



# Vieira Lab Newsletter

## Lab Meeting Schedule

- When: September 26**  
 Where: Salk 403  
 Topic: "Nutrition as my Profession"  
 Presenter: Ms. Jocelyn Bacayo
- When: October 19**  
 Topic: Establishing the DRDR database  
 Presenter: Greg Fitzgerald

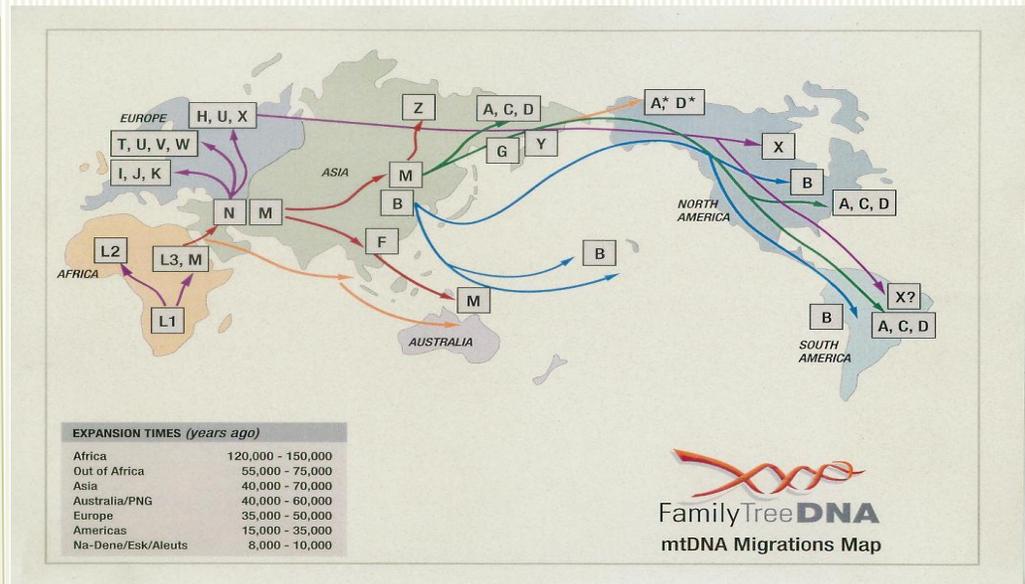
## Upcoming Events

- Science 2007: Collaborate Innovate Transform  
 When: October 11th and 12th  
 Where: Alumni Hall
- Visitor from the Philippines:  
 Ms. Jocelyn Bacayo  
 When: September 24-28
- "Help With Research and the Path to Promotion" Presented by Dr. Alex Vieira  
 When: September 27th, 1:00  
 Where: 371 Salk Hall

## Journal Club Schedule<sup>o</sup>

- September 25th:**  
 Seth Weinberg
- October 2nd:** Mary Marazita
- October 9th:**  
 Kathy Neiswanger
- October 16th:**  
 Andrew Lidral
- November 6th:**  
 ASHG Highlights

Journal Club meetings are in the 5th Floor Conference room of the Bridgepoint Building.



MtDNA studies have shown that we all descend from a region in Africa that corresponds to today's Ethiopia. Letters indicate the mtDNA genetic type. (Credit image: Family Tree DNA)

## Lab News

Three years ago, Dr. Vieira co-authored a report that 12% of cases of non-syndromic cleft lip and palate are probably consequence of deleterious genetic variation in the interferon regulatory factor 6 (IRF6) locus. At that time, this finding was wrongly interpreted by the media as a "new genetic test" for cleft lip and palate. However, some data in that paper did not agree with the findings. In particular, a population from South America did not show the same association with IRF6 as the other populations. The latest issue of the American Journal of Medical Genetics features a report that shed some light to this inconsistency.

Dr. Vieira and colleagues suggest that the association with IRF6 in this South American group can be seen only when individuals with particular mitochondrial DNA (mtDNA) types are selected. MtDNA is inherited only from the mother, unlike nuclear DNA, which is sourced from both parents. Because of the fact that the mutation rate of mtDNA is higher than that of nuclear DNA and is easily measured, mtDNA is a powerful tool for tracking ancestry through females, and has been used in this role for tracking the ancestry of humans. Human mtDNA can also be used to identify individuals and has helped to reunite grandmothers with their lost grandsons and granddaughters.

Vieira AR, Cooper ME, Marazita ML, Orioli IM, Castilla EE. Interferon regulatory factor 6 (IRF6) is associated with oral-facial cleft in individuals that originate in South America. *Am J Med Genet A.* 2007 Sep 1;143(17):2075-8.

## Dental Registry and DNA Repository News

The entire DRDR recruitment team has returned for the fall semester, and recruitment is already on the rise! This month also marks the official one year anniversary since full-fledged recruitment has begun for this research study. With a total of 547 participants and only 74 declines, the recruitment rate remains at a positive 88% compliance rate.

Principal Investigator, Dr. Vieira, will present an update on the DRDR to explain how all faculty members may use the wealth of information collected in the Dental Registry to begin or further their scholarly activities. This meeting will be held on Thursday, September 27<sup>th</sup> in room 371.

If you are interested in dental research, you can submit a project to the DRDR by visiting the following link: [http://www.dental.pitt.edu/vieira\\_lab/DRDRdocumentsforinvestigators.php](http://www.dental.pitt.edu/vieira_lab/DRDRdocumentsforinvestigators.php)  
Please contact Jill Schaefer, the project manager, with questions at (412) 383-5944.

