MEMORANDUM

To: Pharm.D. Students in their P-1 and P-2 year,
    Faculty, VCU School of Pharmacy

CC: J. DiPiro, Pharm.D.,
    Dean, School of Pharmacy
    A. H. Lichtman, Ph.D.
    Associate Dean, School of Pharmacy
    K.C. Ogbonna, Pharm.D.,
    Associate Dean, School of Pharmacy
    Y. Zhang, Ph.D.,
    Director, Graduate Program, Dept. of Medicinal Chemistry
    M. Sakagami, Ph.D.,
    Director, Graduate Program, Dept. of Pharmaceutics
    MP. McRae, Pharm.D., Ph.D.,
    N. V. Carroll, Ph.D.
    Directors, Graduate Program, Dept. of Pharmacotherapy and Outcomes
    Sciences

Date: February 1, 2017

From: Jürgen Venitz, MD, Ph.D.
    Chair, Pharm.D., Ph.D. Subcommittee

RE: Availability of Pharm.D. Summer Research Fellowships (SRF) for P-1 and P-2 Students

1. Dean DiPiro has graciously made available School of Pharmacy Pharm.D. Summer Research Fellowships for the summer of 2017. The intent of these research fellowships is to allow interested Pharm.D. students to embark on a two-month research project with faculty sponsors and to gain insight and interest in graduate-level research by pharmaceutical scientists. Successful completion of such a fellowship is a prerequisite for admission into the combined Pharm.D., Ph.D. program; however, acceptance and completion of a fellowship is neither a commitment by the student to nor a guarantee by the School of Pharmacy of admission into the Pharm.D., Ph.D. program. Application into the Pharm.D., Ph.D. program is a separate process.
   The Pharm.D., Ph.D. Subcommittee (SC) has been charged with the selection of the fellowship candidates and administration of the fellowships.
   A faculty member may sponsor only one student applicant per year. In view of the limited number of fellowships available, previous recipients of a Summer Research Fellowship are eligible for a second award only if strong justification can be offered.

2. First- and second-year Pharm.D. students interested in the fellowship are encouraged to identify and contact individual faculty about their areas of interest.
The following faculty (all members of the Pharm.D., Ph.D. Subcommittee) are willing to assist students in the process:

Hamid I. Akbararli, Ph.D., Dept. of Pharmacology and Toxicology (School of Medicine), hiakbarali@vcu.edu;
Norman V., Carroll, Ph.D., Dept. of Pharmacotherapy and Outcomes Sciences, nvcarroll@vcu.edu;
Annie Cheang, Pharm.D., M.S., Dept. of Pharmacotherapy and Outcomes Sciences, kicheang@vcu.edu;
Aaron E. May, Ph.D., Dept. of Medicinal Chemistry, aemay@vcu.edu;
Patricia W. Slattum, Pharm.D., Ph.D., Dept. of Pharmacotherapy and Outcomes Sciences, pwslattu@vcu.edu;
Jürgen Venitz, MD. Ph.D. (Chair), Dept. of Pharmaceutics, jvenitz@vcu.edu;
Shijun Zhang, Ph.D., Dept. of Medicinal Chemistry, szhang2@vcu.edu.

Additional information about ongoing research in the various individual research labs can be found on the School of Pharmacy website.

3. The fellowship recipients will receive a stipend in the total amount of $2,500 for a two-month summer period starting no sooner than May 8, 2017; the exact beginning and ending dates of the project will be agreed upon in advance by the student and their faculty sponsor. The faculty advisor will discuss and agree upon the logistics and expectations of the fellowship in advance. The faculty sponsor will be responsible for all resources related to the research project.

Upon completion of their projects, the fellowship students are required to submit a final research report by September 11, 2017 to the chair, Pharm.D., Ph.D. Subcommittee. This final research report will be two to five pages in length (excluding bibliography, figures and tables) and contain Background, Objectives, Methodology and Results and Discussion sections; it will have to be reviewed and signed by the graduate faculty sponsor prior to submission. It is also expected that the student will present the results of his/her research as a poster at the School of Pharmacy Research and Career Day in the fall of 2017. A hardcopy of that poster presentation may be submitted in lieu of the formal research report (see above).

4. Interested students will have to apply for these fellowships by March 29, 2017; the application form is attached. Completed application packages will have to be submitted as PDF file via e-mail to Dr. Venitz, Chair, Pharm.D., Ph.D. Subcommittee.

The application package has to include the following:
- A completed Application Form (see attached);
- A Letter of Support from the prospective faculty sponsor (outlining the students ability to successfully complete the project and expressing the sponsor’s willingness to provide guidance for the student and all necessary resources for the research);
- A one-page Research Proposal (including Background, Objective and Methodology of the proposed research, indicating the feasibility for a 2-month project);
- A Statement of Research Interest by the student (outlining their previous
research experience, if any, and their expectations of the summer fellowship project, interest in future research endeavors and discussion of their future professional goals)

Separate from the application package submitted by the student applicant, the following information is required to be submitted by the faculty interviewers by the submission deadline:

- **Completed interview forms by two (2) members of the Pharm.D., Ph.D. Subcommittee.** It is the student's responsibility with the express approval of her/his prospective faculty sponsor to schedule these two interviews in time for a complete application submission.

**Selection criteria for a successful application include strength of the candidate (as documented by GPA, prior research experience, graduate faculty sponsor recommendation, personal statement by the student and faculty interviews) as well as strength of the research proposal (feasibility and scientific validity).**

5. The Pharm.D., Ph.D. subcommittee will start reviewing applications after March 29, 2017. Final selections will be made by April 24, 2017, and the student applicants will be informed shortly thereafter from the Dean’s Office. The fellowships will start no sooner than May 8, 2017 (end of spring semester) and end no later than August 11, 2017 (start of fall semester). **Final research reports are due by September 11, 2017.**

6. So far, the following SOP faculty members have indicated that they are willing to interview interested candidates for specific summer projects in 2017. Please contact the individual faculty directly for further information about these projects!

**Department of Medicinal Chemistry:**

Keith C. Ellis, Ph.D.: *Discovery and Development of Kinase Inhibitors* (kcellis@vcu.edu).

**Department of Pharmaceutics:**

Adam M. Hawkridge, Ph.D.: *Complex Carbohydrate Analysis by High-performance Mass Spectrometry* (amhawkridge@vcu.edu);
Quamrun M. Masuda, Ph.D.: *Compounding Transdermal Gel as Alternate Option for Dysphagic Patients* (qnmasuda@vcu.edu);
Masahiro Sakagami, Ph.D.: *Lung Repair in Emphysema: Immunohistochemical Assessments for Caffeic Acid Derivatives* (msakagam@vcu.edu).

**Dept. of Pharmacotherapy and Outcomes Science:**

Dayanjan S Wijesinghe, Ph.D.: *3-D Printing of Medications to Obtain Continuous Variable Dosing and Combination Drugs* (wijesingheds@vcu.edu).

Other School of Pharmacy/Dept. of Pharmacology and Toxicology faculty may also be contacted as well to discuss their interest in advising summer
students and their availability for summer research projects.

7. The following students (and their summer research advisors) were recipients of past Summer Fellowship awards and can be contacted to discuss their experiences; students currently enrolled in the combined degree program are marked by asterisk (*: current student; **: graduated with Pharm.D./M.S. or Pharm.D./Ph.D.):


2001: Satjit S. Brar** (J. Venitz, MD, Ph.D.), Daniel Phipps (P.W. Slattum, Pharm.D., Ph.D.), Sarah Poston (M.A. Sarkar, Ph.D.).


2003: David S. Lee** (J. Venitz, MD, Ph.D.), Melissa Moore** (R. Polk, Pharm.D.), Jenny Chen (S. Wu-Pong, Ph.D., H. Fillmore, Ph.D.), Seina Parks** (D. Brophy, Pharm.D., M.S.).


2008: Uyen Do (S. Zhang, Ph.D.), Della Varghese** (Cy. Kirkwood, Pharm.D.), Richa Dua (D. Brophy, Pharm.D., M.S.), Shruti Brahmbhatt (P. Slattum,
2009: Jason Quarles (R. Polk, Pharm.D.), Alex Lenhart (S. Zhang, Ph.D.), Che Chang (J. Venitz, MD, Ph.D.), Andrew Johnson (K. Ellis, Ph.D.), Melissa Reis (R. Glennon, Ph.D.), Michael Snow (J. Peart, Ph.D.).

2010: Sara Bekri (Y. Zhang, Ph.D.), Merid Belayneh (J. Venitz, MD, Ph.D.), William Cang (S. Zhang, Ph.D.), Gina Lee (A. Pakyz, Pharm.D.), Drewry Nickerson (M.J. Kennedy, Pharm.D.), Justin Siegfried (L.R. Moczygemba, Pharm.D., Ph.D.), Meghan Thompson (U. Desai, Ph.D.), Tien Truong (M. Sakagami, Ph.D.), Celeste Vinluan (K. Cheang, Pharm.D., M.S.), Jamie Waller (T. Stevens, Pharm.D.).

2011: Tamoor Asif (P. Gerk, Pharm.D., Ph.D.), Elisaveta Budko (D. Sweet, Ph.D.), Biruk Mikru (U. Desai, Ph.D.), Jaykumar Patel (J. Hackett, Ph.D.), Maimuna Bruce (J. Venitz, MD, Ph.D.), Kelley Miller (A. Cheang, Pharm.D., M.S.), Ngochan Vo (M. Sakagami, Ph.D.), Jalpa Patel (P.W. Slattum, Pharm.D., Ph.D.).

2012: Julie Patterson (D. Holdford, Pharm.D.), Raymond Lai (D. Sweet, Ph.D.), Whitney Zentgraf (P.W. Slattum, Pharm.D., Ph.D.), Sarah Barden (D. Holdford, Ph.D.), George Wohlford (J. Venitz, MD, Ph.D.), Michael Kelly (L. Moczygemba, Pharm.D., Ph.D.), Hibah Rehman (M. Safo, Ph.D.).

2013: Kathryn Schwienteck (M. Banks, Pharm.D., Ph.D.), Ankit Zalavadia (M. Halquist, Pharm.D.), Zaneera Hassan (P.M. Gerk, Pharm.D., Ph.D.), Kimberly Hayashi (M. Sakagami, Ph.D.).

2014: Skylar White (S. Zhang, Ph.D.), Sean Hynie (Y. Zhang, Ph.D.), Crystal Leibrand (MP. McRae, Pharm.D., Ph.D.), Omar Hassan (P.W. Slattum, Pharm.D., Ph.D.), Michael Lee (U. Desai, Ph.D.), Dan Nichols (G. Brophy, Pharm.D.).

2015: Elena Fernandez (N. Carroll, Pharm.D.); Giulia Barlow (A. Pakyz, Pharm.D., M.S., Ph.D.), Jason Mao (D. Sweet, Ph.D.), Gupree Dulai (A. Cheang, Pharm.D., M.S.), Layla Sawan (S. Zhang, Ph.D.), Jessica Reid (K. Ellis, Ph.D.).

2016: Harjot Othee (P.W. Slattum, Pharm.D., Ph.D.), Morgan Mabney (Annie Cheang, Pharm.D., M.S.), Rose Kohinke (A. Pakyz, Pharm.D., Ph.D.), Olivia Caron (S. Zhang, Ph.D.), Casey Boyer (D. Sweet, Ph.D.).

8. If you need any additional information, please contact Dr. Venitz at 828-6249 or e-mail to jvenitz@vcu.edu.
APPLICATION FORM FOR Pharm.D. SUMMER RESEARCH FELLOWSHIP
VCU SCHOOL OF PHARMACY
SUMMER 2017

Name: ___________________________________ VCU-ID: ________________________________

Address: _________________________________________________________
_________________________________________________________

Phone: _______________________________ E-mail:____________________

Are you a Virginia Resident?     y / n

Do you have a prior degree?     y / n
If so, describe: _____________________________________
Major Area:  _____________________________________
Institution:  _____________________________________

Do you have any previous research experience?   y / n
If so, describe: ______________________________________
Advisor/Director:  ______________________________________
Institution:  ______________________________________

What is your current GPA in pharmacy:    ____________
(do not complete, will be obtained from Dean’s Office)

What year in the Pharm.D. program are you currently in?  P1  P2

Who is your Faculty Sponsor?  _____________________________________________

Title of proposed research project: _____________________________________________
_____________________________________________
_____________________________________________

Will you receive any other financial assistance during the period of this fellowship?  If so, give details:

_____________________________________________________

_____________________________________________________

Signature    Date

____________________________________________________________________

The following documents need to be enclosed with your application package:

1. Cover form (this form), completed by student;
2. Letter of support by faculty sponsor (discussing the student’s interest in and ability to successfully complete the project and the sponsor’s willingness to provide necessary time and resources for proposed research);
3. One-page research proposal (including Background, Objective and Methodology) by the student and prospective research advisor;
4. Statement of Research Interest by the student (outlining their previous research experience, if any, and expectation from the proposed research project and future professional goals);
5. Completed Interview Forms by Pharm.D., Ph.D. SC members (submitted separately).

Please return the completed application package to Dr. Venitz by Monday, March 29, 2017!

Pharm.D. Summer Research Fellowship-2017, Application Form, January 30, 2017
VCU SOP Pharm.D./Ph.D. Program Interview Form

Date of Interview: _____________

Applicant: _______________________________

Interviewer: ______________________________
(must be Pharm.D./Ph.D. Subcommittee Member)

Please carefully assess and rate the applicant in the following areas. In making your assessment, compare the applicant to other individuals you have known who have similar levels of experience and education.

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Please provide any additional comments: