



Transitioning from Programmer to Biostatistician



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Background

- + BSc Mathematics, Lancaster University
- + MSc Statistics with Pharmaceutical pathway, Lancaster University
- + Now what....?
- + Pressure from peers of expected pathway in industry
- + Expected to take an low level Biostatistician role as first step
- + Came across opportunity to work as a programmer instead



Making the Transition

- + Brought up possibility of switching between programmer and statistician in interview
- + Joined PPD as an Associate Programmer in October 2017
- + Once I had been in role for about 6 months, mentioned the desire to 'keep up' with my stats
- + Soon after that it was mentioned that it might be possible for me to swap over to Associate Biostatistician
- + In May 2018 I officially changed from Associate Programmer to Associate Biostatistician

Comparing the Job Descriptions

Associate Programmer

Programmer I

Programmer II

Senior
Programmer I

Senior
Programmer
II

Principal
Programmer

Summarized Purpose:

Provides computer programming support for some or all of the following activities: creation and maintenance of programs used for data entry, data management, data validation, statistical report generation, and program validation. Communicates effectively within a multi-disciplinary project team to complete assigned tasks on time and within budget.

Associate Biostatistician

Biostatistician I

Biostatistician
II

Senior
Biostatistician
I

Senior
Biostatistician
II

Principal
Biostatistician

Summarized Purpose:

Provides statistical support in terms of analysis database creation, statistical analyses, and creation of formatted statistical analysis tables and summaries. Serves as lead statistician on small and simple projects, with supervision.

In My Experience

As a Programmer

- + DM Listings
- + SDTM programming

Table and Listing programming

ADaM Programming

As a Biostatistician

- + Figure programming
- + Randomisation
- + ADTTE, SURV, CORR datasets
- + TLF Shell
- + SAP
- + ADaM specs

Challenges

- + Lots of further training
 - + A lot of the training for biostatisticians and programmers overlaps at PPD, so much of it I had already covered
 - + So despite having to spend more time doing training, it was stats based and relevant to my new role
 - + Also, some things I had not covered before such as SAS Stat procedures
- + Workload over transition period
 - + PPD had not hired any associate biostatisticians for a few years before I made the switch
 - + So there were a couple of teething problems in assigning the right level of tasks for a junior statistician

Benefits of Programmer's Perspective

- + Allowed to build up confidence with the structure of clinical trials from start of the data path to end
- + More focus on programming meant that SAS skills progressed very quickly
- + Experience in programming TLFs enabled me to create TLF specs which were easier to work with
- + Bridge gap between programmers and biostatisticians, and able to relate to problems both teams might experience

Is it for everyone?

- + Am I glad I did it this way?
 - + I don't know whether I would've preferred it, but it worked out in my case
 - + It allowed me to gain a solid grounding in how the industry worked
- + Not always possible
 - + Lucky timing in my case
 - + Dependent on company structure
- + Benefits gained can be achieved without having been a programmer
 - + Read around the role
 - + Accept tasks which may be traditionally seen as programmer jobs
 - + Communicate with programmers about what they are working on
 - + PPD Programming Forum

Going Forward

+ Future Tasks:

- + Working through SDTM training to better inform my ADaM specification development
 - + Looking to work on more SAP tasks
 - + Planning to attend further training on more complex study designs
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- + Promoted from Associate Biostatistician to Biostatistician I in April 2019

Any Questions?

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