

## The NOVA SCOTIA MEDICAL BULLETIN

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## Editorial

### In Self-Defence

Why do people smoke? Medically speaking tobacco is not habit forming. It apparently does not worm its way into one's physique, as opium or cocaine does. But it is habit forming in the manner that three meals a day or dressing oneself daily are habit forming.

But how happy are you with tobacco or the effects of tobacco? Does it really satisfy the way steak and mushrooms do when we are hungry or a warm coat in the winter. You know better.

Light it, smoke it, taste its bitterness. Of course you know you don't like it but you want another. It is not that you actually enjoy it. You just simply want it.

We know that when we smoke, nicotine, carbon monoxide, hydrocyanic acid, pyridine, phenols and aldehydes are absorbed into the lungs and mouth and various things happen. Momentary stimulation then depression of the sympathetic and central nervous systems. Fine, you find a smoke is "good for your nerves."

Now, how about the **non-smoker**. The cigarette smokers have taken over the world and this habit tends to be odious to non-smokers and particularly so in public places.

Everywhere you go people blow smoke into your face. In a public eating place, one is easily enveloped by clouds of smoke and why does it always seem to be blown towards a non-smoker.

Butts and ashes are to be found everywhere. Does the smoker realize that the pervasive stink of stale tobacco hits the nostrils, reddens the eyes and ruins the appetite.

At a party one can be blinded by the fumes. People tend to be naturally inconsiderate where smoking is concerned. If a smoker stood on the other side of the rail he may see that his inconsiderate actions are held with disgust and contempt by the non-smoker.

Once surrounded by his fumes; he thus becomes impervious to others. Would this be a cowards way? All addicts are cowards at heart.

There could be no democracy in the smoking world. The smoky atmosphere he creates is forced upon the non-smoker. There are just no equal rights; the non-smoker cannot close his eyes or nose, and must always bear silently this imposition on his freedom to breathe pure air.

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If one cannot quit like a man; could he not at least smoke like a gentleman. He might refrain from polluting the atmosphere with its side effects when it might be objectionable to those around him.

Smokers do have (have they forgotten?) a responsibility to society even if they ignore the responsibility to their own health. Certainly he hasn't the right to ruin a stranger's dinner, or to leave smouldering odorous butts in his friend's dishes or scatter ashes over the new rugs.

Smokers in great numbers seem to have become very thoughtless about their habit.

They trade callously on the forbearance of non smokers. The latter have turned the other cheek, or better the other nostril, long enough. It is time they were treated as smokers would like to be treated if the addictive need were on the other lip. Maybe some smokers are so — **in self defence.** ■

W.A.C.

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#### FROM THE BULLETIN OF 40 YEARS AGO

From the Medical Society of Nova Scotia Bulletin, June 1924

#### **Fake Consumption Cures**

Dr. T. M. Sieniewicz, A / Director Massachusetts-Halifax Health Commission.)

In few organic diseases does the mental attitude play so important a part as it does in tuberculosis. Any change either in the treatment itself, or in the individual giving the treatment is likely to result in a temporary improvement of the patient. It is this curious psychological fact that makes the tuberculous patient a pitifully easy victim to those who advertise worthless or fraudulent "Consumption Cures".

How great this psychic factor is, was strikingly shown by the experiments of Albert Mathieu, the French physician. Mathieu led his tuberculous patients to believe that a wonderful 'serum' for the cure of tuberculosis had been discovered. To these patients he gave injections of what they thought was the serum, which actually was a small quantity of a solution of common salt, and carefully noted their condition. A remarkable change was seen; the appetite improved, the temperature diminished, the cough, expectoration and night sweats were mitigated and the patients began to gain weight. With the discontinuance of the injections, the old symptoms returned. ■

# Letters to the Editor

The Editor,  
The Nova Scotia Medical Bulletin.

RE: "The Present and Future Status of Laboratory  
Services In Nova Scotia."

Dear Sir: -

The executive of the Section for Pathology was most interested to read in THE BULLETIN about the present status of laboratory services in this Province. It comes, however, as somewhat of a surprise to read in APPENDIX A to the article that some laboratory directors are expected to refer their work to other hospitals. (St. Rita to City Hospital)

In general, the plans for future services meet with our approval. This is remarkable as at no time have we been consulted, either as a Section of the Medical Society or as Laboratory Directors individually, for advice regarding them.

We question whether it is wise policy of Government to decide on laboratory medical services for a region without consultation with the physicians who carry them out, or to promulgate an overall laboratory plan without notifying the pathologists that it is in effect; in fact has been (according to the date of the article) for seven months.

One can only hope that Governmental Health Schemes in the future will not follow so maladroit a pattern.

Yours truly,

A. W. Gyorfi, M.D.  
Chairman,  
Section for Pathology,  
Nova Scotia Medical Society

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The Editor,  
The Nova Scotia Medical Bulletin

Dear Sir:

Re your article on the 'Present and Future Status of Laboratory Services, Province of Nova Scotia' - February 1964 - in Appendix A - there is an error in the status of St. Rita Hospital, Sydney. You have it as a referring hospital to the Sydney City whereas, it is a Regional Laboratory with the New Waterford Consolidated Hospital as a referring hospital to St. Rita.

Yours truly,

A. L. SUTHERLAND, M.D.

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The Bulletin regrets the inaccuracy referred to in Dr. Sutherland's letter. He is, of course quite correct in his statement.—Editor.

The Editor,  
Nova Scotia Medical Bulletin.

Dear Dr. Filbee:

Re: LABORATORY SERVICES - Present and  
Future Status of Laboratory Service -  
Province of Nova Scotia

1. I have received a communication from Dr. J. S. Robertson asking that I comment on the letter received from the Chairman of the Section for Pathology, Nova Scotia Medical Society relative to the above, as printed recently in the Nova Scotia Medical Bulletin. I will confine my remarks to the last two paragraphs of Dr. Gyorfi's letter as I believe the matter referred to in the first paragraph refers to a printing error which will be corrected by you.
2. The main features of the policies referred to in the publication had, in fact, been developed prior to the inception of the Nova Scotia Hospital Insurance Program, and may be found in the "Report of the Hospital Services Planning Commission, Province of Nova Scotia" of January, 1958. A more detailed treatment could be found in "Application of Proposals, The Hospital Insurance and Diagnostic Services Act to a Prepaid Diagnostic Service Program," O. C. MacIntosh M.D., referred to in the foregoing report. These reports were made available to the Nova Scotia Medical Association and, in fact, have been available to any association or individual desirous of obtaining them. It is surprising then, that these reports have not received the attention by the Pathologists of the province that they undoubtedly deserve.
3. The Nova Scotia Hospital Insurance Commission deals only with hospitals under ordinary circumstances and this only through the administration of the hospital concerned. It is presumed that hospital administration will, when they consider it necessary, bring matters of interest to particular departments, to the attention of the heads of the departments concerned.
4. A draft copy of the revised summary of the reports referred to, "Present and Future Status of Laboratory Services in Nova Scotia", was made available to hospitals prior to publication. Comments were received from the Nova Scotia Hospital Association and discussed at a later date with the executive of the association. Following these discussions, modifications were made in the draft before being submitted for publication.
5. It is unfortunate that the earlier reports in the subject were apparently overlooked by "The Section" and that, under the circumstances, the matter was not drawn to the attention of all pathologists by their hospital administrators.

Yours truly,

O. C. MacINTOSH, M.D.,  
Consultant in Laboratory Services  
N.S.H.I.C.

# Housing Application Form

111th Annual Meeting

The Medical Society of Nova Scotia

Keltic Lodge, Ingonish, N. S.

Monday, September 14 to Thursday, September 17, inclusive

Dr. C. J. W. Beekwith,  
Executive Secretary,  
The Medical Society of Nova Scotia,  
Dalhousie Public Health Clinic,  
University Avenue,  
Halifax, N. S.

Please reserve for me the following:—

**A. Main Lodge**

( ) Double room with bath—twin beds—including meals \$14.50 per person per day.

**B. In Cottage**

( ) Cottage with twin bedded room—including meals \$14.50 per person per day.

I PLAN TO ARRIVE SEPTEMBER ..... A.M. .... P.M.....

I EXPECT TO DEPART SEPTEMBER .....

Names of persons who will occupy above accommodations:—

Name .....

Address .....

In view of the attendance expected, no single occupancy of rooms will be available.  
If you have preference for a member to share a room, enter name here:—

Name .....

Address .....

If you wish to arrange group occupancy of a cottage accommodating 4 or 8 persons please give this information in a letter accompanying this application form.

Signed.....

Date.....

# The Origin and Development of a Medical Laboratory Service in Halifax

D. J. MACKENZIE, M.D., F.R.C.P. (C)

In writing of the origin of laboratory efforts in the field of Medicine, the greatest difficulty encountered is the lack of contemporary records, particularly in an area remote from centers of active medical research. The pioneering efforts of a few isolated but dedicated individuals appear not to have been thought worthy of recording in such reports or journals that were contemporary and have been preserved. In the absence of such records, one must of necessity rely on the memory of physicians who were engaged in the study or the practice of medicine at least sixty years ago, whose memory is vivid and unclouded by the intervening years. It is fortunate that we have in Dr. Samuel W. Williamson of Yarmouth, N. S. a person who during his student and internship years covering 1892 to 1896 in Halifax, participated in and clearly recalls the events of those early days in laboratory medicine.

At a very early stage in its development, the stream of laboratory activities branched off into two somewhat diverging channels. The earlier but very poorly documented channel was purely diagnostic; to assist in the accurate diagnosis of patients admitted for hospital treatment. The later channel was preventive in outlook and came into being as a result of the very high incidence of communicable diseases during that period, and the amazingly fruitful researches in the field of Bacteriology during the two decades following 1875. Laboratories in this field of community or public health were maintained or subsidized by Government funds, thus favoring ample documentation and preservation of their earliest records.

It is unfortunate that in the area of hospital laboratory activities, where the origin of this service must lie, the early records are almost a complete void. Investigation uncovers a few names and isolated bits of information with nothing indicative of the actual work accomplished until the appointment of a full-time qualified Pathologist in Nova Scotia in 1911. The author of this article was fortunate in having received a personal communication from Dr. Williamson that focuses considerable light on the very early days. The following is an extract from his letter dated at Yarmouth, N. S., November 15/61. "Dr. D. A. Campbell was the pioneer. He did his work in his home. I recall he made a trip to Baltimore to Johns Hopkins when he returned with new knowledge in 1893. Dr. A. P. Reid who was superintendent of the V.G. Hospital spent most of his time with his 'scope and slides during my internship. He worked closely with Dr. W. H. Hattie and no doubt he and Dr. Campbell were responsible for the establishment of a room for Dr. Hattie in 1896. Previous to that, Dr. Hattie lectured to us and had us study slides in the years 1895-1896. Dr. D. A. Campbell was a profound student and outstanding teacher in diagnosis. In medicine he was considered the "chief" by students and faculty and he and Dr. Hattie consulted and worked together and about 1895 established a room in the hospital. But previous to that, Dr. D. A. Campbell burnt the midnight oil in intensive study from the year 1893 on. His enthusiasm as well as Dr. Hattie's is responsible for the early teaching in Bacteriology."

In the report of the Medical Board of the Victoria General Hospital for 1894, there is a note to the effect that some apparatus was procured for the clinical laboratory. This is the earliest record discovered that such a laboratory was in existence. A laboratory interne was appointed in 1900 and in 1902 Dr. George M. Campbell was named as Assistant Gynecologist and Pathologist on the attending staff of the hospital. The report of the Medical Board for 1905 states that the pathological services were not adequate to meet the needs of the hospital. This inadequacy was more strongly emphasized in the report for 1908 in which it was pointed out that the greater need was for clinical pathology rather than morbid anatomy, and that internes did not possess sufficient training and experience for this work. A strong plea was made for the appointment of a full-time qualified pathologist responsible for the instruction of students, also to act as pathologist to the hospital and to be given adequate quarters in which to carry out his work. Dr. G. M. Campbell resigned as pathologist in 1909 and in 1911 Dr. M. A. Lindsay was named as the first full-time pathologist.

We may return now to follow the alternate stream of laboratory activity; the authorization and development of the preventive branch generally known as the Public Health Laboratory. For this there is ample documentation without a break for sixty-seven years.

Nova Scotians can claim with some pride of being first to establish many important trends in Canada. Unfortunately the list does not include laboratories. The distinction of having established the first public health laboratory in North America belongs to Ontario, dating back to 1890 in Toronto. This was followed by the State of New York in 1893. Authorization for one in Nova Scotia came in 1894 and for Quebec in the same year.

It was of some interest, at least to the writer, to try and trace the stimuli that prompted the government of the day to establish such an institution. The preceding twenty years provided such a multitude of discoveries in Bacteriology that at least some of them must have been familiar to the more enlightened public. More important, I think, must have been the fact that in 1891 an organized course of lectures in Bacteriology was given for the first time to medical students at Dalhousie. The lecturer was A. H. MacKay, a botanist of more than provincial renown. This was followed in 1893 by a memorial or brief to the provincial legislature from The Medical Society of Nova Scotia dealing with the urgent problem of combating the ravages of tuberculosis in the province. The tangible result of this brief came in 1894 when the establishment of a provincial diagnostic laboratory was authorized. Dr. W. H. Hattie, who had succeeded A. H. MacKay as lecturer in Bacteriology, was appointed as Director and the laboratory became operative in the autumn of 1895. The sum of three hundred dollars per annum was voted for the salary of the director with an additional one hundred dollars to meet the cost of apparatus and supplies for the first year. A small room was made available on the ground floor of the hospital, located immediately behind the main stairway of what was recently the Poliomyelitis Clinic of the Victoria General. Equipment was extremely meagre and for some years the only microscope available was the personal property of the director. During the first two years there was no incubator for the culture of bacteria and the hospital internes during that period acted as human incubators, incubating their culture tubes overnight in the pocket of their nightshirts. In the report covering the first fiscal year we find that "eighteen swabs for diphtheria and



upwards of sixty sputa for tuberculosis" were examined. This modest achievement was expanded into an interesting eight page report by the director.

Perhaps it would be interesting to note how they fared financially in those early years. The sum of one hundred dollars had been advanced to cover all expenses for the first year apart from the salary of the director. To this was added a total of twenty-eight dollars received in payment for the examination of sputa. It seems peculiar that a charge should be made for this examination when the main purpose of the laboratory was to aid in the control of tuberculosis. Receipts, therefore, were \$128.00. On the debit side, only two entries appear, one for postage \$7.69 and the other for materials of various kinds (not specified) \$48.62, leaving a balance of \$71.69 to the credit of the laboratory. In its second year of operation the demand for examinations increased to 65 sputa, 43 throat swabs, 108 Widal's and one other specimen. The financial statement is almost beyond belief. To the credit balance of \$71.69 from the first year activities were added \$38.00 for the examination of sputa. Expenditures again two items; postage \$9.85 and purchase of apparatus \$6.41, making a total expenditure of \$17.26 for twelve months operation, or less than five cents per day exclusive of the director's salary. One item in the report of the second year's operation should be specially noted. Widal published the technic of his agglutination test for typhoid fever in a medical journal in Germany in 1896 and during that year Dr. Hattie performed 108 of them in Halifax.

It would be pleasant to relate that after such brave beginnings, both technical and financial, things went well and the demand for services increased. Unfortunately such was not the case. Despite the addition of tissue examination during the fourth year and a careful explanation of why one Widal test result turned out to be wrong from a clinical viewpoint, the demand for laboratory examinations dwindled. Dr. Hattie accepted a position in the Nova Scotia Hospital in Dartmouth in 1900 and moved the laboratory to that institution. The change in location added other difficulties and Dr. Hattie resigned as Director in 1901. He was succeeded by Dr. Andrew Halliday who lived in Stewiacke, N. S. The laboratory was moved to the Halifax Medical College building, corner of College and Carleton Street and renamed "The Nova Scotia Laboratory of Science". That year we find recorded for the first time the examination of cerebro-spinal fluid, faeces, and something resembling a phenol coefficient on an antiseptic substance called benzozine. In 1902 blood films, gastric contents and calculi appear in the annual report. Dr. Halliday died early in 1903 and was succeeded by Dr. L. M. Murray. In the year following Dr. Murray's appointment the report contains an entry stating that equipment had been obtained that would permit diagnosis of tissues on the day the specimen was received. In 1907 blood cultures were being done and in 1908 autogenous vaccines. In 1910 the laboratory was removed to the N. S. Technical College, Spring Garden Road, and in that year we find ample record of the first serious outbreak of poliomyelitis to occur in the Halifax area. In 1912 Dr. M. A. Lindsay arrived as the first full-time pathologist and director of the Public Health Laboratory. In 1913 tenders were let for the construction of the original Pathological Institute, which was officially opened on March 1st 1914. It was a two storey with basement structure approximately 60 x 20 feet and is incorporated into the University Ave. end of the present Pathology Institute. Dr. Lindsay did not have long in which to enjoy his commodious quarters. Unfortunately, he em-

barked in Montreal for England in May 1914 and perished in the disaster that overtook his ship, the Empress of Ireland in the St. Lawrence River. He was succeeded by Dr. A. G. Nicholls in December 1914.

While these changes were taking place in the Pathological Institute, a similar service was being developed in the Halifax Infirmary then located on Barrington Street. Dr. Victor N. McKay was appointed pathologist in that hospital in 1914. His name first appears in the Victoria General Hospital records in 1905 when probably as an interne, he lectured to the nurses on the subject of urine analysis. After serving overseas in the First World War, he returned to serve as Pathologist to the Infirmary and also Camp Hill Hospital until his death in 1953.

Wartime conditions in Halifax after 1915 soon made it necessary to introduce the Wassermann test into the laboratory routine. It was with this test, while still in medical school, that the writer had his first exposure to the problems of diagnostic laboratory techniques. In doing the Wassermann test, almost every laboratory used its own modification, usually in the direction of over simplification. Some of the reagents had to be prepared in the laboratory — particularly the hemolysin which was prepared by immunizing rabbits with sheeps red blood cells. Complement could be purchased by the inch or yard depending on anticipated needs. A long strip of rather thick filter paper about one quarter inch wide was soaked in guinea pig serum and dried. This was commercially available and for the test one simply cut off a bit about a third of an inch long as directed on the label and added the various reagents in the proper order — strange to say the test seemed to give useful information in a considerable number of cases.

The financial arrangement under which the early full-time pathologist operated was somewhat complicated. As Professor of Pathology and Bacteriology, a portion of his salary was paid by the University. As Director of the Public Health Laboratory he received a portion of it from the Dept. of Public Health, in return for which all examinations of sputum or pus for tuberculosis all Widal's, swabs for diphtheria and specimens for meningitis were to be examined without charge. As Provincial Pathologist, probably the largest portion was paid by the V.G.H. Commission, in return for which all specimens from patients in the public wards of that hospital were examined without charge and all postmortems on patients were also done without charge. Considerable income must have been derived from the examinations of specimens other than those listed above and at least one of the first two incumbents had an active consulting practice.

The year 1920 represents a milestone in that, for the first time, all laboratory tests for venereal diseases were placed on the free list of laboratory examinations. This work became the direct responsibility of Miss Margaret L. Low, who until her retirement in 1947 gave to the laboratory service of this province many years of faithful and efficient service.

In 1921, the writer joined the staff as Assistant Pathologist. In addition to routine work, my first problem was to set up a more convenient blood transfusion service than the simple major and minor cross matching until a suitable donor was found. In 1922 insulin became available in Halifax and it became necessary to organize a new service that was called Blood Chemistry. The range of tests at first was modest, blood sugar, urea, chlorides, creatinin, uric acid and carbon dioxide combining power completing the list. The following year we trained the first group of technicians for a laboratory other

than our own — The class was composed of two students, one from the Glace Bay General, the other from St. Martha's.

In 1923, tenders were called for the first addition to the Pathological Institute. It was occupied without benefit of ceremony in June 1925. In the meanwhile as much of the routine work as possible was carried out in four rooms in the Dalhousie Public Health Clinic.

In 1926, Dr. Nicholls resigned following which some reorganization of laboratory services took place. The Public Health Laboratory was set up as an organization entirely independent from pathology with the writer as Director. The following year Dr. Ralph Smith was appointed as Provincial Pathologist and continued in that capacity until 1949 when he was succeeded by Drs. J. W. Abbiss and J. H. Fodden.

The war of 1939-1945 made a terrific impact, particularly on the staff of the Public Health Laboratory. From the modest total of 6900 specimens examined in 1926, there was a steady but moderate increase in the work performed by that institution until 1939. The record year was 1943 when more than 256,000 specimens were received and examined, almost a forty-fold increase in seventeen years.

Following the end of World War II, there came a rapid expansion of laboratory facilities. The development of the sections of Biochemistry, Clinical Bacteriology and to a lesser degree Hematology had not kept pace with other sections. In 1945, the section of Industrial Hygiene with its necessary laboratory facilities was established with Mr. C. R. Ross in charge. Some degree of reorganization of the whole laboratory service of the Provincial Dept. of Health was needed and in October 1947, the responsibility of administration for all sections of the laboratory services of the Dept. of Health was transferred to the Director of the Public Health Laboratory. The main objectives were to develop the sections that had not kept pace with the demands for service; to organize a branch laboratory in Cape Breton and to reorganize the training of competent laboratory technicians, without which any real expansion of services would be impossible. Such sweeping changes could not be implemented on short notice and, at times, progress seemed to be painfully slow, but looking back after an interval of fifteen years, it appears that a good deal happened in a relatively short time. Technician training was reorganized in 1948. Dr. Roger Reed was appointed Provincial Bacteriologist in 1949 and in the same year, Dr. Harold Reid as Haematologist. The Branch Laboratory in Cape Breton was opened in 1949 with Dr. Clifford Riley as Director. Dr. Martin Hoffman was appointed Biochemist also in 1949. In 1950 a large laboratory for that section was constructed in the private pavilion of the hospital with Dr. Frank Moya as chief assistant. Dr. N. G. B. McLetchie came as Provincial Pathologist in 1950. As each section was organized and functioning efficiently, complete technical and administrative control was vested in the head of the section and unified control ceased in 1951.

While this program of expansion was nearing completion, another and more difficult problem was becoming more and more evident. Lack of space for further expansion created a bottle neck that seemed well nigh insuperable. Diseases which were viral in origin were prevalent in the Atlantic Provinces with no facilities available to aid in their diagnosis or control. The logical site was the Pathological Institute with its close association with the Medical School. Through the cooperation of several members of the In-

stitute staff, two rooms on separate floors were made available and these, together with a room in the old nurses home in which culture media and reagents could be prepared were the handicap under which Dr. C. E. van Rooyen began work following his appointment as Virologist in 1956. In that year also Dr. W. A. Taylor was appointed as Provincial Pathologist. The problem of inadequate working room was solved, at least for the immediate future, by the opening of the second extension to the Pathological Institute in 1961 at which time, happily, it was more correctly named the Pathology Institute.

If this review appears to be inordinately lengthy, it may be remembered that the seventy years under consideration is also a long period. Particularly during the earlier years, laboratory activities had its periods of expansion and recession. The most rapid expansion, almost explosive in character, took place during the first four years of World War II. The establishment of an efficiently operated laboratory in the Naval Hospital at Stadacona did much to lessen the burden of armed services demands on the Provincial institution. Most of the illnesses that contributed so heavily to the activities of the early years were now under almost complete control, but other diseases with demands for laboratory investigation of a vastly more complex nature than those employed a half century ago serve to maintain an increasing demand for expansion into newer areas of investigation. This will be accelerated by the changing philosophy towards medicare programs which will add their quota to the increasing daily load of work that is carried today in every medical laboratory in the country. ■

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TABLETS



help her to smile again . . .  
when constipation accompanies  
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# Roentgenography of the Breast

A. F. GOVONI, M.D.\*

Breast roentgenography, based on the direct study of the difference in contrast between the tissues of the breast and a pathological process arising from it, was advocated by Warren (27) and Romagnoli (25), back in 1930 and 1931, respectively. This roentgen procedure was not, however, widely followed, except by Gros and Sigrist (15), Leborgne (20) and Gershon-Cohen and Ingleby (6).

Recently, however, the improvement of X-ray films, the adoption of special cones and particular techniques, but especially thanks to the work done by Leborgne (20) and Gershon-Cohen and his associates (5 - 14; 16; 18-19; 26), breast roentgenography is beginning to be considered of great importance in the early detection of cancer of the breast.

Other authors who in Europe and in this Continent have been using simple breast roentgenography, are Fugazzola (3-4), Kuntzman and Gros (17), Melot and Potviliege (22), Amalric, Clément and Santamaria (1), Picard and Desprez-Picard and Desprez-Curely (24) and Muntean (23), Egan (2) and Lindell and Boyle (21).

The diagnostic criteria in breast roentgenography for the evaluation of pathological processes, benign or malignant, can be briefly outlined as follows: (1) Tumour - a) malignant: the demonstration of the neoplastic lesion depends on the density of the growth as it stands out from the surrounding tissues. A large size does not necessarily mean an increased visibility of the tumour. The presence of punctate calcifications is considered by Leborgne (20) pathognomonic of a scirrhous carcinoma. The most important roentgen finding is given by the appearance of the contours of the neoplastic lesion. In my limited experience I noted, as reported by Gershon-Cohen and Ingleby (7-8), that the margins of a malignant neoplasm are as characteristic in the mammogram as in the specimen. The lesion generally appears either as a mass with radiating spiculae or as a lobular ill-defined mass. These two patterns correspond to the infiltration by the growth in the breast tissue. Another diagnostic criterion in cancers of the breast is the not too infrequent appearance of a lesion which stands out only because of a certain fuzziness of the surrounding tissue, secondary to the infiltrative process. Gershon-Cohen and Ingleby (7) account also hyperhaemia and oedema "for the blurring around the tumor tentacles". Secondary criteria are: the position of the nipple and in this point an accurate comparison between the nipple of the breast involved and the one not involved is of great importance; the thickened or gross appearance of the trabeculae, even in areas away from the site of the growth; and the overall appearance of the mammary gland involved by the neoplasm.

(b) In benign neoplasms of the breast, such as fibroadenoma, the roentgen diagnostic criteria are: (1) homogeneous nodular opacity, round or oval; (2) smooth contours; (3) the mass displaces the breast trabeculae without infiltrating them. In an intraductal papilloma "the affected ducts are elongated and varicose". Broad finger-like trabeculations are usually not seen, and if pre-

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sent are scanty. Secondary signs of carcinoma are absent. "Intracystic papilloma is most readily recognized by the remarkable ease with which the cyst can be seen" (6).

(2) Mastitis, of the sclerotic type is demonstrated by thickened strands of fibrosis. In the cystic form, numerous and multilobular, dense, homogeneous shadows stand out quite neatly from the surrounding parenchyma. Not infrequently a supervening plasma cell mastitis is represented by a small localized tumour surrounded by an area of oedema and characterized by clear contours.

(3) Roentgenography of the breast in cases of mazoplasia shows an uniform and homogeneous increased density of the breast, normally of both, with a regular appearance of the normal architecture of the breast. In a case of mazoplasia, type II "small cysts may not be recognizable in compact, dense breast tissue. Large cysts, especially if fat is also present, become clearly delineated due to their sharp, smooth margins. The more fat in a breast, the easier the visualization of the cyst", (6).

(5) In accordance with recent studies by Gershon-Cohen and Ingleby (11) abscesses are quite difficult to differentiate from other pathological processes such as plasma cell mastitis, adenositis, mazoplasia type II and cancer, and a correct diagnosis is sometimes impossible. A thorough clinical and physical investigation would make in these cases the interpretation of the roentgen findings less difficult.

Particular mention should be made of calcifications in the mammary gland. These are noted also in secretory diseases of the breast and it would seem that they occur "in foci of degeneration or necrosis and - are - especially common in fat necrosis" (12). In the differential diagnosis one should remember that in carcinoma of the breast the calcifications are punctate and multiple within or outside the tumour, in or around the nipple (20). In fibroadenomas one may notice at times calcifications and they are in the periphery and are coarser.

The roentgen technique is quite simple: lateral, medial and antero-posterior (cephalo-caudad) roentgenograms are taken of both breasts. The inner and outer borders of the breast are clearly marked by small lead letters. A small cone is used and the best distance is of about 30 cm. The films used are the usual medical screen and non-screen films. Egan (2) finds very satisfactory the "Kodak Industrial M" films.

#### CASES

Case 1: Mrs. N. D. age 35. Patient referred for breast roentgenography, because of periodic swelling of both breasts. On palpation one or more large nodules are felt. Roentgen studies of the mammary glands show a rather dense, blurred radiopacity involving both breasts. No calcifications are noted and no deformity of the breasts and nipple is present. (Fig. 1) The roentgen diagnosis of mazoplasia is confirmed by a biopsy. Histologically there is an increase in the lobular stroma with dense and irregular substance. The ducts are dilated and irregular. A diffuse fibrosis is also noted between lobules.

Case 2: Mrs. L. B. age 28. The patient is referred for breast roentgenography because of pain in both breasts. The palpation is negative. The mammograms show no evidence of nodules or other radiopacities. The trabeculae are within the normal limits. No biopsy is performed (Fig. 2). Two years from the roentgen examination no interval changes are noted.



Fig 1

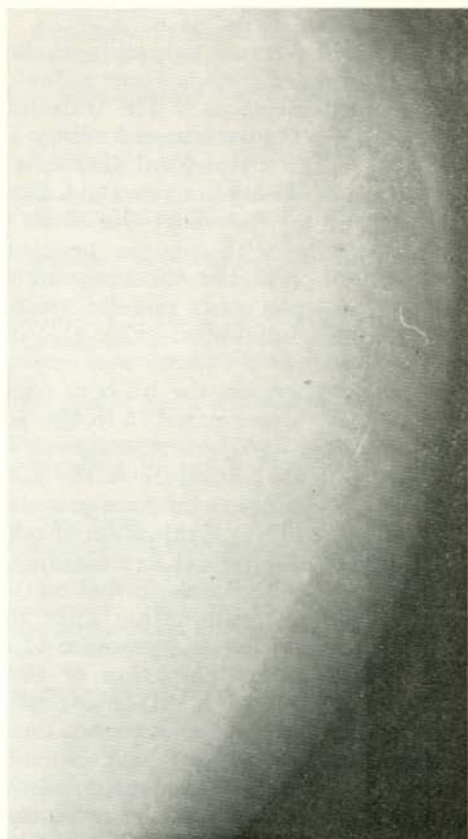


Fig 2



Fig 3

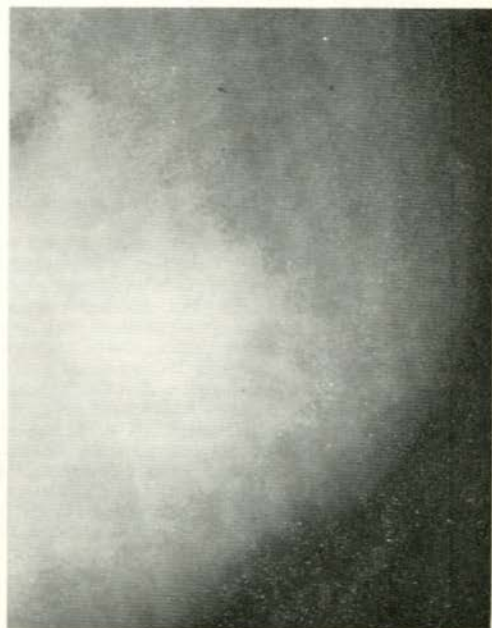


Fig 4

Case 3: Miss M.K. age 28. Referred for mammography because of nodularities felt on palpation in both breasts. Breast roentgenography on both mammary glands show a few nodular, homogeneous ill-defined densities without calcifications. The trabeculae are not displaced and are not gross and thickened. The roentgen findings are indicative of fibroadenomatous changes (Fig. 3). The histological diagnosis is of "pericanalicular adenofibroma".

Case 4: Forty-six years old, female (Mrs. J. S.), complaining of a lump in her left breast, of short duration. Breast roentgenograms show a mass of about 5x7 Cm with spicules, penetrating deeply into the mammary gland. A retraction is noted in the lower inner aspect of the breast. No calcifications are present, nor other nodules are noted. The roentgen diagnosis is of carcinoma of the left breast (Fig. 4). The histological diagnosis is of adenocarcinoma.

Concluding, on the basis in particular of the large experience of Gershon-Cohen and his associated (5 to 13; 16; 18-19), Egan (2), Lindell and Boyle (21) and Leborgne (20), roentgenography of the breast should be considered a helpful and reliable procedure in the early detection of breast cancer.

The indications for roentgen studies of the breast, as emphasized by Kremens (16), are: (1) Evaluation of nodules in one or both breasts, with an otherwise negative physical examination; (2) presence of pain in the mammary gland without any mass noted on palpation; a negative roentgen study warrants a repeat examination after some time. (3) Presence of focal distant findings suggesting the presence of a breast carcinoma, although there are no physical signs on palpation of the breasts. (4) Routine screening before surgical intervention either for biopsy or for radical surgery. (5) In the differential diagnosis between a benign or a malignant lesion. (6) "Evaluation of the patient with cancerophobia and a positive family history for breast malignancy." (7) "Evaluation of therapy (hormonal) in certain benign breast conditions" (16). (8) As a roentgen screening of mammary lesion and tumour progression. Since multiple serial biopsies are impractical and not easily feasible, repeated, periodical roentgen studies of the mammary gland are therefore indicated, especially in those patients who have had surgery for a breast lesion. (9) As a screening routine in healthy females over 35 years of age for the early detection of malignant lesions.

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#### ADDENDUM

Since the paper was submitted in May, 1962, the following papers and book appeared in the Anglo-Saxon literature.

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# Book Reviews

APPRAISAL OF CURRENT CONCEPTS IN ANAESTHESIOLOGY (Volume II). Edited by John Adriani, M.D. Published by the C. V. Mosby Company, St. Louis. Price \$10.75.

This second volume of monographs selected from presentations made by residents and staff members at the Department of Anaesthesiology, Charity Hospital of Louisiana, covers a wider range of topics than did the first volume, and there is more systematic arrangement of material. Respiratory, Cardiovascular, and Hormonal Monographs fall into natural groupings, while Neuroanesthesia is interspersed with a wide range of topics. Each presentation reviews the work on the subject over the years, then outlines the recent concepts in this particular field.

For residents in training or for the specialist in clinical practice away from good library facilities, to whom this volume is directed, these reviews will certainly prove stimulating. A noteworthy feature is the delineation of the problems which remain to be clarified in each field, and the provision of adequate references at the end of each monograph.

Perhaps because the monographs have been written by the less experienced members of the hospital staff, many show defects in clarity and construction which sometimes make the meaning of the writer obscure. Particularly in the more technical sections, one suspects that perhaps the writer of the monograph, as well as the reader, has become confused, and is not quite certain what he wants to say.

With these reservations, this remains a volume well worth reading and re-reading, and a great improvement over the first volume.

I.E.P.

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DIFFERENTIATION BETWEEN NORMAL AND ABNORMAL IN ELECTROCARDIOGRAPHY. Ernst Simonson. The C. V. Mosby Company, St. Louis, Missouri. 1961.

This is a well written and highly informative monograph which should be in the library of every doctor interpreting electrocardiograms. It is an excellent illustration of the application of sound scientific principles and modern methodology to one aspect (electrocardiography) of a vitally important and badly neglected field of Medicine namely the establishment of the range of normal and the probability of abnormality in the areas where overlapping occurs.

A thorough knowledge by the electrocardiographer of the content of this book will reduce significantly the incidence of iatrogenic Cardiac Neurosis.

L.C.S.

# Hearing and Speech Clinic

Readers of the Bulletin may recall that the opening of the Hearing and Speech Clinic was reported in the February Bulletin of 1963. Since then this clinic, operating through grants from both Federal and Provincial governments, and as a Division of the Nova Scotia Rehabilitation Council Inc., has shown a steadily increasing usefulness to these Atlantic Provinces. At this time the present speech and hearing therapists are working to capacity and are unable to accept any additional cases for speech and hearing therapy until more staff is obtained. Almost two thousand services of different types, such as audio test, PSGR (Psycho-galvanometer) test, speech evaluation etc., have been given. A summary of the annual report of the Audiologist, speech pathologist, and administrator, Dr. Adam Sortini follows. It is interesting that 34 patients of all ages were referred from the other Atlantic Provinces. In Nova Scotia, the various counties from Yarmouth, to Pictou and Cape Breton - 35, were all represented.

It is the only such clinic east of Montreal and the report of its first year of operation shows that has filled a need, it deserves support and must need expand if it is to serve adequately these Atlantic Provinces.

The Hearing and Speech Clinic in Halifax provides a wide range of service. This includes testing the hearing of individuals ranging in age from early infancy to old age, and diagnosing speech problems; prescribing and conducting remedial treatment in hearing and speech cases; recommending and fitting hearing aids; and aiding in the diagnosis of emotional disturbance, mental retardation, or malingering in children and adults.

Finding a threshold of hearing may be accomplished by (1) subjective pure-tone audiometry, where the tester plays the different tones and the subject reports orally whether or not the tone is heard, or (2) objective audiometry, where one possible technique is the use of a machine called a psychogalvanometer. With the latter technique, one set of electrodes is placed on the calf of one leg and another set, usually on the finger tips of the opposite hand. Then a tone is played, followed by a mild electric stimulus. This sequence is repeated several times and the central nervous system is trained to expect a 'shock' after every tone. After several trials of tone followed by shock, the tone is then played without the shock. If the patient has hearing, in anticipation of the shock there will be increased sweating under the finger-tip electrodes. The changes in skin-resistance are relayed to an ink writer in wave form and the tester records 'thresholds' objectively (i.e., with no subjective response of any kind from the patient).

During the past year a significant number of children who were referred to the Clinic with hearing losses were found, when tested by the audiologist, to have conductive hearing losses. On being referred to the medical director, (who is also the otologist), the hearing loss was eliminated either on the spot, through wax removal, or by subsequent treatment. Also, a significant number of adults with otosclerosis, some of whom had worn hearing aids for many years, were operated on by the medical director. Post-operative audiological testing indicated that in the great majority of these cases serviceable hearing had been achieved through surgery, and hearing aids were discarded.

Among the 164 speech evaluations made in 1963, every conceivable type of speech problem was found. The ages of patients in therapy at the time of this report range from a four-year-old with delayed speech to a 38-year old stutterer.

It is estimated that one in about every twenty persons has a comparatively serious speech handicap of some sort. This would represent approximately 900,000 people in Canada; and in the Atlantic Provinces, with a population of some two million, we can expect to find 100,000 individuals with speech problems. If all these Atlantic Provinces persons were to receive treatment, this would mean an average of 14,285 cases for each of the seven speech and hearing therapists in the region at present!

When we add to the 900,000 people in Canada who have speech problems another 350,000 of our citizens who have hearing defects serious enough to require such help as lip reading or hearing aids, we gain an idea of the number of people who need the assistance of someone who has specialized in studying disorders of speech and hearing.

All this points to the desirability of having a college or university in this area establish in the near future a training program for speech and hearing therapists, and for teachers of the deaf. The Interprovincial School for the Education of the Deaf in Amherst could be used as a clinical training centre for prospective teachers, and the Hearing and Speech Clinic in Halifax for prospective therapists. ■



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# Current Use of Oral Polio Vaccine

While most Nova Scotia physicians will be familiar with the present status of the Sabin oral polio vaccine, as recommended for use by the Canadian Technical Advisory Committee on live Polio Virus Vaccines, it has been suggested that a brief summary would be in order for readers of The Nova Scotia Medical Bulletin.

The essential features are these:

1) The Advisory Committee recommends that the Sabin oral polio vaccine should be rapidly introduced into regular elective immunization procedures for children.

2) The product recommended is the trivalent vaccine. A second dose at an interval of not less than 6 weeks is recommended.

3) The Advisory Committee recommends that two mass programs conducted by the health department should precede the use of the vaccine in elective routine immunization programs. The Committee cites its reasons for believing that health departments are best equipped to organize mass programs, maintain the unstable vaccine in deep freezers until immediately before use, and see that periodic tests on vaccine potency are carried out.

4) A major reason for use of oral vaccine in preference to the Salk injected vaccine, in addition to ease of mass administration and the more rapid achievement of protection, is because oral vaccine eliminates the reservoir of wild polio virus in the gut of children, while Salk vaccine does not.

5) Because of this fact (4 above) the Advisory Committee also recommends the mass feeding of live oral vaccine in communities where outbreaks of poliomyelitis occur, as an emergency measure to eliminate the wild virus and stop the epidemic.

6) The fears aroused by the four cases of residual paralysis that followed the feeding of four million people in Canada in the spring of 1962 with the more potent oral vaccine initially introduced, must be weighed against the greater risk of withholding the vaccine. Over 100 cases of paralytic polio occurred in Canada in 1963, with 16 deaths, most of these in the Province of Quebec. In numerous communities in Nova Scotia, particularly outside the areas where the oral vaccine was administered in 1962, the immunization level against polio is low enough for there to be carriers of wild virus, particularly among younger children, and for scores of cases and a number of deaths to occur.

7) Canada's Advisory Committee observes:

"It has been established that Sabin vaccine has a very high order of safety, and this is based on the feeding of over 70 million people in North America. . ."

"It is agreed however that there is a very small risk of developing paralytic illness as a complication. This risk is mainly to adults over the age of

30 years who have not been previously immunized either with Salk or with Sabin vaccine. . .

If mass feeding programs reach a high proportion of infants, pre-school and school age children, the need for immunization of adults is reduced."

8) The Advisory Committee's "Guide to Routine Use of Sabin Vaccine" summarized the practical application of present knowledge to the prevention of poliomyelitis, on which the current program of the Nova Scotia Department of Health is based:

| Category of Person  | Sabin Vaccine Recommended | Prior Salk Vaccine Recommended |
|---|---------------------------|--------------------------------|
| Infants (under 1 year)                                      | Yes                       | Yes <sup>1</sup>               |
| Pre-School children   | Yes                       | Not essential                  |
| School children   | Yes                       | Not essential                  |
| Adults with <b>high</b> risk of exposure to wild poliovirus | Yes <sup>2</sup>          | Not essential                  |
| Pregnant women  | Yes                       | Yes <sup>3</sup>               |

- 1) Prior Salk vaccine is recommended for the present, in order not to disturb existing immunization programs with combined antigens.
- 2) For adults with a *low* risk of exposure to wild poliovirus, initial immunization with Salk vaccine is recommended.
- 3) Prior Salk vaccine is recommended as a general precaution.

9) Accordingly, the Nova Scotia Department of Health is offering trivalent Sabin oral polio vaccine to all children in the Province from ages 1 to 19 years. It is not offered to infants at this time because of the recommendation by the Advisory Committee that infants receive Salk vaccine prior to the oral vaccine. The first dose is being offered in May, the second in September throughout Nova Scotia. This program has been endorsed by the Halifax Medical Society and the Executive of The Medical Society of Nova Scotia. ■

Signed:

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Dr. B. F. Miller of Halifax  
wishes to announce that

Dr. A. J. Buhr  
is no longer associated with him  
in the practice of Orthopaedic Surgery

# The Doctors and the Canadian Cancer Society

Margaret E. B. Gosse, M.D.  
President, Nova Scotia Division

In a sense this title is, if not exactly ambiguous, at least confusing. In its origins the Canadian Cancer Society **was** the doctors. Even though over the years the proportion of lay and medical components has varied from time to time, there still remains, and always will remain, a strongly medical flavour in the organization. A word limit of "1000 or 1500", however, will not allow the inclusion of historical detail so let us consider as simply as possible what our direct points of contact are.

First it must be said that everything the Cancer Society does affects the doctors sooner or later. The vast research programme, whether success, or failure, or mixture of both, cannot do otherwise. The lay education programme, except in the one area of prevention of cigarette smoking, is aimed directly at encouraging patients to "see their doctor". The professional education projects are just that. The Society's Welfare or Patient Services seek to bring aid and comfort to the afflicted. It is in this particular field of endeavour that the Society and its workers have the most direct and personal contact with the doctors.

The Patient Services referred to are varied. The following are the most important:

1. Free cancer dressings
2. Transportation to treatment
3. Provision of pain-killing drugs
4. Sick room supplies
5. Colostomy equipment.

## **Cancer Dressings:**

Since its inception the principal welfare service of the Cancer Society has been the provision of suitable cancer dressings free to all cancer patients who ask for them. In Nova Scotia the cost of materials for these alone runs to well over \$12,000.00 a year. The making is all done by volunteers. Distribution is by the local Units. Constant vigilance is necessary to check waste and when excessive requests come in the doctor is asked to give his opinion as to how many are really needed.

## **Transportation:**

Since the year 1957 the Nova Scotia Division of the Cancer Society has administered for the Provincial Government a "Transportation to Treatment Service" whereby cancer patients from all over Nova Scotia, with an income of

less than \$3,500.00 a year, receive free transportation to and from the Nova Scotia Tumour Clinic, providing in the first instance that they have been properly referred by their doctor to the Clinic, and from then on that they are keeping officially made appointments for follow-up visits. This service is applicable only to the Nova Scotia Tumour Clinic and does not apply to patients travelling to treatment in any other hospitals either in Halifax or elsewhere.

The Welfare or Transportation Chairmen in the local Units handle the applications and conduct the income investigation. These chairmen may find it necessary to apply to the local doctor for information, subject always to the patient's consent. The transportation provided is on the basis of return train or bus fare to and from Halifax. If the patient cannot travel by these means, then the doctor must certify that other arrangements, such as car, plane or ambulance, are necessary. If the patient cannot travel without the help of an attendant, once again the doctor must certify this to be the case.

It should be mentioned here that a great many well-meaning and hard-working volunteers are involved in this project and that, human nature being what it is, they are prone to have frustrating and irritating experiences and often to be unappreciated. It should also be mentioned that the original financial outlay for this project is entirely by the Cancer Society, subject to quarterly reimbursement by the government, and that the very substantial book and record-keeping is done by the divisional office staff at the expense of the Canadian Cancer Society.

#### **Pain-killing drugs:**

For a number of years the Nova Scotia Division of the Cancer Society has assisted in the payment for pain-killing drugs for patients with terminal cancer. The assistance is given only in cases of great need and after income or resources investigation. A specific request must be made by the patient or family to the local Unit. If approved the pharmacist is notified of the arrangement. He is reimbursed directly on presentation of all three of these:

1. Itemized statements or invoices showing dates, quantities and prices.
2. Copies of prescriptions (Prescription numbers will not do).
3. Approval of statement or invoices by the attending physician.

Payment is restricted to the following analgesics used in the alleviation of pain:

- a. Codeine as such, or in combination, equivalent to Empirin Compound No.'s 1, 2, 3 or 4.
- b. Morphine, as such, in any form.
- c. Demerol (Pethidine) in any form.
- d. Pantopon.
- e. Leritine as such, in any form.

Difficulties arise in abundance over this form of assistance, chiefly because of failure by patient, family, Unit or pharmacist to secure approval of the formal request before sending in statements covering, sometimes, a period of months or even years. A period of correspondence almost as long sometimes elapses before the complications are straightened out and permissible payments



made. Another source of trouble is failure on the part of the pharmacist or the doctor to note the restrictions. Tranquilizers, anti-biotics, hormones and chemo-therapeutic products are not included, and elaborate preparations containing small quantities of the permissible drugs are generally not allowed. As in so many things, the Society has only a limited amount of money for any one project and if it is carefully spent, more patients can be served.

### **Sick Room Supplies:**

Sick room supplies either as outright gifts or, as in the case of beds, mattresses and bed linen, on loan, are available to those unable to secure these for themselves. Incidentally, no articles, either dressings or loan cupboard supplies, are marked with the name of the Society lest patients who have not realized the nature of their illness should find out in this way. Abuses of this service are infrequent, although unreasonable demands do occur.

### **Colostomy Equipment:**

In cases of real need the Society assists patients in the payment of costs of colostomy equipment and (rarely) of other similar appliances. As of the beginning of this year a small and limited Government Grant, under the National Health Grants is available to help with this. An attempt is always made to encourage the patient to pay part of the bill. Better care is taken of an appliance in which he has a stake. Generally, when a colostomy set is used the need for dressings should diminish. Here it may be pointed out that a little time spent in instructing patient or family in the care of a colostomy, and particularly in diet control, will often do more for the patient's comfort than appliance or dressings.

### **Professional Education:**

Space does not permit even enumeration of the many aspects of professional education in the cancer field. Two or three of local interest must be mentioned. Since the year 1955 a small travel grant has been placed at the disposal of the Nova Scotia Tumour Clinic to allow at least one or two of its doctors to visit annually some worthwhile conference on cancer. This year, for the first time, the Cancer Society in Nova Scotia, supported, by a grant of \$600.00, the "Day in Cancer" Symposium on April 18th at the Nova Scotia Tumour Clinic. This was well-attended and well received. Appreciation of the value of such an offering may serve to make it the first of many. Through a bequest coming to the Society in the Spring of 1963 the Nova Scotia Division has been able to set up a very modest lectureship clinical research - bursary fund as a memorial to the late Rebecca M. Cohn. All these are the first steps in what could be a real advance if necessary funds were forthcoming and demand and interest apparent.

As a matter of interest and information, perhaps unknown to many, the National Cancer Institute of Canada, which is financially supported in a very large measure by the Canadian Cancer Society, makes available as a complimentary subscription to all doctors in Canada who wish to receive it regularly "Ca - A Cancer Journal for Clinicians". Notification of its availability is made in the CMA Journal from time to time. The following is a list of its distribution on request by doctors in the various provinces in July 1963 -

|  | No. desiring CA | No. of Doctors<br>(Active civilian)<br>registered in Province |
|--|-----------------|---|
| British Columbia, Yukon and<br>Northwest Territories | 239             | 2325  |
| Alberta  | 224             | 1413  |
| Saskatchewan   | 105             | 991   |
| Manitoba   | 136             | 1096  |
| Ontario  | 910             | 8018  |
| Quebec   | 468             | 4525  |
| New Brunswick  | 53              | 489   |
| Nova Scotia  | 90              | 752   |
| Prince Edward Island                                 | 13              | 86  |
| Newfoundland & Labrador                              | 26              | 307   |

The Canadian Cancer Society exists to fight cancer and to assist those suffering from the disease. Nothing in its aims and objects is contrary to those of the medical profession. The Cancer Society helps the doctors nationally, provincially and locally. A Unit of the Cancer Society in your community helps your patients and you. ■

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**DOSAGE:** For therapeutic use: one or two tablets two or three times daily. For prophylaxis: one or two tablets daily.

*Bottles of 30 and 100 tablets.*

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**C AND D**

Each sugar-coated tablet contains:

|                                 |             |
|---------------------------------|-------------|
| Brewer's yeast concentrate..... | 75          |
| Vitamin B <sub>1</sub> .....    | 5           |
| Riboflavin.....                 | 3           |
| Niacinamide.....                | 12.5        |
| Pyridoxine HCl.....             | 1           |
| Vitamin B <sub>12</sub> .....   | 1.5         |
| Vitamin C.....                  | 100         |
| Vitamin D.....                  | 500 Int. U. |



## ANNOUNCEMENT

# Research Project

sponsored by

The Medical Society of Nova Scotia

C. J. W. BECKWITH, M.D. - Executive Secretary

The title for the research project is: -

“To attempt to determine the medical needs of the population of Nova Scotia on the basis of distribution of physicians (general practitioners and specialists, including Public Health) and facilities in relation to practical requirements to satisfy the unmet needs and taking into consideration travel, local hospitals and regional hospitals.”

### Background:

During the preparation of the Brief by The Medical Society of Nova Scotia to the Royal Commission on Health Services (1961), a questionnaire had been prepared and forwarded to ninety (90) physicians in various areas in Nova Scotia. The purpose was to elicit the views of these doctors on the subject of Physician's Services.

The results of the “Community Medical Manpower Questionnaire” were not available to include in the Brief, but were subsequently included in a Supplementary Brief which was forwarded to the Royal Commission in September 1962.

The following factors had become apparent from the questionnaire and additional studies: -

1. That it was necessary to determine how many physicians listed on the Provincial Medical Board Registry were actually providing personal clinical services to patients. In 1961 there were 767 physicians on the Register; of these it was estimated that 612 were providing such services of whom 404 were in general practice and 208 were specialists.

2. That although the ratio of all physicians in Canada to the population shows 1 doctor per 879, in Nova Scotia the ratio is 1 doctor per 1013 of the population. Further, that, having identified the number of physicians providing personal clinical services, the ratio becomes 1 doctor for each 1824 people with a range from 1 doctor: 1598 to 1 doctor: 2303 according to the Hospital Region.

3. We have been unable to elicit any additional information.

In preparing “A Proposed Plan for Medical Services Insurance - Nova Scotia” which was presented by the Society to the Government of Nova Scotia in October 1963, this problem again became apparent. The Executive Committee (September 28, 1963) approved a recommendation from our Special Research Committee that an application be made to Federal Provincial Health Grants for financial support of a research project.

It is proposed to:

1. Make studies of population and distribution of physicians.
2. Conduct field studies of patterns of practice in different areas in the province in relation to
  - (a) Facilities to conduct the practice of Medicine.
  - (b) Availability and use of consultant services.
  - (c) Availability and use of hospital facilities including liaison between the hospital, practitioner, and the patients.

The research will examine medical services as they relate to the population. This is desirable as there is an increasing interest in prepayment for medical services and increasing desire to improve the distribution of physicians in relation to the medical needs of the population. This, associated with the trend toward government participation in the provision of such through insurance of medical services all make the research desirable.

The personnel for the research include:

Dr. A. A. Giffin (Chairman Special Research Committee)

Dr. R. L. Langdon (N. S. Chapt., College of General Practice)

Dr. C. B. Stewart (Dean of Medicine, Dalhousie)

Dr. L. C. Steeves (Director, Post graduate division, Faculty of Medicine)

Dr. J. J. Stanton (Administrator Health Unit Service)

Dr. M. R. Macdonald (Registrar, Provincial Medical Board of Nova Scotia)

Dr. C. J. W. Beckwith (Executive Secretary) as Principal investigator.

Dr. A. R. Morton, formerly Commissioner of Health for the City of Halifax, has accepted the invitation, on a part time basis, to develop the research project.

The Society was notified in March 1964 that the application had received approval. The funds available are \$18,490, which covers part time services, travel secretarial assistance and necessary utilities. The budget is for the fiscal year April 1 / 64 to March 31/65.

In the interval since April 1/64, time has been devoted to the organization of the research staff, the approach to the research, and the development of questionnaires.

At the writing, questionnaires are being finalized and Dr. Morton, or a member of the team, will be meeting physicians to seek information related to the research. Each physicians will be approached by mail prior to interview. The co-operation of each physician is sincerely requested.

Any communication relating to this may be sent to the office of the:

Medical Society of Nova Scotia  
Dalhousie Public Health Clinic  
University Avenue  
Halifax, N. S.



## Personal Interest Notes

### CONGRATULATIONS

The Bulletin extends congratulations to the fathers of the eight sons who followed in their fathers' footsteps and graduated from Dalhousie University at this Spring's Convocation on May 14th.

Here follows a list:

- Michael Myles Jennings, son of Dr. Fred C. Jennings, Lancaster, N. B.  
Kenneth Ross MacIntyre, son of Dr. and Mrs. Preston MacIntyre, Montague, P.E.I.  
George David Maddison, son of Dr. and Mrs. G. A. Maddison, Rothesay, N. B.  
Paul David Matusow, son of Dr. and Mrs. M. Matusow, Eastchester, N. Y.  
James McGee Nugent, son of Dr. and Mrs. T. E. Nugent, Bath, N. B.  
Robert Gordon Prosser, son of Dr. and Mrs. R. R. Prosser, Moncton, N. B.  
Allan Harvey Shlossberg, son of Dr. and Mrs. R. S. Shlossberg, Halifax, N. S.  
John Michael Wellman, son of Dr. and Mrs. Marvin Wellman, Macclenny, Florida, formerly of Halifax.

To these young doctors we extend our very best wishes as well as congratulating them on completing their five years of arduous study.

Of course the medical women of the Province are particularly proud of the fact that a woman medical student has, for the first time in the history of the Dalhousie medical school, won the University Medal. This implies that not only in the last year but throughout the whole course the student must hold Distinction standing. This highest honour went this year to Dr. Vivian Boniuk, daughter of Mr. and Mrs. Hyman Boniuk of Glace Bay, Cape Breton. Dr. Vivian already has two brothers who are doctors and one who is a dentist. She plans next year to do postgraduate work in Ophthalmology in the United States where her older brother practises that specialty.

Our warmest congratulations and best wishes to her.

As we salute these new fellow travellers as they begin their journey by our side, we must needs pay tribute also to those who have been long on the way, and now are receiving recognition and acclaim for a course well run.

On May 12th, Acadia University paid honour to Dr. M. R. Elliott who had been Chairman of their Board of Governors for 30 years, a span which covered the tenure in office of five presidents. A plaque was unveiled in Elliott Hall to

pay tribute to his years of service to Acadia, from which he graduated in Arts in 1908. After obtaining his medical degree from Harvard, and a short period at Newton Hospital, he has been in general practice in Wolfville, yet finding time to, as he says, "keep a certain breadth of interest in the community".

On May 11th, at the Annual meeting of the Dalhousie Alumni Society, Dr. A. B. Campbell was made Honorary President of the Society for the following year. Dr. Campbell has been a stalwart supporter of Dalhousie ever since the days when he was part of the backbone of the football team when the Gold and Black placed second to none. Since then he has played many parts in the medical field and at present is part-time at the Department of Welfare, and is as well on the Council of Pastoral Training.

The Halifax Chronicle of May 29th reports that Dr. Hector J. Pothier, MLA, medical practitioner in the village of Weymouth for the past 44 years, has retired and moved to Beaver River. He was born in Sté. Anne d'Usseau, Eel Brook, and graduated with both his B.A. and M.D., C.M. from Dalhousie. After serving in the Army Medical Corps and later on a cable ship he spent a year in New York in postgraduate work and then settled in Weymouth. In 1924 he was a key figure in the formation of the Digby Co. Power Board, and has been an active and enthusiastic worker in many community organizations. In October he was elected representative for the Municipality of Clare in the Provincial elections as a Progressive Conservative.

The following awards during 1963 to Dalhousie graduates and to graduates of other universities who are now practising in this area, must be noted.

#### CERTIFICATION 1963

In Anaesthesia - Drs. M. I. Acker, H. H. Neilly.

In Internal Medicine - Drs. T. J. Edgett, P. A. MacGregor, R. W. Young (also Fellowship.)

In Neurology - Dr. Garth Embree - Fellowship also.

In Psychiatry - Dr. G. A. Frecker.

In Diagnostic Radiology - Drs. D. A. C. Malcolm, H. B. Sabeau.

In General Surgery - Drs. J. R. d'A. Baker, D. E. Morris and Dr. Charles Graham received Fellowships.

In General Surgery (Obs. & Gyn.) - Drs. V. W. Bustard (Fellowship also), H. G. Good, G. M. Jasey (Fellowship also), and Kevin J. Tompkins.

In General Surgery (Orthopaedics) - Dr. E. J. White.

(Otolaryngology) - Dr. R. S. Murphy.

#### FELLOWSHIP 1963

In Medicine (Diagnostic Radiology) - Dr. John E. Campbell.

Graduates from other universities:

#### CERTIFICATION 1963

In Anaesthesia - Dr. J. H. Fiendel, (Infirmiry Staff) and Dr. S. B. Goel who took part of his course at the Victoria General and is now in Toronto.

#### FELLOWSHIP 1963

In Dermatology who took part of course at VGH, Dr. R. L. Coupe.

In Paediatrics (now at Children's), Dr. Mary T. C. Randall.

In Psychiatry Dr. D. T. V. Paulse (who took his training here), and Dr. D. H. Spark, (who trained here and is now on the staff of the N.S. Hospital.)

In Therapeutic Radiology and now on staff, Dr. J. A. Aquino.

In General Surgery (took part of training here), Dr. D. P. Goel.

Four Medical Research Fellowships have been awarded by the Medical Research Council of Canada to Dalhousie graduates. Tenable at Dalhousie are the awards of \$3800 to Dr. J. G. Holland, son of Dr. Clyde Holland, Halifax for study in cardiopulmonary physiology, in Medicine, a \$5000 award to Dr. S. E. York and to Dr. D. W. Cudmore, a \$4200 for study in endocrinology. Dr. Sandra MacFarlane, a Ph.D. of Dalhousie received a \$5000 in medicine, tenable at Harvard.

Dr. Donald I. Rice, whose appointment as associate executive director of the College of General Practice of Canada with headquarters in Toronto, was announced last month, was made an Honorary member of The Medical Society of Nova Scotia at the May meeting of the Halifax Medical Society.

Dr. W. A. Cochrane of Department of Paediatrics, Dalhousie University and Children's Hospital has been elected a Fellow of the American Academy of Paediatrics. The American Academy of Paediatrics is the professional society of specialists for infants, children and adolescents in the Western Hemisphere and has fellows in Canada, the United States and Latin America. Its work is dedicated to the improvement of child health and welfare.

Dr. Norman J. Belliveau, of Montreal, a native of Belliveau's Cove, Digby County, received an Honorary Degree in Social Science at the Convocation of St. Ann's College, his Alma Mater, Church Point on May 30th. He is assistant professor and demonstrator in Surgery at McGill University. He graduated in Medicine from Laval University and is a member of the Medical Society of Montreal and President of the Medical Association of Quebec province.

Dr. Harold L. Scammell has been made President of the Historical Society for a second term.

A donation of \$3,600 has recently been made to the Postgraduate Division of Dalhousie University Faculty of Medicine to assist in furthering professional education in heart diseases.

#### BIRTHS

To Dr. Michael and Dr. Pamela Davis (Haigh), a daughter, Catherine Mary at the Halifax Infirmiry on May 17, 1964. ■

## What intramuscular iron!

- is absorbed directly into the blood stream as well as the lymph?
- did not cause precancerous tumors?
- causes few and fast fading stains?

## Answer: Jectofer

- From Astra Research, the originators of Xylocaine, now another product with an internationally proven record of effectiveness and safety.



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