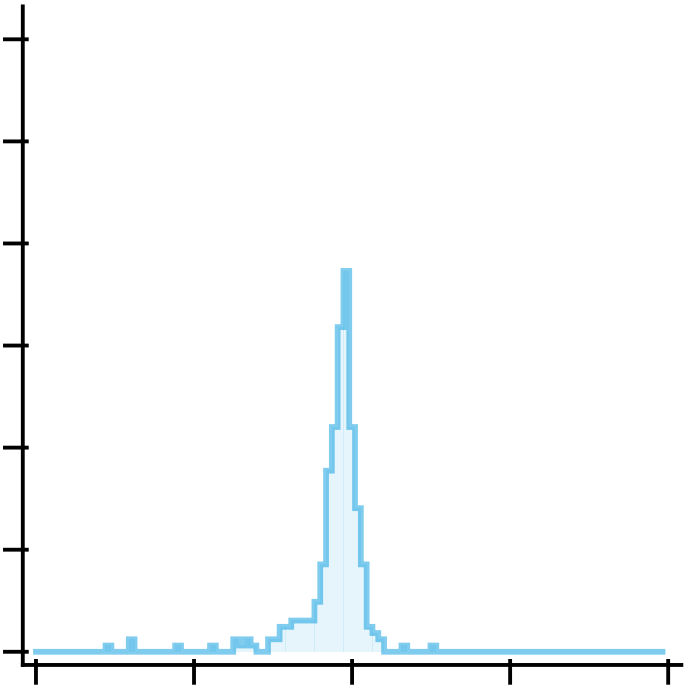
Out[•]=



```
In[•]:= bin = 2 * InterquartileRange[diffsLPaxons] * (Length[diffsLPaxons] ^ (-1 / 3));

In[•]:= hfn = ($MachineEpsilon + #2) / Total[#2] &;

In[•]:= h = Histogram[{diffsLPaxons}, {-4, 4, bin}, hfn,
          ChartStyle → (Directive[#, AbsoluteThickness[3]] & /@ {lpColor}),
          PerformanceGoal → "Speed", PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= h2 = Histogram[{diffsLPaxons}, {-4, 4, bin}, hfn, ChartStyle →
           {{lpColor}, Directive[Opacity[0.1], EdgeForm[]]}, PlotRange → {{-4, 4}, {0, 0.3}}];

In[•]:= hline = h /. rec : {({{_Rectangle}} | {}) ..} :→
           Line[Flatten[rec, 2] /. _[{x_, y_}, {X_, Y_}, ___] :→ Sequence[{x, Y}, {X, Y}]];
```

In[ ]:=
```
histModIndexLPaxons = Show[hline, h2, PlotRange → {{-4, 4}, {0, 0.3}}, FrameTicks →
    {{LinTicks[0, 0.3, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
     {LinTicks[-4, 4, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
  Axes → False, TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}},
  AspectRatio -> 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

Out[ ]=



In[ ]:=
```
bin = 2 * InterquartileRange[diffsLMaxons] * (Length[diffsLMaxons] ^ (-1 / 3));
```

In[ ]:=
```
hfn = ($MachineEpsilon + #2) / Total[#2] &;
```

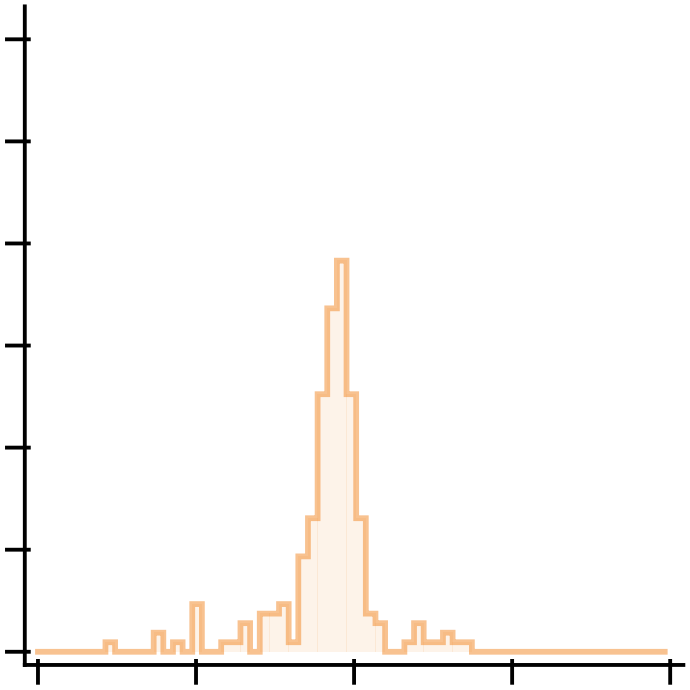
In[ ]:=
```
h = Histogram[{diffsLMaxons}, {-4, 4, bin}, hfn,
    ChartStyle → (Directive[#, AbsoluteThickness[3]] & /@ {lmColor}),
    PerformanceGoal → "Speed", PlotRange → {{-4, 4}, {0, 0.3}}];
```

In[ ]:=
```
h2 = Histogram[{diffsLMaxons}, {-4, 4, bin}, hfn, ChartStyle →
     {{lmColor}, Directive[Opacity[0.1], EdgeForm[]]}, PlotRange → {{-4, 4}, {0, 0.3}}];
```

In[ ]:=
```
hline = h /. rec : {({{_Rectangle}} | {}) ..} :→
     Line[Flatten[rec, 2] /. _[{x_, y_}, {X_, Y_}, ___] :→ Sequence[{x, Y}, {X, Y}]];
```

In[ ]:=
```
histModIndexLMaxons = Show[hline, h2, PlotRange → {{-4, 4}, {0, 0.3}}, FrameTicks →
    {{LinTicks[0, 0.3, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None},
     {LinTicks[-4, 4, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}], None}},
   Axes → False, TicksStyle → Thick, FrameStyle → Thick, Frame → {{True, None}, {True, None}},
   AspectRatio -> 1, FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]]
```

Out[ ]=



In[ ]:=
```
(**********************)

(*********************************************)
(*******Generate plots in Figure 5F***************)
(*********************************************)
```

In[ ]:=
```
controlCharts = Show[
   BoxWhiskerChart[diffsControl, {{"Whiskers", Directive[Darker@controlColor, Thick]},
     {"Fences", Directive[Darker@controlColor, Thick]}, {"MedianMarker",
      Directive[Darker@controlColor, Thickness[0.009]]}}, PlotRange → {All, {-0.7, 0.7}},
    ChartStyle → Directive[controlColor, Opacity[0.3]], Frame → False],
   DistributionChart[diffsControl, PlotRange → {All, {-0.7, 0.7}}, ChartStyle →
     Directive[EdgeForm[Transparent], Opacity[0.2], controlColor], Frame → False],
   FrameTicks → {{LinTicks[-0.7, 0.7, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];
```

```
In[•]:= v1AxonCharts =
  Show[BoxWhiskerChart[diffsV1axons, {{"Whiskers", Directive[Darker@v1Color, Thick]},
     {"Fences", Directive[Darker@v1Color, Thick]},
     {"MedianMarker", Directive[Darker@v1Color, Thickness[0.009]]}},
    PlotRange → {All, {-0.7, 0.7}}, ChartStyle → Directive[v1Color, Opacity[0.3]],
    Frame → False], DistributionChart[diffsV1axons, PlotRange → {All, {-0.7, 0.7}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], v1Color], Frame → False],
   FrameTicks → {{LinTicks[-0.7, 0.7, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];

In[•]:= lmAxonCharts =
  Show[BoxWhiskerChart[diffsLMaxons, {{"Whiskers", Directive[Darker@lmColor, Thick]},
     {"Fences", Directive[Darker@lmColor, Thick]},
     {"MedianMarker", Directive[Darker@lmColor, Thickness[0.009]]}},
    PlotRange → {All, {-0.7, 0.7}}, ChartStyle → Directive[lmColor, Opacity[0.3]],
    Frame → False], DistributionChart[diffsLMaxons, PlotRange → {All, {-0.7, 0.7}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], lmColor], Frame → False],
   FrameTicks → {{LinTicks[-0.7, 0.7, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];

In[•]:= lpAxonCharts =
  Show[BoxWhiskerChart[diffsLPaxons, {{"Whiskers", Directive[Darker@lpColor, Thick]},
     {"Fences", Directive[Darker@lpColor, Thick]},
     {"MedianMarker", Directive[Darker@lpColor, Thickness[0.009]]}},
    PlotRange → {All, {-0.7, 0.7}}, ChartStyle → Directive[lpColor, Opacity[0.3]],
    Frame → False], DistributionChart[diffsLPaxons, PlotRange → {All, {-0.7, 0.7}},
    ChartStyle → Directive[EdgeForm[Transparent], Opacity[0.2], lpColor], Frame → False],
   FrameTicks → {{LinTicks[-0.7, 0.7, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Transparent, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];

In[•]:= transp = Show[BoxWhiskerChart[diffsControl, {{"Whiskers", Directive[Transparent, Thick]},
     {"Fences", Directive[Transparent, Thick]},
     {"MedianMarker", Directive[Transparent, Thickness[0.009]]}},
    PlotRange → {All, {-0.7, 0.7}}, ChartStyle → Transparent, Frame → False],
   DistributionChart[diffsControl, PlotRange → {All, {-0.7, 0.7}}, ChartStyle →
     Directive[EdgeForm[Transparent], Opacity[0.2], Transparent], Frame → False],
   FrameTicks → {{LinTicks[-0.7, 0.7, MajorTickLength → {0, .03}, MinorTickLength → {0, 0}],
      None}, {None, None}}, Axes → False, TicksStyle → Thick,
   FrameStyle → Directive[Black, Thick], Frame → {{True, None}, {None, None}},
   FrameTicksStyle -> Directive[FontOpacity -> 0, FontSize -> 0]];
```

In[ ]:=
```
GraphicsRow[{controlCharts, v1AxonCharts, lmAxonCharts, lpAxonCharts, transp},
 Spacings → {{-280, -280, -280, -280, -480}}]
```

Out[ ]=