

**Professor Charles Després**  
**Recipient of the 2011 CD Nelson Award**

Charles Després joined the Department of Biological Sciences at Brock University in April, 2002 as an Assistant Professor and Tier II Canada Research Chair in Molecular Plant Pathology, he was promoted to the rank of Associate Professor in July, 2007.

During tenure of this Chair, Charles successfully obtained a 5 year NSERC discovery grant in April 2002 that permitted him to conduct research at Brock and to train Graduate students. It should be noted that this was the largest grant given to a new applicant in plant biology in that competition. Several other major infrastructure awards were obtained that were crucial to acquire equipment for his laboratory and for the Brock community (NSERC, CFI, and ODRA) that permitted expansion of research activities throughout the University. In all, Charles has helped to attract directly or indirectly over \$6 million dollars in research and infrastructure grants that are playing crucial roles in the conversion of Brock University from an undergraduate teaching institution to a comprehensive University with modern and high quality graduate programs.



From 2002-07 the Després lab published 6 papers in a variety of excellent journals including 3 in *Plant Cell*, 1 in *Developmental Cell*, 1 in *Current Opinions in Plant Biology* and 1 in *Canadian Journal of Plant Pathology*. In the case of the *Plant Cell* article published in 2006, PhD candidate Amanda Rochon (now Dr. Rochon) was honored for producing the best paper of 2006 by a graduate student, earning the first Ragai Ibrahim Award from the Canadian Society of Plant Physiologists. These results allowed successful renewal of Charles's NSERC Discovery grant in April 2007, for a further 5 years. This is a remarkable achievement for a scientist after only the first renewal of his NSERC grant, placing him in the top 20 % of Canadian scientists who obtain grants from the former Plant Biology and Food Science Committee. This award confirmed that Charles is highly regarded by the scientific community, that he did deserve the Tier 2 Canada Research Chair that he obtained in June, 2002 and that he deserved the highest NSERC discovery grant obtained by a first time applicant in the 2002 competition of the NSERC Plant Biology and Food Science Committee.

Since 2007 the Després Lab has published 6 papers that include 3 in *Plant Cell*, 1 in *Botany* and 1 in *Plant Signaling and Behavior*. The continuing level of excellence of his publications is also matched by the quality of highly qualified personnel being trained in his laboratory. For example, Dr. Rochon is presently a Postdoctoral fellow in the lab of Dr. Barry Shelp and Dr. Patrick Boyle has joined the lab of Gregory Martin at the Boyce Thompson Institute. Meanwhile, and for the second time in its 4 year history, the 2009 Ibrahim Prize of the CSPP has been awarded to Dr. Patrick Boyle, for his PhD research as a student in Charles' lab. In addition Patrick received the prestigious Governor General's Gold Medal Award for his distinguished PhD performance and he is the current recipient of a Human Frontier Science Program post-doctoral fellowship. Presently there are 3 Graduate students in Charles laboratory and he has participated extensively in the training of Undergraduate students. Charles is also carrying a full teaching load and he is presently Biology Graduate Program Director.

Since his research requires skills in multiple disciplines, the group of Charles Després is conducting research in collaboration with some of the top laboratories in Canada including those of Dr. Pierre Fobert (National Research Council of Canada), Dr. Xin Li (University of British Columbia), Dr. Darrell Desveaux (University of Toronto) and Dr. Normand Brisson (Université de Montréal). These activities

have been extremely important in establishing an internationally renowned research group in plant pathogen interactions in Canada, and it is wonderful that Brock University is represented by the participation of the group of Charles Després. It should be noted from his curriculum vitae that Charles has published 15 papers and that 10 of these are published in *The Plant Cell*, with 6 of them appearing in this Journal since Charles joined Brock University!

The research activities of this group are continuing to break new scientific ground when it comes to identify the detailed mechanisms of signal transduction that activate common plant defense responses. The reports that have been published since his arrival at Brock have provided new information on the mechanisms involved and there is no doubt that these fundamental studies will have a large international impact on the development of sustainable disease resistant crops of the future. Knowledge about these mechanisms will help to produce crops that require decreased application of pesticides and this should help to diminish the human footprint on our planet. The CSPP is delighted to honor Charles Després as a very deserving recipient for the C.D. Nelson Award “*in recognition of outstanding achievements by a young scientist to plant physiology in Canada*”.