



► Fernando Cabiases A Tribute to My Friend and Colleague

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My first visit to Peru was in 1968, as a consultant for the Amazon Natural Drug company in Iquitos. As part of my natural products research in the Peruvian Amazon I conducted a short ethnobotanical survey among the Huitoto Indians on the Rio Negro. I presented the results of this research at the Second International Congress on Traditional Medicine in Lima, which led to my first encounter with Fernando, who was giving a talk in the section on hallucinogenic plants. He presented an excellent lecture on the mechanism of action of LSD, which was the clearest and most understandable lecture I have ever heard on this complicated subject. It was presented in such a way as to be completely understandable to everyone in the audience, both scientist and lay-person alike. When I complemented him on his excellent lecture, we struck up a conversation

that has continued into a lifelong friendship and research collaboration, resulting in a number of significant research projects.

I visited Peru on numerous occasions, and was always welcomed by Fernando; whenever he visited Chicago, he always took the opportunity to stop by the College of Pharmacy for discussions on traditional medicine, natural products chemistry and much more. Fernando understood the value of the natural products database (NAPRALERT, available online at <http://www.napralert.org>), and utilized this research tool to great advantage in his work and many publications on medicinal plants.

In 1998 I was invited by Fernando to take part in the 24th International Conference of Internal Medicine, at which time I was given an honorary professor at the Universidad

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Científica del Sur. Our long friendship has permitted the expansion of research collaborations - one of my graduate students, James Graham, began conducting research on peruvian traditional medicine in 1997 in collaboration with Fernando. He earned his Ph.D. and continues his botanical research in Peru as a visiting Professor at UCSUR.

Our collaborative research has resulted in the publication of 15 scientific papers in the area of pharmacognosy, co-authored by Fernando, and include basic research in cancer chemotherapy, cancer chemoprevention and antimycobacterial activity, as well as in traditional medicine. These publications (see table 1) have resulted in the isolation of over 100 bioactive molecules, including 30 novel chemical structures.

Table 1: Publications coauthored with Fernando Cabeles

- A novel cyclooxygenase-inhibitory stilbenolignan from the seeds of *Aiphanes aculeata* 2001 ORGANIC LETTERS **3**(14): 2169- 2171
- Activity-guided isolation of novel norwithanolides from *Deprea subtriflora* with potential cancer chemopreventive activity 2003 JOURNAL OF ORGANIC CHEMISTRY **68** (6): 2350- 2361
- Activity-guided isolation of the chemical constituents of *Muntingia calabura* using a quinone reductase induction assay 2003 PHYTOCHEMISTRY **63** (3): 335- 341
- Anthrone and oxanthrone C-glycosides from *Picramnia latifolia* collected in Peru 2004 JOURNAL OF NATURAL PRODUCTS **67** (3): 352- 356 Antimycobacterial evaluation of Peruvian plants 2003 PHYTOMEDICINE **10** (6-7): 528- 535
- Antimycobacterial naphthopyrones from *Senna obliqua* 2004 JOURNAL OF NATURAL PRODUCTS **67** (2): 225- 227
- Compounds obtained from *Sida acuta* with the potential to induce

quinone reductase and to inhibit 7,12-dimethylbenz[a]anthracene-induced preneoplastic lesions in a mouse mammary organ culture model 2003 ARCHIVES OF PHARMACAL RESEARCH **26** (8): 585- 590

- Constituents of *Musa x paradisiaca* cultivar with the potential to induce the phase II enzyme, quinone reductase 2002 JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY **50** (22): 6330- 6334
- Cytotoxic flavonoids from the stem bark of *Lonchocarpus aff. fluvialis* 2002 PHYTOTHERAPY RESEARCH **16** (4): 320- 325
- Diterpene glycosides from *Egletes viscosa* 2005 PLANTA MEDICA **71** (8): 792- 794
- Isolation and characterization of miscellaneous secondary metabolites of *Deprea subtriflora* 2003 JOURNAL OF NATURAL PRODUCTS **66** (8): 1089- 1093
- Macharistol, a new cytotoxic cinnamylphenol from the stems of *Machaerium aristulatum* 2001 JOURNAL OF NATURAL PRODUCTS **64** (11): 1483- 1485
- Phenolic compounds obtained from stems of *Couepia ulei* with the potential to induce quinone reductase 2004 ARCHIVES OF PHARMACAL RESEARCH **27** (2): 169- 172
- Potential cancer chemopreventive constituents of the seeds of *Dipteryx odorata* 2003 JOURNAL OF NATURAL PRODUCTS **66** (5): 583- 587
- Potential cancer chemopreventive flavonoids from the stems of *Tephrosia toxicaria* 2003 JOURNAL OF NATURAL PRODUCTS **66** (9): 1166- 1170

Fernando's passing leaves a major void in the scientific investigation and rational utilization of traditional medicine in Peru.