

Diagnostic Ultrasound Technology Program

**3000 Landerholm Circle SE
Bellevue, WA 98007-6484**

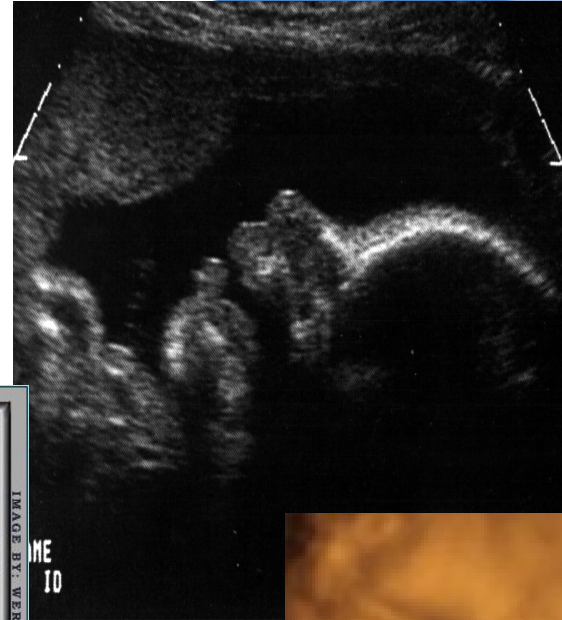
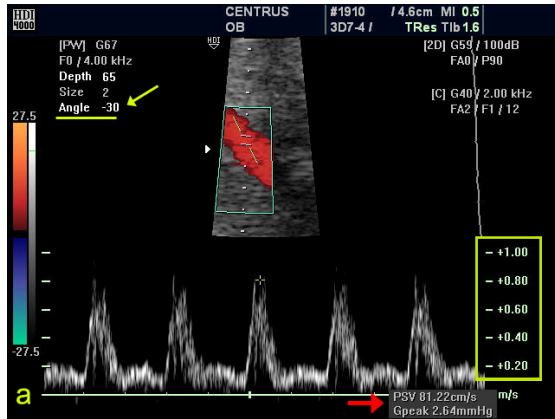
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Part III
Careers in Radiology
Sonography

Diagnostic Medical Sonography



SEEING WITH SOUND

Diagnostic Medical Imaging Services

- Ultrasound
- X Ray (Radiography)
- CT Scan
- MRI
- Nuclear Medicine



Transducer (probe) on the abdomen



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Society of Diagnostic Medical Sonographers (SDMS)

Career Video - Sonography

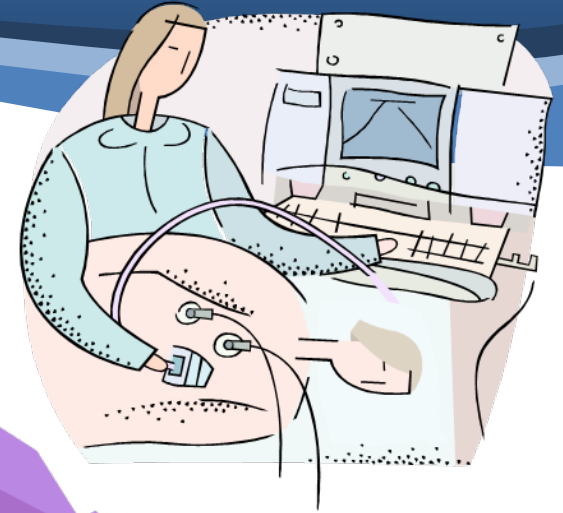
<http://www.sdms.org/career/video/>

Diagnostic Medical Sonography - a SOUND career decision.url

Clinical Specialties

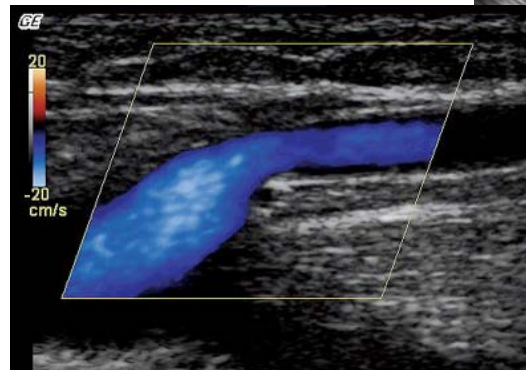
- General Radiology*
- Obstetrics and Gynecology*
- Adult Cardiology*
- Pediatric Cardiology
- Vascular

* offered at Bellevue College



Technology

- High speed digital image processing
- Sophisticated equipment
- Image production and exam quality very “*operator dependent*”



Who Are SONOGRAPHERS?

- Diagnostic Imaging Specialists
- Optimizing images using high frequency sound waves to create diagnostic images for various clinical applications.
- Health Care Professional with a high degree of technical skill and clinical competency
- Functions as integral member of the health care team

SONOGRAPHER SKILLS

- Must be able to produce and evaluate ultrasound images and related data to enable physicians to render a medical diagnosis
- Superior “eye-hand” coordination
- Adept at spatial orientation and depth perception
- Must be able to acquire and maintain specialized technical skills and medical knowledge to render quality patient care in a demanding clinical environment.

Characteristics of Successful Sonographers

- Good verbal communication skills
- Good hand-eye coordination
- Compassion and sensitivity toward patients
- Putting together the whole picture
- Stamina for Focusing
- Ability to multitask and concentrate
- Organized, positive and energetic
- Problem solvers, critical thinkers...

SCOPE OF PRACTICE

- Obtain, review, and integrate pertinent patient history, physical exam, and supporting data to facilitate optimum diagnostic results.
- Produce, assess, and evaluate ultrasound images and related data in collaboration with other Sonographers and interpreting physicians to render a medical diagnosis

Physical Requirements Sonographers

- Stand/walk up to 8 hours for a shift
- Lift, Move and Transfer Patients
- Operate and manipulate ultrasound equipment, patient care equipment such as wheelchairs, stretchers and attachments
- Move loads up to 45 pounds several times an hour.
- Differentiate subtle image details, color, shades of grey and audio signals.
- Assist patients as needed in emergent and non emergent clinical situations.
- www.sdms.org, www.ohsa.org

Physical Requirements-Sonographer

- Respond to audio, and colored, lighted signals and feedback
- Ascend and Descend stairs in an emergency
- Reach, bend, push and pull equipment and patients as needed
- Comprehend, write and speak English clearly to co-workers, physicians and patients
- Provide resuscitation and emergency care to patients as needed.
- Please visit www.sdms.org and www.soundergonomics.com for work related injury data on Sonographers.

WRMSI – Sonographers at Risk

Work Related Musculoskeletal Injuries

- Data shows that >50% of Sonographers are scanning in pain.
- Risk to develop repetitive motion injuries to neck, shoulder, elbow, wrist and hands is real.
- Static scanning positions, workload and pressure applied to body surfaces contribute to WRMSI.

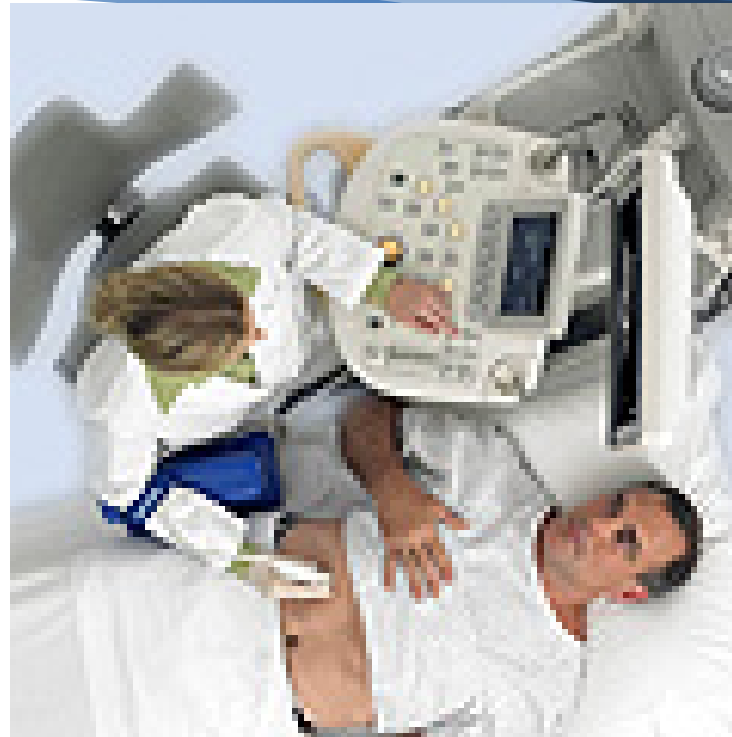
www.soundergonomics.com, www.ohsa.org

Work Related Injuries Sonographers at Risk

Within 5 years of working, Sonographers experience pain while working

- 20-25% experience career ending injuries
- 55.5% increase in number of exams per year performed by Sonographers since 1992
- Related Musculoskeletal Disorders in Sonography, SDMS consensus, May 2003

Work Related Injuries-Common



- Neck
- Elbow
- Shoulder
- Wrist
- Lower Back
- www.soundergonomics.com - survey

CREDENTIALLING

American Registry of Diagnostic Medical Sonographers

National registry exams—credentials in clinical specialties

- Administered by ARDMS (www.ardms.org)
- Over 40,000 registered sonographers
- Overall Pass/Fail rate = 63%
- Bellevue College Pass rate class of 2009&2010 100%
- Cost is \$200 per exam (2-3 exams)

SALARIES

- Average current base Seattle salary = \$25+/hour (varied experience levels, Bellevue College does not guarantee job placement or salary range)
- Salaries vary according to geography, specialty area, and experience level www.sdms.org, Salary Survey
- BCC does not ensure or guarantee employment or salary upon graduation.

Employment Opportunities

- Hospitals / Medical Centers
- Outpatient clinics
- Doctor's offices
- Mobile services
- Department Management
- Education / Training
- Equipment Manufacturers
 - Sales, Education, Clinical Applications, Product Development
- National, international opportunities

INTERNET RESOURCES

- www.sdms.org
- www.ardms.org
- www.aium.org
- www.obgyn.net
- www.ase.org
- www.soundergonomics.com
- www.arrt.org