Infectious Disease Epidemiology – A population approach

Proposal

To consider offering a contract for a book, we do not need to see a complete manuscript.

We do need enough information to understand accurately whatʹs being proposed. So we ask

for a prospectus of the following kind and, when appropriate, draft or indicative material

(such as sample chapters, or lecture notes, or perhaps a survey paper on the same subject as the

book) that shows the style in which the book will be written.

Include as much information as you yourself would require to offer a meaningful evaluation.

There is no prescribed length.

Prospectuses should in all cases include the following information:

 Working book title. If you’d like to raise alternatives for comment, please do.

 Rationale and scope: Whatʹs motivating you to prepare this book? What will your book equip

readers to do? Describe the unifying theme(s) and why you’ve chosen to include/exclude the

things you have.

 Readership: What is your intended core readership? What are the essential prerequisites that

you are assuming of readers? Is there further knowledge that is helpful but not essential?

 Competing/related books: How does your book relate to other books on the topic currently in

use? What will your book offer that isn’t available elsewhere?

 Contents, authored books: Describe the contents of each chapter, e.g. section headings or a

short summary of what each chapter will cover. Will there be exercises? Paper‐and‐pencil?

Data‐based?

 Contents, edited books: List the contributors’ names and affiliations, chapter titles and, ideally,

short abstracts of each chapter in the order in which they will appear in the book. Have all the

contributors been approached and/or agreed at least in principle that they will contribute?

 Special features: For example, will any of your figures require color in order to be

understood? If so, please estimate how many will need to be in color.

 Description of any ancillary material: Will you provide computer code (what

language/package), data sets, solutions to exercises, etc.?

 Proposed length of the book and its proposed completion date. These neednʹt be set in stone, but

please make them as realistic as you can.

 Review for edited books: How will you ensure that the resulting chapters are of a consistent

standard and level? You might want to consider whether external peer‐review will be

necessary for the individual chapters. Please also indicate a timetable for contributors to submit

first drafts to you, and an estimate of when you think the volume will be in final form and

ready to send to the Press for production (the proposed completion date, above).

 Brief credentials of the author(s) or editor(s) (N.B. a full curriculum vitae is not required).

Content

Infectious Diseases on the population/epidemiological level, discussed using a population perspective (instead of a classical Epi “one cohort at a time” perspective)

Will not teach: Epi methods, modeling of infectious diseases (though models will be used to illustrate concepts)

Ideas for structure

Online textbook with a mix of: written text, primary sources for background reading, R/Shiny or Netlogo models and worksheets to explore concepts.

Possible Outline

1. Introduction to topic
2. Introduction to R/Shiny and/or NetLogo
3. Single Outbreaks
4. Birth-death
5. Endemic states
6. Oscillations
7. Extinctions
8. Impact of pre-existing immunity
9. Age structure
10. Vaccination and other Control

Thoughts

Other ID textbooks:

Modern Infectious Disease Epidemiology by Giesecke:

Mostly classical Epi concepts with an ID slant

Infectious Disease Epidemiology by Nelson et al.:

Mainly a reference book.

Essentials of Infectious Disease Epidemiology by Manya Magnus:

Simpler version of the Giesecke book

Epidemiologic Methods for the Study of Infectious Diseases by James C. Thomas:

Penn State – Dynamics of Infectious Diseases – Coursera Online Course:

* 8 weeks