

ASMS Workshop Report

1. Title of workshop and those presiding

Title: **Get Ready to Become an MS Rising Star**

-Young Mass Spectrometrists Workshop

Presided by Olga Friese (Pfizer) and Dian Su (Genentech)

2. Date of workshop/meeting

June 18, 2014

3. Estimate of attendance

~200

4. Summary of program and discussion (Please see pages 2 and 3)

PS. Please see the workshop presentation on pages 4-13

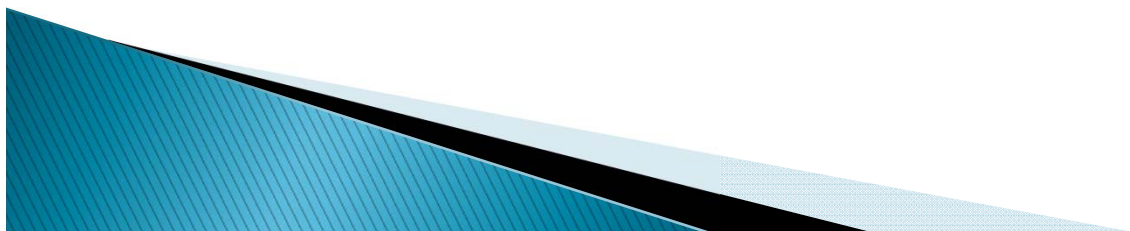


Summary of Program

1)The workshop featured a panel discussion on professional development in the area of mass spectrometry.

2)The panel, consisting of representatives from government, industrial and academic organizations, shared their knowledge and practices on career prospects.

3)Discussion was focused on career planning and management, fundamental training, industrial internship, job search tools and interview strategies.



Summary of Discussion

1. Post-doc help or not?
Depending on career direction; interdepartmental interaction; branching out abilities enhances abilities and communications.
2. Want to start a Biotech company:
Just start MBA helps but not necessary; postdoc useful but not necessary
3. The effect of citizenship on industry/government positions
Federal government position has to be citizen. Some companies have support for permanent residency; Permanent positions supports H1B then green card versus post-doc in companies without support versus for post-doc in company will support visa.
4. How to get the exposure of different area/multidisciplinary field:
Craft something unique; Take initiative; innovative thinking; identify and tackle a problem
5. What does a company look for in a candidate? How much experience?
Depth in MS; Protein and peptide; Develop skillset that's unique
6. Internship opportunities?
Luck; Apply online; Soft/personal skills in addition to technical skills
7. CV-list whole skillset?
Will have key words that match; Confidentiality Don't write things on CV if can't fully describe or explain. If applying for a MS job, you are expected to get instrumental fundamental qualification.
8. What to add in cover letter?
What's applicable to job description; How can you add value? Proof-read; make sure it fits job description (signifies attention to details)
9. Should I be interviewing the company?
Yes; culture; what do you want out of; career; understanding the structure of organization; Your interest in the work, resume and science
10. If want to get a job in a location do you do post-doc in that area?
Not necessary; network
11. Resume question—how to put troubleshooting abilities in simple statement?
For example "I increased uptime by X% by doing X, Y, Z. This type of statement is more impactful than just saying " I am good at problem solving

Get Ready to Become an MS Rising Star

–Young Mass Spectrometrists Workshop

Co-chaired by Olga Friese (Pfizer) and Dian Su (Genentech)

June 18, 2014
Baltimore, MD



"Someone important is bound to see my resume now!"



"It's a little chilly in here. Throw another batch of resumes we have on file in the fire."

Do not find yourself in these situations

Panel Discussion

- ▶ Career planning and management
- ▶ Fundamental training
- ▶ Industrial internship
- ▶ Job search tools and interview strategies



Panelists

- ▶ **Government:**

- ▶ Michael Boyne, PhD. – Food and Drug Administration (FDA)

- ▶ **Industry:**

- ▶ David Hambly, PhD. Principle Scientist – Amgen
- ▶ Violet Lee, PhD. Associate Scientist – Amgen

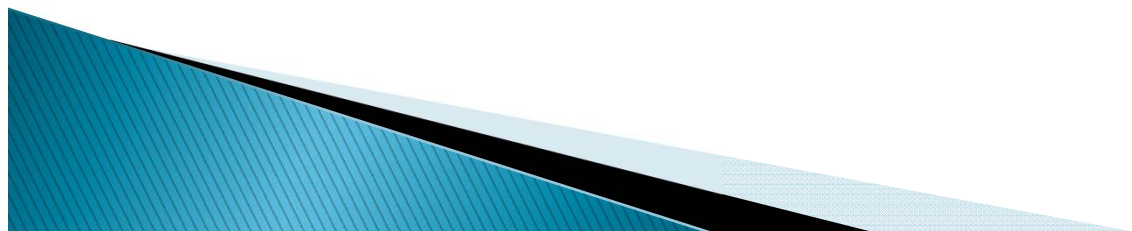
- ▶ **Academia:**

- ▶ Yinsheng Wang, PhD. Professor – University of California at Riverside

Biography – Yinsheng Wang, Ph.D.

Professor of Chemistry, UC Riverside

- ▶ Dr. Yinsheng Wang obtained his Ph.D. in Chemistry from Washington University in St. Louis and joined the faculty of the University of California Riverside in 2001.
- ▶ His current research involves the use of a multi-pronged approach encompassing mass spectrometry, synthetic chemistry, and molecular biology, for understanding the biological consequences of DNA damage and the molecular mechanisms of actions of anti-cancer drugs and environmental toxicants.
- ▶ He has received several awards including ASMS Research Award (2005), AAAS Fellow (2011), *Chemical Research in Toxicology* Young Investigator Award (2012), and the Biemann Medal (2013).



Biography – David Hambly, Ph.D.

Principal Scientist at Amgen

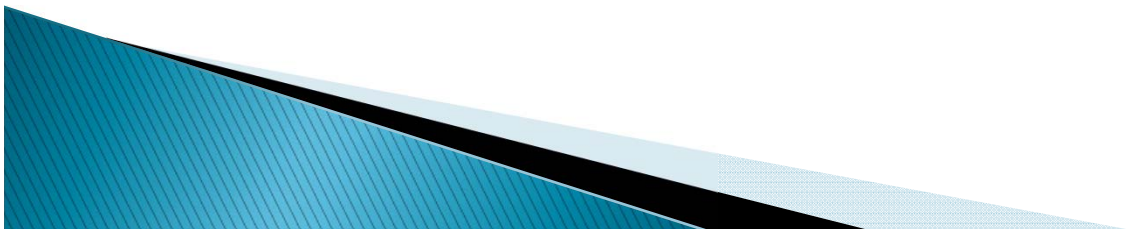
- ▶ Dr. David Hambly received his Ph.D. in Biochemistry from Washington University in St. Louis in 2006.
- ▶ He joined Amgen and has worked in Research and Development as well as Operations(Commercialization and Manufacturing support) over the last 8 years serving in both Formulation and Analytical Sciences leadership roles.
- ▶ David's expertise covers analytical testing, product characterization and forced degradation for proteins, monoclonal antibodies and oncolytic virus / gene therapy products. David has authored IND, INDa and BLA sections for a variety of products.



Biography – Michael Boyne, Ph.D.

Research Chemist at FDA

- ▶ Dr. Boyne received his Ph.D. in Chemistry from the University of Illinois Champaign–Urbana.
- ▶ After a American Cancer Society/Canary Foundation Postdoctoral Fellowship at Washington University Medical School, he joined the FDA.
- ▶ Specializing in bioanalytical chemistry, he is an expert in comparison and characterization of complex drugs, including protein therapeutics, monoclonal antibodies and natural products, and he serves as a subject matter expert for the implementation of modern analytical technologies into the regulatory review process.



Biography – M. Violet Lee, Ph.D.

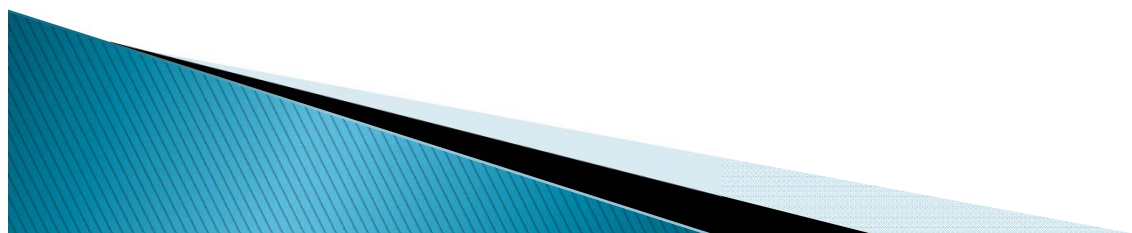
Associate Scientist at Genentech

- ▶ Dr. M. Violet Lee obtained her Ph.D. in Chemistry from the University of Wisconsin–Madison.
- ▶ She joined Genentech in the BioAnalytical Sciences Department supporting *in vivo* late–stage research and mass spec based assay development, by way of Codexis.
- ▶ Violet specializes in bioanalytical chemistry with expertise in protein characterization, small and large molecule quantitative mass spectrometry, systems–biology, antibody drug conjugate (ADC) catabolism and metabolism.



Tools for Successful Career in the Field of Mass Spectrometry

- ▶ **Fundamental training:**
 - Knowledge of mass spectrometry ionization and detection technologies beyond ones that one uses in his current research/work areas;
 - Familiarity with various mass spectrometry and separation technology instrumentation/software – expanding beyond specific instruments used in ones laboratories;
 - Broad knowledge of the mass spectrometry application: from petroleum to food-to pharmaceutical industry as well as to clinical, sports, and cosmetics.
- ▶ **Job search tools:**
 - Knowledge of online job search engines such as Monster, CareerBuilder, etc;
 - Utilization of recruiting agencies;
 - Familiarity with alternative places for job postings such as scientific journals and magazines, scientific societies websites, conferences, company and/or academic institution websites;
 - Importance of social media tools such as LinkedIn;
 - Participation at the national and local mass spectrometry discussion groups;
 - Networking with people in the field through various avenues



Questions to Ask

Before you choose your direction:

- ▶ What areas are interesting in academia and industry?
 - Large molecules, Small molecules, Metabolites...
- ▶ What techniques are most demanding?
 - Separation (HPLC, electrophoresis) and MS (intact MS and peptide mapping, protein quantification)

Before you look for a job

- ▶ What type of candidates are preferred for entry-level jobs?
 - Fresh PhD, Postdocs or those with a couple of years of industrial experience?
- ▶ What's the best time of the year to look for a position?
 - The beginning and the end of the year?
- ▶ How much does referral help?
 - Not must-to-have but maybe very important?
- ▶ What resources can I use for job-hunting?
 - LinkedIn, Glassdoor, Google, indeed, ASMS career center....