ALGONQUIN COLLEGE | OTTAWA PERTH PEMBROKE

PRESENTATION TO BOARD OF GOVERNORS

Program Title:	Diagnostic Medical Ultrasonography
Credential:	Ontario College Graduate Certificate
Program Length:	16 months
School:	Health and Community Studies
Dean:	Barbara Foulds
Proposed Start Date:	Fall 2013

PURPOSE

This Ontario College Graduate Certificate program prepares graduates for a career in the field of Diagnostic Medical Ultrasonography. Diagnostic medical sonographers capture and analyze a variety of complex sonographic images to assist physicians in the diagnosis and management of multiple system disorders.

Graduates may find employment in community and teaching hospitals, medical clinics, education and research settings and in private industry. Algonquin College has initiated the accreditation process with the Canadian Medical Association Conjoint Accreditation Services. Graduation from an accredited program is required for eligibility to write the national certification exams. Upon successful completion of these exams, students will be credentialed as a Canadian Generalist Sonographer or American Registered Diagnostic Medical Sonographer. Graduates have the opportunity to become a member of several professional diagnostic ultrasound organizations such as the Canadian Association of Registered Diagnostic Ultrasound Professionals and the Canadian Society of Diagnostic Medical Sonographers.

BACKGROUND

In the past, most ultrasonography technologists were trained as x-ray technicians. There are six ultrasonography college programs currently available in Ontario. College programs can be grouped into two types: graduate certificate programs that range from 1 to 1.5 years in length, and direct-entry advanced diploma and degree programs which are 3 to 4 years in duration. Most of the colleges offering this type of training are located in southwestern Ontario. At this time, postsecondary educational programs of this nature are not available east of Toronto.

Program delivery is proposed over four terms in a variety of course formats including classroom, lab, online and clinical. It is anticipated that the Simulation Centre for Health Studies will be utilized during evenings and weekends. In Levels 03 and 04, students will complete clinical placements in hospitals and private labs. The curriculum focuses on adding another dimension of healthcare to the existing knowledge of various health professionals.

CONSIDERATIONS

(i) **Evidence of Need**

A labour market analysis was completed by Axion Inc. in February 2012. The findings

indicated that there appeared to be considerable evidence to suggest a severe shortage of medical diagnostic ultrasonography technologists in the near future in Ontario, the rest of Canada, and the United States. Changing demographics, significant improvements in technology, efficiency requirements, and safety concerns about alternative technologies, are some of the principal reasons responsible for the future growth of this profession.

(ii) **Student Interest**

As of March 13, 2012, the Allied Health Department fielded 18 calls requesting information regarding the start date for ultrasonography and program requirements. Forty-four Medical Radiation Technology (MRT) students were electronically surveyed as to their interest in a graduate certificate program in Diagnostic Medical Ultrasonography upon completion of the MRT program. The 50 % response rate indicated that 58% of students would enrol in a Graduate Certificate Program in Diagnostic Medical Ultrasonography immediately upon graduation and 62% within 3-5 years of graduation.

(iii) **Staffing**

In the first year of the program, staffing costs will be attributed to part-time faculty. Consideration will be given to a full-time hire once the program is stable.

(iv) **Admissions Requirements**

Program Eligibility:

An Ontario College Diploma, Advanced Diploma, or Degree in the following:

- Medical Radiation Technology
- Magnetic Resonance Imaging Technology
- Nuclear Medicine Imaging Technology
- Nursing
- Medical Radiation Therapy
- Paramedic
- Respiratory Therapy

or equivalent with departmental approval.

(v) **Advisory Committee Support**

On June 13, 2012 the Medical Radiation Technology Advisory Committee passed a motion stating that they reviewed the curriculum as presented for the Diagnostic Medical Ultrasonography Ontario College Graduate Certificate program and supported the need for this program in the community, recommending it for approval to the President's Executive Committee, and to the Board of Governors. The one absent Committee member subsequently provided support by email on June 19, 2012.

(vi) **Strategic Alignment**

The implementation of this program reflects the strategic directions of the College including the commitment to digital learning with 27% online for non-clinical/lab courses, leveraging of our relationships with business and industry with 1200 hours of clinical placement, and meeting the needs of students and the community. This program was identified as a new opportunity in the Strategic Programs and Services Planning Final Report.

Appendix 1: Program of Study
Appendix 2: Cash Flow Analysis

RECOMMENDATION

That the Board of Governors approve the Diagnostic Medical Ultrasonography Ontario College Graduate Certificate program effective Fall 2013 and seek validation of the program title and outcomes from the Credentials Validation Service and approval for funding from the Ministry of

Training, Colleges and Universities.

Appendix 1: Program of Study - Diagnostic Medical Ultrasonography

LEVEL 1 – 15 Weeks

COURSE NUMBER	COURSE TITLE	Hours					
		Theory		Lab		Field / Clinical	Total Hours
		In class	Online	In class	Online		
IMG1000	Professional Practice in Sonography	30	30				60
IMG1001	Cross-Sectional Anatomy for Sonography	15	15				30
IMG1002	Sonography Physics and Instrumentation I	30	15				45
IMG1003	Abdominal and Pelvic Sonography	45	15				60
IMG1004	Obstetrical and Gynecological Sonography I	45	15				60
IMG1005	Sonography of Superficial Structures	30	15				45
IMG1006	Sonography Skills Laboratory I			90			90
	TOTAL LEVEL HOURS	**195**	**105**	**90**			**390**

LEVEL 2 – 15 Weeks

COURSE NUMBER	COURSE TITLE	Hours					
		Theory		Lab		Field / Clinical	Total Hours
		In class	Online	In class	Online		
IMG1007	Sonography Physics and Instrumentation II	45	15				60
IMG1008	Sonographic Pathology of the Abdomen and Pelvis	60					60
IMG1009	Obstetrical and Gynecological Sonography II	45	15				60
IMG1010	Vascular Sonography	45					45
IMG1011	Musculoskeletal Sonography	15	15				30
IMG1012	Sonography Skills Laboratory II			90			90
	TOTAL LEVEL HOURS	**210**	**45**	**90**			**345**

LEVEL 3 – 15 Weeks

COURSE NUMBER	COURSE TITLE	Hours					
		Theory		Lab		Field / Clinical	Total Hours
		In class	Online	In class	Online		
IMG1013	Clinical Practicum I					600	

LEVEL 4 – 15 Weeks

COURSE NUMBER	COURSE TITLE	Hours					
		Theory		Lab		Field / Clinical	Total Hours
		In class	Online	In class	Online		
IMG1014	Clinical Practicum II					600	

Hybrid Hours: 150/555 = 27%

Program Total Hours: 1935