Project Title

Translating Nitrogen Use Efficiency from models to crops

Report Title

Translating Nitrogen Use Efficiency from models to crops June 2017

Summary

The proposal sought to help better identify orthologous genes as well as indentify how much variation exists in NUE targets in wheat. We proposed to collect RNA Seq data on the eight parents of a widely distributed and publically available mapping population developed at NIAB (MAGIC elite) to add experimental evidence to help build connections between current knowledge in model species and wheat.

Report and outcomes

So far we have collected all of the RNA samples and have sequenced the proposed libraries from the wheat different wheat lines and started to compile a list of genes which respond to N in this population. This dataset will be part of a manuscript in the near future.

We have also held a seminar by Dr. Dan Swan at NIAB on March 9th 2017 attended by researchers, students, and post docs from both Cambridge and NIAB. Four Cambridge PhD students and three post docs (2 NIAB and 1 Cambridge) then meet personally with Dan over a relaxed lunch at NIAB.

Attached below is the flyer for the seminar Dan presented on March 9th 2017

Expenditure

RNAseq -£4000.

Follow on Plans

We plan on presenting the outcome of this work at a scientific meeting using the follow on funds. We will also look into adding the data to other public repositories such as wheat-expression.com funded by JIC, EI, and the BBSRC.



Taken from Dan's tweet on March 9th @DrDanielSwan

DANIEL SWAN

Microsoft

Head of Platforms and Pipelines

"Capacity and capability for the UK research community at the Earlham Institute"

Dr Daniel Swan is Head of Platforms and Pipelines at the Earlham Institute and his group is responsible for the highthroughput genomics and synthetic biology facilities at the Earlham.
Learn how the Earlham
uses its technology
platforms in their own
research programmes,
but also find out how
these are accessible to

the community through the BBSRC National Capability in Genomics.



OPEN SEMINAR

Thursday 9th March, 11 am NIAB (Main Hall) Huntingdon Road Cambridge CB3 0LE

- ALL WELCOME, PRE-REGISTRAION IS ESSENTIAL -

CLICK HERE TO REGISTER OR VISIT: http://bit.ly/NIABSeminar9Mar

Dan Swan, the Head of Platforms and Pipelines is coming to give a talk here at NIAB on new NGS technologies at Earlham on Thursday March 9th. If anyone would like to meet with him after his talk please let Matt Milner know on 01223 342482 or matthew.milner@niab.com and he will schedule some time for you to sit down and chat.

There is also two-four places to have lunch with him and talk in a more one on one about either projects or technology which might help you in your research. These lunch spots are reserved for students and post docs again please let Matt know if you would like to attend.

http://www.earlham.ac.uk/daniel-swan