Thank you Dr. Alexander for all of your hard work & dedication to the RIPF Program!
Pharmacy in the News

MS Treatments in Development

Dr. William Kim, Pharm.D.
1st year fellow in Marketing at Sanofi

Multiple Sclerosis Current Landscape

Multiple sclerosis (MS) is a therapeutic area generating a significant amount of interest recently. The evolution of MS treatments has had extraordinary developments including just last year in 2010 with the advent of an oral MS agent, fingolimod.

Despite these developments, there are still multiple unmet needs in the space including needs for: (1) more convenient delivery forms of medication, (2) treatments with better safety and efficacy than those currently on market, (3) treatments that reverse accumulation of disability and neurological damage, (4) prognostic markers for disease progression and treatment response, and lastly, (5) effective treatments for chronic progressive MS (CP-MS).

In attempt to fill these unmet needs in the space, research efforts have been looking into (1) oral formulations, (2) combination therapy options, which combine lower doses of individual medications possibly resulting in improved tolerability and compliance overall, (3) neuroprotective and neurorestorative agents, (4) induction therapy versus escalation therapy, which use more potent immunosuppressive therapies then switch to weaker immunomodulatory agents, (5) and stem cells and autologous T-cell vaccination.

Quick Review of Phase III MS Drugs

The growing interest in MS is reflected by the dense pipeline for this disease. The promising Phase III candidates include three oral and four injectable drugs. All these candidates with the exception of a few are planned to be targeted for the reduction of relapse-remitting multiple sclerosis (RRMS) episodes.

The three oral drugs include (1) teriflunomide (being developed by Sanofi), (2) BG-12 or dimethyl fumarate (Biogen Idec), and (3) laquinimod (Teva). Their oral delivery formulation is an improvement that addresses very poor compliance rates with injectables. Teriflunomide is an oral drug dosed Qdaily, with efficacy that is likely comparable to current interferons but less than fingolimod. BG-12 is an oral drug dosed BID to TID that is uniquely thought to work by protecting neuronal cells rather than suppressing the immune system. It is likely to be less effective than other oral pipeline candidates and may play a role as adjunct therapy. Laquinimod is another oral drug dosed Qdaily and its efficacy is very questionable, having not met its primary endpoint of reducing annualized relapse rate in its Phase III BRAVO trial. It may also play a role as an adjunct therapy.

The 4 injectable drugs include (1) daclizumab (being developed by Biogen Idec and Abbott), (2) ocrelizumab (Biogen Idec), (3) alemtuzumab (Sanofi/Genzyme), and (4) monthly interferon beta-1a (Biogen Idec). Daclizumab is a humanized monoclonal antibody administered subcutaneously thirteen times a year and is currently on market for use in kidney transplant rejection. It has no serious side effects but has reported frequent gastrointestinal side effects. Ocrelizumab is another monoclonal antibody administered intravenously four times a year. Despite possibly high efficacy results, one death was caused by systemic inflammatory response syndrome in trials. Also, it was pulled from rheumatoid arthritis trials due to opportunistic infections in 2010. Indications for not only RR-MS, but also primary progressive MS (PP-MS) are being investigated. PP-MS patients are currently greatly underserved and this indication is unique out of the pipeline products. Alemtuzumab is another monoclonal antibody already approved for 1st line treatment for B-cell CLL. The product posted great efficacy results but showed a serious risk of autoimmune thyroid disease and other autoimmune disorders. It is administered four times annually by infusion.
NEW FELLOWSHIP OFFERINGS BEGINNING IN 2012
WELCOME TO THE RPIF FAMILY

2 yr Fellowships in:
- Early Clinical Research
- Clinical Research (Late Stage Development)
- Global Clinical Trial Operations
- Global Safety

2 yr Fellowship in Medical Affairs - Medical Information

Fellowship in Medical Affairs - Medical Information

2 yr Fellowship in Regulatory Affairs

ASHP MIDYEAR 2011 - NEW ORLEANS

This year’s midyear meeting was a great success! This success could not have been achieved without everyone’s hard work and the new processes implemented, such as the online interview sign up. This year the number of candidates that interviewed was 12% higher than last year, with a continuing high caliber of candidates.
According to Dr. Barone, I like to “push the limit.” I consider that a compliment based on what the University Outreach Committee (UOC) has accomplished this year. My UOC Co-Chair, Demetre Stamatis, and I have worked hard to attain the following goals.

1. Expand our outreach to all pharmacy schools across the US
2. Allow leadership opportunities for other fellows
3. Maintain better communication with pharmacy schools and students

The first goal was not a simple task since there are over 100 pharmacy schools nationwide. However, we found a way to expand our reach via technology by hosting 2 live webinars. Over 150 students from over 35 different schools registered for the webinars. We now plan to take this a step further by uploading a video of our RPIF classroom presentation on YouTube. Stay tuned.

Only fellows entering a 2-year fellowship are able to hold a committee Co-Chair position, because each Co-Chair is expected to become the Chair of their committee during the 2nd year of their fellowship. Therefore, fellows only completing a 1-year fellowship do not have as many leadership opportunities. To allow all fellows to further develop their leadership skills, we created 3 lead positions: Constant Contact Lead (Mary Mettias), Recruitment Resourcing Lead (Rashmi Morani), and Social Networking Lead (Lynn Anyaele). Our Leads have been vital for ensuring the committee operates smoothly, so we plan to appoint UOC Leads next year as well.

In order to maintain better communication between pharmacy schools, Mary Mettias, our Constant Contact Lead, added school contacts to our Constant Communication initiative. This initiative began last year, but was only focused on establishing constant contact with pharmacy students. To incite more communication from students, we have requested they complete a quick, anonymous survey regarding our outreach visit to their school. In the past, we have only collected survey feedback from fellows who conducted the visits. We look forward to presenting the results from both surveys at an upcoming PDD.
Dr. John Messina started his career as a Novartis fellow in Clinical Development within the neuroscience therapeutic area. During his fellowship he was part of the Exelon (Rivastigmine) team and given the opportunity to participate in the registration program. While working within clinical development he was able to contribute to the NDA (New Drug Application) submission and participated in approval processes for this new drug. After the fellowship he stayed with Novartis in clinical development for a year and then moved to Medical Affairs (phase IV studies), where he continued to work in the neuroscience area. In 2000 Dr. Messina left Novartis to pursue an opportunity at Purdue Pharma working on clinical development of analgesics. His career then took him to Cephalon where he eventually rose to the VP of Clinical Operations and Strategic Planning. Dr. Messina is currently the VP of Clinical Development at OptiNose.

Throughout his career he has had many experiences and opportunities that have allowed him to participate in the development of several different therapeutic compounds at different companies, but he has stayed in clinical research for his entire career. Clinical research is where his passion lays. Two of the key reasons for staying in clinical research are the opportunities presented to him along the way and the interesting projects that he has worked on.

As a graduate of the Rutgers fellowship program it was important for Dr. Messina to give back to recent PharmD graduates. He started a fellowship program while at Purdue Pharma L.L.P for post-doctoral training of PharmDs. He has also served as a mentor throughout his career, which he stresses, is critical to growing the profession. Looking back at his fellowship experience and how it has shaped his career, he notes that it has been invaluable. “The Rutgers fellowship program is the best training program in the country for PharmDs who want to enter industry. It puts them in a company at a level that no one at an entry level can achieve walking in the door. It really puts them in a position to excel.”

Dr. Messina has worked in different size companies in the pharmaceutical industry, which have provided a number of different experiences that have provided him with a diverse background. He notes that it is very important to build your skills base and to make sure you have a solid foundation. He pointed out that the professional experience one has can be different depending on the size of the company; it is important to know what kind of experience you want. One of the many pieces of great advice that he offered me and great advice for all fellows would be to make sure you take advantage of what is offered at Rutgers especially your Rutgers component. Another key piece of advice offered was to make sure to learn as much as you possibly can in the short amount of time during the fellowship and get as many different experiences as you can. The fellowship is providing the experiences in which our professional careers are being built upon, so use that time wisely! Most importantly have fun and enjoy what you do.

Dr. Messina’s current role is the VP of Clinical Development at OptiNose, a company that develops medications for intranasal delivery. Being at smaller sized company provides him with the opportunity to have a wide role and variety of responsibilities. Important skills that have been critical to his career development are strong communication and presentation skills. Having a solid foundation in clinical research is what has prepared him for his current role.
Because 10 million women worldwide could die from breast cancer in the next 25 years, we continue to fight every minute of every day to save every life. Thanks to everyone who donated to support this cause, we were able to raise $984 for the Susan G Koman Breast Cancer Walk.

The NYC Scavenger Hunt was a huge success! The combination of great weather and great friends made for an eventful day. Groups were assigned to find certain locations within the city and take pictures to accumulate points. Not only were major NYC landmarks caught on camera, but fellows were captured discovering NYC’s culture uniqueness. As many fellows are out-of-towners, this was a great way to explore NYC and get to know others. The winning team (top right) included Allison Upalawanna, Christine Novak, Rashmi Morani, Nupur Patel, and Christina DiRamio.
Comedy Shows

Seth Meyers an actor and writer for Saturday Night Live will be performing at the Borgata Music Box in Atlantic City on December 31.

Places to Eat

The Frog and the Peach—New Brunswick, NJ
If you want absolutely delicious fresh local food, this restaurant is a must try! As devoted farm to table advocates, the menu offers dishes using local seasonal produce. The 5 course tasting menu, won’t disappoint!

Salt – Stanhope, NJ
This Gastropub offers an extensive seasonal menu, as well as variety of over 60 specialty and craft beers! This place has a great laid back vibe, perfect place to watch a game or catch up with friends.

Cucharamama—Hoboken, NJ
This intimate restaurant serves up some amazing South American food. The menu has an extensive selection of different South American foods such as Bolivian braised beef, Tamales, Peruvian canary bean stew and a pretty amazing brunch menu too!

Outdoor Activities

Ski season will be here soon! Check out some fun NJ Ski Resorts for some skiing and snowboarding!

Mountain Creek—Vernon, NJ
Campgaw Mountain—Mahwah, NJ
Also next door to NJ are the Poconos Mountains in PA, which also boasts some great skiing

Wineries

The Garden State is also known for some great wineries. During the month of December some wineries featured below will have special holiday events and holiday wine sales. So if you are working on your holiday gift list, a local bottle of wine could be a great gift!

www.newjerseywines.com/events.html

4JGs Orchards & Vineyards – Colts Neck NJ
Will be open every Saturday and Sunday from 1-5pm to celebrate the holiday season

Auburn Road Vineyards–Pilesgrove, NJ
Dramatic Reading of Charles Dickens’ “A Christmas Carol” on the Vineyard Stage in Enoteca following dinner. Be sure to get your tickets in advance to this dinner performance!

Hopewell Valley Vineyards—Pennington, NJ
Music and Wine Fridays, admission is free! Live music through the month of December

Send your favorite spots and upcoming events to the newsletter committee.
Welcome Baby Olivia

Olivia Marie Ringenberg
Born on November 2, 2011
7 lbs and 5 ounces

Congratulations
Mom and Dad!
Theresa and Gregory
Ringenberg

TIME TO CELEBRATE!

Happy Birthday to you:

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Check the web for important forms and guides:
http://pharmafellows.rutgers.edu/
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Recently Engaged!

Congratulations to
Anuj Patel
and Eve Ciacciarelli

Recently Engaged!

Congratulations to
Lynn Anyaele
and Nathaniel
Iwuchukwu