

Symposium

The Panama ICBG: Linking drug discovery, capacity building and biodiversity conservation.

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Introduction. The Panama ICBG maximizes the role of the host country to discover new lead compounds from plants, algae and marine invertebrates for the treatment of cancer and tropical disease. The program has strengthened scientific research in Panama and produced tangible results for biodiversity conservation.

Objectives. To discover lead compounds for cancer and tropical disease, to build scientific capacity in Panama and to promote biodiversity conservation.

Methods. Researchers from Panama and the US train local scientists, helped created two research programs and laboratories, developed novel methods for drug discovery, and use outreach to link biodiversity and human health.

Results. Compounds from plants, cyanobacteria and octocorals have been discovered which show activity against tumor cells and tropical disease. Techniques were developed for drug discovery for malaria and dengue. 84 scientists have been trained, 19 of which are pursuing MS. or Ph.D. degrees. The results helped secure legislation for national parks and the creation of a UNESCO World Heritage Site.

Conclusion. The Panama ICBG shows that developing countries can be key participants in the drug discovery process, including the development of novel techniques and the discovery of potent lead compounds.

Keywords: Panama, tropical disease, conservation.

Selected references

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