

SCHOOL OF PHARMACY NEWS



University of Colorado at Denver
and Health Sciences Center

First Shell Prize Symposium features distinguished cancer researchers

Dr. Rajesh Agarwal honored for his work with silibinin

The John and Barbara Shell Prize for Excellence in Research and Graduate Education was awarded to Rajesh Agarwal, PhD, in 2006. Activities planned to award the annual prize were

expanded to include a half-day symposium open to Health Sciences Center campus faculty, research staff and students. Agarwal and two renowned researchers he invited, presented their work in a series

of seminars on March 30, 2007.

Agarwal presented a glimpse into his extensive work with silibinin and its use in cancer prevention and treatment. Chinthalapally Rao, PhD, professor and Kerley-Cade Endowed Chair at the University of Oklahoma Health Sciences Center, pre-



Zigang Dong, Rajesh Agarwal and Chinthalapally Rao were honored at a reception following the Shell Prize Symposium.

sented his work on colorectal cancer prevention with celecoxib. Zigang Dong, PhD, professor and the McKnight Presidential Professor in Cancer Prevention at the University of Minnesota's Hormel Institute, presented a third seminar covering some of his work with in the chemoprevention of cancer. All three professors are well known internationally for their work with natural products and the use of these compounds in cancer treatment as well as extensive work in carcinogenesis.

The presentations were followed by a reception and a dinner attended by invited administrators, researchers and graduate students.

The symposium topic, Cancer Chemoprevention, was based on the long-standing interest and expertise of Agarwal, recipient of the Shell Prize. Cancer chemoprevention is currently a cutting-edge approach to lower overall cancer incidence and associated mortality and morbidity. Also important is that the most success achieved clinically in the cancer chemoprevention arena is with colon cancer, where the contribution of Rao, one of the two invited speakers, is unparalleled. Several times, Rao has been the first to report targeted approaches for the prevention of colon cancer by both synthetic and natural agents.

The other important aspect of

cancer prevention research in last 10 years has been the use of phytochemicals present in fruits, vegetables, beverages and spices, either in pure form or as an extract with a mixture of them. Dong is recognized as the pioneer in this area of cancer prevention research. Over the years, Dong has been the first to identify various agents and targets through which they exert cancer preventive efficacy in various epithelial cancers.

The Symposium was attended by more than 100 campus academicians ranging from faculty to post-doctoral fellows, graduate and pharmacy students. The enthusiasm of the attendees was so high that the discussion following each talk exceeded the time allowed and continued at the reception following



Dean Ralph Altieri (L) and David Ross, department chair (R) present Dr. Agarwal with the Shell Prize engraved bowl.

the symposium.

John and Barbara Shell are alumni of the School of Pharmacy and generous contributors to the endowment that funds the awards.

Harold C. Heim Awards recognize excellence in student research

The 2006 Harold C. Heim Awards for Excellence in Graduate Research were presented to Natalie Lassen and Erica Lynn Bradshaw Pierce. The presentations were made at the dinner following the Shell Prize Symposium.

The graduate faculty program directors, Vasilis Vasiliou, PhD, and Tom Anchordoquy, PhD, respectively, spoke of the students' research projects. They were joined in presenting the awards by Warren Heim, a supporter of the endowment funding the awards and son of Harold Heim, a former dean of the School of Pharmacy responsible for the development of graduate student research. The selection process to identify recipients of the 2007 Shell Prize and Heim Awards was initiated in July.



Student Awards

Kappa Epsilon Leader Elyse Attwood
Phi Delta Chi Pharmacy Spirit Patrina McCauley
Phi Lambda Sigma Leadership Tara Vlasimsky
Rho Chi Outstanding Student Katherine Miller
Student National Pharmaceutical Association Stephanie Cho
Roche Pharmacy Communications Olivia Rapacchietta
School of Pharmacy Clinical Practice Raenna Nerpel
GlaxoSmithKline Patient Care Julia Logan
Mylan Pharmaceuticals Excellence in Pharmacy Diane DeSugny
APHA/ASP Mortar and Pestle Professionalism Sarah Anderson
Facts and Comparisons Kevin Flynn
Pharmacists Mutual Danna Zhen
Merck Awards So Yeung, Momein Refaat, Hodan Noor

Perrigo Excellence in Non-Prescription Medication Studies Troy Westerberg
School of Pharmacy Valedictorian Jessica Meier, James Vinton
TEVA Outstanding Student Matthew Marshall
School of Pharmacy Outstanding Scholastic Achievement Katherine Miller
School of Pharmacy Scholastic Achievement Ri Holbrook
Department of Pharmaceutical Sciences Shannon Yessak
School of Pharmacy Professional Achievement Awards
 Jamela Urban, P1, Dominique Minjarez, P2, Stephanie Cho, P3, Michael Appel, P4

The Lilly Achievement Tara Vlasimsky
Student Council Presidential Sarah Carson
The Dean's Distinguished Student Sarah Anderson
Holden Community Service Student National Pharmaceutical Association

USPHS Excellence in Public Health Pharmacy Practice Student National Pharmaceutical Association

James L. McDowell Memorial William Anderson, Sarah Carson, Allison Garnhart, Shannon Matsko, Tasheba West

The Lefler Book Award Ashley Letourneau, Amber Simpson
NACDS Scholarship Brandy Shalberg, Mike Egeberg
The Linda Newman Memorial Scholarship Emily Arndt, Momein Refaat
Pearl Surbrugg-Stehley Patrina McCauley
Pharmacists Mutual Elyse Attwood, Charles Foster
Safeway Pharmacy Lubna Farah, Michelle Hanselin, Kyong Kim, Stacey Schomberg, Lindsay Stansfield

Walgreens Pharmacy Scholarships Joshua Cluff, Melinda Lam, Loc Lee, Lam Hoang Nguyen, Troy Westerberg
Wal-Mart Pharmacy Stella Abramova, Brittany Hanselin, Brandon LaMarr, Michele Sampayan

Kaiser Permanente Kent M. Nelson Stephanie Cho, Olivia Rapacchietta, Thu Tran, Tara Vlasimsky

King Soopers Scholarships Cassandra Bankovich, Sarah Chen, Vina Dam, Hanna B. Gurara, Jessica Hoang, Nancy Q. Hoang, Raisa Katanova, Rory Lambert, Andy Lei, Valerie M. Moore, Artem Muradyan, Anh Tuyet Thi Nguyen, Jenny Nguyen, Xuan Nguyen, Adam Nielsen, Myhao Pham, Angela Stevens, Kimberly Strube, Berin Vattappillil, Danna Zhen

Teresa McMahan-Shulkin Memorial Scholarship Kathleen Simons

Scholarships

Annibel Gardner Ashley Garcia, Jacqueline Puga
Burroughs Wellcome Endowment Scholarships Kelley Carlstrom, Adrienne Light
Colorado Pharmacists Society Shannon Matsko, Sarah Sumner
Eckerd Scholarships Tram Do, Ashley Letourneau, Jennifer Paul, Sarah Sumner, Hung Tran

Erwin-Vincent Crystal Nester, Kyrian Uzoeshi
Sara Kwon Memorial Scholarship Stephanie Cho
JM Long Foundation Samuel Addae, Geta Anteneh, Helen Asuquo, Julie Bohm, Dmitri Cohen, Joyce Gallegos, Michelle Garcia, Irina Kandinova, Ashley Hall, Steven Musielak, Kelly Pham, Michelle Pulido, Aden Tsegay, Trang Van, Habtamu Woldeyes



P1s for some one-on-one

Christopher Turner, PhD, Experiential Programs director, upper left corner, poses with, from left (Row one) Geta Anteneh, Kelly Pham, Kim Dao Dang, Habtama Woldeyes, and (Row two) Lisa Yacko and Jeremy Ortega, all P1 students, and the poster that won them a pizza lunch and praise. The class poster competition focused on producing educational material that might be posted in a community pharmacy setting.

SCHOOL OF PHARMACY NEWS

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Celebrating convocation night

Awards and scholarships were presented to pharmacy students, faculty and practitioners at the annual Awards Convocation on May 4. Students, faculty, friends and families were present to honor the recipients of awards for excellent performance in academics and service. The awards were presented by School of Pharmacy Dean Ralph Altieri, PhD.

Several School of Pharmacy faculty received awards for their outstanding contributions to education, research and community health care. A number of pharmacists and preceptors were also acknowledged for their influential roles in the health of Colorado communities.

Students vote for best instructors

Excellence in Teaching by P1 class – James Ruth, PhD

Excellence in Teaching by P2 class – Connie Valdez, PharmD

Excellence in Teaching by P3 class – Doug Fish, PharmD



Leadership Award – Shari Bohn, RPh, president, Colorado Pharmacists Society with Experiential Programs Director Christopher Turner, PhD

Preceptor of the Year awards Leticia Silva, PharmD



Connie Valdez, PharmD, (right) received the Chancellor's Teaching Recognition Award Luran Hansen, PharmD, received the President's Excellence in Teaching Award



Preceptor of the Year awards Grant Bray, PharmD Not pictured: Josie Snyder, PharmD, who was unable to attend



SOP Dean Ralph Altieri, third from left, along with (left to right) pharmacy students Stephanie Cho, Olivia Rapacchietta, and Nicolas Pollard, and SOP Dean Ralph Altieri, are honored for their commitment to diversity.

Diversity efforts recognized

The School of Pharmacy was well represented at the Chancellor's Diversity Recognition Awards Luncheon held April 26.

Among those receiving awards were pharmacy students Stephanie Cho, Olivia Rapacchietta, and Nicolas Pollard, and SOP Dean Ralph Altieri, PhD. Cho, Rapacchietta and Pollard were honored as outstanding students by demonstrating a high level of commitment to diversity throughout their pharmacy school education.

Specifically, this team has driven the development, student participation, coordination, training and leadership of several health fairs for underserved communities, including the Denver Indian Health and Family Services Diabetes Health Fair, the Native American Wellness Health Fair, the Wellspring Health Fair, the National Western Stock Show Health Fair and the Empowering a Health Community Health Fair.

The three students also planned and coordinated the 2007 Student National Pharmaceutical Association (SNPhA) Regional Conference, which was aimed at addressing diversity and health care barriers. More than 13 schools were invited to attend with more than 150 registrants and 11 financial sponsors attending and supporting the conference.

Former Surgeon General Joycelyn Elders served as keynote speaker. The conference offered immunization certification as well as several other continuing education programs related to medical conditions frequently encountered in underserved populations.

Long before becoming the dean of the School of Pharmacy, Altieri was a strong supporter of diversity. He played an important role in organizing SNPhA as a student organization within the school. Because he understood the importance of its mission to support underserved and diverse communities, Altieri supported funding the expenses for the SNPhA founding members at the SOP to attend the national conference in 2003.

He was instrumental in the success of the 2007 SNPhA Regional Conference hosted by local chapter in March.

The awards luncheon is part of the Celebrate Diversity Series hosted by the UCDHSC's Office of Diversity.

Providing pharmacy care in Guatemala

For 10 days this spring, Doug Fish, PharmD, chair of the Department of Clinical Pharmacy, and P4 students Sarah Carson and Jamie Billotti were immersed in the rural culture of Guatemala while providing pharmacy services to impoverished villagers through a volunteer medical mission.



On their trip, organized by Pura Vida, a non-profit organization that focuses solely on Guatemala, they served on teams with other medical professionals.

They were based in Chichicastenango, located in the highlands about four hours by bus from Guatemala City. Each day the teams traveled to clinics set up in outlying farming areas to provide health care to indigenous Mayan Indians, who are a poor, underserved and generally neglected segment of the population.

Fish, Carson and Billotti dispensed prescriptions, compounded medications, counseled patients and consulted with other health care providers. They treated 200 villagers a day and dispensed 3,100 prescriptions over five days.

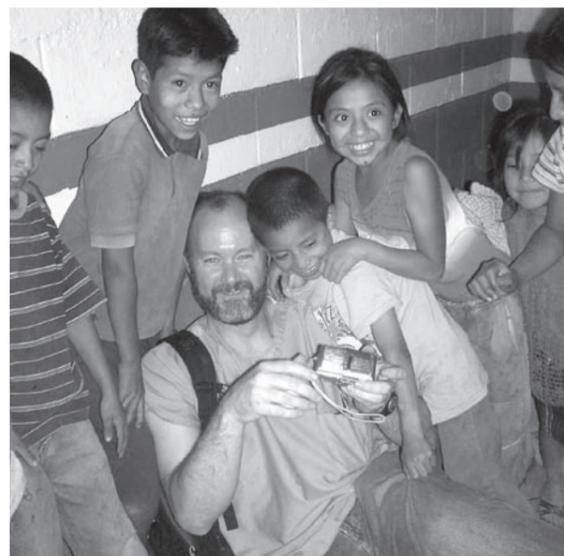
Counseling patients was a challenge since in most cases one translator was used to translate English into Spanish and another was then used to translate that Spanish to Quiche, the native Mayan language.

This is Carson's second medical trip. Last year she went to Ecuador and wants to make more trips into Third World areas. She taught a group of little girls a few words in English and they taught her some Quiche. On the last day as the bus drove out of the village, the youngsters ran behind waving and yelling "good-bye" in English.

"Learning to use what you have to treat someone adequately when resources are limited forces you to think about the pathophysiology behind the disease and what medication or non-pharmacologic therapy will work to cure or treat the patient," she said. "You begin to understand the true importance of non-pharmacologic therapy when you realize that a one month supply of an anti-hypertension medication is all you have to give them."

Students benefit from medical trips such as these in numerous ways. They have the opportunity to put their pharmacy education directly into practice and are able to work independently under non-traditional, somewhat challenging conditions where therapeutic substitution and improvisation are the norm due to limited supplies of available medications. Students also gain experience in working directly with other health care providers.

"The experience is an opportunity to practice pharmacy and to interact closely with other health care providers in unconventional ways, plus you gain a first-hand understanding of the difficult conditions under which much of the rest of world lives," said Fish, who went on medical trips to Guatemala in 2005 and Peru in 1997.



Grape seeds show potential in fighting cancer

Jenni Prosser
Office of Public Relations

A common theme continues to develop in cancer research; a concept that is far from new: eat your fruits and vegetables.

Chapla Agarwal, PhD, assistant research professor at the School of Pharmacy, recently received a five year, \$1.9 million National Institutes of Health grant to study the effects of grape seed extract on colorectal cancer. She believes it may become a major factor in the prevention or treatment of cancer.

“Our aim is to basically extract the grape seed, see how concentrated it is, observe how the cancer acts in the body and see how we can use the grape seed extract against the cancer. I don’t know if it can cure the cancer, but it could help prevent people who are at high risk for colon cancer from developing the disease,” Agarwal said.

Grape seeds are rich in antioxidants, which act as inhibitors against the disease by scavenging the free radicals that can cause colorectal cancer. Agarwal’s pre-clinical trials at the School of Pharmacy have shown success in treating induced tumors in mice models and treating them with grape seed extract. Further research still needs to be done before the findings are applied to human cancers.

The potential benefits are huge. “If you could prevent the cancer somewhere, or at least stop one



Chapla Agarwal, PhD, studies beneficial effects of grape seeds.

stage of the cancer development, it would help control the disease,” Agarwal said. “Chemopreventative agents, such as grape seed extract, can do this.”

Prevention is the best form of treatment for cancer, and chemoprevention is a rapidly growing area in the field cancer research.

One of the major interests in Agarwal’s research stems from the lack of side effects from grape seed extract compared to other forms of cancer treatment.

“A promising element of studies so far is that, the mice haven’t shown toxicity to very high doses of the extract. That’s amazing, because toxicity is the main problem with the current cancer drugs and their side effects. Many people die, not from the cancer itself, but because

of side effects from the treatment. That’s why this natural product research is good,” Agarwal said.

The antioxidants can be found in all forms of grapes, but they are especially prevalent in red grapes with seeds. Because the entire grape is used in the process of mak-

ing wine, red wine is a good source of the antioxidants found in grape seeds.

Through the grant she received, Agarwal has been dedicating her research to the effects of grape seed extract on colorectal cancer, however, she believes it may also affect other forms of cancer, such as prostate, skin and breast cancers.

There is still a significant amount of research to do before any conclusions can be made, but Agarwal thinks grape seed extract has a lot of potential for the future of cancer treatment, “I think it will take

my whole research career; there’s a lot we don’t know. Maybe it will take over as the main form of cancer treatment. That’s what I want, but we haven’t reached that point yet.”

For now, she says, people would do well to focus on eating more fruits and vegetables.

Faculty promotions and tenure

The School of Pharmacy announces the following faculty promotions:

- Doug Fish – professor
- Laura Hansen – associate professor, clinical/teaching track
- Brian Hemstreet – associate professor, clinical/teaching track
- Kavita Nair – associate professor with tenure
- Chris Turner – professor
- Vasilis Vasiliou – professor

Long time service



LaJuana Cotton, Charlotte Klaus and Jill Rogers are pictured at the UCDHSC Staff Recognition luncheon. Charlotte represented the dean in making the awards to LaJuana for 25 years of service to the university and to Jill for 20 years.

2007 Ebert Prize shared by School of Pharmacy and Amgen, Inc.

Professors Theodore W. Randolph and John F. Carpenter and graduate student Renuka Thirumangalathu from the School of Pharmacy and Sampathkumar Krishnan and David N. Brems from Amgen, Inc., received the 2007 Ebert prize for an article they published in the Journal of Pharmaceutical Sciences.

The article, titled Effects of pH, temperature, and sucrose on benzyl alcohol-induced aggregation on recombinant human granulocyte colony stimulating factor, examines how benzyl alcohol causes protein aggregation in therapeutic protein products, specifically recombinant human granulocyte colony-stimulating factor (rhGCSF). By studying this, the researchers hope to create ways to prevent the aggregation. In the article, Thirumangalathu and her colleagues proposed some effective strategies to inhibit or partially counteract preservative induced aggregation in multi-dose protein product development.

The annual prize is awarded by the American Pharmaceutical Association (APhA) for new findings that have a good chance of significantly impacting pharmaceutical sciences.

The Ebert Prize, established in 1873, is the oldest pharmaceutical award in the United States and is named after former APhA President Albert Ethelbert Ebert.

Getting to know the incoming and outgoing residents

Victor Lewis, PharmD

Tell a little about your background.

I am coming from The University of Georgia College of Pharmacy in beautiful Athens, GA. I grew up in Jesup, GA, and still call it home. Jessup is a small town and I came across my first exposure to pharmacy as a junior in high school. A pharmacist from church needed a new delivery boy to deliver meds, and set up hospital beds and oxygen concentrators for his independent (business) in town. I really enjoyed it and stayed with it, so he began letting me do more and more behind the counter. When it came time for college, I decided to take the pre-pharmacy track and try to get into pharmacy school. I still used vacations and holidays to go back home and work with the pharmacy to stay in touch with the pharmacist and the profession and I haven't looked back since!

Why pharmacy as a career?

My first job really opened my eyes as to how large an impact a pharmacist can have on patients and the community. As I delivered medications and hospital beds, so many patients expressed how much Alan (my pharmacist) meant to them and how much he had helped them to navigate through medical issues. I saw this and realized that this is the impact I want to have on patients in a career. Many times, pharmacists are the last line between the patient and the medication, so it is up to us to make sure everything is okay before the medication is administered.

For rotations, I decided to try to get as much hospital exposure as possible, so I went to the Medical College of Georgia in Augusta, GA, for my fourth year. I found this to be incredibly rewarding and have decided to pursue a career in this type of practice.

What are your plans for the future?

My goals are to get the most out of my opportunities as a pharmacist and to develop myself as a clinician as much as possible. So many options exist for pharmacists today with so many different ways to practice pharmacy that I want to experience as many practice types as possible and maximize my patient care abilities. As for more concrete goals, I would like to work in academia because I have seen what a large impact a good professor can have on students. I would get a lot out of seeing students grow and develop. For the next few years, I am interested in clinical pharmacy, preferably at a large academic medical center which could offer a mix of both clinical pharmacy and academia. For the long term, it is hard to say at this point. The dynamics of the profession are changing so much that it is hard to say what pharmacists will be able to do in 10-15 years. I feel that my roots in independent pharmacy will eventually pull me back to that practice area, but there are so many options with wellness clinics and ambulatory care now, even that is hard to describe specifically.

How do you feel about moving from Georgia to Colorado?

I am very excited to be coming to Denver! I enjoy hiking and skiing, and I guess all the other activities that people who come to Colorado are interested in. I look forward to beginning and am enthusiastic about coming across so many new people and experiences.

Phillip Owen, PharmD

What's next for you?

I will be taking a clinical assistant professorship at Mercer University in Atlanta, GA. My practice site will be the Atlanta Medical Center medical and surgical ICUs.

Any particular experiences you will be taking with you from SOP?

My two most memorable moments in residency were participating in specimen collection from a subject enrolled in a drug study at the SOP and giving a lecture for the first time to pharmacy students.

How did you choose pharmacy as a career?

I have an undergraduate degree from the University of Tennessee in biology and I worked in an emergency department at a hospital in Knoxville, Tenn., for one year. I then decided medicine was not really for me, so I chose clinical pharmacy as a career. It offers direct patient care and still has a high degree of intellectual pursuit and fulfillment associated with it.

What are your plans?

I would like to start building my career towards being a clinical researcher and educator. I chose academia because it forces you to stay current on medical and pharmacy literature and allows you to be creative in the ways you teach students and carry out research. Faculty members have to keep up with the current literature and know how to apply it, and contribute to it. I am still learning how to do all these successfully, but that is part of the fun.

How do you think the future of pharmaceuticals affects your plans?

Pharmacy is at an interesting point in which schools are opening so fast that good faculty members are in demand. The next few years

should be interesting for salaries in community and academic settings. I expect the governing bodies responsible for pharmacy school education credentialing, residency credentialing, and board specialization will work more in tandem with one another to prevent the quality of the workforce from declining. My hope is that the trend for faculty salaries will continue to stay competitive or rise based on the level of new students.

Kenneth Utz

What education have you had in pharmacy so far?

I completed my pre-pharmacy work at the University of Arkansas and then graduated from the University of Oklahoma College of Pharmacy. Following my general residency at UCDHSC, I have accepted a position as a specialty resident in oncology at the University of Colorado Hospital, so I will be staying in Denver for another year and am very excited about it.

What experiences at the SOP will stay with you?

My most memorable moment at the SOP was the first lecture I gave to pharmacy students. I prepared and presented the alternative therapies used in heart failure. It was a very surreal feeling to move from someone sitting in class just a few months earlier to an actual clinical professor. I will never forget that feeling.

What led you to a career in pharmacy?

I chose a career in pharmacy for many reasons. I have always enjoyed life sciences, especially biology and chemistry. Pharmacy provided a way to combine both of my interests. Furthermore, it gave me the option of pursuing a field in which I could make a difference in patients' lives, while still being able to give a large portion of my time to my family. Also, I was exposed to pharmacy at a very young age because my father is a pharmacist. In all honesty, I am just not imaginative and decided to follow in my father's footsteps. I think he was happy that I did.

What are your plans for the future?

I will be completing a specialty residency in oncology and plan to practice as an oncology pharmacist. I prefer the outpatient setting to inpatient, but I am keeping an open mind as I travel through my residency life. Also, I have always enjoyed teaching and am currently considering a career in academia.

How do you feel about your experience?

This pharmacy practice year has been quite a ride. I have grown in many areas that I did not anticipate. I don't think that I would have been able to complete this year without the encouragement and laughter of my fellow residents. Kelli, Jessie, and Dorothy will always hold a special place with me and I wish them all the best of luck in the years to come.

Kelli Gibson, PharmD

What have you been doing since you finished at SOP?

Currently I am interviewing for a position in pharmacy administration.

Care to share any memorable moments from your time at SOP?

One of my most memorable experiences occurred during my faculty rotation month. My preceptor was Dr. Robert Page. At the time we were teaching first year pharmacy students about proper aseptic technique. This involved rotating all 130 students through the University of Colorado Hospital inpatient IV room in order

Continued on next page...



Residents new to the program or continuing in specialty tracks gathered in July for orientation. Pictured (L to R) are Phillip Owen, Kelli Gibson, Joe VandeGriend, Kenneth Utz, Dorothy Albright and Jessica Burch.

Incoming and Outgoing Residents*Continued from page 6*

for the students to demonstrate their skills while preparing a parenteral medication in a real IV room. Four students were scheduled per hour, so it took more than 30 hours for us to facilitate all of the students!

Why did you choose pharmacy?

I was initially an undergraduate pre-health major. After shadowing my cousin, who was a pharmacy resident at the time, I decided I wanted to go to pharmacy school. I was interested in working in the health care field, but I was also interested in the many ways business knowledge is utilized in pharmacy.

Where do you want to go from here?

Ideally, I would like to work as a pharmacy clinical coordinator. This position would include the responsibility of working with pharmacists and other health care professionals to create optimal clinical pharmacy programs. I also hope to mentor students, residents, and other pharmacists through this position.

Joe VandeGriend**What experience do you have in pharmaceuticals?**

I graduated from the University of Iowa, School of Pharmacy in 2005. Last year, I completed a Pharmacy Practice Residency at the University of Colorado Hospital. I was fortunate to stay on this year as the Family Medicine Specialty Resident at UCDHSC, School of Pharmacy with Joe Saseen. Recently, I accepted a position with the School of Pharmacy as an assistant professor in the Department of Clinical Pharmacy, which will begin in August.

What created your interest in pharmaceuticals?

Pharmacy runs in my family: my great-uncle owns a pharmacy in my small Iowa hometown, his son now runs it; my uncle also owns and operates several pharmacies in NE Iowa; my first cousin is a pediatric clinical pharmacy specialist in Pennsylvania. I chose pharmacy because the opportunities within the profession are almost endless: academia, ownership of own business, clinical pharmacy specialist, etc...

What would you like to accomplish with your degree?

My goal is to become an effective teacher and successful academician – I have pursued an academic position because it is challenging and rewarding.

Erica Horinek, PharmD**Tell me about your background.**

I am currently a pharmacy practice resident in Salt Lake City with Intermountain Healthcare / LDS Hospital. I graduated from the University of Wyoming School of Pharmacy.

What did you do before college?

I am originally from Colby, Kan., and worked in a pharmacy during high school, which led to my decision to be a pharmacist.

What do you want to accomplish with your degree?

My career goal is to be an adjunct faculty at a school of pharmacy, specializing in either critical care or solid organ transplant services.

Dorothy Albright, PharmD**Tell me about your background.**

I graduated from the University of Buffalo School of Pharmacy in 2006 with a PharmD, before starting a one-year pharmacy practice residency at the University of Colorado Hospital.

What do you plan to do next?

After the residency is completed at the end of June, I will be starting a clinical toxicology fellowship at Upstate Poison Control Center in Syracuse, NY. It is a two-year program and my long term goal is to become a board certified toxicologist.

What led you to a career in pharmacy?

I chose a career in pharmacy because it is a challenging field in health care that has many opportunities to specialize; in my case toxicology. I want a career as a PharmD toxicologist because I think PharmDs can contribute to the field of toxicology with their foundation in pharmacokinetics, drug information, and ability to memorize detailed information without necessarily seeing a patient to relate to the information; which is the way physicians learn.

What are your ultimate goals?

I would like a career in toxicology that involves research and a teaching component at a poison control center. These very different methods of learning can stimulate you and your colleagues for your entire career. I have thoroughly enjoyed my experience as a pharmacy resident at UCH and I appreciated all the opportunities to have rotations and to work with the faculty.

Angela Digiacinto**Where are you from?**

I am coming from Omaha, Neb., as a recent graduate of the University of NE College of Pharmacy.

Why did you decide to study pharmacy?

I am from a family with six children, my twin sister and I being the youngest. I was born and raised in Omaha. My parents and three of my siblings still live in Omaha. I have an older sister who graduated from my same college of pharmacy 10 years before I did, so she has been a strong influence in my career decisions. She was a huge role model for me as I worked my way through pharmacy school and has always been my biggest supporter.

How do you feel about the upcoming year?

I'm so excited about the opportunity given to me at the University of Colorado Hospital with the pharmacy residency! I want to take this year to learn as much as possible and expose myself to as many clinical pharmacy opportunities as I can.

What do you want to do after your finish your residency?

I hope to have a career in clinical pharmacy in a hospital where health care is implemented progressively and where I can really continue to refine my professional skills.

Jennifer Tobin**Tell me about your background.**

I am originally from Austin, Texas, but currently live in Houston and am finishing up at University of Houston College of Pharmacy.

Why are you interested in pharmacy?

I chose pharmacy as a career path because of my interest in how drugs work in and affect the human body, as well as to have an opportunity to be a unique member of the health care team. I have noticed from my own experience with family members that patients are typically misinformed or not informed at all about their medications or why they are taking them. My older sister has been a practicing hospital pharmacist for more than 10 years, and that is another really big part of why I chose pharmacy.

What do you want to do in the future?

My short term pharmacy goals include graduating and passing the NAPLEX and law exams for Texas and Colorado. Then of course, working hard at University of Colorado Hospital next year and completing the pharmacy practice residency program. After that I would like to pursue a second year in oncology or infectious diseases, (but am also open to other possibilities based on my experiences during my first year of residency) with the goal of working as a clinical pharmacist.

Jessica Burch**What are your plans for the upcoming year?**

I will be staying at UCHSC as the PGY2 family medicine resident.

What do you hope to accomplish as a family medicine resident?

My goal is to gain additional experience in ambulatory care pharmacy and work with pharmacists who have set up effective collaborative practice agreements in their clinics.

What did you do before you came to UCDHSC?

I graduated from Colorado College with a bachelor's degree in Biochemistry and I went to work for a genetics company in Utah.

What made you decide to pursue a career in pharmacy?

After spending a while doing genetics research I decided I wanted a career that would allow me to work directly with patients. I looked at many career options in the medical field and decided that pharmacy most closely matched my interest. I went to pharmacy school at Midwestern University in Glendale, Ariz. After graduation, I knew I wanted to do a residency and I knew I wanted to move back to Colorado. I was lucky to achieve both of my goals by matching at UCH.

Chelsea Hunter**Where did you go to college?**

I graduated from the University of Iowa College of Pharmacy.

How do you feel about coming to SOP?

I am very excited to be starting a new step in my professional pharmacy career.

Why are you interested in pharmacy?

My interest in pharmacy came from shadowing a hospital pharmacist during a Medical Careers class I took my senior year in high school.

Is anyone in your family in the pharmacy profession?

My dad has been a pharmacist for more than 35 years.

Which area of pharmaceuticals interests you most?

My interests lie in women's health and neonatology. I am still keeping my doors open as to which pharmacy career I will pursue.

CONGRATULATIONS, SCHOOL



Doctor of Pharmacy Non-Traditional Program

December 2006

Joice Blesson Andrews
William Arnold Gault
Denise Marie Hefley
Cheryl Boyle Lathum
Rebecca Ann Ligon
Anne Ashton Lowe
Eun Jung Nam
Cindy Truong Natsheh
Bernd Philipp Schwalbe

May 2007

Rita Dana Ankus
Anita M. Berk
Kevin Choe
Soonyang Chung
Debra Lynn Painter Cowan
William C. Garst
Sarah Hagler

Mary Patch Harrington
Jeannie Marie Hiser
Tracy Jane Householder
Erin Walsh Kraemer
Catherine Lai
Michele Crossland Lester
Tamera Neyman McFarren
Chad E. Miller
Jennifer Lynn Pawelek
Eileen Peng
Suja A. Pothan
Renee Karen Schroeder
Charles Clifford Sharkey
Connie Pie Chi Shiu
Mary Ann Stuhan
Kumar Swamy
Mei Tang
Marcia Regina Cichello Whitbeck

Doctor of Philosophy

December 2006

Natalie Lassen, Toxicology

May 2007

Erica Lynn Bradshaw,
Pharmaceutical Sciences
Wenchang Guo, Toxicology



OF PHARMACY GRADUATES

Doctor of Pharmacy, May 2007

Sammy O. Alwala
Jing An
Sarah Louise Mercer Anderson,
Rho Chi, Phi Lambda Sigma
Michael John Andrews,
Rho Chi
Michael Daniel Appel,
Phi Lambda Sigma
Rasha Ragaie Barsoum
Daniel Warren Bates,
Rho Chi
Jordan David Bendinelli,
Phi Lambda Sigma
Megan Ashley Berch-Wegner
Sandra Kay Berry
Justin Bradley Bowles,
Phi Lambda Sigma
Ella Anne Breitenbach
Tyler Alan Byassee,
Rho Chi
Heather Skye Cabiness,
Phi Lambda Sigma
Emilyn Garcia Cabrera,
Rho Chi
Danielle Mary-Alice Cassidy,
Phi Lambda Sigma
Reannon Lee Castilleja
Elena V. Chemanaeva
Tin Tin Chou,
Rho Chi
Jennifer Ann Connelly
Jerilyn Theodora Cook
Raegan A. Cormaci
Kimberly Diane Crine,
Phi Lambda Sigma
Tina Phuong Dao
Kai Erik Davids
Miciah William Davis
Maria Rosella Villadiego de Guzman
Diane Reddington de Sugny,
Rho Chi, Phi Lambda Sigma

Christian DeAnn Dobbs,
Phi Lambda Sigma
Megan Patricia Eck
Jessica Anne Engelbert
Kevin Michael Fanciulli
James Hunter Farrar,
Rho Chi
Cynthia Louise Feis
Daniel Eric Finger
Sean Malone Fitzpatrick,
Rho Chi
Kevin Michael Flynn,
Rho Chi
Samrawit Ghezae
Jeffrey David Gold
Mark Bradford Gore
Sonya Laurice Hawkins
Katherine Marie Hays
Dawn Margaret Hollingshead,
Rho Chi, Phi Lambda Sigma
Debrah Lucille Howell,
Phi Lambda Sigma
John Michael Joffer
Erin Elizabeth Johnson,
Phi Lambda Sigma
Sarah Louise Johnson
Marivic Rimas Jose
Keith Thomas Kapp
Kristen Kemp
Nafisa Khan
Bonnie G. Landrum
Jennifer Louise Larson
Hien Thi Le
Jasmine Trang Le,
Rho Chi
Tram Anh Le
Darryl Ross Leopold
Julia Marie Logan
Xiaojun Lu,
Rho Chi
Taryn Leigh Lujan

Monica Ann Manatt,
Rho Chi
Matt Marshall,
Rho Chi
Adrienne Ann Martin
Theresa Rebecca Martin
Eugene Alexander Medley,
Phi Lambda Sigma
Jessica Meier,
Rho Chi
Kendra Kay Messing
Jennifer C. Meyer,
Rho Chi
Kelley Christine Miller
Leanne Alisa Mori
Ahmed Abdi Mudey
Raeanna S. Nerpel,
Phi Lambda Sigma
Binh Nguyen
Leann ThuyAnh Nguyen
Minh-Thu Thuy Nguyen
Trang Thi Nguyen
Feliks Obertman
Adam David Oderberg
Asad Mansur Omar,
Rho Chi
Joy Chinwe Osuala
Randall William Parish II
Christien Travers Paynter
Ashley Rebecca Pearson
Jenna Lynn Pechek
Jon Tor Peterson
Tuyet-Hong Thi Pham
Evelyn Phuong Phan,
Rho Chi, Phi Lambda Sigma
Katherine Kristine Pietz
Nicolas Ross Pollard
Jessica Lynn Pousson
Nicole Renee Rael
Jeffrey R. Rauber
Kelly Nicole Rembold

Michael Douglas Rex
Craig Hamilton Rhodes
Marcello Rodriguez
Aicha Mouna Sadellah
Tammy Rae Schmitz
Erin Sloun Schulz
Sheila Kay Scott
Stacy Ann Shadburne,
Rho Chi, Phi Lambda Sigma
Jelina Jayendra Shah
William Alan Shelver
Sarah Kate Shore,
Phi Lambda Sigma
Rebecca Ashley Simpkins
Latrena Jonell Solomon
Michelle Suzanne Staska
Hilda Taban
Elaine Karen Thannum,
Rho Chi
Matthew David Thielbar
Bethanie Lan Tran,
Rho Chi
Kate Huong Mai Tran,
Rho Chi
Alison Kate Veto
James Warren Vinton,
Rho Chi
Nicholas Michael Vogel
Luan Kinh Vu
Ghadeer Walid Wahdan,
Phi Lambda Sigma
Jory James Wendling
Shaun C. White,
Rho Chi
Robert Thomas Willis, Jr.
George F. Wissa
Develyn Denise Wright
Christina Jing-Won Yu



Where are the graduating PharmD students going?

- Total graduates - 123
- 72 percent will reside in Colorado
- 10 percent will enter residency programs
- One graduate received a fellowship
- One graduate will pursue an advanced degree
- 34 percent will practice in rural or underserved populations
- 69 percent will practice in community/retail field
- 24 percent will practice in hospitals
- 7 percent will practice in settings such as managed care, public health service, and home health

Rotation site rich in opportunities to impact patient care

By Kenna Bruner
Office of Public Relations

Students on rotation at Porter Adventist Hospital in Denver not only get experiential experiences at the inpatient hospital pharmacy, the outpatient ambulatory care pharmacy and the anticoagulation clinic, but they also have the opportunity to participate in innovative and award-winning programs.

Rotations in the hospital's two pharmacies and the anti-coagulation clinic familiarize students with patient interaction, gathering medication information, conducting research and making recommendations about patient care.

Director of Pharmacy at Porter, Ryan Stice, RPh, BS, '96, PharmD, '06, implemented three new programs, two of which garnered industry awards in 2006.

Porter was selected as a best practice site in the Centura Health system for the use of pharmacy students in a Medication Reconciliation Program.

Medication errors affect some 1.5 million Americans each year, according to a study by the Institute of Medicine. One of the most challenging aspects of improving medication safety is ensuring that accu-

rate information about a patient's medications is provided to physicians when a patient comes into the hospital. Compiling the list of medications requires very specific steps as well as clearly defined roles and responsibilities.

In the past, nurses at Porter collected this information from patients when they were admitted to an assigned unit. Stice saw that by implementing a formal process using pharmacists and pharmacy students to collect an accurate list of a patient's current medications and reconciling the list with physician's orders could significantly reduce adverse drug events. Their sleuthing may involve calling families, pharmacies, doctors and nursing homes to get truly complete information.

"People come into the hospital and say they take a red pill twice a day for blood pressure, but that could be one of a thousand possibilities," said Stice. "Someone has to track down those details. I knew that a dedicated pharmacy team could do the most accurate job."

By having pharmacy students gather and check medication information, they have considerable interaction with patients and family members.



Carrie Dunn; Steven Weis, P4; Ryan Stice; Susan Warburton; Jamie Billotti, P4; and Eric Manchester, P4.

"We've received tremendously positive feedback from physicians and nursing staff," said Stice. "The pharmacy students do a great job of tracking down all these details and they produce a very accurate home medications list that reduces medication errors while the patient is in the hospital."

Another project Stice implemented at Porter received a Colorado Patient Safety Coalition Award for the safe use of Fentanyl Transdermal Patches.

Stice and his pharmacy staff had identified overuse and inappropriate use of the potent topical narcotic painkiller Fentanyl. The Federal Drug Administration had issued a "black box" warning about Fentanyl cautioning that it's appropriate for opioid tolerant patients, those who already are taking other narcotic painkillers, for chronic pain that is not well controlled with shorter-acting painkillers. The warning, outlined in a so-called "black box," is the most serious a drug can bear.

Pharmacy students Carrie Dunn and Wendy Johnson who were on clinical rotation at the time, conducted an extensive audit of the use of the medication under the guidance of Oncology Clinical Pharmacist Robin Mower, BS, '93, PharmD, '97; and Clinical Coordinator Diana Lehmana, BS, '96. They found that surgeons were incorrectly prescribing the patch for immediate acute post-surgical pain.

They also learned that patients who were opioid naïve might not be good candidates for Fentanyl and were at risk of respiratory depression.

Based on the literature and the data the students collected, the hospital's medical executive committee authorized the pharmacy to step in and override physicians' prescrip-

tions for Fentanyl and make appropriate changes.

"The students' work was instrumental in getting to that point," said Stice.

In addition to her rotation, Dunn also worked as an intern at Porter while she was in pharmacy school. She has since graduated and is now a clinical and staff pharmacist at Porter.

"The Fentanyl patch project was clinically significant for patient care and to have it win an award is gratifying," said Dunn, who is now a PharmD. "I absolutely love working here. We have a wonderful group of people who make Porter a very nice place to work."

Students at Porter also can rotate through the outpatient Anticoagulation Clinic located next to the emergency department at Porter to help educate patients taking the blood thinning medication Warfarin (Coumadin).

Dosing of Warfarin is complicated because it interacts negatively with many commonly used medications as well as some foods, vitamins, minerals and herbal supplements. In order to optimize the therapeutic effect without risking dangerous side effects, the degree of anticoagulation must be closely monitored. At the clinic, patients get their blood drawn by Susan Warburton, PharmD, with prescriptive authority to adjust their medication dosage under physician protocol.

Stice hopes the rotations at Porter give students the opportunity to put a face on the diseases they learned about from a text book.

"I'd like students to see that there are alternatives other than traditional pharmacy," he said. "I hope they have a rich experience with considerable patient contact."

Curing epilepsy



Manisha Patel, PhD, associate professor in the Department of Pharmaceutical Sciences at the School of Pharmacy (front row, far right), served as chair of the junior investigator session at the spring conference, Curing Epilepsy 2007: Translating Discoveries into Therapies. Leading scientists, health care providers and leaders of health organizations gathered at the National Institutes of Health in Bethesda, MD, to discuss potential targets and technologies for new therapies for epilepsy. Pictured with her are other members of the conference organizing committee and Story Landis, PhD, (second from left, back row) director, National Institute of Neurological Disorders and Stroke.

Moving to the Anschutz Medical Campus: When and Where?

For a few years, our articles have mentioned that the University of Colorado Health Sciences Center is moving to a new campus at the site of the former Fitzsimons Army Medical Center. The Ninth Avenue campus is in the process of being sold and will be vacated by December 2008. Our articles have referred to the move to "Fitzsimons" as we planned our schedule for inclusion in the whole campus transfer. The new campus has been developing rapidly and recently was renamed the "Anschutz Medical Campus (AMC)."

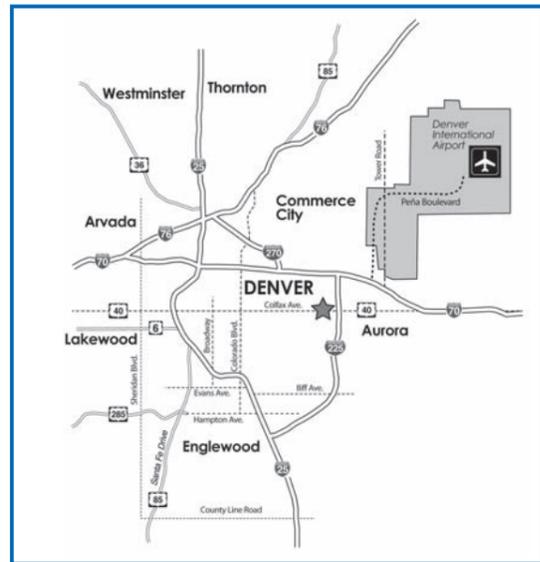
This September, upon completion of construction on the education buildings and a faculty office building at the AMC, the School of Pharmacy's move will begin. Small waves of Department of Clinical Pharmacy faculty members, the dean's office and other administrative staff members will move in each of four months, September, October, November and December. Some staff and faculty members will commute between the campuses to maintain services in both locations

Student moves begin following the fall break. The P1 classes will switch to some of the AMC's new classrooms in late October, allowing all but two months of their pharmacy education to take place in the new setting. The P2 and P3 classes will begin their classes at the AMC in January 2008 when all the new classrooms will be ready for occupancy.

Following completion of the second research building at the AMC, in the summer of 2008, the Department of Pharmaceutical Sciences faculty

members and all remaining administrative staff will be moved between September and December. Finally, when the school's own new building is opened in mid-2010, the faculty and staff will move again to be consolidated under one roof.

Stay tuned for new addresses and phone numbers, but rest assured the current ones will serve without disruption for another year.



September 2007			Mid-2010			
School of Pharmacy begins move to Anschutz Medical Campus - September 2007	Department of Clinical Pharmacy faculty, dean's office, administrative staff move to Academic Office Building 1 - September to December 2007	P1 classes move to AMC's classrooms - late October 2007	P2 and P3 classes begin their classes at AMC - January 2008	Department of Pharmaceutical Sciences faculty and remaining admin staff move to Research Building 2 - September to December 2008	Ninth Avenue campus is vacated - December 2008	School of Pharmacy moves into new Pharmacy and Pharmaceutical Sciences Building - mid-2010

Cancer experience shapes SOP alumna's career

By Jenni Prosser
Office of Public Relations

School of Pharmacy alumna, Hien Pham, PharmD, '03, brings a special kind of experience to her work in the oncology department at Providence Hospital in Mobile, Ala. Five years ago, as she was starting her training rotations, Pham was diagnosed with a form of bile duct cancer and was told that she had six months to live.

After being diagnosed, Pham followed her parents' request for her to stay in Colorado to receive treatments and continue her education, rather than returning home to Alabama. She underwent surgery, chemotherapy and radiation, a process that took more than four months and interrupted her pharmacy education.

Returning to Colorado this June for a visit to the school, Pham talked about her battle with split cell cholangiocarcinoma while studying to become a pharmacist and explained how that experience affected her career. Working in two pharmacy satellites at the hospital, Pham often shares her stories of fighting cancer with her oncology and renal failure patients.

Pham attributes much of her recovery to the support she received from the SOP community. "My decision to stay in Colorado to receive treatments was the best decision I've ever made. The support from my family, classmates, friends, SOP faculty, and the excellent medical care I received helped me to survive my cancer. Without the people and the outstanding care I wouldn't be who I am today," she said.

When she had completed a large part of her treatment, she returned to school to address her rotations and to graduate.

The experience created a bond between Pham and Louis Diamond, PhD, who was dean of the School of Pharmacy at the time. A cherished memory from that difficult time was when Diamond gave her brother Tuong - who was staying with Pham to take care of her during treatment and recovery - a Blockbuster gift card "in case he got bored at home," said Pham, illustrating how Diamond was thinking about Pham and her family, as well. Because of this, Pham started to consider him as family, "he's been like a dad to me," she said.

Diamond speaks just as highly of Pham and his time working with her. "Hien Pham was an academically gifted student and an inspiration to her



Hien Pham (R) and a companion on a recent trip to Europe.

fellow students and to her faculty mentors. We'll never forget the courage and determination she demonstrated in confronting a very serious, life threatening illness during her final year in pharmacy school. It is gratifying beyond description to see her looking so well today and to learn of the enormous success she has achieved in her personal life and professional career."

In addition to Diamond, many students and faculty supported Pham's recovery. She talked about them visiting her at the hospital and cooking Vietnamese food for her. They even opened an account under Pham's name and donated to help pay for her medical care and medications.

Since graduating in 2003, Pham's professional experience has included working at Kindred Hospital in Denver, a Wal-Mart retail pharmacy in Alabama, and Providence Hospital in Mobile, Ala., where she is currently working.

The pharmacy where she works is small, only about 200 patients a day with 12 full-time staff, but it allows her to interact with the patients. "Sometimes I stop by to see the patients

for no reason but to say 'hi,' especially if they're a cancer patient," she said.

One day, she encountered a woman she knew who was a medical student and was being treated for leukemia at the hospital. Pham related her experience with cancer to the woman. "When I told her, she started crying. She gave me a hug, and I told her to just keep fighting," Pham said. "I was supposed to be dead four and a half years ago and I'm still alive."

Pham is an inspiration to her co-workers at Providence Hospital and they are quick to praise her unselfish and gentle demeanor.

"Hien brings joy and laughter to our department," said co-worker Mary Short. "There have been numerous times she helped another employee or a patient emotionally and financially when they were in need of help. She truly exemplifies our hospital's mission."

Not just a cancer survivor, Pham is athletic and determined to stay in shape. Several times every day, she climbs the 12 flights of stairs to the hospital pharmacy where she works. She also goes swimming after work.

As the first person in her family to go to college, Pham's interest in how drugs affect the body caused her to study pharmacy. She explained how her parents' questions about medications led her to the pharmaceutical field.

"They would ask, 'my symptoms are over, why do I still have to take the medication?' By pursuing a career in health care, I can provide advice to my family, take care of myself and give advice to other people," she said.

Pham also loves traveling. One of the books she owns is "1,000 Places to See Before You Die." Her dream is to travel the world to explore the vast beauty and diverse cultures.

"I just live my life one day at a time and enjoy every moment I have in my life," she said. "To me, everything happens for a reason. That's keeping me positive."

Class of '57 reunion



Francisco Gallegos and Leland Brollier, accompanied by his wife Gayle, received mid-day tours of the current School of Pharmacy building and its future site at the Anschutz Medical Campus in mid-May. In addition to recalling pharmacy school in the last half of the 1950s, the two were taken to lunch by the dean and caught up with the current status of the school's varied programs and pending moves to the new campus. Gallegos also attended 50th reunion activities on the Boulder campus where he reminisced with John Wiseman during meals, tours and the Boulder campus commencement march.

Health care Careers Web site launched

Western Healthcare Alliance announces a new career Web site, Rural Health Careers Colorado (www.rhcco.org). RHCCO was developed to assist rural health care providers with the recruiting efforts, and was uniquely designed to bring providers and professionals together via the internet. This Web site lists clinical and non-clinical opportunities at rural Colorado hospitals, their affiliated clinics, and other health care facilities.

The Rural Health Careers Colorado Web site offers job seekers the opportunity to search for positions based on type of position and location. This site also allows job seekers to post their resumes online, offers helpful links, and is free to use.

Hospitals across Colorado have open positions available for physicians, nurses, lab technicians, and more. Once placed, professionals will discover the benefits of working in a rural community, including short commutes, better quality of life, and close and easy access to the scenic outdoors.

News from Classmates

Charlie Peterson, Class of '55, wrote to say he gave up his pharmacy license after 48 years, but still keeps his hand in a real estate deal now and then. He and Susan visit with their three children and six grandchildren and maintain their home at 8878 Red Mountain Rd, Livermore, CO 80536. They can be reached by mail, phone, 970-493-2151, and by e-mail at Peterson@frii.com .

Leland Brollier, Class of '57, is living in Colorado Springs where he and Gayle retired in 1997. His career included retail pharmacy work, but he found his niche in the hospital pharmacy setting and consulting. From the Springs to Burlington, Salida and Canyon City, to name a few, he worked in the Colorado regions hospitals and established several hospital systems as well as setting up pharmacy systems for nursing homes and their drug therapy monitoring. Retirement allows for lots of traveling while taking advantage of their time-sharing options.

Francisco Gallegos, Class of '57, is living in Denver after retiring as a staff pharmacist with the VA Medical Center. Between graduation and his return to Colorado, he earned a master's in public health in health administration at the University of California at Berkeley, in 1976.

John Wiseman, Class of '57, is living in Ann Arbor, Mich. He is a professor emeritus of the University of Michigan's Department of Chemistry. His career included three years in public health, a PhD in chemistry earned at Stanford in 1964, and a faculty career at Michigan from 1966-2001. He and his wife Carolyn celebrated 50 years of marriage in 2006.

William Blade, Class of '58, and his wife Louise are living in St. Louis. He retired as a chemist from Petrolite, in 1997 and then from part-time analytical lab work at Jost Chemicals in 2003. He tries to keep up with new medications via the internet. Bill and Louise have a daughter in St. Louis and a son

with his family in Chicago. He can be reached at: 314-821-0266, billblade@copper.net or 10 Highland Pl., Glendale, MO 63122.

Hugh Kabat, PhD, 1961, has a new address in Oregon where he's closer to family. He may be contacted by phone 503-222-5242, e-mail hkabat@comcast.net, and 4815 SW 1st Ave., Portland, OR 97239.

Lisa (Kranak) Shaver, Class of '98, and her husband are pleased to announce the birth of their first child, Tyson Shaver, in January 2007. Lisa can be reached at: 303-949-2561, clshaver@comcast.net or 12656 W. Mississippi Ave., Lakewood, Colo. 80228.

Jennifer Bingham Willis, BS '99, PharmD 2000, and her husband Billy had a baby girl on April 4, 2007. Their first child, Jessica Raine Willis arrived at a healthy 8lb, 3oz under North Carolina blue skies. Jennifer can be reached at jibingham@peoplepc.com.

In Memoriam -

The sister-in-law of **James Morgan**, class of '51, notified us that he passed away in September of 2005, in Greeley, Colo.

The widow of **Kenneth Leroy Skinner, Jr.**, Class of '52, notified us that he passed away in January of 2006.

A niece of **Richard Hart**, Class of '52, notified us that he passed away at his Denver home, March 10, 2006. He was born in Memphis, Tenn., and earned a bachelor's degree from the University of Tennessee. After serving in the Army during WWII, he attended the School of Pharmacy. He remained in Colorado following graduation until his death, working primarily at the Seventh Day Adventist Hospital (Memorial Hospital) in Boulder. He never married, but is survived by six nephews and nieces.

Mark Meister, one of our P2 students, passed away in March after a battle with melanoma.

Avoiding self-deception can enhance your pharmacy career

By Jenni Prosser
Office of Public Relations

Speaking at the School of Pharmacy's annual Marguerite C. Holden Seminar, Bruce Berger, PhD, RPh, discussed techniques for dealing with difficult patients in his lecture about self-deception.

Berger, professor and head of the Department of Pharmacy Care Systems at Auburn University, explained how every problem in any relationship, whether between spouses, students, faculty or patients, can be traced to issues of objectification and self-deception.

Viewing a person as an object can allow us not do right thing. We then seek justification for our actions, a process Berger refers to as self-deception. Through this, we ignore reality or "become blind." This behavior has damaging effects on us and others, leading to unnecessary bursts of anger and other negative actions. By becoming more aware of self-blinding and avoiding this process we can have healthier interactions with others.

Through a series of examples, Berger showed how always treating a person as a person, regardless of how they are acting, will save energy and improve relationships.

Berger believes that by considering what our personal source of truth would do in difficult situations we can find guidance needed to appropriately treat others. Berger cited religious beliefs as his source of truth.

He related a story of an angry student who, upset with the grade he received on a paper, threw the document at Berger and cursed at him. Berger explained how because of his experience studying self-deception he was able to see that the student was stressed and not take the incident personally. He then told the student he would not tolerate his attitude but was willing to discuss the grade if he calmed down.

After explaining the concept through a number of examples like these, both hypothetical and based his own life experiences, Berger applied the concept to the pharmaceutical field. He expressed the frustrations pharmacists may experience when patients fail to follow their medication regimen or other instances that may cause aggravation and how pharmacists must not let these issues affect the treatment the patient receives.

"If we treat our patients as objects rather than people, might we decide



Bruce Berger (L) gave tips on handling difficult patients in his schoolwide talk. With him are Marguerite Holden and Jack.

it means they don't deserve as much care?" Berger asked the audience. He also described another problem that develops through self-deception as the concept of "boxes" or states of mind that result from not seeing a person as a person. Berger said he goes into his box less frequently after studying self-deception. However, he still occasionally visits his "I'm-better-than box," which leads him to feel underappreciated and self-important. This prevents him from seeing the reality of a situation and having healthy relationships with others.

"If I'm in the 'I'm-better-than box', am I open to what other people have to say? Am I open to suggestion? Am I open to hearing there may be a better way of doing this? Probably not," he said.

Berger warns against getting stuck in the better-than box, and becoming blind to others' humanity. He believes that by truly treating everyone as a person and not an object, we all can become better people, as well as better pharmacy professionals.

What's new at the School of Pharmacy?

The School of Pharmacy is experiencing a number of major transitions that will change how and where pharmacy education and research will be conducted.

In July 2006, a new chancellor was appointed at the University of Colorado at Denver and Health Sciences Center; in December 2006 a new dean was appointed at the school, and by 2010 the school will be relocated from the Ninth Avenue campus into a new pharmacy building on the Anschutz Medical Campus in Aurora.

To help pharmacy students adjust to these transitions, UCDHSC Chancellor M. Roy Wilson, MD, MS, and School of Pharmacy Dean Ralph Altieri, PhD, spoke about the changes at a lecture held February 23.

The chancellor stressed the value of approaching pharmacy and other areas of medical research as interdisciplinary work. As an exam-

ple, and to highlight the importance of working with the Downtown Denver campus, Wilson talked about the research surrounding the cardiovascular drug BiDil. Studies found that the drug was no more effective than the standard medication, until the researchers looked at the participants in groups rather than the population as a whole. They discovered it was effective with the African American subset and so BiDil became a FDA-approved drug as a result. This research highlighted the role that anthropology - a field of study at the Downtown Denver campus - should play in the pharmacy profession.

"There's a whole concept of pharmacogenetics and how a population's response to medications may differ within groups. I think to really understand, you have to understand the origins of people; you have to understand anthropol-



SOP Dean Ralph Altieri talks with students at a reception held after his presentation on transitions at the school.

ogy as well as genetics. That's just one example of how being a consolidated university can benefit your education," Wilson said.

"The way we practice health care is going to change. It's in transition now. I strongly believe that our academic health center can be a leader in the way that health care will be delivered."

Dean Altieri discussed the accomplishments of the School of Pharmacy and its position at the forefront of pharmacy schools in the country. He listed the important roles of the faculty on a national and international scale, including writing textbooks, chairing large organizations and earning substantial grant funding.

"Every year our faculty ranks among the top pharmacy schools in the country and in one of the top two places at the Health Sciences Center for the amount of National Institutes of Health funding we receive compared to other basic science departments on the campus, including all of those in the medical school," said Altieri.

Altieri discussed the numerous achievements of pharmacy students and some of their achievements on both the local community level, providing pharmacy care services through their various organizations, and on the national level through leadership activities in national pharmacy associations, as well as the importance of their involvement in programs in each of the school's mission areas: education, research, service and clinical practice.

He talked about developments at the school from the time he joined the faculty in the mid-1990s, and how those compare to the changes happening now. As dean, Altieri wants to increase student

engagement in the decision making processes at the school and intends to increase involvement with the school's alumni.

Altieri described how all of these components affect the future of the school and its role on the new campus, while expressing his excitement about the transition.

The ALSAM Foundation has committed \$10 million toward construction of a pharmacy school building on the Anschutz Medical Campus, to be completed in 2010. The building is projected to cost \$42 million. Following completion of the building, the school will be renamed the Skaggs School of Pharmacy and Pharmaceutical Sciences. ALSAM is the Skaggs family's philanthropic foundation. Sam Skaggs has been a benefactor of the school for 18 years and provided the lead gift for the current pharmacy school building on the campus at Ninth Avenue.

The new building will be located at the north end of the campus across from the Colorado Science + Technology Park at Fitzsimons, thus providing unique opportunities for faculty and students to work with biotech companies in drug development.

"At the School of Pharmacy, we are in an extraordinarily advantageous position from which we can bridge the research that goes on at the Health Sciences Center with emerging technologies - offering much for our faculty as well as our students who are interested in drug development and clinical trials," said Altieri.

The journey ahead will be an exciting time for pharmacy students and faculty with new opportunities for the school to continue as one of the premier schools of pharmacy in the country.

Recognizing a job well done



Pharmacy school staff enjoyed a family-style Italian feast at a luncheon held in their honor on May 4 at Romano's Macaroni Grill in Cherry Creek. The guest of honor, Dr. Louis Diamond, spoke at the event and graciously thanked the staff for their contributions to the School of Pharmacy's success while he served as dean.

Many opportunities exist to profoundly impact patient care

By Kenna Bruner
Office of Public Relations

How clinical pharmacists are impacting patient care was the subject of a school-wide talk presented in April by the 2007 Dean's Distinguished Lecturer Dennis Helling, PharmD, FCCP, FASHP.

Helling is executive director of Pharmacy Operations and Therapeutics for Kaiser Permanente in Denver and an adjunct professor at the School of Pharmacy. To illustrate his point, Helling gave examples from the perspective of an integrated health care delivery system.

"One of the most important aspects of the work that pharmacists do is to help patients understand their medications and how to use them safely," he said.

Kaiser Permanente is the largest non-profit health maintenance organization in the United States and serves more than 8 million members nationwide with 500,000 members in the Colorado region.

Visionary leadership and implementation of innovative initiatives transformed the pharmacy department into a role model in pharmacy practice recognized nationally and internationally for emphasizing expanded roles for pharmacists.

Pharmacists at Kaiser provide clinical pharmacy expertise in a variety of areas, including primary care, diabetes management, coronary artery disease, travel medicine, infectious diseases, cardiology and rheumatology.



Dennis Helling is presented with a token of appreciation for his lecture.

They function as part of a multi-disciplinary team consulting in drug therapies; developing prescribing guidelines; and educating patients about their medications. In addition to a PharmD degree and residency training, board certification

is required for clinical pharmacy specialists.

In order to free pharmacists' time for patient care, the Pharmacy Automated Refill Center (PARC) was established in 1999. It is an automated centralized refill center where 40 percent of the four million prescriptions at Kaiser are filled. PARC utilizes bar codes, radio frequency transmitters and drug imaging to fill prescriptions. Pharmacists perform clinical screening and provide final checks on prescriptions filled through



Dennis Helling, PharmD, gave a school-wide presentation on pharmacists impacting patient care.

PARC. The 10-year-old system currently fills 8,000 prescriptions in an eight-hour shift. New technology scheduled to be installed this summer will have the capacity to fill 20,000 prescriptions in the same amount of time.

"Because of the increasing volume of prescriptions across the United States, I can't build pharmacies big enough or hire enough pharmacists to fill all those prescriptions the traditional way," said Helling. "Are jobs being lost? No. We still need to take care of drug distribution, but by using technology whenever possible, we can keep pharmacists in contact with patients, impacting their care."

The Clinical Pharmacy Cardiac Risk Service was developed in 1998. Twenty pharmacists care for 11,000 patients. More than 70 percent of these patients are less likely to die from cardiac related complications, with an annualized cost savings of \$3 million from keeping patients out of the hospital with repeat heart attacks or procedures.

Established in 1996, the Clinical Pharmacy Anticoagulation Service is staffed by 20 pharmacists managing 7,000 patients. The impact is that patients are 40 percent less likely to suffer bleeding, clotting or fatal complications; one Warfarin complication is prevented every day.

"I can assure you that patient satisfaction with these services is well above 90 percent," said Helling. "Patients love being able to talk to their clinical pharmacist. My intention today was to inspire and show you that pharmacists can significantly impact your patients. It's all about making a difference."

Seeing double



LaToya Jones Braun, PhD, assistant professor, Department of Pharmaceutical Sciences, and her husband Chad announced the birth of their twins on May 22, 2007. Finn Alexander Braun (L) was a minute ahead and a pound heavier than his sister Muireall Bonnie Braun (R).

Learning about addiction as a disease

Pharmacy students Jamela Urban and Dimtri Cohen attended the University of Utah School on Alcoholism and Other Drug Dependencies in June. They participated in workshops on the pathophysiology of addiction, chemical dependency and diversion among health care professionals, treatment and counseling, pharmacy ethics and law, group therapy experience, the 12-step recovery program, and a case study of a recovering pharmacist.

During the week-long school, they had the opportunity to hear stories of pharmacists and other health professionals who have battled the disease of addiction and to learn how to effectively help someone in need.

A hurdle the two students faced was overcoming misconceptions about the terms "abuse" and "addiction." Abuse refers to intentional misuse; addiction refers to pathological dependence, a true medical

disease.

The school provided information on how to assist pharmacists in their recovery process and ways to educate pharmacists, pharmacy students and other health care providers about chemical dependence.

Urban and Cohen will be sharing their new knowledge with the incoming P1 students. They want students to really understand what chemical dependency is, how to recognize the symptoms and that there is help available.

"We learned about the physiological processes of addiction as a disease," said Urban. "Some people have a predisposition to becoming an addict. Nobody chooses to get a disease. The skills I learned there gave me the support to help my patients with drug and alcohol addiction."

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