SEASON’S GREETINGS FROM THE FUNDERS

“As 2013 is approaching we would like to convey to you our best wishes for this new year. For most of you, it will be the final year of your project activities and we are looking forward to see your project finalizing with fruitful results. We also sincerely hope that when you look back at the last years, that you will have experienced this as a meaningful opportunity to contribute to the strengthening of the science and technology capacity of ACP countries. Again all the best for the new year for all the work activities in which you are involved and we are counting on your continued support in the development of the ACP countries.”

Michèle Dominique RAYMOND

Assistant Secretary - General
Department of Political and Humanitarian Affairs
African, Caribbean and Pacific Group of States (ACP Group)

“The vast majority of what a foundation can claim to accomplish is in fact accomplished through the work of those who receive its grants. A foundation can add value through the expertise of its staff and through its convening and dissemination activities. But it is you, the “grantee,” who epitomize the values of the foundation.

In our case, Andrew Carnegie established Carnegie Corporation of New York just over 100 years ago with an express mission to “promote the advancement and diffusion of knowledge and understanding.” Research and the training of new researchers, at which SABINA has come to excel, exemplify both these aims.

Our founder also intended that his foundation do “real and permanent good in this world.” The strategy we have adopted in our efforts to contribute to developing and retaining the next generation of African academics thus extends beyond a focus on individuals, who are both mobile and temporal, to include support to strengthen mechanisms, like SABINA, through which individuals receive training, conduct research, and forge scientific communities.

Carnegie Corporation of New York salutes the work of SABINA and wishes all of you a safe, happy, and fruitful 2013.”

Andrea Johnson

Program Officer
Higher Education and Libraries in Africa
Carnegie Corporation of New York
In Memoriam: Avrelija Cencič

Prof Avrelija Cencič, one of the most active members of the SABINA International Advisory Committee (IAC), passed away on Friday 14 December 2012. Avrelija suffered a brain aneurism two weeks ago.

She was an award winning university professor, researcher, manager, educator and mentor. Her areas of research were biochemistry, immunology, biotechnology and molecular biology. Avrelija was the Chair of Dept. of Biochemistry at the Faculty of Medicine and Chair of Dept. of Microbiology, Biochemistry, Molecular Biology and Biotechnology at the Faculty of Agriculture and Life Sciences. She was also the Vice dean for research as well as the Vice dean for International Relations at the Faculty of Agriculture and Life Sciences at the University of Maribor, Slovenia.

SABINA and the international science community at large have lost a true giant. She was an inspiration to us all and we are privileged to have had her as an advisor, colleague and mentor. Avrelija will be sadly missed, our heartfelt condolences to her family and friends. May Her Soul Rest in Eternal Peace.

GENERAL NEWS

Professor receives patent for highly effective anti-HIV compounds (FAMU, Dec 2012)

Interim Vice President of Research Kinfe Ken Redda has reached a milestone in his research by receiving a patent for the development of therapeutic agents in the treatment of HIV infection. “A lot of work, money and analysis were invested into this major discovery,” said Redda. “We believe in our work. Our goal is certainly to make sure that this discovery will lead to the development of a more effective drug for the treatment of the HIV virus at an affordable price”...Read more

Visualizing the structures of molecules (Science Daily, Dec 2012)

Hitoshi Goto and colleagues have developed high performance molecular simulation tools to study the 3D arrangement of molecules, enabling better design of medicinal and agricultural drugs. “We've developed high performance molecular simulation tools and a graphical user interface for researchers to study the conformation -- the three-dimensional structural arrangement of molecules...Read more

FORTHCOMING BOOK

Advances in natural medicines, nutraceuticals and neurocognition

Great strides have been made in the field of natural medicine with respect to neurocognition. Once limited to the province of niche publications, these discoveries are now routinely explored in mainstream psychopharmacology, neuroscience, nutrition, and medical journals. Now presented in one convenient volume, Advances in Natural Medicines, Nutraceuticals and Neurocognition reflects the breadth and depth of recent advances in this area. This book assembles recent research to assist researchers in further studies on these ubiquitous supplements and their effect on intelligence, memory, cognition, and brain functioning.
Correction

In last month’s issue of the newsletter, incorrect information regarding PARTNERS SPONSORS JOURNAL ARTICLES was presented.

Biologically active rooperol is formed when the glucose subunits of the nontoxic glycoside, hypoxoside, are cleaved by β-glucosidase. Hypoxoside is isolated from Hypoxis, a medicinal plant genus frequently used by the indigenous people of South Africa as an immune system booster. The aim of this study was to investigate rooperol's antioxidant and anti-inflammatory properties using the ferric reducing ability of plasma (FRAP) assay, NO and ROS production, and phagocytosis. This study confirms previous reports that hypoxoside has to be converted to rooperol to be biologically active. The FRAP assay confirms the antioxidant capacity of rooperol seen in previous studies, whereas rooperol's induction of ROS and NO production, and phagocytosis constitute novel findings. Possible mode(s) of action for the in vitro anti-inflammatory activities of rooperol may be explained by ROS and NO production, and phagocytosis.

Ethnobotanical survey for potential anti-malarial plants in south-western Nigeria

This ethnobotanical study surveyed the different types of medicinal plants used for the treatment of Malaria in the south-western region of Nigeria. Though a large number of traditionally used plants for the treatment of malaria were identified, scientific validation of the traditional claims of anti-malarial properties is imperative. This would establish their candidature for any possible future research for active principles and the possible development of new cheaper and more effective anti-malarial drugs, as well as in the conservation of this rich diversity of anti-malarial plants.

Bulbine Natalensis and Bulbine Frutescens promote cutaneous wound healing

The gel from the leaves of Bulbine natalensis (BN) and Bulbine frutescens (BF) is commonly used as a traditional medicine in South Africa for the treatment of skin wounds and burns. Treatment with both leaf gel extracts has previously been demonstrated to increase tensile strength and protein and DNA content in pig dermal wounds. This study examined the effect of the leaf gel extracts in vivo on histology of wound healing in pigs to elucidate the mechanism of increased tensile strength. Histological analysis of the wound tissue in the study indicated earlier wound contraction and collagen deposition in both treatment groups with re-organisation of the collagen (indicating collagen maturation) evident as early as at day 10. The results of this study suggests that the leaf extracts increase tensile strength by increasing fibroplasia, differentiation of fibroblasts into myofibroblasts, and increased collagen deposition and maturation. This study further validates the use of the Bulbine leaf gels for the treatment of skin wounds.

Pleiotrophic effects of natural products in ROS-induced carcinogenesis: The role of plant-derived natural products in oral cancer chemoprevention

Cancer is a multistage process where each stage involves different molecular, biochemical and cellular events all of which, however, contribute to malignant transformation. Over the last years, substantial scientific evidence has promoted the hypothesis that ROS-induced cellular damage underlies key steps during development of the malignant phenotype including evasion of apoptosis, limitless proliferation, angiogenesis, tissue invasion and metastasis, etc. On the other hand, natural products hold great promise as anti-cancer compounds in preventing against carcinogenesis both in vitro and in vivo. Throughout this article, we aim to review the evidence as to how some of these natural products exert their chemopreventive effects in human carcinogenesis.