This talk will cover the history and pharmacology of aspirin and related drugs. Aspirin and related drugs are the most commonly taken medications world-wide. They are used to treat inflammation and pain but show promise in the treatment of cancer and other difficult to treat conditions. Despite their huge popularity, controversy and debate has dogged these drugs with the most recent being associated with COX-2 inhibitors such as Vioxx. The Vioxx story has attracted global attention with cardiovascular deaths being associated with its use and large scale law suits still being debated. This talk will cover the current pharmacology of COX-2 inhibitors along with novel unpublished data that offers new insights and future direction.