

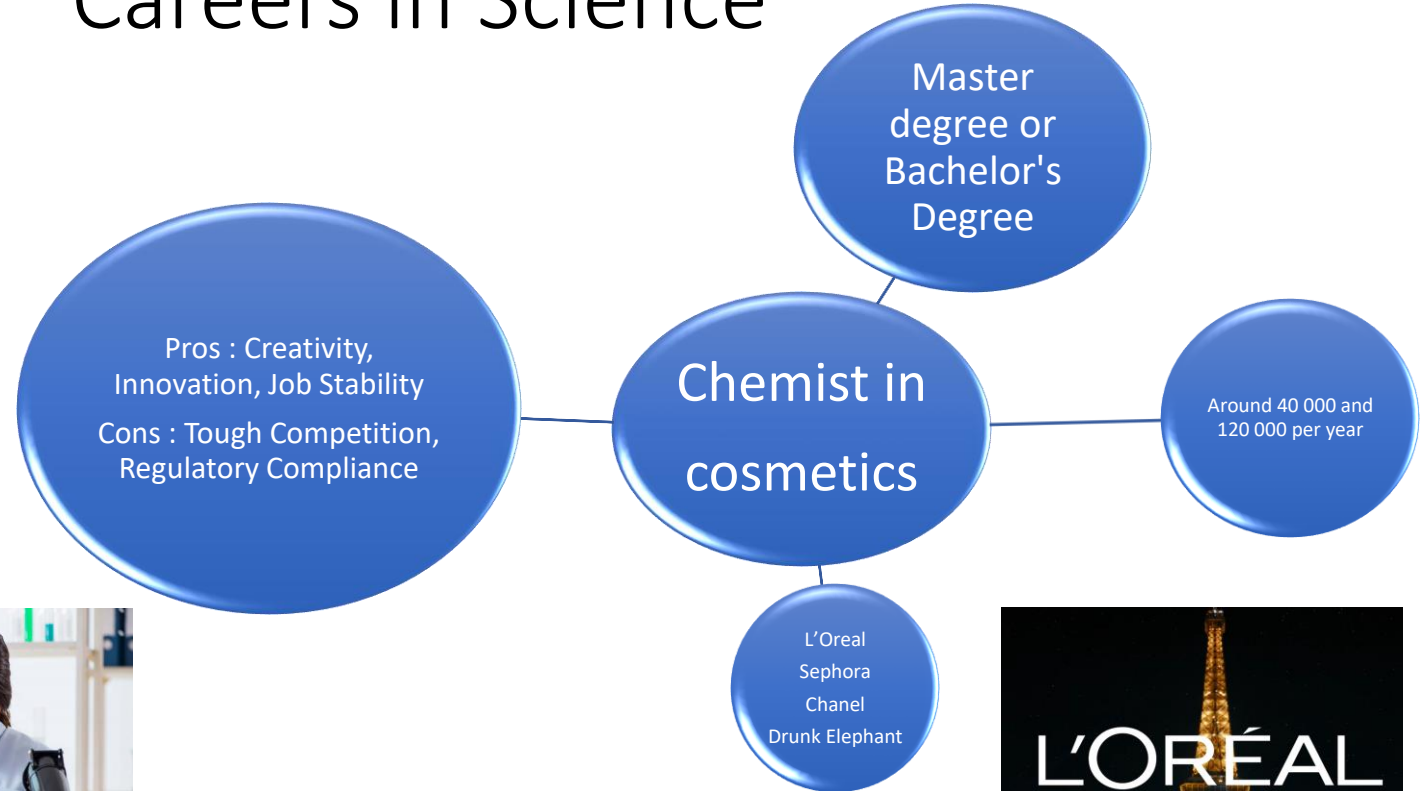
The European Standard



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Careers in Science



CRYOBIOLOGIST -Léa

Cryobiologist is a scientist who studies the effect of low temperature on living things within Earth's cryosphere or in science. It's has six majors, like the study of cold-adaptation of micro organisms and living organism, cryopreservation, preservation of organs under hypothermic conditions for transportations, lyophilization cryosurgery and the studies of physics of supercooling and ice nucleation. It's mainly used in fertility treatment, the transport of human organs and the long-time storage of biological specimens. Back in history, this art was developped in Egypt around 2500 BC for stopping bleeding and swelling.

A high school student who plans to become a cryobiologist may want to take extra math and science classes to prepare. Students can also pursue testing or extra credit classes to take care of some college prerequisites, which can help them focus on **biology** when they are preparing for their undergraduate degrees. It is advisable to seek out colleges and universities with strong science programs with on-staff researchers active in the field of **cryobiology**. Some schools may offer a major in this field, while in other cases, students will graduate as biologists with a focus in their studies on extreme cold. In college, it is also a good idea to start thinking about specific areas of interest. These can include the therapeutic uses of very cold temperatures in surgery, the study of wildlife, and the use of freezing to prepare and store research specimens. These interests can influence which classes a student who wants to become a cryobiologist should take. Someone who wants to work in medicine, for example, should take some premedicine prep classes to develop knowledge and skills. The yearly wage is around 80.000 Us dollars.



We have an interview by Serean Adam a Cryobiology and marine biotechnology scientist, Cawthron Institute, New Zealand. She has obtained a PhD (marine science), at the University of Otago. She is specialized in Shellfish aquaculture, cryobiology, reproduction and developmental biology in aquatic species, marine biotechnology, conservation biology and ecotoxicology. She is developping cryopreservation techniques for preserving the sperm, eggs and larvae of the commercially important shellfish species we have here in New Zealand – green shell mussels, pacific and flat oysters, abalone and geoducks (*Panopea generosa*), a large edible clam. I'm developing the freezing techniques and making them robust enough to apply in selective breeding. She uses chemicals called cryoprotectants to protect the cells while they are cooled. Antifreeze (ethylene glycol) is used as it lowers the temperature at which the water in the cell freezes. Some work outside the cell or stabilise the membrane. These chemicals are often toxic to the cell and their effects vary so we play around with different amounts for each species. For her, It is such an interdisciplinary field. When you go to a cryobiology meeting there are so many interesting people, in such a diverse array of fields, applying it in so many way

AI Engineers – Valentin

Nature of the job : Artificial intelligence engineers are responsible for developing, programming and training the complex networks of algorithms that make up AI so that they can function like a human brain. This role requires combined expertise in software development, programming, data science and data engineering.

Studies : Typically, AI engineers hold a bachelor's degree in computer science, data science, mathematics, or a related discipline. While it isn't always required, a master's degree in these AI-related fields can prove beneficial.

Firms who hire these kind of profiles : AI engineers typically work for tech companies like Google, IBM, and Meta, among others, helping them to improve their products, software, operations, and delivery.

Pay : the median base salary for an AI engineer is \$105,013 in the United States . While the salary range for AI engineers varies.

Pros	Cons
<ol style="list-style-type: none">1. High Demand2. Innovative Job3. Impactful Technology4. High Salary5. Positive Job Growth6. Influence7. Global Exposure	<ol style="list-style-type: none">1. Learning Curve2. High Pressure3. Ethical Concerns4. Job Burnout

Some information about someone who has followed this career /Award winners for the job :

Andrew Ng top 1 of « AI Leaders and Researchers you Should Know in 2022 »

Founder and CEO of Landing AI, Founder of deeplearning.ai.

Andrew was a co-founder and head of Google Brain. He was also the Chief Scientist at Baidu and led the company's AI group. He is a pioneer in online education as a co-founder of deeplearning.ai and Coursera , the world's largest MOOC platform, which started off with more than 100,000 students enrolling for his popular courseCS229A. Dr Ng has touched countless lives through his work as a computer scientist which led to him being named as one of Time magazine's 100 most influential people in 2012.

Abilities and credentials :

Expertise in programming languages such as Python, R, Java, Scala, TypeScript, and C++ Extensive knowledge of probability, statistics, calculus, and linear algebra. Understanding of AI models such as Naive Bayes, linear discriminant analysis, Hidden Markov, and Gaussian mixture models.

A bachelor's degree in computer science is essential for any employment in artificial intelligence.

There is also some skills such as Natural language processing, image recognition, robotics, and decision-making algorithms .

Marine biologist – Laura

Description: Marine biology is the **study of ocean aquatic organisms**, their behaviors and their interactions with the environment; this field of study is an intersection of zoology, biology and technology. Marine biologists may also assess the impacts of human activities on **marine life**.



Studies: A **marine-focused degree** is required, such as marine biology, marine biology and coastal ecology, marine science, ocean and earth science, oceanography. It is usually a bachelor's degree, that takes four years to complete.

The marine biology degree consists of a variety of subjects like pathology, biochemistry, ecology, ocean farming, anatomy, development, reproduction, and conservation. The best universities for this program are Duke University, Boston University or Stony Brook University.

Firms who hire marine biologists: **Aquaculture** production farms, **government** agencies, **universities**, zoos, aquariums, and research firms **employ** marine biologists.

Median salary: Marine biologists earn an average yearly salary of **\$32,159**. Wages typically start from \$24,166 and go up to \$71,561.



Pros: diverse working **environments**, opportunities for **positive impact** on earth and wildlife, an exciting field as oceans are considered the last **undiscovered** frontier of the world with 80% still unexplored

Cons: **challenging** field, with **long hours**, spending a lot of **time** away from home, a **physically** demanding role and potential **safety risks** when working at sea, job that requires a **long education commitment** (master or Ph.D.)

Abilities: **accuracy** and attention to detail, **research skills** like collecting and analyzing data as well as publishing results, **teamwork** skills, **observation** skills, **methodical and analytical** mind, **practical** skills, such as diving, boat driving and first aid

Award winner for the job: **Amanda Vincent** has won the 2020 Indianapolis Prize - an annual award that honors the most successful animal conservationist in the world. Vincent, who was the first biologist to study **seahorses** in the wild, is the first marine conservationist to win the award. This Canadian is one of the world's leading experts on seahorses and their relatives.



Aerospace Engineers — *Nathan and Morgan*

Job description: Design, development and manufacture of aerospace vehicles and systems

Studies needed : Bac +5 or Bac +6.

- Engineering diploma from Engineering schools such as Polytechnique, Centrale or Mines-Ponts
- Masters in Aeronautics and Space

Firms recruiting : Aerospace companies, Governmental agencies, defense companies, aircraft manufacturing companies and R&D companies.

Paycheck : 3.300€ per month without the taxes at the beginning and up to 7.000€ per month without taxes at the end of the career.

Pros	Cons
Exciting field Bringing together many disciplines Well paid	Very difficult to access and really selective 6-years long studies Internships are very rare



The European class Grade 12
Physics/Chemistry



**Be careful with
cosmetics**

Toxicity of black masks proven !

Thibaud DENEUX, Noémie
LEBOISNE, Yann LAMARA, Arthur
BROSSEAU

A recent study has found out that masks against black spots are the cause of several reactions, such as face burns or allergies. According to the French newspaper *Le Figaro*, the risk of allergy when using those cosmetics is very high.

The cause of those undesired reactions are illegal products put inside the products by the brands, without informing the consumer. The brands suspected of these practices are *Onelx* and *Cidbest*, but beyond that, many other brands are probably involved. Indeed, a lot of people who used black masks are currently suffering from face burns. Those burns find their origin in the composition of the glue and the coal, two necessary ingredients used to create this kind of mask. According to the scientists, the frequency of using is the essential factor to explain the appearance of allergies: if you use them too often, you are more likely to develop an allergy.

People should always be careful of the composition of the cosmetics they are using, because the damages that cosmetics can deal to the face or the body in general are almost always greater than what we imagine. However, the brands can sometimes lie to the consumers about the actual composition of their products, that's why it is necessary to buy cosmetics from brands which are trustworthy .



Cosmetic allergy : a burden for modern humanity

Cosmetics are nowadays an essential part of our daily lives, used to enhance our appearance and boost our confidence. However, it is important to be aware that some cosmetics can cause allergic reactions. You have to take account that allergies are increasing in general for everyone. In this article, we will explore the topic of cosmetic allergies, understand how they occur, and learn how to minimize the risks associated with these products.

A cosmetic allergy is an adverse reaction that occurs when the immune system responds to certain ingredients present in cosmetics. These ingredients, known as allergens, can trigger allergic reactions in susceptible individuals. Common symptoms of cosmetic allergies include redness, itching, swelling, rash, or even blisters on the skin.

Cosmetic products can contain many ingredients that may cause allergic reactions. These substances can be found in a wide range of products, including perfumes, lotions, makeup, and hair care products.

When a person with a cosmetic allergy comes into contact with an allergen, their immune system releases antibodies and chemicals. This immune response leads to the symptoms experienced during an allergic reaction.

There are steps you can take to minimize the chances of experiencing an allergic reaction:

Pay attention to ingredient lists on cosmetic products and avoid those known to cause allergies, especially if you have a history of reactions to certain substances.

Before using a new cosmetic product, perform a patch test by applying a small amount on a small area of your skin, such as the inside of your wrist. Wait for 24 to 48 hours to see if any reaction occurs before applying it to a larger area. On the other hand, make sure you've seen a doctor in order to test the different possibilities of allergies. Moreover, look for cosmetics labeled as hypoallergenic or suitable for sensitive skin. These products are formulated to minimize the risk of allergic reactions. Fragrances are a common cause of cosmetic allergies. You may choose fragrance-free products or choose products with natural fragrances, as they are less likely to cause reactions. Sometimes fragrance can cause irritation and patches of eczema.



Effective and Eco-Friendly Deodorant - My Go-To at Home!

As someone who is always on the lookout for products that are both effective and eco-friendly, I have to say that I am impressed with the deodorant I've been using at home - the Green Life Natural Deodorant. Using this deodorant is straightforward. I simply apply a small amount to my underarms after showering, and it keeps me feeling fresh and clean throughout the day.

Unlike other deodorants that can be harsh on the skin, this one is gentle and doesn't cause any irritation or discomfort.

One of the things I love about this deodorant is its quality. It doesn't contain any harmful chemicals like aluminum, parabens, or synthetic fragrances that can be toxic and harmful to our health. Instead, it's made with natural and organic ingredients such as coconut oil, shea butter, and essential oils, which not only work to eliminate odor but also nourish and soothe the skin.

In particular, I appreciate that Green Life Natural Deodorant doesn't contain phthalates, which are often used in fragrance and can disrupt the endocrine system. Instead, it uses essential oils like lavender and tea tree oil to provide a refreshing scent.

Another ingredient that I avoid in deodorants is triclosan, which has been linked to hormone disruption and can be harmful to aquatic life. Green Life Natural Deodorant doesn't contain triclosan, but instead uses baking soda and arrowroot powder to absorb moisture and prevent odor.

Overall, I highly recommend Green Life Natural Deodorant as an effective and eco-friendly option for anyone looking for a safer and healthier alternative to traditional deodorants.

An investigation has been launched into allergic reactions caused by gel nail polish, following reports of individuals experiencing issues such as loosening or loss of nails, skin rashes, and, in rarer cases, breathing difficulties. Methacrylate chemicals, found in gel and acrylic nails, have been identified as potential triggers for allergic reactions, particularly when applied at home or by untrained technicians.

According to the British Association of Dermatologists, this issue is becoming increasingly serious and prevalent. To prevent allergic reactions, it is recommended to avoid using gel nail polish and revert to traditional nail polishes, which are less likely to cause allergies. If individuals are determined to continue using acrylate-based products, it is advisable to have them professionally applied.

We have to be careful while using low-power or incorrect wavelength UV lamps during the drying process, as this can result in inadequate drying of the acrylates, leading to irritation and allergies in the nail bed and surrounding skin. Acrylate allergies can render individuals unable to undergo medical treatments such as white dental fillings, joint replacement surgery, or certain diabetes medications.

Numerous anecdotes of individuals suffering from allergic reactions are shared on social media, highlighting the magnitude of the problem. Nail professionals emphasize the importance of asking the right questions and selecting qualified technicians, as well as products manufactured in Europe or the United States, to minimize risks. The founder of the Federation of Nail Professionals also advises against using DIY gel manicure kits at home and suggests seeking out brands that are free from the allergen HEMA.

Gel nail polish allergies represent a growing and significant issue. It is crucial to take preventive measures such as using high-quality products, avoiding home application without proper training, and seeking professional assistance in case of allergic reactions. Unfortunately, specific statistics regarding this allergy were not provided in the provided article.



A dangerous Hair mask

It is not uncommon for cosmetic products to contain toxic substances and cause allergies among users. Cosmetic allergens are substances found in many cosmetic products. They mainly come from perfume ingredients used in cosmetic products (perfumes, essential oils, etc.) Studies show that about 10-15% of the population may develop an allergic reaction to a cosmetic product at some point in their lives, with a higher prevalence in women. This percentage of people who have had an allergic reaction to a cosmetic product, depends on factors such as skin sensitivity, ingredients used in the manufacture of the product... Today we are going to talk about a product that must be avoided. If you are used to buying cosmetic products, this article is for you. The product in question is a Keratin Hair Mask BYPHASSE Dry Hair 250ml. It is a batch of hair masks sold from the brand Action which contains toxic substances. Indeed, the brand Byphasse, via the government website Rappel Conso, has reminded consumers of a lot of its Keratin Hair Mask Dry. All started with consumer complaints. Many people who bought this product complained about the quality of the product. Symptoms have appeared. Indeed, this product has caused many irritations and allergies. Some people have suffered a skin reaction on their scalp. They said their skin is sensitive with red plates and added that its texture is grainy and the itching sensation is intense. In short, the reactions caused by this product were manifested by tingling and itching of the scalp as well as the neck.

The causes of these allergies were identified very quickly. Not surprisingly, this product contains harmful substances. This batch of masks, sold mainly at Action, does not comply with current regulations. According to a press release, laboratory tests have shown that the percentage of the mixture of methylisothiazolinone (mit) and methylchloroisothiazolinone (cmit) exceeds legal limits. These two substances can then cause an allergic reaction or skin irritation. These tests also showed that the article contains Lilial. This ingredient has not been allowed since March 2022. Lilial is an endocrine disruptor.

In case of an allergic reaction following the use of this product, you must obviously stop using this product now that you are aware of the consequences and that you have informed yourself on the internet. You should consult your doctor or dermatologist directly. These professionals will give you a suitable treatment. Treatment will depend on the severity of the allergy. If the symptoms are mild, it is best to take antihistamine medications to relieve irritation and possibly apply a topical cream containing corticosteroids to reduce inflammation and itching. However, if the allergy is more severe, a prescription for stronger medications may be necessary.



Preventive measures have been put in place so that consumers no longer use this product. For example, the official website of the brand, has put on the product page an "important safety warning". Moreover, the information was relayed in several media. It is very important to prevent the potential dangers of using cosmetic products. As we saw with the example of the hair mask, some products can have serious health consequences for consumers. These products can cause allergies, irritation, and other unwanted side effects on the skin. Certain toxic substances contained in cosmetic products are potentially carcinogenic and can cause irreversible damage to health. It is important to use natural, healthy products to reduce the risk of disease. Prevention on this theme is essential in order to make consumers more aware of choosing products that are more environmentally friendly and of better quality so as not to alter health. In fact, we forget that cosmetic products pose a danger to our health, but also to our environment. In addition to polluting the air around us, they can pollute water and soil. Thus, they are harmful and often non-biodegradable substances that disperse in the oceans and harm aquatic environments and unbalance ecosystems. Here are some tips to avoid having allergies following the use of cosmetic products. To start, it is advisable to reduce the amount of cosmetic products consumed. In addition, it is important to read the labels of the products you use in order to know the potentially harmful ingredients they contain. In addition, we must give preference to vegetable oils that do not contain water, do not need preservatives and are therefore less dangerous. In addition, Before buying, it is advisable to learn about cosmetic brands and their commitments for health and the environment. Finally, recycle your packaging and choose reusable containers

Thank you for your attention dear readers and don't forget to take care of yourself.



Debating of the stakes of the states in the Brexit

In this televised debate, Mr. Liam O'Connor representing the Republic of Ireland and Mr. David Hughes representing Northern Ireland discuss the challenges and potential solutions for strengthening the bond between their regions.

They emphasize on the importance of open dialogue, cross-border collaboration, tailored policies, and international cooperation.

They also address the historical context and existing challenges, focusing on fostering unity, reconciliation, and a peaceful future. Both leaders emphasize on the need for inclusive education, inclusive institutions, economic development, human rights protection, and regional cooperation.

The debate aims at promoting an agreement in order to elaborate a cooperation and a harmonious future for all citizens of Ireland, regardless of their national identity or political beliefs.



Written by Renaud, Romain and Gabriel.

How the Windsor framework impacted the truck drivers



The Windsor Framework, an agreement finalized on February 27, 2023, between the European Union and the United Kingdom, has had a significant impact on trade between Northern Ireland and the Republic of Ireland. The framework has made trade easier and more efficient for those who had to cross the border everyday, like truck drivers. For those, the framework has made very positive changes since Brexit.

Prior to the Windsor Framework, trade between Ireland and Northern Ireland was burdened by customs control and paperwork. Truck drivers had to endure lengthy waiting periods for their shipments to be thoroughly checked, resulting in delays and added stress. However, since the implementation of the framework, crossing the border has become much smoother for these truckers..

One of the major advantages of the open border is the increased speed at which goods can now move between Ireland and Northern Ireland. Previously, the delays caused by extensive customs procedures hampered production processes and slowed down the overall supply chain. Impacting the whole business of companies.

Therefore, the Windsor Framework has not only been an advantage for truck drivers but has also had a positive impact on the overall economy. The reduction in trade barriers and smoother cross-border movements have facilitated increased trade volumes between Ireland and Northern Ireland. This surge in economic activity has helped boost businesses and industries on both sides, supporting job creation and enhancing economic stability.

Written by Raphaël and Camille.

How the Brexit impacted the Fishermen

The United Kingdom's decision to leave the European Union, commonly known as Brexit, has had far-reaching consequences across various industries. One sector significantly impacted by this historic event is the fishing industry. English and French fishermen have found themselves entangled in a web of conflict of interest as they navigate the complexities of Brexit and its implications for fishing rights and access to waters. This article aims to explore the key conflicts of interest arising between English and French fishermen and shed light on the challenges they face.

One of the primary concerns for both English and French fishermen is the allocation of fishing rights and access to waters following Brexit. Under the EU's Common Fisheries Policy, European fishing fleets, including those from France, had access to UK waters. However, Brexit has prompted the UK to reclaim control over its territorial waters, leading to potential conflicts over fishing zones and quotas.

English fishermen argue that Brexit presents an opportunity to restore sovereignty and prioritize the interests of the domestic fishing industry. They believe that reclaiming exclusive access to the rich fishing grounds in UK waters will revitalize their industry and provide economic benefits to coastal communities.

On the other hand, French fishermen fear losing access to UK waters, which have historically been crucial for their livelihoods. The potential reduction in fishing opportunities has raised concerns about economic repercussions for French fishing communities, leading to demands for continued access and fair distribution of fishing rights.

The issue of quota allocation has further intensified the conflict of interest between English and French fishermen. Quotas determine the amount of fish each country's fleet can catch within designated fishing zones. Previously, French fishermen had a significant share of the quota in UK waters, whereas English fishermen argued that they received an unfair portion.

With Brexit, the UK has the authority to revise and redistribute fishing quotas, which has led to apprehension among French fishermen. They worry that a reallocation of quotas may result in reduced fishing opportunities and economic hardship.

English fishermen, however, view this as an opportunity to rectify what they perceive as historical imbalances. They argue for a more equitable distribution of quotas to ensure the sustainability of fish stocks and the long-term viability of their industry.

Brexit has brought the conflicts of interest between English and French fishermen to the forefront. The allocation of fishing rights, access to waters, quota distribution, and trade agreements are contentious issues that demand careful negotiation and consideration. Finding a balanced and mutually beneficial solution is crucial in preserving the sustainability of fish stocks, supporting coastal communities, and fostering cooperation between the two nations' fishing industries. As negotiations continue, it is essential for policymakers to engage in constructive dialogue, taking into account the concerns and interests of all parties involved.

Written by Sara, Valentine and Simon.

