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Every seat in the Quebec Superior Courtroom is filled, mostly by members of the McGill microbiology department. Professors and students have arrived one by one, scattering around the room for seats without acknowledging each other. At the back, a party of well dressed McGill administrators sit straight, cocking their heads in whispered conversation.

Except for a few lawyers and journalists, every person is here under subpoena. They are unwilling participants in a far-flung controversy surrounding two microbiology professors' elaborate scheme to make a fortune with their secret invention called MERLIN.

The courts are blowing open a scandal that has thrown McGill into the midst of international financial speculation and put its board of governors in a conflict of interest situation. But more than McGill's reputation is on the line as details of the affair unravel—the whole question of university research and its relationship to the private sector is under public scrutiny. And this is a classic case of such a relationship gone foul.

Sitting tight-lipped at the front of the courtroom is microbiology department chair Irving Devoe and his colleague Bruce Holbein. Since Jan. 1, 1983, the two professors redirected thousands of government research dollars, McGill microbiology equipment, staff and their own teaching time into MERLIN's secret development. Their company, Devoe-Holbein Inc., has patented MERLIN in 15 countries, and watched its share value jump from 50 cents to \$14.45 in the past year.

Following an investigation by the student newspaper, the McGill Daily, Devoe-Holbein put up \$35,000 to apply for a court injunction against their former employee Dr. Chun Fia Yam and the Daily, to prevent technical information about the invention from leaking out. Yam has filed a number of counter-actions, including a half million dollar suit against Devoe-Holbein. Yam claims to be MERLIN's real inventor, and says the professors are trying to lock him out of any recognition for his work.

Attorneys say the legal battles will take two years to sort out, a prospect that must make McGill administrators squirm. Such a

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controversy hardly helps McGill's \$61 million fund raising campaign, the largest ever in the history of Canadian universities.

The McGill Senate, the body responsible for academic standards, rejected a call for a public inquiry in early December. Instead, McGill principal David Johnston started an independent, private inquiry into the affair.

But despite his efforts, McGill's dirty linen will still get washed in public. The Jan. 23 hearing was postponed until Feb. 6. Meanwhile, the Quebec Securities Commission is investigating a charge that Devoe and Holbein illegally sold shares in their off-shore company Devoe-Holbein International Inc., to McGill professors and staff. The Commission is also looking into potential illegal stock deals surrounding Belgium Standard, the company that will market MERLIN in Canada, and has issued a cease-trading order.

The financial mastermind of the Devoe-Holbein financial empire is Montreal stock promoter Irving Kott. Kott has a reputation for promoting stock in fledgling companies to fantastic heights, and then running off with the profits while the stock crashes around the suckers who bought it. He's stood trial many times over the last ten years for alleged illegal takeover bids, issuing false prospecti, and the like.

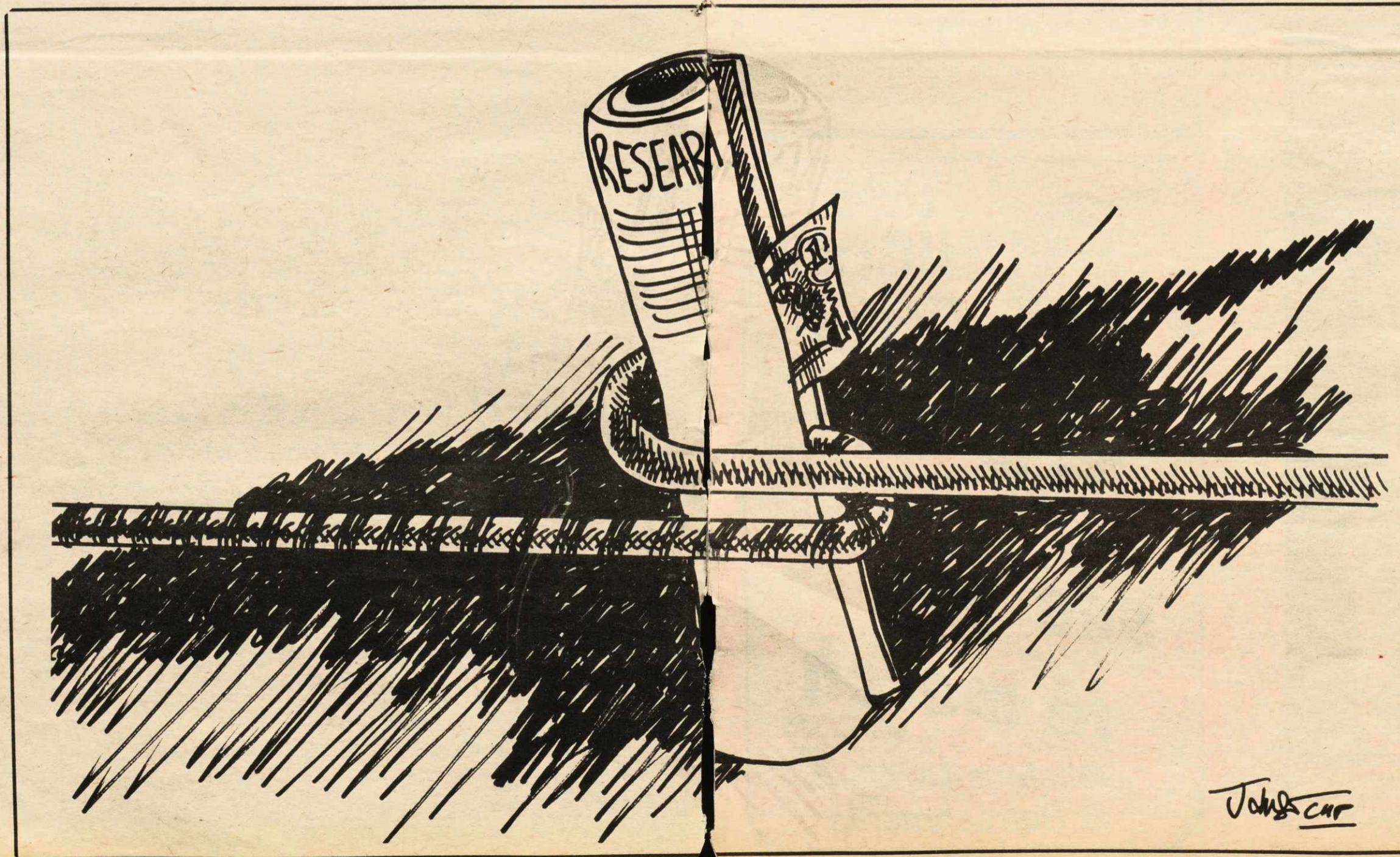
The cause of all this financial wheeling and dealing, MERLIN, is supposedly an alchemist's dream. It is a process for retrieving valuable substances such as gold from sea water and uranium from nuclear waste.

MERLIN's discovery and development took place under very unusual circumstances for a university research project. In Jan. 1982, Yam was ostensibly hired as the microbiology department's chief chemist. However, he had signed a confidentiality agreement with Devoe and Holbein, and was spending all his time developing another of the professors' ideas—a biological process that removed iron from liquids, stopping bacterial growth. It's commercial potential lay in its ability to preserve food.

Three months later, Yam's work took a dramatic turn. "I discovered," Yam said in an interview, "looking at the compound's

Alchemist's dream turns into McGill's nightmare

A get rich quick scheme throws speculation upon relationship between university research and private sector



structure, that you could do it much simpler. There are readily available organic chemicals which we could buy quite cheaply, which imitate the actions of the microbe."

Devoe and Holbein were ecstatic at the find, and named the process MERLIN, Metallic Extraction for Removal of Liquids from Industries.

The two professors quickly incorporated Devoe-Holbein Inc., and proceeded to patent MERLIN. When Yam found his name was not included in the patent application he resigned in protest.

Devoe's obsession with secrecy led him to hire people for loyalty, not competence. Former microbiology graduate students were hired to work in pure chemistry. Their inexperience with lab techniques resulted in several dangerous spills of radioactive isotopes.

More and more of the department's resources were sucked into the project. Supplies disappeared from other labs, including a \$20,000 centrifuge, chemicals and several fraction collectors. Devoe's discretionary slush fund which he controlled as department chair was used to buy supplies for the private lab. The department's three secretaries and a technician spent most of their time on Devoe-Holbein work, and even the professors' government research money—\$83,000 for research into bacterial cell division and \$45,000 for meningitis research—found its way into the MERLIN project.

Devoe traded in his lab coat for a business suit, and arranged for his graduate students to teach most of his classes while he travelled to New York and Europe, taking care of the business.

Professors and students complained they could not get Devoe's or Holbein's attention. "You'd go in to talk about your data and your research and he'd be telling you about how he was going to earn a million dollars," said one graduate student.

While the professors were busy making use of the department's resources, Devoe and Holbein were also arranging interesting financial deals with the university.

McGill's patent policy requires that professors contribute 20 per cent of profits earned to the university from inventions made while working at the school. Instead, Devoe and Holbein gave McGill 20 per cent of their shares.

Three months later, elaborate financial sleight of hand ensured McGill would get far less than its 20 per cent. In February, 1983, Devoe-Holbein International was incorporated offshore in the Dutch Antilles. This is where the real money would be made.

MERLIN's development took place behind locked doors in rented space in the microbiology building, and the professors began to show a growing disrespect for academic policies and standards.

Unwittingly, McGill may have found itself in a stock fraud, since it is a conflict of interest to own shares in a company while employing the people who run it. To avoid this situation the board of governors sent their Devoe-Holbein shares to an independent trust company. But the board is still in a pickle, especially because incoming chancellor A. Jean Grandpre, who assumes his post in April, also has connections to the invention. Grandpre is a director of Stelco Inc., which owns Torcan Inc., the Toronto-based corporation with a contract to build MERLIN's first prototype.

One or more people in the McGill administration must have been conscious of the corporate stampede through the university and allowed it to develop, but it's unlikely principal Johnston's inquiry will be made public to shed light on the affair.

Two other companies are considering the broader issues of the university's corporate involvements, and appropriate relationships between professors who are major stockholders and the university they work for.

Many large American universities have policies that would prevent a Devoe-Holbein affair from ever taking place. At Harvard, for example, Nobel prize-winning professor Walter Gilbert was kicked out of the university after he formed Biogen, a biotechnical firm, and became its chief executive officer. Commenting on a similar situation at Yale, president Bartlett Giamatti said, "When a faculty member becomes substantially involved in a company, the conflict in norms governing the dissemination of knowledge becomes very difficult to reconcile. The burden is more than even the most responsible faculty member can be expected to shoulder."

While committees ponder all the sordid details, the future of MERLIN is another question mark. McGill professors, stockholders and the executive of MERLIN's marketing firm, are suspicious of the invention's scientific worth and certainly the stock.

MERLIN, according to the Arthurian legend, appears mysteriously, performs magical tricks and vanishes forever.