## Internship in Applied Biosciences – ABS 593A 2019 Course Syllabus

# Meeting Time and Place:

## Fall Semester 2019

**Day and Time:** Depends on the number of units the students are enrolled in and their respective class schedules

Location: Respective Laboratories of the Instructor

Instructors:

Instructor Name	Student	Track
Ryan Gutenkunst	Quinea Lassiter	Molecular & Cellular Biology
Ryan Gutenkunst	Elizabeth Ogunbunmi	Molecular & Cellular Biology
David T, Harris	Jose Camarena	Diagnostic Laboratory Sciences
David t. Harris	Leila Darbouze	Industrial Microbial Biotechnology
Michael D.L. Johnson	Talish Davoodian	Medical Microbiology & Immunology
Anita A. Koshy	Alba Marina Dominguez	Diagnostic Laboratory Sciences
Istvan Molnar	Jose Verdugo	Industrial Microbial Biotechnology
Michael Riehle	Minhao Chen	Molecular & Cellular Biology
Anne Wertheimer	Jose Camarena	Diagnostic Laboratory Sciences
Anne Wertheimer	Matthew Duffy	Diagnostic Laboratory Sciences
Anne Wertheimer	Haerin Park	Diagnostic Laboratory Sciences

# **Course Description and Objectives:**

The Professional Science Master's degree in Applied Biosciences at the University of Arizona includes a professional internship as one of the requirements for completion of the degree. This professional internship is defined as specialized work or service on an individual basis, consisting of training and practice in actual service in a technical, business, academic or governmental establishment.

The primary goal of the internship is to give students an opportunity to apply lessons learned in the classroom to a real-world experience set in a professional practice-oriented environment, with the intern's work overseen by a professional. In particular, the goal of the internship is to give the student a practical perspective on problems and applications in a growing discipline known as "Applied Biosciences".

The internship has the following secondary goals:

- a) To help students compare their abilities and interests with the professional requirements of particular Applied Bioscience fields;
- b) To help students evaluate potential employers;
- c) To provide students with the possibility to participate in multidisciplinary research teams;
- d) To expose students to the business and professional environment;
- e) To learn various research methods and professional and business practices.

# Learning Outcomes:

Through practical laboratory and/or administrative work, immersion in scientific teams, and mentoring by scientific professionals, students will gain an in-depth understanding of effective ways to:

1. Participate in research, business, regulatory, or customer- and public-relations teams in a

professional manner while completing assigned tasks in a timely and efficient way;

- 2. Discuss the status of the field and the underlying applied biological problems relevant to their internship work;
- 3. Discuss the business, regulatory, customer relations, and/or educational environment relevant to their internship work;
- 4. Apply appropriate methods to collect, analyze, interpret and critique data relevant to their internship.

### **Evaluation Grading Summary:**

Internships are evaluated by both corporate/organizational evaluative criteria (if applicable) and academic criteria. The final grade for the class is determined by the Primary Advisor of the student and is based on 1) An independent evaluation of the work performed by the student, 2) Input from the student's Internship Supervisor at the hosting agency or at the University of Arizona laboratory where the internship had been performed. The final grade will be calculated according to the following formula:

Submission of all required forms and documents	5%
Evaluation by Internship Supervisor	65%
Independent evaluation by the Primary Advisor	30%

### Absence and Class Participation Policy (required)

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at: <u>http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop</u>. The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, <u>http://policy.arizona.edu/human-resources/religious-accommodation-policy</u>. Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: https://deanofstudents.arizona.edu/absences

### **Course Communications:**

University Email and personal interaction in the laboratory.

## **Required Texts or Readings:**

There are no required textbooks.

## Final Examination or Project:

There is no final exam for this course.

#### Grading Scale:

S, P, F grading: For the majority of individual studies courses, one of the grade systems available is the special grades of S, P, F. Grades of S (superior), P (pass), and F (fail) are not included in the calculation of the GPA, nor do they count toward meeting the criteria for dean's list, honorable mention, or academic distinctions.

#### **Classroom Behavior Policy:**

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.). Students are asked to refrain from disruptive conversations with people sitting around them during

lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

## **Threatening Behavior Policy:**

Required language: The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <a href="http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students">http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students</a>.

# Accessibility and Accommodations:

Please visit the Disability Resource Center website at: <u>http://drc.arizona.edu/instructors/syllabus-</u> statement.

# Code of Academic Integrity:

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: <u>http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity</u>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <a href="http://new.library.arizona.edu/research/citing/plagiarism">http://new.library.arizona.edu/research/citing/plagiarism</a>.

# **UA Nondiscrimination and Anti-harassment Policy:**

The University is committed to creating and maintaining an environment free of discrimination; see <a href="http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy">http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy</a> Recommended language: Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

## **Additional Resources for Students:**

UA Academic policies and procedures are available at <u>http://catalog.arizona.edu/policies</u> Student Assistance and Advocacy information is available at <u>http://deanofstudents.arizona.edu/student-assistance/students/student-assistance</u>

## Subject to Change Statement:

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.