

ORMPT Internship Recruitment

Princess Margaret Cancer Center

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- Wei Xu has a Ph.D in biostatistics. He is extremely insightful and helpful. You will have a one hour meeting every week to be mentored
- Geoffrey Liu knows both the clinical and statistical side to his research. He can greatly smooth your transition.
- COMBIEL training program exposes you to many aspects of clinical research including database design, data collection, study design, clinical motivation, etc.
- Can sit in courses at UofT to continue learning
- Many opportunities to give talks. I gave 4.5 at PM and 1 at UofT

You will have the opportunity to closely collaborate, consult, and educate many clinicians while working on their clinical and genetic studies

while *Clinicians are not satisfied* **do**

- Talk with clinicians to see what they want

- Figure out how to answer it with statistics

- Potentially help them with study design

- clean their data

- analyze their data

- write statistical report

- discuss results with clinicians

end

Prepare statistical methods section of manuscript

Review their manuscript

Algorithm 1: Basic Study Procedure

A substantial amount of my time was spent doing applied research with Wei. Previous interns had some research component but not as large in scope. Wei is interested in many things. If you are interested in doing research you can ask him about it in the interview

- We extended survival trees to make splits by maximizing the difference in response to treatment in the two children
- These methods can help enable personalized medicine
- They can be extended to other cases where a likelihood can be defined
- Paper is currently under review at Biostatitics

Wei let me work on my own projects because they were reasonable

- I noticed that the statistical report writing process was unbearably long, boring, prone to error, and not reproducible
- I found a set of tools that could in theory automatically generate a report directly from R output
- An R package was still needed to actually produce the complicated, and completely formatted R output we needed in an easy way
- I told Wei about this and he encouraged me to pursue
- Now my package reportRx is used by many people in the department
- Package GENmatic is currently in development to automate common quality control, analysis, and reporting for genetic studies