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# **What does a Large Pharmaceutical Company Need from a Scientist Like Me?**

*S. Renee Commerford, PhD*

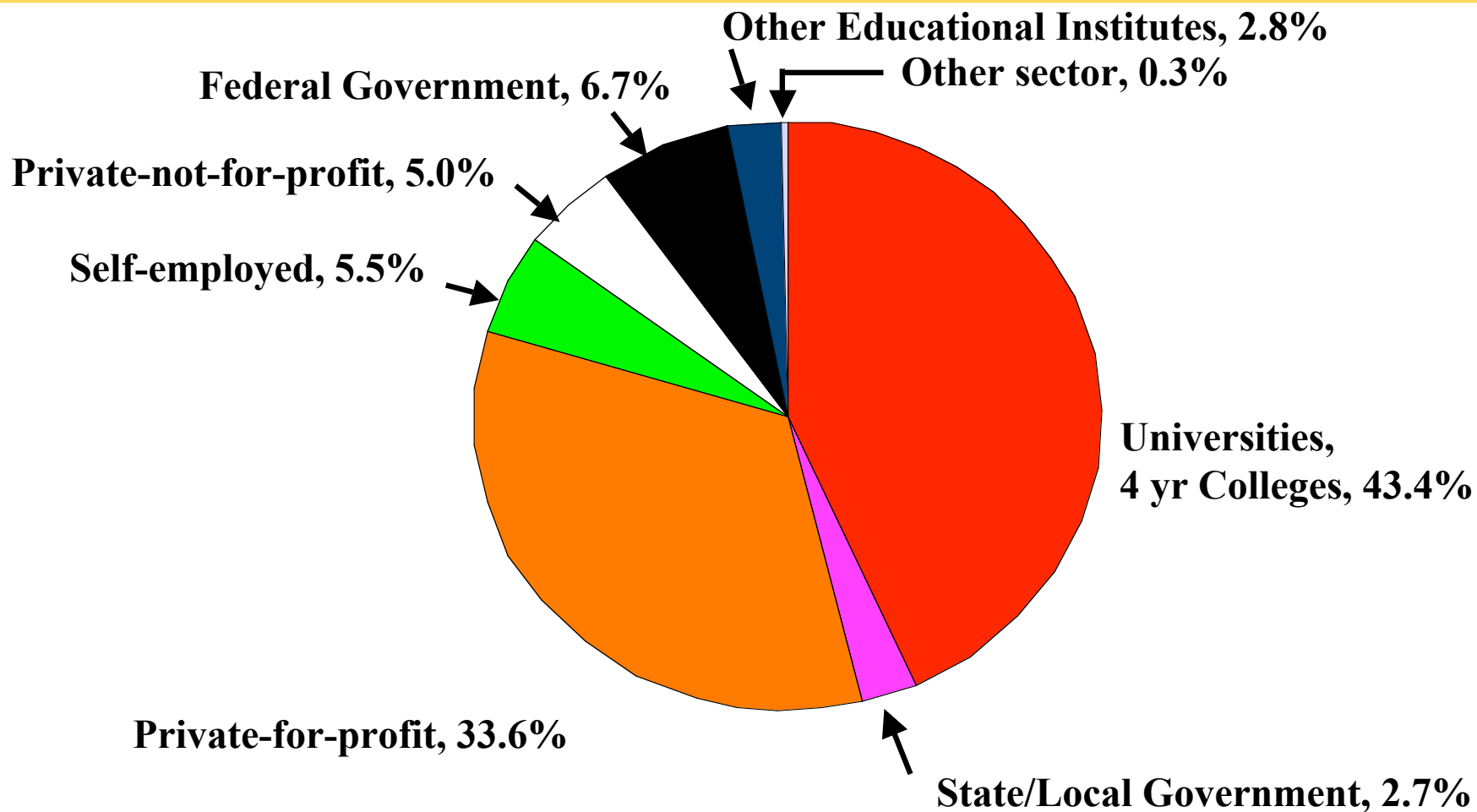
*Ph.D. Career Panel*

*SACNAS Annual Meeting*

*October 23, 2004*

*Austin, TX*

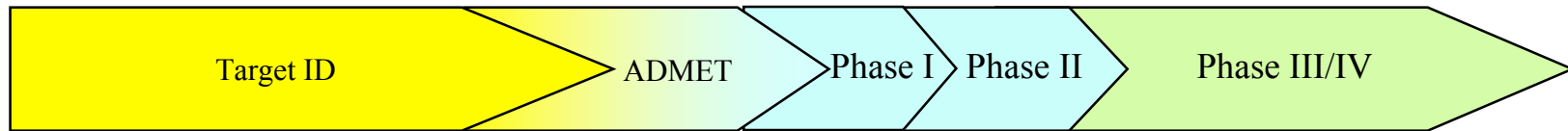
# Employed Doctoral Scientists (all fields), 1999



*NSF/Division of Science Resources Statistics*

# Expectations of Scientists at Pharmaceuticals?

**Stages of Drug Discovery and Development: the many professional fields**



**Technical R&D**

**Chemistry, biology, physiology, biochemistry**

**Preclinical Safety**

**Pharmacology, toxicology, regulatory (FDA)**

**Biomarker dev./Translational Medicine (surrogate/efficacy, MOA)**

**Biology, physiology, biochemistry**

**Clinical Development**

**Regulatory, clinical personnel (MDs, LPN, etc), Marketing**

# Expectations of Scientists at Pharmaceuticals?

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**Highly skilled and knowledgeable in area of expertise...**

**...but able to discuss areas that are not your expertise**

# Expectations of Scientists at Pharmaceuticals?

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*"Find out who set up this experiment. It seems that half the patients were given a placebo, and the other half were given a different placebo."*

**Design comprehensive and mechanistic studies**

**Details...details...details...**

# Expectations of Scientists at Pharmaceuticals?

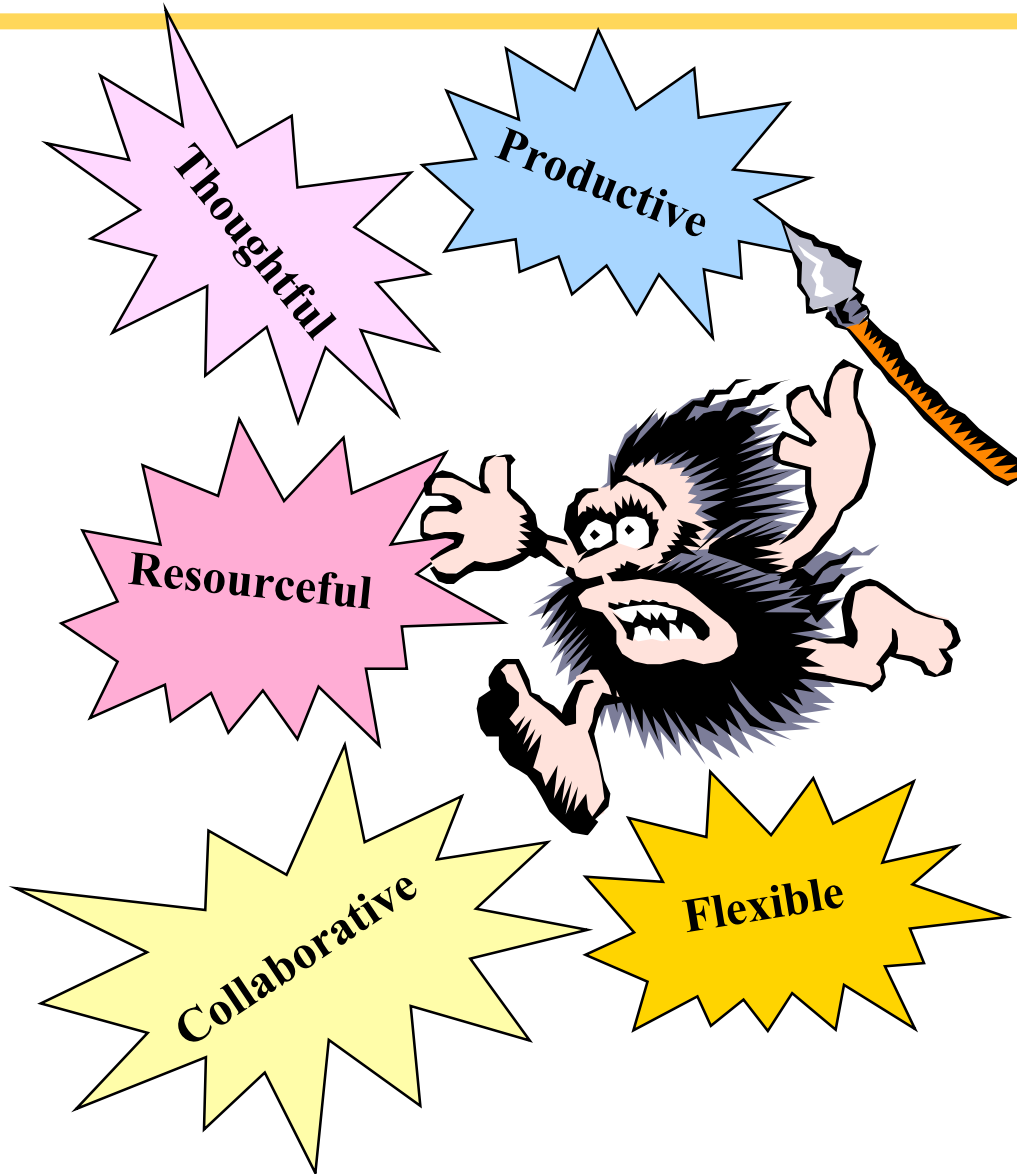
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**Be familiar with and ready to use state-of-the-art methods when necessary...**

**high quality, extremely sensitive equipment is often accessible and is expected to be used**

# Expectations of Scientists at Pharmaceuticals?



## Percentage of day..

Laboratory:	50%	10%
Writing:	15%	30%
Presentations:	10%	20%
Data evaluation:	15%	20%
Meetings:	10%	20%

First few years/**3+ yrs experience**

# So really, can I get there from here?

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**Basic Steps to getting there from here...devise some sort of an ‘Individual Development Plan’**

<i>Basic Steps</i>	<i>...for Post-docs</i>	<i>...for Mentors</i>
<i>Step 1.</i>	<b>Conduct a self assessment</b>	<b>Become familiar with available opportunities</b>
<i>Step 2.</i>	<b>Survey opportunities w/mentor</b>	<b>Discuss opportunities w/postdoc</b>
<i>Step 3.</i>	<b>Write an IDP and share/revise w/mentor</b>	<b>Review IDP and help revise</b>
<i>Step 4.</i>	<b>Implement the plan &amp; revise the IDP as needed</b>	<b>Establish regular review of progress</b>

*<http://www.faseb.org/opar/ppp/educ/idp.html>*