

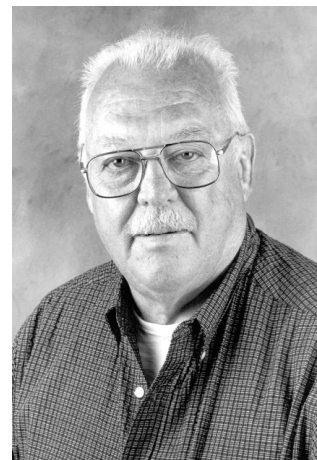


Plants as a Source of Drugs

Dr. Ralph N. Blomster

7:30 PM Wednesday, February 8, 2006
Alexander House,
1131 Wisconsin River Drive , Port Edwards

Dinner 6:00 Café Mulino
(in the Hotel Mead, 451 E. Grand Avenue in Wisconsin Rapids)



It is remarkable to what a large extent medicinal treatment for many centuries rested on the use of plants. Plants have given the field of medicine many useful drugs; such as digitalis, cinchona, ergot, and opium, to mention a few. Humankind's first investigation of the plant kingdom was prompted by a dependence on plants as a source of food. From varied observations of the effects of plants on themselves, human use of plants arrow and weapon poisons, as hallucinogens, and medicaments slowly evolved. In the early days, witch doctors, apothecaries, and physicians used plants to treat disease, elevate mood, and relieve pain. As the art of chemistry evolved, humans learned to isolate the pure chemicals that caused the medicinal effect and to use them. Opium yielded codeine and morphine to relieve pain, and Digitalis provided digitoxin for the heart. Ergot made available ergonovine and ergotamine for migraine and childbirth and, paradoxically, the synthetic LSD as a hallucinogen. The presence of such a wide and diversified group of compounds has prompted the search of plants for new narcotics, heart drugs, and psychoactive and anticancer compounds. Although many drugs are produced synthetically, natural products have served as the molecular model for their starting point. Today, some 40% all prescriptions include compounds of natural origin. Many diseases still cannot be effectively treated with current therapy. How does one find effective agents for these diseases? Plants contain many more compounds than chemists can synthesize. The more than 250,000 uninvestigated higher plant species on the face of the Earth are a source of potential new and effective drugs. However, in the face of the destruction of the Amazon rain forest, time grows short.

Brief Bio: B.S. 1953 Massachusetts College of Pharmacy
M.S. 1958 University of Pittsburgh
Ph.D. 1963 University of Connecticut
1968-1989 Professor, University of Maryland at Baltimore
1989-1996 Professor Emeritus, University of Maryland at Baltimore

Gather at 5:30. Eat at 6:00 at Café Mulino in the Hotel Mead, three blocks east of the Wisconsin River on East Grand Avenue. **Please call or e-mail Dave Thiel at (715) 346-3714 or dthiel@uwsp.edu before noon on Wednesday, February 8 to make a reservation for dinner.**

From the Hotel Mead go west on Grand Avenue to the first stop light at 3rd St.. Turn left (south) onto 3rd St. and proceed about 0.7 miles to the Riverview Expressway (Hwy 54/13). Turn right, cross the river, and turn left at the end of the bridge onto Highway 54/73. Proceed 2.7 miles to the Alexander House on your right. The Alexander House is a combination art gallery and historical museum, and will open especially for us at 6:30 pm.