The epithelia is a versatile tissue that lines all luminal organs, and as such, represents the initial point of contact for myriad host-microbe interactions. The epithelia possesses a wide range of physical, chemical and immune mechanisms to manage this interface. While clearly vital in defense against pathogens, such epithelia responses are also important in maintenance of beneficial commensal microbial populations. New data on novel mechanisms of host-microbial interactions will be discussed.