Protein Trafficking
Course Syllabus

Credit hour: 1
Number: GMS 6062
Course format: 5-week module
Office hours: By appointment (email)

Course Director
John P. Aris PhD, Associate Professor, Department of Anatomy and Cell Biology
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Prerequisites
Students must have successfully completed Fundamentals of Biomedical Sciences I (GMS 6001) or obtained permission from the course director.

Overview
This course focuses on the current state of knowledge protein movements in eukaryotic cells. The course will emphasize molecular mechanisms and disease processes related to protein targeting.

Topic Area Examples
ER protein translocation, protein folding, and protein quality control
Vesicular transport mechanisms (e.g., vesicle formation and targeting)
Golgi apparatus structure and function (e.g., models and predictions)
Protein import into mitochondria, peroxisomes, and/or the nucleus
Endocytosis and endosome trafficking (e.g., signaling receptors)
Lysosomal targeting and homeostasis, including autophagy

Schedule
Tuesdays and Thursdays, 1-3 pm (module 3, 9 classes)
Spring 2018: Tuesday 27 March - Tuesday 24 April

Assignments
Reading assignments are posted at the course web page in Canvas. Students are encouraged to suggest papers for class. There are no required textbooks, but textbooks may be helpful for review.

Learning Objectives
1. Identify cutting edge topics in the current literature related to protein trafficking.
2. Discuss current hypotheses related to mechanisms and functions of protein trafficking.
3. Critically examine experimental approaches pertinent to understanding protein trafficking.
3. Critically evaluate experimental data germane to understanding protein trafficking.

Format
Classes will consist of either a brief introduction followed by discussion of assigned readings or presentations by students of readings chosen in advance by the student and the course director.

Grades
Letter grades are based on participation in classroom discussions of reading assignments (5 points) and/or student presentations (10 points), if assigned. Grades are allocated according to UF policies (https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/). Historically, grades in the course have ranged from A to C. The rubric for grading student presentations is as follows:
1. Quality of content - 5 points - Paper presents research important to field. Experiments and data are critically evaluated. Findings are linked to project aims / goals. Key concepts, related models, and relevant literature are explained to support interpretation of results. Summary of main points.
2. Quality of presentation - 5 points - clear and logical (listener can follow line of reasoning).

Attendance
Attendance is required. Absences will be excused according to UF guidelines, including the following:
1. Illness (including psychological)
2. Family medical emergency
3. Participation in the wedding of a first degree family member
4. Attendance of academic conference where a student is presenting their research
5. Religious holidays (https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies)

Students must contact the course director to obtain permission for an excused absence. Requests should be made via email as early as possible and no less than 1 week in advance of class for conferences and holidays. Once permission is obtained, students are responsible for coordinating a make-up assignment with the course director.

Student Counseling and Resources
The COM Office of Student Counseling and Development (http://counseling.med.ufl.edu/) provides information on counseling, self-assessment, wellness, student resources, and student advocacy. Especially helpful are the many student resource links (http://counseling.med.ufl.edu/com-links/).

U Matter, We Care! If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575. You may also contact the Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/

Academic Honesty
All students should understand the UF Student Conduct Code and Student Honor Code and be familiar with what constitutes a violation (https://sccr.dso.ufl.edu/process/student-conduct-code/). All students should be familiar with, and adhere to, the UF Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code. For all work submitted for credit by Students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

Accommodations
UF is committed to providing academic accommodations for students with disabilities. Students requesting accommodations must first register with the Disability Resource Center (DRC) (352-392-8565, https://disability.ufl.edu/) by providing appropriate documentation. Once registered, students should present their accommodation letter to the course director. The University encourages students to register with the DRC as soon as they begin medical school or upon the verification of a disability.

Electronic Communication
All electronic correspondence related to grades, assessments, academic records, and other matters regulated by the Family Educational Rights and Privacy Act (FERPA) must only be sent to or from a Gatorlink email address (i.e., "username@ufl.edu"). FERPA has specific legal and regulatory restrictions, with violations leading to adverse consequences (http://www.registrar.ufl.edu/ferpa.html). Automatic forwarding of Gatorlink email to a non-UF email account (e.g., a Gmail account) is against UF policy (http://www.it.ufl.edu/policies/email/electronic-mail). Non-UF email providers are not FERPA compliant and do not meet privacy standards for student academic information. Auto-forwarding of Gatorlink email may also violate federal and state policies.

Evaluations
Students are expected to complete online evaluations of this course and its faculty.