

# PHARMACY FORECAST

## IN THIS ISSUE

|   |   |
|---|---|
| Message From the Dean .....             | 1 |
| Plan A in a World Desiring Plan B ..... | 2 |
| CPFI Annual Student Retreat .....       | 3 |
| 2009–10 Prepharmacy Students.....       | 3 |

NEWS AND INFORMATION FROM THE CEDARVILLE UNIVERSITY SCHOOL OF PHARMACY

CEDARVILLE UNIVERSITY

## Message From the Dean



Dynamic partnerships with health care organizations, pharmacies, research entities, and the community characterize effective and progressive colleges and schools of pharmacy. Consequently,

I am pleased to report on the progress of our initiatives in this area. Even though our program is new, we have been invited to develop collaborations on a variety of levels with many excellent groups. We deeply appreciate the confidence many have expressed in us by extending offers to work together. Partnerships that we are moving forward with include:

- Medical centers and health networks in southwest Ohio and the Midwest
- Independent and chain pharmacies throughout the region
- Regional universities offering health professions and research programs
- Health information technology organizations
- Medical device and pharmaceutical research companies
- Health insurance and managed care organizations
- Local professional organizations

As we develop our partnerships, we anticipate working with these groups to afford our students high-quality

experiences in various practice settings. Given the number of organizations and practice sites that have requested our collaboration, we hope to develop and implement unique pharmacy practice experiences that are exceptional in every way. We also anticipate developing research and innovative practice initiatives.

Our leadership team is already involved with several pharmaceutical science and clinical research initiatives. We are in the early stages of implementing an innovative health care delivery model in our region, involving multiple pharmacies, health care organizations, community leaders, and businesses. We are working to expand health information to pharmacists through our technology partnerships. We are also involved with the development of a rural health model of care that would potentially improve patient access and quality of care in southern Ohio.

Through our educational partnerships, we are developing programs to expand opportunities for minority students to participate in pharmacy education and research. Cedarville University's longstanding partnerships with missions agencies afford the school of pharmacy opportunities for faculty and students to engage the world through missions and service.

We continue to prepare our documentation for the Ohio Board of Regents, the Higher Learning Commission of the

North Central Association of Colleges and Schools ([www.ncahlc.org](http://www.ncahlc.org)), and the Accreditation Council for Pharmacy Education ([www.acpe-accredit.org](http://www.acpe-accredit.org)). We anticipate the submission of the first two applications in 2010. We continue to work with the staff from the ACPE, with plans to submit our documentation to them in 2011. Our faculty and prepharmacy student recruitment remains strong. Planning meetings for the new health sciences center have begun.

Our team continues to express how blessed we are to be a part of Cedarville University and experience God's ongoing provision for the school of pharmacy. Please contact me as you discover additional opportunities for us to consider or ways we can help you.

Marc A. Sweeney  
Dean of the School of Pharmacy

*"In all my time as a faculty member, I've never seen anything like the interest we are having in faculty positions from high-quality candidates. Even at my former school, a major public university, we had to recruit hard to find faculty."*



— Dr. Douglas Anderson, Chair of Department of Pharmacy Practice

# Plan A in a World Desiring Plan B

Jeffrey D. Lewis, R.Ph., Pharm.D.

Assistant Dean and Associate Professor of Pharmacy Practice

For Christians engaged in the practice of pharmacy, each day is filled with challenging situations requiring employment of the latest scientific knowledge with truth, wisdom, and compassion. One of the truly exciting aspects of the Cedarville University School of Pharmacy is the mission-driven intention to face the tough questions head-on. One such issue pertains to the professional implications associated with so-called “morning-after pills” such as Plan B® †.

Plan B® is also known as an “emergency contraceptive” (EC). ECs, essentially, are high-dose hormone tablets administered within 72 hours after sexual intimacy in an effort to prevent pregnancy. The active ingredient in Plan B®, levonorgestrel, is a man-made version of the natural hormone progesterone. This medication works by preventing the maturation and release of an egg (also called “ovum”) from the female ovary. This is also the primary way in which traditional oral contraceptives (birth control pills) work. With this action, ECs prevent “conception” as there is no egg available for a male sperm cell to enter. Thus is applied the term “contraceptive” (“contra” = against; “ceptive” = an abbreviation for conception). Conception typically occurs in the uterine tube that connects the ovary with the uterus (or “womb”).

If we believe that life (and pregnancy) begins at conception, our responsibility to protect the sanctity of such ensues from that moment forward. In the normal course of pregnancy, the newly fertilized egg (embryo) would travel through the uterine tube to the uterus where it can implant into the uterine lining (endometrium) and grow for the subsequent nine months before delivery. If a medication has a detrimental effect on a newly formed embryo, somehow preventing the embryo from continuing in the course of pregnancy, we would classify the medication as an abortifacient (i.e., one that induces abortion).

For ECs, in addition to their contraceptive effect, there exists some data suggesting that they may have a negative impact on the endometrium, possibly creating an environment where an embryo is unable to successfully implant. If so, ECs would be considered to be abortifacients, at least some of the time. However, the scientific evidence in this regard is far from definitive. And, for professionals who are committed to taking care of our patients based on the best available evidence, speculation is a rocky road to travel.

What else does the science tell us? Upwards of 70 percent of all fertilized ova (the plural of ovum), for a variety of reasons, never successfully implant in the uterus and are expelled during menstruation. It is very difficult to determine whether or not ECs increase this rate of embryo loss (thus confirming an abortifacient effect). Further, we are presently unable to precisely identify when conception has occurred. It is only after the embryo successfully

implants in the uterus and secretes a new hormone (human chorionic gonadotropin; hCG), that we are certain pregnancy has occurred. This doesn't occur for a few days after conception and implantation. Identifying the very small percentage of the time when an EC might act as an abortifacient (if at all) is seemingly impossible.

At present, pharmacists (including Christians) are quite divided in their perspectives regarding whether or not Plan B® (as one product used for emergency contraception) is purely a contraceptive or, at times, might also be an abortifacient. Agreement is lacking, even within Christianity, regarding the moral appropriateness of contraception with some holding to the position of “natural law” — meaning that sexual intimacy must allow for the possibility of procreation. However, certainly those who believe ECs potentially act as abortifacients face significantly greater challenges in their practice, both ethically and legally.

Many states offer pharmacists an opportunity to “opt out” of participating in patient care situations to which they have moral

and/or religious objection. Other states require pharmacists to dispense legally written prescriptions, regardless of personal moral objections. Refusing to follow the law (and thereby risking loss of the license to practice) has been a response by some pharmacists, and such are the subject of present-day court cases. What ramifications might we expect if all Christians practicing in a given state chose this path? Would this be good or bad for our patients?

Additionally, pharmacists are often working with a limited set of data about a given patient. For example, hormonal contraceptives are used for other medical conditions (e.g., regulation of menstrual

cycles). Also, what are the patient's intentions and understandings regarding these medications? And, what role does that play in our actions?

These and many more questions regularly challenge the Christian in pharmacy practice. But, such is a worthy and noble endeavor. Addressing these issues in a learning community grounded in biblical truth is critical to wise decision-making in the real world. Cedarville University is just such a community. The bottom line is that we must always treat our patients with excellence in knowledge, compassion, and godly wisdom. They may be seeking Plan B®, but we need to help them discover Plan A: the grace and mercy of God through His Son, Jesus Christ.

A more detailed review of the professional challenges posed by emergency contraceptives is available online at [www.cedarville.edu/pharmacy/PlanB](http://www.cedarville.edu/pharmacy/PlanB).

† Plan B® is a registered trademark of Women's Capital Corporation, a subsidiary of Duramed Pharmaceuticals, Inc. Duramed is a subsidiary of Barr Pharmaceuticals, LLC.



## CPFI Annual Student Retreat

Cedarville University hosted the Christian Pharmacists Fellowship International (CPFI) Annual Student Retreat on October 9–11, 2009, drawing 40 prepharmacy and pharmacy students representing five universities from California, Pennsylvania, Illinois, and Ohio. This was the first time the retreat was hosted in the Midwest.

Applying the theme “Engage,” students were challenged to engage the Word of God in a way that will impact themselves and those around them, to engage one another in encouragement and prayer for both specific schools and the profession of pharmacy as a whole, and to engage their respective campuses through skills learned in several leadership sessions held during the retreat. Dr. Julie McDonald, keynote speaker and CPFI national board member, spoke about the role of Christian pharmacists in community pharmacies. She also covered contemporary topics such as medication abortions and controversial drugs.

Students attended seminars taught by University personnel on effective

leadership. Additional highlights included attending a concert by nationally acclaimed musicians Todd Agnew, Building 429, and Kimber Rising; experiencing worship led by Cedarville University’s HeartSong praise team; and enjoying the rich fellowship of other Christian pharmacy students during meals and other social times. Students left the retreat informed about the challenges Christians face in pharmacy, encouraged by new relationships with other pharmacy students, and better prepared to transition into life as a working professional.

After the retreat, one student commented, “I am more convinced than before that studying pharmacy is what I am meant to do at this time. With the information I received, I can go back to my chapter and engage people. I am also more knowledgeable about the calling of God on my life as a Christian.”

For more information on Christian Pharmacists Fellowship International and its world-wide mission, visit: [www.cphi.org](http://www.cphi.org).



*“The effective pharmacy professional must always have the patient in mind. Knowing Christ colors that mindset, particularly in such vital areas as genetic research, drug interactions, bedside manner, and world health issues. Cedarville, through its minor in Bible, provides the unique opportunity, to produce pharmacists who see patients through the eyes of Christ.”*

— Dr. Beth Edwards, Senior Clinical Research Scientist at Eli Lilly and Company and Member of the Cedarville University Pharmacy Advisory Council

## 2009–10 Prepharmacy Students



*The 55 students taking the first pharmacy course, PHAR-1011 Profession of Pharmacy-History and Issues, gathered on their first day of class for this photograph. Representing 15 states, these talented students have an average ACT score that ranks them among the top 10 percent of college-bound students in the nation.*

## Contact Us

We would love to hear from you! You can reach the school of pharmacy at [www.cedarville.edu/pharmacy](http://www.cedarville.edu/pharmacy) or at 937-766-7480. Prospective students should contact admissions at 1-800-CEDARVILLE (233-2784) or pharmacy admissions at 937-766-3290. We welcome your ideas, recommendations, partnerships, and support.

## Watch for the Next Issue

In the next issue, watch for an article by Dr. Douglas Anderson on pharmacogenomics.



*Prepharmacy students Lauren Amick, Lindsay Tarleton, Molly Turner, and Allison Henry celebrated the school of pharmacy in the 2009 Homecoming parade on October 3, 2009.*

Cedarville University is a Christ-centered learning community equipping students for lifelong leadership and service through an education marked by excellence and grounded in biblical truth. More than just a mission statement, this focus attracts more than 3,000 Christian students from around the nation to study in our 100 academic programs on a beautiful 400-acre campus in southwest Ohio.

Outstanding students, world-class facilities, talented professors, and award-winning technology contribute to an education that *U.S. News & World Report*, *The Princeton Review*, and *Peterson's Competitive Colleges* all recognize as one of the best in the Midwest.

ADDRESS SERVICE REQUESTED

Cedarville University  
School of Pharmacy  
251 N. Main St.  
Cedarville, OH 45314

PHARMACY  
FORECAST

