Younger Chemists Committee of St. Louis ACS

Chemistry Career Night

COVIDIEN Pfizer
Washington University in St. Louis
Dr. Keith Stine

Chairman - ACS St. Louis
Younger Chemists Committee (YCC) of STL-ACS

Arindam Roy, Chair-YCC-STL
St Louis Local Section YCC

- Co Chair: Dr. Kenya Powell
- Secretary: Mr. Philip Cheney
- Events Co-ord: Mr. Francisco Franco
- Treasurer: Dr. Dan Mans
- Chair: Dr. Arindam Roy
YCC: Membership and Mission

- 35 Years and Younger
- Address any issues faced by early career chemists!
- Happy hour
- We plan to do a seminar given by a chemist on a scientific topic
- We meet once a month
Younger Chemists Committee

- www.acs.org/ycc

- Local Section under the new website: www.stlacs.org
Just A Thought

• Think about one issue
• Send me an E-Mail: royarind@yahoo.com
• Do come to our meetings (Wash U or Covidien)
• Be a part of the TEAM YCC
Acknowledgement

- Dr. Keith Stine: Chair, St Louis ACS
- Officers of YCC and Ms. Dayna Turner
- Volunteers: Dr. Eric Burton, Dr. Archana Parameswar
- Our Speakers:
  Dr. Lucinda Buhse
  Dr. Lloyd Hill
  Mr. Keith Hampton
  Dr. Rajesh Devraj
  Dr. Ryan McCulla
- Dr. Ed Hiss/WashU
- Sponsors
Thank You

royarind@yahoo.com
Lucinda (Cindy) Buhse, Ph.D.

Director, Division of Pharmaceutical Analysis
Center for Drug Evaluation and Research (CDER)
Food and Drug Administration (FDA)

Chemistry Career Night
Washington University
September 17, 2008
Education

• B.A. Chemistry, Grinnell College, Iowa
  – Undergraduate Research under Professor Luther E. Erickson
    Research Title: “Kinetics and Mechanisms of Isomerization of Amino Acid-DMSO Chloride Complexes of Platinum (II).”

• Ph.D. Physical Chemistry, University of California, Berkeley
  – Graduate Research under Professors John H. Clark and George C. Pimentel.
  – Thesis Title: “Picosecond Dynamics of Solvation: Time-Resolved Fluorescence of 4-Aminophthalimide in Solution.”
Industrial Career

ROHM & HAAS

(7 years)

– Senior Scientist for Plastics Research
  • Developed new Plexiglas formulations
  • Ran quality control for a high temperature plastic pilot plant

– Process Chemist for Multi business Manufacturing Facility
  • Improved processes for several products

– Process Chemist for Agricultural Business
  • Developed conditions for scale up of pesticide

** Management experience with technicians, chemists and engineers**
Industrial Career (cont.)

– Validation Engineer for Diagnostics Division
  • Introduction to FDA, cGMPs
– Batch Chemist Supervisor for Diagnostics Division
– Production Manager for Diagnostics Division
– Validation Manager in Engineering Department
– Analytical Services Manager in Fine Chemicals Division

** Management experience with Ph.D.’s, supervisors**
Government Career
7 years with FDA

– Deputy Director, Division of Pharmaceutical Analysis
– Director, Division of Pharmaceutical Analysis
– Acting Director, Office of Testing and Research
Mission of Division of Pharmaceutical Analysis

- Ensure, through biological, chemical, and/or physical assessments, the safety and efficacy of human drugs used in the United States;
- Provide a strong scientific and analytical base to support complex FDA investigations and enforcement actions concerning the quality and authenticity of human drugs;
- Provide leadership to advance and disseminate the application of new technologies and methods, in order to assess the quality and authenticity of human drugs.
Thank You

FDA.gov
USAJOBS.gov
Thanks for the invitation from Dr. Arindam Roy
BIO

UMSL A.B.
- great mentoring from faculty

ISU Ph.D.
- Outstanding learning / growth
- "A Place to Grow"

Career Stops
- STL Police Department Lab
  - CSI -- not for me
- Roche Carolina
  - Great facility – bad cultural fit
MALLINCKRODT / COVIDIEN

- Left in 1997; returned in 2000 to present
- Developed expertise in opium alkaloids, isolation, purification, synthetic conversions to other drug substances and their end use
- Experience in lab, management, plant operations and quality control
SUCCESS DRIVERS

Resume vs. Behaviors

- Resume
  - Education
  - Publications
  - Experience
  - Projects

- Behaviors
  - Hiring / Promotions
    - “The Selection Solution”
SUCCESS DRIVERS

Career Path Selection Scientist vs. Other

- Block outside influence
- Self Discovery

“The Lemming Conspiracy”
SUCCESS DRIVERS

Fourth Grade Teacher vs. Real World

- Copy from your neighbor?

Never - Ever Stop Learning

- Technical and non-technical
CONTACT INFORMATION

Lloyd Hill, Director Project Management, Covidien

Lloyd.hill@covidien.com

314-654-1375
Career Path

• Job Shadow - Industrial Paper Chemist

• College (Biology)
  – General Chemistry (BA Biology & Chemistry)
  – Organic Chemistry (BS Chemistry)
Career Path

• Undergraduate Research

• Graduate School

– Preparing Future Faculty
Career Path

• Postdoctoral Research
  – Develop skills
  – Improve CV

• Saint Louis University
  – Applied to ~70 Positions.
Pros to this path

• Graduate School = Fun
  – If you like the work.

• Faculty Position
  – Independence
  – Working with Students
  – Flexibility (sort of)
Cons to this path

• Graduate School
  – Time

• Faculty Position
  – Reliance on Government.
  – Salary (sort of)
Insights

• Competitive Positions - Start Early

• When to get out
  – Early College
  – Graduation
  – 1st semester graduate school
  – M.S.
  – Ph.D. - become a lawyer.
Keith Hampton
Sr. Recruiter, Lab Support
CAREER MANAGEMENT STRATEGIES
PLANNING FOR SUCCESS
On Assignment Lab Support

- Scientific Recruitment

- Parent Company – On Assignment Inc.

- Branches throughout Northern America, UK & Belgium and The Netherlands
The role of a Recruiter

• To Advise Technical Managers & Personnel
• To recruit & interview prospective candidates
• To offer career management/outplacement advice
• To get skilled scientists a job!
Elements of Career Management

- Personal Evaluation
- Your Interests and Experiences
- Resume Writing Skills
- Interview Technique
- Creative Job Hunting
Personal Evaluation

• Are you a patient / impatient person?
• Are you an easy or difficult person to work with?
• Communication skills
  • Do you jump in before you have heard everything?
  • Do you ask for clarification?
  • Do others understand your ideas / instructions?
• How do you manage any differences in opinion?
• What is important to you?
Your Interests & Experiences

• Abilities – are you organized, able to teach, to listen, etc?

• General interests/experiences
  • What have you enjoyed?
  • What are you good at?
  • What would you like to learn more about?

• Spare time – interests and hobbies

• Previous work experience
  • Technical Skills
  • Transferable Skills
Your Resume

• What is the purpose of a Resume?
  • To represent you and your skills as it applies to a particular position
• Good Resume => Interview
• Good Interview => Job
• Bad Resume => No Interview (& no job!)
The Resume: Your 10 second commercial!

• Appropriate cover letter
• Layout – clear, concise, error free, 1-2 pages
• Gain interest – most important details first
• Outline technical skills, (project, placement etc)
• Is it relevant to the position you’re applying for?
Interview Technique

- Preparation is essential
- What type of interview – technical, psychological or informal chat?
- Personal appearance
- Attitude (body language)
- Firm handshake
- Show you are interested – prepare thoughtful and intelligent questions

**NOTE: Evaluation starts at Reception**
Creative Job Hunting: 80% of Vacancies are Never Advertised!

- Professional Associations
- Advertisements
  - Scientific Journals
  - Newspapers (local and national)
  - Internet
- Networking (professional meetings, friends)
- Specialist Recruitment Agencies
- Job Centers
- Speculative Letters
What Employers Look Out For

• Clear communication skills
  • Verbal: team environment
  • Written: GLP/GMP report writing
• Enthusiasm & Interest
• Commercial awareness
• Adaptability
• IT Skills
• Relevant experience
Typical Industries

- Pharmaceutical Sciences
- Biotechnology
- Functional Genomics, Cell-Based Therapy and Large Scale Protein Production, Medical Devices
- Food, Beverage and Brewing
- Contract Research Organizations
- Customised Analytical and Production Services
Opportunities in These Industries

- Quality Control
- Quality Assurance
- Research & Development
- Formulation
- Process Design and Scale up
- Analytical & Method Development
- Technical Support
Examples

- **QC**: analysis of food, cosmetics etc to meet industrial standards

- **Investigative analysis**: ELISA analysis for meat specialization, DNA screening

- **Pharmacokinetics**: testing effects of drugs on cells & whole body

- **R&D**: gene-based therapy
...and if you don’t want a lab job?

- Technical sales and marketing
- Regulatory Affairs
- Quality Assurance
- Human Resources, Recruitment
- Teaching
- Patenting
Planning for the Future

• Continue to plan your career path

• Re-evaluate yourself annually
  • What are your long-term / personal goals?
  • Are you moving in the right direction?
  • Are you still learning new skills? What new skills would you like to develop?
  • Are still enjoying this job? If not, why not?
  • Can you progress in this role?
  • What is the boss’s view of your future in the company?

• Be proactive – is it time to move on?
An Overview

- Know Yourself
- Market yourself effectively
  - Finding the vacancy
  - Resume
  - Interview
- Regularly re-focus on long term career goals
- Think big!
Any Questions?
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