

Collaboration Reigns

Princess Chulabhorn of Thailand visits the NIH to discuss collaborations with NCI.

(Photo: E. Branson)



Her Royal Highness Princess Chulabhorn Mahidol of Thailand

A long-established collaborative culture at the NIH has produced important scientific breakthroughs by connecting not only different groups within the NIH, but also institutions across the country and even across continents. Thus, a two-day visit to the NIH by Her Royal Highness Princess Chulabhorn Mahidol of Thailand only seems unusual without the knowledge that she is a committed research scientist as well as founder and president of Thailand's Chulabhorn Research Institute. Its mission focuses on global collaboration and applying translational discoveries to improve the quality of life for the people of Thailand.

The princess attended a CCR-sponsored meeting June 15-16, 2010, to discuss recent findings and new studies aimed at the discovery and development of natural products that could yield treatments for cancer. The meeting explored ongoing and potential research collaborations between the NCI and Chulabhorn Research Institute.

The Thailand Initiative on Genomics and Expression Research for Liver

Cancer (TIGER-LC)—a collaborative project between Thailand, CCR, and other international institutions—was the topic of discussion on the first day of the meeting. Director of CCR Robert Wiltrout, Ph.D., and CCR investigators Curtis Harris, M.D., and Xin Wei Wang, Ph.D., as well as other CCR scientists involved in TIGER-LC, presented new findings in lung and liver cancer research relevant to the TIGER-LC project, including studies investigating cancer biomarkers that could guide decisions for appropriate treatment choices. At the close of the day, H.R.H. Princess Chulabhorn toured CCR's Genomics Center and imaging laboratories, where some of this research takes place.

The following day served as a forum for sharing data on natural products, an area of research underway at both NCI and the Chulabhorn Research Institute to discover disease-fighting compounds in natural resources. H.R.H. Princess Chulabhorn, who has a Ph.D. in organic chemistry

and has taught courses in natural products chemistry, presented the latest data on natural products research in Thailand. David Newman, Ph.D., of NCI's Division of Cancer Treatment and Diagnosis, discussed NCI's Natural Products Branch and Repository, which contains plant samples, marine animals, and microbes from more than 35 countries. Jim McMahon, Ph.D., Chief of CCR's Molecular Targets Laboratory (MTL), described the natural products screening efforts currently taking place in the MTL. Barry O'Keefe, Ph.D., also from the MTL and a former teaching assistant of H.R.H. Princess Chulabhorn, discussed an antiviral protein that his team isolated from red algae called griffithsin that has shown activity against several viruses including HIV (see "By Land or by Sea" in Vol. 3, No. 1 of *CCR connections*). Finally, Yves Pommier, Ph.D., of CCR's Laboratory of Molecular Pharmacology, presented two types of natural products studied at CCR with anticancer properties called camptothecins and ecteinascidins.

The two-day meeting between Her Royal Highness and CCR fostered a rich exchange of information on cancer research and natural products, and plans are in place for further collaboration in the months ahead. "The Chulabhorn Research Institute does excellent work in natural products, and Thailand is home to numerous endemic species and biodiversity with potential for both bioprobe and drug discovery," said Dr. O'Keefe. "Since we already have a good track record of interacting in a productive manner through TIGER-LC, we are optimistic that future collaborations between the two groups in the area of natural products will also be successful."