Yale NewHaven Health Yale New Haven Hospital

# School of Diagnostic Ultrasound



# What is a Diagnostic Medical Sonographer?

# A diagnostic medical sonographer is a highly skilled professional who used high-frequency sound waves to generate digital images for interpretation by a physician.

A sonographer can image many different parts of the body including soft tissue organs of the abdomen, extremities and pelvis including evaluation of the fetus. Ultrasound can also be performed on blood vessels for the assessment of arterial or venous disease, the heart and pediatrics patients.

Sonographers can work in hospitals, clinics, vascular laboratories, public health facilities, mobile imaging and community physician groups including radiology OBGYN, internal medicine and cardiology practices. Career pathways include sonographer, lead sonographer, manager/director, educator, research, sales or application specialist.



#### **Diagnostic Medical Sonographer Responsibilities**

#### **Patient Care**

Ultrasound may be recommended for patients of all ages from newborn to the elderly. Patients who receive an ultrasound can be from healthy to critically ill Sonographers explain the procedure to each patient, parent and/or caregiver.

#### **Patient History**

Sonographers are required to obtain a medical history from the patients and review the information provided as it pertains to the ultrasound examination.

#### Perform Exam

Sonographers make sure that the equipment and exam prep supplies are ready for each exam. They are trained to position the patient according to the part of the body being examined while making the patient as comfortable as possible. Sonographers are required to know the protocol for each exam.

#### **Analyzing Technical Information**

Sonographers are trained to analyze and prepare technical information received from the ultrasound exam for interpretation by the physician. They provide an oral and written summary of the technical findings.

## Independent Judgment

Sonographers are required to make independent decisions regarding the extent of the exam.

#### Team Player

Sonographers interact with and assist physicians, nurses, peers, administrative staff and transporters as part of the medical care team.

# School of Diagnostic Ultrasound

Founded in 1975, under the supervision of Dr. Kenneth Taylor, the program trained one to two students per year in general ultrasound. Echocardiography training was added to the diagnostic ultrasound program in the early 1980s.

As ultrasound technology advanced and the demand for diagnostic ultrasound grew, more sonographers were needed for hospital and community settings. Over the last 40 years, the program has grown to accept 8 general and 3 cardiac students per year and has graduated over 200 students. Vascular Technology and Pediatric Echocardiography have recently been added as six month learning concentration for credentialed sonographers/echocardiographers.

# **Our Mission & Philosophy**

Our mission is to attract, train and graduate qualified individuals into the ultrasound profession. Our program philosophy is based on the belief that the diagnostic medical sonographer is an integral part of the medical team and provides a vital service to the patient and physician by accurately detecting disease. We provide a continuous process of hands-on-training along with structured comprehensive instruction. The program is committed to support the professional and personal development of each individual seeking this career.

# **Learning Resources**

Students enrolled in the Ultrasound Program are provided intense didactic and clinical instruction by experienced medical sonographers who are registered by the American Registry for Diagnostic Medical Sonographers (ARDMS). Each student is provided direct hands-on training and exposure to all facets of ultrasound. A leader in medicine and advancing medical technology, Yale New Haven Hospital is affiliated with Yale University School of Medicine. The ultrasound section of diagnostic imaging is a busy clinical service with a strong research commitment. The ultrasound section performs 40,000 exams each year which provide each student with the maximum clinical experience.

# **Program Concentrations**

#### **General Sonography**

# 13 month program

Includes abdomen, OB/GYN and small parts imaging Hours: Mon - Fri, 8 am - 4:30 pm

### **Adult Echocardiography**

# 12 month program

Hours: Mon - Fri, 8 am - 4:30 pm



#### **General Sonography or Adult Echocardiography Programs**

Eight general sonography and three echocardiography students are accepted per year.

## **Admission Requirements**

#### Academic and Clinical:

- 1. High school diploma or equivalent.
- 2. Associates degree completed in the United States or Canada.

OR

Completion of a full-time, two year recognized AMA or AMA equivalent allied health trained program that is patient care related completed in the United States or Canada. (ie Radiologic technology, respiratory therapist, occupational therapist, physical therapist or registered nurse.

- 3. Post-secondary academic course prerequisites and patient care experience\*
- Communications (English/Speech/Composition)
- Algebra or higher level math
- General Physics
- Human Anatomy and Physiology I & II (with lab)
- Medical Terminology (Online courses acceptable)
- Patient care (Didactic and clinical experience)
- Requires documentation of >750 direct patient care contact hours either through program of study (i.e. Radiologic technology, nursing, respiratory therapist etc.) or practical experience.
- \* A minimum GPA of 2.5 is required for all college-level course prerequisites

A non-citizen applicant is required to provide documentation form Immigration and Naturalization Service of their permanent resident status by presenting their alien registration card. The school is not approved by INS to enroll non-immigrant status students.

## **Technical Capabilities**

Applicants must have the potential to meet the following technical standards for Sonographers

- Lift more than 40 pounds routinely
- Push and pull routinely
- Bend and stoop routinely
- Have full use of both hands, wrists, and shoulders
- Distinguish audible sounds
- Adequately view sonograms, including color distinctions
- Work standing on their feet 80% of the time
- Interact compassionately and effectively with the sick or injured
- Assist patients on and off examining tables
- Communicate effectively with patients and other healthcare professionals
- Organize and accurately perform the individual steps in a sonographic procedure in the proper sequence.

Reference: http://www.sdms.org/public/career.asp Copyright © 1993-2000. Society of Diagnostic Medical Sonography. Dallas, Texas USA. All Rights Reserved Worldwide Non-Discrimination Clause: Yale New Haven Hospital through its responsible management, shall recruit, hire, train, upgrade and promote in all position titles, without regard to race, color, religion, sex, national origin, age, disability, or status as a disabled veteran, or a veteran of the Vietnam era. Exceptions will be allowed where age and/or sex are essential, bona fide occupational requirements, or where an identifiable disability cannot be accommodated to allow satisfactory performance of essential job functions.

# **Program Curriculum**

#### Sonography

- Introduction to sonography
- Abdominal sonography I & II
- OB/GYN sonography I & II
- Sonographic principles and instrumentation I III
- Introduction to vascular sonography
- Clinical lab I IV
- Clinical practicum I IV

#### **Echocardiography**

- Adult Echocardiography I IV
- Sonographic principles and instrumentation I III
- Clinical practicum I IV

#### **Graduation and Board Registration**

Students who successfully complete the didactic and clinical curriculum will be granted a certificate of completion from the program. Successful graduates are eligible to sit for national registration by the American Registry of Diagnostic Medical Sonographers (ARDMS) in Sonographic Principles and Instrumentation (General and Echo), Abdomen (General), OB/GYN (General) or Adult Echo (Echo).

Program Accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP) through recommendation by the Joint Review Committee on Education in Diagnostic Medical Sonography.

#### Commission of Accreditation of Allied Health Programs (CAAHEP)

25400 US Highway 19 North, Suite 158, Clearwater, FL 33763 727-210-2350 www.caahep.org

Joint Review Commission on Education in Diagnostic Medical Sonography (JRC-DMS)

6021 University Boulevard, Suite 500, Ellicott  $\widetilde{\text{City}}$ , MD 21043 443-973-3251

www.jrcdms.org

#### **Vascular or Pediatric Learning Concentrations**

#### **Admission Requirements**

#### **Vascular Learning Concentration**

Completion of an accredited general or cardiac sonography program and credentialed by the ARDMS in either Abdomen (RDMS) or Adult Echocardiography (RDCS).

# **Pediatric Echocardiography Concentration**

Completion of an accredited cardiac sonography program and credentialed by the ARDMS in Adult Echocardiography.

# **Program Curriculum\***

# Vascular Technology

Vascular Technology I & II

### Pediatric Echocardiography

Pediatric Echocardiography I & II

#### **Vascular Learning Concentration**

6 months Hours: Mon - Fri, 8 am - 4:30 pm

Call for start dates

#### **Pediatric Echocardiography Concentration**

6 months Hours: Mon - Fri, 8 am - 4:30 pm Call for start dates

#### **Graduation and Board Registration**

Students who successfully complete the didactic and clinical curriculum will be granted a certificate of completion from the program. Successful graduates are eligible to sit for national registration by the American Registry of Diagnostic Medical Sonographers (ARDMS) in the exam consistent with the learning concentration.

<sup>\*</sup>The vascular and pediatric echocardiography programs are not accredited.

# To Apply

#### Submit the following to:

Program Director
Yale New Haven Hospital School of Diagnostic Ultrasound
55 Park Street
Floor 3R – Suite 340
New Haven, CT 06510-3202

- 1. Completed program application
- 2. Resume
- 3. \$20 application fee made payable to Yale New Haven Hospital
- 4. Two letters of recommendation
- 5. High school transcripts
- Official transcripts of completed college courses or other postsecondary study program
- 7. One page typed statement of professional objectives and reasons for pursuing a career in diagnostic ultrasound
- 8. Recent photograph (2.5 in. x 3.5 in.)

Applicants are accepted as a rolling admission. The application deadline is six weeks prior to starting classes.

## **Tuition and Expenses**

General Sonography Program: \$15,000

(4 quarterly installments)

Adult Echocardiology Program: \$15,000

(4 quarterly installments)

Vascular Learning Concentration: \$7,500

(2 installments)

Pediatric Echocardiography Concentration: \$7,500

(2 installments)

Students accepted into the ultrasound program are required to pay a non-refundable deposit to ensure placement. The deposit will be applied towards tuition.

Students should expect to incur expenses including but not limited to, textbook fees, SDMS or ASE membership and registry application. Housing is not available. Applicants are required to provide proof of health insurance upon admission. Financial aid and advanced placement are not available through the program.

#### Staff

Jennifer Wright, BS, RT(R), RDMS, RVT, RDCS *Program Director* 

Risa Kent, MD Medical Director, General and Vascular Programs

Robert McNamara, MD Medical Director, Echocardiography Program

Steve Ghiroli, RDMS, RDCS Coordinator Pediatric Echocardiography, Didactic Instructor

#### More Information:

Jennifer Wright, Program Director 203-688-8227 Jennifer.wright@ynhh.org

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