

# Chemist

## Dr Mark Lynch

---



### What does a Chemist do?

A chemist studies chemical processes occurring within living organisms. This can include anything from how a drug works to why you get fat from eating too many sweets.

### What do you work in and what is your specialty?

I am more focused on the chemistry aspects than on the biological. Possibly the biggest unanswered questions in science is how life evolved from non-living chemicals. We really know very little about this process. So for me the study of the chemistry of life is a fascinating puzzle just waiting to be solved.

### How did you become interested in this area and when did you first start?

Even when I was very young I had a keen interest in the natural world. I was and still am amazed at the different shapes and forms of life. Also when I was growing up fireworks were readily available and this stimulated my interests in chemistry. It was pretty natural that at some stage I would combine these interests.

### What study path have you taken to get here?

In high school I did quite well at science, though I was poorly advised that to be a “real” scientist I should focus on chemistry and physics, rather than my real loves of chemistry and biology. However, at university I was allowed to study the things I really wanted to and this consisted of mainly chemistry with biochemistry and some biology thrown in. I did my Honours in Forensic Science, which was interesting in a fairly macabre way. I then reached something of a crossroads in my life, where I was tempted to abandon science altogether. Fortunately I found a PhD project on developing anticancer drugs which fitted my interests quite well.

### What do you like most about your job?

I like puzzles and there is probably no bigger puzzle than life itself. I often feel like I am an explorer standing at the edge of a vast unexplored ocean with many wonders just waiting to be discovered. I always get a thrill when I find something new.

### Do you have any particular career highlights?

One of the things you do as a chemist is make new substances. I remember the first time I ever made something that had never been made before and thinking that I am holding something completely unique in the entire universe. Another unique substance I made was very good at killing cancer cells, so for a brief time I thought I had actually cured cancer. More experiments showed that this substance was equally as good at killing healthy cells, so rather than the cure for cancer all I really had made was something extremely poisonous.

### What advice would you give to someone interested in working in this area?

Let your curiosity take you where it will take you. You will enjoy the journey!