

LENScience Senior Biology Seminar Series Student Update Number 6 – April 14th, 2011

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Questions from Seminar 2: Rethinking Polynesian Origins



We had lots of great questions from the seminar last week. These have now all been posted on the seminar question page along with Lisa's answers. Do go and check these out—apart from the fact they are really interesting, there's also lots of useful information for answering Challenge Question 3. To go to the Seminar 2 Question page [click here >>>](#)

Best Question Award Seminar 2

Jennifer Randle Onslow College

Onslow College: Jennifer Randle LiveChat Question 7th April

Kumara arrived in New Zealand before Spaniards began moving around Polynesia. Is this evidence for contact of Polynesians with South American indigenous culture? Are there any studies which have been done on commensal plant migration?



Professor Lisa Matisoo-Smith, Allan Wilson Centre, 13th April

Excellent question - Yes! The presence of the kumara is indeed evidence of contact – and a post-doc, Andrew Clarke, who is working in our labs here in Dunedin is looking at genetic variation in kumara and other commensal plants (for example the bottle gourd). You can check out his web site that has links to popular articles about his research ([Click here>>>](#)). Plant genetics are much more complicated than human or animal genetics though – the remains rarely are recovered from the archaeological record, and we have to consider the possibility of recent admixture (Genetic admixture is the result of interbreeding between two or more previously isolated populations within a species)

We have also identified the prehistoric introduction of chickens from Polynesia to the Americas (using ancient mtDNA studies) and have published this in the Proceedings of the National Academy of Science (PNAS) – ‘Google’ Alice Storey and Pacific chicken DNA to read about it! A link to the PNAS paper can be found in the seminar resources section of the seminar webpage. [Click here>>>](#)



Seminar 2 Challenge Questions

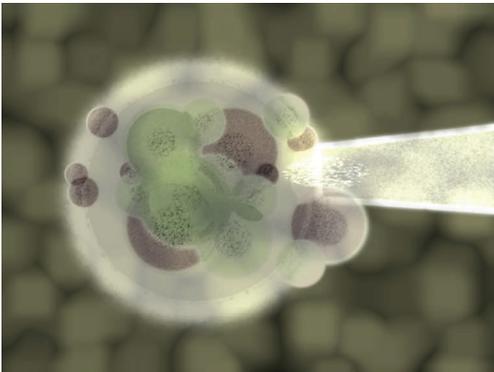
We are waiting for your responses! We will make some comments as soon as we start to see contributions come in. If you are feeling nervous, work with your friends to develop an answer and get your teacher to take a look before you post. Remember you learn from doing—not from watching other people do it. Keep a watch on the wiki to see how Lisa and the LENSscience team respond to your answers. If they challenge you with a question or a suggestion about how to improve your answer, have another go at answering the question—that is how you will learn.

Seminar 2 Week 3: April 11th—15th

- Go to your POST-SEMINAR SCHOOL WORKSHOP on the [CHALLENGE QUESTIONS](#).
- Work together with your group to develop answers to the challenge questions.
- Post your answers on the wiki. Each challenge question has its own [wiki page](#).
- Watch the wiki and learn from what other people are writing.

Seminar 3: Aneuploidy and Related Biotechnologies

We welcome [Fertility Associates](#), our Science Partner for Seminar 3.



Reproductive technologies such as In Vitro Fertilisation (IVF) and Preimplantation Genetic Diagnosis (PGD) are used to meet human needs around fertility issues (which affect 1 in 6 couples) as well as provide options for couples who are at high risk of conceiving embryos with genetic disorders such as Down Syndrome and Cystic Fibrosis.

Fertility Associates is New Zealand's leading provider of fertility diagnosis, support and treatment. In addition to their very visible public face as a clinical provider, Fertility Associates have a strong research programme, partnering with the Liggins Institute in

research to understand reproductive technologies and the long term effects of these on the health and wellbeing of children.

Dr Richard Fisher, one of the founding directors of Fertility Associates will be joined by Dr Bert Stewart, Fertility Associates Scientific Director and members of the genetic counselling team to present Seminar 3, which will explore the need for and support provided by reproductive technologies.

Seminar 3: Aneuploidy and Related Biotechnologies

Date: Thursday 12th May (Term 2, Week 2)

Time: 3:45pm—5:15pm

Seminar Paper: download the seminar paper from the seminar website. [Click here >>>](#).

Congratulations 700+ students who have completed their personal registration for the seminar series.

Have you [registered](#)?

Make sure **YOUR** friends have [registered](#).

The student registration link [on this web page](#) or directly [here](#).

