

Team-based care
Working together
to reduce errors

Workforce shortage
Why it's the best time
to enter medicine

Physician Assistant
A quicker way to
enter the workforce

**MEDIA
PLANET**

June 2012

CAREERS IN HEALTHCARE



Donald Hodges

Histology Technician at the Mayo Clinic in Rochester, Minnesota.

Read more on page 9

PHOTO: MAYO CLINIC

"I get up each day doing something that matters and affects the lives of hundreds of people every day."



MAKE A DIFFERENCE

After experiencing medical treatments of his own, **cancer survivor and champion cyclist Lance Armstrong** is now dedicated to educating others about the disease, and inspiring well-being

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CHALLENGES

Millions of dedicated health care professionals – **from nurses to pharmacists to lab technicians** – help people every day and make a positive difference in the world.

An abundance of opportunity

The opportunity to provide care and comfort to people in need is one of the great joys of being a physician and pursuing a career in health care. The job satisfaction that comes from making a difference in someone's life is hard to beat. Millions of dedicated health care professionals — from nurses to pharmacists to lab technicians — help people every day and make a positive difference in the world

An aging population

As millions of baby boomers turn 65, more health care professionals will be needed to care for the aging population. Administrative jobs in health care are also on the rise, mainly due to the growth of electronic health records (EHRs) and the need for an improved electronic and data infrastructure.

A growing need

A 2011 study conducted by the American Medical Association (AMA) showed that office-based physicians and their practices

generated more than \$1.4 trillion in 2009 for the nation's economy. That economic contribution will continue as the health care workforce expands through 2020, according to the U.S. Bureau of Labor Statistics (BLS). In fact, one medical economist calls the health care field "recession proof." The BLS describes the health care and social assistance industry as "the most rapidly growing sector in terms of employment," and eight of the top 20 fastest growing professions fall within the health care industry. To keep pace with job growth in this field, our country must have a qualified workforce ready to fill these important jobs.

Inspiring the next generation

The AMA has advocated for higher training standards in medical education for nearly 165 years, and that commitment continues today. We work every day to create a health care environment where physicians and other

"As millions of baby boomers turn 65, more health care professionals will be needed to care for the aging population."



Peter W. Carmel, M.D.
American Medical Association President

health care professionals can thrive in sustainable practice roles that are attractive to future generations. In fact, next month in Chicago, AMA physicians, residents and medical students will take time during our annual meeting to meet with students from the Chicago Public Schools and City Colleges of Chicago who are interested in pursuing health care careers. We will share our personal stories of how fortunate we are to be part of such a noble profession and encourage them to pursue this worthy and rewarding career.

I've been practicing medicine for more than four decades, and I can tell you without a doubt that there is no better feeling than improving people's health and lives. We hope the information within this section serves as an inspiration to enter this highly rewarding field.

PETER W. CARMEL, M.D.
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WE RECOMMEND



Stephen C. Shannon, DO, MPH
discusses the difference between DO's and MD's.

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MEDIA
PLANET

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SCHOOL OF MEDICINE

NEWS



DON'T MISS

Employment boom for allied health care workers

Employment growth in the health field will be especially high for allied health care workers, especially for those who work outside the inpatient hospital sector, such as pharmacy technicians and personal and home care aides. Nursing aides, orderlies and attendants, and home health aides are among the occupations adding the most new jobs between 2006 and 2016, about 647,000 combined.

Projected growth in demand for allied health workers 2006-2016

49%

HOME
HEALTH
AIDE

35%

MEDICAL
ASSISTANT

29%

PHYSICIAN
ASSISTANT

32%

PHYSICAL
THERAPY
ASSISTANT

U.S. BUREAU OF LABOR STATISTICS
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Changing healthcare education



Andrew Jeon, MD, MBA
President of
DeVry Medical
International

Just over a century ago, an educator named Abraham Flexner inspected each of the 155 medical schools in the U.S. at that time.

He concluded that the training provided at many was inadequate—in some cases, woefully—to prepare physicians to provide high-quality and relevant care to their patients. There were too many lectures, and not enough hands-on training. Knowledge of basic medical principles varied widely among the faculty. The length of medical education, typically two years, was insufficient. Flexner's report led to

a dramatic transformation of medical education.

The question being asked by the Flexner Report is this: how do we make medical education relevant to society's needs? We are still grappling with that question today. We are also asking a question that was not apparent in Flexner's day: how do we build healthcare teams to serve our patients?

The importance of team players

The simple answer is that we must orient our education and training programs to create team players. Research shows that teamwork is crucial to providing safe care and preventing medical errors. A long line of working groups, committees, and reform-minded individuals have issued calls for more inter-professional learning that allows students in medicine, nursing,

and allied health to train together as they will later practice together. This is exactly what is needed. Yet too often healthcare professionals train in silos.

Simulation training

Medical schools around the world are looking at ways to bring the different members of the team together early in their education. One way is to use simulation to place students in "real-world" situations that allow them to not only apply knowledge and clinical reasoning, but also practice interacting with their colleagues across disciplines. Another is to create opportunities for these students to study together with common curricula addressing areas like patient safety, health information technology, communication, and ethics. The outcome of this kind of training goes beyond quality, safety, and

efficiency. It goes to the heart of the patient-centered care concept.

Flexner's focus was the education of physicians, but the idea of healthcare teams is there in his famous report, in his description of doctors as "social instruments" whose function was "fast becoming social and preventive, rather than individual and curative." His great legacy is the shift in medical education from the emphasis on "learning what" to "learning how." It is time now to embrace a new emphasis on "learning with" our peers in the other health professions.

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TEAM-BASED HEALTHCARE: A SMART APPROACH TO REDUCING ERRORS

From the time they enter the hospital to the time they go out the door, a patient is likely to pass through the hands of potentially dozens of different healthcare providers.

With every handoff and communication between those providers, there's a chance of error.

That's why hospitals and medical centers are increasingly focusing on the importance of team-based healthcare, and medical schools are beginning to integrate training in that area into their curriculum.

At Ross University School of Medicine (RUSM), for example, students

are put through a series of videotaped scenarios, where their ability to work as part of a team is analyzed.

"We set up typical scenarios that medical professionals experience in the operating room and the emergency room, and we go through those events in real time and make it as lifelike as possible. In these situations, nurses and doctors are acting in unison to address a problem in real time, and we're simultaneously videotaping that," said Dr. Joseph A. Flaherty, MD, Dean and Chancellor at RUSM.

"We then take a look at the tape

with the students and ask 'What happened? Why did the patient live? Who is doing what? Were you working in synchronicity?'"

Communicating to reduce errors

Successful team-based healthcare requires that healthcare professionals think beyond who is doing what work with a patient and consider how they are communicating to reduce errors.

"I was visiting a site in Michigan," recalls Flaherty, "and I attended this simulation in which 4 students

attended to a patient who had gone into cardiac arrest. You could learn so much by watching how they responded to it, who took command of the situation, who took over resuscitation versus who was handling communication."

From life-or-death moments to assuring the highest quality of care possible for all patients, team-based health care is all about reducing errors and improving patient safety, which is one thing all healthcare providers ultimately strive for.

RICHARD SHARP
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FACT

1

INTER-
PROFESSIONAL
LEARNING
ALLOWS
STUDENTS IN
MEDICINE
TO TRAIN
TOGETHER



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a pediatrician.
I chose AUC."*

—Alexandra Fox, Clinical Student

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American University of the Caribbean
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INSIGHT



QUESTION & ANSWER

**Terrence Cascino, M.D.**

Juanita Kious Waugh, Executive Dean for Education and Professor of Neurology, College of Medicine, Mayo Clinic.

■ What role does the education system play in the healthcare industry?

Teaching students and residents to conduct cutting edge research and deliver high value, safe patient care begins the minute they walk in the door and continues throughout their education and training. The future of biomedical education centers on teaching research, the art of medicine, and the

science of health care delivery. This includes incorporating simulation learning, professionalism, and teamwork in a multidisciplinary environment into the curriculum and training of all learners.

■ What is the most important trend shaping healthcare careers today?

The change from individual practice to care by multidisciplinary teams. Physician assistants and nurse practitioners are playing greater roles in primary and specialty health care. Lesser known professions, such as surgical assistants and pathologists' assistants are involving allied health workers in unique ways. Students from different professions must learn to work together to provide optimal care.

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Continue this conversation on Twitter by joining Mayo Clinic experts at the #HealthCareer on June 6 from 1-2 p.m. EST.

Healthcare careers in demand: Physician Assistant

If you're looking into new careers in healthcare, one of the fastest growing professions with a medical education requiring less time than a physician's and high salary expectations, consider becoming a physician assistant.

According to the Bureau of Labor Statistics, "Employment of physician assistants is expected to increase 30 percent from 2010 to 2020, much faster than the average for all occupations."

Physician assistants (also known as PAs) practice medicine as part of a team with doctors and can perform many of the same healthcare tasks such as performing examinations, diagnosing and treating illnesses, ordering and interpreting lab tests, prescribing medication and much more.

"While PAs report competitive salaries and a high level of satisfaction with their careers, by far, the biggest advantage to becoming a PA is the fact that we receive a general medical education, allowing us tremendous flexibility throughout our careers and in the healthcare team," said Robert Wooten, PA-C, President, American Academy of Physician Assistants.

The typical education for PAs is a master's program that includes instruction in core sciences like anatomy, physiology, biochemistry, pharmacology, behavioral science, medical ethics and more. Aspiring PAs must also complete more than 2,000 hours of clinical rotations, with an emphasis on primary care in ambulatory clinics, physician offices and acute or long-term care facilities.

Most PA programs take a little over two years (27 months on average), while comparatively, physicians go to medical school for at least four years after obtaining

their bachelors and nursing programs generally take two to four years to complete.

Additionally, when PAs enter the medical profession, prospects are generally quite bright.

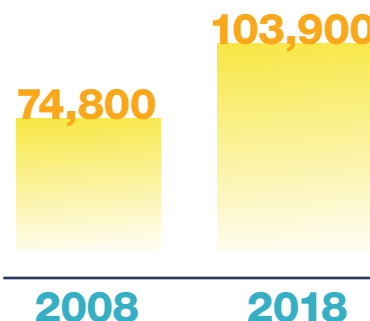
"AAPA's data shows that a newly graduated PA can expect to be earning nearly \$80,000 right out of school, and in ten years, most of them could be earning over \$95,000" says Wooten.

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FACTS

Projected growth of PAs in clinical practice



With a projected growth of 39 percent, the Bureau of Labor Statistics predicts physician assistants will be the second fastest growing health profession in the next decade.

I look forward to the day when I can...treat cancer patients and support them. Because I know. My cancer is in remission. My answer was Mayo Clinic.

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NEWS



DON'T MISS

■ After graduating from an osteopathic medical school, students generally continue training in a graduate training program called a “residency,” the first year of which may be called an “internship.” This traditional rotating internship provides broad training in areas such as family medicine, surgery, obstetrics and gynecology, internal medicine, pediatrics, and other fields of medicine as determined by the program or the trainee’s interests.

AMERICAN ASSOCIATION
OF COLLEGES OF
OSTEOPATHIC MEDICINE
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Osteopathic medicine: Another option for students

■ **Question:** What career path focuses on whole person health and prevention?

■ **Answer:** Osteopathy is designed to be more of a patient-centered holistic approach to medicine.

These days, becoming a Doctor of Osteopathic Medicine is an increasingly popular path for those entering a career in medicine, with over 20 percent of medical students training to be osteopathic physicians.

Over 63,000 fully licensed osteopathic physicians work across the country, with an additional 4,200 fully trained D.O.s entering the workforce each year.

Similarities to M.D.s

Like M.D.s, D.O.s go through a rigorous training program to work in hospitals and clinics around the country, where they can prescribe drugs, perform surgery, and practice medicine.

“The core education is very similar to that of an M.D.,” according to Dr. Stephen Shannon, President and CEO of the American Association of Colleges of Osteopathic Medicine.

“It requires the same amount of school and residency training, and shares much of the same curriculum and textbooks. The difference is really in the approach and philosophy,” says Dr. Shannon.

Specifics of osteopathic medicine

Osteopathic medicine is designed to be more of a patient-centered holistic approach to medicine, going beyond diagnosing and treating illness and injury to look at the root of health issues.

“Osteopathic medicine is about looking at not just the disease, or the organ or even just the individual, but also in the status of their health in the context of who they are as a person, as a part of a family, within their community and in the workplace,” says Shannon.

D.O.s are also trained in hands-on care, which can help diagnosis and treat many types of pain, injuries and a variety of other illnesses.

“In addition to a traditional medical curriculum they receive additional training in the musculoskeletal system and how it affects other body systems,” says Dr. Margaret Wilson, Dean of A.T. Still University’s Kirksville College of Osteopathic Medicine.

Going into osteopathic medicine is an option more medical students than ever are considering.

“Osteopathic medicine offers a unique choice for students seeking a medical career. Its emphasis on whole person health and prevention offers a rewarding career path for those interested in becoming a physician,” says Wilson.

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Aspiring Physicians: Why Consider Osteopathic Medical College?

Osteopathic medicine is a distinctive form of medicine practiced in the United States. Osteopathic physicians (DOs) use all of the tools and technology available to modern medicine, with the added benefits of a holistic philosophy and a system of hands-on diagnosis and treatment known as osteopathic manipulative medicine. DOs emphasize helping patients achieve a high level of wellness by focusing on health education, injury prevention and disease prevention.

DOs are licensed to practice the full scope of medicine in all 50 states, and in more than 45 countries around the world. They practice in all types of environments, including the military, and they specialize in every area of medicine.

If you want to be the kind of physician who works in partnership with your patients, who considers the impact that lifestyle and community have on the health of each individual, and who works to erase barriers to good health, a career

as an osteopathic physician may be a good match for you.

Today, some 20,000 students are enrolled at osteopathic medical schools. More than 20 percent of U.S. medical students are training to be DOs. There are 29 U.S. osteopathic medical colleges and four branch campuses offering instruction at 37 locations in 28 states.

About Osteopathic Medical Education

Osteopathic (DO) medical school curricula mirror those at all U.S. medical schools. The first two years focus on the biomedical and clinical sciences, followed by core clinical training in primary care and clinical specialties.

DO schools require training in internal medicine, obstetrics/gynecology, pediatrics, family practice, surgery, psychiatry, radiology, preventive medicine and public health. In addition, most schools provide a rural or underserved-focused primary

care experience, and include time for electives as well.

The colleges maintain the core values that distinguish osteopathic philosophy and practice: holistic, patient-centered, preventive, and health- vs. disease-focused care within a primary care context.

The curriculum is clearly distinguished by its inclusion of osteopathic manipulative medicine (OMM). This therapy, also called osteopathic manipulative treatment (OMT), involves manually diagnosing structural dysfunctions related to illness and injury, and manipulating muscles and bones to move them into proper position, thereby restoring functionality and/or removing impediments to healing.

OMM education is in addition to, and integrated with, medical training on current and emerging theory and methods of medical diagnosis and treatment.

In most DO schools, community-based education is a mainstay of clinical education. While in-hospital experiences are an important aspect of that training, most



DO students have training experiences in community hospitals, and all DO students experience significant time in out-of-hospital ambulatory (frequently primary care) settings. In many schools, a community-based primary care rotation in a rural or underserved area is a required aspect of (usually) fourth-year training.

The colleges of osteopathic medicine are accredited by the American Osteopathic Association Commission on Osteopathic College Accreditation (COCA), which is recognized by the U.S. Department of Education to accredit osteopathic medical education. Many osteopathic medical schools are components of larger higher education institutions that are accredited by a regional accrediting organization.

To find out more about becoming an osteopathic physician, visit:
www.aacom.org/InfoFor/applicants/

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INSPIRATION

Never too late: Healthcare career options later in life

■ **Question:** Do you think it's too late to start a career in healthcare?

■ **Answer:** Think again - it's never too late.

While it takes years to go to medical school to train to be a doctor, there are many options out there for those who want to take advantage of the healthcare job market without spending ages learning how to do so.

Case in point is Donald Hodges, a 51-year-old Histology Technician at the Mayo Clinic in Rochester, Minnesota.

Layoff to opportunity

Hodges worked in manufacturing for 25 years. After being laid off a few years ago by former employer Crenlo, he decided that perhaps it was time to go back to school.

"I often thought it would be nice to get up in the morning and do something that would benefit others. So, when the great recession hit I found myself part of a massive lay off. I looked at this as an opportunity, not as a negative thing."

After receiving funds for training from the Minnesota Dislocated Worker Program, Hodges was accepted into the Histology Tech-



CAREER CHANGES
After 25 years in manufacturing, Donald Hodges enters the medical field for the first time.
PHOTO: MAYO CLINIC

nician Program at Mayo School of Health Sciences.

"The desire to make a difference and being given the financial means during a very hard economic time in our country's history was my inspiration," Hodges says of his career switch.

Histology is a little known field, but one that is booming. The current need for certified histology technicians far exceeds the supply of trained individuals.

Hodges ended up working at Mayo's Department of Laboratory Medicine and Pathology, where his recently acquired training allows

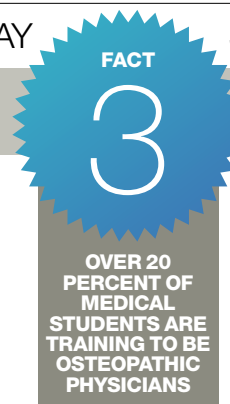
him to make his mark, literally, on the world.

Creating an impact

"The switch was well worth it. I get up each day doing something that matters and affects the lives of hundreds of people every day. Oh yes, and the slides that I create have my initials on them, and they are saved indefinitely by Mayo Clinic. You could look at this as my own sense of immortality," says Hodges.

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Question 1: What is the most common misconception about careers in the medical industry?	It's not just about helping patients get better anymore, it's about educating them and keeping them well. With chronic illness and healthcare costs on the rise, the mandate for providers in today's marketplace is changing. There is greater emphasis on the quality and value of care. Taking the time to provide coordinated, patient-centered care is a hallmark of the PA profession that is increasingly being recognized by the healthcare system, and more importantly, by our patients.		Medicine has always been regarded as a noble profession. The most common misconception is that most people believe it's unattainable. The physician shortage in the U.S. allows for more medical graduates to enter and practice in medicine. The current trend in the U.S. is to develop and open new medical schools and increase enrollment in the existing medical schools, which is a direct result of the physician shortage. With increased seat availability in medical schools, the opportunity to enter the field of medicine is greater than ever.		People seem to believe that medicine today is reserved for the elite few. This is simply not the case. If one is willing to work hard, the immense satisfaction possible from helping others is within the reach of most people. It's important for students to find people who will guide them in the right direction.	
Question 2: What advice would you give to someone who is considering pursuing a career in the medical field?	Become a PA! The profession has been consistently ranked as a top job in America for several years by Forbes, CNN Money, the Wall Street Journal and many others. On average, we're well compensated and enjoy enormous flexibility in our careers. PAs function as clinicians, administrators and educators in all settings and specialties across healthcare. Experts predict the demand for PAs to increase 30-percent by 2025 because physicians and healthcare systems recognize the value PAs bring to team-based, patient-focused healthcare.		A career in medicine is very demanding and requires complete devotion, dedication and hard work. The rewards associated with the selfless dedication of helping someone is truly gratifying and will last a lifetime.		If I were younger and starting my career over, I would be very serious about investigating which profession offers the most opportunities over the course of a life time. As this generation matures, adults may tire of a single assignment and would like to move to another position within the same discipline. I would be sure to pick a field of study that offers multiple opportunities within the discipline.	



AMERICA'S LOOMING PHYSICIAN SHORTAGE:
A PUBLIC HEALTH ISSUE

According to the Council on Graduate Medical Education (COGME), the United States faces a looming physician workforce shortage of as many as 85,000 physicians by 2020.

Impact of aging population
With around 25 percent of physicians age 60 or older, the American healthcare system is certain to see a wave of retirement of the baby boomers, while the need for healthcare professionals

increases dramatically with an increasingly older population.
While some lawmakers and advocacy groups have recognized the need for increasing numbers of medical graduates, the recent deficit discussions in Washington have put government funding to support that possible solution in peril.
Effects of government spending cuts
The U.S. currently spends \$9.5 billion on Medicare Graduate Medi-

cal Education, and possible cuts in Medicare could potentially reduce or eliminate that crucial program when it is most needed.
According to Dr. Stephen Shannon, President and CEO of the American Association of Colleges of Osteopathic Medicine, the effect of potential cuts could be devastating.
"If Medicare funding for GME is cut, residency programs will be severely challenged in their ability to continue educating their current numbers of residents,

much less the additional physicians the nation needs and U.S. medical colleges are all working so hard to produce," says Shannon.
Besides avoiding funding decreases on GME, Shannon points to eliminating or easing caps on residency programs as a possible solution for the physician shortage crisis.
"In a relatively short period of time, the number of students and Osteopathic schools will double from what it was in the early

2000's," says Shannon.
"That is great, and can help address the shortage. Unfortunately, at the same time, there has been a lack of growth in residency positions. There is a 24-25 percent projected shortage in residency positions even as the need for physicians increases. We need to realize that workforce shortage is a basic public health issue and take steps to address it." says Shannon.

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6 BEST TIPS

Steps to a successful health career**1 Find out if a health career is right for you**

It's important to choose a career that you will enjoy. Write a description of your ideal job - what factors matter most to you?

2 Learn more about health career opportunities

There are hundreds of health careers - including many jobs you may not have heard about. Health careers are organized into fields that focus on specific areas of health care or certain types of patients.

3 Find a career that fits your educational plans

You can train for many health careers in 2 years at your local community college. Other jobs require a four-year degree, while some involve up to 14 years of education. Consider training for a job as an "assistant" or "aide" to enter the workforce sooner.

4 Find out what health care workers do

Before you choose a career, do some research to learn about the day-to-day responsibilities of the job. "Shadow" a health worker for a day to see what the career is really like.

5 Start building your resume now

Most health careers require a background in science - take as many science and math courses as you can.

6 Don't let money stop you

Paying for school is a challenge, but you can get financial assistance for college or a training program. Many scholarships, grants and loans are available for minorities and low income students.

3D imaging: A new view on neurosurgery

Try a little experiment. Place a bottle in front of you. Now reach for it. Now place the bottle back, cover one eye and reach for it again.

Chances are you either overshot or undershot your mark. Taking away one eye reduces your spatial perception, which might make for some goofy barroom hijinks when you're reaching for a bottle, but it doesn't make much sense when it comes to neurosurgery.

For years, believe it or not, that's how neurosurgery assistants had to maneuver in the operating room, but new uses of 3D imaging technology is changing all that.

Improving patient care

"Our surgical microscope has provided 3D imaging since its intro-



"The new technology gives everyone in the operating room critical full spatial visibility during the operation."

PHOTO: NEUROLOGICAL INSTITUTE OF NEW JERSEY UMDNJ-NEW JERSEY MEDICAL SCHOOL

duction into the operating room in the 1960s. The big difference is that our assistants will only see images in two dimensions. This 'flat' image and adjusting to the flat image is something that makes training of residents and,

at times patient safety, an issue," says Dr. Charles Prestigiacomo, Professor and Chairman at the Department of Neurological Surgery at the University of Medicine and Dentistry of New Jersey.

In addition to the 3D microscope that's been standard practice for years, the system used by Prestigiacomo and his colleagues includes a new 3D endoscope, the small camera that goes inside the cranium, resting at the base of the brain during surgery.

The new technology gives everyone in the operating room critical full spatial visibility during the operation.

More visibility, shorter learning curve

"With the 3D technology, all members of the operating team are now able to visualize critical brain structures in 3 dimensions and

thus more safely navigate around them," says Prestigiacomo.

The hope is that the long-term payoff of using the new 3D imaging system is in safer visits to the operating room for patients, and shorter learning curves for neurosurgeons.

"The 3D imaging technology, though new, is serving a tremendous benefit as a teaching tool and as a safety device. In a teaching institution such as ours it is imperative that we offer the best technology has to offer... both to our patients and to our trainees," says Prestigiacomo.

RICHARD SHARP

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A chance to do something that matters

Let's start with the numbers
The Bureau of Labor Statistics (BLS) predicts that 5.7 million new health related jobs will be created by 2020.

That's 28 percent of all new jobs, many in careers that can last a lifetime. Why is health care demand so strong? The U.S. population is getting older, and sadly, sicker, which means most of us will need some sort of care in the foreseeable future, and not just from doctors and nurses. A few jobs, such as home health aide positions, are available right out of high school. An associate's degree opens the door to a wide array of opportuni-

ties, and with a professional degree and graduate work, the sky's the limit.

Plenty of options

Whether you're drawn to working with patients, information, or the latest health technologies, there is no such thing as a dead-end job in health care. More education is always available to move up the career ladder, and the more you learn, the more you earn. The BLS says the median weekly salary is \$638 with a high school diploma, \$719 with some college, and \$1,053 with a bachelor's degree. Careers in medicine and dentistry require 8 to 12 years of education after high

school but command salaries of \$150,000 and more.

Benefits of working in healthcare

Of course, healthcare can be demanding and involve long hours, but many careers also offer considerable flexibility. An optometrist in private practice can start at 9:00 a.m. and be home in time for dinner. Some nurses work evening or weekend shifts to be home with their children after school. Coding medical bills can be done from home.

Strong demand, good to excellent pay, and flexibility are all excellent reasons to pursue a

health career, but so is the chance to do something that matters. Many communities urgently need health care providers today, and many more will need them tomorrow. Helping to keep people well or to care for the sick and vulnerable can bring personal, as well as financial rewards. Along the way, you just might save someone's life, help cure a disease, or hold someone's hand at a time of great need.

NICOLE FAUTEUX
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INSPIRATION

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Interested in getting involved in the healthcare industry?

Are you comfortable with science?

■ Many (but not all) health careers require you to be a strong science student. Some fields involve some laboratory science, and some programs demand intensive work in the hard sciences (i.e., chemistry, physics, biology).

Are you prepared to keep up with developments in your field?

■ In order to keep up with the latest developments in your field, you'll need to continue studying and learning throughout your career.

Are you comfortable with standardized exams?

■ In addition to the admissions tests required for admission to many academic programs, you may need to take a certification or licensing exam upon completion of your academic program.

Are you a team player?

■ Health care is increasingly becoming a group activity: A patient's treatment and recovery depends on how well the healthcare team communicates and collaborates with one another.

Do you want to make a difference?

■ If you want to give back to society and do something that matters, a health career offers extraordinary opportunities to care for people and make a difference in the world.

EXPLOREHEALTHCARE
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Lance Armstrong is not only a cancer survivor and champion cyclist, **he is also the founder and chairman of the Lance Armstrong Foundation**, an organization that serves people affected by cancer.



FINISHING STRONG
Lance Armstrong does his part to inspire and help others stay healthy.
PHOTO: ELIZABETH KREUTZ

LANCE ARMSTRONG: A HEALTHY HERO

There are many ways people can be involved with the healthcare industry that do not require going to medical school or advanced degrees—from working with health advocacy campaigns to fundraising for a cause, and more. After his own battle with cancer, professional cyclist Lance Armstrong drew from his own experience and founded the Lance Armstrong Foundation in order to educate and support others.

Q: Tell us about the Lance Armstrong Foundation. Why did you start the foundation and what is its mission?

A: Before knowing my own fate, I declared myself not a cancer victim but a cancer survivor. I wanted a way to advocate for people living with cancer and decided to create the Foundation. Our mission is to inspire and empower people affected by cancer. We have created an incred-

ible social movement by uniting people in the fight against cancer. Through advocacy and awareness campaigns, fundraising events and volunteer opportunities, we have engaged thousands to join the fight and help make cancer a global priority.

Q: The yellow Livestrong bands have become a fashion icon! Did you have any idea they would be such a success? Why yellow?

A: We were all shocked by the impact of the wristband. LIVESTRONG as a concept really resonated with people and we realized we were on to something. It wasn't just about cancer, but about living life to its fullest, attacking each minute, yet being focused enough to take it all in. The brand took off and in turn brought more attention to the disease and the foundation. To think we have raised \$80 million to date by selling wristbands for \$1 each is truly amazing. Yellow is the color of the maillot jaune, the leader's jersey in the Tour de France, and the inspiration for the color of the wristband.

Q: When were you first diagnosed with cancer? Tell us about that experience. How did you remain hopeful?

A: I was diagnosed with advanced testicular cancer on October 2, 1996. I had ignored the symptoms for months—pain comes with professional cycling so it was easy to dismiss the soreness in my groin, headaches and difficulty breathing. I reluctantly went to the doctor after my testicle had swollen to three times its normal size. I owe a lot to my neighbor—a friend and doctor

who insisted I get it checked. By the time I was diagnosed, the cancer had already spread to my lungs and brain, so it is fair to say I was in bad shape.

There were days that chemo left me feeling like I could not get out of bed, but I knew that every day that I did not get up was a day I was losing. I am a competitive person by nature, so I learned that I had to bring that same spirit into my fight against cancer. I could not let cancer win. My will to live was bigger than the disease itself.

"Cancer has also allowed me to give back to my community and now the world in a way that I would never have imagined."

Q: Has the illness affected your performance and/or training?

A: A cancer diagnosis changes a person forever. I've been a competitive athlete for most of my life and I'm sure I would have pursued a long career in professional cycling either way and with success. But cancer put suffering and pain and fear—which are all part of any Tour de France—in perspective. No mountain stage in the Tour can compare to it. Cancer gave me focus, a purpose and a lot to live for. This is a life I owe to cancer. I appreciate my life in a completely new and better way because I faced cancer and was lucky enough to survive. Cancer has also allowed me to give back to my community and now the world in a way that I would never have imagined.

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* U.S. Department of Health and Human Services, Health Resources and Services Administration, 2008

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