Researchers at the University of South Florida have extracted novel compounds from an Antarctic deep sea coral for the treatment of *Leishmania donovani* infections.

Leishmaniasis is a disease caused by leishmania parasites and is transmitted by the bite of a sand fly. Worldwide, about 12 million people are estimated to be infected with the disease. Further, this number increases by two million annually. Leishmaniasis presents itself in three main ways: through visceral, cutaneous or mucocutaneous infections. Common symptoms include open sores and mucosal ulcers. Disease prevention is difficult as there is currently no available vaccine. This disease is potentially fatal if left untreated, producing tens of thousands of deaths annually and countless painful and disfiguring physical manifestations. Current treatment options are costly, face increasing levels of drug resistance, and typically cause toxic side effects. Thus, new treatments are desperately needed.

USF researchers have identified a novel metabolite derived from an Antarctic marine coral that shows promise as a new treatment option for leishmaniasis infections. Antarctic marine invertebrates are being investigated for their natural chemical protective mechanisms used against predators. This natural product chemistry is ideal for new drug development efforts. The identified metabolite has exhibited specific inhibition of *Leishmania donovani* parasites in laboratory settings.

ADVANTAGES:
- Specific inhibition of *Leishmania donovani* parasites
- A natural drug candidate
- Does not produce toxic side effects

Tech ID # 18B140