

	Environmental Analysis Teaching and Research Laboratory	Date: 8/11/2016	Number: X
	Standard Operating Procedure	Title: Cyanobacteria DNA Extaction from Filtered Samples	
	Approved By: Los Huertos	Revision Date:    /    /	

## 1. Scope and Application

**1.1** This method involves several preliminary steps to lyse cyanobacteria cells prior to DNA extraction via a modified Quiagen kit protoco.

**1.2** This method is modiefied from the UCSC Zehr Lab DNA extraction protocol.

**1.3** Sonication steps are adapate from the "Ultrasonic Lysis: Cell Disruption & Extraction" protocol found in the Heilsher Ultrasound Technology webpage.

## 2. Health and Safety

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## 3. Personnel & Training Responsibilities

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Students using this SOP should be trained for the following SOPsa:

- SOP1
- SOP2

## **4. Required Materials**

### **4.1. Equipment**

4.1 Ultrasonic desmembrator cat?

4.2 Water bath or heat block (size?!)

4.3 Shaker Incubator?

4.4 Vortex mixer

4.5 Micropipette (size??)

## **5. Supplies**

5.1 Qiagen DNeasy kit (Cat #)

5.2 Ice

5.3 RNase Away

## **6. Estimated Time**

6.1 This will take XX minutes...

## **7. Procedure**

7.1 Prepare ...

7.2

## **8. References**

8.1 APHA, AWWA. WEF. (2012) Standard Methods for examination of water and wastewater. 22nd American Public Health Association (Eds.). Washington. 1360 pp. (2014).