First dean of computer science appointed at UNB

(UNB-PRI) Dana Wasson's career at the University of New Brunswick has paralleled the growth and development of computer science at UNB from a few courses offered in the department of electrical engineering in the 1960s to a full-fledged faculty as of May 1990.

Recently appointed the first dean of the faculty of computer science, Dr. Wasson was one of the first professors to teach computer science, the first director of the computing centre (now computing services), and the first director of the school of computer science.

Born in Jemseg, N.B., Dr. Wasson skipped Grade 12 and came to UNB from Minto, N.B., to study electrical engineering. He first became interested in computers as an undergraduate when he and a fellow student completely designed and built what now would be called a four-function calculator. After obtaining a bachelor's degree in 1956, he went on the the Massachusetts Institute of Technology where he earned a master's degree in 1958.

While Dr. Wasson was at MIT, James Dineen, then head of the UNB electrical engineering department, interviewed him for a position. IBM also interviewed him. But, Dr. Wasson choose to teach at UNB because he believed it would be easier to earn a doctorate if he were working in a university environment.

A year after Dr. Wasson joined UNB in 1959, the university purchased its first computer, an LGP 30, which was operated by the department of electrical engineering. At the time, there were only three professors interested in computers.

In 1964, the computing centre was formally established and Dr. Wasson was appointed its first director. An IBM 1620-II, a substantially more powerful computer, was installed at the same time.

After eight years at UNB, he took a sabbatical to begin studying for a doctorate at the University of Waterloo. He chose Waterloo because it had a large computing centre and an evolving computer science program. While Dr. Wasson took courses in computer science, his doctorate in pattern recognition was obtained through the electrical engineering department in 1972.

Just prior to his sabbatical year, Dr. Wasson submitted a brief to the Bailey commission on the future of the university. "That brief gave us the political clout to get computer science established at UNB." He proposed time sharing and remote access to an expanded computer centre from terminals via telephone lines, and the establishment of an academic training program, beginning with a master's program and then an undergraduate program. His proposals were accepted.

In 1968, shortly after he returned from his sabbatical, an IBM 360-50 was installed in new facilities in Head Hall. Now considered a "marginal machine," this computer was more than 1,000 times faster than UNB's first computer.

UNB's first master's in computer science students were accepted in September 1968. In 1973, the first undergraduates were accepted and the department became the school of computer science. Dr. Wasson was appointed its director. To date, nearly 200 master's students and 800 bachelor students have graduated.

As director, Dr. Wasson has worked hard to increase the number of faculty in computer science. "In the late 70s and early 80s, the school was flooded with undergraduates and the faculty size did not keep up." He hired one faculty member a year from 1983 until recently. Concentrating on hiring doctorates, he identified young faculty at UNB who were good teachers and supported them in their doctoral studies.

As dean he hopes to increase the viability of evolving research areas in computer science by promoting the development of research groups. Research groups now exist in computer systems, artificial intelligence and ocean mapping. The artificial intelligence and computer systems research groups each have one full-time employee who works with the professors in their research.

"A lot of creative energy is required to keep both graduate and undergraduate courses up-to-date, particularly with the technological changes and the revolution in microcomputers," Dr. Wasson said.

A major undergraduate review of the curriculum is underway. The recent development of workstations with high performance graphics interfaces needs to be introduced into the undergraduate curriculum, he said. Computer aided software engineering tools and fourth generation languages also need to be introduced to make it easier for programs to be written.

Recruitment of students is also a priority. The co-op program is very healthy, Dr. Wasson said, and first-year enrolment jumped 30 to 40 per cent this year. "I think this jump occurred because there are more job openings for co-op students, and that that news has reached high school students."

A major task will be to equip laboratories, many of which are common labs for the whole university.

Dr. Wasson is a member of several professional organizations including the Canadian Information Processing Society, the Association of Computer Machinery, the institute of Electrical and Electronic Engineers, the Pattern Recognition Society and the Association of Professional Engineers of New Brunswick.

UNB appoints new dean of engineering

(UNB-PRI) The new dean of engineering at the University of New Brunswick in Fredericton plans to build on the existing strengths of the faculty and to increase research activity, industry co-operation and graduate studies.

Wolfgang Faig, who has been acting dean since June 1989, has been appointed dean of engineering until June 1995. Since 1971, Dean Faig has taught and carried out research in the department of surveying engineering at UNB.

"Engineering at UNB has an excellent reputation for its undergraduate program," Dean Faig said. "I would like to enhance this and also make us better known for graduate studies and research."

Dean Faig hopes to examine the connection between engineering and the environment and the potential for a program in environmental engineering at UNB. "We have the expertise in our various departments and could pull together an interdisciplinary team, such as the Groundwater Studies Group which does research in groundwater management in the Maritimes."

Now that the School of Computer Science is becoming a separate faculty, Dean Faig plans to examine the possibility of a degree program in computer engineering. Computer engineering involves designing and building computers, while computer science concentrates more on communicating with and applying computers.

He also wants to integrate the faculty's student recruitment campaigns with the work of Monique Frize, who was recently appointed holder of the NSERC-Northern Telecom Women in Engineering Chair. He will assist Dr. Frize in her national campaign to encourage women to enter engineering.

Dean Faig's administrative career at UNB began when he was appointed associate dean in 1981; he was acting dean in the 1987-88 academic year, and since July 1989. In the department of surveying engineering, he as been acting chair and director of graduate studies.

Dean Faig first came to UNB "because of its international reputation in surveying engineering." He had earned a degree in engineering form the Technical University of Stuttgart in West Germany. After working in industry, he came to UNB to study for a master's degree in science (surveying engineering), which he received in 1965. He returned to Stuttgart where he received a doctorate in 1969. Before joining UNB's department of surveying engineering, he taught at the University of Illinois for two academic years.

Dean Faig teaches photogrammetry and surveying. His research has been concentrated on the use of photogrammetry as a 3-D measuring devices for a variety of applied engineering projects. As dean, he will continue to teach, perform research and supervise graduates students although on a reduced scale.

Internally, Dean Faig intends to institute regular reviews of academic programs every three to five years to ensure that the programs remain up-do-date and meet the future needs of business and industry. He will also be working on the upgrading of computer facilities, particularly now that the trend is away from mainframes and towards individual workstations.