Open Science in action
Doing research as a community!

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Chair of OHBM Open Science SIG

@cmaumet
@ohbmopen
‘Open’ science?
Understanding the human brain...
Representing the human population

[Graph showing median sample size over years from 1995 to 2015]

2015: 30 participants

Open data

[Poldrack et. al, Nature Neuroscience 2017]
Understanding what matters and what does not

Open methods

[Bowring et. al, HBM 2019]
Every *little* bit counts
Sharing our research outputs

Preprocessing

Derived data

Statistical analysis

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Sharing our research outputs

1. Preprocessing
2. Derived data
3. Statistical analysis

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Sharing our research outputs

Preprocessing

Derived data

Statistical analysis

HAL, BiorXiv, Pubmed

Image credits: Parcels 1 2 & 4 (CC0), Parcel 3 (CC0), Parcel 5 (CC0).
Sharing our research outputs

Preprocessing → Derived data → Statistical analysis → HAL, BiorXiv, Pubmed

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Preprocessing → Derived data → Statistical analysis → HAL, BiorXiv, Pubmed

Image credits: Parcels 1 2 & 4 (CC0), Parcel 3 (CC0), Parcel 5 (CC0).
Sharing our research outputs

Preprocessing → Derived data → Statistical analysis → HAL, BiorXiv, Pubmed, brainmap.org, neurosynth.org, brainspell.org, NEUROVAULT

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Image credits: Parcels 1 2 & 4 (CC0), Parcel 3 (CC0), Parcel 5 (CC0).
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HAL, BiorXiv Pubmed Neurosynth.org brainspell NeuroVault

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Preprocessing → Derived data → Statistical analysis

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Doing research as a community!
Hackathons: A new space for collaborative projects and learning.

Liza Levitis
OS-SIG hackathon co-chair

Inclusivity as a requirement for robust and reproducible brain imaging research.

Cassandra Gould van Praag
OS-SIG Open Science Room co-chair
Thank you!

Credit: Presentation template by SlidesCarnival, adapted