

The CCRM Niche

News, updates and events for our partners

Centre for Commercialization of **Regenerative** Medicine

EMD Millipore signs on for first industry project



EMD Millipore's Robert Shaw (left), the company's commercial director, and CEO Michael May of CCRM. (Elementalview photo)

CCRM was pleased to host executives from EMD Millipore, the Life Sciences division of Merck KGaA, to celebrate the launch of its first industry project. **Robert Shaw**, Commercial Director and **Dr. Knut Niss**, Manager R&D, both with EMD Millipore's Stem Cell Initiative near Boston, MA, were on hand to sign documents, meet staff and tour CCRM's development facility in Toronto, in March.

This joint project, launched in February 2012, will focus on translating 2D tissue culture vessels into 3D tissue bioreactors. According to Mr. Shaw, "Translating the promise of stem cells into therapeutic reality will require large-scale, industrialized production under tightly controlled conditions. [The current method] is an expensive and labour intensive process. This...project will address those challenges and facilitate optimized, large-scale cultivation of stem cells which can accelerate the progress of therapies into the clinic."

Michael May, CEO of CCRM, views this project as "one that will benefit industry, academia and the patient community." EMD Millipore's Mobius® CellReady stirred tank bioreactor will be temporarily relocated to CCRM's lab during the span of the project.

Upcoming Workshops

CCRM is hosting Cellular Therapies Manufacturing and Clinical Trials in Canada, June 25-26.

In August (13-15), CCRM will host Human Induced Pluripotent Stem Cell Workshop.

Both will take place in Toronto.

Please visit our website's [Workshops](#) page for details.

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Unveiling the Industry Consortium (IC)

They are leaders in the regenerative medicine (RM) field and now they have something else in common. The companies listed below are the founding members of CCRM's Industry Consortium.

- Agilent Technologies
- ATCC
- Athersys, Inc.
- Axcelon Biopolymers Corp.
- BD
- BetaLogics, a division of Janssen Research & Development
- Cellular Dynamics International
- GE Healthcare
- Interface Biologics, Inc.
- Lonza
- EMD Millipore
- Northern Therapeutics Inc.
- Octane Biotech Inc.
- Pall Corporation
- Pfizer
- Reveille
- STEMCELL Technologies
- Stem Cell Therapeutics Corp.
- TEVA Innovative Ventures
- VistaGen Therapeutics, Inc.

These 20 companies represent the key sectors of the RM industry: therapeutics, devices, reagents, and cells as tools. CCRM is excited to be collaborating with them to strengthen the RM field.

As Michael May, CEO of CCRM, announced in March 2012, "By working with industry, CCRM captures business expertise that informs product development and commercialization. We already had access to some of the best scientific minds in the field and now we have access to seasoned industry experts. This is key to our success and will accelerate product development."

Pfizer-CCRM Innovation Fund expected to stimulate industry

Demonstrating their commitment to their ideals, Pfizer Canada and CCRM have established a new fund to support development projects that will accelerate RM technologies for drug screening and therapeutic applications. The announcement was made April 30th.

"Pfizer Canada is pleased to contribute to this new fund, which will support important research here in Canada," explains **Dr. Bernard Prigent**, VP and Medical Director, Pfizer Canada. "With the novel resources offered through CCRM's development capabilities, we hope to help advance the RM field in this country."

Pfizer Canada has contributed \$500,000 to this fund and CCRM will contribute matching dollars to any approved projects.

Viewpoint

Michael May, CEO, CCRM



CCRM was founded on the promise that it would build a strong foundation for the commercialization of regenerative medicine (RM) technologies and therapies by collaborating with industry – from SME's to large, multinational partners. So far, we're off to a good start.

We're thrilled to have 20 companies, representing all the key sectors in the field of RM, as members of our IC. Furthermore, we are leveraging the business expertise of several other industry partners who provide business leadership and expertise through service on CCRM's Board of Directors and Commercialization Review Committee. These alliances are essential if CCRM is going to succeed and we have every intention of doing that while positioning Canada as the place to invest in RM.

The EMD Millipore and Pfizer partnerships (see pages 1 and 2 of this issue) are the first of what we expect will be a long list of worthwhile initiatives with industry. Currently, we have 10 more projects in development that we look forward to announcing soon.

Stem cell research has the potential to transform lives and CCRM wants to play a leading role in ushering in that reality. With the help of our IC, we're confident that we can achieve our goals.

Smarter than Google

The platform staff at CCRM brings experience and expertise to their roles, but when there is a question that Google can't answer, they turn to CCRM's Lead Scientists.

The Lead Scientists, along with key members of CCRM, form the Translation Advisory Group (TAG) to provide guidance, contacts and environmental scanning for CCRM activities and it serves in an advisory capacity for operational issues. The members are as follows:

Lead Scientists

Bill Stanford (Ottawa Hospital Research Institute) and **James Ellis** (The Hospital for Sick Children Research Institute, Toronto), Cell Reprogramming & Engineering Platform

Gordon Keller (McEwen Centre for Regenerative Medicine, University Health Network, Toronto) and **Mick Bhatia** (McMaster Stem Cell and Cancer Research Institute, Hamilton), Cell Manufacturing Platform

Molly Shoichet (Institute of Biomaterials and Biomedical Engineering, University of Toronto), Biomaterials & Devices Platform

Additional TAG Members

Andras Nagy, Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto

Janet Rossant, The Hospital for Sick Children Research Institute, Toronto

Michael Rudnicki, Ottawa Hospital Research Institute

Paul Santerre, Institute of Biomaterials & Biomedical Engineering, University of Toronto

Peter Zandstra, CSO, Centre for Commercialization of Regenerative Medicine, Toronto

For complete bios of the Translation Advisory Group, please visit <http://www.ccrm.ca/translation-advisory-group>

Throughout the May-June timeframe, CCRM will be conducting in depth meetings with PIs across its member institutions to further understand community assets in RM, gain perspectives on industry bottlenecks in RM and identify new opportunities for commercialization. This process will then be rolled out to the broader Ontario Stem Cell Initiative (OSCI) network.

Getting to Know

Stephen Minger

Board of Directors, CCRM



Dr. Stephen Minger is Global Head of Research and Development for the Cell Technologies business of GE Healthcare Life Sciences, a US\$1.8b unit of GE Healthcare. Appointed to this role in 2009, Dr Minger is responsible for directing the development of GE's innovative cell-based technologies for use in drug discovery and pharmaceutical research. He also leads the development of GE's enabling technologies for the rapidly emerging fields of regenerative medicine and cell therapy. Dr. Minger joined GE Healthcare Life Sciences from King's College, London where he was Senior Lecturer and Director of the Stem Cell Biology Laboratory.

Known globally as a leading stem cell scientist and as a high-profile advocate for the advancement of stem cell science, Dr. Minger is co-founder and Director of the [London Regenerative Medicine Network](#), the world's largest multi-stakeholder cell therapy and regenerative medicine network. He also serves as Stem Cell Expert and Member of the UK Gene Therapy Advisory Committee.

Please visit

www.ccrm.ca/stephenminger

for more details about his career.

New faces at CCRM

The Business Development and Marketing group at CCRM has three new additions to round out the team. Working with **Dr. Allison Brown**, they keep lone male **Dr. Rahul Sarugaser** on his toes.

Jennifer Moody joins CCRM from Stemcell Technologies in Vancouver, British Columbia, where she held the position of senior scientist in R&D. Dr. Moody has a PhD in Genetics from the University of British Columbia and she was a postdoctoral fellow with Dr. Stefan Karlsson at the Lund Stem Cell Center in Sweden. Dr. Moody has a diverse research background and considers herself a stem cell “jack of many trades”. Dr. Moody is Manager, Technology Development for CCRM.

Elizabeth Gray is CCRM’s new Technology Assessment Officer. She obtained her PhD in Molecular Genetics from the University of Toronto, Samuel Lunenfeld Research Institute, in the lab of Dr. Tony Pawson. Before joining CCRM, Dr. Gray worked in business development with Tornado Medical Systems in Toronto and was a Business Development Manager with Medisca Pharmaceuticals in Montreal. Dr. Gray’s area of expertise is cell signaling and cellular communication.

Stacey Johnson has over 20 years of experience working in media relations and communications. Ms. Johnson has a MSc in Public Relations from the University of Stirling, Scotland, and a BAH in English and Drama from Queen’s University. Her work experience includes story producing for CTV National News, consulting for Hill and Knowlton Canada and leading media relations, communications and marketing initiatives for two health, not-for-profit organizations.

To read complete bios, please visit http://www.ccrm.ca/ccrm_team

CCRM Activity

CCRM continues to advance a diverse pipeline of RM disclosures from its member institutions. It has also started to receive disclosures from other universities and research institutes across Canada and the U.S. To date, 30 disclosures have been evaluated. In January, CCRM executed a 12-month option for a biomaterials technology from McMaster University to support its Biomaterials and Devices Platform. Since then, two new technologies have been advanced to the due diligence (DD) phase during which CCRM will conduct a more in-depth market and IP analysis and draft a plan for in-house development. Pending approval by CCRM’s Commercial Review Committee, it will then execute an option to license these technologies. CCRM anticipates moving another 3-4 technologies to the DD phase shortly.

Meet the CCRM Team

Kamal Garcha

Director, Cell Reprogramming & Engineering Platform



Kamal Garcha directs the Cell Reprogramming & Engineering Platform at CCRM. In this role, he works with CCRM’s other platform directors – **Drs. Gary Skarja** and **Nick Timmins** – and manages two development scientists – **Drs. Emily Titus** and **Wanyi Xiang** – and **Susan Runciman**, the development technologist.

Dr. Garcha is responsible for the daily operations of the platform, including establishing standard operating procedures and completing projects for industry and institutional partners. His position includes evaluating IP assets and their potential value to CCRM, as well as reviewing and implementing state-of-the-art technologies for deriving induced pluripotent stem cells (iPSCs) and engineering cell lines.

Dr. Garcha is currently expanding an iPSC cell bank, which will allow for the banking and distribution of iPSCs. Dr. Garcha obtained a PhD in Cellular and Physiological Sciences from the University of British Columbia and conducted his postdoctoral fellowship with the University of Toronto and the Ontario Human iPSC facility.