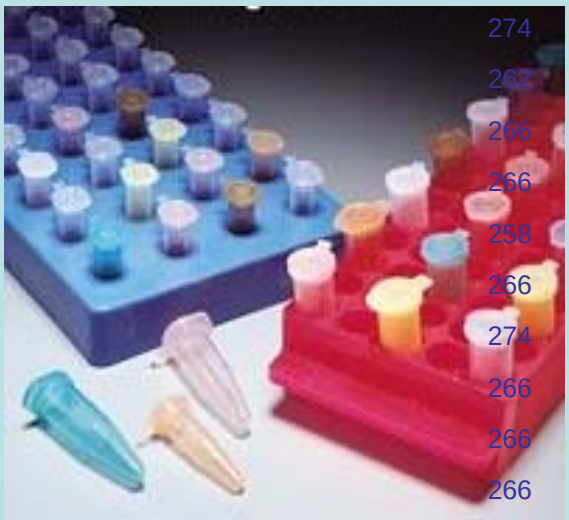
| Afu56 | | Afu160 | | Afu195 | |
|---|---|---|---|---|---|
| 266 | 274 | 134 | 146 | 161 | 161 |
| 274 | 274 | 134 | 134 | 161 | 165 |
| 266 | 266 | 134 | 146 | 165 | 165 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 274 | 274 | 134 | 134 | 161 | 165 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 274 | 274 | 134 | 146 | 161 | 165 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 266 | 266 | 134 | 134 | 161 | 161 |
| 266 | 266 | 134 | 134 | 161 | 161 |
| 262 | 266 | 134 | 146 | 165 | 165 |
| 274 | 274 | 134 | 134 | 161 | 161 |
| 262 | 262 | 134 | 150 | 161 | 165 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 258 | 266 | 134 | 134 | 161 | 161 |
| 266 | 266 | 134 | 134 | 161 | 165 |
| 274 | 274 | 134 | 134 | 161 | 165 |
| 266 | 266 | 134 | 134 | 161 | 161 |
| 266 | 274 | 134 | 134 | 161 | 165 |
| 266 | 274 | 134 | 146 | 161 | 161 |
| 262 | 274 | 134 | 146 | 165 | 165 |
| 266 | 274 | 134 | 146 | 161 | 165 |
| 266 | 274 | 134 | 150 | 165 | 165 |

# Whichloci



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ECL 290

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Image: www.stockwellscientific.com

# Overview and Use

- Input: empirical microsatellite data for a set of populations.
- Output: which of your loci are best for distinguishing between these populations.
- Guides you to the statistical power to determine which population an individual came from.

# How it works

- Calculates allele frequencies for your populations
- Generates simulated data sets based on these frequencies, assuming HWE and no LD
- Attempts to assign simulated individuals to correct populations
- Determines which loci are most useful for assignment and how many are needed

# Program Options

- Method for ranking loci
  - Whichrun Assignment
  - Allele Frequency Differential
- Assignment Accuracy – acceptable % of individuals correctly assigned
- Assignment Stringency – minimum confidence in assignment for it to be considered correct
- Critical Population Method – focusing on one population, ignoring the rest.

# Tutorial Overview

- Importing data and generating simulated datasets
- Finding the % of individuals in a dataset that can be correctly assigned
- Adjusting assignment stringency
- Ranking loci and determining how many to use
- Critical population method