Applying to the BSHP

Applications for the BSHP must be submitted online by February 1. The application is available at www.r.umn.edu/apply.

Applicants must also submit:
- Official transcripts from all colleges attended
- Application essay

Selected applicants will be invited to Rochester to interview at Mayo School of Health Sciences in March. Notification of admission decisions will be made by UMR mid to late April. Classes begin August 1.

Contact Information

For additional information about the BSHP degree, contact:
Admissions Office
University of Minnesota Rochester
E-mail: ApplyUMR@r.umn.edu
Telephone: 1-877-280-4699 | Website: www.r.umn.edu/bshp

For additional information about Echocardiography, contact:
Joshua Finstuen, Program Director
Echocardiography
Mayo School of Health Sciences
E-mail: finstuen.joshua@mayo.edu
Telephone: 507-266-3799 | Website: www.mayo.edu/mshs

The Profession

Echocardiography (echo) is the use of ultrasound to assess the anatomy of the heart and blood vessels. The diagnostic medical sonographer specifically trained in echocardiography is an echocardiographer or cardiac sonographer. A cardiac sonographer performs approximately six echoes per day on patients. Findings are reported to the physician in charge and patient data is entered in the computer system.

A typical day involves reviewing the patient's history, performing the echo examination along with blood pressure, and presenting the echo findings to the physician and other allied health staff. Cardiac sonographers also help teach other student sonographers and medical residents-in-training and are expected to continually learn new technology and disease processes.

Cardiac sonographers may be employed in hospitals, clinics, private offices, and industry. Most full-time cardiac sonographers work about 40 hours a week and may have evening and weekend hours and times when they are on call and must be ready to report to work on short notice.

The demand for cardiac sonographers continues to exceed the supply with faster than average job growth anticipated. The supply and demand ratio affects salaries, depending on experience and responsibilities. On average, diagnostic medical sonographers earn an annual salary of $70,865. [2011 data from www.iSEEK.org]
About the Echocardiography Track

The Bachelor of Science in Health Professions (BSHP) is an educational collaboration between the University of Minnesota Rochester (UMR) and Mayo School of Health Sciences (MSHS).

The BSHP Echocardiography Track delivers upper-division curriculum designed to prepare students to become well-rounded, fully competent cardiac sonographers in an environment based on teamwork and mutual respect. The program offers an exceptional educational experience by providing high-quality didactic and clinical experiences that prepare students to:

- Perform patient assessments
- Acquire and analyze data obtained using ultrasound and related diagnostic technologies
- Provide a summary of findings to the physician to aid in patient diagnosis and management
- Use independent judgment and systematic problem solving methods to produce high quality diagnostic information and optimize patient care

Upon successful completion of the coursework, students will receive a Bachelor of Science in Health Professions degree from the University of Minnesota and a certificate in Echocardiography from Mayo School of Health Sciences and be eligible to take the appropriate professional certification examinations.

All courses originate in Rochester. Academic coursework is offered at UMR or MSHS and is coordinated with Mayo Clinic to optimize the learning experience.

Faculty

Mayo School of Health Sciences draws its faculty from Mayo Clinic's clinical, scientific, and technical staffs. They are chosen for their commitment to teaching as well as clinical practice and/or research. Many have published and lectured extensively and are highly regarded in their field. Students will have direct access to these individuals throughout their training, allowing them the opportunity to learn directly from some of today's best practitioners.

University of Minnesota Rochester faculty are committed to the development of integrated curricula and working closely with colleagues from Mayo School of Health Sciences to design technology-enhanced courses that address current issues and trends relevant to the health care industry.

Patient Care Experience

The Echocardiography Track requires Certified Nursing Assistant (C.N.A.) training and licensure. The C.N.A. license is earned after taking a national certification exam. The license does not need to be current. Other certified/licensed/registered medical professionals may also meet this requirement. Direct patient care experience (Patient Care Assistant or P.C.A.) is recommended and can strengthen an application.

Prerequisite Coursework

Students complete lower-division (freshman-sophomore) courses at the University of Minnesota Rochester or at regionally accredited colleges and universities. Students must also complete all University of Minnesota liberal education and theme requirements prior to admission to the BSHP. The following list of prerequisites must be completed or in progress before application to the program:

- English Composition
- College Algebra (or higher level math course)
- Statistics
- General Psychology
- Ethics
- Public Speaking
- Medical Terminology
- General Chemistry
- [Human] Anatomy or Anatomy & Physiology I with lab
- [Human] Physiology or Anatomy & Physiology II
- Microbiology with lab
- Physics with lab

All prerequisite courses and liberal education requirements are outlined on the BSHP Prerequisite Course and Liberal Education Planning Chart available online at www.r.umn.edu/bshp.

Accreditation

The University of Minnesota and Mayo School of Health Sciences hold regional accreditation by the Higher Learning Commission, a commission of the North Central Association of Colleges and Schools. The Echocardiography Track is accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP).

Upper-Division Curriculum

Total of 66 credits

The challenging, high quality curriculum for the program is designed with courses in a specific sequence, progressively building on expertise while advancing through the program. Some coursework is delivered in a blended electronic and classroom format. Academic coursework is coordinated with clinical rotations to optimize the learning experience.

Fall Semester of Junior Year - 14 credits
- ECHO 3011 Foundations of Echocardiography (8 cr)
- ECHO 3101 Cardiovascular Anatomy & Physiology (2 cr)
- ECHO 3301 Clinical Practicum I (3 cr)
- HP 3021 Patient Care Techniques (1 cr)

Spring Semester of Junior Year - 13 credits
- ECHO 3202 Adult Echocardiography I (2 cr)
- ECHO 3212 Adult Echocardiography II (2 cr)
- ECHO 3222 Adult Echocardiography III (2 cr)
- ECHO 3302 Clinical Practicum II (7 cr)

Summer Semester between Junior and Senior Year - 13 credits
- ECHO 3403 Echocardiographic Application (3 cr)
- ECHO 3503 Stress Echocardiography (2 cr)
- ECHO 4303 Clinical Practicum III (8 cr)

Fall Semester of Senior Year - 13 credits
- ECHO 4111 Ultrasound Physics I (2 cr)
- ECHO 4201 Vascular Imaging (1 cr)
- ECHO 4211 Congenital Heart Disease (2 cr)
- ECHO 4401 Clinical Practicum IV (8 cr)

Spring Semester of Senior Year - 13 credits
- ECHO 4112 Ultrasound Physics II (2 cr)
- ECHO 4501 Research Project and Publication I (1 cr)
- ECHO 4402 Clinical Practicum V (10 cr)

Students majoring in the BSHP must complete at least 120 credits which may be transfer credits or credits from the University of Minnesota. A minimum of 66 credits must be completed in the Echocardiography Track. Courses are subject to change.