#### NRNB Student Profile: Jacob Windsor



Jacob Windsor was enrolled in 2017 Google Summer of Code (GSoC). Over the summer, he worked with his primary mentor, Egon Willighagen, on a Pathway Presenter for WikiPathways. Jacob described the problem in his application: "Pathway diagrams are often confusing and their meaning difficult to communicate to others. This can be solved by creating a tool to create dynamic & animated pathway presentations."

- **Student Project:** WikiPathways Pathway Presenter https://github.com/nrnb/gsoc2017pathway\_presenter
- Student Project blog: http://jcbwndsr.com/
- **Quote from Jacobs's mentor:** "Jacob is an outstanding student and I can only hope to work with him again in the future"

# Where are you from and where did you attend university during Google Summer of Code (GSoC) 2017?

I grew up in the UK in the East Midlands and attended the Maastricht Science Programme at Maastricht University, NL.

#### How did you first hear of GSoC?

Through Egon (my mentor) a year before I applied. I did a project with him for university and he encouraged me to apply that year but I unfortunately had no time. Luckily there was still next year!

#### How did you first hear about the NRNB and Cytoscape?

Also through Egon during the same project.

#### What problem did you work on?

I developed a "pathway presenter" in an effort to improve the educational capabilities of WikiPathways. This tool can be used to present dynamic presentations of WikiPathways diagrams to an audience. The project led on from work I had done previously in my thesis.

#### What was your experience with GSoC?

Luckily, due to my thesis work, I was pretty experienced with WikiPathways, my mentors, and the technology I was using so it was fairly easy for me. Hence, since it is more helpful to others reading this, I'll talk about my experience with starting my

thesis. This was the first project I had worked on with other developers so that was a fairly steep learning curve. I quickly learnt that communication is key and you get many ideas from those more experienced than you if you just share what problem you're trying to overcome.

## What was your experience after GSoC?

My understanding of the technologies I was using had increased dramatically (React, SVG etc.) but, more importantly, I had improved my understanding of open source practices. The "soft" skills that I improved upon during the period, such as communication, documentation, and self-motivation, will help me throughout my career.

## How do you participate in the WikiPathways community?

Currently, not as much as I'd hope to. Starting a new job and moving to a new city has taken up a lot of time. I hope to participate more in the community in the coming year; helping fix bugs on Pvjs (the diagram viewer on WikiPathways) and generally helping out where I can.

#### What happened with your project after the end of GSoC 2017?

It was mentioned in this paper, which I am extremely chuffed about.

# What you are doing now and what are your next career goals?

I am working as a front-end software engineer at <a href="Abcam">Abcam</a>; a role that GSoC absolutely helped me acquire. I will stay within the biology domain from a software engineering perspective but, other than that, I do not know what direction my career will take me in at the moment. The most important thing is that I keep learning!

Thank you to Egon Willighagen, Anders Riutta and Alex Pico for mentoring me on this project and helping me work through some of the problems that were encountered along the way.