# Biostatistics using

## The Department of Anatomy, Embryology and Physiology of the Academic Medical Centre (AMC), University of Amsterdam is honoured to host Dr. Kyra Stull to present a 5 day course on biostatistics using R

The Department of Anatomy, Embryology and Physiology of the AMC is hosting a 5-day workshop that will address biostatistics commonly used in health sciences using R, a free system for statistical computation. Course participants will learn step-by-step procedures to use R and the codes to conduct specific statistical analyses. The course is designed for beginners; however, a basic understanding of statistics is required to adequately grasp the concepts that will be discussed.

Following an introduction to R as a language and an environment, the statistical analyses that will be covered include: descriptive statistics, hypothesis testing (i.e. Student's t-tests, chi-squared tests, ANOVA, etc.), linear and logistic regression, discriminant function analysis and principal component analysis.

On the final day of the course participants can bring their own data and conduct their own statistical analyses under the supervision of the instructor.

### Three reasons why you should join:

1. LEARN TO USE R
2. COMPLETE YOUR OWN STATS
3. WALK AWAY WITH CODE

### DETAILS

**When:** May 2016*

**Where:** Amsterdam Medical Centre

**Who:** Individuals with the following backgrounds:

- Anthropology
- Archaeology
- Sociology
- Psychology
- Biomedical Sciences
- Forensic Science
- and similar fields

**How much**: 550EUR

**Contact Details:**
To enquire more or to rsvp your interest in the course please email:
k.l.colman@amc.uva.nl
Subject: R course 2016

*Date will be confirmed once number of interest participants are known

## About Dr. Kyra Stull

Dr. Kyra Stull obtained her MS in Biological and Forensic Anthropology at Mercyhurst University in 2008. She continued on to obtain her PhD in Anthropology at the University of Pretoria, South Africa in 2013 and is currently appointed as assistant Professor in the Department of Anthropology at the Idaho State University.. Kyra is a biological anthropologist with specific interest in human growth and development and modern human variation and its application to forensic anthropology. Since her first experience with R in 2008, she has routinely used R to conduct statistical analyses in forensic anthropology and forensic pathology research. During the course of her doctoral studies she advised numerous postgraduate students in research design and methodology, taught informal courses in biostatistics and a week-long intensive R workshop for applied biostatistics.

# Preliminary Program:

| Day 1: | | Day 2: | |
|---|---|---|---|
| 8:30 | Registration and Welcome | 08:30-10:30 | Descriptive/Summary Statistics and Hypothesis Testing |
| 9:00-10:30 | Introduction to R; Installing R and Packages | 10:30-10:45 | Break |
| 10:30-10:45 | Break | 10:45-12:00 | Linear Regression |
| 10:45-12:00 | Importing Data | 12:00-13:00 | Lunch |
| 12:00-13:00 | Lunch | 13:00-14:00 | Linear Regression |
| 13:00-15:00 | Data Manipulation | 14:00-15:00 | Logistic Regression |
| 15:00-15:15 | Break | 15:00-15:15 | Break |
| 15:15-15:45 | Research Methods | 15:15-16:15 | Logistic Regression |
| **Day 3:** | | **Day 4:** | |
| 08:30-10:30 | Data Visualisation | 08:30-10:30 | Discriminant Function Analysis |
| 10:30-10:45 | Break | 10:30-10:45 | Break |
| 10:45-12:00 | Data Visualisation | 10:45-11:45 | Principle Component Analysis |
| 12:00-13:00 | Lunch | 11:45-12:45 | Lunch |
| 13:00-14:30 | Data Visualisation | 12:45-13:45 | Approaching research projects and reproducible research |
| 14:30-14:45 | Break | 13:45-14:00 | Break |
| 14:45-16:00 | Visualisation for Linear regression and Logistic Regression | 14:00-16:00 | Closing and Open Data Analysis Time |
| **Day 5:** | | | |
| 08:30-16:00 | Open Data Analysis Time | | |