

## Andrea Whalen's Individual Contribution Page

### "Semester" Contributions

*Paragraph explaining contributions to date. Provide links to pages you worked on. Ex. "I re-wrote the [main chemical doser page](#) so that it is up-to-date to reflect the new research we are conducting."*

The Granular Sequencing Batch Reactor (GSBR) team is under the Wastewater group. The research focus for the semester was "optimizing" the GSBR operation process—changing the anaerobic and aerobic time—and observing the impact a modified regime had on denitrification.

As part of the Wastewater group, the GSBR team plans to ultimately coordinate with the Upflow Anaerobic Sludge Blanket (UASB) team, in order to determine final effluent parameters and assess the effectiveness of having these two reactors in series. Another aim of the team is to improve inoculation start-up time and examine granulation specifically—including the big question of how we get another granule from one granule. Both these goals were not able to be addressed over the course of Fall 2015. It is hoped that these goals will be part of the future of the Wastewater group in AguaClara.

#### Tasks to Date:

-Current Task: Redo nitrogen assays in order to observe reasonable results, Update Research Report as needed and prepare Final Presentation

-[GSBR page](#)

-Trainings: Project Team Safety, Laboratory Safety, Chemical Waste Disposal, Process Controller, Media Preparation, COD Testing, Nitrate/Nitrite & Ammonia Assays

-Symposium Presentation

-Research Reports

-Literature readings of GSBR

-Meeting notes