

REPORT OF EDUCATION COMMITTEE.

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A meeting of this Committee was held January 10th, 1921, at which the questions submitted to the Committee were taken up:-

(1) On the details of the curriculum of the first two years:-  
Your Committee would beg to report progress; the matter is still under discussion.

(2) With regard to the length of the Session: The length of the session is at present approximately 30 weeks teaching and 32 weeks including examinations (if the week in which the students are preparing for examinations in May is included), which is practically the same as that in Toronto, - our Autumn term is two days longer, and as their Easter term continues five days after ours cease, there is about three days difference in the session.

As to the length of term for the adjustment of hours of teaching in the subjects that are common to medicine and arts in the first year, that is still under discussion.

(3) As to the question of full-time clinical heads: The Committee would remind the faculty that the discussion of our re-organization of clinical teaching began with a letter from Mr. W. Vaughan dated December 14th, 1917, and the question of appointment of heads in the clinical departments began with a letter from the late Sir William Osler, dated August 29th, 1919. On the 24th of November, 1919, the Faculty recommended that one head in medicine and one in surgery be appointed in each of the hospitals, and on the 17th of March, 1920, this decision was revised and it was decided that there be one chief in each of the Clinics in each hospital and that one of these be head of the department; the head to control the teaching and research in both hospitals and who shall then be the chief of clinic in his own hospital and at the same time director of teaching and research in both.

The Education Committee discussed at some length the question of whether such a head of department should be full-time or part-time, and would draw the attention of the Faculty to the fact that the great teachers and leaders in medicine in Europe have been part-time men, and that such experiments as have been carried out on this Continent in the appointment of full-time men, have not fulfilled the promises expected.

In the report of March 17th, 1920, referred to, the matter of the part-time man was advocated.

Your Committee would also draw attention to the fact that in our negotiations with the Rockefeller representatives the recommendations of the Faculty were for a single head for the various clinical departments and expressed their fullest approval of the plan and stated that they would await developments along these lines with great interest. The Faculty therefore is now under <sup>mutual</sup> obligation to the Rockefeller Foundation to carry out this plan.

The Committee therefore recommend that the Faculty immediately make effective their decision and appoint one head in all the clinical branches so as to ~~far~~ keep faith with the Rockefeller Foundation.

BRITANNIA BOND

Memo.

Reference your letter of January 21st, 1918, dealing with the need of co-ordination in medical and hospital work, the following is submitted.

At all times during the past <sup>30</sup>~~two~~ years there have been two main divisions of medical life in Montreal. On one side there were the graduates of McGill and on the other side were the graduates of Bishop. Within these main divisions there were two others, namely those who were on the staffs of hospitals and those who were not. There were minor segregations of staffs of the various hospitals. At the time when Bishop's medical faculty was merged into the faculty of McGill there was a prospect that the two main divisions would be brought together. That has not been the result. The reason was that the terms of the agreement were not carried out either in the letter or the spirit of it. Major Wilson is quite wrong in his recollection that a specific number of appointments were to be set aside for graduates of Bishop College. Such a proposal was made, but I made the counter proposal that no such hard and fast agreement should be made. The final arrangement was that as the occasion arose all persons should be considered on their merits without reference to their previous affiliations. It was certainly the understanding that in course of time graduates of Bishop College would be considered of sufficient merit to warrant their appointment to McGill.

All this happened 15 years ago, and it is not in my memory that any graduate of Bishop's has been so appointed.

In respect of graduates of McGill who at that time were members of the faculty of Bishop's, I can only recall one who has since been appointed to McGill. That was myself, but the records will disclose the state of the case.

I am not aware that any graduate of Bishop's has ever been considered for an appointment, but it would be hard to justify the neglect of Dr. England. For 30 years he has taken his place in the surgery of Montreal, and was so highly considered that for a term he was President of the Montreal Medical Society in which the membership was composed very largely of McGill graduates.

I consider that the graduates of Bishop have a real grievance, and this <sup>fact of</sup> ~~latter~~ consideration has only made the situation worse rather than better. The Western Hospital is bound up in this controversy, and all other hospitals are affected.

You will remember a dinner which you gave at least 15 years ago in the St. James' Club, where this whole question was discussed. That marked the beginning of a movement which soon lost force. It has been heavy on my conscience ever since as to who paid for that dinner. I suspect it was yourself, when in reality the burden should have fallen upon me. If you succeed in this laudable task I shall take it upon myself to discharge this old obligation by a similar event. *at the*

*moment the memory of that dinner  
is very absorbing: there was not meat!  
Duc*

*Chemistry, Physics & Botany not considered in this paper.*

The Medical Faculty of McGill University has long derived its main strength from its clinical teaching, and this tradition supported by exceptional clinical facilities has survived just one hundred years.

A reputation based chiefly upon clinical teaching, however, involves an element of weakness unless accompanied by consistent and adequate advance in the application of scientific methods to the field of medicine.

The Faculty has for some years back been undergoing a re-adjustment of its outlook, in which the need for a more thorough scientific training as a preparation for clinical study has become apparent, for it is felt that the immediate future of a school largely depends upon the quality of the training that is available to its younger clinical teachers.

Recognizing the slow nature of the process by which thoroughly efficient clinical teachers are produced, the Faculty sees its surest prospect of continued advance in supporting and strengthening, first of all, the primary scientific departments of the curriculum.

Entrance Requirements:- It is agreed to raise the standard matriculation into the Medical School in order that students may be intellectually prepared for a five years professional study.

The arrangements provide for-

1. Concentration of the cultural subjects in the first preparatory year.

This is equivalent to the senior matriculation.

2. Concentration of the premedical sciences in the second preparatory year. These two years may be pursued in this, or any other accepted state or provincial college, and when successfully completed

give admission to the new five years medical course.

In the five years medical course there will be four years of professional study leading to a final year devoted entirely to hospital work.

In order to encourage the schools, an object which is vital from a broad educational point of view, the Medical Faculty has been scrupulous to arrange the subjects for this preparatory year, so as to be capable of execution in the schools.

By the imposition of this higher standard of entrance requirements, it is expected that the average annual number of medical students at McGill may be considerably reduced.

The Primary Medical Sciences:

These include-

1. Anatomy, (with Histology)
2. Physiology (with Biochemistry)
3. Pathology ( with Bacteriology)
5. Pharmacology.

To place these subjects on a proper basis, there is a need of five full-time chairs, with provision for adequate teaching facilities, and encouragement of research.

Granted further equipment for physiology, more adequate accommodation for pathology, and an independent professor, first of pharmacology, and then of Biochemistry, with the necessary departmental equipment in each case, these major requirements will have been fulfilled.

Pre-clinical Sciences: Of these departments, chemistry and physics are already more or less adequately equipped, while biology, which throughout has been more intimately connected with medicine, has always had inadequate accommodation.

It is interesting in this connection to point out that the professor of botany, whose accommodation is particularly bad, has devised and carried into execution an unique course in microscopic work and general physiology of special value to medical students.

In order to bring together under one roof, and with certain facilities in common, the departments of zoology, botany, Bio-chemistry and physiology, a plan for the establishment of a biological building is under consideration.

Psychology: The Faculty has decided to provide a course on psychology for medical students, which shall precede the instruction in psychiatry.

While the present course as arranged, will be limited to about 24 lectures, it is proposed to extend along these lines when suitable laboratory space for this subject is available.

Training of Junior Teachers: It is considered important to recognize the responsibility of inspiring and training a junior staff, from whom the higher posts in this and other institutions may be filled.

In order to carry out this duty, to the importance of which McGill is fully alive, two procedures are necessary:-

1. The brighter spirits among its graduates must be attracted to a scientific career.

No organization can provide for the fulfilment of this condition because success depends entirely upon the individuality of the

departmental heads.

2. Care must be taken that no insurmountable financial difficulty shall stand in the way of such a career.

This condition, which is at present one of grave moment, can probably be met by a well-planned policy.

Two plans for this are suggested for consideration:-

- This was included but faculty follow procedure for increasing salaries*
- (a) To institute a certain number of post-graduate research scholarships.
  - (b) To give younger scientific teachers a sufficient minimum salary as a living wage, and to fix the maximum salary of the senior assistants in order to encourage further professional activity, always having in view the best interests of the department.

Bachelor of Science Degree, Med. (in Course):

It has been suggested to confer the degree of B. Sc., Med. in Course, to certain distinguished students who have successfully accomplished some special work during the early years of their Course in Medicine.

3. Salary of Professoriate in the Pre-clinical Departments:-

Increases of salary, ~~if any~~, must be assigned chiefly in terms of scientific and general academic standing. It is understood that any such increases shall be made especially where there has been advancement of prestige acquired since appointment to the staff.

The Faculty would lay especial stress upon the importance of securing and retaining distinguished and progressive men as professors, and it is prepared to pay an adequate price for conspicuous achievement.

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THE CLINICAL DEPARTMENTS.

The problems herein contained are somewhat more involved than those pertaining to the preclinical departments. The subject will be dealt with under two headings, teaching and research.

Clinical Teaching.

Control of Teaching:- It is agreed that the growth and development of undergraduate teaching require one head to each department, who shall organize and direct the teaching. He will not at present be placed on a full-time basis, but at the same time must on no account permit the claims of consulting practice to interfere with his university work.

The final decision as to the adoption of completely full-time teachers will be arrived at by the experience of the immediately ensuing years in this and other leading schools.

University and Hospitals: The heads of departments shall be responsible to the University for the conduct of the teaching and the University will control the teaching appointment inasmuch as a majority of the electoral board are members of the University.

Clinical Year: The students of the final year shall carry on work as though hospital residents.

The intention is, by granting a certain degree of responsibility to the students to prepare them better for general practice. During this year in hospital, they will receive systematic class instruction and thus obtain a better training than if left purely to their own initiative.

Correlation with Preclinical Teaching: It is intended that certain of the preclinical teachers shall give instruction in the clinical application of their subjects to the students of the later years.

Salaries of Clinical Professoriate:

It is understood that for the present none of the clinical professors will ask for any increase in stipend, although in the budgets hereafter appended, is given a summary of the ideal financial arrangements that might be made when funds are available.



Dr.Martin's Motion re. Faculty Organization.

Dr.Martin gave notice of motion that an Executive Committee of three or five be appointed by the Faculty to carry on the routine business of the Faculty during each session. Further, that the Committee have full power to carry out all ordinary business of the Faculty with the exception of making appointments to the Teaching Staff and of changing the general policy of work in the various departments. This Executive Committee must carry on its duties by weekly meetings and must see to it that every department of the faculty gets prompt and satisfactory attention to its requirements. The Faculty itself will thereby be freed from the obligation of such frequent meetings as heretofore and the business can be carried on with much greater expedition.

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C O P Y.

At a meeting of the Canadian Medical Association, held in Quebec June 25th, 1919 the following Resolution was moved by Col. Bruce of Toronto, seconded by Col. Armstrong, Montreal, and unanimously adopted:

THAT the C.M.A. takes this opportunity, the first after the cessation of hostilities, to record its deep appreciation of the sacrifice made by our profession in Canada during the long war which has just ceased. We are proud to think that no class in Canada has done more to show its patriotic and sound citizenship than medical men. It is with deep feeling we offer our sympathy to the relatives of those medical men who have so nobly given up their lives for their country, and to those who have sustained wounds and loss or deterioration of health as the result of war service. We feel that the medical officers, nursing sisters and the rank and file of the C.A.M.S. Service by their patriotic and self-sacrificing devotion to duty have contributed in a large measure to the winning of the war, and have reflected great credit on Canada. It is evident that even though the war is now over, a permanent army medical organization must be maintained and the following suggestions are offered in order that we may profit by the experience gained in this war:

(1) That a course be given in each Canadian Medical College on such subjects as medical history of the war, military sanitation, military medical organization, etc.

(2) That a Research Fellowship be established by the Militia Department in each medical college in Canada for graduates who show special aptitude for such work, and that provision be made for their accommodation in the National Health Labty., which we understand, is to be established in the Federal Dept. of Public Health.

(3) We would suggest that the rate of pay of the medical men of the P.A.M.S. be put on a par with the R.A.M.C. in order to attract the better class of medical men to the Canadian M.S.

(4) That these and other suggestions for the improvement of the C.A.M.S. be referred to a Committee constituted as follows: The Presidents of the C.M.A., and each provincial medical assoc., One member from the faculty of each medical college in Canada, and the following officers:

Brif. Gen'l A.E. Ross, Kingston; Col. J.D. Courtne, Ottawa; Col. C. Peters, Montreal; Lt. Col. F.H. Mewburn, Calgary; Lt. Col. F. McTavish, Vancouver; Lt. Col. S.W. Provse, Winnipeg; Lt. Col. J. Hayes, Halifax; Lt. Col. Chas. Hunter, Winnipeg; Lt. Col. Munroe, Saskatoon; Major Harry Morrell, Quebec; Lt. Col. C.L. Starr, Toronto

and the mover & seconder of the Resolution; and that this Committee be given power to add to its number.

That a copy of this Resolution and a report of the Committee be forwarded to the Prime Minister of Canada.

Department of Physiology,

McGill University,

December 4th, 1919.

*John Tait*

Dear Sir,

In order to get further information on the question of the six-years curriculum as arranged at Toronto, I sent Professor Macleod a copy of my critical remarks on the Toronto curriculum (a similar copy has already been forwarded to you), at the same time offering to circulate to members of the McGill Medical Faculty copies of any reply which he might make.

He has kindly taken the trouble to meet my criticisms in detail and his reply is more than a mere statement of personal opinion, for it evidently carries the approval of <sup>other</sup> Heads of Departments as well. I have pleasure in now forwarding for your consideration a copy of this reply.

Yours truly,

*John Tait*

TORONTO, Nov. 24th, 1919.

Professor John Tait  
McGill University.

X. I cannot very well reply in full to the criticisms you have made until I learn the nature of the substitute plan by which you propose to remedy the supposed evils. Nevertheless, I think that some of your criticisms are scarcely to the point and arise from a certain misunderstanding of the nature of our course.

In the first place let me point out the most important of the reasons for increasing the course in Medicine in Canada from five to six years:-

(1) To provide time for courses in certain non-scientific cultural subjects.

(2) To allow time for more thorough instruction in certain of the subjects of the already existing medical course and for the introduction of new subjects.

(3) To permit of the introduction of a certain amount of optional study, either in advanced courses of the Medical curriculum, or in academic college courses that are ancillary to those of Medicine.

(4) To conform in principle with the requirements that have been adopted in most of the States of the Union for licensure to practice in Medicine and Surgery.

With the Arts and Medical Colleges so closely associated as they are in Canada, it is possible to frame the schedule for these six years so that all of the above conditions are fulfilled and at the same time the standards of education adopted in the States are conformed with, without sacrificing our national individuality by being mere copyists.

Turning now to your criticisms: Under (1) you state that we add two cultural subjects to the curriculum. Evidently you refer to the asterisked options (which must be chosen from among the following: English, History, Political Economy, Philosophy and Psychology), but you do not consider that besides the optional subjects every student must take the following: (a) Tutorial class in English composition (called English Expression)\* (first year); (b) Course of lectures on the influence of science on Civilization (1st year at present, will possibly be transferred to 3rd year later); (c) Course in Elementary Mathematical Calculations (30 hours, called Physics (Tutorial) on Time-table); (d) Course on Principles of Psychology (15 hours during 3rd year).

\*FOOTNOTE: (Owing to the reduced staff of the Department of English for the present year this course is given by two tutors, one from the Faculty of Education, the other from one of the Schools. Arrangements are being made to place the course entirely under the charge of the Department of English for next year. Besides this course, which is compulsory, about one-third of the six year students have also elected College English.)

Before replying to 2. and 3. let me point out that it is essential that the student be guided in his choice of options by a class advisor, who shall be appointed for each entering class and accompany it through the first three years. One of the duties of the advisor is to explain to students the purpose and nature of the various options, another, is to supervise in a general way the work they are doing. This functionary must offer opportunity to the students at stated times, to consult with him over their work. He will not advise the student to select a special course, but will guide him in the proper choice of options after ascertaining his wishes. After the third year, the work of the Class Advisor will probably be taken over by the Dean.

Para. 2. means that if a student, electing certain courses designed to fit him for some specialty, should decide after a year or two that he wishes to change, the time he has given to these courses will not have been valueless from the general educational standpoint; being more or less advanced courses they will have a high cultural value. The phraseology of the paragraph in the announcement is perhaps somewhat ambiguous.

Under 3. (a) the class advisor will help to remove this admitted difficulty which however is no greater in Medicine than in Arts or Engineering. It is not the first time that the student has had to choose among several options. He did so when he selected to study Medicine. Surely he can be trusted to exercise this faculty to a limited extent among subjects that are not essential to his training as a general practitioner of medicine. It may be pointed out, further, that no one of the options permitted could under any circumstances involve a waste of time.

With regard to the time-table difficulty (b), I do not believe that this will be great. There has been no unusual difficulty in this connection in the first year course in Toronto. Of the present first year class, about 100 take French (in 3 classes at different periods), about 50 English, about 15 German, and about 15 Mathematics. With classes of these sizes we have found that the Arts faculty are willing to help us by arranging that suitable courses are given at hours which fit in with our schedule.

It seems strange that (c) should be used as an argument against permitting the student to elect certain courses for the purpose either of broadening his general knowledge, or of specializing in one or more subjects of which he has an elementary knowledge. Expanded, the latter part of the paragraph referred to should read ". . . fit all of the students for all of the

special &c. . . " There can surely be no reason why certain students should not be permitted to undertake a certain amount of advanced work in chosen subjects of the medical curriculum, and why others should be deprived of the one opportunity of their lives to take college courses in cultural subjects. If all students are compelled to take prescribed college (Arts) courses before commencing the Medical course, the latter will be even more crowded in subjects than it is at present and there will be no possibility of giving more than the minimum requirement (pass) course in any of the subjects - a humdrum and uninspiring outlook for both instructors and students.

I am afraid that I do not see the point in the argument d. It certainly works both ways.

(4) I cannot reply to the fourth argument until I know the substitute plan for ensuring a proper training in English. I would point out, however, that all students not having advanced certificates in English (Senior Matriculation) are required to take a course in English Expression.

(5) The Faculty has not yet ruled upon the standing of the examination results for the options of the Third Year. It is understood, however, that there is no distinction in this regard between the obligatory and optional subjects. I will be interested to know how you propose to deal with this matter. It must come up in any scheme.

(6) In Toronto there is a combined Arts and Medical course (P. & B.) which will occupy seven years in the new course. (4 in Arts and 3 in Medicine) and which required an Honours Matriculation certificate for entrance (Calendar p.180). Arts graduates without certificates in the Pre-medical sciences would have to take six years for the medical degree; with these certificates, five years.

Under any scheme it is inevitable that graduates of the usual Arts course (who have not taken courses in the pre-medical sciences) must take practically the whole of the prescribed medical course. Until I see your substitute plan, I cannot very well answer this criticism more fully. In Toronto we will naturally make every concession we can to attract Arts graduates to the medical course, even to the extent, perhaps, of condensing the courses of the first three years into two years in cases where this is possible.

The six year course as outlined at Toronto is intended to encourage schools and colleges to raise their standards so as to secure for their students credit in the courses of the 1st and possibly of the 2nd year.

I may add that the replies to your criticisms have been read before a meeting of the Heads of Departments here and although not official in the ordinary sense, they were approved by the meeting.

MCGILL UNIVERSITY,  
MONTREAL.

PHYSIOLOGICAL LABORATORY.

November 21st, 1919.

Private and Confidential

Dear Sir,

With the permission of Professor MacLeod I take the liberty of sending you a copy of a Proposed Announcement to Medical Students at the university of Toronto. The Announcement deals with the first three years of the six-years curriculum as now arranged in that university.

The arrangement of the six-years curriculum both at Toronto and at McGill seems open to serious criticism. I have therefore in an appended note animadverted upon certain features of the Toronto policy, which is selected for criticism solely because Toronto seems to have pushed ahead of McGill in laying out precise plans for a curriculum of the type agreed upon between the two universities. Such details of the McGill scheme as are known to me are also commented upon in the same note.

N.B. For reference it seemed necessary to number the first few paragraphs of the Toronto Announcement, though the paragraphs of the original text do not carry numbers.

Yours truly,

*John Tait.*

PROPOSED ANNOUNCEMENT TO MEDICAL STUDENTS.

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1) The student of Medicine is reminded that during his years of study he is preparing himself to enter a profession which presents manifold and diverse aspects. No prescribed course of study of practicable length can by any possibility fit the student for all of the special careers which the profession of medicine offers.

The Curriculum provided by the Faculty of Medicine is designed to furnish a framework of knowledge and technical skill which will adequately equip all students for the general practice of medicine and its branches, the time allotted for this purpose, in every subject of the course, being well in excess of that required as the minimum by examining boards and Universities in this and other countries.

The six years curriculum, however, also provides for the student filling in and amplifying his regular work with special studies that are designed either to broaden his general education, and therefore make him better fitted for the practice of medicine, or to enable him to undergo, in certain of the subjects of the curriculum, a somewhat more intensive training than is essential for all students, so as to prepare him for some particular type of medical career. To enable the student to accomplish these purposes a number of hours of optional study are prescribed, the precise subjects of study being largely left to the students' choice. It is, however, expected that this choice will not be aimless, but made of set purpose and designed to some particular end.

2) It will be of decided advantage to the student to form some conception of the general type of medical career which he desires to follow at an early period in his course. This is particularly so when laboratory investigation (and teaching), hygiene or psychiatry, is thought of. This choice should be made with great care, and only after a thorough investigation of the work involved. But it may be pointed out that it would not handicap a student if he should decide after trial of one type of course, to change to another.

3) During the first year only a limited number of optional hours are available. The student, who, upon entering the faculty of Medicine, is unfamiliar with scientific methods of work and thought, is advised to utilize these hours in acquiring thorough familiarity with the prescribed subjects. The

The student who has some previous acquaintance with science and feels confident that he will not experience any exceptional difficulty in familiarizing himself with the prescribed subjects, is advised to devote a certain proportion of his optional hours to the study of such subjects of general knowledge as will assist in providing him with that breadth of outlook and catholicity of interests which will enable him to enter with intelligence into the life and interests of the communities with which he may find himself associated, and to speak and write in a clear, simple and convincing manner.

4) Among the various courses of this nature which are available to the first year student, the following are especially recommended:

English, 1a, 1b,	2 hours,
History, 1a,	2 hours
( Scientific French,	2 hours
(or Scientific German,	2 hours
Mathematics (Recommended for students of Group B4)	

5) It is at the beginning of his second year that it will be of decided advantage to the student who contemplates a career in a laboratory investigation (and teaching), hygiene or psychiatry to make his choice. While the prescribed regular schedule for the second and third years adequately covers all the subjects necessary for a thorough grounding in the introductory medical sciences, there is a certain amount of extra time in which those students who may have decided that they wish to enter some special field, can take extra courses designed to fit them to that end, or in which other students may take courses in general knowledge which may be useful and valuable in whatever branch of medical science they may afterwards find their life work. It should be clearly understood that the regular and optional schedules are so arranged that it will ultimately be no hardship if a student, having mistakenly elected some special course, should decide to proceed in some other direction.

Broadly speaking, the student should aim at preparing himself in one or other of the following directions:-

A. General Practice. Most students will naturally prepare themselves for the general practice of Medicine.

B. There are certain students, however, who may desire to undergo a training which will qualify them for some special type of career. Such careers are as follows:-

1. Internal Medicine and Surgery,
2. Mental Diseases,
3. Public Health,
4. Laboratory Investigation (and teaching).

But Before entering upon one of the courses of Class B, the student must have the sanction of the Faculty on the recommendation of his adviser.

A. In preparing for General Practice the student should remember that his profession will be at least as much a branch of social service as of technical scientific practice and that upon a number of occasions in his career he will likely be called upon for advice and guidance in matters in which not only his medical skill and knowledge will be involved, but also social, ethical and economic factors, a right understanding of which will often enable his services to be very much more effective. The student of this category is therefore urged to utilize a substantial proportion of his optional hours of study in acquiring some measure of knowledge of the leading principles of ethics and economics, including sociology. Optionals may be profitably chosen from among the following subjects:-

Second Year. Any of the optionals of the first year also:

- \*English, 2a, (2 hours)
- \*History, 2a, (2 hours)
- \*Political Economy (Economics), 16, (2 hours)
- \*Philosophy, 3, (2 hours)
- \*Psychology, 4 & 5,
- Chemistry, 7, (Physical chemistry)
- Physics, 4, 5, 14.

Third Year. Any of the optionals of the first two years also:

- \*Political Economy (Economics & Sociology) 28,29 (2 hours)
- Philosophy (Logic & Theory of Method) (2 hours)
- History, 3a & 4a, (3 hours)
- Additional work in any of the Medical Sciences of the first three years.
- Practical Dietetics (Household Science) (2 hours for 15 weeks)
- Sanitary Engineering)
- Sanitary Chemistry, )

During each of these years every student must elect as one of his optionals at least one of the subjects marked with an asterisk.

B.1. In preparing himself for Internal Medicine & Surgery the student is recommended to equip himself as thoroughly as possible in the Introductory Medical Sciences. He is therefore urged to choose the bulk of his optionals during his second and third years from subjects of this character. He must, however, also elect during both years, one of the asterisked subjects indicated above. Optionals may profitably be chosen from among the following subjects:

Second Year Chemistry, 7, 9, 16  
 Physics, 3a, 3b, 7, 25  
 Comparative Anatomy (Zoology 4 & 5)  
 Additional Anatomy  
 Additional Histology & Embryology  
 Any of the subjects detailed under the  
 Second Year of Group A.

Third Year Additional Biochemistry  
 Additional Physiology  
 Chemistry, 4, 10, 19, 20  
 Any of the subjects detailed under the  
 Second & Third Years of Group A.

B.2. The student who designs subsequently to devote himself to the study of Mental Diseases is especially urged to equip himself with a knowledge of modern experimental psychology. He must elect one of the asterisked subjects under Group A. Besides this the following subjects are recommended:-

Second Year

Philosophy, 4 (Psychology)

Chemistry, 7, 9

Physics (Electricity, etc.), 3, 7

Philosophy, 15 & 16 (Psychology)

Additional Physiology

Additional Biochemistry

(To be amended)

Third Year

B.3. The student desiring to work in the field of Public Health should aim at acquiring some knowledge of economics in order to enable him to comprehend the political and social aspects of his work, and he should acquire a knowledge of Parasitology, of the structure, habits and control of disease-bearing insects, and especially of bacteriology and immunity. He must elect one of the asterisked subjects of Group A.. Besides this the following subjects are recommended:-

Second Year

Political Economy

Zoology (Parasites) )

Zoology (Insects) ) - Biology, 9

Chemistry, 7, 9

Sanitary Engineering) See Calendar of the

Sanitary Chemistry )Faculty of Applied  
Science, p.71.

Third Year

Bacteriology

Protozoology

Additional Biochemistry

Statistics (Actuarial Science 2)

B.4. The student who aims at a career of Laboratory Investigation should be guided by the requirements of the field in which he desires to work, and should choose his subjects of optional study in conference with the adviser and the head of the department representing the subject in which he expects to be especially interested. The student is reminded, however, that in all fields of laboratory research, mathematics is becoming of rapidly increasing importance and he is strongly urged to acquire a knowledge of elementary calculus and of statistical methods. He must also elect one of the asterisked subjects of Group A.

STUDENT ADVISER.

In order to assist the student in making a correct choice of optional subjects, a student-adviser has been appointed for each year. Every student is required to submit to the adviser a list of his proposed studies and his time-table, and the written approval of the adviser and the consent of the Faculty Council will be required before the student's registration will be considered to have been completed. It is understood that any coherent plan of study designed by the student for a particular and intelligible purpose will be approved, but courses of study which appear to be manifestly unsuitable, and for his choice of which the student can furnish no adequate explanation or excuse, will not be approved by the adviser.

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## PRELIMINARY REMARKS:

In the Toronto Scheme note:-

- (1) that non-scientific cultural subjects are entirely under the control of the Arts Faculty;
- (2) that every student is compelled to take at least five options during the first three years;
- (3) that of these options two must be subjects which belong entirely to the Arts Faculty, e .g. English Literature, Political Economy, Philosophy;
- (4) that besides the two Arts subjects three more must be taken from among the subjects classified as the Preliminary Medical and Fundamental Medical Sciences, (including ~~Mathematics~~)

Under the present McGill Schedule note:-

That a non-faculty teacher teaches English. Medical students can hardly be expected to exult in the prospect of drill in English; attendance at the English class and discipline therefore suffer from the beginning.

Suppose the teacher at the end of the term finds it necessary to plough 50 per cent. of the students; they make an outcry, members of Faculty intervene, the teacher climbs down - he can scarcely do otherwise - and the main object of his appointment is defeated. The position of this teacher is a very difficult if not impossible one.

The matter comes to this. Either English instruction (i.e. spelling, grammar, composition) is absolutely essential, or it can be dispensed with. If it is absolutely essential, then it must be thoroughly grappled with and put on a proper basis.

## CRITICAL EXAMINATION OF TORONTO SCHEME.

(1) By common admission the six-years course at Toronto and at McGill, was instituted partly because of defective higher school education and partly because the old five-years curriculum was becoming overburdened. Toronto signalises the addition of the extra year by adding two non-medical, higher cultural subjects to the curriculum. From the educational point of view this is "eye-wash" and cannot make up for the want of a good training at school.

(2) Paragraph 2 of the Toronto Announcement is twice self-contradictory:- (i) How can a student "at an early period in his course" make "a thorough investigation of the work involved" in hygiene, psychiatry or, let us say, in pathological laboratory investigation? (ii) If it is "of decided advantage" to the student to make an early choice, how can it be that he suffers no handicap by a subsequent volte-face? (This last contradiction is no accident, for it is repeated in paragraph 5.)

(3) The effort, so conspicuous in the Toronto scheme, to provide optional courses of study to meet the different bent or inclination of different students is not to be dismissed outright as unreasonable. In Arts and in Engineering the practice is in operation. But in Medicine it is impracticable owing to the following considerations:

- (a) The difficulty of effecting an appropriate choice at an early period (to recognition of this difficulty we may trace the inconsistent statements in Para.2. of the Announcement).
- (b) The time-table difficulty - think of the complications due to the necessity of fitting in Medical with Arts classes, not to speak of the complications due to possible change of course!
- (c) The fact stated in Para.1. of the Announcement that "no prescribed course of study of practicable length can by any possibility fit the student for all of the special careers which the profession of medicine offers".
- (d) The desirability of teaching every man the ordinary business of a general practitioner; thus, a graduate who wishes to take up a career of laboratory investigation (and teaching) - for which he gets miserable pay - is fortified in sticking it out by the thought that if the worst comes to the worst he still has a profession to fall back upon.

(4) Apparently the main business of a student in his first year (see Announcement Para.3.) is to familiarise himself with scientific methods of work and thought, and to get a thorough grasp of the prescribed (scientific) subjects. Should he already know these moderately well, he is advised to learn to speak and write in a clear, simple and convincing manner. I have elsewhere pointed out that unless he can speak and write in a clear and simple manner he is ipso facto unqualified for the study of science in a university.

(5) Suppose a second-year or a third-year student, desiring to be a general practitioner, selects, let us say Philosophy and Political Economy as special subjects; the Arts Faculty plough him in both subjects. What year is he in then?

(6) Two highly objectionable features, inherent both in the Toronto and in the McGill schemes, viz. that they tend to prevent qualified Arts graduates from entering Medicine, and discourage laudable effort on the part of the high schools, I have brought out elsewhere.

*J. Tait.*

*McGill Faculty*

C O P Y.

13 Norham Gardens,

Oxford, Eng., 29/8/19.

To the Dean of the Medical Faculty,  
McGill College.  
Dear General Birkett,

The situation is this - McGill simply cannot afford to fall behind other first-class schools in the development of modern clinics in Medicine, Surgery, and in Obstetrics and Gynaecology. New conditions have arisen, to meet which it is essential to have sympathetic and active co-operation of University and hospitals.

Medically Montreal occupies a unique position - a school with a record of splendid work, and two of the best equipped hospitals on the Continent; but a new departure is needed which will involve change of heart as to methods, etc. and a realization of the full responsibility of the hospitals in this matter. It is their job quite as much as that of the University; and the clinics should be under the control of both bodies jointly.

As to details:

(1) The establishment of two clinical boards, one of the I.G.H. the other of the R.V.H., to control all arrangements relating to the hospital side of the University work. The Principal, the President of each hospital, with two Collegiate and two hospital representatives to form each Board, which would be separate and independent and would control the appointments of the heads of the clinics.

(2) The clinics: a. 80 - 100 beds in each hospital for each medical and surgical clinic. b. An out-patient department associated with each. c. Ample clinical laboratory facilities. d. Specific budgets for each clinic.

(3) Personnel: a. Professor in charge of each clinic, appointed by the Clinical Board or by an ad hoc Committee named by them for the purpose. A whole-time man, or if thought wiser, largely so. Salary \$10,000 paid partly by the University and partly by the Hospital. b. Assistants, whole and part time, named by the Professor and appointed by the Clinical Boards, with salaries ranging from \$3000 to \$1000

(4) Teaching The complete control of the teaching of Medicine and Surgery would be in the hands of the two professors in each subject. Others would receive clinical professorship and help in the ward and other teaching.

(5) The Obstetrical and Gynaecological Clinics could be organized on similar lines in connection with the hospitals and the University maternity.

(6) Throw the appointments open to the best men available.

Three things are necessary to carry out such a scheme:

(A) Realization on the part of all concerned that we are at the parting of the ways and that a new deal is a necessity.

(B) A self-denying ordinance on the part of men at present in charge, and

(C) Money - for which an appeal should be made to the public. Possibly the Rockefeller Board might help, but this is a citizen's affair which should appeal to all who are anxious to see Montreal keep in first rank as a medical centre

Yours sincerely,

(Signed) WM. OSLER.

January  
Fifteenth  
1920.

Dr. George E. Armstrong,  
320 Mountain Street,  
Montreal, Que.

Dear Dr. Armstrong:-

I have much pleasure in enclosing  
herewith a copy of a letter addressed by Professor  
Meakins to Mr. Wm. M. Birks, to which reference was  
made in our conversation last evening.

Yours very sincerely,

Encl. /

Acting Principal.

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MEMORANDUM  
IN REGARD TO THE SIX YEARS  
MEDICAL COURSE

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MEMORANDUM  
IN REGARD TO THE SIX YEARS  
MEDICAL COURSE.

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The following statement has been adopted by the Faculty of Medicine and the Council of Laval University :

Laval University, Quebec, April 1917.

McGill and Toronto Universities have agreed and made known that after 1918 their medical courses shall be given in six years.

This decision seems to have been settled upon after a mutual understanding, and after notice to other Universities to which the move might be of interest.

Without a doubt, such a transformation of the medical curriculum requires a mature discussion following a complete study of the subject ; and it cannot be overlooked that not only teaching bodies but also licensing bodies throughout the Dominion, v.g. the Provincial medical boards and the Canadian Medical Council, very likely had an opinion to express on the matter. These Boards, according to the report of the third conference of Canadian Universities were notified of the change after it had become an accomplished fact.

Queen's University of Kingston has already protested and set down, in the memorandum published in December 1916, that this decision is of a high importance and should not have been arrived at in a hurry. Queen's

complains that the facts have become known only upon inquiry of the Dean of the University. Laval, though without official knowledge, her representatives not being present at the 3rd meeting, knew that such a course would be adopted.

Our Faculty thinks it advisable to take advantage of this discussion to define the situation clearly as far as the preparation of our students is concerned and to decide the value of preliminary education in relation to the study of medicine.

There are two main reasons brought forward to justify the lengthening of the medical studies, viz. : 1° That education preliminary to the study of medicine does not occupy sufficient time and has not the proper scope ; 2° That the modification will conciliate the medical curriculum of the Universities with the program of the best medical teaching bodies in the United States. To come to that end, McGill and Toronto Universities establish a year of applied science and a few lectures in languages.

We are agreed with Queen's opinion that both these propositions should be very carefully studied before it is agreed that the first is true and that the second is desirable.

Let us first make plain our status by showing what is required in Laval University to obtain a degree of B.A. B.S., or B.L., or even the so-called *Inscription*, which in our opinion means more than the matriculation of some English speaking Universities. And as a preliminary let us be allowed to expose the principles of our system.

The Doctor in medicine, by his profession, occupies an elevated rank in society and his part in life is important and difficult. His education therefore should prepare him for high functions, and as a necessary consequence, his intellectual formation should be of a high general order, and in no way restricted or hastily specialised.

No doubt this fundamental and general culture must include some scientific training, but we hold that a large

place should be reserved to the study of Languages and Literature (*Humaniores Litteræ*) and even more to that of Philosophy and History. Hence, in Laval, the following disposition of the studies preliminary to that of Medicine.

### TEACHING

Our examinations for the degree require eight years of High school and College (classical) studies : Languages : French, English, and Latin, 6 years ; Greek, 4 years. Sciences, 2 years, covering : 500 hour lessons in Philosophy (in Latin), 480 hour lessons in Mathematics, 180 in Physics, 75 in Chemistry, 40 in Botany, 40 in Astronomy, 25 in Mineralogy, 30 in Geology, 30 in Zoology, 10 in Architecture.

### EXAMINATIONS

Every candidate to the Degrees of B.A., B.L., B.S., or for the Inscription undergoes two sets of written examinations, the first in Letters (Languages and Literature), after Rhetoric, (third last year), and the second in Sciences and Philosophy at the end of his course.

Both these sets are made up of two series of examinations on Collegiate or University subjects.

The Collegiate examination papers are corrected and appraised by professors of the classical colleges in which the student writes, on subjects defined by the University, viz. : for the examination in Letters : Precepts and History of Literature, Geography, Universal history, History of Canada.

For the examination in Science : Chemistry, Astronomy, and Natural History.

The University examination papers are corrected and appraised by a Board of University examiners and cover the following subjects : In Letters : French-Latin, Latin-French, Greek-French, English-French, French-English, translations, and literary composition.

In Sciences : Philosophy, Mathematics, and Physics.

### CLASSIFICATION OF CANDIDATES

Candidates whose notes average 66.6% in each set of examinations are rated Bachelor of Arts, B.A.

Candidates whose notes average 66.6% on the first set of examinations and 50% on the second are rated Bachelor of Letters, B.L. Candidates whose notes average 33.3% in the first set and 66.6% in the second set are rated Bachelor of Sciences, B.S.

Candidates whose notes average 33.3% on both sets have the *Inscription*.

It should be noted that this *Inscription* is accepted as an equivalent to the preliminary examination of the Royal College of Surgeons, London.

This *Inscription* is equivalent in theory, to the matriculation of the English Universities, as a matter of fact it means more preparation.

We therefore can hardly see the necessity of forcing the student to another year of sciences, when in his medical studies he will be put through lessons and practical work in Chemistry, Biology, — including Embryology, Hystology, Bacteriology, Compared Anatomy and Physiology, Botany — and Physics in connection with Physiotherapy, Electrotherapy, and Applied Physiology. After his course of studies, he has the theory ; in the Faculty of Medicine he will find the repetition of the theory and its immediate application.

Our course for the degree of Bachelor is sufficient to prepare the student for the higher scientific studies and if not, let the fault be remedied by improving the preparatory not the higher course.

It would be an error to mix up with the medical studies scientific preliminary work which is wholly independent and must be considered only as a preparation. This new curriculum is nothing but a catchy and factitious arrangement in which insufficient preparation would be remedied by the lengthening and complication of studies already long enough.

Let things stand as they should : scientific preparation in the colleges, medical training in the Faculties ; let those whose preparation is insufficient modify it and correct it.

To alter the actual system would lead to confusion in the work of the different departments and the useless repetition of the same work for the students.

McGill and Toronto propose the possibility for the student to obtain a degree of B.S. Such a degree, in our University, can only be obtained after a course of eight years, and not before the age of twenty as an average.

We should have to combine scientific and medical teaching, which method though accepted in some American or Canadian Universities, is by no means, desirable in our opinion.

If the course in medicine is to be lengthened to six years, it would surely be better to give all this new time to medical work, but the five year system hardly yet in force, seems to be giving very good results and should be fairly tried before being discarded.

This six year system, on account of repetition, would deprive our student of a full year which might well be given to medical work, and it should be carefully noted that our University year is of nine full months.

It is useless to insist on the other reasons put forward by Queen's ; they are not without importance, and some

deserve due consideration, as, for instance, the inquiries being actually conducted on preparatory studies to medicine, and the necessity of improvement in hospital facilities.

We want to make plain that our students going into the study of medicine are sufficiently prepared, and that it would be for them a serious drawback to lose precious time in useless repetitions.

Let actual and well proven methods be seriously applied, more precise and more complete, but let also teaching bodies, as is necessary, have a certain free margin in matters of detail.

In short, we understand the importance of the length of medical studies : it is the principal factor in the raising of the scientific level of the profession.

But as important, if not more so in our eyes, is the question of the length and nature of the preparation for the study of medicine. The doctor in medicine needs first, to prepare him for serious medical work and to allow him to fulfil properly his part in life, a deep and general culture.

We should therefore sincerely inquire whether he shall find it in the hasty specialisation of his work in the High School and College, or rather in the more general form of *classical studies*. This is, in our opinion, the true, the pressing, the vital question, and we believe that our system furnishes the most reasonable solution in providing the sound preliminary training necessary to the elevating and sustaining of the intellectual standard of our profession.

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131 Stanley St.  
Mar. 19/21

Principal Sir Arthur Currie,  
Wesell.

Dear Sir Arthur.

May I be permitted  
to express how very sincerely I  
appreciate your address of this  
afternoon.

I have had the privilege  
of working under Dr. Finley for several  
years and the longer I work the  
greater I consider the honor and  
privilege to be.

Then again, had I never  
heard of you before, Sir, and I have  
heard a great deal, your appeal of  
this afternoon would have stimulated  
anew a loyalty to Wesell.

I am proud to be assoc-  
iated with an institution, which  
has you, Sir, at its head.

Ever Sincerely Yours.

Howard Macbordick. (M.R.)

66

STATISTICS OF THE EXAMINATION HELD AT MONTREAL

OCTOBER 19th, 1920  
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NUMBER OF CANDIDATES -- 37  
OF THESE PASSED -- 23  
REFERRED -- 9  
REJECTED -- 5

FROM:-		THESE WERE FROM:-	
MCGILL	25	ONTARIO	9
LAVAL	3	QUEBEC	11
QUEEN'S	3	NOVA SCOTIA	3
TORONTO	1	BRITISH COLUMBIA	3
WESTERN	1	MANITOBA	2
TUFT'S	1	PRINCE EDWARD ISLAND	2
UNIV. OF TEXAS	1	ALBERTA	1
COLL. OF MED & SURG. CHICAGO	1	SASKATCHEWAN	1
CAMBRIDGE	1	NEWFOUNDLAND	1
		ENGLAND	1
		UNITED STATES	3

UNIVERSITY	TOTAL NUMBER	PASSED	REFERRED	REJECTED
McGILL	25	17	7	1
QUEEN'S	3	2	1	-
LAVAL	3	1	-	2
CAMBRIDGE	1	-	1	-
TORONTO	1	1	-	-
WESTERN	1	-	-	1
TUFT'S	1	1	-	-
UNIV. OF TEXAS	1	1	-	-
COLL OF MED & SURG CHICAGO	1	-	-	1

FROM MCGILL

THERE WERE UP FOR FIRST TIME -- 15  
" " " " SUPPLEMENTALS -- 10  
OF THOSE UP FOR FIRST TIME -- 15

McGILL (cont'd)

THERE WERE	PASSED	10
" "	REFERRED	4
" "	REJECTED	1

OF THOSE UP FOR SUPPLEMENTALS -- 10

THERE WERE	PASSED	7
	REFERRED	3

FROM QUEEN'S

THERE WERE UP FOR SUPPLEMENTALS -- 3

THERE WERE	PASSED	2
	REFERRED	1

FROM LAVAL

THERE WERE UP FOR FIRST TIME -- 3

THERE WERE	PASSED	1
	REJECTED	2

FROM WESTERN

THERE WERE UP FOR FIRST TIME -- 1

	REJECTED	1
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FROM TORONTO

THERE WERE UP FOR SUPPLEMENTALS -- 1

	PASSED	1
--	--------	---

FROM TUFT'S

THERE WERE UP FOR SUPPLEMENTALS -- 1

	PASSED	1
--	--------	---

FROM UNIV. OF TEXAS

THERE WERE UP FOR FIRST TIME -- 1

	PASSED	1
--	--------	---

FROM COLL. OF MED. & SURG. CHICAGO

THERE WERE UP FOR FIRST TIME -- 1

	REJECTED	1
--	----------	---

FROM CAMBRIDGE

THERE WERE UP FOR FIRST TIME -- 1

	REFERRED	1
--	----------	---

THE SUBJECTS IN WHICH THE REFERRED AND REJECTED  
MEN FAILED WERE :-

HYGIENE	4
PATHOL & BACT	5
SURGERY	4
OBSTET & GYNEC	10
MEDICINE	10

66

STATISTICS OF THE EXAMINATIONS HELD AT  
 TORONTO      WINNIPEG      AND      VANCOUVER      JUNE 15, 1920  
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NUMBER OF CANDIDATES	--	65		OF THE TOTAL OF 65
AT TORONTO	39			PASSED      44
AT VANCOUVER	17			REFERRED    13
AT WINNIPEG	9			REJECTED    8

THERE WERE FROM :-

ONTARIO	26
BRITISH COLUMBIA	17
QUEBEC	4
MANITOBA	3
SASKATCHEWAN	3
ALBERTA	3
NOVA SCOTIA	3
NEW BRUNSWICK	1
NEWFOUNDLAND	2
GREAT BRITAIN	2
UNITED STATES	<u>1</u>
	65

THERE WERE FROM :-

McGILL	30
QUEEN'S	11
TORONTO	11
MANITOBA	3
WESTERN	1
JOHNS HOPKINS	1
JEFFERSON	1
RUSH	1
TUFTS	1
CHICAGO COLL P. & S.	1
GLASGOW	1
EDINBURGH	1
M.R.C.S. & L.R.C.P.	<u>1</u>
	65

FROM	TOTAL NUMBER	PASSED	REFERRED	REJECTED
McGILL	30	18	7	5
QUEEN'S	11	9	2	-
MANITOBA	3	3	-	-
TORONTO	11	9	1	1
WESTERN	1	1	-	-
JOHNS HOPKINS	1	1	-	-
JEFFERSON	1	1	-	-
RUSH	1	-	1	-
TUFT'S	1	-	1	-
CHICAGO COLL.	1	-	-	1
PACIFIC MED COLL	1	-	-	1
GLASGOW	1	1	-	-

FROM	TOTAL NUMBER	PASSED	REFERRED	REJECTED
EDINBURGH	1	-	1	-
M.R.C.S. & L.R.C.P.	1	1	-	-

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FROM MCGILL

UP FOR WHOLE EXAMINATION	--	19
UP FOR SUPPLEMENTALS	--	11
OF THOSE UP FOR THE WHOLE		
PASSED		8
REFERRED		6
REJECTED		5
OF THE 11UP FOR SUPPLEMENTALS		
PASSED		10
REFERRED IN PATH		1

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FROM QUEEN'S

UP FOR WHOLE EXAMINATION	--	7
UP FOR SUPPLEMENTALS	--	4
OF THOSE UP FOR THE WHOLE		
PASSED		6
REFERRED OBSTET & MED		1
OF THOSEUP FOR SUPPLEMENTALS		
PASSED		3
REFERRED IN MED		1

---

FROM TORONTO

UP FOR THE WHOLE EXAMINATION	--	11
PASSED		9
REFERRED IN PATH		1
REJECTED		1

---

The subjects in which the referred and rejected candidates failed were,-

Pathology etc	12
Obstetrics etc	11
Medicine	10
Surgery	7
Hygiene	7

May  
Fourth  
1923.

Sir Andrew Macphail,  
216 Peel Street,  
Montreal.

My dear Sir Andrew:-

Thank you very much for your memorandum of the 28th of April re medical courses.

On the evening of the day on which you wrote it the Council of the Medical Faculty decided not to make any change in the courses for next year.

There is no doubt whatever but that the former decision re two pre-medical years and five medical years was taken too hastily and that due consideration was not given to all the issues involved. Medical education everywhere seems to be in the melting pot and we must not allow ourselves to be stampeded. I fully agree with you that the curriculum at McGill should not be influenced in any degree whatever by the regulations of the Medical Council of Oklahoma, U.S.A.

Ever yours faithfully,

Principal.

28 April

1923

216 Peel St.

Montreal.

Dear Sir Arthur,

Having said

so much against the 7-year  
course, I felt obliged to get  
forth the reasons, for which  
there was no time at the  
meeting. They are contained  
on the enclosed pages. I should  
add that I am sending  
this memo to you alone  
for such use as it may be.

Ever yours faithfully

Arthur Macphail

Memp on the teaching of medicine, arising from the  
meeting of the Medical Faculty, April 26th, 1923,

by Sir Andrew Macphail.

This meeting was the first occasion upon which the proposal was definitely put forward for seven years attendance in the university as a condition for graduating in Medicine. On previous occasions the subject was discussed with reference to two "pre-medical years," five years professional study, <sup>with</sup> <sup>of these a</sup> and one "hospital year." At the meeting of April 26th, a final decision was sought by a formal motion by the chairman of the Educational Committee, that two years attendance and study in a college be exacted as a condition of entrance upon the study of medicine. The term "college" was defined as a corporation entitled to grant degrees in Arts, that is, a university.

This motion, if approved, would have abrogated all present regulations for admission to the study of medicine. These conditions of admission are at present of various kinds. They are defined in the Calendar of 1922 - 23 as, "~~Senior~~ matriculation" or "~~Some~~ ... examination accepted by this university." The outside examinations so accepted are set forth in the Calendar of 1921 - 22, and no regulations have since been made to prevent their acceptance up to the present time.

These examinations are of the most diverse kinds, and are described under 19 categories. At the meeting herein referred to, the proposal to close all these avenues of admission, and substitute

an absolute two years attendance at a "college", making seven years in all, encountered so much opposition that no vote was taken, and the meeting adjourned.

The Faculty at this meeting confined itself to its sole function, as set forth in the "plan for reorganization," dated 15th December 1921, and approved by the university in June 1922. This function under Section 4 is merely "to discuss." Under Section 5 "final decision" rests with the Council. Accordingly it is now competent for the Council to accept the motion of the Educational Committee irrespective of any discussion that may have taken place in the Faculty, and remit their decision for approval by the University.

Up to June 1922, the present Council was the faculty. Previous to that date the Faculty was composed of 18 persons, mostly heads of departments with three members ex officio. Upon that date all officers of instruction and lecturers were added, increasing the members of the Faculty to 97; but the present Council was made nearly identical with the former Faculty.

This Council at the present moment is composed of 17 persons of whom 3 are not graduates in medicine; 12 have never practised medicine; only 2 practise general medicine, 1 practises surgery; and 2 practise specialties. Of the Council only 5 members were present at the meeting of April 26th, and the remaining 12 will be free to take a "decision" without having heard the "discussion" in the Faculty. Of the Executive Committee of the Council only 1 member was present.

*Eight of the 17 members are without that intimacy of knowledge of Canada, which comes from having been born and educated in Canada. These figures assume the resignation of Dr. Armstrong and Dr. Sterling.*

The Educational Committee, which formulated the proposal for seven years residence in the university, first met on the 9th February 1920, when the chairman presented a scheme, "calling for two pre-medical years after matriculation, four years of medical study, and one year residence in hospital." At a meeting on February 26th, the proposal "was finally agreed upon; all members commented favourably."

To the Executive Committee on March 20th 1920, this discussion was referred. On motion of Dr. Whitnall and Dr. MacTaggart it was accepted, and "sent forward to the Faculty with the approval of this Committee."

The old Faculty on April 8th, 1920, considered the proposal, and "the resolution was approved."

The Corporation on May 19th, 1921, "accepted the principle" of the seven years course. For another 18 months the subject was under consideration, and at the opening of the sessions of 1922 it was presented to the Faculty. In the meantime a new situation had developed. The Faculty was not now a small body composed for the most part of technical scientists. It had been enlarged to include nearly a hundred of the teaching staff in medicine, and this was its first meeting. Apart from members of the Council, no member of the Faculty <sup>at the autumn meeting</sup> ventured to give any opinion, although the Principal besought them to offer their ideas freely, "so that no one might go away feeling he had not stated all that was in his mind."

During the present session of 1922 - 23 the whole problem has been profoundly considered individually by the teachers. The opposition grew steadily, and culminated at the meeting of April 26th,

when the difference of opinion was so manifest that no decision was ventured upon.

It is submitted in this memorandum that the opposition to the 7-years course was so general and so sincere, although expressed with modesty and reticence, that the proposal should be abandoned. At the meeting it received no defence even from the Chairman who proposed it or from any member of the Education Committee present. Indeed the Chairman openly disclaimed any responsibility for it.

It is not the present intention to state in detail the argument against the 7-years course, but the following observations are offered:

- I. The proposal had its origin in a meeting of various interests in Chicago, which was attended by two members of the Faculty. The American matriculants from the preparatory schools in the United States were found to be so ill educated, and the schools so inadequate, that some academic attendance in the university was considered necessary. In Canada the Collegiate Institutes are quite as good as the average American University, and final students from these Institutes are as well qualified as graduates from those universities. The educational conditions in the two countries are entirely different. This was not fully appreciated by the old Faculty, and the proposal naturally received a strong support from the members who are graduates of American Universities.

2. Many of the Canadian Collegiate Institutes and Colleges which do not confer degrees give a course which is quite equal to the first two years in some of the Canadian Universities. For forty years the final certificate from some of these schools have given entrance to the second year of McGill Arts Faculty without further examinations. Under the 7-year proposal all such students would be compelled to enter the first year of some Arts Faculty, and no provision is made for those who educate themselves privately.
3. At the meeting in the autumn of 1922 eleven separate references were made by speakers to the necessity of complying with the regulations in the United States, to meet the needs of American students. Every student in the Faculty costs the University 2400 dollars in addition to the fees he pays. This donation to the education of American students should be considered sufficient without wresting the Faculty from its immediate obligation to meet the conditions of Canadian students.
4. In no country in the world, except the United States, is a 7-years course considered advisable.
5. A 7-years course will demand an outlay of 7000 dollars. Men who could pay 4000 were strained to pay 5000; some managed to pay 6000; few can pay 7000 dollars. The medical school will then be the preserve of rich men. This process of selection is a vicious one. Even an especial intellectual selection is useless without a corresponding selection of teachers.

7. No man who is rich enough to spend 7 years in the university is likely to return to the country districts to practice. The strength of McGill has always been in the country practitioner. When he is no longer of McGill then the school will have perished. It is also a matter of pure surmise that the school can ever develop into an institution of abstract scientific medicine, even if that were desirable.
8. Physicists, botanists, zoologists, and chemists are prevented by their very excellence as such from entertaining correct opinions upon the study of medicine. To them these subjects are each an end in itself, a stock in hand, a finished product. To the physician they are merely a means, a raw material, useful only so far as they serve in his profession, - useless unless he can use them. A physician might be a perfect botanist, zoologist, and physicist. By that very perfection his value as a physician would be destroyed.
9. By too prolonged and detached scientific study a man loses his aptitude for medicine, just as a farmer who attends an agricultural college loses his aptitude for farming and becomes a professor of farming.
10. It would appear impossible to find any solution by the present method of enquiry. For more than three years the Council and its Committee has been engaged upon the problem, and the best they can do is to propose a 7-years course. They are unable to decide what is to be done with years 1, 2 and 7. At the first touch of reality the whole fabric of "hospital year," and "pre-medical years" come down. They have not agreed what subjects shall be taught, how, or by whom. Finally, they are mistaken in their doctrine of "the basis

of medicine." The basis of medicine is not in physics and chemistry. That basis is, as it has always been, in the human body, with anatomy and physiology and therapeutics as the means of study.

11. 8. There is consternation over this proposal in the country amongst the graduates. They fear the school may be handed over to men who never see beyond their own laboratories and hospitals. They do not know what, or how long the course is, or what it will cost.

The suggestions of this memorandum is that the teaching of medicine must change with increasing knowledge. To lengthen the course without changing the system is no remedy. To conform with arbitrary licencing arrangements is no remedy. At present the school is fettered by regulations imposed upon it by legislators whose chief concern is to maintain the privileges of the profession.

The business of the School at the moment is to consider afresh what its future policy shall be. There is no evidence that six years or even five years is the correct period of undergraduate study. It is quite certain that a Council as at present constituted is by its very constitution incapable of solving so intricate a problem.

If the 7-year proposal were definitely abandoned this would be the moment to formulate a policy based upon wisdom and not upon expediency<sup>or</sup> limitation. Every teacher should be called upon to offer his ideas in writing. The graduates who will assemble early in June for the Medical Association should be called into conference. The students who are the ones most concerned should be asked to send

instructed delegates. In no other way can the present confusion be ended. This confusion is <sup>universal,</sup> ~~unusual.~~ McGill by its happy Constitution and freedom is the only University that can approach the problem with any surety of success. The first question is not how long shall the course be, but how much shall be taught.

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Bury

March  
Twenty-first  
1921..

Dr. D. W. Mackenzie,  
624 Sherbrooke Street West,  
Montreal.

Dear Dr. Mackenzie:-

Thank you very much for your  
note of yesterday.

I cannot tell you how much I long  
for the greatest possible measure of cooperation  
amongst our teachers and others concerned in the  
success of our Medical School. That such success  
will come I am too much of a Canadian to doubt  
for a moment.

Most cordially reciprocating your  
good wishes, I am,

Ever yours faithfully,

Principal.

DAVID W. MACKENZIE, M. D.  
624 SHERBROOKE ST. WEST.  
MONTREAL.

March 19<sup>th</sup> 1921

Sir Arthur Currie  
Principal, McGill University

Dear Sir Arthur:-

Having listened  
with much interest to your address  
this afternoon, to the teachers of the  
Medical department of McGill, I  
want to congratulate you.

It was certainly to the point,  
- and by following your suggestions  
we will accomplish much.

With heartiest good wishes

Very sincerely yours

D. W. Mackenzie

*Medical Faculty  
Bing*

March  
Twenty-first  
1921.

Dr. A. Howard MacCordick,  
131 Stanley Street,  
Montreal.

Dear Dr. MacCordick:-

I thank you very much for your  
note of yesterday.

I believe that it is possible to  
make McGill the greatest Medical School on this  
continent and one of the greatest in the world.  
By great I do not mean great in number of graduates,  
but in the quality and character of the men we  
turn out. That we shall reach our objective I  
firmly believe, but it can only be reached by all  
of us working wholeheartedly and unselfishly to-  
gether.

Most cordially reciprocating your  
good wishes, I am,

Ever yours faithfully,

Principal.

With the Compliments

of

Professor John Fair

McGill University

Montreal

(Robert  
Recallum)

# The Cultural Value of a University Medical Curriculum\*

BY

JOHN TAIT, M.D., D.Sc.

(Professor of Physiology, McGill University).

WHEN I was a youth our family clergyman told me of a serious moral dilemma which once confronted him in the course of his pastoral work. A poor widow in his congregation had an only son, a ne'er-do-weel, who had run away from home, joined the Army and been drafted off to India. To the mother, a virtuous woman and faithful church attendant, the boy and his welfare was the one consuming interest of life. The clergyman received a communication from the commanding officer of the son's regiment stating that the youth had been killed in a drunken brawl; the letter ended with a request that the news of his death might be conveyed to the mother. This duty was performed by the clergyman, who, however, had well foreseen that the widow would immediately ask how the son met his death. "Do you know what I told her?" he said to me, and the smitten look upon his face as he spoke indicated how far he was from priding himself on his answer. "I told her that *he had been killed in action.*"

This incident stuck in my mind. While doing post-graduate work in Berlin, I one day accidentally ran across an old school companion, X, whom I had not seen for years. X had left school to take Arts and Divinity; I had branched into Science and Medicine: in this way we had lost sight of each other. An unexpected reunion in a foreign city was naturally a pleasure to us both. I was invited that evening to X's rooms (holding a post-graduate scholarship he was

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\* In a recent after-dinner speech the author gave a summary of the views set forth in the present paper. As the summary was perhaps too condensed to be clear, this more extended statement is now circulated for perusal.

studying at the university of Berlin). There, the conversation having drifted towards ethical questions, I told the story of the minister and the widow. "That man did wrong," said X; "he deliberately took the responsibility of deceiving the woman, and he had no right to." X's standpoint was no mere lifeless echo of authoritative moral teaching. As he expounded his attitude one could see that it was the outcome of a long and studied consideration of similar issues, and, fine straight-minded fellow that he was, one could not but respect him in his unhesitating verdict.

Not long afterwards that same evening X suddenly turned to me and said: "By the way, you're a medical man. Tell me, how is it that a drunk man sees double?" The question seemed such a trivial one that at first I was uncertain whether it was seriously put. Perceiving that he expected a formal answer I pointed out the probable explanation, which however seemed to leave X cold. "But," he remonstrated, "I fail to see why the drunk man should not see *three* images, or *four*, or even a greater number still." I explained to him how one could by experiment settle that the number of images depends upon the number of eyes possessed by the intoxicated person. "Look here," persisted X, "it is a case of progression from *one* to *two*, is it not? Well, mathematically speaking, *two* may be derived from *one* in various ways, for example by arithmetical or again by geometrical progression. In any case why should there be a limit? Theoretically speaking, the drunk man should surely see an infinite number of images; that is my point."

It was useless to reason with him or to suggest that he probably stood alone in the assertion that a drunk man does actually see more than two images of one and the same object. After some further discussion I began to perceive how matters stood with X. He had had the originality to note that the double vision of a drunk man involves a problem worthy of inquiry. Whether he had confused the issue with that involved in the multiplicity of self-images that one sees when placed between two large, almost parallel, mirrors, as e.g. in a restaurant, I am unable to say; but in his mind he had constructed an apparent answer to the question, which, being *his own* solution, now meant more to him than even the premisses from which his reasoning started.

As has already appeared, to X the essence of a lie is the intention to deceive, and deliberate deception was abhorrent to him. Yet this fine straightforward type of humanity could evidently do a thing which to a scientifically trained individual counts among the lowest of low actions, viz. exalt a figment of the imagination, something culled from the inner recesses of the brain, above simple accredited facts. The idea of committing an intellectual falsehood had obviously no meaning for X.

As I went home I pondered over the curious fact that when we were at school years before we could interchange ideas on common ground; at that time X understood me and I understood X. Since then we had been subjected to two different intellectual disciplines with the result that our thought processes were now strangely different, so different as to preclude any extensive community of outlook. X had unwittingly revealed to me what appeared to be a great want in his mental furniture. Had I in turn unconsciously betrayed to X some equally important lacuna in my educational equipment?

With this introduction I shall put the question: What, in a wide cultural sense, is involved in the training under our present university medical curriculum? Is it sufficiently liberal? Are we medical teachers warranted in the hope that the graduates we turn out will prove themselves men of education who will do us credit and not bring us into disrepute by some unfortunate oversight in the scope and range of their training? I am the more tempted to put the question having recently heard from more than one mouth the remark that the present-day medical man is one of the worst educated of any professional class. The question would seem to require a considered answer.

The subject matter of the curriculum may be taken under four separate headings.

### 1. THE SCIENTIFIC SIDE.

A good scientific training is far more than a training in useful knowledge. It instils some degree of intellectual honesty. It develops at once power of criticism and power of

generalisation. It helps to teach the value and bearing of evidence and powerfully aids in imparting a detached, non-subjective, judicial attitude in face of all the conflicting "idols of the mind." It has this important distinction from a law training, that it tends to scout rather than to foster authority in the formal sense.

All sciences are not equally valuable as instruments of training in developing the best and most comprehensive form of scientific outlook. It will save discussion if I refer the reader to the illuminating exposition of cultural values involved in the study of the individual branches of science, as set forth by Herbert Spencer in his introductory book "The Study of Sociology." Spencer there points out the inherent defects of a scientific training which is limited to any single related group of sciences. The physical or mathematical sciences preeminently teach the value of experimental evidence and give a feeling for the various influencing "conditions" that modify the course of objective phenomena. The descriptive or classificatory sciences, inasmuch as they deal with static phenomena, provide a training in ideas of order, in the marshalling of innumerable facts into coherent system. The biological group is especially valuable in that the facts brought under review are far more complex than those envisaged in the physical or mathematical sciences.

Bearing these issues in mind one may unhesitatingly affirm that the university course in medicine is superior in its scientific range to that required for qualification for any professional career whatsoever. Nor is the training at any point a superficial one. On the biological side it is wonderfully thorough. A physicist might object that his quarter of the field is inadequately covered, but only if he closes his eyes to the existence of the long course in physiology, followed by that in pathology and in pharmacology. On the classificatory side the medical curriculum might seem at first sight inadequate; one must keep in mind however the bearing of the systematic courses in microscopic and in macroscopic anatomy, in pathology, in medicine and in surgery. Had my friend X had a course in anatomy or in chemistry he would have learned to recognize a fact as a plain fact.

Hitherto I have spoken of science on its purely intellectual side. It does have its human side, in this case not special to itself, but not for that reason overlooked by a good teacher. When we feel tired of things in general, "fessi rerum" as Virgil says, a scientific book is the last resort for relief from ennui; on such occasions, when the times are felt to be out of joint, the purely intellectual can rarely minister to the mind fatigued; on the other hand the biography of scientific men may supply the want. The biographical history of science is a story of human endeavour, of triumph over difficulties, of inventiveness, of constructive originality. In this particular regard it is on all fours with that of any great branch of human interest or activity. It matters not whether we study art, religion, philosophy, law or ethnology, the history of the man who achieves is essentially the same. There is the same driving, all-consuming interest, the same eternal fashioning, creating spirit which fills us with reverent wonder and informs us of the divinity in man. On this question I need say no more (cf. Schuster's British Association presidential address, 1915) except to point out the (for teachers of a biological subject) opportune parallelism between this thing and the growth-impulse as seen in living organisms. Handled with discrimination, instruction in science may on occasion be used to inspire glimmerings of reverence and humility of spirit.

## 2. THE CLINICAL TEACHING.

The task of the clinical teacher is even more complex than that of the teacher of the preliminary sciences and makes a new demand upon his range of culture. Nevertheless—and this shows the infectious and self-propagating effect of true education—the devotion to their work of the clinical as compared with the more exclusively scientific staff of medical universities has often enough been conspicuously prominent. The clinical teachers, to be efficient, must be permeated with the scientific spirit, but they must have something more, and it is this *more* that sometimes supplies them with much of their fervour.

On crossing over from his purely scientific to his clinical studies a student passes from a region in which phenomena are considered objectively to one in which the subjective comes largely into play. He has to deal now with his fellow man, not

merely as a thing composed of connective tissue, of muscles or of endocrine glands, but as a thinking, feeling being, with brothers, sisters, parents, with a wife and children perhaps, with an occupation, a "job" to keep, with financial and other worries; altogether presenting a host of complexities which never disturb the Olympic calm of the chemical, anatomical, physiological or pathological laboratories. Plunged suddenly into this welter of drama and of tragedy the student is keenly responsible to the compelling interest of the novel phenomena and may find it difficult to keep his head amid such distractions. The clinical teacher, alert to the psychological situation, has the duty at once of quickening and of steadying the sympathy of his pupils.

While the first demand involves no serious drain upon the teacher's time, it is none the less vital. It is met largely by his attitude and behaviour towards the patients and by the degree of his interest in their psychological environment. I was once present at a surgical clinique of a world-renowned German professor. The clinique took the form of an operation-demonstration. Four cases that required trephining had been collected in the theatre. Before No. 1 was put under an anæsthetic his symptoms and physical signs were brought under review. Induction of anæsthesia begun, his case was further discussed, a prognosis not too hopeful volunteered, and the projected operation described. The remaining patients meantime showed interest to the extent of their respective ability, the operation being performed in their full view. And so on in turn. Having been trained in a British hospital, I did not go back to this clinic, but, on subsequently learning of the barbarous attitude of some of the medical officers in charge of prison camps in Germany during the war, I called to mind that these officers may have been students under just such teachers, in which case they had at least the justification of high example for their conduct.

Modern educational outlook is characterised chiefly by a greater reliance upon the provision of adequate environment with correspondingly less insistence on the spoken didactic word; an increasing degree of faith in the natural tendency of the mind to grow of itself is the keynote of the change that has of late taken place in educational thought. Long ago in the

Scottish universities an admirable system of "dispensary" training for students was evolved. After some initial experience in hospital work the men are attached for a period to one or other of the various dispensaries throughout the university city. These are partly consulting offices for walking patients, and during consulting hours a qualified teacher is in charge. Requests for home medical visits are also lodged at the dispensaries and these calls are answered by students, who, having a fairly free hand and bearing responsibility to the extent of their own confidence in themselves, are yet within reach of expert advice. The patients, who live in the slums, are poor, often the veriest outcasts of humanity. The close contact with these social wrecks which is involved in medical attendance infallibly works a revolution in a student's mind. First of all comes the unexpected discovery that his patients have the same elemental affections, display the same (or even greater) goodness of heart, show the same response to any act of attention or of kindness as members of the social grade to which the student himself belongs—in short that they are out-and-out *human*. Next in turn comes a spontaneous realisation of the inner content of the phrase "Judge not that ye be not judged," along with a feeling of perplexed and indignant surprise at the indifference which inquires not into these social conditions. This is education in a high sense; so far as the universities are concerned it demands only a particular organisation; the educationally precious thing is, lamentably enough, the social conditions themselves.

But we have followed our student too far along his clinical course, and retracing our steps we must speak of the steady action of the teacher's discipline. Were it not for the objective interest in disease the profession of medicine would be nerve-torturing to the point of impossibility; in this objective interest the practitioner finds a strong antidote to depression. Partly for this reason the considered expenditure of energy of the clinical teacher is all directed towards deepening the channel for the original impulse given by the early scientific teachers. The acquired knowledge is now shown in its application, the acquired habit of mind displayed in its instrumental power. On this subject I need say little more, for we are once again in the realm of objective scientific teaching.

In the preceding evaluation of the part played by the clinical teacher in medical education I have drawn attention to the more complex character of the material handled by him, and to the wider demands thereby made upon his general education. This seems to me necessary for more than one reason. I might perhaps specifically refer to the inadequate conception sometimes entertained by the early scientific teachers of the problem of education as it presents itself to him; nor is the clinician at all times tolerant of the more narrow but sometimes justly assumed outlook of the scientific teachers. Team work is never at its best unless the individual members composing the team have a reasonable conception of the rôle allotted to the other participants.

Under the influence of a well-conducted curriculum the pupils come to realise that medicine is a growing, advancing thing; they derive too a certain sense of the possibilities and lines of direction of future advance; furthermore—and this is vital—they obtain some comprehension of the integration and complexity of the medical organism as symbolised in the different departments of the university faculty, and are brought to see that advance in treatment depends as much upon progress in physiology, pathology etc. as on advance more directly referable to the activity of the clinicians. It is a great initiation into the greatest of all departments of organized progressive research.

The succeeding two headings fall rather under the medical curriculum of the future than under the average existing curriculum. We have however to assess as best we can the trend of developing events.

### 3. PSYCHOLOGICAL TRAINING.

In spite of the variety and extent of work on brain physiology the physiologists are coming to recognize that their methods touch merely the fringe of the problems presented by brain function. Physiological training is of itself inadequate to deal with the subject (in this connexion compare a recent pamphlet by C. S. Myers of Cambridge). Meantime the psychologist, aided at need by the technique of physiology, has opened out a field of medical research of definite value and of even greater promise. More especially during

the war the psychologists have entered the domain of medicine and cured cases of injured brain function by methods exclusively psychological. Confronted with such cases the time-honoured physician of our acquaintance was perplexed and at a loss, his training affording him no *point d'appui*. It is hardly correct to dismiss the problem here presented on the plea that cases of abnormal psychology are numerically negligible. The farther the psychologists proceed with their medical work the more is revealed the prevalence of unsuspected cases of abnormal psychology, which are yet amenable to appropriate treatment. Seeing too that the modern trend of normal psychology, whether purely introspective or experimental, has shifted definitely towards the study of problems of immediate and vital interest to medical men (cf. e.g. Drever's "Instinct in Man"), problems once handled by members of the medical faculty under the title of "physiology" (cf. Unzer's or Alison's "Physiology"), the time has arrived at least to consider whether the medical student in order to have an enlightened view of human conduct and behaviour should not undergo some instruction in psychology.

#### 4. PREVENTIVE MEDICINE.

The case for the wider study of this subject, which has grown up and been organized in considerable measure apart from university impulse or participation, is so completely proved as to require almost no comment. The problem of raising an A1 army from a C3 population can be handled as little by our present type of medical graduate trained exclusively in methods of treatment as by the scientifically raw politician interested chiefly in methods of administration. Preventive medicine is not to be envisaged as a thing simply of drain pipes, of ventilation or of vital statistics; it is medicine on its administrative, i.e. its wide social side. Concerning itself with pre-natal and infant welfare, with the welfare of the school child, with the problem of physical culture equally with that of infection, with all the larger questions of social environment in its influence upon health, it can be adequately taught *only when the instruction is brought into relation with existing organisations dealing with some of its various branches*. A large subject, handled largely (on one

aspect it links hands with the present embryonic but actively developing school of social service), preventive medicine involves a discipline of eminently broadening and activity-quickenning quality.

Our survey complete, let us now ask how such a statement can be made as that the medical man is one of the worst educated of any profession. The only possible answer, apart from uninspired or clumsily organized professional training, is that his pré-medical education has been defective.

## THE PRE-UNIVERSITY EDUCATION.

### I. LANGUAGE.

The great cultural element in the pre-university education is linguistic study. By this is implied not necessarily acquaintance with the classical languages, but primarily and principally a formal study of and some command over the native language.

Consider the question simply in relation to vocabulary. Each new word added to a child's vocabulary stands for a mental advance. A very young child soon comes to appreciate the meaning of words like *my*, *run*, *sit*, *stand*, *hot* etc., and can use them correctly to fit the corresponding experiences. It requires some thought and perhaps some acquaintance with baby children just to realise the complexity of experience that attaches to appropriate use of even such simple words as *my* or *run*, and to appreciate the value of the symbolism involved. Helen Keller records as an epoch in her life the discovery that every object has a name. By his early teens a child has acquired three vocabularies, a speaking, a writing, and a reading vocabulary. They largely overlap, the most poorly furnished being the first, the most extensive the last. Each item in any one of them speaks for a complicated experience. As vocabulary grows in numerical extent its units grow in range of significance. Select a simple word like *blood* and consider the vast range of associations that is gradually built up around this word in the course of a medical curriculum. The same kind of process, relating to a multitude of words, goes on steadily throughout school life.

On another aspect language study is grammar, and grammar is logic. The formal study essential for correct use and appreciation of the mother tongue is a highly complex thing, demanding close and concentrated attention, calling into play the subtlest regions of thought. Even Faraday, as a bookseller's apprentice, in preparation for his unsurpassed experimental career found it necessary to devote hours of leisure to the study of English composition.

The grammar of one's own language is not usually sufficient to develop an adequate logic. G. H. Lewes points out in his "Biographical History of Philosophy" how disadvantageous it was to the Greeks in developing their philosophy to know only one single language, their own. So carefully hidden are the pitfalls in words that the Greeks repeatedly blundered where their successors the Romans, with less inherent aptitude for this branch of inquiry but knowing both languages, were shielded against the errors of their more able predecessors. So it is that we learn our grammar best by comparative contrast with a foreign language—and by far the most effective for the purpose is Latin.

For a future student of medicine Latin of course has a special claim to attention on the vocabulary side, and so for that part has Greek, but the special quality of the Latin language as an instrument for conveying thought involves a mental discipline hard to be extracted in equivalent measure from another tongue. I can well remember the effect of my first introduction to Latin at school. Having as yet studied no foreign language and arguing presumably from the relation between the English tongue and the variant Scottish dialect, I had concluded to myself that (allowing for considerable complication of detail in view of the time consumed in such study) to each letter or to each sound in an English vocable there is a corresponding equivalent in a foreign language, that, in short, translation into a foreign tongue involves essentially a process of transliteration of vocables. The very first contact with "mensa" and its string of inflected cases, the first look at the paradigm of a Latin verb, dispelled for ever this puerile hypothesis and cast a new light upon the subject of language. Had the first studied foreign language

been French or German my a priori conception might not have died such a sudden death.

While Latin provides a superior discipline in the logic of expression, its place can be taken by other languages. The aim is, by whatever means, to gain understanding of and command over the native language.

There is no need here to discuss language on the literary or artistic side. Linguistic study is the one invariable essential for entry into any advanced sphere of intellectual activity whatsoever.

Should anyone accustomed to deal with university examination papers have a lingering doubt as to the merely logical training involved in the formal study of language, let him think of those cases in his experience where grammatical construction is consistently loose; the ideas that struggle for expression are at the same time invariably found to have been inadequately apprehended. Even the thought behind the ungrammatical language is lame, and *it cannot be otherwise*. The bad grammar betrays a feeble sense for the element of precision in such lectures as are heard or in such books as are read; and just as a primary "sensory" aphasia immediately and inevitably produces a corresponding defect not only on the "motor" but on the intellectual side, so inability to appreciate clarity of lecture-room speech is mirrored in the obfuscated thought displayed in an examination test.

## 2. MATHEMATICS.

The subject of next importance in the preliminary training is mathematics. One frequently hears the view expressed that mathematics is a science. Such an assertion however betrays an inherent misconception; *mathematics is primarily and fundamentally a language*, that particular language, namely, to which we have recourse when expressing relationships between things on the quantitative side. It is admittedly of more limited application than the wider and richer symbolism ordinarily denoted by the word "language," but is just as necessary within its own particular sphere.

As evidence that mathematics is a branch of study different from science one might point to the history of development of the subject. Mathematical procedure and principles

were well understood and codified before the scientific idea had found adequate formal expression. Meantime mathematical reasoning had over and over again been applied without avail to the elucidation of subjects falling within the purview of science (one overlooks here isolated instances of success, as in the hands of Archimedes, Gallileo, Kepler). In the case of these unfruitful applications the mathematical principles invoked were unimpeachable; the breakdown occurred owing to inadequate comprehension of the inherent nature and possibilities of mathematics. When Newton in his early twenties, after inventing the differential and the integral calculus, expressed the opinion that such intellectual exercises are unworthy of the serious study of a philosopher, he incidentally emphasized the distinction between the purely mathematical and the scientific, which last involves the painstaking accumulation of accurate numerical data, observational or experimental. Modern textbooks of dynamics in which the constant  $g$  (acceleration due to gravity) is introduced without any account of its experimental history, or in which the principles of hydrostatics are mathematically handled without reference to a single carefully conducted experiment, by implication tend to perpetuate a mediaeval and erroneous conception of the place and function of mathematics. It must always be kept in mind that the physical experiment as such has no place or abode within the domain of mathematical system; the mechanically planned, physical experiment is the new thing that has so vitalised modern inquiry into the facts and operations of Nature. At the same time mathematics is the language *par excellence* in which these facts and operations can be expressed.

But, it may be objected, even granted that mathematics is not a science, it is equally not a language, because of its peculiar function as an instrument for arriving at truth. The distinction here suggested between mathematics and language breaks down on examination. Let the reader consider the following phenomenon, which must have fallen within his experience on more than one occasion. Some new chain of reasoning, let us say, has passed through the mind. It appears sound enough while in its first inchoate form. So soon however as it comes to be set down on paper it is shown up in a

new light. Either the steps of the argument follow in logical order or, what is just as often the case, the formal process of translation into successive syllogisms betrays an unsuspected gap in the thought connexion. Only when we have taken the trouble deliberately to set down each step of our reasoning in formal language do we have the satisfaction of knowing whether it will stand the test. Thus language just as much as mathematics is an instrument for arriving at truth. The statement, so often on the lips of paedagogues, that there is no better way to learn a subject than to teach it, derives its force simply from the fact that teaching imposes upon the teacher the necessity of translating his thought into rigorous language.

Holding a place of secondary importance in comparison with linguistic study, mathematics is an essential pre-requisite for the understanding of any so-called "exact" science. Its sphere of useful application coincides especially with the realm of scientific phenomena (it is for this reason that it tends to be confused with science itself!). As medicine is based on physics and chemistry, which sciences cannot proceed without the mathematical language, so a medical student must have acquired a certain facility in using the language before attending a university course in either of these two basal sciences. Physics and chemistry are not the only pre-medical sciences for understanding of which mathematics is a help. The tendency is for the so-called "natural" sciences (zoology, botany, geology, etc.) gradually to become experimental and then to require mathematical expression, and we can already observe sufficient signs of this general tendency in biology.

Just as a business man engaging a clerk has a right to expect of any applicant a certain minimal mathematical knowledge (to the extent of ordinary school arithmetic), so teachers of the pre-medical sciences are entitled to ask that their students should come to them with a certain degree of manipulative skill over algebraical and trigonometrical formulae. Physics and chemistry can then be better taught, the physiologist and pathologist in turn reap the benefit, and the standard of precision is raised throughout the curriculum.

## WHAT IS OUR POLICY TO BE?

A significant development has recently begun in medical education in Great Britain. A few weeks ago the Scottish universities decided to raise the standard required for entry into Medicine to that required for entry into a Scottish faculty of Arts or of Science, which last standard has long been high. Hitherto the preliminary standard of education required for Medicine has been low throughout Great Britain. The English medical universities will no doubt follow the Scottish lead, in which case, the grade of preliminary qualification demanded for entry into Medicine will be raised throughout the length and breadth of the country.

Considering the mental demands made upon a student in the course of a medical curriculum, inefficient preliminary preparation is a drag all along the line. The medical teachers may be of the best, but this will avail little if their examination standards have to be lowered to suit an inferior and halting grade of intellectual equipment.

The preliminary education is a *pre-stage*; it involves questions which are best understood and can be best handled by an Arts faculty. The assumption of such duty by a medical faculty implies want of faith in the educational curriculum pursued elsewhere in the university; it not only tends towards antagonism between faculties, thus destroying co-ordinate university spirit, but it incidentally drives away from Medicine the very men who should by every means be encouraged to enter the curriculum, viz. the Arts graduates. There are unfortunate cases, e.g. where great spatial separation exists between the Arts and medical faculties of a university, in which a medical faculty may be forced to take on the duty of providing adequate pre-medical education; even then a sufficient linguistic and mathematical grounding must *precede* the serious study of science.

Lastly, let us consider the matter wholly on the administrative side. If the average standard of high school education in Canada is not as yet sufficiently advanced to allow a boy to pass straight from school to the study of the pre-medical sciences in a university, it follows that the Arts faculties of the various universities must receive *their* students in an equally

unprepared condition. The Arts faculties have under the circumstances to supply at present to their first-year students what is after all only higher school education; and the accommodation in an Arts faculty of medical students as well is simply a question of extra space and of extra staffing, there being no question of additional laboratory equipment. And here comes the crux of the question. If the preliminary non-scientific instruction necessary for Medicine is handled as a thing by itself, in advance of the scientific education, the better higher-grade schools are provided with a strong inducement to strive to send forward their prospective medical students sufficiently prepared to dispense with the additional year or two years in Arts. Should however a medical faculty decide inextricably to intermingle preliminary non-scientific with pre-medical scientific instruction, the more deserving schools are to that extent discouraged, for in these circumstances no amount of higher linguistic and mathematical training can save a university year to such of their pupils as wish to study Medicine. When one considers how vital it is for the universities to give encouragement to the schools, one realises what a fatal policy it would be, and how harmful to the best interests of national education, for a medical faculty to embark upon a hybrid type of curriculum.

November 10th, 1919.

REPORT OF COMMITTEE ON REORGANIZATION  
OF  
MEDICAL AND SURGICAL SERVICES.

Your Committee has studied the three reports and the Substance of the general discussion of the Medical Board at a meeting on February 6th. 1923, and submits the following plan of reorganization:-

SURGICAL SERVICE:-

1. There shall be two continuous services, each with an Attending Surgeon in Charge.
2. In addition to the Attending Surgeon in Charge the Staff of each service shall consist of:-
  - Attending Surgeon or Surgeons.
  - Associate Surgeons.
  - Assistants in Surgery.
  - Junior Assistants in Surgery.

The number of Attending Surgeons, Associate Surgeons, Assistants and Junior Assistants in Surgery shall be determined by the Medical Board.

These appointments shall be made in accordance with the present Bylaws governing the appointment of Attending Surgeons, Surgeons to the Outpatient Department, Assistants and Junior Assistants respectively.

3. Each service shall be composed of an Indoor and an Outdoor Department.  
In the Outdoor Department the two services shall be in charge on alternate week-days and either an Attending or an Associate Surgeon shall be on duty at each clinic.
  4. The principle of continuity of care of the patients shall be maintained by admission and discharge to and from the Indoor and Outdoor Departments of each service.
  5. The Surgical Staff shall have regular meetings at least once a month.
- X The Chairman of the Surgical Staff shall be the Ranking Teacher in Surgery in this Hospital.

MEDICAL SERVICE:-

1. There shall be two continuous services, each with an Attending Physician in Charge.
2. In addition to the Attending Physician in Charge, the Staff of each Service shall consist of:-
  - Attending Physician or Physicians.
  - Associate Physicians.
  - Assistants in Medicine.
  - Junior Assistants in Medicine.

These appointments shall be made in accordance with the present Bylaws governing the appointment of Attending Physicians, Physicians to the Out-Patient Department, Assistants and Junior Assistants respectively.

The number of Attending Physicians, Associate Physicians, Assistants and Junior Assistants in Medicine shall be determined by the Medical Board.

3. Each service shall be composed of an Indoor and Outdoor Departments.  
In the Outdoor Department the two services shall be in charge on alternate week-days, and either an Attending or an Associate Physician shall be on duty at each clinic.
4. The principle of continuity of care of the patient shall be maintained by admission and discharge to and from the Indoor and Outdoor Departments of each service.

5. The Medical Staff shall have regular Meetings at least once a month.

X The chairman of the Medical Staff shall be the ranking teacher in Medicine in this Hospital.

CONSTITUTION OF THE MEDICAL BOARD.

All member of the Attending Staff above the rank of Junior Assistant shall have a seat on the Medical Board.

The Medical Board shall meet at least twice a year.

The Council of the Medical Board shall consist of the two Attending Physicians in Charge, The two Attending Surgeons in Charge, the Cynaecologist, the Orthopaedist, the Ophthalmologist, the Oto-Laryngologist, the Urologist, the Pediatrician, the Neurologist, the Dermatologist, the Pathologist, the Radiologist and the Physiotherapist, and the Superintendent of the Hospital.

The Council shall meet monthly.

The Council shall have such duties as at present appertain to the Medical Board.

(Signed) Alfred T. Bazin

Convener.

66

14/3/21

PROPOSED PLAN FOR REORGANIZATION OF FACULTY OF MEDICINE.

-----oOo-----

From amongst the teachers in Medicine there shall be two officially constituted bodies:-

- 1. The Faculty
- 11. The Council.

From these there shall be selected Committees,  
(a) Standing,  
(b) Special.

The Standing Committees shall be,  
1. The Executive Committee,  
2. The Education Committee,  
3. The Library Committee

The Special Committees shall be,  
1. The Committee on Appointments,  
2. Such other special committees as may from time to time be deemed necessary.

THE FACULTY.

- (1) The Faculty shall consist of those members of the Teaching Staff having the rank of Professor, Associate, Assistant, or Clinical Professor, and Lecturer. Emeritus Professors may also be included.
- (2) The Principal of the University shall be the Chairman of the Faculty, and in his absence, the Dean. Should neither of these be present the Chair shall be taken by the Senior Member.
- (3) The Faculty shall meet at least three times during the Session, at the call of the Principal or of the Dean.
- (4) Its function shall be to discuss all matters pertaining to Education (graduate and undergraduate studies; general educational policy, including methods of teaching; curriculum, etc.)
- (5) It shall be responsible to the Council and shall refer all questions to that body for final decision.

THE COUNCIL.

The Council shall consist of the following Members,-

- 1. The Professors of Biology, Chemistry and Physics.
- 2. The Professor of Anatomy,
- 3. The Professor of Physiology,
- ~~The~~ 4. The Professor of Bio-Chemistry
- 5. The Professor of Pathology and Bacteriology,
- 6. The Professor of Hygiene,
- 7. The Professor of Pharmacology,
- 8. The Professor of Medical Jurisprudence.

9. The titular head of Medicine, who at the same time shall be Chief of Clinic in one Hospital.
10. The Chief of Clinic in Medicine in the other Hospital, who shall at the same time have full Professorial rank,
11. The titular head of Surgery, who at the same time shall be Chief of Clinic in one Hospital,
12. The Chief of Clinic in Surgery in the other Hospital, who at the same time shall have full Professorial rank,
13. The Professor of Obstetrics and Gynecology,
14. The Professor of Oto-Laryngology,
15. The Professor of Ophthalmology,
16. The Dean, and the Assistant Dean, if not included in the above list.

-----oOo-----

- (1) The Dean of the Faculty shall be the Chairman of the Council and in his absence the Senior Member present.
- (2) The Council shall meet at least four times during the Session, or more frequently if deemed necessary, at the call of the Dean or the Assistant Dean.
- (3) The Council shall be the Executive of the Faculty and shall conduct its business.

#### STANDING COMMITTEES.

1. The Executive Committee The Executive Committee shall be appointed by the Council, and shall consist of, the Dean, the Assistant Dean (Chairman) and three others of its Members.

It shall hold weekly meetings or at the call of the Chairman as frequently as may be deemed necessary.

It shall transact all the business of the Faculty except that which is concerned with appointments, or which may involve a change in any policy of the Faculty.

The Executive Committee shall be responsible to the Council and shall report to that body. It shall also prepare the business for the ordinary meetings of the Council.

2. The Education Committee: This Committee shall consist of ten members, to be chosen from amongst the members of the Faculty. It shall meet at least once every fortnight and shall consider such matters as may be referred to it by the Faculty, the Council, or the Executive Committee.

It shall report the results of its deliberations to the Faculty and shall prepare all the business of the meetings of that body.

3. The Library Committee: This Committee shall consist of not more than seven members, to be selected from amongst the Members of the Faculty. It shall consider all matters pertaining to the Medical Library and shall report to the Faculty.

SPECIAL COMMITTEES.

The Committee on Appointments: This Committee shall consist of the Principal, the Dean, the Assistant Dean, and two other Members of the Council, chosen by the Principal.

These two members shall be changed from time to time, according to the nature of the appointment to be made.

This Committee shall have the power to recommend to the Governors for appointment, all full professors, heads of departments.

It shall, after consultation with the heads of the different departments, recommend to the Governors all other appointments down to and including Lecturers.

All appointments below the rank of Lecturer shall be made by the Council on the recommendation of the head of the department concerned.

Other Special Committees: These shall be appointed by the Faculty, the Council, or the Executive Committee, as occasion may arise.

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143

Faculty of Medicine, McGill University,  
Dean's Office,

Montreal, December 14th, 1921.

Sir Arthur Currie,

Principal,

McGill University.

Dear Sir Arthur,

I am sending down half a dozen copies of the proposed plan of reorganization of the Medical Faculty, This is completely revised and brought up to date and was passed by the Faculty at its last meeting and is now forwarded to the Governors for their approval.

Yours very sincerely,

*Geo. W. Seave*  
Assistant Dean.

*msf*

15/12/21,

PROPOSED PLAN FOR REORGANIZATION OF FACULTY OF MEDICINE.  
-----oOo-----

From amongst the Teachers in Medicine there shall be two officially constituted bodies:-

1. The Faculty,
11. The Council.

From these there shall be selected Committees,-

- (a) Standing,
- (b) Special.

The Standing Committees shall be,-

- i. The Executive Committee,
- ii. The Education Committee,
- iii. The Library Committee,
- iv. The Building Committee.

The Special Committees shall be,-

Such Committees as may from time to time be deemed necessary.

THE FACULTY:

1. The Faculty shall consist of Emeritus Professors, and all those Members of the Teaching Staff having the rank of Professor, Associate, Assistant, or Clinical Professor, and Lecturer.

2. The Principal of the University shall be the Chairman of the Faculty and in his absence, the Dean. Should neither of these be present the Chair shall be taken by the Senior Member.

3. The Faculty shall meet at least three times during the Session, on dates to be chosen and published in the Calendar, or at the call of the Principal or Dean.

4. Its function shall be to discuss all matters pertaining to Education (graduate and undergraduate studies; general educational policy, including methods of teaching; curriculum, etc.)

5. The recommendations of the Faculty shall be referred to the Council for final decision.

THE COUNCIL:

The Council shall consist of the following Members,-

1. The Senior Professor of Botany,
2. The Senior Professor of Zoology,
3. The Senior Professor of Chemistry,
4. The Senior Professor of Physics,
5. The Professor of Anatomy,
6. The Professor of Physiology,
7. The Professor of Biochemistry,
8. The Professor of Pathology and Bacteriology
9. The Professor of Hygiene,

10. The Professor of Pharmacology,
11. The Professor of Medical Jurisprudence,
12. The Osler Librarian,
13. The titular head of Medicine, who at the same time shall be Chief of Clinic in one Hospital,
14. The Chief of Clinic in Medicine in the other Hospital, who shall at the same time have full Professorial rank,
15. The titular head of Surgery, who at the same time shall be Chief of Clinic in one Hospital,
16. The Chief of Clinic in Surgery in the other Hospital, who at the same time shall have full Professorial rank,
17. The Professor of Obstetrics and Gynaecology,
18. The Professor of Oto-Laryngology,
19. The Professor of Ophthalmology,
20. The Dean and the Assistant Dean, if not included in the above list.

-----oOo-----

(1) The Principal shall be the Chairman of the Council and in his absence, the Dean.

(2) The Council shall meet at least four times during the Session, on dates to be selected and published in the Calendar, or at the call of the Dean or the Assistant Dean.

(3) The Council shall be the Executive of the Faculty and shall conduct its business.

#### STANDING COMMITTEES:

1. The Executive Committee: The Executive Committee shall be appointed by the Council, and shall consist of, the Dean, the Assistant Dean (Chairman), and three others of its Members.

It shall hold weekly meetings, or, at the call of the Chairman as frequently as may be deemed necessary.

It shall transact all the business of the Faculty except that which is concerned with appointments, or which may involve a change in any policy of the Faculty.

The Executive Committee shall be responsible to the Council and shall report to that body. It shall also prepare the business of the ordinary meetings of the Council.

2. The Education Committee: This shall consist of not less than seven members, to be appointed by the Council from amongst the Members of the Faculty.

3. The Library Committee shall consist of not less than seven members, to be selected by the Council from amongst the Members of the Faculty.

4. The Building Committee shall consist of not less than five members, to be selected by the Council from amongst its members. This Committee shall have charge of the New Medical Building and also of the Biological Building at present under construction.

#### SPECIAL COMMITTEES:

Special Committees may be appointed by the Faculty, or the Council, to deal with such special questions as may arise from time to time.

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THE REQUIREMENTS FOR THE DEGREE OF B.Sc (Med) AS NOW PROPOSED.

(a) Honours in the examinations in the Medical Course in any two of the following subjects: Anatomy (including Embryology and Histology), Physiology, Biochemistry, Pharmacology and Pathology. The two subjects selected may be termed the minor subjects.

(b) High standing in another of these subjects (which may be called the major subject), obtained in special examinations held in the final year of that subject in the course to the M.D. degree, examinations demanding a much wider and more thorough knowledge of the subject than is exacted of the student to obtain honour standing in a minor subject.

To enable the candidate for the degree to qualify for the special examinations in his major subject, courses of instruction over and above of those now provided for in the course for the degree of M.D. must be given by the staff in the Department concerned, which additional courses should involve not less than two hundred and fifty hours. These may be given in the final year of that subject in the undergraduate medical course.

If the candidate for the degree selects biochemistry as his major subject, he must, to qualify, have taken honour standing in the examinations in Chemistry of the Second Year.

The Candidate for the degree should have a reading knowledge of French and German, and his general attainments, as shown by his record in the class lists, in the undergraduate medical course must be distinctly above those of the average student.

It may be pointed out that the number of hours of instruction in the fourth year of the Seven Years' Medical Course, so far arranged for, is considerably below that scheduled in any of the years and, therefore, it may be assumed that provision can be made in the time table for that year for the special courses of instruction in Anatomy, Physiology, Biochemistry, when these are taken as major subjects by candidate for the degree.

In conclusion, it may again be urged that, if the B.Sc.(Med.) degree can be awarded to students in course for the M.D. degree on their fulfilling the requirements outlined above, a considerable proportion of each class will, in the earlier years of the course, with the attainment of this degree in view, be stimulated to work harder, to take a keener interest in their studies and, eventually, in the case of some of them at least, prompted by their attainment in one of the Medical Sciences, to enter on a career which may bring distinction to the University.

MEDICAL FACULTYReorganization of Clinical Teaching

The medical boards of the hospitals appointed the following gentlemen their representatives to discuss with representatives of the university plans for securing better cooperation and co-ordination of clinical teaching :

<u>Montreal General Hospital</u> :	Drs. H. A. Lafleur, E. von Eberts and G. Mathewson.
<u>Royal Victoria Hospital</u> :	Drs. C. F. Martin, W. W. Chipman, and E. F. Archibald.
<u>Maternity Hospital</u> :	Drs. D. J. Evans and H. M. Little
<u>Alexandra Hospital</u> :	Drs. A. D. Blackader and H. B. Cushing.

Several of the above-named representatives, and other members of the teaching staff in Medicine, having expressed a strong desire that a meeting of the representatives should be held before Mr. Vaughan left Montreal, they were asked to meet him on the evening of Saturday, the 2nd March, 1918. In addition to the above-named gentlemen Colonel Birkett, the Dean of the Faculty, was invited to attend, as well as Dr. Certel, representing the laboratories.

There were present at the meeting besides Mr. Vaughan, Colonel Birkett, Drs. Lafleur, Chipman, Evans, W.F. Hamilton, von Eberts, Cushing, and Certel.

Mr. Vaughan explained the reason for calling the meeting, and stated that the Board of Governors had appointed the Principal, with Mr. A. J. Brown and Mr. John W. Ross, to act as

SCHEME FOR A MEDICAL CURRICULUM (Preliminary)

1. In view of:
  - a. the limitations of our present system of preliminary education, and
  - b. the demands of medical training,it seems to be imperative that the education of a medical man should occupy at least seven years after leaving a high school.
2. These should be divided as follows:
  - a. Two years premedical training
  - b. Five years medical training, of which one year should be devoted to 'interne' hospital work.

-----oOo-----

Standard of admission: a matriculation consisting of:  
English,  
History,  
Latin,  
Elementary Mathematics  
Either French, German or Greek  
Either Chemistry, Physics, Botany or Geography,  
or its equivalent.

TWO PREMEDICAL YEARS: These should be given in a Faculty of Arts, and where conditions permit, under the supervision of a Faculty of Medicine.  
(There would seem to be no valid reason why a satisfactory course definitely known as a "Premedical Course" could not be offered by the Faculty of Arts at McGill. All of the professors at present teaching the premedical subjects in this faculty are members of the Faculty of Arts.)

YEAR I: Latin, English, Mathematics including Mechanics, Elementary Chemistry, and either Greek, French or German.

Standard for entrance to Year II:

- a. Having passed the examinations of Year I.
- b. An examination equivalent to the above, e.g. as graduate or student of any acceptable college.

YEAR II: Chemistry, Inorganic and Organic  
All Biology  
All Physics, except Mechanics taken in Year I.

-----oOo-----

FIVE MEDICAL YEARS:

Standard for entrance to the purely medical part of the course:

- a. having passed the examinations of the second pre-medical year,
- b. having passed elsewhere an equivalent examination,
- c. a graduate B.A. or B.Sc. who has had an equivalent amount of Chemistry, Physics and Biology.

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SCHEME FOR MEDICAL YEARS.

- YEAR I: PRIMARY MEDICAL:  
Anatomy, General  
General Physiology (first term)  
Physiology (second term)  
Physiological Chemistry
- YEAR II: PRIMARY MEDICAL:  
Anatomy, advanced  
Physiology  
Bacteriology and General Pathology
- YEAR III: Didactic and CLINICAL  
Clinical Medicine,  
Clinical Surgery  
Gynaecology & Obstetrics  
Special Pathology  
Medical Jurisprudence & Hygiene  
Pharmacology & Therapeutics  
Mental Diseases (?)
- YEAR IV: DIDACTIC & CLINICAL:  
Clinical medicine  
Clinical Surgery,  
Gynaecology & Obstetrics,  
Special Pathology,  
Clinical Therapeutics  
Mental Diseases (?)  
Ophthalmology  
Oto-laryngology,  
Pediatrics.
- YEAR V: HOSPITAL RESIDENTIAL YEAR:

It is particularly to be desired that the question of details concerning the actual distribution of subjects and number of hours devoted to each should not baulk due consideration of the main advantages of the scheme, which it is suggested are:

1. The insistence upon a higher standard of non-scientific preliminary education.
2. Granted such higher standard, a condensation of the purely medical part of the course.
3. The reservation of the whole of the fifth, or final, year for non-didactic 'interne' hospital work.
4. The admission of a suitably prepared B.A., or B.Sc. graduate direct into the first medical year so that they can qualify in five years.

SUMMARY:

Matriculation on entrance  
First pre-medical year: cultural and partly scientific  
Second pre-medical year: scientific  
First medical: Primary medical  
Second medical: do.  
Third Medical: Didactic and clinical  
Fourth Medical: do.  
Fifth Medical: Hospital interne.

McGILL UNIVERSITY

MONTREAL.

FACULTY OF ARTS.

OFFICE OF THE DEAN.

April 29, 1920.

Dr. F.D. Adams,  
Acting Principal,  
McGill University.

Dear Dr. Adams,

I find that you desired to have  
Dr. Birkett's letter and scheme in regard to the  
seven years course in Medicine returned to you,  
which I do herewith.

Yours very truly,

*Chas. E. Moore,*

Dean

Encls.

Faculty of Medicine, McGill University,  
Dean's Office,

Montreal, ..... March 24th, 1920 .....

Prof. F. D. Adams,

Acting-Principal, McGill University.

Dear Mr. Principal,

I am enclosing herewith a scheme for a new medical curriculum which has been drawn up and approved of by the Education Committee of the Faculty of Medicine.

It is to be noted that the opinion of the Education Committee is that the pre-medical work should be given in the Faculty of Arts and I am writing now to ask if you will have this placed before the proper authorities and an opinion expressed with reference to this question at as early a date as possible as the Faculty of Medicine is desirous of considering this new curriculum at its next meeting.

Yours sincerely,

*H. S. Birkett.*

Dean.

File

Faculty of Medicine, McGill University,  
Dean's Office,

Montreal,..... March 7th, 1921

Sir Arthur Currie, G.C.M.G.  
Principal, McGill University.

Dear Sir Arthur,

Your letter of the 28th ult. to Dean Birkett, dealing with the matter of the Faculty organization, was considered by our Executive Committee Friday afternoon. At this meeting I suggested that this would be a good time to take up the whole question of the Constitution of the Faculty and made a tentative proposition along the lines included in the enclosed memo.

I may say that this was drawn up hurriedly, as I am now leaving for Chicago, and practically only offers a basis for suggestions. The Committee will consider the whole question at a meeting to be held March 15th on the return of Dr. Armstrong and myself. I may say incidentally that the proposed plan would do away with the present Associate Faculty.

I will be glad if you will give this your consideration and let me know if you think there is any good in the suggestions made.

Yours sincerely,

*Geo. W. Seave*

Assistant Dean.

*MSB*

7/5/21

PROPOSED PLAN FOR REORGANIZATION OF THE FACULTY OF MEDICINE.

-----oOo-----

(1) That the term "Faculty of Medicine" shall in future apply to all teachers in the Faculty from, and including, the rank of Lecturer up. This would at present mean about eighty members.

(2) That a second body be constituted which shall be known as the "Council of the Faculty", this body to consist of all members of the teaching staff of Professorial Rank, heads of departments concerned in the teaching of the purely medical subjects. (This would exclude the heads of departments concerned in teaching such subjects as Biology, Chemistry and Physics, etc.)

(3) An "Executive Committee" as at present constituted.

The duties of these bodies would be,-

- (A) , The Faculty - to deal with all questions of curriculum and the broad general educational problems;
- (B) , The Council - to deal with other questions, such as appointments, salaries, etc., to receive and deal with reports of the Executive Committee and to forward such reports as deemed proper to the larger body, or Faculty;
- (C) The Executive Committee - to carry on the ordinary business of the Faculty as at present.

-----oOo-----

This outline, owing to shortness of time, has been hurriedly drawn up and contains only suggestions. Other suggestions to be considered would be the question of representation on the Council of heads of departments in the General and Royal Victoria Hospitals as the case may be.

14/3/21

PROPOSED PLAN FOR THE REORGANIZATION OF THE FACULTY OF MEDICINE.

-----oOo-----

From amongst the teachers in Medicine there shall be two officially constituted bodies:-

1. The Faculty,
11. The Council.

From these there shall be selected Committees, (a) Standing, and (b) Special.

The Standing Committees shall be:

1. The Executive Committee,
2. The Education Committee,
3. The Library Committee.

The Special Committees shall be:

1. The Committee on Appointments,
2. Such other Special Committees as may from time to time be deemed necessary.

THE FACULTY.

(1) The Faculty shall consist of those members of the Teaching Staff having the rank of Professor, Associate, Assistant, or Clinical Professor, and Lecturer. Emeritus Professors may also be included.

(2) The Principal of the University shall be the Chairman of the Faculty, and in his absence, the Dean. Should neither of these be present the Chair shall be taken by the Senior Member present.

(3) The Faculty shall meet at least three times during the Session, at the call of the Principal or of the Dean.

(4) Its function shall be to discuss all matters pertaining to Education (graduate and undergraduate studies; general educational policy, including methods of teaching; curriculum, etc.).

(5) It shall be responsible to the Council (?) and shall refer all questions to that body for final decision. //

THE COUNCIL.

The Council shall consist of the following members:-

1. The Professor of Anatomy,
  2. The Professor of Physiology ,
  3. The Professor of Bio-Chemistry,
  4. The professor of Pathology and Bacteriology,
  5. The Professor of Hygiene,
  6. The Professor of Pharmacology,
  7. The Professor of Medical Jurisprudence,
  8. The titular head of Medicine, who at the same time shall be Chief of Clinic in one Hospital,
  9. The Chief of Clinic in Medicine in the other Hospital, who shall at the same time have full Professorial Rank,
  10. The titular head of Surgery, who at the same time shall be Chief of Clinic in one Hospital,
  11. The Chief of Clinic in Surgery in the other Hospital, who at the same time shall have full professorial rank,
  12. The Professor of Obstetrics and Gynaecology,
  13. The Professor of Ophthalmology,
  14. The professor of Oto-Laryngology,
  15. The Dean, and the Assistant Dean, if not included in the above list.
- 

*Chemistry*  
*Physics*  
*Botany*  
*Zoology*

(1) The Dean of the Faculty shall be the Chairman of the Council and in his absence the Senior Member present.

(2) The Council shall meet at least four times during the Session, or more frequently if deemed necessary at the call of the Dean or the Assistant Dean.

(3) The Council shall be the Executive of the Faculty and shall conduct its business.

STANDING COMMITTEES.

1. The Executive Committee: The Executive Committee shall be appointed by the Council, and shall consist of, the Dean, the Assistant Dean (Chairman), and three others of its members.

It shall hold weekly meetings, or at the call of the Chairman as frequently as may be deemed necessary.

It shall transact all the business of the Faculty except that which is concerned with appointments, or which may involve a change in any policy of the Faculty.

The Executive Committee shall be responsible to the Council and shall report to that body. It shall also prepare the business for the ordinary meetings of the Council.

2. The Education Committee: This Committee shall consist of ten members to be chosen from amongst the members of the Faculty. It shall meet at least once every fortnight and shall consider such matters as may be referred to it by the Faculty, the Council, or the Executive Committee.

It shall report the results of its deliberations to the Faculty and shall prepare all the business of the meetings of that body.

3. The Library Committee: This Committee shall consist of not more than seven members, to be selected from amongst the members of the Faculty. It shall consider all matters pertaining to the Medical Library and shall report to the Faculty.

SPECIAL COMMITTEES.

The Committee on Appointments: This Committee shall consist of the Principal, the Dean, the Assistant Dean, and two other members of the Council, chosen by the Principal.

These two members may be changed from time to time, according to the nature of the appointment to be made.

This Committee shall have the power to recommend to the Governors for appointment, all full professors, heads of departments.

It shall, after consultation with the heads of the different departments, recommend to the Governors all other appointments down to and including lecturers.

All appointments below the rank of lecturer shall be made by the Council on the recommendation of the head of the department concerned.

Other Special Committees: These shall be appointed by the Faculty, the Council, or the Executive Committee, as occasion may arise.

Toronto, March 10th, 1921

The Annual Conference between the Medical Faculties of the Universities of McGill and Toronto was held to-day at Toronto University.

There were present, representing McGill, - Professors Armstrong, Scane and Tait,

representing Toronto, - Dean Primrose, Associate Dean Macleod, Professors Wishart, Graham, Rudolf, FitzGerald, Mackenzie, MacCallum, McMurrich McLennan, Clarke, Watson, Goldie, Hunter, Henderson, Bensley Allan, Harding, and Dr. Ryerson, Secretary.

1.....The Minutes of the previous meeting were read and approved.

2.....The Raising of the Standard of Entrance was introduced by Dr. Ryerson reading the new regulations for 1921 and for 1922, as issued in a circular by the Registrar of the University of Toronto. It was pointed out how this action was expected to result in a reduction and limitation of the number of students.

Professor Tait described the steps taken by McGill University and pointed out the difficulties of requiring Honour Matriculation on account of the schools of Quebec not being equipped to undertake such advanced instruction. The action of McGill in requiring a student to take one year in Arts at a college or university would practically correspond to our Honour Matriculation standard. They felt this step was advisable in view of the number of students they got from the United States and the Eastern Provinces,

Professor Macleod thought that in the transfer of students from McGill to Toronto or vice versa we should try to live up to the spirit of the regulations rather than the letter.

Moved by Professor Scane,  
Seconded by Professor Mackenzie,

That Pass Matriculation in Quebec and First Year Arts McGill, as required by the Faculty of Medicine be considered as equivalent to Pass Matriculation and Honour Matriculation in Ontario, students being accepted by either University for the purpose of transfer after they have completed the first year in Medicine, without requiring the making up of any subjects or parts of them which have not been covered.

Carried.

3.....Standing of Undergraduates from other Canadian Universities

The framing of a resolution to cover the action of the two Universities (McGill and Toronto) was left to Doctors Scane Mackenzie and Ryerson.

4.....Standing of Graduates from other Canadian Universities

The Secretary read the following resolution adopted by the University of Toronto for British Columbia and Saskatchewan.

British Columbia:- That Graduates of this University be granted exemption from the first year of the Six Years' Course in this Faculty, provided they have taken the following courses at the University of British Columbia:-

Chemistry - Courses 1 and 2.

Biology - Distinction Course including laboratory in Mammalian Anatomy.

Physics - Courses 1, 2 and 3

4...(Con)

Saskatchewan:- "That graduates of this University be granted exemption from the first year of the Six Years' Course of this Faculty, provided they have taken the following courses which correspond to Course 2 as set forth in their communication, viz:-

Chemistry, Courses 1, 2a, 3b.  
Physics - Course 1, with Mathematics Course 1  
Biology - Courses 1 and 11 (eleven)

This University requested that students who have taken Courses 1 and 3 as outlined in this communication be granted exemption from the first two years of the Six Years' Course in this Faculty.

The Faculty ruled that it would be impossible to grant students who have taken the above mentioned courses exemption from the work of the second year of the Six Years' Course in view of the fact that in neither course is the subject of Anatomy covered. Even though credit be given for the course in Biochemistry as suggested, this could not allow sufficient time for the subject of Anatomy to be covered. It was also to be pointed out that in course 3 laboratory work in Organic Chemistry would not be covered by students of the University of Saskatchewan taking this course. It might be pointed out to them, however, that students who had taken either course 1 or 3 would be granted exemption from the first year of the Six Years' Course".

It was pointed out that in both Universities graduates from other Canadian Universities would take nine years before graduating in Medicine.

It was decided that graduates from other Canadian Universities be considered by each Faculty: that any action taken be communicated to each other and that this matter be one of the subjects for discussion at the next conference.

Dr. Scane brought up the question of acceptance of graduates in Medicine from other Universities. At McGill these men are required to pass examinations in all subjects and then attend the final year and pass the examination before they could receive a degree from McGill.

At Toronto many men of this type have been refused the opportunity of entering the University.

Moved by Professor Scane,  
Seconded by Professor Mackenzie,

That except in cases where reciprocity exists, students making application for advanced standing into either institution shall be required to pass examinations (written, oral or both) in at least two subjects of the year or years previous to that which he seeks to enter.

5.....Limitation of Students. Professor Macleod explained what steps had been taken in Toronto in this regard and the former resolution was reaffirmed.

It was pointed out that authority had been received from the Senate to limit the students next year to a definite number and that in 1923 it is expected the standard of Honour Matriculation will materially reduce the number applying.

6.....Hygiene and Public Health, Including Industrial Hygiene

Professor FitzGerald outlined the work being done in Industrial Hygiene in large corporations. He stated that his department is more interested in this from a public health standpoint rather than that of Medical or Surgical Industrial Work. He did not think that the field for Industrial Hygienists was sufficiently great at the present time to warrant special courses being introduced to qualify men from a Public Health standpoint.

Question of separating Industrial Hygiene from Public Health work for the undergraduate was discussed. Dr. Scane did not think that they should be separated but that the two should be given as one course.

No action was taken on this question.

7.....Optional Courses in Final Years - Considerable discussion took place on this subject. Professor Tait did not think a similar Optional System could be introduced at McGill on account of the time table being so full and also the difficulty of providing instructors for the Optional Courses.

8.....Seven Years' Course at McGill.- Dr. Scane outlined the new course as they proposed to carry it out at McGill after 1923. The course would consist of two pre-medical years, four years pure medicine and one Hospital year. The distribution of the subjects would be:-

First Year....General Arts Course.

Second Year...Premedical Sciences - Physics, Chemistry and Biology.

Third & Fourth

Year.....Fundamental Medical Sciences, Anatomy, Physiology and Physiological Chemistry.

Fifth and

Sixth Years...Pathology, Pharmacology and the Clinical Subjects.

Seventh Year..Hospital Year.

McGill were taking this step so that there would be no difficulty in their students being accepted by State Boards for Licensure in the United States.

The question of transfer of students was discussed in view of the two different courses at Toronto and McGill and the feeling was that no serious barrier would be raised to such transference at various stages of the course.

Professor Macleod thought that Toronto could overlook any deficiency in Optional subjects in view of the year in Arts which students at McGill would have at the beginning of their course.

9.....Dr. Scane submitted the regulations for the Degree of B.Sc(Med) as proposed at McGill as follows:-

(1) With a view to encourage further study of the more strictly medical sciences the degree of B.Sc(Med) has been instituted.

(2) The major subject for this degree may be any one of the following:-

anatomy, including Embryology and Histology  
Physiology, or General Physiology  
Biochemistry  
Pharmacology  
Pathology

In these various subjects special advanced courses are provided.

(3) To obtain the degree an additional year of advanced study apart from the time given to his medical curriculum, is required of each candidate.

(4) The degree is open to:- (1) Medical graduates of the five years' or of any subsequently instituted course;  
(11) Medical undergraduates of the six years', or of any subsequently instituted course, who have completed the professional examination in Anatomy, in Physiology and in Biochemistry, provided the major subject selected is one of these branches of science. Candidates in Pharmacology or in Pathology must similarly have completed in each case the professional medical examination in that subject.

Each candidate must have attained in his previous medical course a standard satisfactory to the Medical Faculty.

9...(Con)

- (5) The additional year of advanced study will include:-
- (I) One major subject (this may, at the discretion of the Head of the Department concerned, take the form of a piece of research work).
  - (II) Two minor subjects in branches cognate to that of the major subject.
  - (III) Acquisition in reading facility in two modern languages other than English, provided this has not been already attained. (A course in German is especially recommended).
- (6) With regard to his projected course of study a candidate should in each case consult the professor of the major subject selected.

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An Alternative Proposition, affecting especially Section 3 above, is:-

"During any three years following the introductory year in Biology, Physics and Chemistry, a candidate will take special minor courses, and at the end of that time, or at any subsequent time, he will do special research in one of the above five subjects".

The course as outlined down to Section 6 was considered, but the alternative proposition was seriously objected to in that it would allow a student to obtain a B.Sc(Med) degree in a little over three years and would thereby cheapen the degree. The opinion was expressed that if some men could get the degree by doing three months work in the summer, others would be unwilling to spend a whole year to get the same degree.

The Conference then adjourned.

*file*

R E P O R T on TRIP to ATTEND MEETINGS of  
THE ASSOCIATION of AMERICAN MEDICAL COLLEGES,  
OMAHA, and the COUNCIL of MEDICAL EDUCATION,  
CHICAGO.

*and re Reorganization at Neelsie*

These Meetings were for the purpose of discussing Medical Education in general, the medical curriculum in particular, the relations of Medical Schools and Hospitals, Hospital Administration, and kindred subjects.

At the Meeting of the Association of American Medical Colleges, every large School in the United States was represented. (There are 70 Class A. Medical Schools in the United States). Among the attendants at these Meetings were the Presidents of a number of the Universities, the Deans of all Medical Schools, some of the more prominent educationalists, and many other Professors and Heads of Departments.

This Report embodies merely a summary of some of the more important features which concern our immediate problems, and the conclusions arrived at from listening to contributions given at the meetings and to private conversations with many of the more prominent educationalists.

"Methods of Modern Education" formed the chief topic of discussion at the first meeting of the day in Omaha, and it was universally agreed that our present plans of teaching were in a chaotic condition and capable of very great improvement.

It was believed that the rigid standardization of Medical Schools was being overdone; that whereas the extinction of so many of the inferior schools, following upon the Flexner investigation of a decade ago, had done incalculable good, the Medical Schools of Class A. - 70 in all - were of sufficiently high standard to be allowed to use their own individuality as to the type of teaching adopted.

There seemed no variation of opinion in regard to the following facts:-

1. That Primary School Education is everywhere insufficient.

2. That there is a necessity for better educators among our teachers in the Primary Schools.

3. That pupils before entering the Medical School, should be taught English expression, English composition and Public Speaking. //

4. That there is a great necessity for better educators among our teachers in the Medical Schools, and the teachers should be selected for their ability to inspire their students, to convert facts into power, and to enlarge the general intellectual horizon of the students as well as presenting mere facts. It was believed that our Schools were carrying our students through, but were not developing them.

5. That in the Medical Curriculum, the attempt is being made to teach students too much, and that a great deal of non-essential matter // should be eliminated from the curriculum. In much of our modern teaching, there is a tendency to an ultra-scientific training instead // of teaching the students the more practical essentials to fit them to become good general practitioners. One cannot cover the whole curriculum in the few years of medical study, but one can make an effort to teach the students the methods of diagnosis and treatment which will form a basis for them to develop further knowledge after their graduation.

6. That there seems to be very little unity of plan in education in our Medical Schools, and it was felt that a better realization should be sought of what the real objective of Medical is.

#3.

*It was further felt that the students should enlarge the scope of their medical*  
Education upon the social side of disease, so that ~~students~~<sup>they</sup> would not merely be content with the facts of disease, but would study the patient as an individual with regard to the influence of his environment, of his importance as a member of the community, and of the importance of the physician as the centre from which Public Health should be developed.

A propos of this subject, many of those participating in the discussion stressed the point that students were not sufficiently taught that patients are, after all, human beings, each with his own individual problem in society, and each with his own individual mentality, all of which should be studied from the sociological standpoint as well as from the standpoint of the diagnosis of a specific disease.

Some discussion occurred with reference to the examination of students in the final year. It seemed to be the general opinion that the type of question set in an examination revealed the type of teacher; that an examiner, if he has taught his subject well, will have dilated on general principles and not merely upon facts; that the broad outlines of his subject alone form a satisfactory basis for educating the students, *and for examining them.*

The Correlation of the fundamental sciences to clinical teaching was dwelt upon at greater length than any other topic of Medical Education. It was believed that teachers should take means to introduce patients to students of the earlier years in order to illustrate to them in a clinical way what is being taught in the class rooms on Physics, Anatomy and Physiology. Considerable success has been achieved in some of the Schools along these lines, and students of the first two years in Medical Schools obtain added interest by the exhibition of patients, specimens and lantern slides to illustrate the conditions described in the class rooms. This, I think, is a matter of easy arrangement in our own School. //

A propos of this same subject, it was considered wise to stress upon students in the third year (i.e. when they are taught for the first time the methods of clinical diagnosis) ~~to emphasize~~ the salient points dealt with in the class in Physiology, Anatomy and Chemistry, thus correlating the fundamental sciences to clinical teaching in a much more interesting manner.

Relation of Hospitals and University.-

The Meetings revealed the fact that the majority of the first-class Medical Schools in the United States are connected with hospitals which are known as the "University Hospitals" or University Clinics.

The clinical teaching in the hospitals and the appointments of the staff, as also the budgets thereof, are controlled by the University; moreover, wherever new Medical Schools are being erected by the Universities and Hospitals, University Hospitals are placed in juxtaposition to the School; e.g., at the Vanderbilt University in Nashville, and Columbia University in New York, this latter being designed to be the best and most modern plant in existence. Where in addition to this University Clinic, there are other hospitals of a civic nature, these are for the most part utilised by the University in a somewhat looser arrangement, but the teaching is under University control.

In Harvard there are three hospitals, each with independent teaching units, though in each the teaching is under University control, but these have been built up at an enormous expense and only with a moderate amount of successful coordination. The Dean of the Harvard School expressed strongly the view that the ideal condition would have been to have had all the teaching in one unit, but the traditions of Boston necessitated the use of all the old-time institutions. The expense of this, however, has been beyond all proportion to the necessity of such an arrangement.

The conclusions arrived at with reference to our local problems are as follows:-

1. That in Montreal ideal conditions exist for the creation of the best kind of arrangement for a Medical School, viz:-

Three large units, which go to make up a perfect Medical School, exist side by side:-

- (a) The scientific laboratories of the University (Physics, Chemistry and Biology).
- (b) The Medical School, with its special laboratories and class rooms.
- (c) Hospital facilities at the Royal Victoria Hospital.

Were it possible to utilise all of these for the

common good, educationalists agree that the conditions would be ideal. Nevertheless, the size of the hospital with reference to the number of patients, the size of the staff and the accommodation, is scarcely adequate. An increase in size, however, to 100 beds <sup>more</sup> and accommodation for all the extras that this would imply, would make a very ideal arrangement. If, however, this seems impracticable at present, it is necessary to utilise the added facilities afforded by the Montreal General Hospital; and in any case there are many advantages for the School in having close cooperation with this hospital for purposes of teaching.

The effort to duplicate two sets of University teachers (one in each hospital) and to maintain them, to thus endeavour to balance power and influence, entails an absurdly high cost, and at the expense, too, of efficiency and coördination.

Attention is here drawn to the important question of clinical material. It is a well-recognized fact that to the undergraduate students, a large amount of material is not an essential. The course of instruction in Medicine is primarily intended to teach a student how to recognize and teach the ordinary types of disease, the method of approach to the problems of the sick, and of the study of methods. For this purpose, few patients are required, not many, for it is everywhere agreed that there is some disadvantage to the student to see too many cases, for it involves a rapid survey of many, instead of a careful analysis of the few. More careful attention to methods of examination of a few patients affords a far better training to the student. It is only the graduate who benefits by seeing a large number of cases, because he has already learned by his training in methods how to profit by seeing large clinical material. Thus, for example, Sir William Osler frequently said that a careful study of a case of pneumonia and of typhoid will do a student far more good than a rapid and superficial study of a host of diseases. During one session, indeed, he devoted most of his time to a few cases of pneumonia alone, this being the only material that he employed for his students. *of diagnosis is treatment.*

For this reason, then, one must not overestimate the importance of a large indoor or outdoor service for the undergraduate students. For post-graduate study, however, a large material is invaluable, and in this respect, the material from the two hospitals is a valuable asset to the School.

For McGill University, then, a University Clinic with fully equipped and staffed departments, organized so that those in charge have ample time in which to direct the departments, is an essential.

It is obvious, too, that such a clinic should be primarily at the Royal Victoria Hospital for geographic, economic and academic reasons.

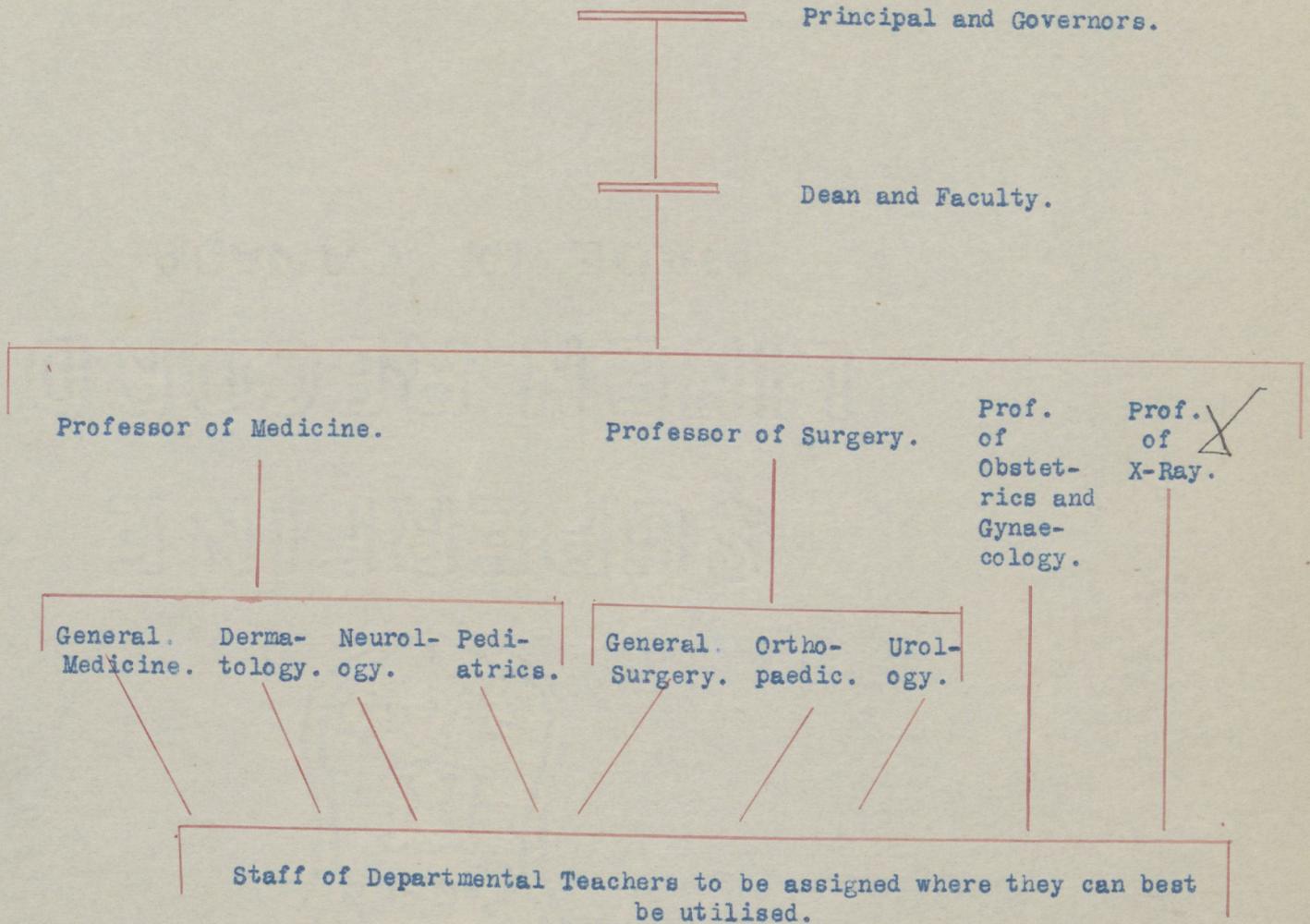
#6.

The teaching staff in this University Clinic should be under the control of the University, and appointments should be initiated by the University, though the Trustees of the Hospital should have the privilege of vetoing any appointment suggested.

The Montreal General Hospital should undoubtedly be utilised as an auxiliary hospital from the standpoint of the University, the students being given facilities to study the cases under the charge of the teaching staff in that institution. A plan is subjoined by which that can be done to the complete satisfaction, I believe, of both institutions.

The chief point is that the idea of one University Hospital should prevail, and from this centre of the organization, all teaching arrangements should emanate. Anything else leads to less efficiency.

Teachers as heads of departments must organize the department NOT as hospital men, but as University teachers, and such a head should select his staff with the approval of the University, and should co-ordinate the work and supervise the curriculum, and so forth, of his department. This is a University matter, not a hospital matter, and all hospital services must conform to that point of view. The following diagram illustrates the idea:-



In each of these sub-departments the staff of teachers would conduct the University work under the direction of the head of the department, who must organize the teaching arrangements to the best advantage of the students.

A suggested curriculum is appended in general outline.

I would suggest for the coming year the following:-

2nd Year:- Students in Physiology and Anatomy to be brought in contact with patients at the Royal Victoria Hospital, to illustrate once a week the lessons learned in these subjects at the School. This method conforms to the modern views on Education, viz. of correlating fundamental sciences and clinical study.

3rd Year:- To get their fundamental training in diagnostic methods at the University Clinic (R.V.H.)

4th Year:- To take all alinical work at Montreal General Hospital (say in the morning) and their lectures in the University Buildings (say in afternoon).

5th Year:- A hospital year. The students to be equally divided between the two hospitals and the Maternity Hospital.

(These changes will involve the use of fewer teachers, and the selection of only the best from our staffs).

The Correlation of the Fundamental Sciences to Clinical Teaching.-

A great deal of time at the Congress was devoted to this subject. Two plans were considered with favour:-

1. Giving teachers the means to introduce patients to students of the early years in order to illustrate to them in a clinical way what is being taught about the fundamental sciences (Physics, Anatomy, Physiology).

2. Students are encouraged to make special study of such lines as they prefer. Thus, as in Harvard, to elect subjects for more careful attention, which would develop initiative, individuality and a spirit of enquiry, as opposed to the method of spoon-feeding and of teaching merely an abundance of facts. This is the "elective system", and it is generally agreed that here in McGill, conditions will not permit such an innovation as yet.

It is suggested that in Anatomy, Physiology and Physics, arrangements should be made to illustrate in the hospital by the exhibition of patients and pathological specimens, etc., conditions described in the Physiology and Anatomy classes during the week preceding.

With systematic cooperation, this could be easily managed, and if necessary, illustrative cases could be brought from the hospital to the University class room.

Students are taught too much. It seems to be the concensus of the competent that in all Schools, attempts are being made to teach students more than they are able to absorb, and at the expense, even, of essentials that are of greater importance in practice. Some arrangements must be made whereby in each clinical department, stress is laid on the necessity of teachers to emphasize instruction on the essentials of ordinary disease, and to teach only a minimum of such special features as can only be utilised by practitioners with the aid of skilled experts.

Full-time Chairs in Clinical Branches:-

It is uniformly agreed that the chief of a clinical teaching department in the Medical School requires much more time for the direction of his department than has obtained in the past, where the departmental head has been absorbed in the time-taking effort to practise. This is true whether the practice be of a consulting type or general in his own special line of work. On the other hand, it is agreed that unless such a teacher has some contact with the public and private patients, he fails adequately to influence the students, who are for the most part destined to become general practitioners. And the questions arise:-

1. How much practice shall such a departmental head be allowed to do?
2. Can a hospital afford to dispense with such services as will help to add fees to the hospital by attracting patients to fill the private services?

It is well known that in Yale, where the full-time system in all its rigidity prevails, and where the Chief is not in touch with private patients, there is a dearth of paying patients in the private wards, and the hospital suffers thereby. The work has become ultra-scientific, and the human side is to some extent lost sight of; this, I may say, is being rapidly corrected by the admission of part-time men to the service.

The general trend of opinion in the American School is this:-

The head of a clinical department should have an office in the hospital, where he may see private patients; that he may have permission to consult over such patients, though not to have private patients in hospital for treatment; that he be permitted to have outside consultations only under very special circumstances, where the hospital or the University would consider it a duty or a distinct benefit for the head of a service to give advice.

The main duty of such a departmental head should be to look after an adequate number of teaching beds, to supervise the out-patient department and the clinical laboratories, to teach students, and stimulate research.

It is a definite retrograde step for a University to allow the head of a department time to practise in an office away from the hospital, or to attempt the duties of a consultant on cases out of town. The reason is obvious:- If such a director be worthy of his post, his calls would be too numerous to give due attention to his department; and vice versa, if he is not sufficiently in demand by outside physicians, the implication is that he has not created the inspiration which a departmental head should create on the profession in general.

#11.

Hospital Accommodation in Montreal.-

A recent survey of the hospital situation in Montreal revealed statistically that more hospital beds were required to meet the needs of the citizens. My attention was called to this report during the recent meeting, and it would seem that only the French population is concerned in this defect - that for the English-speaking and Protestant community ample provision exists to-day.

Now, if this be true, is it essential or wise to add more accommodation in our English hospitals when other needs for our English community are so urgent - when, for example, our handling of the Public Health situation, our training of doctors in this line is so lamentably deficient, when we have no trained psychiatrist in the University to teach our students the essentials of mental diseases, nor to act as consultant with our professional men?

I understand that it has been proposed to add some French doctors to the service of our Montreal General Hospital to meet the increasing demands made through the influx of French patients. Could not this be better met by the new Notre Dame Hospital now under construction rather than increase our financial obligations by added overhead charges? (Every patient in hospital costs more to the institution than the income derived from various sources for his maintenance).

Over-hospitalization.-

The view was very strongly expressed at the Chicago meeting that a change of viewpoint was coming with reference to hospital building, that more accommodation was being provided than necessary, that much economy could be attained by the newer method of ambulatory clinics. In other words, many cases are unnecessarily received in our hospitals, and many kept in too long, thus adding to expenses. That the practice of having visiting doctors from the hospital staff to go to patients' houses would and does save a great deal of hospital responsibility, and has been tried out with great success already.

Finances of the Medical School.-

The modern Medical School is apparently transcending all the bounds of reasonable expenditure in an effort to attain standards of efficiency. These expenditures are more often than not urged without regard to the possibilities of attaining such ideals. For example, attention was drawn to the fact that here and there, large laboratories were erected for the purpose of research without any probability of the institution being able to staff them with men capable of using them with any value to the School. In other words, no dividends are paid.

Departments are often created on a scale not justified by existing conditions, and Schools compete in buildings and equipments where it is useless and wasteful. To-day, for example, the enormous endowments of Johns Hopkins and Harvard in Health have rendered it unnecessary extravagance on the part of any School in the vicinity to attempt competition on an equal scale; for this reason, that the need for men in such a service and the outlook for suitable remunerative posts for graduates are insufficient to create any greater demand.

The duplication, again, of large clinical laboratories in various departments of our hospitals is another example of wasteful expenditure, as is also the needless construction of many large teaching theatres and class rooms. By careful arrangement, hours of instruction can be so adjusted as to utilise these class rooms for various departments. The expenditure of money in some of the large State institutions in the U.S.A. has become an everyday affair, and there seems almost no limit to the amount of money thus used. In Ann Arbor to-day building operations are going ahead that will involve the immediate expenditure of about \$20,000,000. To this must be added the expense of upkeep of these buildings. This is all very well for the State-endowed institution; for the unendowed institution, such as is McGill, the outlook is extremely serious, and for that reason, there is every need to conserve as much as possible any money that is available.

We will apparently soon be obliged to face the fact that students we have been hitherto receiving from the West in fairly large numbers will remain in the Provincial Schools which are now being organized. Thus, for example, in Alberta, whence McGill has continuously drawn many of its students, the new Medical School which is being established under most ideal conditions, with University buildings of the most modern type, with hospital facilities all under the control of the University, and with a progressive body of teachers, will provide for the students of this Province, who will find it no longer necessary to go elsewhere for their education. In Manitoba this already exists, and the Medical School in Winnipeg but rarely sends students to McGill.

I am told by the Minister of Education for British Columbia

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that the same is expected in the near future in that Province.

Again, in the East, with Dalhousie University making constant progress, the influx of students from the East to McGill will be continuously less.

Ontario is already provided for, so that McGill will have to depend on the Provinces of Quebec, New Brunswick and Saskatchewan for its future students, and from students seeking admission to McGill from the United States. The advent of American students will arise largely owing to the limitation of numbers in the large Medical Schools of that country.

If one looks, for example, at the immediate requirements of the Medical School, one can see that the situation is increasingly difficult as compared with the facilities in the United States, where large salaries attract promising teachers, and competition becomes so great as to render the future outlook for McGill very dark.

In every one of our departments there is a crying need for money if we are to keep abreast of the times; money for equipment, for salaries, for expansion. One cannot see where this money is to come from in many years, and for that reason, any new expenditure should consider the need of satisfying only the most urgent requirements, and that, too, only after a broad view of the demands of the School in general. I will cite a few examples in question:-

1. The Department of Hygiene and Preventive Medicine at McGill University is in an extremely unsatisfactory state, and requires drastic changes. Nothing short of a very complete change in the teaching, the equipment and the staff will place us in a position where we can avoid severe criticism. This would, no doubt, necessitate an added income of \$15,000 a year, even with the simplest kind of equipment and staff to teach our students Elementary Hygiene along modern lines, and this, too, quite apart from the Department of Public Health as it affects the relations of the University to the Community.

2. The Department of Psychiatry is without a head. I know of no School in America, not even a second-rate School, where there is not a well-trained Professor of Psychiatry, while in McGill, no such individual exists, and we employ the services of a man whose ideas of modern Psychiatry are obsolete. (Confidential). Our students are already aware of our defects in comparison with other Schools, and that our graduates leave the University quite unprepared to do themselves or their School either justice or credit. To obtain such a man, a salary of at least \$6,000 a year would be necessary, to which must be added a considerable sum besides for the equipment of his department,

#14.

and other assistants on the teaching staff.

3. In the Department of Physiology, there is a growing need for additional funds if we are to measure up with the Schools elsewhere. This, again, cannot be done without the expenditure of at least \$10,000 - perhaps more. The staff of the Department of Physiology, as seen in the Annual Calendar, is extremely weak as compared with that of such Universities as Harvard, Yale, Columbia, and, in fact, any other School, even in the Far West. *annually*

McGILL UNIVERSITY  
MONTREAL

FACULTY OF MEDICINE  
OFFICE OF THE DEAN

May 13th, 1924.

Sir Arthur Currie, G.C.M.G.  
Principal's Office,  
McGill University, Montreal.-

Dear Sir Arthur,

A propos of the Courses in Chemistry and Physics, may I be allowed to make the following statements?

1. We would propose to accept from other Canadian colleges than McGill, students who have had their courses in Chemistry and Physics as required by our newer matriculation standard, only if the course is satisfactory, and if the student has taken sufficiently high marks in his examinations. Each case would be taken on its merits.

2. We do not see why the students cannot receive from the Faculty of Arts exactly the same courses as they are now being given under the auspices of Arts or Medicine; the courses would remain the same, and the teachers would, naturally, remain as they are.

3. Clinical teachers are agreed that the knowledge of Physics and Chemistry <sup>which</sup> these students have in their clinical year is not of such an advanced type in the McGill group as to distinguish them from students who come from other Canadian universities.

4. It is obvious that those students who contemplate doing advanced work in Chemistry or Physics will be compelled to do extra work as post-graduates if they wish to follow along those lines of work in connection with their medical career.

For these reasons, I would like to urge that the courses remain as they are, and that we be permitted to admit students to the regular five-year Course in Medicine on some such basis as outlined in paragraph #1.

We are now revising the Annual Announcement, and would like to have this matter settled in the very near future.

Very truly yours,

*C. Martin*

Dean,  
FACULTY of MEDICINE.

66.

Dr. Martin's Suggestion to Substitute Departmental Meetings  
for Meetings of the Associate Faculty.  
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At a meeting of the Faculty in June, Dr. Martin gave notice that at the first meeting of the Faculty in October 1920, he would move that in future meetings of Departments be substituted for meetings of the Associate Faculty. It was requested that each member be furnished with a statement of the reasons for this suggested change.

The suggestions, initiated by some members of the Associate Faculty, are based on the following data: -

The Associate Faculty, (consisting of all teachers not on the Executive Faculty), was organized some years ago for the purpose of discussing problems of medical education, and the general welfare of all departments, (I quote from the Constitution). The By-laws read that there shall be monthly meetings. Their two representatives sit on the Faculty, and are supposed to present the views of the facultette, and to vote according to its wishes.

It would seem to be a fundamental error to ask a body of junior teachers to meet together for the purpose of discussing medical education and presenting their views to the Faculty periodically, when such a body carries with it no responsibility whatsoever.

It is also conceivable that such a body of men gathering together, might easily be so constituted at a particular meeting as only to present the views of one special teaching group.

Here in McGill University, where two hospitals exist, it is apt to accentuate rather than obliterate hospital differences,- a condition of affairs which the Faculty is constantly endeavouring to avoid.

Moreover, the existence of such an organization justifies itself

only if sufficient interest is created, and the results are worth the time spent.

I will refer to these subjects seriatim:-

1. Manifestations of Interest:

- (a) Regularity of meetings. The Minutes of the organization show that monthly meetings have never been held,- in fact, there have been on an average less than two meetings per annum.
- (b) Attendance. The attendance shows an equal lack of interest, for only once in the history of the organization has there been more than one-third of the members present,- never has there been at any time one-half of the members of the Associate Faculty present at a single meeting.

The details are as follows:- Total number of members about 120.

In 1914 there was 1 meeting with 10 members present.  
" 1915 " " 3 " " 20, 14, 15 "  
" 1916 no meetings.  
" 1917 there were 2 meetings with 14, 14 present.  
" 1918 " was 1 " " 22 present.  
" 1919 " were 3 " " 16, 29, 45 present.  
" 1920 " " 2 " (to date) with 47, 37 present.

(The number of members present at the last meeting was large because members were exhorted to be present.)

- (c) The Functions of Representatives. The functions of the two representatives on the Faculty, are, First, to present the views of the organization to the Faculty, and - Secondly, to cast their votes accordingly.

From the above data it is obvious that these representatives have never yet been able to present the views of even a small majority of the members of the organization.

According to their Minutes, the facultette have, during the last six years, held but three meetings on serious educational topics, and at these no representative discussions have occurred, and thus no representative votes could have been taken.

It is equally obvious, then, that the representatives who sit on the Faculty Board, merely vote as individuals, and not as representing the body of junior teachers.

2. Results:

The question as to whether or not, the results of these facultette conferences have been worth while, is on the face of it already answered by the data given.

Moreover, the Faculty may well consider whether it is possible for a large and mixed group of junior teachers to discuss with any satisfactory conclusions, the problems of medical education, and the welfare of any department.

The larger problems of medical education are already dealt with by the Educational Committee, and it is always possible for any individual on the Teaching Staff, or for any departmental group to bring before this committee any subject which they consider worthy of discussion.

In other words, even taking it for granted that in future larger and more representative meetings are held, it is doubtful if they would be able to cope with the broad problems of education at any such gathering.

Departmental Meetings.

I think it is agreed that the successful and harmonious operation of any department requires frequent meetings of its members. These meetings should have for their object conferences concerning the system

and organization of the department, its harmonious co-operation, the methods of teaching, and any other matters which will induce the greatest possible efficiency, harmony and loyalty. It will further add to a better faculty and university spirit, and, most of all, to the development of a junior staff of teachers who will be successfully fitted for promotion to higher appointments.

When the Faculty realizes that there are many demonstrators to-day who have held their appointment without promotion for from ten to twenty years, it can only imply one of two things, either, 1, that the Head of the department is not sufficiently interested himself in his staff to see to it that they produce work, and conduct classes so that they are fitted for promotion, or - 2, that the men themselves, being unworthy of higher promotion, have been allowed to drift on in the same position instead of giving way to men of worthier calibre.

In other words, there is something radically wrong with every department, where this kind of thing is allowed to exist.

Apart from the fact that a certain number of mediocre men are required for the hack work of ordinary teaching, there is no excuse for maintaining men in this junior position without at least encouraging them to produce something which is worthy of their appointment as demonstrators.

To-day, among fifteen demonstrators who have held these appointments for more than ten years, only four have ever published anything worthy of their department, while their teaching has not commended itself sufficiently to their chiefs to admit of recognition.

Nine teachers hold appointments as lecturers without ever having contributed to medical literature.

I would therefore submit that it is urgent upon this Faculty to take steps to further departmental organization and efficiency.

That meetings of departments be held at least once a month.

That the work be adjusted in such a way that the more capable and efficient junior teachers are given the opportunities of preferment.

That the Associate Faculty, as such, give way to departmental meetings, at which full attendance is made compulsory, and that every junior teacher be urged to bring forward at these meetings any suggestions for improvement in the department which may seem fit and proper.

The proceedings of such meetings should be presented at the monthly meetings of the Faculty, and there need be no reason why a minority report of such a meeting might not be presented where the occasion arises.