



## **Dr. Nahum Sonenberg Recognized for Outstanding Achievements by the Canadian Cancer Research Alliance**

*For immediate release*

November 2, 2015 (MONTRÉAL) - The Canadian Cancer Research Alliance (CCRA) announced that **Dr. Nahum Sonenberg**, James McGill Professor in the Department of Biochemistry at McGill University's Faculty of Medicine and member of the Rosalind and Morris Goodman Cancer Research Centre at McGill, is the recipient of its award for ***Outstanding Achievements in Cancer Research***.

Early in his research pursuits, Dr. Sonenberg discovered eIF4E, a molecule critical for the translation of genetic information into proteins. This discovery transformed the scientific community's understanding of the control of protein synthesis and has helped create opportunities for controlling protein synthesis in mammals. For example, this research helped explain the cancer-fighting properties of rapamycin (and its analogs, temsirolimus and everolimus), a drug originally developed as an antifungal agent and immunosuppressant for organ transplant recipients. In more recent work, his lab has demonstrated that prevention of eIF4E phosphorylation reduces tumor growth, and importantly, prevents the development of metastases. He is now collaborating with the pharmaceutical industry to discover drugs that inhibit eIF4E phosphorylation.

Another related research stream that investigates how the mammalian kinase target of rapamycin (mTOR) stimulates interferon production via phosphorylation of its effector proteins, the 4E-BPs and S6Ks. This work has led to a pharmacoviral approach to treat malignant brain tumours. A third major research thrust explores the mechanism of microRNA action in translation and mRNA decay. miRNAs play major roles in cancer development, progression and metastasis.

"Dr. Sonenberg's pioneering and fundamental discoveries have laid the basis for the understanding of how translation initiation factors promote ribosome binding and the regulation of initiation factor activity by extracellular stimuli. His seminal work demonstrating how control of translation initiation is implicated in cancer has had a profound and global impact on the trajectory of basic and translational research," says Dr. David Huntsman, Co-Chair of the Scientific Program Committee for the CCRA Canadian Cancer Research Conference. "Not only has Dr. Sonenberg continued to expand our knowledge of the biochemical processes so critical to cancer and other diseases, but his impact can also be seen in the accomplishments of many other Canadian researchers who were his protégés. As a research community, we are truly fortunate to have him in our midst."

Dr. Sonenberg will be presented his award during the CCRA's Canadian Cancer Research Conference held in Montréal from November 8-10, 2015. For more information, please visit <http://www.ccra-acrc.ca>

For more information or to arrange an interview, please contact:

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**Dr. Nahum Sonenberg, Montréal, QC:** Dr. Sonenberg received his PhD in Biochemistry from the Weizmann Institute of Science (Rehovot, Israel) in 1976. He joined the Roche Institute of Molecular Biology in Nutley, New Jersey as a Chaim Weizmann postdoctoral fellow and, in 1979, moved to McGill University. Since 2002, Dr. Sonenberg has been a James McGill Professor in the Department of Biochemistry and he is a member of the Rosalind and Morris Goodman Cancer Research Centre. Dr. Sonenberg was a Howard Hughes Medical Institute International Research Scholar from 1997 to 2011. He has been a fellow of The Royal Society of Canada since 1992 and was named to the Order of Canada in 2010.

Dr. Sonenberg's scientific achievements have been acknowledged with numerous prizes and honours: Robert L. Noble Prize from the National Cancer Institute of Canada (2002); Killam Prize for Health Sciences (2005); American Academy of Arts and Sciences (2006); The Royal Society of London, UK (2006); Gairdner International Award (2008); Fellow of the American Association for the Advancement of Science (2012); Queen Elizabeth II Jubilee Medal (2013); McLaughlin Medal from the Royal Society of Canada (2013); Wolf Prize in Medicine (2014); and Foreign Associate of the U.S. National Academy of Sciences (2015).

The **Canadian Cancer Research Alliance** (CCRA) is comprised of 35 organizations that collectively fund most of the cancer research conducted in Canada—research that will lead to better ways to prevent, diagnose, and treat cancer and improve survivor outcomes. Its members include federal research funding programs/agencies, provincial research agencies, provincial cancer care agencies, cancer charities, and other voluntary associations. CCRA is motivated by the belief that, through effective collaboration, Canadian cancer research funding organizations can maximize their collective impact on cancer control and accelerate discovery for the ultimate benefit of Canadians affected by cancer. The CCRA is supported by the Canadian Partnership Against Cancer through a financial contribution from Health Canada. For more information, please visit: <http://www.ccra-acrc.ca>