Running list of regions of interest in IPD fMRI.

From literature and from current-study contrasts.

::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::

* **Nucleus Accumbens –** Activated for reinforcing symmetrical social behaviors (CC or DD outcomes).
* **Caudate Nucleus (R) –** CC>other outcomes; CC,DD>other outcomes; Player(C) given prior Partner (C) (XC,CX);
* **Ventromedial PFC -** Activated for reinforcing symmetrical social behaviors (CC or DD outcomes).
* **Orbitofrontal PFC -** Activated for reinforcing symmetrical social behaviors (CC or DD outcomes).
* **rACC / sub-genual ACC –** Activated for reinforcing symmetrical social behaviors (CC or DD outcomes). CC>else;
* **L\_post central gyrus (BA 1/3) –** CC,DD > other outcomes; CC>other outcomes;
* **R central sulvus (BA4) –** CC,DD > other outcomes
* **R medial frontal gyrus (BA11) –** CC,DD > other outcomes; CC>else;
* **L/R paracentral lobule (BA7) –** CC > other outcomes
* **L superior temporal gyrus (BA22/42) –** CC>else; ToM / Reponse to Partner C
* **L\_insula –** CC>else;
* **L/R OFC (BA11) –** CC>else;
* **L Ant insula –** CC>else;
* **L frontal pole (BA10) –** CC>else;
* **R post-central gyrus --** (XC,CX)
* **R ACC / DMPFC (BA32) --** (XC,CX); ToM / Reponse to Partner C
* **R collateral sulcus --** (XC,CX);

*see: Rilling et al., 2002 – A Neural Basis for Social Cooperation*

* **MPFC** – ToM / Reponse to Partner C
* **TPJ –** ToM / Reponse to Partner C
* **ACC –** ToM / Reponse to Partner C
* **Temporal Pole –** ToM / Reponse to Partner C
* **Precuneus / Posterior Cingulate (BA 7/31)** – ToM / Reponse to Partner C
* **Lingual Gyrus–** ToM / Reponse to Partner C; unreciprocated cooperation
* **Thalamus –** ToM / Reponse to Partner C; unreciprocated cooperation
* **L hippocampus–** ToM / Reponse to Partner C
* **L putamen–** ToM / Reponse to Partner C
* **R Superior frontal gyrus (BA8) –** ToM / Reponse to Partner C

*See: Rilling et al., 2004 – The neural correlates of theory of mind within interpersonal interactions.*

* **Anterior Insula** – unreciprocated cooperation
* **Mid frontal gyrus (BA9) –** unreciprocated cooperation
* **L amygdala**  -- unreciprocated cooperation
* **Lateral OFC (connectivity with insula)** – unreciprocated cooperation CD outcome

*Rilling et al., 2008 – The neural correlates of the affective response to unreciprocated cooperation*

* **Increased Anterior Insula –** unreciprocated coop > reciprocated coop
* **Increased left hippocampus –** unreciprocated coop > reciprocated coop
* **Increased left lingual gyrus –** unreciprocated coop > reciprocated coop
* **Connectivity (AntIns~LOFC)** – predicts subsequent defection following unreciprocated cooperation.

**See also:** *Opposing BOLD responses to reciprocated and unreciprocated altruism in putative reward pathways*

* **vmPFC / rACC**
* **striatum / subgenual ACC**

*Sanfey 2007 – Social Decision-Making: Insights from Game Theory and Neuroscience (revie)*

* **Striatum (NAcc, caudate, putamen)**
* **DLPFC – see also:** Soutschek et al., The importance of the lateral PFC for strategic decision making in the PD. 2015. [*TMS to DLPFC reduces cooperation following CD trials*]
* **MPFC**
* **OFC**
* **ACC**
* **PCC**
* **Insula**
* **Amygdala**