

EXECUTIVE SUMMARY [NON-CONFIDENTIAL, NON-TECHNICAL ABSTRACT FOR PUBLIC INFORMATION OR PROGRAM PROMOTION]: State in layman's terms the application's broad, long-term objectives and specific aims, making reference to the potential public benefits of the project relevant to California. Do not include proprietary or confidential information. This may be distributed before the funding decision has been finalized.

The specific aim with this proposal is to make new anti-cancer drugs to be used against certain types of cancer. Azaspirene is a new anti-cancer drug, which is unique in that it stops the blood supply feeding the tumor cells, rather than destroying the cancer cells similar to conventional chemotherapy. Often this is associated with severe side effects. As the chemical structure of azaspirene is known, this will provide clues on how the next generation of anti-cancer drugs should look, and how they should be designed. The preparation of azaspirene and its family of analogs will be made in the PI's laboratory utilizing organic chemistry as essential tools. The long-term objectives, and the results from the proposed work to be conducted at San Diego State University, are expected to have broad biological and health implications arising from the development of new chemotherapeutical drugs used in battling cancer.