Susan J. Baserga, M.D., Ph.D.
Education, Training and Career Development

B.S. in Biology, Yale College, 1980
M.D. Yale U. School of Medicine, 1988
Ph.D. Human Genetics, Yale University, 1988
Post-doc MB&B, Yale University, 1988-1993
Assistant Professor, Ther. Rad. and Genetics, Yale, 1993-1999
Associate Professor, Ther. Rad. And Genetics, Yale, 1999-2002
Associate Professor (tenure), MB&B, Genetics and Ther. Rad., Yale 2002-2007
Professor, MB&B, Genetics and Ther. Rad., Yale 2007
Associate Director for Academic Development, Yale MSTP 1998-2009

Program Director, Predoctoral Program in Cellular and Molecular Biology (largest Ph.D. training grant at Yale, for the time being). Since 2012.
New and creative ways to prepare trainees for diverse scientific careers
NIGMS administrative supplement to T32007223
New course Spring 2017
Made for graduate students
Attended by post-docs too
MOTIVATION

We have used this Administrative Supplement to develop a new course for our PhD and MD/PhD students: Skill Development for Diverse Scientific Careers. The 2012 Biomedical Workforce Report concluded that our traditional training programs do little to prepare our students for the wide variety of scientific and biomedical career options open to them. We designed a new course that will address topics that were not covered in any curriculum at Yale: biotechnology entrepreneurship, how to run clinical trials, both in academia and in pharma, the business and scientific sides of biotech; strategies for optimal professional productivity; how to convert a CV into a resume, and how to find a post-doctoral fellowship or research residency. Our goal is to teach trainees skills that trainees can use in a variety of diverse scientific careers. This course will serve as a valuable new resource for all of our students as they transition into the biomedical workforce.

APPROACH

We have run the Skill Development for Diverse Scientific Careers Course over 10 weeks in the spring semester, meeting once/week from 5-6:30 PM, beginning in Spring 2017. So as not to increase the course-taking burden on our students, the course was optional, and students were able to attend individual sessions. We advertised the course via the Biological and Biomedical Sciences (BBS) newsletter, through the MD/PhD program, by each graduate department, and on posted flies. Course materials were distributed in a handout-based system for each session. The session combined didactic presentations (45 min) with faculty led discussion and networking opportunities. Course credit (Satisfactory/Unsatisfactory) was awarded to every student who attended 80% of the sessions and who had registered for the course. This Administrative Supplement to T32GM07223 was an important catalyst to put this new course in place on an ongoing basis.

To optimize productivity, you need to be healthy

Avoid getting sick:
Get enough sleep, eat healthy, do other things.....

Eating healthy:
Good: Whole grains, vegetables, lean protein, fruits, legumes, nuts,
Bad: too much salt, sugar, alcohol, drugs

Get regular exercise, go outside:
Keeps you fit, reduces stress, helps executive function, improves brain function.

Have healthy and supportive relationships:
Friends, family need to understand how important getting your work done is to you.

COURSE EVALUATION, ASSESSMENT, AND OUTCOMES

Each session was evaluated individually with a Yale Qualtrics web-based survey. It consisted of 5 questions with radio buttons for “yes”, “no”, and “maybe” as answer choices. We included a write-in box for additional comments. The 5 questions were “Did the presentation expose you to new options for your future career in biomedical science?”, “Was it clear what roadmap such a career path might take?”, “Are you considering this option as a potential career path?”, “Was it clear how you would gain the necessary skills?” “Was there adequate time for discussion and interaction with the speaker?” As an additional method of assessment, one of the co-course directors, Drs. Baserga, Kazmierczak or Koleska, attended each session. Overall, student feedback indicated that the course was a success.

LESSONS LEARNED

1) The most useful section of the course evaluation was the comment section, as that provided concrete suggestions for changes.

2) Next year we will be adding another new session on careers in publishing and scientific writing.

ACKNOWLEDGEMENTS

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Syllabus BBS 550b
https://medicine.yale.edu/bbs/training/nihprograms/CMB/cm
bcardevops.aspx

In the Spring of 2017 we will offer a new course that will address topics that are not currently covered in any curriculum at Yale: biotechnology entrepreneurship; how to run clinical trials, both in academia and in pharma; the business and scientific sides of biotech; strategies for optimal professional productivity; how to convert a CV into a resume; and how to find a post-doctoral fellowship or research residency. The course will be graded satisfactory/unsatisfactory based on 80% attendance. For feedback, please take the Qualtrics survey at the end of each session or speak with one of the organizers.

January 17, 2017  Transitioning from academic research to a career in biotechnology.
Instructor: Margaret Kiss, Ph.D., Director of Molecular Sciences, AxoMx, Inc.

January 24, 2017  Your personal marketing plan: how to write a resume tailored to your career search.
Instructor: Hyun Ja Shin, Ph.D., Office of Career Strategy.

January 31, 2017  Planning and performing a randomized controlled clinical trial.
Instructor: Loren Laine, M.D., Professor of Medicine (Gastroenterology).

February 28, 2017  Skill development for the business side of biotech/pharma.
Instructor: Rachael Felberbaum, Ph.D., Senior Director of Business Development, Protein Sciences Corporation.

Instructor: Leonard Bell, M.D., Chairman of the Board of Directors, Alexion Pharmaceuticals, Inc.

April 4, 2017  Choosing and applying for research residencies and fellowships: paths to basic, translational and clinical research careers for physician-scientists.
Instructor: Barbara Kazmierczak, M.D., Ph.D., Associate Professor of Medicine & Microbial Pathogenesis and the Director of the MD/PhD program.

April 11, 2017  How to take the first step: Phase I clinical drug trials.
Instructor: Patricia LoRusso, D.O., Professor of Medicine (Oncology).

April 18, 2017  How to find, apply and interview for a post-doctoral fellowship.
Instructor: Susan Baserga, M.D., Ph.D., Professor of Molecular Biophysics & Biochemistry, Genetics and Therapeutic Radiology, Program Director for the Predoctoral Program in Cellular and Molecular Biology.

April 25, 2017  Effective use of ‘big data’ in research: large numbers are useful but they aren’t a cure all.
Instructor: Amy Justice, M.D., Ph.D., Professor of Medicine and of Public Health.

May 2, 2017  Strategies to increase productivity in biomedical science.
Instructor: Anthony Koleske, Ph.D., Professor of Molecular Biophysics and Biochemistry and Director of the Combined PhD Programs in the BBS.
Remedy to encourage successful careers as independent researchers

Stable and attainable funding (R01)

Hopeful chatter