Things it would have been useful to have been told as a starting PhD student

If everyone likes your work, you can be certain that you haven't done anything important. Conflict goes with the territory -- that of changing how a profession thinks and furthering what we know about our world. The pressures on PhD students and young researchers are predominantly to conform, to fit it, to accept fashionable ways of analyzing problems, and above all to please senior professors and their own postgraduate peers. Unfortunately this is bad for scientific progress. [This fact is perhaps the single most helpful thing I have learned, and would pass on to any young researcher who wishes to listen to advice, which I confess is very probably what I would not have done when I happened to be in my twenties.]

The main difference between world-class researchers and sound researchers is not intellect; it is energy, single-mindedness, more energy, and the ability to withstand what will sometimes feel like never-ending disappointment, tiredness and psychological pain. Tenacity is almost everything. [This is the second key thing I have learned.]

Work on the assumption that your supervisor will contribute 1% of your PhD and you will contribute 99%. Then you will probably only be slightly disappointed.

Everyone is good at something, and poor at other things. Think that through a bit about yourself. Try not to beat yourself up about the parts you are not so great at. I know one ordinary, down-to-earth British man about my age who initially was refused entry into university and became a lab technician because could not pass French O level no matter how hard he tried. Things turned out reasonably OK for him*. If necessary, you can team up eventually in research with people with complementary skills.

Start writing journal articles, and submitting them to journals, as early as possible. Do that while a PhD student.

Submit to the very best journals in the world, and accept the pain of rejection letters. Keep on doing so.

Go to all the seminars you can, in all areas of your discipline. If you concentrate narrowly at this age, after all, you have little chance of achieving vision or a real education.

Aim for a balance between humility+open-mindnedness (80% perhaps) and arrogance+sheer-self-belief (20%).

Try not to be dragged too much into whatever seems trendy this year. It probably began 10 years ago in some research corridor on the other side of the world and, at the absolute frontier, is already on its way out. The best idea is to work on important, timeless, deep questions that most people have not thought of or think are too hard. If people say to you "but nobody works on Z", then you may have a chance to be able to do something of lasting value.

Listen to your supervisor, although not necessarily down to every decimal point. But -- this only applies in rare cases -- try not to be exploited by your supervisor.

Do not send long emails to your supervisor, especially ones where you are subconsciously releasing your frustrations or looking for a bit of therapy. Go and see him or her. Every email I get with more than 2 paragraphs, from anyone, I basically don't read.

You have extraordinary intellectual talent. Try never to forget that, even when tempted. Work on what you believe in; it will help sustain you.

Best of luck. Andrew Oswald Professor of Economics

^{*} a few years ago he got the Nobel Price in Medicine and Physiology