1,000 sequences and counting … Progress and workflow of the Sponge Barcoding Project.

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Some of the authors of this publication are also working on these related projects:

Seamounts Lithistid populations View project

Tethya wilhelma genome View project

1.000 Sequences and counting...

## Progress and workflow of the Sponge Barcoding Project

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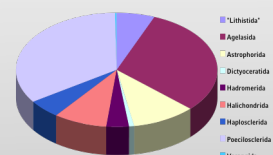[2] Biodiversity Project, Queensland Museum, South Brisbane, QLD 4101, Australia
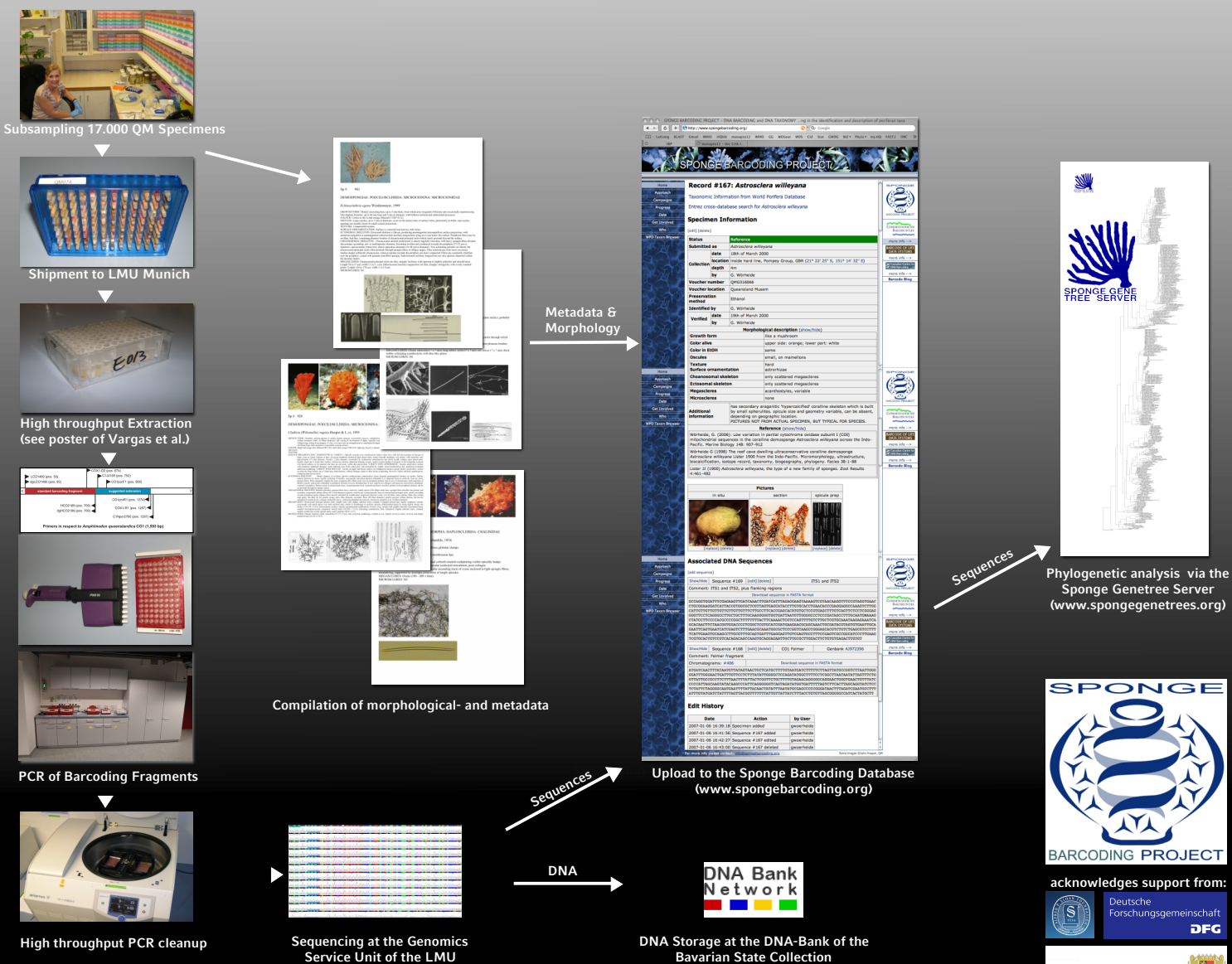[3] Bavarian State Collection of Zoology & GeoBio-Center[LMU], Munich, Germany
contact: info@spongebarcoding.org , www.spongebarcoding.org
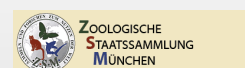
The Sponge Barcoding Project (www.spongebarcoding.org) is the first worldwide barcoding project on any non-bilaterian taxon, and aims to cover the complete taxonomic range of Porifera. The Sponge Barcoding Database (SBD) is the prime access point for DNA signature sequences together with information on conventional morphological taxonomic characters of sponges. This unique combination of sponge-specific conventional taxonomic information and their DNA signature sequences is crucial for the use on sponges and the distinguishing feature to all other DNA databases. In its initial phase, the Sponge Barcoding Project currently constructs its backbone framework of DNA signature sequences primarily from specimens of the Queensland Museum (QM, Brisbane, Australia), which hosts one of the largest sponge collection of the Southern Hemisphere and provides tissue of 17.000 samples. Currently extracts of 4.000 specimens extracts are produced and in October 2010 the 1.000th sequence is expected to be uploded to the sponge barcoding database.

Current (Sept 2010) ordinal distribution of the QM samples uploaded to the SBD

- "Lithistida"
- Agelasida
- Astrophorida
- Dictyoceratida
- Hadromerida
- Halichondrida
- Haplosclerida
- Poecilosclerida
- Verongida

Subsampling 17.000 QM Specimens

Shipment to LMU Munich

High throughput Extraction (see poster of Vargas et al.)

PCR of Barcoding Fragments

Compilation of morphological- and metadata

Metadata & Morphology

SPONGE BARCODING PROJECT

Record #167: Astrosclera willeyana

Upload to the Sponge Barcoding Database (www.spongebarcoding.org)

Sequences

Phylogenetic analysis via the Sponge Genetree Server (www.spongegenetrees.org)

SPONGE GENE TREE SERVER

High throughput PCR cleanup

Sequencing at the Genomics Service Unit of the LMU

DNA

DNA Bank Network

DNA Storage at the DNA-Bank of the Bavarian State Collection

SPONGE BARCODING PROJECT