

Connecticut Career Resource Network UPDATE

Connecticut's Blueprint for 'Green Collar' Job Creation

News Release: Governor M. Jodi Rell's Executive Order No. 23 (2/3/09)

"Experts say there is the potential for hundreds of thousands of 'Green Collar' jobs to open up in communities across our nation over the next decade. We want Connecticut's students to be at the head of the line for those jobs - with the training, confidence and expertise they need to succeed." Gov. M. Jodi Rell

Green collar jobs are white- and blue-collar jobs in green businesses, whose products and services directly improve environmental quality. Examples of such professions and trades include: plumbers, HVAC technicians, engineers, architects, electricians, auto mechanics, energy-efficient appliance installers, manufacturers, chemists, landscapers, and builders.

Some of the highlights of the executive order call for:

1. The Department of Economic Development and Department of Labor to jointly plan for growth of green industries and identify those jobs that will qualify as "green jobs." See the December 2008 edition of *The Connecticut Economic Digest* article **How 'Green' is Connecticut's Economy?** for Green Job occupations and industry designations. www.ctdol.state.ct.us/lmi/misc/ceddec08.pdf
2. The Connecticut Employment and Training Commission (a public-private partnership) to create and chair a Green Collar Jobs Council comprising various state departments, business and industry that will develop job opportunities and establish training programs.
3. The Community College System, through a grant from the U.S. Department of Labor, to create programs for jobs in alternative and renewable energy. These programs will be designed so that students can go on and complete an associate's degree or bachelor's program in the same field.

Preparing Connecticut's Workforce for Green Collar Jobs

EPA Technical Forum held on February 24, 2009

Following are some highlights from William Leahy's (Director of the Institute for Sustainable Energy at Eastern Connecticut State University) presentation:

Green-Collar Jobs Provide Opportunities

Through certification training, qualify individuals for "family supporting, career tracking sustainable jobs" that:

- Reduce our dependence on foreign oil, and strengthening national security.
- Promote the use of domestic renewable energy resources and advanced technologies.
- Reduce the tax burdens of inefficient public buildings and public housing.
- Mitigating climate change by cutting green house gas emissions.

Where are most of the Green Collar Job Opportunities?

- Buying and Selling Energy Related Products
 - Building Energy Assessment
 - Energy Efficient Building Construction
 - Building Operations and Maintenance
 - Project Engineering and Implementation
 - Energy Transmission and Distribution
 - Transportation Systems and Services
- From: The Advanced Technology Environmental and Energy Center*

Emerging Occupations: Green Job Opportunities

- Power Purchaser & Carbon Trader
- Renewable Energy Site Assessor
- Geothermal Assessment Specialist
- Tradesmen & Supervisors for Energy Efficiency Construction
- Renewable Energy Systems Installer
- Building Automation Specialist
- CHP Installers & Operators
- Ice-storage Technician
- Biofuel Processing Technician & Fuel Cell Technician
- Sustainability Coordinator
- Advanced Transportation Systems Technician

WHAT IS A GREEN COLLAR JOB?



"GREEN jobs...help conserve energy, promote the deployment of new technologies, and contribute to the mission of becoming a more sustainable nation."

Green Job Corps

A GREEN-Collar Job is in essence a blue-collar job that has been upgraded to address the environmental challenges of our country." Apollo Alliance

"When it comes to mechanicals, GREEN means maximizing the energy efficiency of existing equipment, and specifying the most efficient systems for new applications, using renewable and sustainable fuels, and conserving water." Green Mechanical Council

Connecticut's TOP 10 Two-Year Degrees

Don't be misled in thinking that a bachelor's or master's degree is the ONLY way to advance your career!

Whether you are looking for a career change in a more lucrative field, or enrolling in college for the first time... a two-year associate's degree from a community college is one of the quickest routes to bringing home a heavy paycheck each week. Let's face it, associate's degrees are convenient, less expensive, and offer a more flexible and shorter time commitment. Interested in knowing which two-year degrees offer the most job opportunities and will earn you the most GREEN after graduation? Read on.

Computer Support Specialist: As long as there are people who work on computers, there will be a need for people who are dedicated to providing technical assistance when their computers inevitably crash. These folks are exceptionally qualified to answer questions or resolve computer problems for clients in person, via telephone or from remote location. **Estimated Employment: 7,630 Annual Average Salary: \$52,450**

Physical Therapist Assistant: In the U.S., while every other industry sector slashed their workforce in 2008, the health care field added nearly 400,000 jobs. Jobs in Connecticut for physical therapy assistants are expected to grow 23% by 2016, especially as Baby Boomers get older and "a bit more creaky." Most physical therapist assistants work in hospitals or a practitioner's office. **Estimated Employment: 670 Annual Average Salary: \$45,940**

Electrical & Electronic Engineering Technician: Ask any engineering technician you know what their specialty is and I guarantee the majority will say they work on electrical and electronic products. These techies work in industrial or commercial plants and laboratories, taking calculations, running tests, modifying equipment and otherwise assisting the engineers on their team. **Estimated Employment: 1,900 Annual Average Salary: \$55,360**

Registered Nurse: If it's a high-growth career field you want, you can't beat registered nursing. In Connecticut, RNs comprise the largest occupation in the health care field. With just over 1,000 job openings a year in the state, and a projected job growth rate of nearly 20%, training to become a registered nurse is a sure fire way to fast-track your career in a rewarding and high-paying field. **Estimated Employment: 32,800 Annual Average Salary: \$68,590**

Radiation Therapist: If you have ever had a loved one who was stricken with the dreaded C-word, undoubtedly you were grateful for the folks working in this profession. Radiation therapy involves treating disease with penetrating beams of high-energy radiation. Radiation therapists are highly skilled members of the cancer management team. In Connecticut, the radiation therapist occupation is expected to grow 33% by 2016, which is much faster than average. **Estimated Employment: 780 Annual Average Salary: \$79,360**

Legal Secretary: They are the nameless heroines and heroes who work behind the scenes in the big cases that grace our courts every day. They know the law and are vital links in the chain of judicial and legal enterprises; they are... Legal Secretaries. They help lawyers by preparing and processing legal documents, such as appeals and motions. Legal Secretaries not only help manage tons of files at courthouses and large legal firms, they also help with many aspects of legal proceedings. **Estimated Employment: 2,960 Annual Average Salary: \$44,500**

Dental Hygienist: If you are someone who takes great personal pride in your oral hygiene routine, how about teaching your skills to those less apt. In Connecticut, dental hygienists must also obtain a state license. It's worth the investment for this is a fast growing and high-paying occupation. Even better, most dental hygienists work part-time and many enjoy flexible work schedules. **Estimated Employment: 3,160 Annual Average Salary: \$70,970**

Environmental Science & Protection Technician: Today it's all about 'Going Green', 'Protect the Environment', 'Eco-Friendly', 'Recycle and Reuse' ...we're all trying to 'Save the Earth' these days, right? If you are someone who knows what your *Carbon Footprint* level is, this may be the career for you. These 'green' technicians perform laboratory and field tests to monitor the environment and investigate sources of pollution, including those that affect health. **Estimated Employment: 390 Annual Average Salary: \$42,160**

Veterinary Technician: Did You Know? Dental cleaning, often performed by vet techs, have become more popular as owners learn how important dental care is for pets. I wonder if there is such a thing as teeth whitening for dogs? These tech's also must be certified to work in Connecticut, but this is among the top three jobs in the state with the highest growth rate (over 40%). **Estimated Employment: 1,030 Annual Average Salary: \$35,700**

Camera Operator: Whether videotaping a political protest for the local news, shooting a weekly cable TV program, or filming a scene for a new action movie, the decisions you make as a camera operator will require a combination of creative and technical skills. **Estimated Employment: 2,960 Annual Average Salary: \$44,500**

Q: Where are the jobs in Connecticut? A: HEALTH CARE!

With the economy in the dumps, job security is more important than ever. So, it may be wise to choose a career path that is 'recession-proof', one that assures that your skills will be in demand for years to come. Health care is one of the fastest growing industries in the nation. In fact, nearly half of all the health care occupations in Connecticut are projected to grow *much faster than average*. Registered Nurses are among the top 5 occupations in the state with the most annual job openings through 2016. In Connecticut, jobs in health care are a sure fire **RECESSION-BUSTER!** Here are some top picks:

Veterinarians: Projected Job Growth (31%) Raise your hand if you have a pet, and you treat your beloved fur-ball as one of the family. Hey, for me personally, I see my dogs veterinarian more than I see my own doctor! Whether animals serve as companions or work on farmland, they need caring professionals to see to their health. Veterinarians often start out as vet assistants or vet technicians while pursuing their educational degrees. **Salary range: \$73,250 to +\$146,000/yr.**

Medical Assistants: Projected Job Growth (31%) Are you looking for a meaningful job? Do you like helping others? Do you have an interest in health and medicine? Are you a "people person"? Are you good at multitasking - switching tasks throughout the workday? Do you like variety in your job? Medical assistants can be trained on the job or through a short certification program. **Salary range: \$25,690 to \$42,990/yr.**

Pharmacy Technicians: Projected Job Growth (29%) For many older Americans, taking prescribed medication to treat heart disease and alleviate their pain from arthritis is a daily event. Often, it's the job of pharmacy technicians to look at a patient's medication record and determine if there is any danger of a drug interaction occurring. Most technicians receive training on the job, or through formal education programs. **Salary range: \$21,340 to \$45,780/yr.**

Home Health Aides: Projected Job Growth (25%) Do you want to make a difference in people's lives? Are you interested in improving the quality of life for our most vulnerable citizens? Home health aides provide hands-on care, supervision, and emotional support to millions of people with chronic illnesses and disabilities. If you're looking for a health care job that doesn't require specialized training, this is a great place to start! **Salary range: \$21,500 to \$37,410/yr.**

Cardiovascular Technologists & Technicians: Projected Job Growth (25%) In the U.S., heart disease is the #1 cause of fatalities, and these dedicated health professionals assist physicians in diagnosing and treating cardiac (heart) and peripheral vascular (blood vessel) ailments. Most Cardio Techs receive training in 2- to 4-year programs and normally complete a 2-year junior or community college program. **Salary range: \$28,540 to \$80,830/yr.**

Athletic Trainers: Projected Job Growth (25%) Certified athletic trainers are highly qualified health professionals who are trained in preventing, recognizing, managing, and rehabilitating injuries that result from physical activity. They must hold a bachelor's degree and be certified. Prospective athletic trainers can gain experience by volunteering to help the trainers and coaches at their school. **Salary range: \$20,230 to \$66,010/yr.**

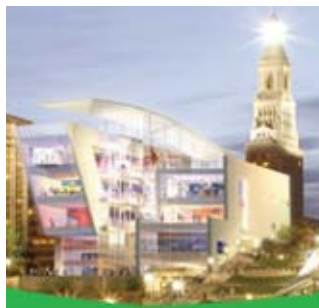
Anesthesiologists: Projected Job Growth (21%) Anesthesiologists focus on the care of surgical patients and pain relief. Imagine how important it is to administer just the right dose of medication to an infant whose organs are still underdeveloped or cannot speak to tell you that he's in pain. It takes many years of education and training to become a physician, and these docs often work 60+ hours a week. **Salary range: \$90,370 to +\$145,600/yr.**

Psychiatric Aides: Projected Job Growth (21%) Mental illness sometimes requires years of institutional care, and aides develop supportive relationships with the people in their care. Working under the supervision of mental health nursing and medical staff, these aides assist patients who are mentally ill, developmentally disabled, brain injured, or have problems with substance abuse. Only short-term on the job training is required for this job. **Salary range: \$19,540 to \$36,200/yr.**

Dental Assistants: Projected Job Growth (20%) The dentist has just sutured (stitched up) a patient's gums and wants you to clean the area with a handheld suction device and a water-spray. Next you're off to remove sutures from a patient in another room. Dental assistants work side by side with dentists to perform a wide range of patient care, office, and laboratory duties. Many dental assistants go on to become dental hygienists. **Salary range: \$27,870 to \$50,240/yr.**

Pharmacists: Projected Job Growth (18%) Pharmacists prepare and distribute medications prescribed by doctors and other health practitioners. They advise patients on the drugs they take and make sure that they avoid dangerous drug interactions. You'll also find them researching new medications for drug companies or monitoring drug therapy at hospitals, nursing homes, and mental health institutions. **Salary range: \$79,060 to \$130,630/yr.**

Physician Assistants: Projected Job Growth (18%) You won't have a "Dr." in front of your name as a physician assistant (PA). But it's the next best thing to being there. As a PA, you'll do pretty much everything doctors do, from giving checkups and diagnosing illness to prescribing medication. To become a PA, you'll need to attend a post-bachelor's degree PA program and earn a master's degree. **Salary range: \$71,430 to \$120,140/yr.**



Science Learning Results Emphasize Need for New Approaches

By Matt Fleury, President & CEO and Hank Gruner, Vice President of Programs of the Connecticut Science Center

News Release: April 8, 2009 (<http://ctsciencecenter.org/PRO4022009.php>) - A report recently illustrated the severity of the science education deficit in Connecticut ('Appalling' College Test Scores, Hartford Courant, March 27, 2009) while science professor Robert Thorson asked whether we are teaching science for the right results, the right way? (Science Isn't Facts - It's Learning to Understand, Hartford Courant, March 26, 2009). Indeed, when just 11% (African American), 18% (Hispanic) and 41% (White) of high school seniors taking the 2008 ACT college admission test are ready for college work in science in a state spending \$10 billion a year on elementary and secondary education, new approaches are in order. While these results are not necessarily reflective of all students, they are disappointing for our dedicated education administrators, teachers, and students and their families, and they portend a future where Connecticut can no longer offer a technology-ready workforce, and our economy and our children are left behind.

Pressed by federal requirements designed to close the widening science and math education gap between US students and those in other nations, our schools are increasingly focused on learning outcomes. Many worry that these learning targets are tilted towards rote fact retention for testing purposes, rather than process skills that enable students to be successful learners and problem solvers throughout life. In fact, Connecticut's new Science Mastery Tests do accompany an education framework that incorporates learning process elements, including guidance for teachers in what we call "inquiry-based learning", which asks children to seek, assemble and apply information, rather than simply regurgitate it. At the same time, the legislature is considering requiring three years of lab science for high school students, plus an independent science project. As believers in interactive, hands-on learning, informal science education institutions such as science centers generally support this approach. However, when less than one quarter of a child's life is spent in school, and only a fraction of that in science class, we must ask whether it's realistic or fair to expect school-based education alone to help our children achieve in science at a level necessary for success in the 21st century.

"How will a high school student who becomes interested in science after visiting the Connecticut Science Center go about becoming a scientist?" asks Professor Thorson, a geologist. Like him, elementary and secondary school educators know this question to be immensely important. So do business leaders who seek capable employees, public officials concerned with economic competitiveness, and parents concerned about the readiness of their children for college degrees and tomorrow's workforce. Increasingly, they understand, as the National Academies' Committee on Science Learning in Informal Environments recently found, that the return on our massive investments in school-based formal education can be greatly magnified when it is paired with engaging, skills-based learning beyond the classroom. Such environments are, the Academies reports, "Rich with real-world phenomena...where people can pursue and develop science interests, engage in science inquiry, and reflect on their experiences through sense-making conversations."

Teachers are as eager as anyone to exploit this potential: Already, 600 Connecticut educators have participated in the Connecticut Science Center's professional development program, the GE Foundation Institute for Inquiry, to get better at teaching information gathering, interpretation, and doing science, not just fact memory. Significantly, they are doing this because their ability to teach these skills not only deepens the life value of the education they offer in the classroom – they are convinced that it can also help students do better on their exams when little else has worked. Both are important.

As the Connecticut Science Center opens with its exhibits and programs this spring, teachers, parents and students across the state will have a major new learning destination where school groups, individuals, friends and families will be able to find science beyond the classroom that supports what our schools are trying to achieve. Here, science is an enjoyable, eye-opening feature of a casual family outing on a rainy day, and it is a highly focused field trip and lab session on 5th Grade Biology, specifically aligned with the state's science education framework. A highly strategic new centerpiece of our state's science education infrastructure, the Connecticut Science Center will embrace the innate curiosity of our children to help them discover a science that means something to them, where they can ask their questions, test their theories, manipulate the variables themselves, and make memorable discoveries that they will celebrate and own, not just for the test, but for life.

Connecticut Science Center is Hiring!

The Connecticut Science Center is currently looking for a few exceptional individuals who have the skills and spirit to become part of its inaugural team. If you believe you have genuine passion and talent for providing warm hospitality and superior customer service, if you are enthusiastic about Hartford's future and about the great State of Connecticut, and if you would thrive in an environment where your job is to encourage exploration, ignite wonder, and facilitate fun, then you might want to discover more about these opportunities.

Currently posted on their website are job openings for Summer Science Exploration Camp Counselor, Digital 3D Multi-Media Specialist, Theatre Usher and Assistant Manager, Youth Program Coordinator, and Executive Assistant.

Interested? Go to www.ctsciencecenter.org to learn more.

