This past April, the Rutgers Pharmaceutical Industry Fellowship (RPIF) Program held a Global Healthcare Professional Development Day featuring Johnson & Johnson Chairman of the Board and Chief Executive Officer Alex Gorsky as the Executive Spotlight Speaker. During his fireside chat with Dr. Toscani, Mr. Gorsky discussed his military background, career at Johnson & Johnson, current and future trends in the pharmaceutical industry, and participated in an open forum Question & Answer session. Key insights from the discussion included taking advantage of new opportunities, living outside of one’s comfort zone by working in another country, finding the right balance between work and family, taking care of one’s personal health and wellbeing, embracing the immense forthcoming change in healthcare, and utilizing experience, knowledge, and expertise to become a leader in the pharmaceutical industry.

Mr. Gorsky is the seventh person to serve as Chairman and CEO of Johnson & Johnson since it became a publicly traded company in 1944. A longtime advocate of diversity and inclusion, Alex has been named one of the “100 Most Inspiring Leaders” by Pharma Voice and he was recently nominated by Modern Healthcare as one of the “100 Most Influential People in Healthcare.” He is the Executive Sponsor of two Johnson & Johnson employee resource groups, the Women’s Leadership Initiative and the Veteran’s Leadership Council. Mr. Gorsky is also a member of the Business Council and the Business Roundtable.

Other notable accomplishments include membership on the Board of Directors of IBM, the National Academy Foundation, and the Congressional Medal of Honor. In 2014 Alex was given the Joseph Wharton Leadership Award and the CADCA Humanitarian of the Year Award, as well as an Honorary Doctorate from Thomas Jefferson University in Philadelphia.
Alex Gorsky’s motivational and thought-provoking messages made a huge impact on all the Fellows, preceptors, alumni, and invited guests in attendance. After the fireside chat a number of the Johnson & Johnson Fellows and stakeholders shared their thoughts and main takeaways –

“It was inspiring to have a renowned leader in Pharma recognize the fellowship as emerging leaders within the workforce. His statement ‘that we are coming into this industry at the right time with a long future ahead of us,’ was exciting and motivating.”
– Christina Kudrna, Promotional Education Fellow

“There is something quite amazing about a leader who makes you feel that you are the only person in a room. It is easy to see, that the advice and direction he gives is true and from the heart.”
– Felix Vainer, Business Analytics Fellow

“My biggest takeaway was that for each of us to achieve long term success in any career path we pursue, we need to keep a focus on living a healthy lifestyle. Don’t get so wrapped up in your day to day work/deliverables, that you neglect and forget how important it is for you to take care of your mind and body with proper nutrition and daily exercise. Sound advice from someone who leads by example!”
– Christopher Nunez, Associate Director Medical Affairs

“Alex Gorsky’s Fireside chat was very relatable and captured the audience from start to finish. His focus on balancing personal and professional life was insightful and relevant to all attendees. Throughout his talk, he shared stories of his experiences and encounters. It was a great opportunity to meet a leader and take away a valuable message.”
– Saranya Venkatachalam, Medical Information Fellow

“Alex Gorsky is an inspirational and charismatic leader. He is a great representative of Johnson & Johnson. His words and vision made me proud to work for such a great company.”
– Anirudh Srikonda, Global Scientific Engagement Fellow
The Fellowship Chronicles | June 2016

INSPIRATIONAL TACTICS FROM THE HEAD OF AN ONCOLOGY BUSINESS LINE

By: Irene Okeke, Pharm.D.

The last professional development day of the fellowship year was a special event for the RPIF Program, particularly for the Merck Fellows in attendance. Frank Clyburn, Merck’s President of Global Oncology, served as the Executive Spotlight panelist in discussion with RPIF Program Director, Dr. Michael Toscani, to shed some light on the journey to leadership and explain the rigorous pathway that he endured during his many years in the pharmaceutical industry.

Mr. Clyburn’s first job opportunity in industry was as a drug representative in the marketing franchise. He knew that it was only a matter of time before he would be on the pathway to an extremely successful career in the field. As the current Head of Global Oncology Marketing at Merck and Vice Chairman of the Thomas Edison State University Foundation Board of Directors, he offered advice to Fellows on how to move up in the ranks and provided insight on noteworthy strategies that would inspire them to stand out in such a highly competitive job market.

Throughout his illustrious career, Mr. Clyburn has served on several boards and committees. He has dedicated himself to understanding the complexity of the many different market landscapes, which includes traveling globally to emerging markets. During his informative discussion with Dr. Toscani, Mr. Clyburn explained the major challenges of relocating his entire family after he decided to accept a new job position requiring him to move abroad. In retrospect, he recognized this to be a pivotal decision that would later have a tremendous influence on his career path. It was at that point that Mr. Clyburn drove home the inspirational message highlighting the importance of taking risks in one’s career and embracing new opportunities that require operating outside of their comfort zone.

Mr. Clyburn highlighted the importance of maintaining a positive work-life balance and how essential it is to having a successful career. He touched base on the constant pressures and stress that typically accompany the quest for leadership and success. Despite his keen sense of work ethic and passion to thrive in the business, one major piece of advice that he outlined to the Fellows was the significance of keeping loved ones close. Creating strategies to carve out family time in the midst of a hectic work week will always deem challenging. Mr. Clyburn alluded to the crucial importance of family time and how it has a direct correlation to a prosperous and meaningful career.

In providing closing remarks and final thoughts regarding the future of the immuno-oncology landscape, Frank Clyburn described why companies with the most innovative and novel ideas will have the greatest potential of staying afloat in this dynamic market. With so many breakthrough immuno-oncology players emerging in Pharma today, Mr. Clyburn made it evident that our focus will continue to remain on the patient. He noted that the pharmaceutical community has only begun to scratch the surface of what has become one of the most exciting times in the history of oncology medicine. Stay tuned!
ALUMNI SPOTLIGHT: NISHALE PATEL, PHARM.D.
Manager, Medical Information UK & Ireland at Bristol-Myers Squibb
By: Lauren Clouse, Pharm.D.

While I was on a BMS rotation in London this past spring I met Nishale Patel, a former RPIF Fellow who was now working abroad. I sat down with Nishale to ask a few questions about her experience transitioning from U.S. to European Medical Information and then further progressing into her current role as a UK & Ireland Medical Information Manager.

What has the experience of working across countries provided for you?

I have learned a lot in a short space of time. It was great to understand the fundamentals of medical information (MI) from the US perspective initially. Moving over to the United Kingdom (UK), I was fortunate to be working in an above country European MI Operations role which provided me with more insight on how the global MI organization works from a broader perspective. I quickly became aware of the regulatory and healthcare environment differences between Europe and the U.S. Later I went on to my current role in UK MI – this deeper local market perspective has given me more insight into the differences between each market and how this ultimately affects the way the MI service is delivered.

How has your professional network expanded from your fellowship to current position?

Working in a global organization with cross country experience is invaluable and just as importantly it has helped me to meet and maintain a great network of colleagues across the organization. I have been able to keep in close contact with the Fellows that were in my class, and it is always a pleasure bumping into a familiar face when attending international congresses. It is great to see this international fellowship rotation being formalized and the opportunity being provided to the Fellows. I look forward to meeting more of you, like Lauren, on this side of the pond!

What is your favorite memory as a Fellow?

My favorite memory and what I miss the most since coming to the UK is the Rutgers family. Our happy hours were always a great time to network and share experiences and it was always great to see mentors and preceptors attend these too. Sharing the fellowship experience and having that network around you is, in my opinion, the most valuable part of the program. There was always someone to go to, for celebrating a good day and for support.
In the Spring of 2016, the Newsletter Committee attempted to gain a better understanding of who “we” are. With an ever growing program, RPIF is becoming as diverse as it is expansive. We sent out a brief survey to all Fellows conducted through GoogleForms. Data was generated from 57 Fellows who completed the survey. Take a look at some of the results below!

Did you relocate to a different state for your fellowship?

- Yes (n=34) 40.4%
- No (n=23) 59.6%

Have you had the opportunity to travel with other RPIF Fellows?

- Yes (n=50) 12.3%
- No (n=7) 87.7%

Where are you currently located?

- New Jersey
- Greater Phila. Area
- Bay Area California
- Greater NYC Area
- Maryland/DC
- Other

For what reasons have you traveled with other RPIF Fellows? (Select all that apply)

- Network Events
- Vacation/Leisure
- UOC/OOC
- Conference

⇒ Most Fellows relocate to different states to begin their fellowship, however 96% of total respondents report hanging out with one another on weekends
⇒ A majority of Fellows have the opportunity to travel with each other for various reasons
⇒ An impressive 70% of Fellows have been involved with ≥1 scholarly activity during their fellowship
⇒ These survey results prove that the definition of “fellowship” certainly holds true for RPIF!!

fel·low·ship (noun) 1. friendly association, especially with people who share one’s interests.

“they valued fun and good fellowship as the cement of the community”
This has been an incredible year for Scholarly Activities (SA), with the RPIF Fellows setting new records for research posters, publications, and organized symposia in 2015-2016. Table 1 and Figure 1 (below) highlight the remarkable achievements of our Fellows by providing a breakdown and comparison of the different scholarly activities completed through the course of this year.

Not only have RPIF Fellows made significant strides in their scholarly work in 2015-2016, but these projects continue to prove truly valuable to the industry and healthcare community. Table 2 showcases the awards that Fellow research posters have received this year and different national and international professional congresses.

Table 1. Scholarly Activities by the Numbers

<table>
<thead>
<tr>
<th>Table 1. Scholarly Activities by the Numbers</th>
<th>Figure 1. Comparison of SA Project Types</th>
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<tbody>
<tr>
<td>Fellows involved in at least 1 scholarly activity</td>
<td>n=9 Posts</td>
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<tr>
<td>Posters* presented at various local, regional, national, and international conferences</td>
<td>n=7 Publications</td>
</tr>
<tr>
<td>Publications* in peer-reviewed journals, magazines, and other media</td>
<td>n=3 Symposia</td>
</tr>
<tr>
<td>Oral presentations at conferences and symposia</td>
<td></td>
</tr>
<tr>
<td>Professional symposia developed/organized by Fellows</td>
<td></td>
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<tr>
<td>Professional societies and journals began long-term collaborations with RPIF</td>
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*Includes posters accepted for presentation at an upcoming professional congress.
†Includes manuscripts accepted for publication in peer-reviewed journals

Table 2. Bringing Home the Prize

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<tr>
<th>Table 2. Bringing Home the Prize</th>
<th>Fellow Poster Awards</th>
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<tbody>
<tr>
<td>Authors</td>
<td>Recognition/Conference</td>
</tr>
<tr>
<td>Title</td>
<td>Authors</td>
</tr>
<tr>
<td>Breast cancer treatment guidelines: medical information preferences of European physicians</td>
<td>Sheena Gurai, Evelyn Hermes-DeSantis, Michael Toscani, Dannis Chang</td>
</tr>
<tr>
<td>Identifying and Assessing Best Practices for Standard Response Documents in the Pharmaceutical Industry</td>
<td>Tony Luu, Alice Kim, Mark Rametta, Juan Nadal, Tara Pummer</td>
</tr>
</tbody>
</table>

Our Fellows have been fortunate to have had several opportunities to showcase their many scholarly accomplishments at a few recent events. At this year’s last Professional Development Day (PDD) on April 21st at the Busch Campus Center, the SALs hosted the 1st Annual Spring Scholarly Activities Showcase, in which many of the collaborative Fellow projects with Rutgers faculty, residents, and students were displayed during a poster session. The RPIF Program also had a strong presence at the annual Ernest Mario School of Pharmacy Research Day, held on April 26th at the Robert Wood Johnson Medical School. There, several Fellows showcased their research projects by presenting to other faculty, residents, and students of Rutgers University during the poster session.
UPCOMING CONFERENCES
May 2016—September 2016

International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
21st Annual International Meeting
May 21-25, 2016 in Washington, DC

Drug Information Association 52nd Annual Meeting
June 26-30, 2016 in Philadelphia, PA

American Association of Colleges of Pharmacy Annual Meeting
July 23-27, 2016 in Anaheim, CA

Association for Value-Based Cancer Care (AVBCC) Annual Meeting
September 27-29, 2016 in Washington, DC
Abstract Submissions (Deadline: June 16, 2016)

In the spring semester of 2016 I had the opportunity to teach Pharmacy Communications II to P3 students at the Ernest School of Pharmacy at Rutgers University. I had some reservations at first, and I was not sure how the students would react to having Fellows who recently graduated teach the course. The time commitment was one of my biggest worries with class every Wednesday afternoon and PDD every other Thursday, but juggling work and class did not turn out to be too difficult. Fenan Solomon co-taught the class with me, and it was smooth sailing from the very first day.

We tried to establish a low stress environment that would allow our students to learn as much as possible during each lecture. Some of the lecture topics included how to effectively counsel patients taking anticoagulants, asthma medications, and over the counter products. The students responded to our style of teaching better than we could have hoped, which really set the tone for the entire semester. There was never a dull moment even with the grading of presentations, counseling sessions, and the occasional take home assignment. Dr. Toscani would even check in from time to time and tell some of his renowned jokes. In the end, one of the most rewarding aspects of teaching this course was seeing the students learn and improve each week throughout the semester. Whether you’ve considered teaching at some point or not, I encourage all Fellows to try to get teaching experience while they have the opportunity to do so because it’s certainly worth the investment!
<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Position Details</th>
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</thead>
<tbody>
<tr>
<td>Claire Dybala ’00</td>
<td>Claire recently took on a new position at Takeda Pharmaceuticals as National Director, US Health Outcome Liaisons. Previously, she served as a Director of Medical Strategy at Takeda. Claire began her industry career through the Rutgers Fellowship program and completed her post-doctoral fellowship at Ortho Biotech in their Market Research department.</td>
</tr>
<tr>
<td>Sergio Gatoulis ’12</td>
<td>Sergio was most recently a Senior Manager of Global Medical Affairs and Clinical Development at Bayer Consumer Health, where he completed his 2-year post-doctoral fellowship in 2012. In December he accepted a role as Director of Global Clinical Research for Pfizer Consumer Healthcare, based in Madison, NJ. He also recently became the Director of the Pfizer/Rutgers fellowship programs.</td>
</tr>
<tr>
<td>Sanchali Kasbekar ’14</td>
<td>Sanchali completed her 2-year postdoctoral fellowship in Global Regulatory Strategy at Bristol-Myers Squibb. Subsequently she joined AstraZeneca as a Regulatory Affairs Manager focusing primarily on global submission strategy for 5 oncology products across multiple stages of development including initial FIH study, phase 3 protocol development, and BLA/MAA filing planning. Recently, in March 2016, Sanchali was promoted to the role of Associate Director, Regulatory Affairs Oncology, AstraZeneca.</td>
</tr>
<tr>
<td>Thomas Lehman ’14</td>
<td>Tom completed his 2-year MI/MSL fellowship with Bristol-Myers Squibb in 2014, transitioning to a new role on his matrix team as a Manager in Immunoscience Medical Affairs. He has since been responsible for core medical activities including data dissemination and lifecycle management strategies; and recently developed an unbranded multi-channel institutional advertising campaign to highlight the future of Immunology research at BMS, officially kicked off with a stand-alone medical booth at the American College of Rheumatology annual meeting.</td>
</tr>
<tr>
<td>Tonia Nesheiwat ’10</td>
<td>Tonia completed her fellowship at Schering-Plough in Oncology Global Clinical Development and later accepted a clinical position at Novartis Oncology. She joined Celgene Corporation in 2013 to expand her therapeutic knowledge into the hematology franchise working as a clinical scientist in myeloid malignancies. In August 2015, Tonia was promoted to Director of the Immuno-Oncology hematology program within Medical Affairs and is excited for the opportunity to work on multiple Immuno-Oncology compounds across all hematology indications within the Celgene portfolio.</td>
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ATTENTION: RPIF ALUMNI & FELLOW DIRECTORY
By: Matthew Schmidt, Pharm.D.
Alumni Relations Co-Chair

The RPIF program has long been known for fostering close bonds and lasting relationships among Fellows. With over 800 alumni and counting, it can be difficult to stay in touch and track alumni contact information. Have you ever wondered what your co-Fellows are up to now? Hoping to reconnect with past colleagues? Interested in supporting the professional development of current Fellows?

The RPIF Alumni Relations Committee, in collaboration with the Website Committee, is excited to announce the rollout of RPIF’s first ever Alumni & Fellow Directory this summer! The purpose of the Directory is to exist as a dynamic portal through which employer and contact information can be shared with members across the RPIF Community. Additionally, the portal will enhance fellowship engagement and allow RPIF to maintain a more robust and current database of all current alumni and Fellows. We welcome you to create your own personal profile and start connecting with the RPIF Community! It is highly encouraged to use the Directory as a network for both alumni and Fellows to help discover new career opportunities. Let’s stay in touch and continue to professionally and socially support all members of the RPIF Community.

I would like to especially thank our website developer, Eric Pasarin, and my Co-Chair, Kelsy Snyder, as well as past Alumni Relations and Website Committee Co-Chairs, for laying the ground work and shaping the way to make the Alumni & Fellow Directory possible! The Alumni & Fellow Directory can be accessed from the RPIF PharmaFellows website at http://pharmafellows.rutgers.edu/. Alumni and Fellows will receive an email this summer with specific instructions for setting up a profile. If you have any questions or are having issues accessing the Directory, please email Matthew Schmidt at schmidt.matthew@gene.com.

UNIVERSITY OUTREACH COMMITTEE
By: Alexander Oladele, Pharm.D. & Chris Isibor, Pharm.D.

The University Outreach Committee would like to take the time to thank each committee that helped to ensure a successful year. Most importantly, we thank each Fellow that participated in a University Outreach Visit to help educate pharmacy students on opportunities within the pharmaceutical industry. From September 2015 to April 2016, Rutgers Fellows had representation at 69 pharmacy schools and were able to interact with approximately 2,100 students by way of live presentations and discussions. Records were also set this year as over 750 students RSVP’d for the 2015 webinar, a 25% increase from the last year. In total, the Webinar Co-Leads, Irene Okeke and Siwen (Cassie) Ding, were able to secure approximately 1,200 RSVP’s for the entire 2015-2016 year.

The UOC was also supported by the Outreach Logistics & Public Relations Liaison, a position that was added for the first time by RPIF. Not only did this position help to improve collaboration between UOC and OOC committees, it also helped to develop budget tracking and other useful materials that helped increase efficiencies of the overall vision.

A huge THANK YOU to Irene, Cassie, and Shannon for their efforts this year!
INDUSTRY EXPERIENCE DURING PHARMACY SCHOOL
By: Edmund Arthur, Pharm.D.

I had the rare opportunity of participating in an internship program at Amponsah-Effah Pharmaceuticals Ltd in Ghana, West Africa during the summer between my first and second professional years of pharmacy school. This was a rather unique experience because the company solely manufactured generic products ranging from cholesterol lowering medication to liquid cough suppressants for the local markets in Ghana and parts of West Africa.

This internship demanded that I take part in many aspects of the manufacturing process, such as analysis of batch samples to ensure batch to batch consistency under Good Manufacturing Practices (GMP). In order to accomplish this, we used highly sensitive instruments such as a Mass Spectrometer and a High Performance Liquid Chromatography (HPLC) device, all of which were very new to me. At the end of my period at the site, under supervision of a technical pharmacist, I led the production of a batch of atorvastatin from the active pharmaceutical ingredient (API), through tablet molding to finally, packaging and shipping. A batch of medications that would be sold in pharmacies all over the country.

The hands on experience helped me better understand the drug manufacturing process that goes on behind the scenes and afforded me the realization of the incredible amount of work that it entails. The work, meaningful as it was, was only a small part of what made my experience special. Everyone I met, from the factory staff to the quality control pharmacists ensured that I was socialized into the norms of shared and expected social behavior and aspirations of the value of pharmacists to the society. These acquired skills would later prove essential the following year when I took a co-op internship position at Bristol-Myers Squibb in their Regional Clinical Operations Department.

There are many reasons to consider interning in the pharmaceutical industry during pharmacy school. As a pharmacy student, one can get his or her foot in the door and gain the necessary exposure to determine what field to pursue, but perhaps none is more worthwhile than being a part of something bigger than yourself and knowing that ultimately your contribution will potentially impact thousands of individuals.

DELELVING THE DELIVERABLE BUT MISSING THE MARK
By: Daniel Boulos, Pharm.D.

Success may be defined as achieving a desired outcome previously agreed upon by one or more individuals. In most cases, the tangible deliverable is used as a measure of success; however, what many neglect to include in measuring success is the intangible outcome – the resulting relationships and how team members feel after the deliverable is achieved. The best leaders are the ones keen on both of these aspects rather than the solely the tangible deliverable simply because they understand and value individuals’ development throughout a project.

While the tangible deliverable is certainly the most immediate form of success, it does not paint the whole picture. Regardless of the outcome of the group, members will likely not remember anything more than the appreciation they felt, or lack thereof. It is imperative that one prioritizes how they measure success and how the approach to achieving the deliverable impacts the members. This is just as important as the immediate deliverable because relationship recognition leads to employee investment and passion, ultimately paving the road for future work. The reality is that conscious relationship building within a team project is what will lead to the long-term success of a team and the ability to continuously achieve desired outcomes.
The Organization Outreach Committee (OOC) has had a tremendous year in regard to fellowship outreach. RPIF has been able to participate in **32** national, regional, and local conventions (22 in fall, 10 in spring/summer). This has been the busiest and most successful year yet with **record setting** student attendance (>750 students reached!) and number of outreach visits (including 5 entirely new organizations!). We have been able to implement a new budget tracking system that has enabled us to budget more effectively for visits and provides a per student cost for every outreach attempt. All in all, OOC has been able to send more Fellows to more visits all without substantial increases in costs due to new collaborations and effective budget management. Special thanks to **Mike Stamatis** who has completed his fellowship and was key to ensure the continued success of the OOC, and of course, a great mentor! Thank you Mike and good luck! Here is an overview of the many great meetings we were able to participate in this year:

<table>
<thead>
<tr>
<th>Organization Outreach Committee Meetings</th>
<th>Year and Location</th>
<th>Year and Location</th>
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<tbody>
<tr>
<td><strong>TSHP 2016</strong> Frisco, TX</td>
<td><strong>SNPhA Regions III, IV, and V 2016 Conference</strong> Cleveland, OH</td>
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<tr>
<td>Georgia Society of Health System Pharmacists Summer Meeting Jacksonville, FL</td>
<td>2016 FSHP Annual Meeting Orlando, FL</td>
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<td>APhA Region 3 Nashville, TN</td>
<td>APhA Region 4 Dearborn, MI</td>
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<td>APhA Region 8 Las Vegas, NV</td>
<td>APhA Region 5 Minneapolis, MN</td>
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<tr>
<td>New England Pharmacists Convention Foxboro, MA</td>
<td>American College of Clinical Pharmacy (ACCP) San Francisco, CA</td>
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<tr>
<td>OSHP Residency Showcase Columbus, OH</td>
<td>Academy of Managed Care Pharmacy (AMCP) Nexus Educational Conference Orlando, FL</td>
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<td></td>
<td>Minnesota SHP Midyear Clinical Meeting Brooklyn Center, MN</td>
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<td></td>
<td>SCSHP Fall Conference Columbia, SC</td>
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<td></td>
<td>plus more to come!</td>
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**Rutgers Fellows** at the American Pharmacists Association (APhA) Annual Meeting in Baltimore, Maryland this past March
THE FACE BEHIND THE MEDICINE
By: Giannina Garcia, Pharmacy Intern

Big Corporate often takes the shape of a well-tailored suit driving away in a luxury car to his mansion. The public views these executives solely as profiteers and more decisively the enemy. The notion behind some major corporations holds that the company is only seeking compensation and disregards consumer needs. Working in the pharmaceutical industry, these stigmas run deep. Patients see rising prices and assume money is going straight into that well-tailored suit pocket. Patients hear platforms of candidates on the campaign trail preaching that industry is pocketing more and more of stakeholders’ money. Presidential candidate Hillary Clinton is proposing to limit brand name patent time and Donald Trump wants to permit open dialogue between Medicare to encourage price cuts. Both proposals may stifle research and development and place increasing regulation on the already highly monitored processes of the industry.

The entire pharmaceutical world is being put on display and admittedly, I was one of these non-believers until I began interning at a biotechnology company. It’s difficult not to be skeptical when full details aren’t publically available. However, after this internship experience, it’s obvious that yes, a profit is being made, but that is not always top priority. One of the most memorable occurrences as an intern was when a patient with multiple sclerosis spoke how the company’s drug enabled her to hike and enjoy adventurous activities with her three children and take charge of her disease. Most pharmaceutical companies are not just in it for the “quick buck,” but actually do take the time necessary to ensure that their patients and employees are given the proper attention and care, as seen through their patients’ stories. What is often ignored is the amount of funding and time spent on developing new medicines and therapies. According to Forbes, the average cost to launch a new drug totals just over four billion dollars and that is only after many costly failed attempts during developmental stages. Big corporate may seem to be all luxury and fine suits, but the true face behind the medicine takes the shape of ordinary people trying to improve the lives of others.

A GLIMPSE INTO GENERICS WITH TEVA’S FIRST FELLOW
By: Sean Caltabiano, Pharm.D.

Working in the generic drug industry has proven to be an incredible learning experience for me, as the first Rutgers Fellow with Teva Pharmaceuticals. One of the most noticeable differences between the generic world when it is compared with an innovator company is the type of submissions that are sent (i.e. **Abbreviated New Drug Application** – ANDA vs New Drug Application – NDA). As part of the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the “Hatch-Waxman Amendments,” a new regulatory pathway was established to allow for the submission of generic drug applications via an ANDA. ANDAs reference a reference listed drug (RLD) which the Food and Drug Administration (FDA) has already approved as being safe and efficacious. Instead of repeating studies a RLD conducted to prove safety and efficacy of their drug product, generic drugs must provide data to demonstrate bioequivalence with the RLD, and further must show they have the same active ingredient(s), route of administration, dosage form, strength, and conditions of use as the RLD. With the elimination of costly trials to establish safety and efficacy, generic drugs are able to be developed more quickly and at a decreased cost, which is ultimately seen on the consumer level.
Even with this abbreviated process for the generic drug industry, it is not merely a simple copy and paste procedure to create a generic product. **Generic drug development begins long before the consumer first sees a new drug on the market.** Often times, even before the FDA has approved a NDA, generic companies are evaluating whether to pursue a generic version of the medication. In addition to thorough evaluation, a significant amount of scientific development goes into producing generic drugs. One aspect of the process includes formulation development which can involve reverse engineering to determine the composition of the drug product. This piece, among others, is carried out to ensure pharmaceutical equivalence and bioequivalence of the generic product as compared to the RLD. Ultimately, utilization of resources helps achieve the goal of improving patient accessibility to high quality, affordable medications.

With the consistent approval of new drugs, it is inevitable that the generic drug industry continues to grow too! Thus far in fiscal year 2016, the Office of Generic Drugs (OGD) has received a total of **527 ANDAs**, averaging about **75 per month**. Teva Pharmaceuticals has contributed to this, and continuously strives to provide patients with affordable medications. Overall, the generic industry has provided more than **$800 billion in savings over the last decade in the U.S. alone**. There is so much more to learn about generic drugs, so I encourage you to research further and ask questions! I am so fortunate to have had the opportunity to be a Fellow with the world’s largest generic drug company, and I look forward to the future experiences I will have as my fellowship continues.

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**3rd Annual Alumni West Coast Networking Event**

By: Matthew Schmidt, Pharm.D., West Coast Liaison

On May 12, 2016, RPIF hosted the 3rd Annual Spring RPIF West Coast Alumni Networking Event in San Francisco, California. After spending the day at Genentech, Dean Barone and Dr. Toscani joined the GenenFellows and west coast alumni for an evening of fun and networking at Sens Restaurant. Beautiful views of the Bay Bridge accompanied the forging of new professional bonds and the rekindling of past connections. On behalf of the west coast Fellows, I am very pleased to say that **over 20 alumni** from **7 partner companies** attended the event.

As we look to the future, we at Roche-Genentech are excited to contribute directly to RPIF’s growth on the west coast. Our fellowship soars ever higher as we will soon welcome 7 new first year Fellows to our South San Francisco campus. There is much eagerness and enthusiasm for the program as we head into the 2016-17 fellowship year.

As we eagerly anticipate our incoming Fellows, we are also excited for our west coast graduating Fellows:

Anna Cheng, Daphne Torre, Michael Stamatis, & Shannon Dervin

We wish them the best of luck and thank them for fostering RPIF’s growth in California.
CONGRATULATIONS TO THE CLASS OF 2016!

We are excited to welcome the 102 incoming Fellows who will be starting their Rutgers Fellowship this July!

RPIF Dates to Know

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Thursday, June 30th</td>
<td>Fellowship Orientation Busch Campus Center</td>
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<tr>
<td>Friday, July 29th</td>
<td>ROPES Team Building Werblin Rec Center</td>
</tr>
<tr>
<td>Saturday, August 27th</td>
<td>Annual Canoe Trip Delaware Water Gap</td>
</tr>
<tr>
<td>Friday, November 18th</td>
<td>Fellowship Information &amp; Networking Day</td>
</tr>
</tbody>
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For more information, please visit the RPIF webpage: [http://pharmafellows.rutgers.edu/](http://pharmafellows.rutgers.edu/) ifellows@pharmacy.rutgers.edu

Phone: 848-445-6498 Fax: 732-445-7553

Sports Page

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>June 23rd</td>
<td>NBA Draft</td>
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<td>Barclays Center, Brooklyn, New York</td>
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<td>June 27th</td>
<td>Wimbledon Championship</td>
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<td>—July 10th</td>
<td>England Tennis Club, London, United Kingdom</td>
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<td>July 12th</td>
<td>MLB All-Star Game</td>
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<td>Petco Park, San Diego, California</td>
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<td>July 28th</td>
<td>PGA Championship</td>
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<td>—July 31st</td>
<td>Baltusrol Golf Club, Springfield, New Jersey</td>
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TAP THE APP

Click the icons for more!

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CONTACT THE NEWSLETTER COMMITTEE

Please contact us if you are interested in writing for the next edition of the Fellowship Chronicles.

Special thanks to all of our contributors!

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