

# Predictor, Montreal, and Meg Crane: A Very Brief History of Pregnancy Testing in Canada

By Jesse Olszynko-Gryn

MCGILL ALUMNUS AND CAMBRIDGE UNIVERSITY PHD RECIPIENT, JESSE IS A HISTORIAN OF SCIENCE, TECHNOLOGY AND MEDICINE AT THE UNIVERSITY OF STRATHCLYDE, GLASGOW. HE IS CO-LEAD ON AN UK-GERMAN COLLABORATIVE RESEARCH PROJECT INVESTIGATING THE CONTESTED USE AND REGULATION OF DRUGS IN PREGNANCY AND THE RISK OF BIRTH DEFECTS SINCE THALIDOMIDE. HIS FIRST BOOK WILL RECONSTRUCT THE REMARKABLE TRANSFORMATION OF PREGNANCY TESTING FROM AN ESOTERIC LABORATORY TOOL TO A COMMONPLACE OF EVERYDAY LIFE.



redictor has come home. Initially sold in Montreal drugstores in 1971, an original “Predictor” brand pregnancy test kit, was unveiled at McGill University’s Osler Library on May 7<sup>th</sup>, 2019. The first reliable pregnancy test sold directly to women, Predictor was created by graphic designer Meg Crane in the late 1960s. At the time, Meg was employed by the New Jersey-based pharmaceutical company Organon. Fearing a backlash from conservative doctors and the church, Organon decided to test market Predictor in Canada, where abortion had been legalized in 1969. Predictor would not be approved for US sales until 1976. But in 1971, Organon set up a Canadian subsidiary, Chefaro Labs, at Rue Saint-Paul (Montreal’s oldest street), to locally distribute Predictor.



The design of the Predictor was thoughtful yet simple. Photo credit: Mary Yearl

With its test-tube and dropper, Predictor resembled a small chemistry set. The result (a visible pattern at the bottom of the tube) took two hours to form, but the test itself was 99% accurate. Although slow and clunky by today’s standards, Predictor represented a major step for women’s access to knowledge about their own (reproductive) bodies. It prepared

the way for Clearblue and the other more streamlined products that followed.<sup>1</sup>

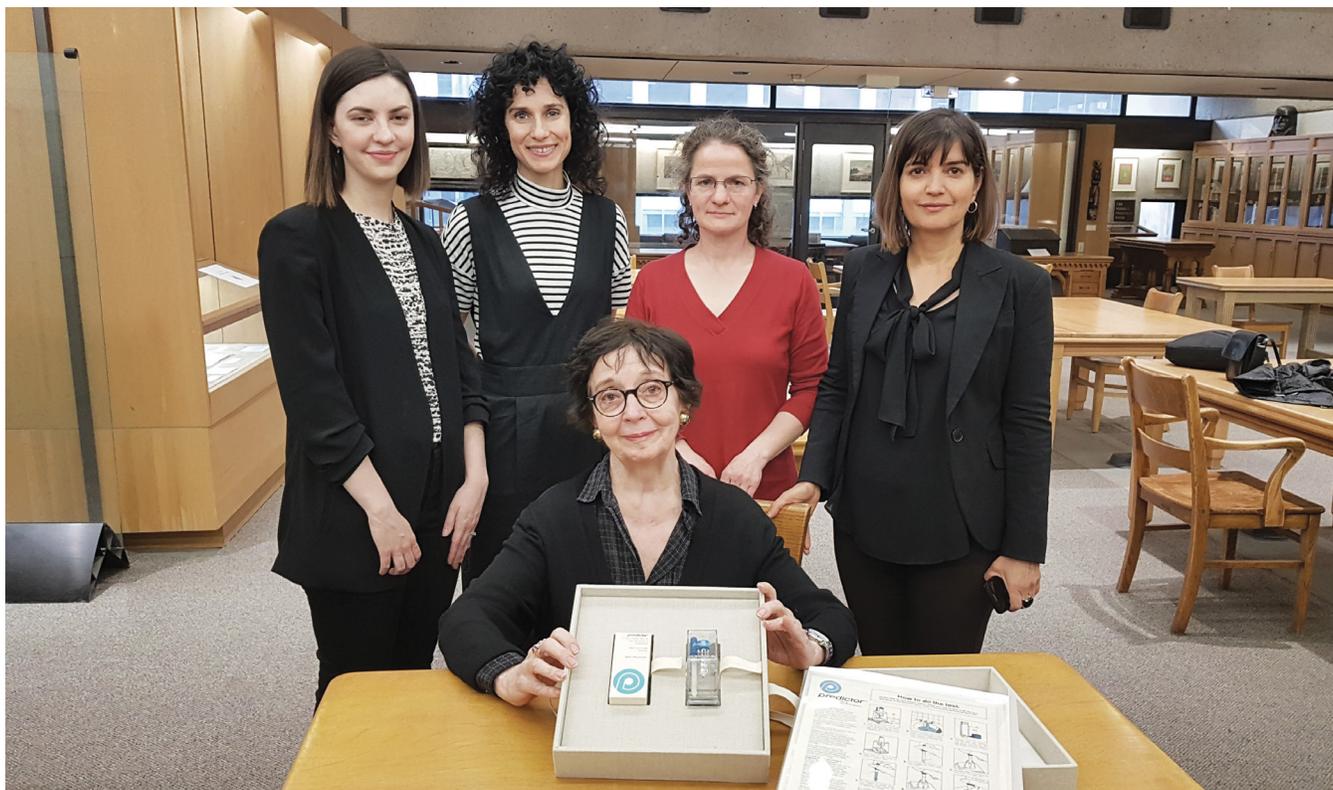
As with all subsequent home pregnancy tests, Predictor functioned by detecting the presence or absence in a woman’s urine of hCG (human chorionic gonadotropin), the so-called hormone of pregnancy. The first reliable test for hCG,<sup>2</sup> a German innovation, dates back to the late 1920s. Back then, pregnancy testing involved injecting immature female mice and then dissecting them to inspect their ovaries for visible changes induced by hCG. The need for mice and an experienced technician limited access, especially in a sparsely populated country like Canada. As an editorial in Canada’s leading medical journal lamented in 1930, the “expensive” mouse test for pregnancy could not be made “generally available” because it required “the assistance of a laboratory where a large stock of young female mice is constantly at hand, and where there are trained observers.”<sup>3</sup>

Rabbits also came into general use in the 1930s, giving rise to the American euphemism, “the rabbit died.”<sup>4</sup> Crucially, women did not have direct access to either the mouse or rabbit test. Laboratories would only deal with doctors. Demand, nevertheless, steadily increased throughout the 1930s. To give a sense of scale, the University of Toronto offered an Ontario-wide service that performed over 6,500 (mostly rabbit) tests for pregnancy between 1931 and 1937; requests came in from as far as three-hundred miles away.<sup>5</sup>

Meanwhile, by the eve of World War II, a new test animal had come into vogue: *Xenopus laevis*, the South African clawed frog.<sup>6</sup> *Xenopus* had the advantage of being reusable: because hCG induced female of the species to lay eggs (a “positive” result), no animal had to be killed or dissected in the course of a test. During the war, hundreds of *Xenopus* were flown in from Durban (via Khartoum, Cairo, Gibraltar, and London), and put to work screening new recruits into the Canadian Army Women’s Corps at Rockcliffe Hospital, near Ottawa, and at McGill’s Macdonald College (where female troops were stationed).<sup>7</sup>

Frogs reigned supreme until the early 1960s, when they were made obsolete by cheap, mass-produced test kits (these formed

*Continues on page 7*



Speakers at the unveiling of the Predictor. In front: Meg Crane. In back, left to right: Jenna Healey, Alanna Thain, Mary Yearl, and Christabelle Sethna. Photo credit: Cynthia Tang.

the basis for Predictor). Medical control was also beginning to relax. In Canada in the 1970s, hospital labs provided free pregnancy tests, on provincial Medicare, but only when ordered by a physician. Women who did not want to go through a doctor could have a test done at a drugstore, for anywhere between \$5 and \$10.<sup>8</sup> Predictor initially retailed for \$5.50. It was in keeping with the zeitgeist for an advertisement in the popular Canadian women's magazine *Chatelaine* to boldly proclaim: "Every woman has the right to know whether or not she is pregnant."<sup>9</sup>

Organon's Canadian adventure was, however, short lived. Despite strong sales and lack of controversy, the business-to-business company strategically retreated from consumer goods and also cancelled plans to launch Predictor stateside. Instead, Organon licensed the design to other, more consumer-oriented companies that in 1978 brought out equivalent products under diverse brand names. One of these was Acutest, the brand used by Spike in "It's Late," the ground-breaking eleventh episode of *Degrassi Junior High* (1987). Today the global market for home pregnancy tests is valued at over a billion dollars. Related products, such as ovulation tests and the Eve Kit, Canada's first home HPV test, owe much to Meg's innovation. It all started forty-eight years ago in Montreal. Welcome home Predictor.

*Jesse thanks Mary Hague-Yearl for the opportunity to contribute to this newsletter and Meg Crane for generously sharing her story; Wellcome (106553/Z/14/Z) and AHRC (AH/T013281/1) for supporting the research. He is delighted to have been able to facilitate the return of Predictor to Montreal.*

*Please direct any correspondence to [jesse.olszynko-gryn@strath.ac.uk](mailto:jesse.olszynko-gryn@strath.ac.uk).*

1. Jesse Olszynko-Gryn, "Predictor: The first home pregnancy test," *Journal of British Studies*, 59 (2020): 638-642.
2. Jesse Olszynko-Gryn, "The demand for pregnancy testing: The Aschheim-Zondek reaction, diagnostic versatility, and laboratory services in 1930s Britain," *Studies in History and Philosophy of Biological and Biomedical Sciences*, 47 (2014), 233-47.
3. A.G.N., "The Zondek-Ascheim test for pregnancy," *Canadian Medical Association Journal*, 22 (1930), 251-53.
4. Sarah A. Leavitt, "'A private little revolution': The home pregnancy test in American culture," *Bulletin of the History of Medicine*, 80 (2006), 317-45.
5. E.W. McHenry and C.H. Best, "The biological test for pregnancy," *Canadian Medical Association Journal*, 37 (1937), 151-52.
6. John B. Gurdon and Nick Hopwood, "The introduction of *Xenopus laevis* into developmental biology: Of empire, pregnancy testing and ribosomal genes," *International Journal of Developmental Biology*, 44 (2000): 43-50
7. Stella B. Cameron, "Moses in the Laboratory," *Scientific Monthly*, 66 (1948), 488-90.
8. Donna Cherniak and Allan Feingold, *Birth Control Handbook*, 12th ed. (Montréal: Montréal Health Press, 1975), 16-17.
9. "To the woman who is wondering whether or not she is pregnant," *Chatelaine*, Sept. 1971, 98-99.