Introductory talk at FAMELAB training event, hosted at CREST (SciSTIP) 2 February 2016

Researchers live for knowledge. Doing research is all about creating new knowledge. Researchers compulsively gather facts and new information. And, that is exactly why it is sometimes so hard for them to communicate with people outside their field. The problem is, they know far too much! Their level of knowledge is too advanced and the language they have acquired is far too specialised.

That is why it is a brave act to volunteer for FameLab!

Here the challenge is to focus on a tiny morsel of what you know, but to make it clear, relevant, interesting and compelling to ordinary people in just 3 minutes.

This requires skill, courage and lots of preparation.

If you can master the skill to present a clear message in a way that will make people sit up, listen and take notice, it will serve you well throughout your future career.

In today's world, scientists who are able to share compelling scientific evidence and articulate science-based solutions are the ones who become leaders in their fields...

- They are the agents of change who can compel policymakers to take evidence-based action;
- They make science visible, thereby helping to secure support for future research;
- They boost innovation and economic growth;
- They help to counter misinformation; and ...
- They inspire the next generation of scientists.

Research funders around the world increasingly demand of scientists to participate in public life.

But, how do scientists feel about these new demands on their time?

Whenever I attend a public talk by a scientist, I ask them the following question: What is in it for you?

- Why do you take time out of your busy schedule to speak to a group of school children?
- What motivates you to make time for media interviews?

Over the years I've asked this question of emerging scientists, internationally acclaimed science leaders and even a few Nobel Prize winners.

They agree that a high public profile helps to attract funding, collaborators and students.

But, the answer I get from most of them will perhaps surprise you.

At the end of last year (2015) I asked the same question of Prof Andrew Forbes, a top young physicist from Wits who is also an honorary professor here at Stellenbosch.

He presented a wonderfully engaging and inspiring talk as part of our "Science Fridays" series.

He spoke about how new technologies based on light is changing our world and sparking incredible innovations. The audience was spell-bound for 40 minutes.

His response to my question was similar to what I've heard often before:

- When you have to explain your work to people who are completely new to your research, it
 forces you to think really hard about what you are doing, and why people should care about
 it.
- It gives me new perspectives on what I do, he said.
- Listening to people's concerns gives me new insights on what I'm busy with.
- The questions people ask even give me new ideas for future research.

Public dialogue is no longer an optional add-on to research.

Instead, it has become an integral part of being a scientist.

And that is why we need to equip scientists with communication skills, confidence and opportunities – exactly what "FameLab" is all about.

Marina Joubert, Stellenbosch, 2 February 2016