

Disease type/risk	First Author	Study Title Complete Citation	Date	Abstract	Human	Human cell	Animal	Animal cell
	Babb, S. J.	Babb, S. J.; Crystal, J. D., Episodic-like memory in the rat. Curr Biol 2006, 16, (13), 1317-21.	2006	A fundamental question in comparative cognition is whether animals remember unique, personal past experiences. It has long been argued that memories for specific events (referred to as episodic memory) are unique to humans. Recently, considerable evidence has accumulated to show that food-storing birds possess critical behavioral elements of episodic memory, referred to as episodic-like memory in acknowledgment of the fact that behavioral criteria do not assess subjective experiences. Here we show that rats have a detailed representation of remembered events and meet behavioral criteria for episodic-like memory. We provided rats with access to locations baited with distinctive (e.g., grape and raspberry) or nondistinctive (regular chow) flavors. Locations with a distinctive flavor replenished after a long but not a short delay, and locations with the nondistinctive flavor never replenished. One distinctive flavor was devalued after encoding its location by prefeeding that flavor (satiation) or by pairing it with lithium chloride (acquired taste aversion), while the other distinctive flavor was not devalued. The rats selectively decreased revisits to the devalued distinctive flavor but not to the nondevalued distinctive flavor. The present studies demonstrate that rats selectively encode the content of episodic-like memories.				
	Jachak, S. M.	Jachak, S. M., Cyclooxygenase inhibitory natural products: current status. <i>Curr Med Chem</i> 2006 , 13, (6), 659-78.	2006	Non-steroidal anti-inflammatory drugs (NSAIDs) are of huge therapeutic benefit in the treatment of rheumatoid arthritis and various types of inflammatory conditions. The target for these drugs is cyclooxygenase (COX), a rate-limiting enzyme involved in the conversion of arachidonic acid into inflammatory prostaglandins. COX-2 selective inhibitors are believed to have the same anti-inflammatory, anti-pyretic and analgesic activities as that of nonselective inhibitor NSAIDs with little or none of the gastrointestinal side effects. Thus, in the last 6-7 years several selective COX-2 inhibitors including coxibs were discovered and introduced into clinic. Recent reports evidence that selective COX-2 inhibitor such as rofecoxib, can lead to thrombotic cardiovascular events through inhibition of prostacyclin formation in the infarcted heart. This has resulted in withdrawal of rofecoxib from the clinic in September 2004. Moreover, the COX-2/COX-1 selectivity ratio is vital in the design of COX-2 inhibitory drugs, as it is clear from rofecoxib, which is more than 50-fold COX-2 selective. After looking at all above mentioned facts, natural product-based compounds seem better as these compounds are generally supposed to be devoid of severe side effects. The literature indicates that natural product-based compounds are mainly COX-1 selective. Through minor semi-synthetic changes in the structures, their selectivity towards COX-2 can be increased. The present review article addresses natural product COX inhibitors of plant and marine origin, reported during last ten years and their advantages, possible leads for further development and current status. In addition we describe our experience in the characterization, design and synthesis of potential natural COX inhibitors.		X		X