We will start momentarily at 2pm ET

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Have Questions?

Type Questions Box!

“Why am I muted?”
Don’t worry. Everyone is muted except the presenter and host. Thank you and enjoy the show.

Or tweet using #acswebinars

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Q: “Hungry for a brain snack?”

A: ACS Webinets™ on YouTube

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Upcoming ACS Webinars®

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Thursday, March 6, 2014
“From Waste to Wealth Using Green Chemistry”

James Clark, Director, Green Chemistry Centre of Excellence
Dr. Joseph Fortunak, Professor, Howard University

Thursday, March 13, 2014
“Detecting Bioterrorism: Is Chemistry Enough?”

Dr. Kristin Omberg, Los Alamos National Laboratory
Dr. Darren Griffen, University of Kent

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Join Dr. Derek Lowe on Reddit!

Science AMA Series: Friday, Feb 28 @ 2pm ET

http://www.reddit.com/r/science

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Next in the Drug Discovery Series!

Thursday, March 27, 2014
“Primer in Drug Target Classes” Session 2

Dr. John P. Overington of the European Bioinformatics Institute
Dr. Molly Schmid of Tech Coast Angels

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Everything Up to the Clinic

Starts with high-level strategy, then down to biologists/chemists
Target based or phenotypic? Secondary assays and in vivo in place?
Good old medicinal chemistry! Potency, selectivity, tox and PK.
And now the real money begins to be spent...

Disease Pathology  Target ID & Validation  Assay Dev. & Screen  Hit to Lead  Lead Op  Preclinical Dev.  Clinical

Literature, competition, proprietary edge? Varies by disease area and risk tolerance.
Triage hits and shakedown to see which look real. Cover as much ground as possible.
Scale-up, 2-week tox in 2 species, formulation work, etc.

Ref. 1
What’s Changed

1990s: HTS/combichem wars
More “orphan” indications
Phenotypic assays have made a comeback
New technologies for validations (siRNA, e.g.)
Same as it ever was?
Dedicated group or not? Companies vary in their approach
No way around these, despite many attempts.
Clinical failures are sliding towards Phase III, God help us.

Audience Question

Have you worked on a phenotypic project?

1. Yes, and recently
2. Yes, but a long time back
3. No – target-based only!
4. Doesn’t apply (not my job)
Additional Resources

CORANTE

http://www.corante.com.pipeline/

ACS Webinar Slides

Rick Connell
2014-Feb-27
Pfizer Inc., Groton, CT
Audience Questions: Contract Research Orgs

• At my company…

  1. I work directly and personally with a CRO
  2. I don’t, but people in my department work with a CRO
  3. My department does not work with a CRO

Business Change ➔ Impact on Chemistry Roles

• Fewer “Me-too” compounds

  Simvastatin  Fluvastatin  Atorvastatin  Rosuvastatin

• More testing/compound
  • PDM, Safety, Bio..

• Information Diversity
  • Hard Copy ➔ Open Access
  • Need enhanced Data Search / Management strategies

• High Throughput Screening

• Program Diversity

• Molecular Diversity

• Synthetic Diversity

• Further Role Specialization
  • PMC, Synthesis, Scale-up
  • Design, Analytics, Comp

Patient Diversity, Adaptation
Geography is Destiny: How Academics Broke Down Fortress Pharma

- Many Pharmas Research sites were build on
  - Existing manufacturing sites…where drivers were access to water, land, tax incentives.
- Acquisitions in the last decade ➔ a federation of Research sites
- As Pharma sought to partner with academics, co-localization with Academic Medical Centers (AMCs) becomes more important.

### Audience Question: Merger and Acquisitions

- In the last 5 years, my company…
  1. Acquired another company
  2. Was acquired by another company
  3. Merged with another company (merger of equals)
  4. Has not been involved with a merger or acquisition.
Skills and Capabilities needed Today

- Strong Scientific Skills
  - Track record of achievement

- Data Management skills
  - Command of e- Literature
  - Ability to handle large data sets

- Communication

- Project Management

- Agility

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2014 Drug Discovery Series:
Overview of the Drug Discovery and Development Process

Dr. Richard Connell
Pfizer

Dr. Nicholas Meanwell
Bristol-Myers Squibb

Dr. Derek Lowe
Vertex

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Did your question go unanswered?

Science AMA Series: Friday, Feb 28 @ 2pm ET

Science AMA Series
Medicinal Chemist
Derek Lowe
Inside the Real World of Drug Discovery
reddit.com/r/science
2 pm EST
Friday, Feb 28th

In the Pipeline

http://www.reddit.com/r/science

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