

Oral History Interview with Dr. William Bridgeo
Conducted by Angela Baker August 5 1993
Transcription By: Armin Shujaatullah March 19 2000

AB Okay, could you state your full name please?

WB Yeah, William Francis Bridgeo.

AB And your date and place of birth.

WB St. John, New Brunswick, December 15, 1927.

AB Okay, could you give me a little bit of information on your educational background

WB Grade school, and high school at Saint Vincent's Boys school in St. John, New Brunswick. Undergraduate education at Saint Francis Xavier University in Antigonish, part-time student at Dalhousie University for one year, graduate student at Laval University, Quebec city. Continuing at University of Ottawa to a Ph.D., and post doctoral education at Notre Dame University, south end Indiana and then another extended post doctoral work in the sixties at the college of ceramics New York State University in Alfred, New York. Part time or rather, a short course at MIT.

AB And, briefly your research interests over the years, describe them?

WB Oh, they've been pretty broad. Um, initially in the field of amino acids, which at the time were not nearly as prominent as they are now, although the professor I worked with told me they would be... in other words in organic chemistry. After I got my degree, I moved away from organic chemistry, and went back to something that I had an earlier interest in, analytical chemistry. And I worked in that area throughout my professional life in the lab. But I was early, very early in my career connected to Nova Scotia Research Foundation which was a multi disciplinary organization, and as such I got involved in a wide variety of research projects. Forestry, energy, coal, fuel cells, um, environmental studies ...over the years. Water chemistry, quite quite a broad, broad range of of of topics.

AB So you say you first came to Saint Mary's in fifty-nineteen fifty-four?

WB I believe yes, I think it was January 1954.

AB And what was the science department consisting of at that time

WB Well I think there was Professor Allan Sabeau, professor James Murphy, a Jesuit - and that was it in chemistry. Engineering at the time was considered there was no faculty of science and in engineering there were two I think professors me-in, three including me a part time person. Biology - the Rojos who you probably have spoken to. Well basically the biology department Mr. And Mrs. Rojo, physics

seemed to be taught by, by the other professors, that was the chemistry professors and the engineering professors they pitched in to, to teach physics. And the odd part time professor in one aspect or other of science was hired, but it was very, very very small category of people that time.

AB What were the academic course offered, like at that time?

WB Well the first courses that would fall in to the first two years of the of the university program. Chemistry was probably even then a little bit more advanced, and they did give degrees in science where the students studied for four years and the few students that did do through that type of program would be given the upper level courses on a, almost on a one to one basis by Father Jimmy Murphy and by Professor Allan Sabean, and as I say in my case I was brought in on a part time basis to do a second year course and to introduce analytical chemistry. So it was a smaller fraction.

AB So how did they develop, just briefly, how did the department develop over the years that you've been here?

WB Well the numbers of students involved were, well it's a small number, I don't know what the total registration of the university in those days was, but it's maybe between two and three hundred for all faculties, and I think that higher education grew in the '50s and certainly in the '60s. Became a great demand certainly after Sputnik, there's a huge increase in the number of people wanting to going to university and so what was there was just built upon and the class sizes increased dramatically. I started out in one course, uh, four students, and that particular course only grew to about, something about twenties, but the other course that I was dealing with, um, I think had between twenty and thirty and the last year that I taught that course was I think something between a hundred and hundred and ten which is far far too many students in a class in a science course for my liking anyway. So it it it was it grew partially as a result of of the desire on part of the population for higher education. Saint Mary's was situated in a metropolitan community, so they had a bigger demand on them in that respect—more people here. It was just a gradual development and they tried to accommodate the, the growth by picking up part time professors, you know. A professor would teach one course [each term then]

AB Were there particular programs or areas of study that were introduced, in the university?

WB You know generally speaking you'd get a Bachelor of Science degree, that that was it and there was I suppose an introduction level somewhere along the line during that period of the concept in an honours degree that very very few students were doing. It was by and large a general degree where you'd have to go back, I'd have to go back and look at the calendars and what not, and see where the concept of the major degree came in, but I would tend to think that it was some time in the late, the late fifties where they'd be talking about a major in chemistry or major in

physics. Prior to that it was just a Bachelor of Science degree. Was a very heavy requirement for arts subjects in those years you know. Students had to do I think three courses in philosophy, three courses in English, and then these were the people that were taking science you know. And mathematics was also required but mathematicians were scarce, very scarce, even into the sixties. I can remember going to, I think it's University of Waterloo with the precedence to try and get a Ph.D. with a professor in mathematics. Nobody in mathematics had a Ph.D. And since most of the courses were taught on a part time basis and at the time Doctor Stanton at University of Waterloo had between sixty and seventy Ph.D's in the mathematics department. He really had a corner on all the, the mathematicians in the country, and he, he was very good about it. He said well you can try and raid us if you like you know, but that's just to give an indication that even in to the sixties, mathematicians were very very hard - Ph.D. mathematicians - were very hard to get a hold of.

So the, the big change in all of these things was around 1967 when Dr. Labelle became president. And there was dramatic change at that time. In the short time that he was president, between two and three, effectively three years but the last part of it, last six months you know he was coasting out. The growth was just dramatic, very dramatic like nothing else. And professors were... There were, there were only two full professors in the whole university. Father Burke-Gaffney and Doctor Somavich. They took that title full professor on, on a very high plane and Father Burke-Gaffney, I think published something every year he was here, for years and years and years. And Doctor Somavich, was from Poland—he's a world figure in terms of World War Two and so on, and he went to Harvard as a visiting professor with the time and then he went to Notre Dame or vice versa, but he was away for two years as a visiting professor at those two institutions. And when he came back, I met him over here, just at the entrance to the McNally building off the parking lot and he said "What happened here?" and I said "Well, what do you mean?" "Well" he said, "I left here two years ago Saint Mary's was a college, I come back here now it's a University!" And that was a comment by one of the only two people who were operating internationally at the time. So then from that point on, there was a different type of growth. It picked it up and dropped off and then it began to to rise again and in the second rise it's gone up to where it is now.

AB So, when you first started in the science faculty there was not even a science building. How were the research facilities changed over the time you've been here?

WB Well, it all happened at the same time.

AB Around what time?

WB '67. Now as individuals, Father Jimmy Murphy was operating - he'll probably tell you this, it was nothing but a closet. In that area as you enter from the parking lot in to the McNally building, the entrance way when you walk in those doors, that was my lab. That's where I had four students in this particular course that I was talking about. Turns out that one of those four I think is the most imminent graduate we had in science in all the years I've been here. So, those of us who were doing things, just did it under difficult conditions. And people really don't know anything about that. They wouldn't appreciate it, they didn't want those stories, and I'm gonna tell them.

AB (laughs). Okay, so at around that time that you were mentioning, women became full time students at the university, what effect did that have on the school?

WB Well, I think it was a good thing. Once again it was under Jesuit administration and I think they were teaching order, decided that this was the right thing to do and I sat on the the committee that the—negotiated the beginnings of that and uh, I just think that their decision was right. It was a good thing to, to bring women into the institution. Bothers me a bit now when I go over there around the main lobby and I'll hear some young girl giving a tour to a group of people talking about Saint Mary's and illustrating the growth of the university by maybe pictures or what not that are around the place and then, one of them said, you know, "back in such and such a time when this was put in place [well] this was an institution for men only—I think." And I just recoiled, they, no sense of that at all. But at that time not only Saint Mary's because they became co-ed but the whole world experienced a tremendous dramatic change with respect to discipline, and I don't think that the girls were responsible for changing that, but huge decrease in discipline in society at that time. I suppose girls were, were to some extent the recipients of that. My general reaction was that it was a good decision to go co-ed.

AB Did you have many females students in your classes in those areas?

WB No, not in the early years. They came on gradually, but later on I've had years where over fifty percent have been girls. Nowadays it's dropped down below that again, so it's less than fifty percent, but the the level of participation of girls today is much higher. They're much more relaxed in dealing with professors, in dealing with men. Sometimes a little bit too aggressive. That's part of the social change in, in the world and I sometimes ask myself what did I do, when I voted for opening the university up to the girls. What a nice experience this over-aggressiveness which I suppose is a form of defensiveness. I guess most girls don't feel that way, some can be very aggressive. And very aggressive with respect to marks and grades, because that holds the door to something else, but that's fundamentally not right as far as I'm concerned. There should be more interested in understanding, rather than the bottom line—grades, marks, that sort of thing. I've found that the girls they are today are more so than men, aggressive in that respect. There's, they're determined to get these grades at all costs you know—not at all costs, but

that's one of the reasons I decided I didn't want any further teaching. I could have applied for another contract but my experience in the last couple of years was negative in that regard. I think I succeeded in turning the whole class around attitudinally—it was a trying thing, a hard thing to do. And so I said oh, my time has come - it's for another generation to do this.

AB So around that same time as well the Jesuits gave over administrative control?

WB Yes they gave over administrative control about 1971. There was an interim president at that time, Mr. Edmund Morris was appointed, and then he was followed by the first lay president was Dr. Carrigan. Dr. Carrigan was followed by Dr. Ozmond.

AB So what effect did that have on the school do you think? Also as well, what role has religion played in the university in the time that you've been here, has that changed?

WB Oh yeah, oh yeah. I think it, it played a very very important role while the Jesuits were here, and after the Jesuits passed over the administration it dropped dramatically and that's another thing that perhaps couldn't have stopped because it was a worldwide trend. The lay people didn't attempt to maintain that that aspect or that dimension of university life to the same extent that the Jesuits did. So, I think we'll have to look at that historically maybe in a few more years yet just to see what came from this. And, and turning back in that in that direction now, actually and the work that, that I've been doing with people outside university. Once again, uh, kind of find the role of religion in the world. Oh there was a big change as I say, you have to look at the, the changes in the whole world in that-that period. We talked about this in, another place and another context, in the spring, and one of the persons who was there held a very, very, very high position in Canadian life – public life - and I made reference to the fact that well, such and such all changed in 1970, and this person was a very thoughtful person, and said after thinking for a bit, "I think we should have fought harder in 1970." So as I said this, this historic time went back.

AB Okay, now also in the early '70's Saint Mary's became one of the first universities to union—faculty, to unionize, uh what do you think lead to that decision and what effect do you—it had?

WB Again I think it was all part of the social change, a group of people, young people, young faculty members, who reacted to discipline, did not want discipline. They did not want to be told by administration or any body else really, what to do. They felt that they were the ones to decide. I can remember Dr. McCormick and Dr. Monohan seemed to feel strongly that way. They were professors and I was a, I guess I, I'm not sure whether I was Dean at the time, or whether it was just a professor, and we were discussing something about... oh I forget the issue.

[THREE KNOCKS POSSIBLY ON A DOOR ARE HEARD AT THIS POINT]

(Do you want to check, Kim?) Yeah the comment was made - you certainly don't think that you're an employee here, do you? You're running the university - and I don't know if, didn't agree with that at all. I came from a background where there was more discipline in life than that, and I said to myself, well academic thinking and wanting to be [] of my thoughts and so on but yeah, I work for Saint Mary's. But they, they were - oh no no you don't think you're an employee, the professors and not employees of the university, they are the university - and you can see that that goes back to Harvard, through Oxford and Cambridge also—but it it was a kind of thinking that was throughout society and so these people came in and they wanted to have a say and they wanted to, you know working conditions, salaries, and so they just started this. It wasn't my motto, and I never joined. But because of the way it was set up you had to pay anyway. You pay the money out of your salary each month, but I never considered myself a member and I specifically told the administration when I left administration and back to faculty. I am not a member of the union, I didn't think that a union model is appropriate for university. But they accomplished some good things, But I still don't think that it's it's a it's a model for university

AB Okay, talk a little bit about the student population over the time you've been here. We talked about it in terms of gender how about age and ethnic origin. Have you noticed any changes in those areas over the time you've been here?

WB Mm, not a great deal. Well age yeah, there are many more mature students now than than there were and more and more adults are deciding to come back. We don't see that many of them in the science faculty because the times which our courses are taught are not convenient. But we've had some. I can recall a couple of real fine... one's a captain in the navy about to retire, you know, a high profile, smart man. and they and then I admired the way they maintained their dignity but were friendly and even keel with the students, they were just wonderful at their job. But there ain't that many, there haven't been that many in science faculty—you'll find a lot more in the other faculty's, so that question doesn't really hit us in science to many degrees. Ethnic origin, not enough because even going back in to the fifties, there was a sizable, on the basis of total numbers, students who were here from Hong Kong, and from other provinces of Canada that group four that I speak of, one was from the Caribbean, one was from Quebec and two of them were from Halifax, and today you've got the statistics in the paper the other day eighty five percent are Nova Scotian... There may have been even a little, um well there could have been more Americans for example, back in those days—uh here back in those days than there are now. So but, the ethnic origin part, you see small numbers of people here from international programs, but no large groups like there were from, from Hong Kong, and the Chinese population is still is-is pretty pretty sizable on the role of basis here, you know. Um, I see the odd one from from Africa and... that nothing that would impress me one way or another in that regard.

AB I see. Okay those area about the areas that I wanted to cover, unless you can think of any other events or changes that stand out in your mind over the years that you've been here.

WB Well, as I say... I've been protective of myself in thinking about this. You've hit the major transitions... the move from arts and science to science, and in the consolidation of engineering and science in one faculty, and the growth of that faculty that was, from my point of view that's one development, which had a lot of impact because we were the ones that forced the issue on research, on qualifications—I was as popular as a skunk at a garden party because I insisted on Ph.D's. And I encouraged a lot of faculty who had master's degrees to either upgrade or move on and I was not popular. Mathematics would not come in to the science faculty until I left because I pushed that thing so, now they're in they're in the science faculty and many of the people with masters degrees did upgrade and now they're happy, and full-fledged professors. That was one thing that we really had a big impact on and the rule of the Jesuits went with the administration, was a significant move. But again, I would be tempted to say we lost a lot of class - however again, we did experience a growth and we'll only be able to look back in time to come and just assess it afterwards. And the development of co-education again very significant decision on the part of the Jesuits, they set the stage for all these things. And Saint Mary's has been such a good deal] by that. I'm not worried about the number of female faculty that are, that are here in terms of their-their numbers whether they're less than fifty percent or not. I'm much more interested in the... quality of input of the students.

Crazy, I think as far as female faculty are concerned, that will come. Be patient. Wait - but don't hammer that on a basis of rights. I would fire people who did that, still I'd fire them. But you'll find that these.... Oh I'll tell you another story about Mr.Fore (?)—do you ever hear of him? Well ask around, very creative man - architect, designer, futurist, forty-four, forty-five honorary degrees, two of them from Harvard. I thought that was unusual till I heard that Father Hesberg in Notre Dame has a hundred and eight honorary degrees. Another strong leader—yet and don't knock Johnny McDonald as a strong leader... Anyway, Mr.Fore and I met over in Israel, and it was at time when I was experiencing all this unrest and so on and developing the faculty. And he had just finished talking to seven hundred to eight hundred international engineers, a big audience, about pollution and how the world is gonna deal with this. Terrific address, started with the creation of the world out there, brought the whole thing right down to right here on earth today. And then he told all these people in the audience - most of them were grey haired - “you have the knowledge now, to solve ninety percent of the world's pollution problems, your research programs are going to enable you to solve at least six percent more, and you're only left with about four percent that you can't get your hands on right now, but that'll come. But unfortunately there's not a thing you can do about it - because the nature of your training, and your professional approach - you can't deal with the political dimension and the decision making roles that are involved in the societal picture. The approach is to give that knowledge to the young people.” He said “today you've got,”—I can't I now I can never some days I rattle if off and some days my mind doesn't even—“they are interested, they're informed and they're intelligent.” And somebody else later told me there's another one starting with an 'I'. He says “you give them those answers and they're gonna solve the problem.” And, then coffee break - or not coffee break - , on the way

back from uh, Haifa, where we were down to Tel Aviv, along [through] in a train we stopped and had one of those, first time I ever had something like that. A bottle of beer right by the train, beautiful warm day under a tree there—all these guys trying to get a hold-up Mister Fore, and I was right beside him. And I said, you've got a great deal of confidence in the young people, I said I'm a young dean of science, and I have a vision that I'm trying to direct the program, and I'm having a heck of a time trying to direct some of these young professors "Don't you pay any attention to young professors. They've all got axes to grind. You go to the young students. They're the ones that are gonna do the job for you." So, everybody was after me and I sort of turned a little bit, put my head down, and I said well, I guess I must be patient. Well, he spun round, left the people he was going to meet, came back he said "my dear young man, this is the most traumatic period in human history, you must be patient!" So, that's why my [come]

AB Haha, so, good.