

Telephone (803) 725-2473
Fax (803) 725-3309



Drawer E
Aiken, SC 29802
www.srel.uga.edu

Microsatellite Development Work Order

Please read through the details for each option carefully, fill out the work order form on pages 2 and 3 and email it to genomics@srel.uga.edu or mail it with your samples.

Sample specifications:

Option 1 & 2) You need to enclose two samples of high molecular weight DNA (≥ 100 uL of ≥ 50 ng/uL of > 10 kb DNA per sample). Please either include a picture of an aliquot run on a 1% agarose minigel or Qubit measurements. If you run a gel please provide information about the amount of DNA loaded and the ladder/size standard used.

Option 2) ≥ 24 additional DNA samples suitable for PCR (≥ 150 uL of 20 ng/uL). Please include a picture of aliquots run on a 1% agarose minigel or Qubit measurements. We screen at least 8 samples across up to 48 loci so we do use a lot of DNA. It is really important to send enough DNA.

Summary of work & limitations:

Option 1: Sequence and design primers.

We will prep one DNA sample for paired-end shotgun sequencing on the Illumina platform. The resulting sequences will be analyzed with bioinformatics tools and then we will identify microsatellite repeats and design primers using *PAL_FINDER_v0.02.03*. We guarantee that primers can be designed for ≥ 48 loci. We can not guarantee what proportion of primer pairs designed will be amplifiable in your lab, what proportion will yield scorable results from the genomic DNA of your critters, or what proportion are polymorphic, etc.

Option 2: Sequence, design primers, and screen primers.

In addition to option 1, we will order primers for 48 loci. We will attempt PCR optimization for all loci, and screen the successfully optimized & polymorphic loci across 24 individuals (some DNA samples do not amplify at all loci, but we will attempt to amplify all 24). If at least 8 loci are polymorphic and you want a primer note we will co-author (with you) a primer note describing these results and will include basic statistics such as (observed and expected heterozygosities, number of alleles at each locus, polymorphic information content) and tests for deviations from Hardy-Weinberg and linkage disequilibrium. We will do our best to identify 8 polymorphic loci, but we cannot guarantee that because some critters simply don't have "normal" levels of polymorphism.

Microsatellite Development Pricing --Costs are in US dollars.

Option	<u>Total cost for 1, 2 or 3 species</u>		
	1 species	2 at once	3 at once
1. Sequence via Illumina and design primer pairs for all potentially amplifiable microsatellite loci	\$3,000	\$5,400	\$7,200
2. Do option 1 and then also order and test 48 primer pairs and screen good loci across up to 24 individuals	\$7,500	\$13,400	\$18,000

Work Order Details

How many species would you like us to enrich?

Species name(s): _____

Common name(s): _____

How many DNA samples are you sending?

Please describe anything in particular (e.g. inbred, highly endangered, not diploid, self-fertilizing...) about your species we should know? _____

Please put a check next to which option you would like us to perform.

Option 1: Sequence via Illumina and design \geq 48 primer pairs.

Option 2: Sequence via Illumina, design primers, test 48 primer pairs and screen up to 24 individuals across scorable, polymorphic loci.

If you are sending more than one species have you received a quote for a multi-species discount? Yes No If yes, what was the quote? _____

Contact for DNA samples & microsatellite development:

Name: _____

Address: _____

Email: _____ Phone: _____

Contact for payment issues if different from above:

Name: _____

Address: _____

Email: _____ Phone: _____

Payment:

Payment is expected upon receipt of invoice. Payments not received within 30 days will be assessed a 5% late fee.

Please indicate the form of payment: Credit card Check Wire transfer

Does your department/organization require you to establish a purchase order before payment can be processed? Yes No

Does your organization require bidding for purchases over \$5,000? Yes No

Prior to shipping any DNA, please send an email to genomics@srel.uga.edu.

US mail & International mail:

Dr. Stacey Lance
Savannah River Ecology Laboratory
PO Drawer E
Aiken, SC 29802

FedEx, UPS, or other courier:

Dr. Stacey Lance
Savannah River Ecology Laboratory
Savannah River Site, Building 737-A
Aiken, SC 29808

I _____ [name & institution]
understand and agree to the above terms and conditions, as well as those outlined on the web pages.

_____ [electronically sign & date]