

Research focuses on four main areas: aneurysms, nuclear magnetic resonance imaging, cardiac mapping and transplant immunology. Dr. Philip Halloran, the multiple transplant unit's medical director, stresses the importance of immunology research to further understand various illnesses, including diabetes and lupus.

Construction of the Walter C. Mackenzie Health Sciences Centre was funded through the Alberta Heritage Savings

Trust Fund, which was established by the provincial government with oil and gas revenues. The second phase of the centre was officially opened in 1986.

Barbara Nyland, who works in the Research and Technology Department, states that an enrolment of 1 500 students a year has brought the hospital to the forefront of medical education in North America.

## Canadian Diving Company Plunges into New Technology



Mark Atherton

**A** Canadian diving company is making the underwater world more accessible for those who want to see some pretty fish without strapping on awkward scuba equipment.

International Hard Suits Inc. (IHS) is a British Columbia company founded in 1986 to develop, manufacture and market the Newtsuit — a

revolutionary one-person diving suit that protects the diver from pressure and avoids the need for decompression. Weighing 275 kg and giving the operator a passing resemblance to the Michelin Tire man, the Newtsuit allows divers to work as deep as 300 m with unprecedented mobility.

Not only is the Newtsuit the world's most advanced atmospheric diving suit, it is also the most cost-efficient. Diving to 300 m using conventional diving techniques can cost in excess of C\$270 000 for one 12-hour dive. But with the Newtsuit, diving costs can be cut to a mere C\$7 050. This tremendous saving is possible because the Newtsuit requires no decompression time; the crew size can be reduced from 22 persons to 4; and there is no need for the expensive breathing gases that are normally required in deep-sea diving.

For the scientific and research community, the Newtsuit now allows divers to observe and document historical wrecks, deep-water fauna and flora, and rare events as they occur beneath the sea. For the offshore oil and gas industry, it

permits human intervention for construction, inspection, or sub-sea well completion. And thanks to a revolutionary new fluid-filled rotary joint, the Newtsuit is so flexible that it allows up to 75 per cent of normal dexterity.

The Newtsuit is the brainchild of Vancouver-born diving pioneer Phil Nuytten, president of IHS and a recognized authority on diving technology.

In 1966, Nuytten and a group of Vancouver business people co-founded Can-Dive, the world's largest diving company which has since achieved numerous "firsts" and technical accomplishments in the diving industry. After working with the cumbersome "hard" diving suits of the 1970s,

Nuytten saw the need for a more effective, economical and flexible suit. "The problem with other suits was that the joints were depth sensitive — the deeper you went, the stiffer they got," he said in an interview.

A public company listed on the Vancouver Stock Exchange, IHS delivered its first two Newtsuits to Japan's Fuji Co. Ltd. last December at a price of C\$300 000 each. Today, the company has orders for 22 more Newtsuits worth about C\$7 million.

## A School with a Difference

**R**ick Hansen is perhaps best known for his 1986 Man in Motion Tour — a round-the-world wheelchair marathon that brought him to 33 countries on four continents and raised millions of dollars for spinal-cord research. But the real legacy of his achievement, what Hansen has been most committed to, is changing people's attitudes towards the disabled. Last spring in London, Ontario, Rick Hansen was on hand to open a new school — a school with a difference.

With his wife Amanda by his side, Rick Hansen arrived to join in ceremonies naming the school in his honour. But there's more to the Rick Hansen School than just being named after the Man in Motion.

With an elevator, wide doors and appropriate washroom facilities, it's a school that can be easily used by a disabled child. According to school principal Bob Harvey, "Any child who happens to be physically challenged, living in our school district

can now come here rather than go off to another facility outside of the community."

Rick Hansen had insisted that the first school with his name be barrier-free for the disabled. Said Hansen, "We should be planning for a society that embraces disabled persons as full and equal partners of the community. This school has taken that leadership role by creating a totally accessible environment." The new Rick Hansen school is the first public school in Canada to fulfil these objectives.

After the ceremonies, it was clear that Hansen had made a considerable impression. According to Jordan McCaughen, a 10-year-old girl who attends the school now named in Hansen's honour, "I think he's really had an impact on people who are disabled and people who thought that disabled people really couldn't do anything." And indeed he has.