

HIGHLIGHTS IN INNOVATION



Numerous scientists are eschewing the traditional academic path to break entrepreneurial ground with their own R&D, manufacturing, and venture start-ups. What's the attraction – and how is it financed? Distillations looks at some of the key players to emerge from U of T's Chemistry Department.

SOFINNOVA VENTURES

Michael Powell is a man of many talents – and one who wears many hats. The antithesis of the stereotypical “lab rat”, Powell is the Managing General Partner of Sofinnova Ventures, a San Francisco-based firm which invests venture capital in early-stage life science and information technology startup companies.

His path to the top began at the University of Toronto, where he completed a specialist B.Sc. with honours in chemistry at the Scarborough campus. He then proceeded to complete a Ph.D. in physical chemistry at U of T in 1981 under the supervision of Jerry Kresge.

Powell then turned his eyes south, where he did post-doctoral work in bio-organic chemistry at the University of California; he subsequently became a faculty member there. After serving as an Adjunct Professor at the University of Kansas, he made the leap from academia to the private sector, filling the position of Project Team Leader at Syntex Research.

After his stint at Syntex, Powell became Director of Product Development at Cytel in 1987, a company based on the search for antagonists to the major histocompatibility complex to ameliorate autoimmune disease. Mike was part of this start-up’s early growth, which culminated with a successful IPO.

Powell then moved to Genentech in 1990, where he remained as Group Leader for six years, heading up the delivery and development of several protein and peptide therapeutics. He was also involved in spinning out VaxGen, an AIDS vaccine company.

Current interests for Powell in particular and Sofinnova in general include clinical-stage product companies, particularly in the oncology, endocrine and neurology fields. Powell’s Series A investments include: Actelion, Anesiva, Intermune, Seattle Genetics, and Threshold Pharmaceuticals (all now public companies), as well as numerous private companies (Orexigen, Ascenta Trius, and Diobex). His investment strategy is to invest in product-focused biotech companies headed up by management experienced in drug development.

Powell’s interests are many and varied. In his 20 years of pharmaceutical development experience, he has worked on 20 clinical products and authored almost 100 papers and books, including a 1,100-page treatise on vaccine design. His R&D expertise is in drug delivery, vaccines,



Mike Powell, Managing General Director of Sofinnova Ventures
Photo credit: Dr. Mike Powell

immunology, chemistry, and drug development of small molecules and protein therapeutics. He was the first scientist from the biotechnology industry to be elected a Fellow of the American Association of Pharmaceutical Scientists, and was also an Editorial Board Member of *J. Pharm. Sci.* and a Scientific Advisor to the Controlled Release Society. He is currently Board President of AVAC (AIDS Vaccine Advocacy Coalition), a Vaccine Advisor to the Bill and Melinda Gates Foundation, and a Strategic Advisor to OneWorld Health.

In his spare time (amazingly, he does have some), he is “the Indiana Jones” of Sofinnova. He doesn’t wear a fedora, but he does dive, climb, trapshoot, and ski. He is an avid fisherman and pilot, alternately swimming with sharks and cruising the skies. When he finally gets his feet on the ground, he’s been known to hunt dinosaur fossils.

And how does Mike Powell, the man of many roles, see himself? Is he in essence a researcher? Savvy businessman? Corporate explorer?

“I’m really a scientist/entrepreneur at heart,” he says.

- Dr. Mike Powell, Helen Smith

SOFINNOVA FAST FACTS

Thirty years ago, Sofinnova's French parent firm, Sofinnova SA, was founded by a group of French financial institutions that believed in the potential of venture investing, making Sofinnova SA the first "American-style" venture capital firm in France. Peter Brook, the founder of T.A. Associates, was a board member of Sofinnova SA in the early years. Sofinnova SA quickly established a presence in the European market through the formation of the Sofinnova Partners venture firm in Paris. Sofinnova SA owned this firm from 1972 until its spin-off in 1997.

Sofinnova SA launched U.S. investment funds in 1974, making it the first European venture company to enter the U.S. market. Based in San Francisco, with Jean Deleage as its first President and founder, Sofinnova SA was very successful and an early investor in stellar successes such as Tandem Computers and Genentech. In 1984, Sofinnova SA decided to leverage its unique trans-Atlantic positioning by creating a direct partnership presence in the U.S., creating independence from the Paris team.

In 1997, the global Sofinnova organization restructured by creating two independent management teams: Sofinnova Ventures of San Francisco and Sofinnova Partners in Paris. Each firm became an independent venture capital firm with separate funds, teams, investment strategies and partnerships. As part of the restructuring and buyout, Mike Powell joined Sofinnova Ventures in the summer of 1997. Thus began a new phase in Sofinnova's history, where the firm would be an early-stage, California-style VC firm that would use its unique French heritage and European contacts to bring value to its U.S. investments.

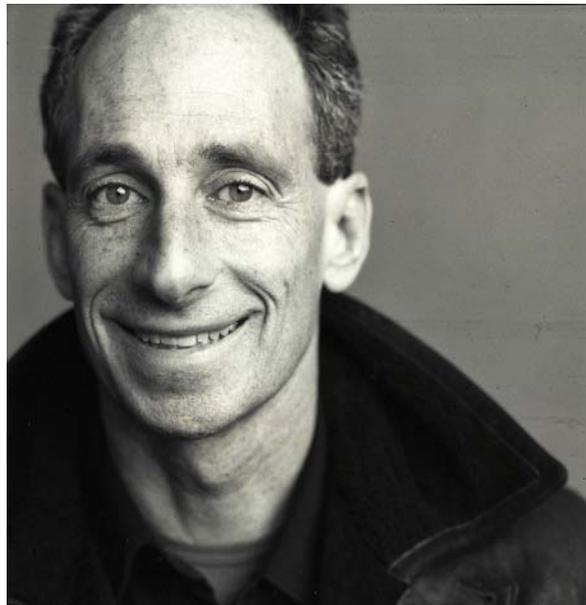
- Courtesy of Sofinnova Ventures

TORONTO RESEARCH CHEMICALS

The roots of David Dime's interests in chemistry are close to home. "My interest in chemistry came initially from my father," he says. Dime's father, a pharmacist, operated one of the oldest pharmacies in Toronto until his retirement in 1986. It held an arcane appeal for the young Dime, who was fascinated by old bottles of chemicals, roots, barks, and elixirs. Dime's father mentored his son, introducing him to his first experiments and employing him during the summers. He also gave Dime two pieces of business advice which Dime remembers to this day: "'work for yourself' and 'don't be a pharmacist'."

Dime studied chemistry at the University of Toronto, completing his Ph.D. in 1978 with Professor Stewart McLean in the area of alkaloid synthesis. He then headed to Columbus to join Professor Leo Paquette's research group at Ohio State University, where he worked on synthetic methodology and the synthesis of marine natural products.

During a stint with Sandoz, Inc. in Switzerland, Dime came to feel that research in industry was more interesting and better funded than in a conventional academic setting. He declined a job in New Jersey, deciding that this was not the type of position he wanted, and returned to Toronto. But the seed had been planted, and continued to grow. Dime then joined Jeremy Carver's research group in the Medical Genetics department of U of T's Faculty of Medicine to do carbohydrate synthesis. It seemed like a good way to pursue his interests in biological and medicinal chemistry while increasing his marketability.



Dr. David Dime

Photo credit: Dr. David Dime

The position was to be an interim one while Dime looked for a job. However, it opened his eyes to the breadth and depth of biomedical research that was going on at the University of Toronto and the affiliated teaching hospitals. He realized that there were a large number of scientists doing interesting work in a variety of areas, using a wide range of esoteric chemicals. Most of these researchers had neither the chemical expertise nor the financial resources to set up a laboratory to synthesize specialized reagents which were not commercially available. Historically, researchers would go to the university chemistry department and get someone to synthesize the required chemicals for them, in exchange for co-authorship on the ensuing paper.