



### Clinical Pharmacy Residency in Iran

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The first department of clinical pharmacy in Iran was established after the recruitment of American-educated and American-trained Iranian clinical pharmacists at the School of Pharmacy, Tehran University of Medical Sciences (TUMS), in the mid-1990s. The first 4 years of clinical faculty activities were devoted to establishing and teaching therapeutics courses in undergraduate classes. Next, in 1994, the department started admitting the first group of clinical pharmacy residents in a 4-year postgraduate program.<sup>1</sup> Currently, three residency programs are approved by the Iranian Ministry of Health and Medical Education (Table 1).

**Table 1. Residency Programs in Iran**

Academic Centers with Residency Programs	Year of Establishment	No. of Admissions per Year
Tehran University of Medical Sciences	1994	8–10
Shahid Beheshti University of Medical Sciences	2007	7 or 8
Mazandaran University of Medical Sciences	2008	3

Clinical pharmacy residency programs in Iran are university-based rather than site-based, and the residents are trained in different hospitals in order to complete their rotations. The main requirement for entering the clinical pharmacy residency program is to attain a Pharm.D. degree from an Iranian-accredited school of pharmacy and pass a written entrance examination plus an interview session. The entrance examination is focused on therapeutics, pharmacokinetics, pharmacology, physiology, and toxicology. All residents take 12 months of didactic courses and 18 months of clinical rotations. At the end of the third year, residents take the board examination, which consists of a 200-question multiple-choice test, including therapeutics and clinical pharmacokinetics case-based questions. By the end of the fourth year, residents need to close and defend their thesis projects, which are mainly fo-

cused on interventional studies, categorized as either clinical trials or pharmacotherapy specialty services. Table 2 shows the content of the TUMS residency program.

**Table 2. Curriculum of the TUMS Residency Program**

Year(s)	Instructional Module
First	Didactic Courses <ul style="list-style-type: none"> <li>▪ Pathophysiology</li> <li>▪ Clinical Pharmacokinetics</li> <li>▪ Advanced Therapeutics</li> </ul>
Second and third	Clinical Rotations <ul style="list-style-type: none"> <li>▪ Intensive Care (2 months)</li> <li>▪ Infectious Diseases (2 months)</li> <li>▪ Psychiatry (2 months)</li> <li>▪ Nephrology (2 months)</li> <li>▪ Hematology/Oncology (2 months)</li> <li>▪ Endocrinology (1 month)</li> <li>▪ Cardiology (1 month)</li> <li>▪ Gastroenterology (1 month)</li> <li>▪ Surgery (1 month)</li> <li>▪ Drug Information (1 month)</li> <li>▪ Hospital Pharmacy (1 month)</li> <li>▪ Emergency Medicine (1 month)</li> <li>▪ Pediatrics (1 month)</li> </ul>
End of third	Board Examination (200-question multiple-choice examination plus an interview session conducted by the Iranian Board of Clinical Pharmacy)
Fourth	Thesis Project and Dissertation Defense Meeting

TUMS = Tehran University of Medical Sciences.

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### Clinical Pharmacy Residency in Iran (continued)

There are two primary reasons for this 4-year program:

1. The 6-year Pharm.D. program curriculum at most Iranian pharmacy schools is still pharmaceuticals-based rather than balanced therapeutics-based; and
2. There are not enough hospital and clinical rotations in Pharm.D. programs during the last year of pharmacy school.

Currently, clinical pharmacy faculty members at TUMS and some other schools are proposing revisions to the Pharm.D. curriculum to include more therapeutics courses and hospital pharmacy training in their programs.<sup>2</sup> Altogether, there are about 150 clinical pharmacists (including residents) in Iran, primarily employed by the government and academic centers (based on data provided by the Iranian Society of Clinical Pharmacists). Clinical pharmacists' activities have been focused on clinical areas such as cardiovascular intensive care, infectious diseases, oncology, psychiatry, nephrology, and endocrine diseases. However, with the significant population growth and

increasing use of pharmaceuticals in Iran, pharmacotherapy services must be expanded in both the government and the private sector.<sup>3,4</sup> Therefore, the residency programs need to be revised as site-based with a shorter, more concise duration of training. Moreover, collaboration with international clinical pharmacy organizations would be an academic and professional milestone for Iranian clinical pharmacists.

1. Radfar M, Rastegarpanah M, Gholami K. The evolution of clinical pharmacy in Iran, past to present. *Iran J Public Health* 2009;38:136-7.
2. Salamzadeh J. Clinical pharmacy in Iran: where do we stand? *Iran J Pharm Res* 2004;3:1-2.
3. Dashti-Khavidaki S, Khalili H, Hamishekar H, et al. Clinical pharmacy services in an Iranian teaching hospital: a descriptive study. *Pharm World Sci* 2009;31:696-700.
4. Fahimi F, Sharif-Kashani B, Hossein-Ahmadi Z, et al. The first pharmacist-based warfarin monitoring service in Iran. *J Pharm Health Serv Res* 2011;2:59-62.

### Mr. Luc Besançon Named FIP General Secretary/Chief Executive Officer



The International Pharmaceutical Federation (FIP) Bureau and Executive Committee named Mr. Luc Besançon as general secretary/chief executive officer, effective August 1, 2013.

Mr. Besançon joined the FIP staff in 2008 as project coordinator. In 2009, he became manager of scientific and professional affairs, and in 2012, after the passing of the late Mr. Ton Hoek, he assumed the position of acting general secretary for professional, scientific, and external affairs. Mr. Besançon is a

pharmacist with a specialization in industrial pharmacy; he graduated from the University of Burgundy, France.

Commenting on his new role, Mr. Besançon stated: "I'm excited and proud to be taking on the role of CEO of FIP, the global organization representing pharmacists and pharmaceutical scientists around the world. I am looking forward to the challenges this role will bring and the invaluable interactions with FIP members and our partners to ensure the advancement and recognition of our profession."

We wish Mr. Besançon the best of success in this leadership position.

### Special Offer for International Registrants at the ACCP Annual Meeting

ACCP is pleased to offer international travelers attending the ACCP Annual Meeting in Albuquerque advance ordering on purchases from the ACCP Bookstore. Registrants from the non-continental United States will be able to eliminate shipping and handling fees on their purchases. In the weeks leading up to the meeting, watch your e-mail for special instructions on purchasing books in advance for pickup at the On-site Bookstore in Albuquerque.

Advance international ordering is open only to registrants of the 2013 Annual Meeting who order publications from ACCP's Online Bookstore. Beginning September 1, meeting

registrants can place their orders, and the books will be available for pickup at the On-site Bookstore. Meeting registrants will receive our lowest (member) pricing on all items in the bookstore. Orders are assigned no shipping and handling fees; however, local New Mexico sales tax will be applied. Watch for upcoming instructions on taking advantage of this special offer for international attendees. This special promotion will end on October 1, 2013.

More information on the 2013 ACCP Annual Meeting, which will take place October 13–16, 2013, is available at [www.accp.com/meetings/am13/](http://www.accp.com/meetings/am13/).

## Lecture Series to Advance Clinical Pharmacy Practice in India

The Indian Association of Colleges of Pharmacy (IACP) has launched a lecture series to advance and promote clinical pharmacy practice and the Pharm.D. program.

The first of these lecture series was held June 1–8, 2013, at colleges of pharmacy in Bangalore, Chennai, Coimbatore, Mysore, and Ooty. Dr. Wafa Y. Dahdal, director of international programs and associate director of professional development at the American College of Clinical Pharmacy, met with college leadership and educators at each of the participating colleges and presented on advances in clinical pharmacy practice around the globe, professional competencies, and professional development of the clinical pharmacist.

Prof. B. Suresh, president of the Pharmacy Council of India and convener of the lecture series, commented on IACP's embarkation on this new journey and the first lectures, stating that the "Indian pharmacist is presently rediscovering his role in the health care delivery. The clinical pharmacist with Pharm.D. qualification and an intense experiential training in a clinical setting will emerge as a member of the healthcare team capable of supporting the physician and other healthcare professionals besides the patient as a medicines expert and will be the next generation pharmacist. IACP will continue to strive and support this cause."



## Mark Your Calendar

### 2013 ACCP Annual Meeting

October 13–16, 2013

Albuquerque, New Mexico



### 2014 ACCP Updates in Therapeutics®

April 11–15, 2014

Chicago, Illinois





## Book Highlights



### ***How to Develop a Business Plan for Pharmacy Services***

an **accp** Publication

In the ever-changing health care industry, pharmacists are often presented with opportunities to expand their services or implement new programs. Although the literature provides ample evidence to support the value of clinical pharmacy services in many different

practice settings, a common obstacle is the ability (or inability) to translate the evidence to practice and develop the business case in order to convince administrators to support such services.

Now in its second edition, this book is designed to assist individuals in evaluating and creating pharmacy service proposals. The book includes 16 chapters divided into three parts: Introduction to Business Planning, The Business Planning Process, and Sample Business Plans and Other Sources.

Features of the newly released edition include:

- Discussions on the key elements of the business planning process
- A set of exercises to guide the reader in writing his or her own business plan
- Access to online resources, including:
  - An electronic version of the workbook questions
  - An electronic version of the business plan template to be used for writing a business plan
  - A Microsoft Excel program that allows the user to develop financial statements for proposed businesses
- Two business practice models

*How to Develop a Business Plan for Pharmacy Services* will assist pharmacy clinicians, managers, and leaders in exploring, researching, proposing, and implementing new services and will enhance existing services by providing a systematic approach to the business planning process. The materials presented are applicable to pharmacy services in hospitals, community practice settings, managed care organizations, ambulatory clinics, and elsewhere.

More information on this text is available at [www.accp.com/bookstore/practiceDevelopment.aspx](http://www.accp.com/bookstore/practiceDevelopment.aspx).

## A Message from the Editor

Dear Colleagues:

This issue of *ACCP International Clinical Pharmacist* presents articles that represent efforts to further enhance clinical pharmacy training and promote clinical pharmacists and clinical pharmacy practice.

The article titled "Clinical Pharmacy Residency in Iran" summarizes the evolution and current status of residency training programs in the Islamic Republic of Iran. It describes one nation's experience in developing and expanding residency training programs to produce well-trained, qualified clinical pharmacists who would advance and expand clinical pharmacy services. The article highlights the country-specific challenges and professional stimulus that shaped the current structure and curriculum of the residency programs and opportunities for future advances. Although the article represents only one country's experience, we should note that the importance of well-designed residency training programs in preparing qualified clinical pharmacists who are equipped to further advance and expand patient care services is increasingly being recognized globally.

The article titled "Lecture Series to Advance Clinical Pharmacy Practice in India" briefly reports on an initiative that the Indian Association of Colleges of Pharmacy is undertaking to promote clinical practice and better prepare future clinical pharmacists to assume the new roles and take on the challenges and opportunities afforded in developing high-quality interprofessional patient care pharmacy services.

Pharmacy leaders, administrators, and practitioners in charge of establishing new pharmacy services or looking to advance current pharmacy services will especially find *How to Develop a Business Plan for Pharmacy Services* featured in "Book Highlights" of great value.

I would like to end this message by congratulating Mr. Besançon on his assuming the position of general secretary/chief executive officer of the International Pharmaceutical Federation. We wish him the very best and look forward to continuing to work with him in his new post.

Wafa Y. Dahdal, Pharm.D., BCPS

# BEING A CLINICAL PHARMACIST

## Applying Knowledge and Skills to Team-Based Patient Care

### PRE-MEETING SYMPOSIUM

Offered by the American College of Clinical Pharmacy

The 13th Asian Conference of Clinical Pharmacy

Haiphong, Vietnam

September 12, 2013

9:00 a.m. – 5:00 p.m.

#### PROGRAM GOAL

To demonstrate what clinical pharmacists do and how they do it.

#### OVERALL PROGRAM OBJECTIVE

At the end of this workshop session, participants will be able to explain how the clinical pharmacist applies pharmacotherapy knowledge and skills in real-life settings to effect improvement in patients' medication-related outcomes based on illustrative patient cases in internal medicine, cardiology, nephrology, psychiatry, and infectious diseases.

#### PROGRAM FACULTY

**Wafa Dahdal, Pharm.D., BCPS**  
*Director of International Programs*  
*American College of Clinical Pharmacy*

**Brian Hemstreet, Pharm.D., BCPS, FCCP**  
*Associate Professor*  
*University of Colorado*

**William Kehoe, Pharm.D., BCPS, FCCP**  
*Professor and Chair*  
*University of the Pacific*

**Alan Lau, Pharm.D., FCCP**  
*Professor and Director, International*  
*Clinical Pharmacy Education*  
*University of Illinois at Chicago*

**Michael Maddux, Pharm.D., FCCP**  
*Executive Director*  
*American College of Clinical Pharmacy*

#### PROGRAM

TOPIC	PRESENTER
Welcome and Introduction	Maddux and Lau
An Overview of the Clinical Pharmacist's Practice	Lau
Getting the Work Done on the Hospital Wards and in the Clinic	Maddux
Internal Medicine Cases: Emphasis on Recommending Therapy	Hemstreet
Psychiatry Cases: Emphasis on Patient and Drug Pharmacotherapy Assessment	Kehoe
Cardiology Cases: Emphasis on Monitoring	Dahdal
Internal Medicine Cases: Emphasis on Patient Education	Kehoe
Infectious Diseases Cases: Emphasis on Consultations	Hemstreet
Chronic Kidney Disease Case: Emphasis on Collaboration	Lau
Internal Medicine Case: Putting it All Together	Hemstreet
Summation	Maddux and Lau