Biol 456

California State University San Marcos • NEW COURSE • FORM C

ORIGINATOR'S SECTION:

1. College:

☐ CHABSS ☐ CoBA
☐ CoEHHS ☒ CSM

Desired Term and Year of Implementation (e.g., Fall 2008):

Spring 2017

2.Course is to be considered for G.E.? (If yes, also fill out appropriate GE form*) ☐ Yes ☒ No

3. Course will be a variable-topics (generic) course? ☐ Yes ☒ No
("generic" is a placeholder for topics)

4. Course abbreviation and Number:* Biol 456

5. Title: ***(Titles using jargon, slang, copyrighted names, trade names, or any non-essential punctuation may not be used.)***
Molecular Medicine and Mechanisms of Disease

6. Abbreviated Title for PeopleSoft:
(no more than 25 characters, including spaces)
Molecular Medicine

7. Number of Units: 3

8. Catalog Description: ***(Not to exceed 80 words; language should conform to catalog copy. Please consult the catalog for models of style and format; include all necessary information regarding consent for enrollment, pre- and/or corequisites, repeated enrollment, crosslisting, as detailed below. Such information does not count toward the 80-word limit.)***

This course will provide an in-depth analysis of molecular medicine and advances in the field taught through a combination of didactic methods and the use of case studies. Topics will include basic principles of molecular medicine, discoveries in cellular and molecular mechanisms of disease, applications of clinical research, relevant topics in biomedical ethics, and current developments in personalized medicine. An overview of the process from basic science discovery to therapeutic or vaccine approval is presented using practical aspects of specific case studies. Lecture instruction may include determination of biomarkers for disease, detection and treatment of cancer, animal models of disease for pre-clinical studies, use of cell-based therapeutics, targeting of cellular signal transduction pathways and vaccine development. Prerequisites: *one of the following:* BIOL 351, BIOL 352, BIOL 353, BIOL 477, BIOL 504, BIOT 355 or BIOT 356 with a minimum grade of C (2.0). No course credit if Biol 396 (50240) or Biol 686 (442954) were already taken.

9. Why is this course being proposed?

The number of Biology and Biotechnology majors has greatly increased over the last few years. We need more electives to serve this population of students. In addition, graduate students in biology need more choices for electives. This course offers an option for biology, biotechnology and graduate students to gain a deeper knowledge of how a product goes from bench to bedside.

10. Mode of Instruction*

For definitions of the Course Classification Numbers:
http://www.csusm.edu/academic_programs/curriculumscheduling/catalogcurricula/DOCUMENTS/Curricular_Forms_Tab/Instructional%20Mode%20Conventions.pdf

Type of Instruction	Number of Credit Units	Instructional Mode (Course Classification Number)
Lecture	3	C2
Activity		
Lab		

11. Grading Method:*
☒ Normal (N) *(Allows Letter Grade +/-, and Credit/No Credit)*
☐ Normal Plus Report-in-Progress (NP) *(Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress)*
☐ Credit/No Credit Only (C)
☐ Credit/No Credit or Report-in-Progress Only (CP)

12. If the (NP) or (CP) grading system was selected, please explain the need for this grade option.

13. Course Requires Consent for Enrollment? ☐ Yes ☒ No

☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department - Director/Chair

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

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14. Course Can be Taken for Credit More than Once? ☐ Yes ☒ No
If yes, how many times? (including first offering)

15. Is Course Crosslisted: ☐ Yes ☒ No

If yes, indicate which course and check "yes" in item #22 below.

16. Prerequisite(s): ☒ Yes ☐ No BIOL 210 and 211 and *one of the following:* BIOL 351, BIOL 352, BIOL 353, BIOL 477, BIOL 504, BIOT 355 or BIOT 356 with a minimum grade of C (2.0) or consent of the instructor.

17. Corequisite(s): ☐ Yes ☒ No

18. Documentation attached:
☒ Syllabus ☐ Detailed Course Outline

19. If this course has been offered as a topic, please enter topic abbreviation, number, and suffix:* Molecular Medicine BIOL 396, 50240; BIOL 486, 42955/BIOL 686, 42954

20. How often will this course be offered once established?* Once per year

PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM COMMITTEE SECTION:
(Mandatory information – all items in this section must be completed.)

21. Does this course fulfill a requirement for any major (i.e., core course or elective for a major, majors in other departments, minors in other departments)? ☒ Yes ☐ No

If yes, please specify:
This course will fulfill an upper division elective for Biology or Biotechnology majors

22. Does this course impact other discipline(s)? ***(If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.)*** ☐ Yes ☒ No

If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

Discipline _____ _____ _____Support _____Oppose
Signature Date

Discipline _____ _____ _____Support _____Oppose
Signature Date

SIGNATURES : (COLLEGE LEVEL) :

Julie Jameson
1. Originator (please print or type name) Date

2. Program Director/Chair 2/2/17 Date

3. College Curriculum Committee 2/7/17 Date

4. College Dean (or Designee) 2/8/17 Date

(UNIVERSITY LEVEL)

5. UCC Committee Chair Date

6. Vice President for Academic Affairs (or Designee) Date

7. President (or Designee) Date

Office of Academic Programs Banner: Catalog Revised 3/28/2007

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

SYLLABUS-BIO 486: MOLECULAR MEDICINE AND MECHANISMS OF DISEASE
FALL 2016

Friday 9:30-12:20 University Hall 444

Instructor:
Dr. Julie Jameson
Science Hall 1, Room 317
760-750-8274
jjameson@csusm.edu
Office Hours: 9:30-10:30AM Wednesday and/or by appointment
Final Exam: Combined oral presentation and written exam Dec 9

Course Description

This course will provide an in-depth analysis of molecular medicine and advances in the field taught through a combination of didactic methods and the use of case studies. Topics will include basic principles of molecular medicine, discoveries in cellular and molecular biology, disease mechanisms and development, clinical research, biomedical ethics, and personalized medicine. An overview of the process from basic science discovery to therapeutic or vaccine approval is presented using practical aspects of specific historical examples. Lecture instruction may include understanding: how genes are used for personalized medicine, how current devices and therapeutics are used for the detection and treatment of cancer, how animal models of disease are used for pre-clinical studies, how cell-based therapeutics are used to eradicate disease, and how molecular medicine impacts global health.

Prerequisites for BIOL 486-4: BIOL 351 or BIOL 352 or BIOL 353 or BIOT 355 or BIOT 356 or BIOL 477.

Course Learning Outcomes

At the end of the course students will be able to:

1. Understand the organizational requirements for the translation of biomedical therapeutics from bench to bedside.

2. Discuss the impact translational research has had on human health and disease.

3. Explain why pharmaceutical companies select particular drug or therapeutic targets for further study.

4. Articulate the significance and potential of molecular medical advances in biomedical research.

5. Identify ethical issues, analyze key moral concepts and principles, and discuss them productively with others.

6. Make responsible decisions about social issues that relate to translational medicine such as availability and cost of therapies, use of human subjects in research, race and ethnicity in clinical trials.

7. Identify promising translational medicine scientists, physicians, ethicists, public policy makers, industry members and regulatory boards in San Diego.

8. Identify and utilize well established and reputable sites for scientific research.

This Course Addresses the Following Biological Sciences Program Student Learning Outcomes:

1. Use the scientific method to ask testable questions and to design and conduct laboratory, field, or theoretical investigations to address these questions.

2. Apply knowledge of the major principles from the fundamental biological areas of 1) cellular and molecular biology, 2) genetics, 3) physiology, and 4) and ecology and evolution.

3. Employ mathematical and computational skills to organize, analyze, and evaluate biological data.

4. Communicate biological information in an appropriate written and/or oral format to both scientific and general audiences.

5. Locate, determine the reliability of, critically evaluate and summarize scientific literature and other sources of biological information.

Cougar Courses: A Cougar courses site has been set up and will contain all of the necessary materials for the course, including a copy of the syllabus, assignment guidelines, case studies, articles, and other relevant reading materials.

Team Based Learning: Students will work in teams of six students throughout the semester.
Why use teams? Teams have been shown to outperform their best member. In fact it was found that in teams studied over a 20 year period of time, over 99.95% of the teams outperformed their best member by approximately 14%. Thus, the worst team is likely to outperform the best student in the class! (Michaelsen et al, 1989) Teams allow students to discuss and interface during class thus improving their communication skills. In addition, team based learning helps prepare students for their future careers which will include engagement with team and project members.

TEAMMATES Evaluations: Students will use the TEAMMATES website, https://teammatesv4.appspot.com/ to perform peer evaluations. You will receive an e-mail from the TEAMMATES website asking you to submit an evaluation. You have four days to complete the evaluation. I recommend you do this on a computer as some students have had difficulties with hand held devices. Make a screen shot of the final submission to keep as evidence of submission. I also suggest setting an alarm to remind you to submit your evaluation on time.

The first evaluation is worth 10 points (5 points for submitting at least three sentences in each response, 5 points for positive responses from your peers). The mid-semester and final evaluations are worth 20 points (10 points for submitting at least three sentences in each response, 10 points for a positive peer review). Students will lose one point for each 5% reduction in cumulative score. For example if you get 95% effort you will get 9 points, if you get 90% effort you will get 8 points etc. In rare cases where one student outperforms the group (as stated by the group in %) that person may receive extra points.

Required Readings:
Websites: http://www.plosmedicine.org , www.sciencemag.org, and Cougar Courses
Readings: Will be identified on CC
Optional Textbook: Translational Medicine and Drug Discovery, Cambridge Books (ebook available) or Molecular Medicine, Academic Press, Molecular Biology of the Cell (Garland)

Make-up Work

If you miss class for any reason, it is up to you to get the information, announcements, assignments, etc. you missed. Contact me immediately if you are going to or have missed a test. Please be cognizant to your responsibilities working as a member of a team on class assignments. You will not get the points assigned to the worksheets that day if you miss class. Each student is allowed one "sick" day where they will not lose the quiz points or Case Study that day, however *they must e-mail the instructor and send any assignments prior to the missed class or quiz responses within 24 hours in order to receive credit.* Midterms and Final due dates will only be reassigned in the most extreme of situations with approval from the Dean of the College of Science and Math.

Course Requirements:

Midterm (Take Home)	100 pts
Final Exam (Take Home)	80 pts
Final Presentation (In Class)	70 pts
In Class Worksheets	60 pts
Case Study Challenges	120 pts
Reading Assessments	60 pts
Team Evaluation	50 pts
Total	**540 pts**

Final grade assignments: C and above is passing, grades are rounded to the nearest whole number.

A = 93-100%
A- = 90-92%
B+ = 87-89%
B = 83-86%
B- = 80-82%
C+ = 77-79%
C = 73-76%
C- = 70-72%
D = 60-69%
F = < 60%

Students are expected to commit 6 hours per week of outside work to this course.

Course Outline

Week	Topic	Readings
Sept. 2	**Medical Team Selection** **Introduction to Molecular Medicine** **Scientific Collaboration in Molecular Medicine- the key players** **Goal: Personalized Medicine**	*Zika Virus, Where are we now?*
Sept. 9	**Section 1: Breast Cancer- from Genes to Personalized Medicine**	
	Reading Assessment	*Breast Cancer- Genes to*
	Team Evaluations- Goals for semester	*Personalized Medicine*
Sept. 16	**Section 1: Breast Cancer- from Genes to Personalized Medicine**	
		Breast Cancer- Genes to Personalized Medicine
Sept 23	**Section 2: The CRISPR Revolution- Genes, inheritance, and Genome Editing**	
	Reading Assessment	*Genes, Inheritance And Genome Editing*
Sept 30	**Section 2: The CRISPR Revolution- Genes, inheritance, and Genome Editing**	
		Genes, Inheritance And Genome Editing
Oct. 7	**Section 3: Aging-Related Chronic Diseases from Bench to Bedside**	
	Reading Assessment	*Aging-Related Chronic Disease from Bench to Bedside*
Oct. 14	**Section 3: Aging-Related Chronic Diseases from Bench to Bedside**	*Aging-Related Chronic Disease from Bench to Bedside*

TAKE HOME GIVEN OCT 14 AFTER CLASS, DUE OCT 18 BY MIDNIGHT

Oct. 21	**Section 4: Hepatitis C and Global Health**	
	Reading Assessment	*Hepatitis C and Global Health*
Oct. 28	**Section 4: Hepatitis C and Global Health** Team Evaluations- Progress made	*Hepatitis C and Global Health*
Nov. 4	**Section 5: Immunotherapeutics for Autoimmunity and Cancer**	
	Reading Assessment	*Immunotherapeutics for Autoimmunity and Cancer*
Nov. 11	**Holiday!! Veteran's Day!**	
Nov. 18	**Section 5: Immunotherapeutics for Autoimmunity and Cancer**	
		Immunotherapeutics for Autoimmunity and Cancer
Nov. 25	**Holiday!! Thanksgiving!**	
Dec. 2	**Section 6: Molecular Medicine and Forensic Science**	
	Reading Assessment	*Molecular Medicine and Forensic Science*
Dec 9	**Final Presentations- All Class** Team Evaluations- Overall performance	

FINAL EXAM GIVEN AFTER CLASS DECEMBER 9, DUE DECEMBER 13 BY MIDNIGHT

Academic Honesty and Integrity

Students are responsible for honest completion and representation of their work. *Plagiarism will not be tolerated on any of the quizzes, projects or exams.* If you have copied or modified someone else's work you have plagiarized. This includes copying and pasting information from the internet. You need to use your own words for ALL assignments. There will be ***zero*** tolerance for infractions. The instructor reserves the right to discipline any student for academic dishonesty and plagiarism, in accordance with the general rules and regulations of the university.

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/material that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty, in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole. Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University

Disabled Student Services

Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with me during my office hours in order to ensure confidentiality.

Week 1 Sept. 2 "Zika Virus- Where are we now?":

We will start by developing our medical teams. Teams will contain students with a diverse background in coursework and real world experiences. We will discuss what constitutes molecular medicine using Zika virus as a specific example. Students will learn about basic Zika virus biology, public health issues, recent therapeutics and vaccines in the pipeline, and current clinical trials. We will discuss which professional careers and infrastructure are involved in the translation of medical research from bench to bedside.

Readings Prior to Class:
http://abcnews.go.com/Health/zika-virus-outbreak-update-vaccine-safety-trials-fall/story?id=37550339

http://irp.nih.gov/blog/post/2016/03/4-key-takeaways-from-zika-virus-a-pandemic-in-progress

http://www.cdc.gov/zika/

http://www.who.int/csr/research-and-development/zika-rd-pipeline.pdf

Weeks 2-3 Sept 9, 16 "Breast Cancer- Genes to Personalized Medicine":

Week 2 will start with a short reading assessment. We will discuss how genetic mutations can lead to disease susceptibility, how scientists and companies are detecting these mutations, and whether these genes can be patented. BRCA1 and BRCA2 will be used as a specific example showing how protein function can become altered leading to cancer. On week 3 a case study challenge will be due. Students will investigate how far we have come with "personalized medicine".

Readings Prior to Class:
"The Advocate", http://science.sciencemag.org/content/343/6178/1460.full

"The 'Other' Breast Cancer Genes,
http://science.sciencemag.org/content/343/6178/1457.full

"The Race to Clone BRCA1",
http://science.sciencemag.org/content/343/6178/1462.full

"Enhancing Quality of Life as a Goal for Anticancer Therapeutics",
http://stm.sciencemag.org/content/8/344/344ed9.full

Watch Video: http://www.youtube.com/watch?v=ylkIIjOVIlM

Weeks 4-5 Sept 23, 30 "Genes, Inheritance and Genome Editing":

Week 4 will start with a reading assessment. We will define what is gene therapy using a case study with SPK-RPE65 and Glybera. The process from discovery to FDA approval will be mapped and potential career pathways discussed. On week 5 a case study challenge will be due.

Readings Prior to Class:
"History of Gene Therapy",
http://www.sciencedirect.com/science/article/pii/S0378111913004344

"Widespread and Efficient Transduction of Spinal Cord and Brain Following Neonatal AAV Injection and Potential Disease Modifying Effect in ALS Mice",
http://www.nature.com/mt/journal/v23/n1/full/mt2014180a.html

"Development and Applications of CRISPR-Cas9 for Genome Engineering",
http://www.sciencedirect.com/science/article/pii/S0092867414006047

"Who Owns CRISPR?", **http://www.the-scientist.com/?articles.view/articleNo/42595/title/Who-Owns-CRISPR-/**

"CRISPR Dispute Raises Bigger Patent Issues that We're Not Talking About",
http://phys.org/news/2016-04-crispr-dispute-bigger-patent-issues.html

Reference for in class work:
http://www.nature.com/mtm/specialissues/vectorproduction?WT.mc_id=BAN_MTM_1604_SpecialIssue

Watch Videos: http://www.youtube.com/watch?v=2pm9u1E8k3s
http://www.youtube.com/watch?v=Edx9L0Sasoc

Weeks 6-7 Oct 7, 14 "Aging- Related Chronic Disease from Bench to Bedside":

Week 6 will start with a reading assessment. In lecture we will define inflammation and how it impacts human disease using aging and type 2 diabetes as specific examples. In class we will identify recent therapeutics that show promise in preclinical models. Signal transduction pathways that can be manipulated by targeted therapeutics will be discussed using mTOR as a specific example. On week 7 a case study challenge will be due. The midterm will be given on Oct. 14 due on Oct. 18 at midnight.

Readings Prior to Class:
"Selling Long Life",
http://www.nature.com/nbt/journal/v33/n1/full/nbt.3108.html

"Finding Clues in Genes of 'Exceptional Responders'",
http://www.nytimes.com/2014/10/09/health/in-genes-of-exceptional-responders-clues-to-fighting-disease.html?_r=3

"Metabolic Consequences of Long-Term Rapamycin Exposure on Common Marmoset Monkeys (Callithrix jacchus)",
http://www.impactaging.com/papers/v7/n11/full/100843.html

Watch Video:
http://www.ted.com/talks/stephen_friend_the_hunt_for_unexpected_genetic_heroes

References for class: Craig Venter's Human Longevity, 100K Wellness Project, Google's Calico, The Resilience Project

Weeks 8-9 "Hepatitis C and Global Health":

Week 8 will start with a reading assessment. This section we will be studying global health and the development of drugs for the US and abroad. Our case study will be HCV and the drug Sovaldi. We will examine how nucleoside inhibitors work and how clinical trials are designed. Virus transmission and life cycle will be studied in order to determine how viruses can be targeted by therapeutic drugs.

Readings Prior to Class:
"Sovaldi Makes Blockbuster History, Ignites Drug Pricing Unrest",
http://www.nature.com/nbt/journal/v32/n6/full/nbt0614-501.html

"AG Warns Maker on Hepatitis Drug Costs",
https://www.bostonglobe.com/business/2016/01/27/calls-gilead-lower-price-hepatitis-medicines/CNykZWySat0LiYY4cUZfRO/story.html

"Sofosbuvir and Ribavirin in HCV Genotypes 2 and 3",
http://www.nejm.org/doi/full/10.1056/NEJMoa1316145#t=article

"Hepatitis C Drugs Not Reaching Poor", http://www.nature.com/news/hepatitis-c-drugs-not-reaching-poor-1.15053

Visit Website: **www.CDC.gov** Investigate Hepatitis C

Weeks 10-11 Nov 4, holiday, 18 "Immunotherapeutics for Autoimmunity and Cancer"

Week 10 will start with a reading assessment. The biological basis of autoimmunity will be discussed with an emphasis on the early development of the drug glatiramer acetate. The development of immunotherapeutics has revolutionized the biologics industry. We will define immunotherapy and use TNF-a and CD20 targeting as

specific case studies. Week 11 a case study challenge will be due. The role of the FDA in drug approval will be studied.

Readings Prior to Class:
"Immunotherapy of Autoimmunity and Cancer: the Penalty for Success", http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2764117/

"Cancer Immunotherapy Meets Biomaterials", http://www.nature.com/nbt/journal/v33/n1/full/nbt.3119.html

"Obama's Cancer Moonshot", http://www.nature.com/nbt/journal/v34/n2/full/nbt0216-119.html

Watch Video: https://www.youtube.com/watch?v=-NNjDjXSJt0

Visit Website: http://www.merckmanuals.com/professional/immunology-allergic-disorders/biology-of-the-immune-system/immunotherapeutics

Weeks 12 Dec 2 "Molecular Medicine and Forensic Science"

We will start week 12 with a reading assessment. We will discuss the many jobs involved in forensic science, the types of assays utilized, the use of short tandem repeats, the preservation of evidence, and the examination of bacteria to determine time of death.

Readings Prior to Class:
"The Living Dead: Bacterial Community Structure of a Cadaver at the Onset and End of the Bloat Stage of Decomposition", http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0077733

"The Necrobiome", http://www.the-scientist.com/?articles.view/articleNo/38946/title/The-Necrobiome/

"The Human Microbiome: at the Interface of Health and Disease", http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3418802/

"Biocrimes, Microbial Forensics, and the Physician", http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.0020337

"Extracting Evidence from Forensic DNA Analysis: Future Molecular Biology Directions", http://www.biotechniques.com/BiotechniquesJournal/specialissues/2009/April/Extracting-evidence-from-forensic-DNA-analyses-future-molecular-biology-directions/biotechniques-140701.html

Weeks 13 Dec 9 Oral Presentations "Biography of a Medical Breakthrough"

- **First you will decide which drug to investigate and identify the molecular pathway(s) it targets.** You will need to obtain approval of the professor in order to proceed.
- **Then, you will research reputable sources from the primary literature** to identify studies that originally identified this pathway as a target for molecular medicine, studies that translated this into humans, clinical trials that were performed on this drug (in all phases), and proof that the FDA approved this drug (and for what intended use). These resources will be used to provide background for your presentation and help identify which scientists were involved in the discoveries. The STEM librarian is willing to help with any difficulties with performing literary searches.
- Reputable websites must be utilized to determine the prevalence of this disease to **provide relevance** (cdc, WHO, etc.). The mechanism utilized by the drug to target disease will have to be carefully described such that the audience can understand.
- It is required to **use PowerPoint slides, visual diagrams, or some other form** of display to clearly present your topic. 15 minutes per group.
- In addition, **you will turn in a written essay** to support your oral presentation (at least two pages long). This must be written using original language (your own words). This must be printed (7 copies) and provided to the professor prior to the oral presentation. All references need to be cited (not included in the two page limit).
- Each team will peer review another team (in a blinded manner). Two questions will be required from your team.
- This project is worth 70 points. Teamwork on this project will be judged using the teammates website after class.

  Essay 25 points
  Oral presentation – 45 points
  (Delivery, content, completeness, accuracy, and syntax)

Weeks 14 Final Exam- Take Home

Final Exam given after class on Dec 9. Due on Cougars Courses Dec 13 by midnight.

More Information:

Drugs in the pipeline
http://www.nature.com/nbt/journal/v32/n5/full/nbt.2902.html

Best Translational Centers
http://www.nature.com/nbt/journal/v32/n5/full/nbt.2887.html
or translationalcenters

NIH NCATS
http://www.ncats.nih.gov
http://commonfund.nih.gov/idg/index

Career Webinars:
http://webinar.sciencemag.org/all-webinars/career

Register for The Scientist:
http://www.the-scientist.com/?subscribe.now