UNIVERSITY OF MISSOURI-COLUMBIA

Family & Community MEDICINE

Spring 2003

MU HAS BEEN A PIONEER IN CURRICULUM REFORM WITH

PROBLEM-BASED LEARNING

TRAINING STUDENTS TO PRACTICE MEDICINE in an ever-changing health care environment is a challenge, but the University of Missouri has been able to meet the challenge — thanks to the insight and leadership of Michael Hosokawa, EdD.

"Medical education is fun because the students are so bright; they can learn without being taught," he says. An internationally recognized specialist in medical education, Dr. Hosokawa has played a key role in initiating innovations that have made MU's School of Medicine a pioneer in curriculum reform.

The movement to update the way students learn, especially during their first years of school, began in 1989, when then Dean Lester Bryant described MU's curriculum as a "perfectly preserved 1950's curriculum." Although many faculty were saying, "If it ain't broken, don't fix it," in Dean Bryant's mind, an outdated curriculum was unacceptable.

Dr. Hosokawa understood his concerns. "We weren't training students to think and practice like doctors," he explains. "When a physician examines a patient, he/she begins an information-gathering, problem-solving process. At that time, our curriculum wasn't teaching students how to problem solve."

Under Dr. Hosokawa's leadership, a dedicated group of nearly 70 basic sciences and clinical faculty accepted the charge of revamping the curriculum. Their goal: To develop a curriculum that required problem solving, lifelong learning, informatics, and the application of knowledge and skills. "This was very different than our former curriculum that focused on memorization," Dr. Hosokawa says. "Biomedical science and clinical care change so rapidly that memorizing facts is not adequate preparation for future physicians."

Modernizing physician education was a complicated project, Dr. Hosokawa says, and resistance from faculty who opposed the change made the project even tougher. He admits that without the support of Dean Bryant and his friends in Family Medicine, many of whom played a key role in developing the new curriculum, he probably would have given up.

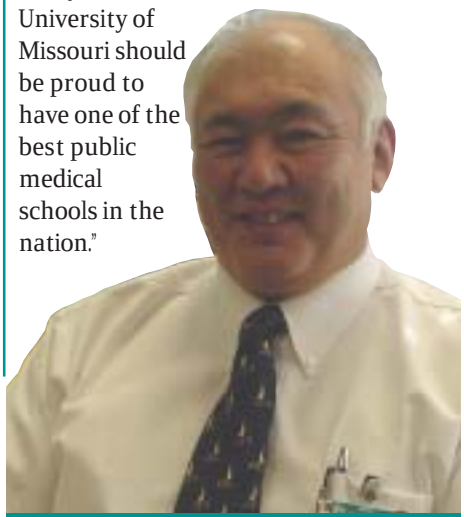
In fall of 1993, problem-based learning was implemented at MU — a curriculum that offered a new approach to learning by integrating basic sciences into case studies. Innovations included small-group teaching, computer-simulated patients, open-book exams, faculty as mentors, and clinical training in the first year. Students responded favorably to the new curriculum, describing it as an exciting, dynamic, and fun way to learn. Some faculty reserved judgment, however, wanting proof that problem-based learning worked.

"When our first board scores came, there was an improvement over previous years, but the doubters knew this was just an artifact," Dr. Hosokawa says. "The next year, when we scored above the national mean for the first time, a few doubters changed their minds. Now that Missouri is significantly above the national mean – and some 80 percent of our students get their first or second choice in residency match, most faculty are supportive and take pride in MU's pioneering problem-based curriculum."

So far, 50 medical schools have adopted some form of problem-based learning, and when compared to most of these schools, Dr. Hosokawa says, Missouri is one of the success stories. He credits this success to several factors: A dean who gave 100 percent support to the change; an expenditure of almost $1.2 million in classrooms, equipment, and learning resources; and a group of faculty that was enthusiastically committed to the project. It was a worthwhile investment of our time, energy, and funds, he says, because today, MU's medical school is known worldwide for its curriculum.

While Dr. Hosokawa likes working with medical students and appreciates the opportunity to impact medical education, he also values his role in the family medicine fellowship, a program that he and Steven Zweig, MD, MSPH, co-direct. "Training physicians for careers in academic medicine is rewarding work," he says. "The fellows are always highly motivated and eager to learn."

Learning is strong because it is a priority at Missouri, but not every university shares MU's commitment to medical education, says Dr. Hosokawa. "I'm afraid medical education is being marginalized because of financial problems facing many academic medical centers. We at University of Missouri should be proud to have one of the best public medical schools in the nation."



MICHAEL HOSOKAWA, EdD
Professor, Family and Community Medicine
Associate Dean for Curriculum

To learn more about MU's medical school curriculum, please e-mail Dr. Hosokawa at hosokawam@health.missouri.edu

Chair's Message

WE ARE LIVING IN DIFFICULT TIMES. In health care, unfamiliar ideas about the role of physicians, shifts in medical student interests, and the ever-changing financing of medical care threaten to distract and keep us off balance. The University of Missouri, like most health care institutions, is undergoing literally unprecedented budget cuts. Even these concerns pale in comparison to the events currently unfolding in the Middle East.

Given that these are important but distracting events, how can we continue to be successful in patient care, education, research?

There are many ways to avoid losing our way in turbulent times. I think focus and commitment are worth highlighting. As you read through the pages of this newsletter, note the success of faculty, residents, and graduates and how their ability to focus on priorities and maintain a commitment to their personal mission has helped them succeed.

Focus and commitment helped Dr. Ringdahl and our department achieve success with a three-year strategy to improve our residency. The result was that we filled in the match this year — something accomplished by only 76 percent of residency programs this year.

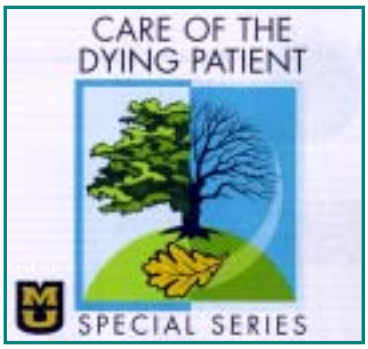
I hope that attention to focus and commitment will help you deal with some of the turbulence of our difficult times.

HAROLD A. WILLIAMSON JR.
Professor and Chair

FAMILY MEDICINE

FACULTY FOCUS

FAMILY AND COMMUNITY MEDICINE FACULTY



made significant contributions to "Care of the Dying Patient," a two-part series published in *Missouri Medicine*.

David Fleming, MD, a MU associate professor of health management and informatics and internal medicine, served as guest editor of this special series. He assembled a panel of experts from the School of Medicine to write articles on specific topics relating to end-of-life care. Clay Anderson, MD, assistant professor of hematology and oncology, served on this panel along with family medicine physicians Steven Zweig, MD, MSPH, professor and associate chair; David Mehr, MD, MS, associate professor; David Cravens, MD, MSPH, assistant professor; Scott Shannon, MD, post doctorate fellow; and Paul Tatum III, MD, a former MU family practice resident and fellow who currently holds a faculty position at the University of Colorado Medical School.

Series I articles, published in the Nov/Dec 2002 issue of *Missouri Medicine*, included:

- *The Endless Challenges of End-of-Life Care* (Fleming, D)
- *Pain Relief at the End-of-Life: A Clinical Guide* (Anderson, C)
- *Relieving Pain: What are Today's Ethical and Legal Risks?* (Fleming, D)
- *Questions and Answers about Hospice: A Guide for Missouri's Physicians* (Zweig, S)
- *Spirituality and End-of-Life Care* (Shannon, S; Tatum, P)

Series II articles, published in the Jan/Feb 2003 issue of *Missouri Medicine*, included:

- *The Opportunities of Caring at the End-of-Life* (Fleming, D)
- *Relieving Non-Pain Suffering at the End-of-Life* (Cravens, D; Anderson, C)
- *Cultural Sensitivity in End-of-Life Discussions* (Fleming, D)
- *Helping Older Patients and their Families Decide about End-of-Life Care* (Zweig, S; Mehr, D)
- *The Burden of Caregiving at the End-of-Life* (Fleming, D)

Missouri Medicine is a bimonthly medical journal published by the Missouri State Medical Association. "Care of the Dying Patient" is the first coordinated and themed series of articles in the journal's publishing history.

WE'RE PROUD TO WELCOME NEW FAMILY MEDICINE FACULTY:

JOSEPH LEMASTER, MD, MPH, is an assistant professor in the department of family medicine. Before coming to MU, Dr. LeMaster completed his master's degree and a National Research Service Award Fellowship at the University of Washington in Seattle, and he spent 10 years overseas directing public health and research projects in Nepal.

A physician at Green Meadows Family Practice Center, Dr. LeMaster's clinical interests include diabetes, foot complications of diabetes, and geriatrics. In addition to patient care and teaching, he will be conducting research focused on exercise and its effects on chronic disease processes.

JOYCE WOOD HARTER, RN CS, MSN, FNP, serves as clinical instructor in the department. A family nurse practitioner, Ms. Harter is on staff at Callaway Physicians, Fulton, MO. In addition to her duties at the Fulton clinic, Ms. Harter directs William Woods College Student Health, provides patient care at nursing homes in Callaway County, and teaches family practice residents.

Ms. Harter's nursing career spans nearly 25 years. She came to Columbia in 1980 and completed her education at MU. Her interests include student health, geriatrics, and women's health.

DEPARTMENT UPDATES

After a two-year study, the **Institute of Medicine Gulf War and Health Committee** released its report on the specific health effects that have been associated with insecticides and solvents used during the 1990-91 Gulf War. "Our exhaustive examination of the literature produced no unexpected findings," said committee chair **JACK COLWILL, MD**, professor emeritus of MU Family and Community Medicine. "While we would like to have more definitive answers about many of these chemicals and their possible effects on health, in most cases the evidence is simply not strong enough or does not exist." Family Medicine Professor **MICHAEL LEFEVRE, MD, MSPH**, also served on this 40-member IOM committee. Copies of their 632-page report will be available later this year from National Academies Press (http://www.nap.edu).

PAMELA MULHOLLAND, MHA, has been named administrative manager for MU Family and Community Medicine. Since earning her graduate degree at the University, Ms. Mulholland has held several positions in health care administration. Most recently she's worked at Harry S Truman VA Hospital and MU Health Care, where her jobs have focused on practice management. Ms. Mulholland replaces **SANDRA SCHERFF, MPA**, who retired after 20 years in the department.

FAMILY PHYSICIAN FOCUSES ON

BREAKING DOWN BARRIERS

SO HER PATIENTS CAN ACCESS HEALTH CARE

MAKING A DIFFERENCE … it's the goal that motivates Debra Howenstine every time she sees a patient. And when she achieves this goal, she says, she is incredibly gratified. So are her patients.

Dr. Howenstine joined MU's Family Medicine faculty and accepted the role of medical director at the Columbia Boone County Health Department in 1991. Her job there gives her many opportunities to make a difference.

Until last fall, the health department provided a primary clinic for people without options for health care. To qualify, patients had to be substantially below poverty level and have no insurance. In addition to financial restraints, patients faced other barriers that limited their access to care – barriers relating to language, transportation, substance abuse, and mental health, says Dr. Howenstine. Because of these barriers, the clinic staff provided special services and follow up care to make sure health care was successful.

DEBRA HOWENSTINE, MD
Assistant Professor

"We realized that our assistance and what we knew in terms of medical care wouldn't do any good if the patient couldn't follow our instructions," she says. "So the challenge we faced was not just to figure out what was needed medically but also how to tailor it so it would work, given the patient's unique situation and resources."

Even though the health department's clinic population was small, it included a group of people who really needed a doctor like Dr. Howenstine - a doctor willing to go the extra mile for her patients. That's why when city/county officials decided to close the primary care clinic last October, and Dr. Howenstine moved her practice to the Family Health Center (FHC), she made sure her patients could follow her there.

Now, most of her clinic time is spent at FHC, a federally funded clinic for underserved patients in mid-Missouri. However, Dr. Howenstine retains her administrative role at the health department, and one of her primary responsibilities is to oversee the special programs and population-based services offered there.

"We provide immunizations, TB control, HIV testing and counseling, STD testing and treatment, family planning services, and follow-up on communicable diseases," Dr. Howenstine explains. "We also offer many resources for Spanish-speaking people in the community."

When Dr. Howenstine first came to Columbia for medical school in 1984, she knew no one who spoke Spanish. But the population has changed immensely since then, she says. Today, 30 percent of her patients are Spanish-speaking; Dr. Howenstine speaks Spanish everyday. She feels strongly connected to the Hispanic population and credits her family for helping her develop these connections.

"When I was growing up, I traveled several times to Mexico and South America with my parents; they were volunteers in a Quaker social service group," she says. "These were meaningful experiences for me, so after high school I went back with the group – but that time I was a participant, not the child of a leader."

Dr. Howenstine is able to find meaning in all of her experiences as a family medicine faculty member. She likes teaching medical students and developing curriculum on topics she thinks are important, such as domestic violence, child abuse, and cross-cultural communication. She enjoys working with residents on the community health rotation. But most of all, she values her role as a family physician and the rewards it provides.

"My decision to pursue medicine did not grow out my interest in biochemistry, but rather my strong desire to contribute and make a difference in peoples' lives," she explains. "I feel incredibly fortunate and rewarded to have patients who really benefit from my assistance."

FIRST YEAR RESIDENT SEEMA DIDDEE IS COMMITTED TO

Easing the Distress and Pain of her Patients

FIRST YEAR RESIDENT SEEMA DIDDEE WAS born, raised, and educated in India, and for five years, she practiced medicine there, specializing in obstetrics, gynecology, and laparoscopic surgery.

SEEMA DIDDEE, MD

Dr. Diddee loves medicine. She can't imagine doing anything else, so of course she planned to continue her medical career when she and her husband moved to the United States two years ago. After passing her licensing exam, Dr. Diddee wanted to pursue a new specialty, one that offered a more diverse patient population and wider range of health care concerns - plus opportunities to do OB. She decided on family medicine and enrolled in MU's residency program, confident it would provide a comprehensive learning experience.

Residency is going well for Dr. Diddee. She appreciates the nurturing attitude of faculty and values the diversity of her patients and their health care needs. And so far, adjusting to the demands and intensity of intern year has not been a problem for her. "In India, I trained in a hospital that delivered 14,000 babies a year," she says. "I worked 12-hour nights, so I'm used to going long hours with no sleep."

What Dr. Diddee is not used to, however, is the vast amount of paperwork required of U.S. doctors. She complains about being able to spend only 10 minutes with a patient, but then 15 minutes on the patient's paperwork. "The health care system in this country is designed such that you really have to cover yourself against malpractice," she explains. "In India, you don't worry a lot about patients coming after you for mistakes."

While malpractice suits are not a big concern in India, limited resources are, she says. With access to current textbooks and journals, U.S. doctors can learn about new evidence that may impact their medical decision-making. "Evidence-based medicine is the ideal way to practice," she says. "But if you work in a developing country, it's not easy to implement."

Health care in India vs health care in the U.S. - the systems may be different, but patients are pretty much the same, says Dr. Diddee. "Patients want an empathetic doctor who listens and really cares about their problems," she explains. "And when you realize you've made a difference in a patient's life, the rewards are always big, no matter where you practice."

Dr. Diddee is excited about the next two years of training. "Practicing medicine is an ongoing learning process," she says. "Every patient teaches you something new, and every faculty member offers a different perspective on medicine."

THE REWARDS OF FAMILY PRACTICE

Family physician Douglas Bradley enjoys his community, his practice, and especially his patients

LIFE AS A FAMILY DOCTOR IS FULFILLING FOR Douglas Bradley, a former MU resident who for the past 20 years has lived and practiced in Belton, MO. Family medicine, he says, has been a good fit for him.

While Dr. Bradley considered several factors before deciding to specialize in family medicine, it was the doctors he interacted with as a medical student at MU who had the greatest influence on this decision. "I saw a lot of myself in the family medicine faculty," he says. "They became role models for the kind of doctor I wanted to be and the way I wanted to practice." And later, after he enrolled in MU's family practice residency, these same doctors became his friends.

Residency was a more meaningful experience for Dr. Bradley because of the relationships he developed during his training. The department became like home to him, he says. In fact, he still has strong bonds with many of the faculty.

By the time he graduated, Dr. Bradley felt prepared for family practice. His Fulton experience taught him to function autonomously, he says, and it helped him gain confidence in his everyday practice decisions. That's why when Belton needed a family doctor twenty years ago, Dr. Bradley welcomed the opportunity.

There were real benefits to practicing there, he says. Belton, a suburb just 30 miles south of Kansas City, is where he and his wife grew up, so he already had ties to the community. Plus during his residency, a hospital was being built in town, and this meant there'd be a need for more doctors in the area.

Looking back, Dr. Bradley feels like he was on the ground floor of big changes in Belton's health care community. The town got its first hospital and the number of doctors has more than doubled since he began practicing there in 1983. Today, he practices with two family physicians and a nurse practitioner, and their group serves nearly 14,000 patients.

As Dr. Bradley's patient population has grown, his practice has evolved, he says. "When I started, my practice was 45 percent pediatrics; now that's down to 25 percent. Today I spend most of my time caring for an older group of patients."

Time management is his personal demon, says Dr. Bradley. He struggles as he tries to keep up with paperwork that is ever increasing, and he sometimes feels stressed by changes in the health care system that impact the way he practices medicine. Despite these challenges, Dr. Bradley has no reservations about who he is or what he's doing.

"As a family doctor, every door you open is a new experience; each day is filled with different problems," he says. "And what happens within the four walls of the exam room, the interactions that occur between doctor and patient – that's where the rewards are."

DOUGLAS BRADLEY, MD

Family THE MEDICINE MAN

JOHN SEARS, MD - 1998 Family Practice Resident
Twenty miles from home at Coal Mine Canyon, AZ

BICYCLE MECHANIC. AUDIOVISUAL TECHNICIAN. RETINA SPECIALIST. John Sears pursued several career interests before deciding to go to medical school at age 39. Today, he is a family physician, and since finishing residency in 1998, he's worked at the Tuba City Indian Health Center. Dr. Sears couldn't be happier. He's found the job he'll keep until he retires.

Located in northeast Arizona, Tuba City, population of 8,000, is home to Navajo and Hopi Indians. The health center there is staffed by 40 physicians and includes a continuity clinic, a walk-in clinic, and a 70-bed hospital. Patients drive an average of 50 miles for routine care, some even farther for inpatient service, because medical care at the Tuba City Health Center is free to Native Americans.

Serving this patient population is complicated, Dr. Sears says. To be effective caregivers, physicians must know and respect the customs and beliefs that are such a strong part of the Indian way of life. In very traditional cultures, the medicine man is doctor, he says; members of these tribes may come to us, but only if the medicine man fails.

"Their major goal is living in harmony, so when you try to give them medicine, it's like throwing marbles into the machinery," Dr. Sears explains. "I have to convince them that treatment will restore harmony, and this is difficult, especially if the patient doesn't speak English."

And many of his patients don't speak English. "Breaking the code," he says, is one of the biggest challenges he faces as an IHS physician. "We have designated translators in the clinic," he says. "But on the inpatient side, it's more complicated, particularly if we're caring for an elder who's facing end of life."

In spite of the challenges, Dr. Sears can't imagine practicing anywhere else.

"I get to live in the Painted Dessert, and as a crow flies, I'm only 30 miles from the Grand Canyon. The climate is great, and the environment is beautiful," he says. "I enjoy learning and living the Indian culture and feel fortunate to serve a population that needs and truly appreciates the care I provide."

In the past 20 years, MU family practice residents and medical students have demonstrated their commitment to improving health care for underserved populations by serving the IHS.

TOTALS THAT MAKE MU FAMILY MEDICINE PROUD:

11 RESIDENCY GRADUATES have served the IHS for a total of 80 YEARS. These family physicians have provided health care at 10 IHS SITES located in 5 STATES.

MU Family Medicine provides fourth-year medical students an opportunity to serve the IHS in a four-week offsite externship. In the past 15 years, nearly 100 students have participated in this learning experience.

Family practice residency graduates who have joined the IHS:

RESIDENT	CLASS	IHS SERVICE	DATES
HOWARD HAYS	1985	16 years	1987 - present
& AUGUSTA HAYS	1987	16 years	1987 - present
IHS Sites: Crow Creek Service Unit, SD; White Earth Health Division, MN			
ALAN GILL	1990	4 years	1990-1994
IHS Site: Blackfeet Community Hospital (Browning), MN			
STEVEN HOLCOMB	1992	4 years	1992-1996
IHS Site: Menominee Tribal Clinic (Keshena), WI			
HOLLY BENEDICT	1992	2 years	1992-1994
IHS Site: Whiteriver Service Unit, AZ			
RICK WILLIAMS	1992	2 years	1992-1994
IHS Site: Whiteriver Service Unit, AZ			
ANITA HOLTZ	1993	10 years	1993 - present
IHS Site: Crownpoint Health Care Facility, NM			
ANN HOSMER	1993	6 years	1993-1999
& NEVILLE DAVIS	1993	8 years	1993-2001
IHS Sites: Crownpoint Health Care Facility, NM; Gallup Indian Medical Center, NM			
MARY BETH McCOY	1996	7 years	1996 - present
IHS Sites: Keams Canyon Service Unit, AZ; Parker Indian Health Center, AZ			
JOHN SEARS	1998	5 years	1998 - present
IHS Site: Tuba City Indian Medical Center, AZ			

WHY family practice graduates value their work in the IHS:

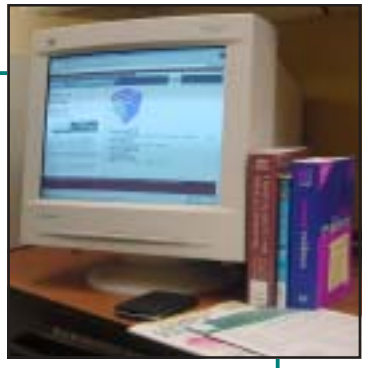
"It's fun; we love the work, the people, and the experience."
"I am able to use my skills and knowledge to practice full spectrum family medicine."
"In the IHS, it's all about patients and their needs — not about making money."
"I've always had a strong interest in delivering health care to underserved populations."
"The IHS system is unique and professionally challenging ... the culture is fascinating."
"As an IHS physician, I learned about the importance of trust in the healing process."

ABOUT THE Indian Health Service...

an agency within the Department of Health and Human Services, provides comprehensive health care services to American Indians and Alaska Natives. For more information about the IHS:
http://www.ihs.gov

EVIDENCE-BASED MEDICINE (EBM)

IT'S NOT NEW ... SO WHY THE SUDDEN BUZZ?



EBM was introduced a couple decades ago by a group of health care professionals, led by David L. Sackett, MD. Critical of the empirical approach to medicine, the group thought it was no longer good enough for physicians to base clinical decisions solely on what they knew or what they'd been taught. They recommended a more valid approach to medicine, one that incorporated current and relevant evidence in clinical decision-making.

While Sackett's approach works well in the inpatient setting - where physicians have more time to search for the latest evidence, incorporating EBM into private practice has been a challenge for family physicians. Their patient population is large; their information needs are diverse, and the volume of medical literature published is huge. To keep up with this growing body of information is impossible for clinicians to do on their own.

But a movement initiated in the early '90s, primarily by physicians in academic medicine, is helping clinicians apply the latest scientific information in patient care. Recognizing the value of relevant evidence and how it can impact clinical outcomes, these physicians have collaborated to deliver new and useful knowledge to clinicians. Their efforts include reviewing and evaluating the large volume of medical research - filtering it for the clinically relevant - and then creating resources and tools that deliver this new information to clinicians. Technology has been a driving force in the EBM movement, providing physicians more options and quicker access to the latest scientific evidence. Today, as the number of family physicians using EBM grows, so does the number of patients benefiting from better health care decisions.

"Medicine in general is improved when physicians use the best science available in their practice," says James Stevermer, MD, MSPH, assistant professor at MU Family and Community Medicine. "But that doesn't mean you simply take evidence and turn it into a guideline. Clinicians must also take into account the local situation, available resources, and patient preferences - then decide whether to follow the guideline."

A 1995 MU resident graduate, Dr. Stevermer says that throughout his training he learned by example about the evidence-based approach to medicine from faculty role models. "Our faculty have an excellent knowledge of EBM and are committed to using it," Dr. Stevermer says.

They're committed to teaching it, too. MU medical students are introduced to EBM in their first year of school, and later, during the family practice clerkship, they learn more about EBM and have opportunities to apply it. In addition, an elective on evidence-based approaches to medicine is offered to fourth-year students.

EBM training is strong in MU's family practice residency. Residents learn from attendings how to apply the latest scientific evidence in their clinical decisions. They learn, with mentoring from faculty, to critically review and write about new research by creating POEMs *(see below)*. Residents later present their POEMs at Journal Club. And faculty reinforce the importance of EBM by using new literature and evidence in cases they present at noon conferences.

EVIDENCE-BASED MEDICINE RESOURCES

THE COCHRANE LIBRARY: Provides highly structured, systematic overviews of the effects of interventions in health care. The reviews are based upon evidence from clinical trials that are included or excluded on the basis of explicit quality criteria, thus minimizing bias. Available on subscription basis. http://www.update-software.com/cochrane/

CLINICAL EVIDENCE: Provides an evidence-based summary of the current state of knowledge, ignorance, and uncertainty about the prevention and treatment of clinical conditions based on thorough searches and appraisal of the literature. http://www.clinicalevidence.com/

INFOPOEMS: Available on subscription basis, this clinical awareness system provides current, evidence-based answers to clinical questions at point of care. This product is also available for Palm OS users. http://www.infopoems.com/

CLINICAL INQUIRIES: Published in *Journal of Family Practice*, Clinical Inquiries answer real questions submitted by family physicians to the Family Practice Inquiries Network (FPIN). Evidence-based answers are developed thru extensive literature searches conducted by medical librarians. Clinicians then review the evidence and write the answers. The answers are peer reviewed, and a practicing family physician writes a clinical commentary. http://www.fpin.org/

POEMS: Published in *Journal of Family Practice*, POEMs (Patient-Oriented Evidence that Matters) provides critically appraised reviews of articles from over 90 journals of interest to primary care physicians. POEMs review articles that address common primary care problems, report outcomes that matter to patients, and, if valid, require physicians to change the way they practice. http://www.jfponline.com/

ACP JOURNAL CLUB: Consisting of two journals *ACP Journal Club (*a publication of the American College of Physicians), and *Evidence-Based Medicine* (a joint publication with the British Medical Journal Group), this resource provides a synthesized summary of studies that are both methodologically sound and clinically relevant. A commentary on the clinical value of the article is provided. Clinicians can quickly understand and apply to their practice important changes in medical knowledge. Available on subscription basis. http://www.acpjc.org/

DYNAMED: Available on subscription basis, this evidence-based medical information database is updated daily and contains nearly 1,800 clinical topic summaries. It is designed for use at the point of care. http://www.dynamicmedical.com/

Resource list compiled by Adjunct Assistant Professor
Susan Meadows, MLS

— GRANT GENERATING PROJECT DESIGNED TO —

EXPAND AND ENHANCE FAMILY MEDICINE RESEARCH

WATCHING FAMILY MEDICINE RESEARCH grow across the nation is exciting for Daniel Longo, ScD, because he realizes that as family practice knowledge expands, patients benefit and heath care in general improves. This is important to Dr. Longo and is one of the reasons why he's so strongly committed to the Grant Generating Project (GGP).

GGP was launched by the North American Primary Care Research Group (NAPCRG) Committee on Building Research Capacity in an effort to increase research capacity in family medicine nationally. Realizing that most departments do not provide salary support for faculty engaged in research, GGP identified its purpose: To equip researchers with the skills needed to successfully develop and submit grants for research funding. From 1995-99, GGP was directed by David Katerndahl, MD, family medicine professor at University of Texas-San Antonio (UTHSC-SA). MU Family Medicine Professor Dr. Longo, who's been with the program since its start, became director in 1999.

Open to faculty from university and community-based family medicine departments, GGP is designed to take fellows step-by-step through the process of writing a grant – from concept paper to final proposal. Fellows accepted in this yearlong program learn the nuts and bolts of grant writing through networking, mentoring, and participating in five workshops. Three sessions are held in conjunction with national meetings, including NAPCRG's fall meeting and the Primary Care Research Methods and Statistics Conference at UTHSC-SA. The final workshop takes place at the Society of Teachers of Family Medicine's spring conference, where a mock study section is held and outside reviewers critically evaluate each fellow's grant proposal.

"GGP teaches the skills of grantsmanship," says Dr. Longo. "It's everything you never learned in graduate school – even if you were trained in a PhD program." Grantsmanship, he explains, is something you can only learn by working in a post-doc position, so physicians, in particular, don't have opportunities to develop these skills.

To become a successful grant writer requires time, technical assistance, peer review, and consultation. In addition, fellows need a strong mentor with similar research interests. As a "fellowship without walls," GGP is able to provide assistance, training, and resources to fellows in their home environments.

Fellows can participate in GGP without leaving their current jobs, and although this makes the program convenient and very appealing, it also presents certain challenges. Enabling fellows to complete their GGP work while juggling all other demands of their job, is one of the biggest challenges of the program.

"Learning to juggle the multiple balls of clinical care, teaching, and research is a balancing act they have to do not just during GGP, but through their entire career," Dr. Longo says. "We want to eliminate the myth that you can do family medicine research on nights and weekends. Research is not a hobby; it's a job."

But getting fellows to understand the value of research is not enough, says Dr. Longo. We need organizational commitment, too, and that's why we let chairs know upfront that in order to complete this program, fellows will have to devote 20 percent of their time to GGP activities.

Chairs have shown enthusiastic support for GGP. In fact, Frank deGruy III, MD, chair at University of Colorado Department of Family Medicine, helps in annual recruitment efforts by writing a letter promoting GGP to his colleagues.

While the workload is large and often demanding, Dr. Longo says that directing GGP is a fun and rewarding experience. The camaraderie is different for each class, but the bonds are always strong and meaningful. "In many ways, I become an important figurehead for the fellows. They become part of me and I feel responsible for their success," he explains. "And when they succeed - and all of them do - I am as proud and excited as they are."

— GRANT GENERATING PROJECT —

DANIEL LONGO, ScD
Professor, Family and Community Medicine
Director, Grant Generating Project

PARTICIPANTS: GGP is open to MD and PhD faculty from family medicine departments – university and community-based – who are interested in pursuing investigator-generated independent research on topics of interest to family medicine.

FUNDING: Primary funding for GGP is provided by: North American Primary Care Research Group, American Academy of Family Physicians, Society of Teachers of Family Medicine, and College of Family Physicians of Canada. Plus the GGP fellow's home department pays a small tuition.

APPLYING: Ten GGP fellows are accepted annually, based on competitive applications that include letters of recommendation, curriculum vitae, and a first draft concept paper for the grant proposal that will be developed during the GGP year.

GGP PRIDE POINTS:

- Seven classes have completed GGP; an eighth class will finish this spring. Graduates total 64, and they represent family medicine programs from 23 states and Canada.
- A survey of GGP fellows who participated from 1995-2002 indicates that GGP helped generate nearly 100 new grants, with funding totaling close to $20 million.
- One former GGP fellow recently received an RO1 from the National Library of Medicine. And two fellows obtained major awards from the Robert Wood Johnson Foundation's Generalist Physician Faculty Scholars Program.
- Daniel Longo, ScD, was awarded the 2002 NAPCRG President's Recognition Award for his achievement in building primary care research capacity through GGP.

FOR MORE ABOUT GGP: **Visit www.fcm.missouri.edu/research-ggp.htm or contact the GGP office at schuberts@health.missouri.edu**

School of Medicine

University of Missouri-Columbia
Department of Family and Community Medicine
M226 Medical Sciences Building DC032.00
Columbia, MO 65212

UNIVERSITY OF MISSOURI-COLUMBIA

Family & Community MEDICINE

M226 Medical Sciences Building
Columbia, Missouri 65212
Telephone: 573-882-2996
Fax: 573-882-9096
http://www.fcm.missouri.edu

Chair:
Harold Williamson Jr., MD, MSPH

Associate Chair:
Steven Zweig, MD, MSPH

Administrative Manager:
Pamela Mulholland, MHA

Questions and comments about this newsletter should be directed to:
Kathy Boeckmann, MA
573-884-7916
boeckmannk@health.missouri.edu

— 26th Annual —

Family Practice Update

May 9 – 10, 2003
Reynolds Alumni Center
Columbia, Missouri

Please plan to attend!

For more information, call: 573-882-0366 or check: www.muhealth.org/~cme/fpu

SPONSORED BY:
University of Missouri Health Care
Mid-Missouri Area Health Education Center - MU Sinclair School of Nursing
Department of Family and Community Medicine