We investigate the origin of the color-magnitude relation (CMR) observed in cluster galaxies by using a combination of cosmological N-body simulations of cluster of galaxies and a semi-analytic model of galaxy formation (Lagos, Cora & Padilla 2008). Simulated results are compared with the photometric properties of early-type galaxies in the Antlia cluster (Smith Castelli et al. 2008). The good agreement obtained between observations and simulations allow to use the information provided by the model to unveil the physical processes yielding the tight observed CMR.