Gifted Children Going Forward: Creating a True Smart Economy

Career Path in Science Research

A Story of One Chemist

by

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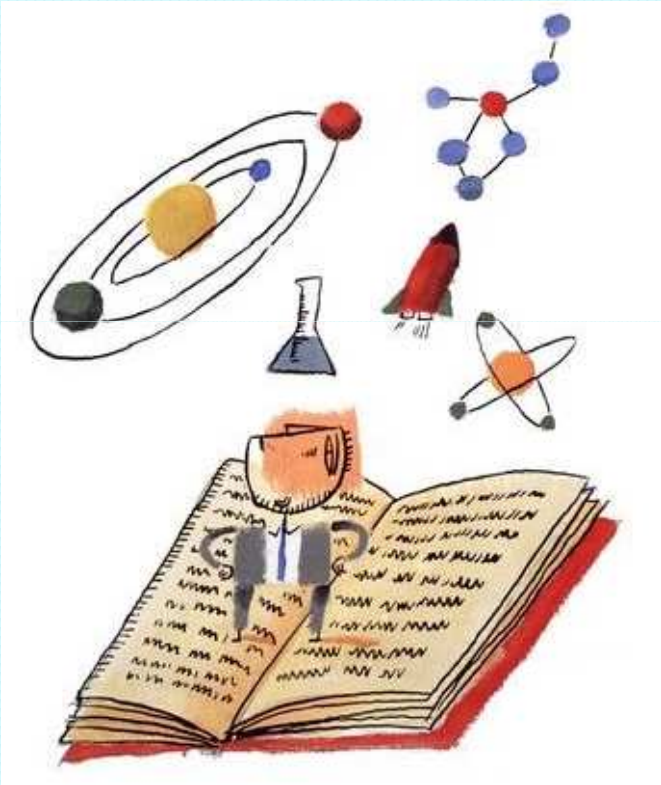
What is a Science Research?

"a special method of finding things out"

- Observation of nature
- Wondering why?
- Forming hypotheses (in an "If… Then…" format) and making predictions
- Collecting data
- Analyzing data
- Deriving conclusions
- Asking the next question



"having an idea" or "creativity" or "imagination" are also very important components

The Meaning of It All: Thoughts of a Citizen Scientist. 1998. Michelle and Carl Feynman. Perseus Books, Reading, MA

Who can become a scientist?

Intelligence alone is insufficient; success in science also depends on other qualities

Curiosity. It's what makes you get up in the morning and want to come in every day

Knowledge and initiative. Equally important is that creative spark

Flexibility – a willingness to go back in another direction with the same enthusiasm

Persistence, strong analytical skills and unwillingness to accept things on faith

Drive, motivation, determination – and an ability to communicate what you find

Follow your star. If you are interested in something, go for it

People have a greater capacity to this than they think – if they are unafraid

Scientists need ideas that run counter to some preconceived notions and a lot of patience

An ability to work with other people because science is a very interactive business

There is no single formula for success; Scientists are quite diverse – and not necessarily the best students in high school and college

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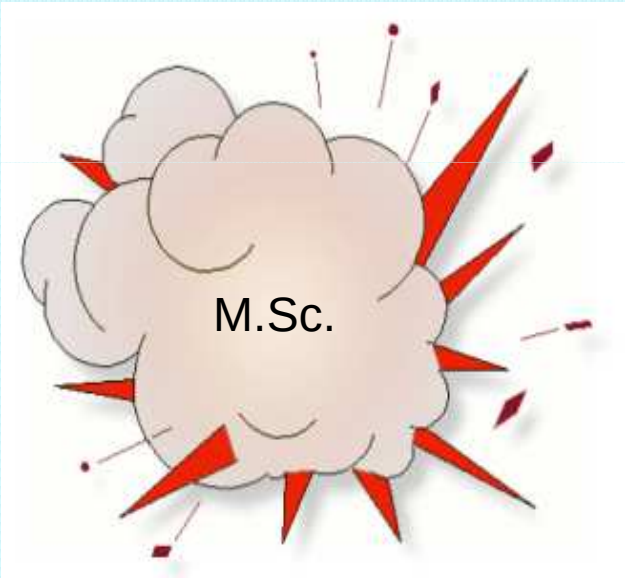
My Adventure with Chemistry



- Flight Attendant?
- Archeologist?
- Dentist?

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Careers in Chemistry

The career options in chemistry are practically endless! However, the employment options depend on how far you have taken your education.

analytical chemist

atmospheric chemist

chemical engineer

clinical biochemist

cosmetic scientist

crystallographer

environmental chemist

forensic chemist

formulation chemist

health and safety adviser

medical laboratory scientist

process chemist

toxicologist

pharmaceutical chemist

instrumentation technician

materials scientist

nuclear scientist

biochemist

biotechnologist

food scientist

molecular biologist

marine chemist

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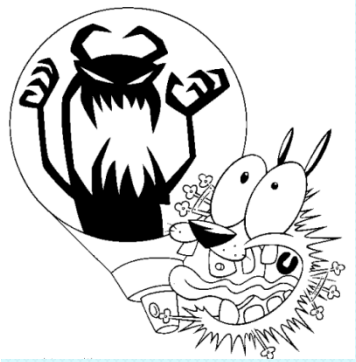
Post Graduate and Post Doc's Traits

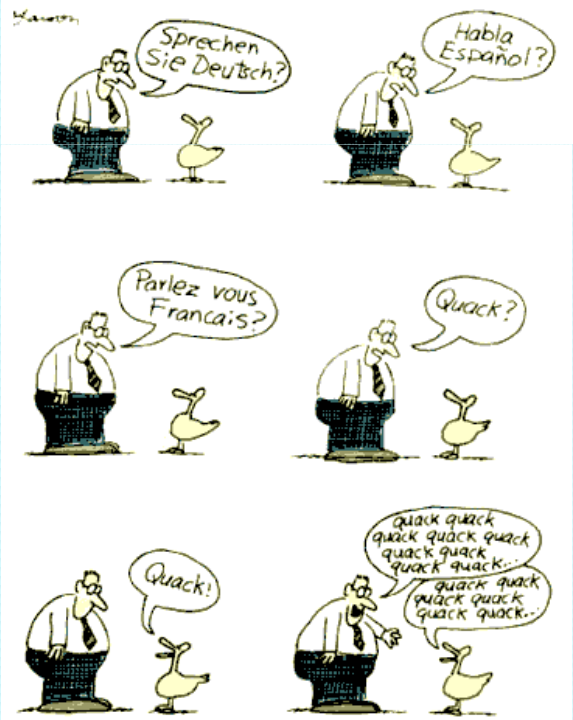
Courage



Curiosity

Self-convidence

Communication Skills



Creativity

Determination

Patience

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What I like about being a scientist

Mysteries… Mysteries… Mysteries… Mysteries…

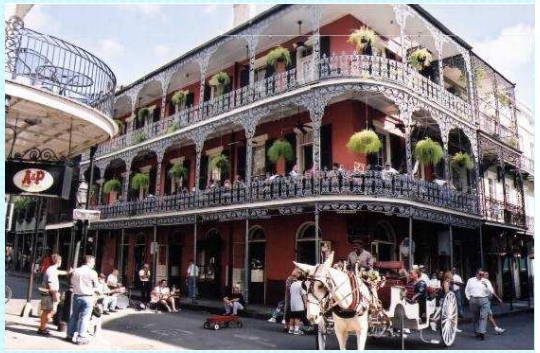
Freedom to work on problems which interest me

Flexibility of the schedule

Teaching

Conferences, symposia

People from different countries, cultures



My scientific nightmares

Grants

Researchers – Businessmen

Oral presentations

Salary

Less job opportunities

Want to be a professional scientist?

If you're interested in science, the best place to start is by learning as much as you can (*Discover*, *New Scientist*, and *Natural History* or even *Science* and *Nature*)

But science isn't just about book learning; you can get involved in the activities of science in many ways:

- volunteer at a nature or science center
- work with a non-profit that promotes science
- attend a science cafe (where a scientist gives an informal talk about his or her work)
- try out a summer science program
- ask to shadow a scientist on the job
- explore the natural world on your own — after all, science is all around us

Science careers are a great choice for those who enjoy research and have an inquisitive mind. Becoming a scientist does require years of study and a lot of dedication, so it's important that you understand in advance what goes into the career.

"Our confidence to face the global financial crisis should rely on science, knowledge and talented people"

Every research career is different!

But every one can be fun and rewarding!

THANK YOU