



- LESLIE WOOD -

THE SCHOOL OF HEALTH INFORMATION SCIENCE — BEGINNINGS

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<http://hinf.uvic.ca>

*Editor's Note: This is the first of a
three part series on the School of
Health Information Science.*

The School of Health of Information Science at the University of Victoria will celebrate its 20th anniversary in the year 2002. For nineteen years it was unique in Canada, and it still leads the way in education in the health informatics industry.

The University of Victoria has over 18,000 full and part-time students and almost 4,000 faculty and staff. Its roots extend back to Montreal: In 1903, UVic became affiliated with McGill University and maintained this relationship until 1915. A few years later, an affiliation was arranged with the University of British Columbia, which remained in place until the early 1960s. In 1963 the University began granting degrees in its own right. The University is committed to excellence in teaching, scholarship and research. The School of Health Information Science shares this commitment.

In the late 70's, Dr. William Gibson, then Chairman of the Universities Council of British Columbia, envisaged a need for a new type of professional who had the knowledge and skills to effectively introduce information technology into Canada's health care system. His vision came to fruition in 1981 when the University of Victoria inaugurated a new four-year Bachelor of Science degree program in Health Information Science. The new program was added to the University's Faculty of Human and Social Development which consisted of the Schools of Child and Youth Care, Nursing, Public Administration and Social Work.

In July 1981, Denis Protti was appointed Professor and Director of the Health Information Science program. With his extensive background in information systems management in the Canadian hospital sector, he proved to be the perfect choice to lead the fledgling School.

In the fall of 1982 the initial curriculum was implemented. It was based, in part on the ACM's Special Interest Group in Biomedical Computing (SIGBIO) 1979 model curriculum for Ph.D. programs in the field of Health Computing. The Association for Computing Machinery (ACM) is a group of primarily American professionals working in the field of computer science and information systems. SIGBIO is one of the special interest groups and consists of individuals involved or interested in the application of computing technology in medicine and the biological sciences. The focus of their recommended curricula was to prepare graduates for careers in administration of health care resources, in biomedical research laboratories, in computer-based education and in the development and use of health care delivery information systems. The original curriculum was also heavily based on the ACM's model curriculum on Management Information Systems; a curriculum which specifically distinguished the field from that of Computer Science. Finally, the Heidelberg/Heilbronn curriculum had an influence on the design of the UVic curriculum.

Professor Protti worked tenaciously to keep the new School afloat as the inaugural class of 17 students was admitted into the School in September 1983 at the same time that the economic recession began to affect British Columbia. The program's five year, \$1,920,075 (1980 dollars) earmarked funding was cancelled and the budget frozen at the 1983 level. The resources for 9.2 faculty and an annual intake of 30 students per year were no longer assured; part of the program's funds was directed to other parts of the University. The program's future was seriously in doubt, to the point that the University's Admissions Officers were advising new applicants that the program was going to be terminated. The program's team at the time consisted only of the Director, a part-



Denis Protti

time co-operative coordinator and a secretary. During the next three years, Professor Protti and a dedicated group of sessional lecturers managed to teach all of the required courses despite cutbacks to university funding. The program survived due primarily to the pressures put on the University from the health care community.

One of the first students admitted to the program was Cathy Hull. When asked to describe her view of Health Information Science she replied, "To me, Health Information Science is about helping people use credible information to understand health and the factors that influence health and to take effective actions to improve health, individually and as a society. Look at the diverse careers and lives that graduates have followed. You'll see that Health Information Science can be a springboard for just about anything one wants to be!" Ms. Hull is currently the Managing Editor, BC Provincial Health Officer's Annual Report.



Cathy Hull

The May 1986 convocation saw the first group of Health Information Science students receive their degrees. All were fully employed prior to leaving the University. Christine Nicolls commented, "I was part of the first graduating class. It was a great time to be in the HINF program. All the courses were being tried for the first time (both good and challenging at times), but we had a world of opportunities because there were very few people more experienced in our field. When we went out on placements, we were the experts not the lowest person on the totem pole. Health Information Science is an interesting, challenging field where you can make a significant contribution to the health system even if you are not inclined toward being a nurse or a doctor."

In 1986, the freeze on staff hiring was lifted and Dr. Walter Dietiker and Dr. Jochen Moehr were appointed to tenure track positions. Dr. Jochen Moehr is a medical doctor with a Ph.D. in Medical Informatics from Hanover, Germany, and is considered a world expert in this field. Dr. Dietiker, who has a Ph.D. from Manchester, worked at the executive level in the development of software and as a director of Research in the private sector. To this day Dr. Moehr continues to teach and carry out research at the School.

The acceptance of the graduates of the program demonstrated a market and need for this type of professional with great potential for the future. The acceptance, and other factors, helped to validate the concepts and existence of this particular learning process and experience. In 1987 the University designated the program as the "School" of Health Information Science making it a professional school within the University context, providing an undergraduate program leading to a Bachelor of Science Degree with a Co-operative Education designation. At the same time another faculty position was added and Gerhard Brauer joined the School.

Under Professor Protti's leadership the School continued to grow and reach out to the international community. Annually since 1985, a Colloquium entitled Partnership in Productivity has brought together senior corporate and hospital executives, physicians and Deputy Ministers of Health to discuss the issues and trends facing Canada's health care industry. The colloquium is by invitation only and is regularly sold out. In May 1989, the School organized and held a very successful International Symposium on Medical Informatics and Education. The Symposium drew over 350 delegates from 23 countries and involved 80 volunteers from the University and the community. As a result of the Symposium the world's scientific community became more aware of the School offerings and approaches. Between 1987 and 2000 the School

hosted 8 international Information Technology in Community Health (ITCH) conferences.

In January 1990, the School was granted two full-time faculty positions when Dr. Dietiker left. Dr. Paul Fisher filled the first, and Dr. Ken Thornton was appointed as a Visiting Professor. The latter is now retired but continues to maintain strong ties to the School.

That same year the School welcomed its first two graduate students - Julie Comfort and Jim McDaniel. Ms. Comfort received her MSc in 1993. She is currently the Project Manager, Information Systems, at B.C. Children's Hospital. Dr. McDaniel received his PhD in 1994. He is presently the School's Systems Coordinator and Adjunct Assistant Professor.

In November 1992 the School celebrated its 10th anniversary and as part of the convocation, the School nominated Dr. Roger Côté of the University of Sherbrooke, a renowned leader in the field of Medical Informatics to receive an honorary Doctor of Science degree from the University. In his acceptance address, Dr. Côté commended the University for its leadership in having a program that is recognized as a model for others to emulate.

The 1990s were a decade of continued growth for the School. Collaborative relationships were established with numerous organizations and institutions including the Universidade Federal Do Rio Grande Do Sul (Brazil), National Yang Ming University (Taiwan) and the Canadian Society for International Health.

Professor Protti relinquished his role as Director in 1993 to Dr. Fisher to spend more time on research, developing new initiatives for the School, and teaching. Professor Protti has been instrumental in shaping the national health information strategy and emerging electronic health/patient/personal records in U.K. In fact, the National Health Services in U.K. has introduced the "Protti Critical Progress Markers", or Protti2001 for short, as a set of performance indicators to evaluate the adoption, use and impacts of health information across the country. The significance of this pioneer work is immense in that the Health Informatics (HI) strategy, evaluation framework, electronic records and implementation experience are areas of core competency for the School.

Shannon Turner, a member of the first graduating class, best illustrates the high esteem with which his students hold him. "Denis has never wavered in his commitment to the School and has shared the power with some pretty brilliant faculty members. Denis has a deep and abiding belief in the worth of this profession. The consequences of that are that a good number of us have experienced extremely worthwhile careers. Denis fostered a respectful and professional relationship with the students. He didn't waste time in blame or pointing out problems, he just moved forward to solutions in a helpful manner. This profession has enabled me to act within my belief systems to effect decision making in health care. It has meant an endless stream of technical developments and some very cool toys. It has provided me with a stable income for my family and a wonderful network of peers whom I still seek out for support. So my thanks to the School and in particular Denis our professional "father" and mentor for his loving commitment to us all."

The knowledge and skills acquired within the School of Health Information Science, along with work experience in the field, develops broadly educated professionals with a thorough understanding of both information technology and the healthcare field. Providing a broad education requires the study of information from many perspectives, including epidemiological, legal, medical, sociological, financial and economic perspectives. The full-time faculty is regularly augmented with practicing professional experts from the field. The process also requires the School to be involved

in ongoing informatics research.

In facilitating its research objectives, the School of Health Information Science contributes to the body of knowledge in the field through theoretical and applied research. A general goal is to initiate and conduct research aimed at the development and design of effective applications of information technology to all aspects of healthcare delivery.

The School of Health Information Science uses a process of Co-operative Education as an important part of its teaching philosophy and methodology. This education process formally integrates academic studies on campus with related work experience in hospitals, in governments, in agencies, and in the private sector. This helps to provide students with an excellent, well-rounded education; employers with a more cost-effective way of completing special projects and evaluating prospective employees; and the University with valuable feedback on the quality and relevance of its programs.

A new strategic plan was developed in 2000 to ensure the School embraced the new millennium with a renewed sense of purpose and course of action and Dr. Francis Lau took up his position as

Director of the School on January 1, 2001. The strategic plan can be viewed at <http://hinf.uvic.ca/plan2000/index.htm>.

In 1988 then Co-op Coordinator, James Coward, wrote, "What the future will bring to Health Information Science will be very interesting to observe. The Canadian healthcare system continues to be extremely complex, and extremely expensive. Significant pressures will continue to be maintained on all areas of the system; whether from governments, hospitals, medical practice, technological advance and change, labour or from the general public. The challenge to the School of Health Information Science at the University of Victoria is to continue to respond, to improve and change itself. Most importantly, the School must continue to be a positive contributor to the healthcare system. This is the real reason this new and unique program exists in Canada. It should continue to be the reason in the future." Those words are still applicable today.



Editor's historical note:

In addition to Prof. Protti's achievements as one of the founders of the School, he has also left a lasting impression on the industry when he was a much younger man. Denis was one of the founders of COACH: Canada's Health Informatics Association.



COACH Founding Board Meeting, Toronto, 1975

Back (L-R): Robert E. Zuckerman, Vice President; Robb Palmer, Publications Chair; Vernon Shipley, Treasurer
Front (L-R): Denis Protti, Secretary; Steven A. Huesing, President; Marie Barret, Program Chair.