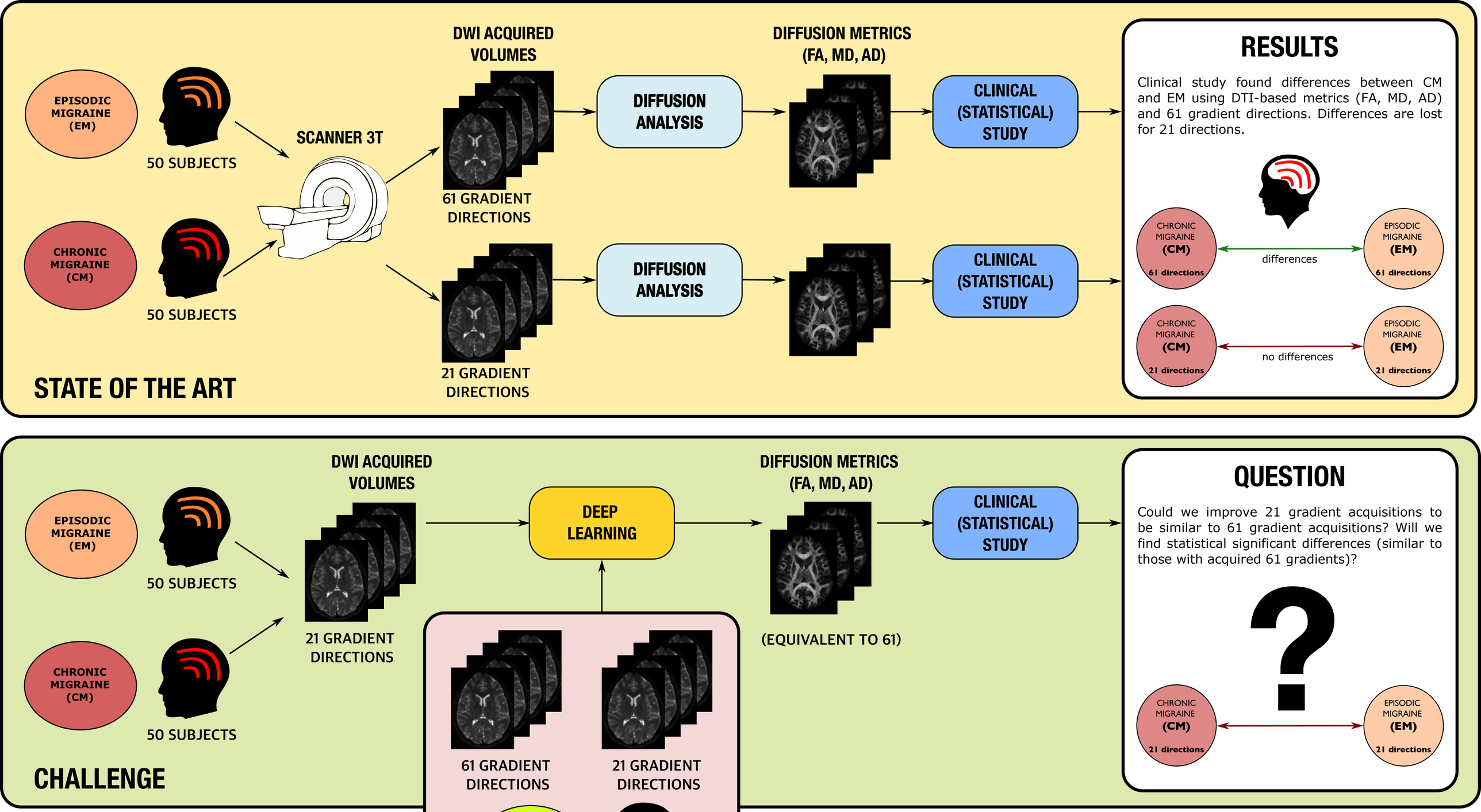
EPISODIC MIGRAINE (EM)
50 SUBJECTS
CHRONIC MIGRAINE (CM)
50 SUBJECTS
SCANNER 3T
DWI ACQUIRED VOLUMES
61 GRADIENT DIRECTIONS
21 GRADIENT DIRECTIONS
DIFFUSION ANALYSIS
DIFFUSION ANALYSIS
DIFFUSION METRICS (FA, MD, AD)
CLINICAL (STATISTICAL) STUDY
CLINICAL (STATISTICAL) STUDY
STATE OF THE ART
RESULTS
Clinical study found differences between CM and EM using DTI-based metrics (FA, MD, AD) and 61 gradient directions. Differences are lost for 21 directions.
CHRONIC MIGRAINE (CM) 61 directions
differences
EPISODIC MIGRAINE (EM) 61 directions
CHRONIC MIGRAINE (CM) 21 directions
no differences
EPISODIC MIGRAINE (EM) 21 directions
EPISODIC MIGRAINE (EM)
50 SUBJECTS
CHRONIC MIGRAINE (CM)
50 SUBJECTS
DWI ACQUIRED VOLUMES
21 GRADIENT DIRECTIONS
DEEP LEARNING
61 GRADIENT DIRECTIONS
21 GRADIENT DIRECTIONS
HEALTHY CONTROLS (HC)
TRAINING DATA
DIFFUSION METRICS (FA, MD, AD)
(EQUIVALENT TO 61)
CLINICAL (STATISTICAL) STUDY
CHALLENGE
QUESTION
Could we improve 21 gradient acquisitions to be similar to 61 gradient acquisitions? Will we find statistical significant differences (similar to those with acquired 61 gradients)?
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CHRONIC MIGRAINE (CM) 21 directions
EPISODIC MIGRAINE (EM) 21 directions