

# CHICAGOLAND PHARMACEUTICAL DISCUSSION GROUP

Affiliated with the American Association of Pharmaceutical Scientists

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## **PROGRAM: ORAL DRUG ABSORPTION BEYOND THE SOLUBILITY LIMIT**

**DATE: THURSDAY, JUNE 13, 2024**

**SPEAKER: DR. NA LI, UNIVERSITY OF CONNECTICUT**

Many drugs today suffer from extremely low water solubility, leading to in a negligible amount of solubilized free drug available for absorption. However, drug absorption can occur beyond its solubility limit, from drug particles as well as complexes such as micelles. These submicron- and micron-sized colloidal species function as vehicles that traverse the diffusional barrier adjacent to the intestinal wall, delivering a high payload of drug to the mucosal surface. This process was termed as the particle drifting effect. While the particle drifting effect was widely conjectured in vitro and in vivo, and is believed to be responsible for the positive food effect observed with poorly soluble drugs, accurately predicting bioavailability due to this effect remains elusive. In this presentation, we will discuss the mechanisms and extent of drug absorption beyond its solubility limit. Our results will contribute to improved formulation development and bioavailability prediction for enabling formulations, such as amorphous solid dispersions.

Dr. Na Li is an assistant professor in the Department of Pharmaceutical Sciences at the University of Connecticut (UConn). She received her bachelor's degree in Food Science and Engineering from South China University of Technology, and Ph.D. degree in Food Chemistry at Purdue University, followed by postdoctoral training in Industrial and Physical Pharmacy at Purdue. Prior to joining UConn, she also worked in the pharmaceutical industry on solid-state chemistry and crystal form selection of small molecule drug candidates. Her lab group, started in 2019 at UConn, focuses on bridging biopharmaceutics, pharmacokinetics with formulation sciences to guide the development of enabling formulations.

**TIME: 5:30 PM – SOCIAL HOUR**

**6:00 PM – DINNER**

**7:00 PM – MEETING**

**PLACE: JAMESON'S CHARHOUSE**

**151 E TOWNLINE RD, VERNON HILLS**

**COST: \$55.00**

**REGISTER AT [cpdgmeeting@gmail.com](mailto:cpdgmeeting@gmail.com)**

**ZELLE PAYMENT AT [cpdg2022@gmail.com](mailto:cpdg2022@gmail.com)**

**THE DINNER MEAL CHOICES ARE THE FOLLOWING:**

1. MACADAMIA CRUSTED TILAPIA – WITH LEMON BUTTER SAUCE
2. LEMON PEPPER CHICKEN – SAUTÉED IN WHITE WINE, GARLIC SAUCE & SERVED WITH RICE AND VEGETABLES
3. VEGETABLE KABOBS (GREEN PEPPER, ONION, MUSHROOM AND TOMATO) – SERVED WITH RICE (VEGETARIAN)

**WHEN REGISTERING, PLEASE INDICATE YOUR SELECTED DINNER MEAL:**

Meal Choice: Fish, Chicken, or Vegetarian	First Name	Sur (Last) Name	Company

**E-MAIL WILL BE SENT  
CPDG ACCEPTS CASH, CHECKS (PERSONAL OR COMPANY) OR THROUGH ZELLE  
FIRST FIVE STUDENTS ARE FREE  
PLEASE MAKE RESERVATIONS EARLY NO-SHOWS WILL BE BILLED ACCORDINGLY  
MORE INFORMATION CAN BE FOUND ON THE CPDG WEBPAGE:**

<https://aaps-cpdg.org/>

**Firm Registration Deadline of 12:00 p.m., Tuesday, June 11, 2024**

**DIRECTIONS TO THE JUNE 13, CPDG MEETING AT JAMESON'S CHARHOUSE  
151 E TOWNLINE RD, VERNON HILLS, IL**

- EXIT I-94 AT TOWN LINE RD. (60)
- HEAD WEST ON TOWN LINE ROAD (60) PAST MILWAUKEE AVE (21)
- RESTURANT WILL BE ON THE LEFT-HAND SIDE OF THE ROAD

