

## **Draft: Scientific/Research Career Development**

### **Facilitators:**

1. Prof. Federico ROSEI (IMRS, Canada)

### **PART1:**

#### **Mentorship for Young Scientists: Developing Scientific Survival Skills**

Prof. Federico ROSEI (IMRS, Canada)

In this lecture, I will try to convey a feeling for our course on “Survival Skills for Scientists” [1]. This is a graduate course designed and developed in my department, in which we give basic advice and offer mentorship to our graduate students and post-docs. The central theme of this presentation is that succeeding in Science requires skills (often referred to as ‘soft professional skills’) beyond those needed for Science.

The lecture aims at giving basic guidance and mentoring to young scientists (typically science and engineering undergraduate and first year graduate students).

#### **The main topics are:**

- The job market for graduates in science and engineering (industry, national labs and academia; advantages and disadvantages)
- Funding in modern science
- Publish or perish; publishing quality papers, having an impact
- Presenting your work to your peers
- The fundamental laws of ‘scientific survival’ (know yourself, plan ahead, and play chess)
- Ethics in modern science
- Alternative careers

#### References

- [1] F. Rosei, T.W. Johnston, “Survival Skills for Scientists”, Imperial College Press (2006).