Developing a biomedical science career in research and education

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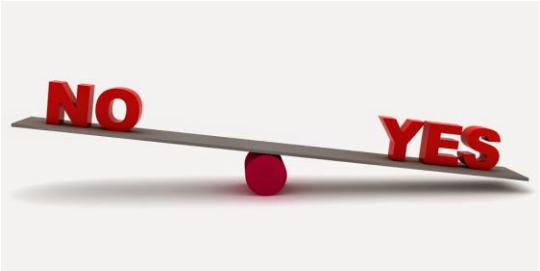
The Bsc. (Hons) in Biomedical Science qualification may be only the starting point for a number of options, for example:

Likely Age	Option A:
22/23	Work as a medical scientist in a hospital laboratory
26+	Conduct further work-based study
30+	Take up a senior or specialist position
45+?	Become Chief Medical Scientist/Head of Dept.

Option B:	Likely Age
Start a PhD in a research institution	22/23
Take up a post-doc contract position	26/27
Become a career grade researcher	30+
Become a lecturer	35+?
Become a senior lecturer/Head of Dept.	45+? 45+?

Are there other options available for those working as medical scientists with an interest in lecturing or research?



Possible options for teaching/lecturing:

Co-ordinating student training in the laboratory

Guest lecturing in biomedical or other science/medical fields

Part-time lecturing in the nearest third level institution

Involvement in online delivery becoming increasingly possible

Further options for conducting academic work **without** Higher Education Institution involvement

- Journal club
- Becoming involved in the ACSLM
- Giving talks
- Reviewing papers
- Reviewing books
- Conducting work in the laboratory and presenting it
- Publication in a scientific journal
- Joining an editorial board
- International collaborative inter-laboratory work

Options for conducting academic/research work **with** Higher Education Institution involvement as a Medical Scientist working in a hospital

Broken down to its simplest elements

- We are qualified scientists
- We and our laboratories are generating masses of patient-associated data
- A PhD (or MSc) by research consists of chapters
- Success in this endeavour is secured – how?
- A suitable supervisor/or two or three supervisors

Case study: Frances Duggan, PhD, who says:

- Backing from employer is important; support levels may vary across organisations
- Permissions needed
- Change control procedures/quality manager may need to know
- Ethical approval
- HR policies
- Budgetary support Dept. of Health

Case study: Frances Duggan, PhD

Outcome from this research:

- PhD
- Favourable outcome for patients to follow

Frances says: “In this case donors who had sufficient blood iron levels but who were deficient in iron stores as evidenced by their ferritin levels, would be checked as part of donor care in this study only. As a result, now an iron supplementation programme is about to be started – with benefit to general population health and governed by EU directives.”

Considerations for conducting research in hospital laboratories

- What is your area of interest?
- Is research likely to be feasible?
- Choose your supervisors carefully
- Prepare a plan after a number of discussions
- Look at costings
- Decide on timelines
- Register with the HEI
- Aim to publish

Discussion