



CQDM preselects 13 projects within the competition Explore 2011

In the course of its Explore 2011 program, CQDM is proud to announce the preselection of 13 exceptional projects. A total of 51 projects were submitted this year for the Explore program. The competition was extremely elevated as a great number of high quality projects were received. After a careful review, our Scientific Advisory Committee has preselected 13 projects focusing on the innovative aspect and the potential for strong impact on biopharmaceutical research. In the following months, these projects will be subject to a more thorough scientific evaluation by an independent committee of reviewers coordinated by the FRSQ. Furthermore, CQDM will evaluate aspects such as intellectual property, ethical issues, corporate information (in case of private companies) as well as any potential risks which might compromise the completion of the research project. Based on results from this evaluation, the Scientific Advisory Committee and the CQDM will make recommendations to the Board of Directors, who will in turn select the projects. The final results will be announced on September 26th 2011.

The preselected projects are:

- **Flash-walk mapping: as step-by-step approach to GPCR conformation cartography.** Terence Hébert, McGill University (Co-investigators: Sylvain Chemtob, Ste-Justine Hospital, Audrey Claing, Université de Montreal, William Lubell, Université de Montreal and Stéphane Laporte, CHUM - Royal Victoria Hospital).
- **Validation of a new technique for simple and cost-effective production of mouse models of human diseases.** Marie Kmita, Institut de Recherches Cliniques de Montréal.
- **Rapid epitope discovery platform for cellular vaccine development: proof-of-concept with influenza.** Réjean Lapointe, Centre de recherche de l'université de Montreal (CHUM).
- **Circumventing the need for predictive biomarkers in personalized ovarian cancer therapies: empirical chemosensitivity testing using a microfluidics-based multiplex platform.** Anne-Marie Mes-Masson, Centre de recherche – Centre Hospitalier de l'université de Montreal (CRCHUM).
- **Development and validation of a new therapeutic modality: Activated Degradation Induced by E3 Enhanced Ubiquitylation (ADIEU) to ablate high potential cancer and inflammation protein kinase targets.** Stephen Morris, Aegera Therapeutics Inc.

- **Real-time atomic-level structural studies of nicotinic acetylcholine receptor.** Jay Nadeau, McGill University. (Co-investigator: Bradley Siwick, McGill University).
- **Detection of molecular interaction field similarities and its application in the rational drug design of selective multi-functional inhibitors.** Raphael Najmanovich, Université de Sherbrooke.
- **Virtual affinity maturation of therapeutic antibodies.** Enrico Purisima, National Research Council, Biotechnology Research Institute (Co-investigators: Maureen O'Connor-McCourt, NRC-BRI, Yves Durocher, NRC-BRI and Paul Labute, Chemical Computing Group.)
- **Pinpointing critical drug targets for autoimmune disease.** Brent Richards, McGill University. (Co-investigator: Constantin Polychronakos, McGill University).
- **IDAC, an innovative drug discovery platform targeting ion channels.** Philippe A. Séguéla, McGill University.
- **Highly efficient microfluidic blood cell separation, based on dielectrophoresis, for the separation of circulating tumor cells from a given blood sample.** Ion Stiharu, Concordia University.
- **Multiplexed Microfluidic Pancreatic Islet Culture Platform for the *In vivo* screening of therapeutic peptide drugs.** Maryam Tabrizian, McGill University (Co-investigators: Lawrence Rosenberg, Montreal Jewish General Hospital and McGill University and André B. Charrette, Université de Montreal).
- **Development of nonhuman primate models of neurodevelopmental and neurodegenerative disorders.** Shahin Zangenehpour, McGill University. (Co-investigator: Yojiro Yamanaka, McGill University).