



# Health Sciences

*By Jobs for the Future (JFF) and Beyond School Bells (BSB)*

## Health Sciences Posters

### Contents:

#### Career Connection Posters

- Biostatistician (L1)
- EMT (L1, L4)
- Neurology Technician (L1)
- Occupational Therapist (L1)
- Phlebotomist (L1, L5, L6)
- Physical Therapist (L1)
- Physician Assistant (L1, L7)
- Radiologic Technician (L1)
- Social Worker (L1)
- Surgical Technician (L1, L7)



**JFF**



**Beyond School Bells**

nebraskachildren

# SELF

## SKILLS

- I have the necessary education and credentials to conduct research in the life and medical sciences.
- I enjoy thinking critically and using evidence to justify claims.
- I like to stay current on the latest research that can help inform new discoveries.

## ABILITIES

- I can clearly explain ideas to others.
- I am able to work well with computers and data software.
- I can easily interpret numbers and their values within a given formula.
- I have a strong understanding of mathematics and applied statistics.

## PERSONALITY TRAITS

- I enjoy working with numbers.
- I like to explain new findings to community members.
- I work well on a team.
- I pay great attention to detail.
- Conducting research to inform practice is important to me.

## SECURITY



## NEXT STEPS



Employers require a bachelor's and master's degree in mathematics, biomathematics, statistics, biostatistics, or a related major. Some require a doctorate degree.

# BIOSTATISTICIAN

## SOCIETY

Biostatisticians play a critical role in forwarding the field of medical sciences. They use mathematics and statistical theories to collect, organize, interpret, and evaluate numerical data. Their responsibilities include:

- Drawing conclusions or make predictions based on data summaries or statistical analyses.
- Designing research studies in collaboration with physicians, life scientists, or other professionals.
- Preparing articles for publication or presentation at professional conferences.
- Writing program code to analyze data using statistical analysis software.

# SELF

## SKILLS

- I have the basic training required to treat a patient during first response.
- I enjoy thinking of creative solutions to difficult problems.
- I enjoy communicating with others in a social environment.

## ABILITIES

- I can clearly explain situations to others.
- I am able to work well with my hands.
- I can visually scan and understand my surroundings.

## PERSONALITY TRAITS

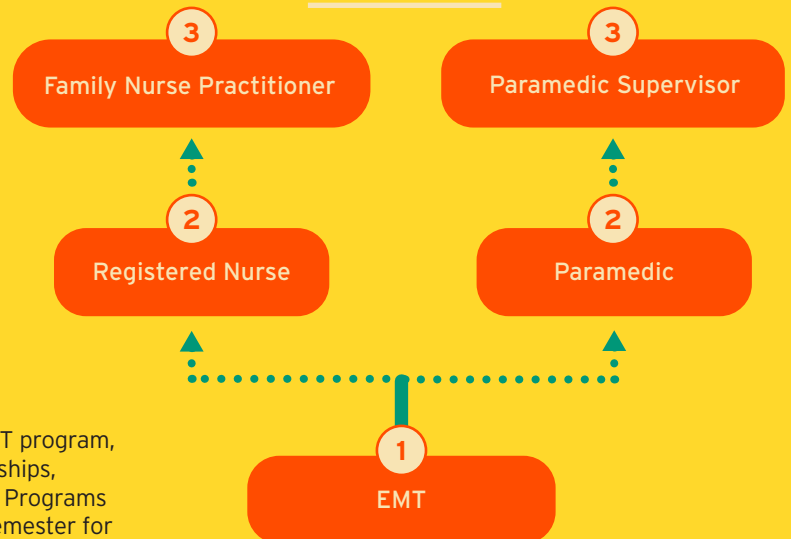
- I express concern for others when they are in trouble.
- I am honest and genuine when I communicate with others.
- I can remain calm under pressure and when faced with new challenges.
- I am able to control my feelings and actions well.

# SECURITY



Associate's Degree EMT program, Registered Apprenticeships, or other Certified EMT Programs (can be as short as 1 semester for the Basic Level!) required.

# NEXT STEPS



# SOCIETY

An EMT is often the first link to survival in an emergency. It is a crucial role that can mean the difference between life and death! On the scene, some of the duties an EMT is responsible for include:

- Assess injuries, administer emergency medical care, and extricate trapped individuals.
- Transport injured or sick persons to medical facilities.
- Administer first aid treatment or life support care to sick or injured persons in pre-hospital settings.
- Operate equipment, such as electrocardiograms (EKGs), external defibrillators, or bag valve mask resuscitators, in advanced life support environments.

# EMT

# SELF

## SKILLS

- I have the basic training required to assist neurologists in taking CT scan images of a patient's brain.
- I enjoy thinking critically and using evidence to justify claims.
- I like to stay current on the latest research that can help inform new discoveries.

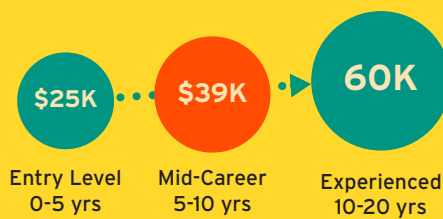
## ABILITIES

- I have a strong understanding of the brain and neuroscience.
- I can visually scan and understand CT scan images.
- I am able to work well with computers and technology.
- I can clearly explain situations to others.

## PERSONALITY TRAITS

- I enjoy communicating with people of all ages.
- I am clear and calm when I share instructions.
- I quickly notice when people are in discomfort or are afraid, and I adapt my behavior to help them stay calm.
- I pay great attention to detail.
- My teammates can depend on me.

## SECURITY



## NEXT STEPS



High School diploma or HSE, Associate's Degree in a Neurology Technician program (1-2 years after post-high school).



## SOCIETY

Neurology Technicians produce images, such as CT-scans, of the human brain for use in diagnosing medical problems (for example, a brain disease or injury). Their daily tasks include:

- Operate CT scan equipment to conduct and analyze medical brain scans.
- Take and examine CT scan images to locate abnormalities, such as evidence of brain disease or injury.
- Consult with a neurologist to determine a final diagnosis when abnormalities are found in the scan.
- Analyze and record test data to issue reports that use charts, graphs, or narratives.

# NEUROLOGY TECHNICIAN

# SELF

## SKILLS

- I have the necessary education and credentials to support patients who are recovering from various injuries and/or suffering from other health issues.
- I enjoy thinking critically.
- I have strong planning skills.
- I can guide and instruct people.

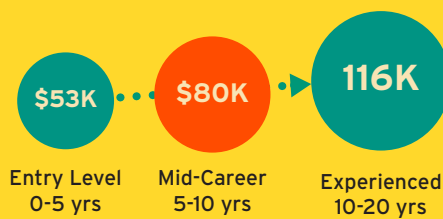
## ABILITIES

- I can clearly explain ideas to others.
- I can effectively manage a team.
- I am able to work well with computers and use different types of software.
- I am physically fit and can lift patients and equipment as needed.

## PERSONALITY TRAITS

- I enjoy working with people.
- I like to help people improve their health and well-being.
- I work well on a team.
- I pay great attention to detail.

## SECURITY



## NEXT STEPS



Employers require a master's degree or higher in occupational therapy.



## SOCIETY

Occupational Therapists help people improve, develop, recover and maintain their ability to perform tasks in their daily living and working environments. Their responsibilities include:

- Select patient activities and exercises
- Support clients in completing activities and exercises
- Monitor and document each patient's treatment progress
- Use computer applications programs to help clients improve decision-making, abstract-reasoning, problem-solving, and perceptual skills, as well as memory, sequencing, and coordination

# OCCUPATIONAL THERAPIST

# SELF

## SKILLS

- I have the basic training required to draw and handle blood.
- I enjoy communicating with others in a social environment.
- I notice details easily.
- I enjoy thinking through and solving problems.

## ABILITIES

- I can clearly explain situations to others.
- I am able to work well with my hands.

## PERSONALITY TRAITS

- I express concern for others when they are in trouble.
- I consider myself a patient person.
- I find it easy to calm others down.
- I can remain calm under pressure and when faced with new challenges.
- My teammates can depend on me.
- I like to keep my space neat and always know where my belongings are.

# SECURITY



Associate's degree from a phlebotomy program or other Certified phlebotomy course.

# NEXT STEPS



# PHLEBOTOMIST

# SOCIETY

Phlebotomists work directly with patients in laboratories and hospitals. They draw blood for tests, transfusions, research, or blood donations. Their responsibilities include:

- Draw blood from patients and blood donors.
- Talk with patients and donors so they are less nervous about having their blood drawn.
- Verify a patient or donor's identity to ensure proper labeling.
- Label the drawn blood for testing or processing.
- Enter patient information into an onsite database.
- Assemble and maintain medical instruments such as needles, test tubes, and blood vials.

# SELF

## SKILLS

- I have the necessary education and credentials to support patients with medical problems or other health-related conditions, illnesses, or injuries.
- I enjoy thinking critically.
- I enjoy using data to solve problems.
- I manage my time efficiently.

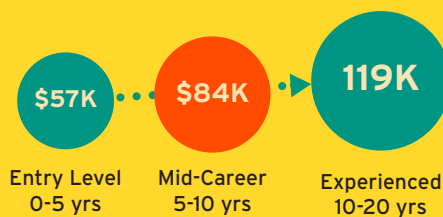
## ABILITIES

- I can clearly explain ideas to others.
- I have strong observation skills.
- I can move heavy equipment, lift patients, and stand for extended periods.
- I am able to work well with computers and software.

## PERSONALITY TRAITS

- I enjoy working with people.
- I like to help people improve their health and well-being.
- I work well on a team.
- I pay great attention to detail.

## SECURITY



## NEXT STEPS



Employers require a master's degree or doctorate in physical therapy and a state license.



## SOCIETY

Physical Therapists help people improve mobility, reduce pain, restore function, prevent disability, and enhance fitness and wellness. Their daily tasks include:

- Examine, evaluate, diagnose, plan, and treat patients
- Use evidence-based tests and measures to examine and evaluate clients
- Observe and examine an individual's responses to the interventions.
- Record the patient's overall therapy status and note any changes
- Educate and instruct the individual and their family or caregivers about activities and exercises to continue at home, school, or work

# PHYSICAL THERAPIST

# SELF

## SKILLS

- I have the basic training required to provide medical treatment for a patient.
- I enjoy communicating with others in a social environment.

## ABILITIES

- I can clearly explain situations to others.
- I am able to stay focused on the task at hand.

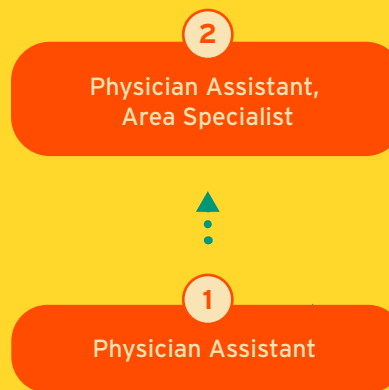
## PERSONALITY TRAITS

- I express concern for others when they are in trouble.
- I am honest and genuine when I communicate with others.
- I enjoy thinking of solutions to difficult problems.
- I am able to control my feelings and actions well.
- I notice details easily.

## SECURITY



## NEXT STEPS



Minimum of a Bachelor's Degree is required, in many cases a Master's degree is expected.

## SOCIETY

Physician Assistants often perform many of the same duties as a doctor! They can conduct complete physicals, provide treatment, and counsel patients, under the supervision of a physician. Their responsibilities include:

- Examine patients to obtain information about their physical condition.
- Interpret diagnostic test results for deviations from normal health.
- Obtain, compile, and record patient medical data, including health history, progress notes, and results of physical examination.

# PHYSICIAN ASSISTANT



# SELF

## SKILLS

- I have the basic training required to assist radiologists in taking x-ray images of patients.
- I can stand for long periods of time and help to lift/move patients when necessary.
- I enjoy communicating with others in a social environment.

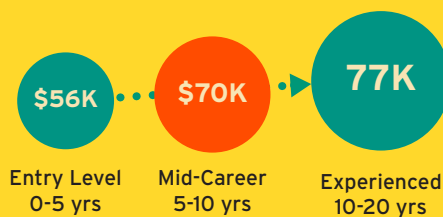
## ABILITIES

- I can clearly explain situations to others.
- I am able to work well with my hands.
- I can visually scan and understand x-ray images.
- I have strong math and science skills.

## PERSONALITY TRAITS

- I express concern for others when they are experiencing pain and injury.
- I am clear and direct when I communicate with others, and I am an active listener.
- I pay great attention to detail.
- My teammates can depend on me.
- I am very caring and gentle.

## SECURITY



## NEXT STEPS



High School diploma or HSE, Associate's Degree in a Radiologic Technician program (can be as short as 2 years or less of training!)



## SOCIETY

Radiologic Technicians produce images, such as x-rays, of parts of the human body for use in diagnosing medical problems (for example, to detect a broken bone). Their daily tasks include:

- Adjusting and maintaining imaging equipment.
- Preparing patients for procedures, including taking a medical history and answering questions about the procedure.
- Positioning the patient and the equipment in the location needed to get the correct image.
- Operating computerized equipment to take the images.
- Keeping detailed patient records

# RADIOLOGIC TECHNICIAN

# SELF

## SKILLS

- I have the necessary education and credentials to help patients understand their health conditions.
- I enjoy thinking critically.
- I enjoy using data to solve problems.
- I manage my time efficiently.

## ABILITIES

- I can clearly explain ideas to others.
- I can use data to make well-informed decisions.
- I am able to work well with computers and data software.
- I have strong coordination skills.

## PERSONALITY TRAITS

- I enjoy working with people.
- I like to help people improve their health and well-being.
- I work well on a team.
- I pay great attention to detail.

## SECURITY



## NEXT STEPS



Most states and employers require a Master's degree in Social Work. All states require a license to practice.



## SOCIETY

Healthcare Social Workers assess and support individuals and their families to understand and address diagnoses, chronic, acute, or terminal illnesses, after a severe stroke or heart attack. Their responsibilities include:

- Advise family caregivers.
- Develop and coordinate plans for individual patient treatment and rehabilitation plans.
- Provide patient education and counseling.
- Monitor, evaluate, and record a patient's progress according to measurable goals, and then revise treatment and rehabilitation plans as needed to reflect changes in a patient's condition

# SOCIAL WORKER

# SELF

## SKILLS

- I have the basic training required to assist surgical professionals in operating on patients.
- I enjoy thinking of creative solutions to difficult challenges.

## ABILITIES


- I can clearly explain situations to others.
- I use logic to come up with solutions to difficult challenges.
- I am able to work well with my hands.

## PERSONALITY TRAITS

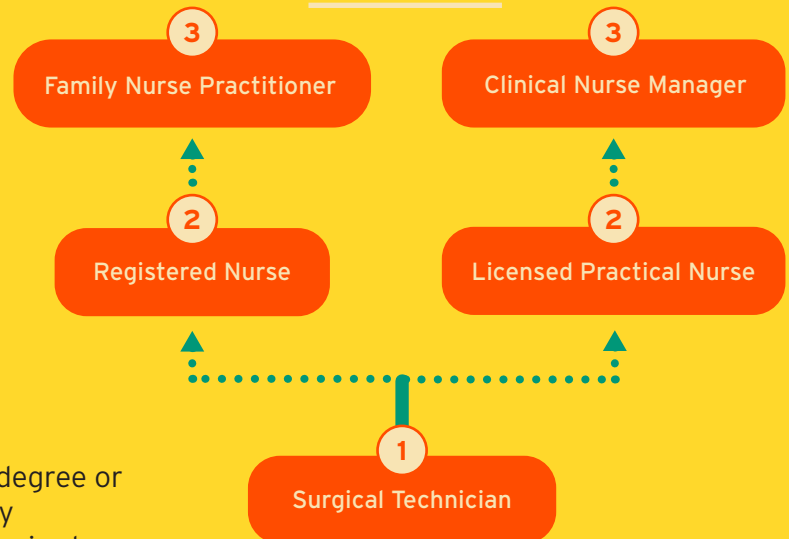
- I notice details easily.
- I am honest and genuine when I communicate with others.
- I am able to control my feelings and actions well.
- I can remain calm under pressure and when faced with new challenges.
- My teammates can depend on me.
- I am comfortable with changes and adjust to situations quickly.

# SECURITY



 An Associate's degree or a postsecondary certificate is required.

# NEXT STEPS



# SOCIETY

Surgical Technicians are a direct link to saving lives in the operating room. They assist surgeons, registered nurses, or other surgical professionals during surgical operations. Their responsibilities include:

- Helping surgeons by holding instruments, cutting sutures, and counting sponges, needles, and other supplies.
- Preparing and transporting patients for surgery.
- Passing instruments and other supplies to surgeons and assistants during operations.
- Cleaning and organizing the operating room and medical equipment used in surgeries.

# SURGICAL TECHNICIAN