Wearable electronics are a group of electronic devices and sensors with applications in mobile health care, Internet of Things (IoT) and Human Machine Interfaces (HMI). One of the latest advances in the field of wearables, known as electronic tattoos (e-tattoos), is the development of ultrathin and ultralight sensors and systems that can be laminated on the various types of surfaces such as metals, skin, plant and polymers with wide range of roughness and topological complexities. Graphene electronic tattoo (GET) sensors are made of a single layer to few layers of carbon atoms (graphene) supported with a thin polymeric substrate. The overall thickness of GET is 300 times lower than a single strand of human hair. GET is optically and mechanically imperceptible. It conforms to the microscopic texture of the laminating surfaces and stays intact with them without tape or adhesive, mainly with van der Waals force. In this talk, the characterization and applications of GET for physiological sensing such as electroencephalography (EEG), electrocardiography (ECG), electromyography (EMG), Electrooculography (EOG), sensing the temperature and hydration of skin and human machine interface will be presented.