

Implementing Your Academic Mission

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Presenter Disclosure Information

Lisa H. Butterfield, Ph.D.

The following relationships exist related to this presentation:

No Relationships to Disclose related to this presentation

But in the interests of full disclosure, the following relationships exist (2014):

Advisory Board participation:

Daiippon Sumitomo Pharma,

NeoStem, Scientific Advisory Board member,

Astellas

Education and Training

Undergraduate:

1982-1986 Rensselaer Polytechnic Institute, Troy, NY, 1986
B.S., Biology, Minor: German

Graduate:

1986-1993 University of California, Los Angeles, CA 1993, Ph.D., Biology,
Molecular Biology, Winston A. Salser, Ph.D., advisor

Postgraduate:

1993-1995 Postdoctoral Fellow, Tumor Immunology, Hungyi Shau, Ph.D. and
Sidney Golub, Ph.D., advisors

1994 AACR Histopathobiology of Neoplasia Workshop, Keystone, CO

1995-1997 Postdoctoral Fellow, Cancer Gene Therapy,
James S. Economou, M.D., Ph.D. advisor

Appointments and Positions

- 1985-1986 Research Assistant, Rensselaer Polytechnic Institute, Laboratory of H. Roy, Ph.D.
- 1986-1993 Research Assistant, UCLA, Laboratory of W. Salser, Ph.D.
- 1986-1989 Teaching Assistant, UCLA, Biology Department.
Courses: Molecular Biology Lab, Cell Biology Lab, Genetic Engineering and graduate section.
- 1993-1997 Postdoctoral Fellow, UCLA, Department of Surgery, Division of Surgical Oncology (2 postdocs)
- 1997-1999 Assistant Research Oncologist, UCLA, Department of Surgery, Division of Surgical Oncology
- 1999-2003 Adjunct Assistant Professor, UCLA, Department of Surgery, Division of Surgical Oncology
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- 2003-2004 Visiting Assistant Professor of Medicine and Surgery, University of Pittsburgh School of Medicine, UPCI
- 2004-2010 Assistant Professor of Medicine and Surgery, University of Pittsburgh School of Medicine, UPCI
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- 2006-2010 Assistant Professor of Immunology, University of Pittsburgh
- 2004-present Member of the Immunology Graduate Program, University of Pittsburgh
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- 2005-2006 Associate Director, UPCI Immunologic Monitoring Laboratory
- 2006-2008 Director, UPCI Immunologic Monitoring Laboratory
- 2008-2010 Director of Operations, UPCI Immunologic Monitoring and Cellular Products Laboratory
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- 2010-2013 Associate Professor of Medicine, Surgery and Immunology (with tenure), University of Pittsburgh
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- 2010-present Director, UPCI Immunologic Monitoring and Cellular Products Laboratory
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- 2013-present Professor of Medicine, Surgery and Immunology, University of Pittsburgh, Pittsburgh, PA

Evolution of my Research Program

1. Grammar School: Professor/Scientist, impact human disease
2. Junior High: Lesch-Nyhan Syndrome paper, gene therapy
3. High School: Biology, Genetics
4. Undergraduate: Molecular Biology, gene regulation, human disease:
Project on RuBisCO-mutant corn plants, RNA gels and blots.
5. Graduate: Gene Therapy, **Cancer**
6. Postdoc 1: Cancer **Immunology**
7. **Postdoc 2: Cancer Immunotherapy, Translational Research, Clinical Trials**
8. Junior Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
 1. Melanoma
 2. Hepatocellular Cancer
 3. Cancer Vaccines
 4. Immune Monitoring of Responses
9. Independent Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
 1. Melanoma and Hepatocellular Cancer
 2. Cancer Vaccines, mechanisms
 3. Immune Monitoring of Responses, predictive and prognostic biomarkers for insight into mechanism of response

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4. Undergraduate: Molecular Biology, gene regulation, human disease
5. Graduate: Gene Therapy, **Cancer**

Project: Gene regulated in HL60 promyelocytic cell line *in vitro* differentiation
Molecular biology “tools”, cancer focus; (unproductive lab)

1. Postdoc 1: Cancer Immunology
2. **Postdoc 2: Cancer Immunotherapy, Translational Research, Clinical Trials**
3. Junior Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
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4. Independent Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
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5. Graduate: Gene Therapy, **Cancer**
6. Postdoc 1: Cancer **Immunology**
Project: NK cell genes important for killing function
7. **Postdoc 2: Cancer Immunotherapy, Translational Research, Clinical Trials**
8. Junior Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
 1. Melanoma
 2. Hepatocellular Cancer
 3. Cancer Vaccines
 4. Immune Monitoring of Responses

3 trials: Melanoma
2 trials: HCC
Immune and clinical responses

} 8 yrs.
9. Independent Faculty: Cancer Immunotherapy, Translational Research, Clinical Trials
 1. Melanoma and Hepatocellular Cancer
 2. Cancer Vaccines, mechanisms
 3. Immune Monitoring of Responses, predictive and prognostic biomarkers for insight into mechanism of response

Training Environment

What doesn't work:

Graduate Lab as a model:

no rotations in other labs, bigger lab, presenting data 1-2x/year,
no postdocs, no collaborators, no meetings, rare papers, no grant development

What worked for me:

Postdoc #2 Lab as a model:

smaller lab, regular meetings, regular data presentations, 1:1 and group meetings, going to 1-2 meetings/year, having postdocs and fellows come and go, having collaborators, regular papers, work together on grants.

Create environment where each person is the only limitation to their individual productivity (and grant money is the only other limitation).

Help develop each person's CV according to their individual career goals.

Maintaining Consistent Funding

1. Strategize
2. Keep an eye on the budgets
3. Don't overspend
4. Apply for 10 to get one?
5. Study section experience, other grant reviews
6. Compare notes with colleagues

Maintaining Science Relationships

Be a good colleague

Say “yes” most of the time

Do what you say you’ll do, do a good job and do it on time

Say what you mean

Reply to emails/calls in a timely fashion

Be present

Be respectful (the person that you have never heard of who wants to talk to you may end up reviewing your paper, reviewing your grant, being at the institution you want to work at, having a reagent that you need...)

Worse Things About My Job

Filling out forms constantly

Too many sales emails that I unsubscribe from/send to junk

Too many grants that I have to apply for

Too little money available, budget cuts when you get a grant

High costs of publications (open access),

meetings (bring lab members?)

Need for focused strategy in all areas, not free exploration

Pressure (from above) to have grants for salaries

Pressure (from above) to have higher impact publications

Constantly being judged/reviewed

and sometimes getting poor quality reviews

Best Things About My Job

Independence (technically, I do what I want)

Job security of tenure

Clinical successes in the field

Student and postdoc interactions, mentoring and teaching

Great colleagues

Opportunity to constantly learn

(attend seminars, meetings, read papers and grants,
visit other institutions)

Contribute to the understanding of cancer and it's treatment

Participate in cancer patient treatment and health

Constantly being judged/reviewed

gives you input and direction for improvement