Motivated by the exciting prospect of a new wealth of information arising from the first observations of gravitational and electromagnetic radiation from the same astrophysical phenomena, the Dark Energy Survey (DES) has prompted a broad range of follow-up programs for LIGO/Virgo events using the Dark Energy Camera (DECam). This talk presents the discovery of the optical transient associated with the neutron star merger GW170817 using DECam and discusses its implications for the emerging field: multi-messenger cosmology with gravitational waves and optical data.