Post-genomic era revolutionizing the study of insect physiology

Ottawa, Canada (April 5, 2012) – The Canadian Journal of Zoology (CJZ) presents a special issue showcasing cutting-edge research in insect biology. Advances in insect physiology and endocrinology through genomics, peptidomics, and related technologies is a collection of six reviews by leading international researchers compiled by guest editors Drs. Ian Orchard and Angela Lange of the Department of Biology at the University of Toronto in Mississauga.

Recent advances in functional genomics and genetics technologies have opened wide the opportunities to increase understanding of insect physiology and endocrinology. Sequenced genomes are now available for several insect species that are of worldwide significance for agriculture, food safety, medicine, and energy production. Bold initiatives such as the i5k project (www.arthropodgenomes.org/wiki/i5K) and the Genome 10K project (www.genome10k.org/) aim to assemble the genomes of 5,000 insects and 10,000 vertebrate species, respectively.

“This is an incredibly invigorating time to be a researcher in these biological disciplines,” state Orchard and Lange. “We believe that this compilation of reviews in CJZ sets the scene and context for an exciting new era and depth of knowledge that can be gained from this post-genomic revolution.”

“This review series contains outstanding contributions from superb biologists around the globe,” said Dr. Saber Saleuddin, co-editor of CJZ. “If the goal of a review series is to bring together past, present, and future research trends, then we have certainly achieved that. We hope that researchers will find the series interesting and stimulating.”

Advances in insect physiology and endocrinology through genomics, peptidomics, and related technologies was published in the Canadian Journal of Zoology on 5 April 2012 by NRC Research Press. This special issue is available open access: http://www.nrcresearchpress.com/toc/cjz/90/4.

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Full reference (Introduction)

About the Publisher
NRC Research Press, which began as the publishing arm of the National Research Council of Canada (NRC) in 1929, transitioned in September 2010 from NRC and the Federal Government of Canada into an independent not-for-profit organization operating under the new name Canadian Science Publishing. Canadian Science Publishing (which continues to operate its journals under the brand NRC Research Press) is the foremost scientific publisher in Canada, publishing 15 of its own journals and providing advanced electronic publishing services to its clients. With over 50 highly skilled experts and an editorial team comprising some of the world’s leading researchers, NRC Research Press (Canadian Science Publishing) communicates scientific discoveries to over 175 countries.