Introduction

Drug development is a rigorous process involving many years of dedicated work from countless individuals. IPhO’s VIP Case Competition aims to help student pharmacists explore and understand the core elements involved in drug development, ultimately producing a cohesive plan to bring a theoretical new molecular entity from ‘bench to bedside.’ IPhO Student Chapters from all over the country participated in this unique challenge, applying their educational experience, conducting research, and leveraging their networks to craft a plan for their new drug. Participants were asked to cover drug development from many perspectives, including clinical sciences, regulatory affairs, commercial/marketing, and medical affairs.

In addition, an overarching goal in this competition is for participants to demonstrate the Value of Industry Pharmacists by highlighting the many key roles and contributions of industry pharmacists within the drug development process.

As a resource, each chapter was paired with a current industry fellow as a ‘chapter partner’ to provide advice and guidance on ongoing project activities.

Objectives

The objectives of the competition are as follows:

- To demonstrate the value of industry pharmacists
- To create a cohesive drug development plan, engaging several of the key functions where pharmacists most frequently contribute
- To provide diverse exposure to student pharmacists and allow them to explore new areas, think critically, and expand their network
- Provide students with the opportunity to network and liaise with a current industry fellow

2016-17 Competition Details

The 2017-18 VIP Case Competition challenged participating IPhO Student Chapters to develop a drug under the following prompt:

“Your pharmaceutical company has recently discovered a new molecular entity (NME), medizolid, with the potential to treat infectious diseases. After conducting pre-clinical studies, there are no major safety concerns and the molecule shows promising antimicrobial activity. In particular, you notice your molecule demonstrates excellent coverage of resistant gram positive pathogens with activity similar to that of Linezolid (MRSA and VRE). The clinical pharmacology, toxicology, pharmacokinetic, and early research teams have received the go-ahead from the company’s internal decision-making bodies to package the preclinical data, develop a first-in-human clinical study protocol, and file an IND with the FDA.

Your company now wants to plan ahead and determine all of the appropriate activities and steps that are needed to gain regulatory approval and bring this NME to patients. What needs to be accomplished to ensure this potential innovative therapy makes it to market and successfully reaches the patients who can benefit from it?”

Along with this case description, several guiding objectives and questions of importance relating to aspects of clinical development, regulatory affairs, medical affairs, and marketing/commercial were provided to help chapters better understand what key information should be provided as part of their final submission.

Results and Finalists

24 IPhO student chapters competed in this year’s competition. Those who finished the challenge submitted an audio-recorded PowerPoint presentation to demonstrate their work. These presentations we evaluated by a core committee of IPhO fellows and leaders based on content, creativity, and presentation.

Five finalists emerged from the talented pool of student chapters who participated. The finalists represented Keck Graduate Institute, University of Connecticut, Purdue University, Rosalind Franklin University, and University of the Pacific.

In recognition of their impressive work, the top placing teams were awarded monetary prizes. The first place submission was showcased at IPhO National in San Francisco in front of the national student audience.

The 2017 VIP Case Competition finalists were:

**First Place**: Keck Graduate Institute (KGI)
**Second Place**: University of Connecticut
**Third Place (tie)**: Rosalind Franklin and Purdue University
**Fifth Place**: University of the Pacific

Conclusion

The inaugural VIP Case Competition provided 24 IPhO Student Chapters with the opportunity to not only learn about the drug development process, but actually perform an industry pharmacist’s role and develop a new molecular entity from Phase 1 through FDA approval. IPhO chapters who participated in the competition stated that this unique competition provided students insight into the real life of an industry pharmacist that is above and beyond what they are exposed to at their university. The competition created a platform for IPhO students to plan and collaborate on a long term project that concluded with a video recorded presentation. Students were also furnished with an invaluable opportunity to network, connect, and discuss their submission with industry fellows and experts. The inaugural VIP Case Competition was a great success and IPhO looks forward to providing this annual competition to IPhO chapters across the country for many years to come.