A CUT ABOVE: The Children's Hospital at Dartmouth is the only medical center in the United States to have two pediatric neurosurgeons who research brain trauma in children, according the director of the program, Dr. Ann-Christine Duhaime.



Surgical stencil: A simple but inventive idea

D r. Lori Alvord is used to getting attention for being the first woman Navajo surgeon. But she wants to leave a legacy that goes beyond that. "I don't want to be niched into one corner," she says. So she's decided to become an inventor—in addition to her roles as associate dean of student and multicultural affairs at DMS and a general surgeon at DHMC and the DMS-affiliated VA in White River Junction, Vt. She recently received a patent for her first invention, a sort of stencil for laparoscopic surgery. In laparoscopy, a small incision of less than half an inch is made, usually in the abdomen, and a tunnel is cut through the body to the site in need of surgery. That tunnel, which is lined with a tube, serves as a pathway for the tiny instruments that the surgeon will operate with from outside the body. While the instruments and tubes are specific sizes, says Alvord, surgeons "just look and guesstimate" how long to make incisions in the skin. "What we should be doing is making them just the right size," she says.

Seal: If an incision is too small, the surgeon may try to force the instruments through, injuring adjacent tissues. If an incision is too big, that can cause problems, too. "The way we look at everything inside," Alvord explains, "is we pump carbon dioxide into the abdomen to distend it . . . [so] we have a little place to work." If there's not a good seal between the skin and the tube, air can leak out, making the surgeon's workspace inside the body smaller than is optimal.

Alvord's stencil design has openings that correspond to specific instruments and sizes. It also has longer slots that can be used for non-laparoscopic incisions, which most surgeons also do freehand. The idea behind the stencil is "so amazingly simple,"

Children's Hospital at Dartmouth mascot is ``as real a dinosaur as one will ever see"

here have been recent reports of a big, blue, very friendly dinosaur wandering around the Children's Hospital at Dartmouth (CHaD). This six-foot-tall creature is named Chad A. Saurus— Chad for short.

According to local folklore, a CHaD-a-saurus egg—dating back to the Cretaceous period, roughly 100 million years ago—was found in a big block of ice near DHMC in the early 1990s. A CHaD staff member cared for the egg until it hatched and then raised the baby dinosaur in a secret location at the hospital. The dinosaur liked the place so much he decided to make it his permanent home. These days, he's often spotted socializing in and around CHaD.

The CHaD-a-saurus has a few wranglers who take him on walks and make sure he behaves so he doesn't accidentally frighten anyone. Among them are Jonathan Strutt, Kari Vandenburgh, and Sarah Farley—all second-year Dartmouth medical students. They accompany Chad when he visits hospitalized children or represents CHaD at special events, such as the Dartmouth business school's Tuck Run for the Kids; local March of Dimes fund-rais-



The CHaD-a-saurus and his handlers, on the Dartmouth Green.

ers; and CHaD family nights sponsored by the Fisher Cats, a minor league baseball team in Manchester, N.H.

"The kids are so excited when they see him," says Sharon Brown, CHaD's director of community relations. In fact, she adds, people of all ages "respond with such glee" when the dinosaur makes an appearance.

Chad's favorite activities include doing arts and crafts projects, dancing, visiting patients, and playing hide-and-seek with doctors and nurses. Chad's wranglers are sometimes asked who's inside the dinosaur suit, and they assure all questioners—even inquisitive reporters—that Chad is as real a dinosaur as one will ever see.

There is no reason to fear the CHaD-a-saurus, they emphasize. He's an herbivore, so he eats mostly grass and small plants—but that means he must be monitored around DHMC's flower beds and shrubbery.

And he loves ice cream, too. So kids had better watch their ice cream cones carefully when the friendly blue creature is around! L.E.