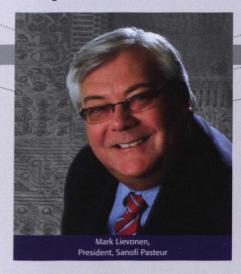
PAGE 52 LIFE SCIENCES

## Global Leader in Human Vaccines Expands Canadian Facilities



WITH A GOAL TO ACCELERATE THE DEVELOPMENT of its diseasefighting vaccines, Sanofi Pasteur, the world's largest manufacturer of human vaccines, recently completed construction of a \$101-million research and development facility in Toronto. The state-of-the-art facility is further evidence of Canada's continued development of leading research enterprises in the biopharmaceuticals sector.

The R&D expansion—a major investment for the company—had strong support from the Ontario government: up to \$13.9 million through the province's Biopharmaceutical Investment Program.

Mark Lievonen, President of Sanofi Pasteur in Canada, says the company's relationship with the government strengthens its operations. "Ontario's support has been a tremendous asset—it reinforces the importance of our work and contributes to our success. We look forward to continued partnerships in the future."

Sanofi Pasteur is the vaccines division of French pharmaceutical giant Sanofi-Aventis Group, and the largest company in the world devoted entirely to human vaccines. In 2009, the company distributed more than 1.6 billion doses of vaccine globally, for the immunization of more than 500 million people. Sanofi Pasteur's broad range of vaccines provides protection against 20 infectious diseases. In addition to Toronto, the organization has sites around the world, including two in France and one in the U.S.

## Canada a perfect fit for Sanofi Pasteur

Canada has proven to be an ideal location for the company. Founded in 1914, the company was known through much of its history as Connaught Laboratories. Originally part of the University of Toronto, the Laboratories played a significant role in the large-scale production of insulin, and of polio and diphtheria vaccines in the early 20<sup>th</sup> century. The organization also made major contributions to the development of vaccines for smallpox and pertussis. The site was recently designated Sanofi Pasteur's North American centre of excellence for biopharmaceutical vaccine development.

Vaccination with combination vaccines during early childhood has been the cornerstone of both Canada's immunization program and Sanofi Pasteur's leadership role and success. One of the premier products out of the newly expanded Toronto site is the acellular pertussis combination vaccine Pediacel<sup>®</sup>. The single-shot combination vaccine protects children against diphtheria, tetanus, pertussis (whooping cough), Haemophilus influenza type B and polio. When its predecessor vaccine, Pentacel<sup>®</sup>, was licenced and introduced by Sanofi Pasteur in 1997, it provided a better level of protection against pertussis than did prior vaccines, and fewer adverse reactions. The Pentacel vaccine is licenced for use in nine countries outside Canada, including the U.S., Argentina and Australia.

Sanofi Pasteur is the world's largest producer of influenza vaccines, and provided over 170 million doses in 2008, most of them a manufactured by the company's U.S. facility. Last year, Sanofi Pasteur's Toronto facility played an important role by packaging and labeling flu vaccine syringes.

Sanofi Pasteur's 1,100 employees work at the Connaught site in Toronto, which is one of several biopharmaceutical manufacturing clusters in Canada. The area is rich in hospitals and universities, and attracts a well-educated and diverse workforce.

"Canada has provided an ideal home for us to expand our business," notes Mr. Lievonen. "In doing so, it has supported our innovations to help prevent disease and save lives."

Sanofi Pasteur invests approximately \$100 million in R&D annually in Canada. With 18 vaccines currently in development or submitted for approvals, research targets include new vaccines for the prevention and treatment of diseases such as dengue fever and Clostridium difficile (known as C. difficile, one of the most common causes of hospital-acquired infection).

Sanofi Pasteur is a great example of how international investment helps drive innovation and profitability in Canada's biopharmaceuticals industry.