



Views from the University of Waterloo School of Optometry on Meeting with the Manpower Needs of the Future**

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The University of Waterloo continues to be the major source of optometrists for all provinces in Canada except Quebec and the student body is recruited from all provinces including Quebec. The pool of candidates for admittance remains high (300-400) and of an academic calibre that is increasing annually. Up to half the incoming students have B.Sc. or higher degrees and this year only two candidates with a single year of University have been offered positions, reflecting the trend in recent years. We continue to seek academically well qualified students with broad interests and excellent interpersonal skills. With such a large pool it is possible to select these and attrition has been low with the loss or failure of only a handful of students. Unfortunately many well qualified candidates are not admitted indicating that there will be no shortage of students for a third Canadian school.

Why does Waterloo not increase its class size? The major reason is that the facility was designed for 50 incoming students a year and with an intake of 60 our resources are already strained. In addition, there is the possibility that an increased class size would dilute the quality of education and clinical experience provided to the professional student.

Following their recent accreditation site visit the Council on Optometric Education of the American Academy of Optometry were most complimentary of all of the School's programmes, and renewed the School's accreditation. Also both the M.Sc. and Ph.D. programmes received the highest rating from the Ontario Council on Graduate Affairs and the maximum (7 years) accreditation was granted this year. In other fields the school has been most successful and the faculty are engaged in a whole host of activities which in turn reflects the overall quality of the optometric education provided.

In addition to 172 Doctor of Optometry degrees, in the past three years the University has awarded 8 M.Sc. (Physiological Optics), 2 Ph.D. (Physiological Optics), and 1 two year Residency Certificate; of the recipients of these degrees three remain on our full time faculty and three were not O.D.'s.

A number of modifications and expansions are apparent in the clinics. The Government of Ontario (through several Ministries and Agencies) has assisted in the establishment of the Centre of Sight Enhancement at the School; this incorporates the former Low Vision Clinic and the expansion includes the services of allied health professionals such as social work, technologists and public health nurses in addition to optometrists with specialty training in low vision/rehabilitative optometry. The Ocular Health Clinic is to move into a redesigned unit in the fall with the addition of a full time clinical faculty member with residency training in the area. The clinical services in electrodiagnosis and pediatrics have increased. Outreach programmes are being expanded.

What are the manpower needs of the School? These may be divided into several main areas:

1. Academic faculty preferably with an optometric degree in addition to their graduate degrees.
2. Clinical faculty preferably with specialty residency training or graduate training.
3. Part-time clinical associates with: (a) Specialty expertise (b) Contemporary primary care skills.
4. Graduate students and residents.

The School needs a complement of approximately 20 academic faculty, 12 clinical faculty and over 30 clinical associates. At the present time these needs are not fully met and the School's academic administrators continue to carry full teaching, clinical and research loads in addition to their administrative and committee responsibilities at the School, University, provincial, national and international levels. In recent years we have been forced to recruit clinical and academic faculty from outside

Continued on p. 27

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**Extracted from a presentation at Interaction '85 entitled *Optometric Manpower Needs in Canada*, July 2, 1985, Regina, Saskatchewan

I-4 isopter for a 25 year old age group. The area of the patient's II-4 isopter (which should be larger than a normal I-4 isopter) is only 47% of the area of the normal I-4 isopter shown in Fig. 2. The cause for this field reduction is not clear, although it could be related to the severe changes in receptor direction caused by the scleral buckle.

Regarding the two-month delay in the detection of the patient's retinal problem, it should in fairness be pointed out that retinal detachments due to blunt injury frequently follow an insidious course¹. The blow causes a peripheral hole which allows a slow entry of fluid into the subretinal space. A large,

billowing retinal detachment is uncommon in such cases. In fact, such retinal holes may cause visual disturbances more suggestive of central serous retinopathy than retinal detachment. Thus many retinal detachments due to blunt injury are not detected until the macula becomes involved. Field testing could certainly give a much earlier warning of the need for retinal detachment surgery in such cases.

References:

1. Cox, M.S., Schepens, C.L., and Freeman, H.M., Retinal detachment due to ocular contusion, *Arch Ophthalmol* 1966; 76:678-685.

Continued from p. 11

of Canada. This is because there is a shortage of Canadian optometrists with post O.D. training; a number of those with such qualifications prefer the rewards of practice to those of academia. The number of University of Waterloo School of Optometry graduates entering graduate or residency programmes remains small. A new graduate can command much higher remuneration than a new assistant professor with four or five years more training.

It is our opinion that most manpower studies tend to generate more optimistic pictures than actually exist. Trends that have already occurred in the United States and the United Kingdom are beginning here, with O.D.'s working in administrative or clinical positions in community clinics, hospitals or as full time consultants/researchers in industry including those producing contact lenses and pharmaceuticals.

The aggregate optometric student body in Canada is more than 50% female. The long term effects, with regard to manpower needs, of an optometric work force which is increasingly female has not been addressed satisfactorily. A number of our students are considering residency programmes in the United States, others write the American National Board Examinations. Since only a few Canadian optometrists find their way to other countries we feel that this number is not significant at this time. We note that there are only one or two full time public service optometrists (compared with numerous physicians and dentists) and that there are no military optometrists (compared with over 600 in the United States). Should there be changes in policies, which would encourage optometrists into such positions, the overall effect on the manpower needs might well be considerable.

Much energy has been expended over many years in attempts to develop a second optometry school in English Canada. We would welcome and support such a development. Although initially this would strain the limited optometric educator resources of Canada, the long term effects of reducing the

shortage of practitioners and increasing the competition for well qualified educators would enhance the attractions of a university career. Based on our experiences at the School we wish to offer the following suggestions with regard to any new school in Canada. It must be located in a prestigious university which has full academic resources and graduate facilities. Preferably it should also be located at an institution with one or more other *primary* health care programmes. The latter eliminates the need to educate the university's administration as to the special needs of a clinical programme, the relevance of clinical duties and the need for differential salary scales. The university should be located within a large enough patient drawing area for the clinics to operate at an optimum level. Factors which have aided in recruiting faculty at Waterloo include the impression that Southern Ontario offers a good quality of life, the close proximity of Toronto with its many attractions including easy air travel to anywhere in the world, and the international reputation enjoyed by the University of Waterloo as a whole. We often hear it stated that the manpower needs of optometry schools can be relieved by having certain courses taught by professors from other departments. Even within a university well experienced with optometric education frequently such courses are unsatisfactory.

Continued support of COETF is vital since this fund provides a prime source of direct and indirect funding for Canadian optometrists seeking post professional education. The funds generated by WATFUND are used principally to modify, develop and re-equip our clinical facilities. In addition to support received from the optometric profession we are also indebted to funding received from Federal and Provincial government agencies, other agencies, the University of Waterloo, the corporate sector and private individuals. The profession continues to do an excellent job in recruiting outstanding young men and women for the School. We would urge you to pay particular attention to those who show potential for a career in optometric education.