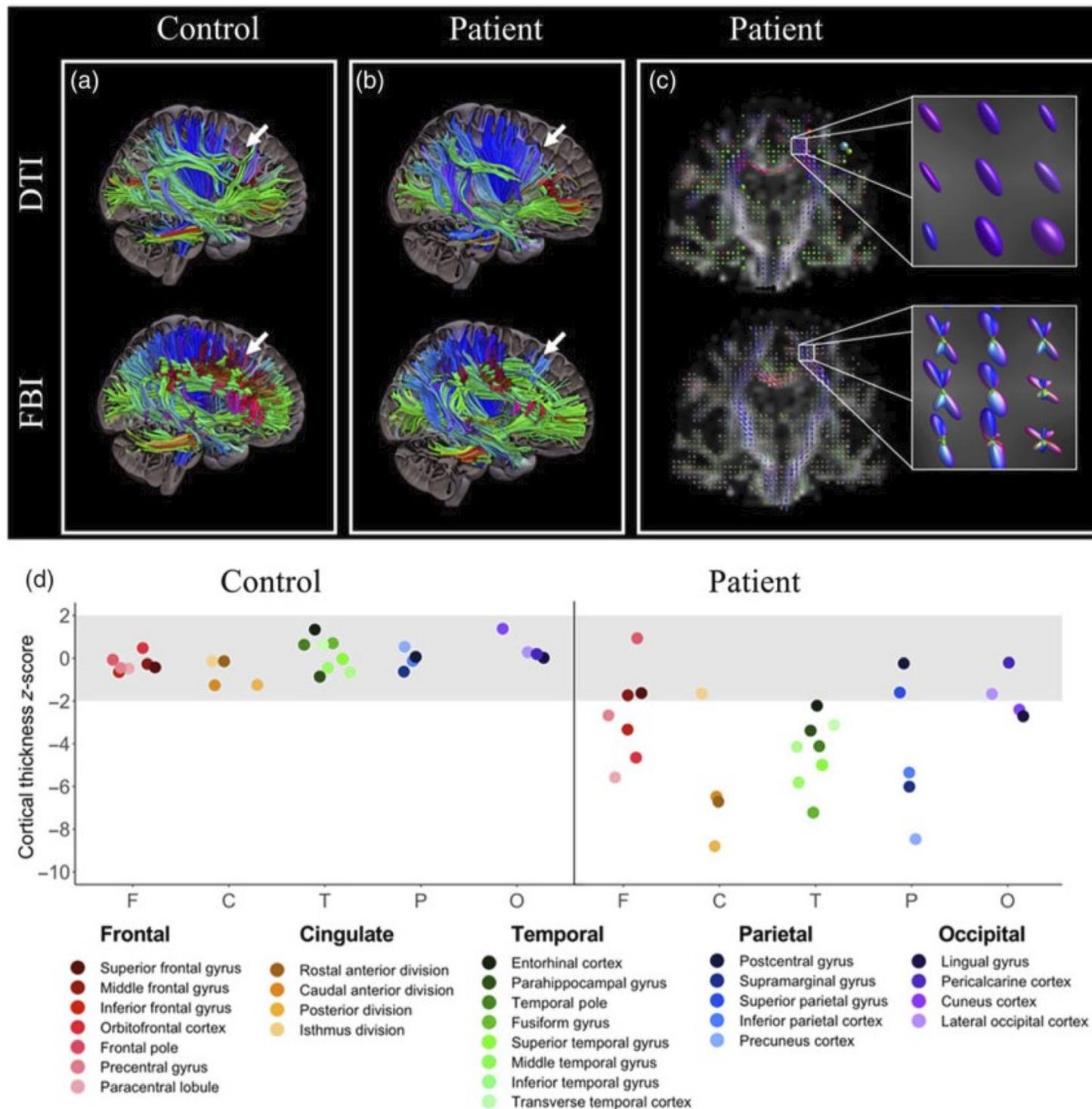


# CBI's Image of the Month

January, 2021

Courtesy of the Benitez Lab



**Fig. 2.** DTI and FBI tractography (A–C) and cortical thickness normed z-scores (D) of the control and the patient. (A and B) The sagittal slices include tracts with anterior-to-posterior (green), inferior-to-superior (blue), and left-to-right (red/magenta) directional orientations. Compared to DTI, FBI is better able to resolve crossing fibers particularly in the frontal regions (see tracts indicated by white arrows in A, particularly the red/magenta tracts using the FBI data). Compared to DTI, FBI resolves the potential presence of intact axons in the frontal regions (see tracts indicated by white arrows in B, particularly the green and red/magenta tracts using the FBI data). (C) This figure shows coronal slices of DTI and FBI fiber orientation distribution functions (ODFs) with a zoomed-in  $3 \times 3$  matrix of voxels highlighting FBI's ability to generate ODFs with multiple directions, thereby resolving crossing fibers. (D) This figure depicts the normed z-scores (y-axis) of the cortical thickness regions of interest within the F = Frontal, C = Caudate, T = Temporal, P = Parietal, and O = Occipital lobes (x-axes) for both the control and the patient, showing more aberrant cortical thickness measurements in the patient than the control across most regions. DTI = diffusion tensor imaging; FBI = fiber ball imaging.