Figure 3
A “chatterbox” origami model to show in 3D the mechanisms of depression at behavioral, cognitive, biological, and environmental levels of explanation. The figure can be cut out and assembled along the dotted lines (search “how to make a chatterbox” online for instructions). The entire model represents an individual with depression. Move apart the four apices to reveal examples of either maintenance (blue) or treatment target (brown) observations and hypothesized mechanisms. Behavioral observations constitute directly observed experimental and clinical variables; for example, fewer specific details recalled during an autobiographical memory task or clinical observations of reduced spontaneous activity. At the cognitive level are the mental processes hypothesized to result in these behavioral observations; these are unobservable directly but must be inferred on the basis of controlled experiments. At the biological level are molecular or systems neuroscience mechanisms thought to underlie cognitive and behavioral phenomena. Finally, at the environmental level are environmental risk factors and factors thought to exert a broad impact on an individual. All levels are relevant for understanding depression in an individual person. Abbreviations: MEST, MEmory Specificity Training; OGM, overgeneral memory.