## Constraint Importance

For each constraint related to risk avoidance please specify:
- The importance given to each constraint during the surgical planning for MTL depth electrode implantation.
- The minimum distance at which a trajectory is not allowed.

### Avoidance of Vessels

How important is to avoid vessels (obtained from CTA)

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### Minimum Distance to Vessels (in mm)

Specify the minimum distance to any vessel that is considered safe (closer than this a trajectory should be rejected)

### Avoidance of Sulci crossing (obtained from anatomical MRI)

Specify the importance given to avoidance of crossing a sulcus wall

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### Minimum Distance to Sulci wall (in mm)

Specify the minimum distance that is considered safe (closer than this a trajectory should be rejected)

### Avoidance of Sulci fundus (obtained from anatomical MRI)

Specify the importance given to avoidance of going through the bottom of a sulcus

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### Minimum Distance to bottom of Sulci (in mm)

Bottom of sulci is avoided since small vessels may lie underneath. Specify the minimum distance that is considered safe (closer than this a trajectory should be rejected)

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Avoidance of Ventricle crossing (obtained from anatomical MRI)
Specify the importance given to avoid crossing the Ventricles (in particular lateral ventricle for anterior HC electrodes)

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Minimum Distance to Ventrices (in mm)
Specify the minimum distance that is considered safe (closer than this a trajectory should be rejected)

Smallest insertion angle
Specify the importance given to being as perpendicular to the skull as possible

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Maximum insertion angle (in degrees)
What is the maximum angle allowed (0 = perpendicular; 90= tangent). An angle larger than the specified value is not allowed

Minimum distance to Ear canal (in mm)
Specify the minimum distance to the ear canal that is considered safe (closer than this a trajectory should be rejected)

Muscle width
Specify the importance given to reduced muscle crossing

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Constraint Importance

Global Constraints

**Relative Importance: Risk vs. Target (AG/HC) Positioning**
How important is being far from Risk areas (e.g. ventricles/sulci/vessels) vs. accurately positioning the electrode in the Target. ONLY approaching target is important corresponds to 1 - Equally important corresponds to 5 - ONLY RISK is important corresponds to 10

![Importance Scale](image)

Target only is important

Risk only is important

**Relative Importance: Target (AG/HC) vs. surrounding neocortical GM**
Weight the importance of recording from the Target (AG/HC) and/or the surrounding neocortical grey matter. ONLY recording from target is important corresponds to 1 - Equally important corresponds to 5 - ONLY recording from NC GM is important corresponds to 10

![Importance Scale](image)

Target only is important

NC Grey matter only is important

**Global constraints: Minimum global distance between trajectories (in mm)**
Specify the minimum distance along the trajectories to avoid crossing (in mm)

**Global constraints: Minimum distance at insertion between trajectories (in mm)**
Specify the minimum distance between pegs (in mm)

**Are there other constraints that we should consider?**
Please specify any other constraint that we should have considered and its corresponding importance

**Comments**

![Comments Field](image)

Never submit passwords through Google Forms.

100%: You made it.