

the abstract

NEWSLETTER FOR THE FACULTY OF THE
DUKE UNIVERSITY SCHOOL OF MEDICINE

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Contents

Message from Dean Andrews 2

Research Opportunities

Beckman Young Investigators Program 3

Your Colleagues

John Perfect, M.D. 4

Guoping Feng, Ph.D. 5

School News

Update on DUH Addition, Learning Center 6

Faculty News

Faculty Awards 7

New Faculty Appointments 8-9

Work & Life 10

the abstract

MISSION: This newsletter is a conduit for information, news and school announcements, and is intended for all School of Medicine faculty members and leadership.

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Peering in on your peers: Introducing *the Abstract*, a newsletter for exploring faculty issues at the School of Medicine. FILE PHOTO

Your new publication

In a journal article, the abstract performs a vital function. By boiling down the objective, hypothesis, methodology, results and conclusion to a few elegant paragraphs, an abstract summarizes the most important elements of an experiment.

In this spirit, The Abstract newsletter will capture the most important elements of information pertaining to the faculty of the Duke University School of Medicine.

In brainstorming meetings, you've told us about the lack of a general, faculty-centric publication for disseminating ideas and profiling individuals. We created *the Abstract*, which can be read both online as a PDF or printed out, to

fill that need. It will provide news, policy updates, new appointments, and profiles of your colleagues, among other features.

We hope that you also view *the Abstract* as a way to make your voice heard, to draw attention to work you think is important and to get in touch with your colleagues in the hopes of building a sense of community and encouraging collaboration. To ensure that we address your concerns in the best way possible, I'll be working with an advisory committee of your peers. Please feel free to submit material and questions at any time. Welcome to your newsletter.

– Editor, Duke Medicine Internal Communications

Welcome to your new faculty newsletter

Dear Faculty,

As I have been saying often in my public presentations, I am impressed that the Duke faculty is already doing many things that other major medical schools are talking about doing – promoting interdisciplinary collaborations, strengthening clinical research, connecting science and policy, and developing the translational continuum between basic and clinical sciences.

And, of course, doing all that while so ably educating and preparing our students.

Yet, when I arrived here at Duke University School of Medicine, I heard a clamor for new and improved communications within our growing school.

There's so much happening here, you told me, that we need better ways to share and discuss all of the activities of the faculty, to bridge the basic sciences and clinical departments, to engage administrators and faculty in important discussions about the future of the school.

So, communications will be an institutional priority. (See the sidebar for our other priorities.)

As one way of addressing communications, we are launching this newsletter – with your active participation, it will be a newsletter by, for and about all of our faculty.

To assist editor Kelly Malcom in



identifying stories, profiles and issues that will make this newsletter worth your time to read and discuss, I have invited a cross-section of faculty members to serve on an editorial panel.

But each of you can contribute news, story ideas and photographs. This is to be your publication, and I look forward to watching as it grows to reflect all the impressive ways you help to make Duke such a top medical school.

Note that this newsletter is a PDF file meant to be read on your computer monitor, but it will also print on your office printer. Contact Kelly if you'd like to receive a print copy.

Thank you, and enjoy.

– Nancy C. Andrews, M.D., Ph.D.

School priorities for 2008

1 Strengthening our Medical Scientist Training Program to take full advantage of Duke's preeminence in discovery science, clinical investigation and global health.

2 Improving communications within the School of Medicine and launching a public Web site that better reflects Duke's programs and innovations.

3 Commencing the planning process for the construction of two new buildings – one for our students to have a state-of-the-science learning center, and another to promote new synergies between Duke scientists using diverse approaches to understanding and conquering disease.

4 Solidifying the overall financial stability of the school in light of federal funding challenges and healthcare reimbursement trends.

5 Facilitating dynamic collaborations between our basic scientists, translational scientists and clinical investigators.

Grant Writing Seminars

The Faculty Development office welcomes back Dr. Stephen Russell DVM PhD from GrantWriters Inc to lead two grant writing seminars. In past years, these seminars fill up very quickly, so we encourage you to register now for one or both.

Please note that these two programs are separate events and individual registration is required for each program. Handouts and refreshments will be provided for both seminars.

To register, please visit <http://medschool.duke.edu/modules/eguide/event.php?eid=95&key=3070>

Seminar 1: "Write Winning Grants"

Date: Wednesday, July 9, 2008, 8 am - 4 pm
Location: Hock Plaza Auditorium (Room 0001), 2424 Erwin Road, Durham, NC (Parking information will be sent to registrants)

This seminar comprehensively addresses all aspects of the proposal-writing process, such as idea development, identification of the most appropriate granting agency, how to write for reviewers, and tips and strategies in presenting an applicant's case to reviewers. Participants are taught to organize their presentations using a linear progression of logic, which leads reviewers through their applications.

Seminar 2: "So You Want a Career Development Award"

Date: Thursday, July 10, 2008, 8 am-12 pm
Location: School of Nursing Building, 307 Trent Drive (this is the new School of Nursing Building, located on the corner of Bell Service Drive and Trent Drive), Auditorium 1014, First Floor.

This seminar is designed for Career Development Award (CDA) candidates and their mentors. It emphasizes the 'partnering' between candidate and mentor necessary for a successful proposal and will highlight the National Institutes of Health's mentored K Awards and the NIH's Ruth L. Kirschstein F32 National Research Service Award for individual post-doctoral fellows. The seminar will teach positioning for success in advance of writing the proposal, tips and strategies that help to assure a successful application, and principles and fundamentals applicable to any agency's CDA.

Beckman Young Investigators program seeks applicants: Deadline August 1

The Arnold and Mabel Beckman Foundation is again soliciting applications to the Beckman Young Investigators (BYI) program. Because no more than two candidates may apply from any one institution, there is an internal review process for prospective Duke submissions, as detailed at right.

The Beckman Foundation makes grants to nonprofit research institutions to promote research in chemistry and the life sciences, broadly interpreted, and particularly to foster the invention of methods, instruments, and materials that will open up new avenues of research in science.

The BYI program is intended to provide research support to the most promising young faculty members in the early stages of academic careers in the chemical and life sciences. Projects should show promise of contributing to significant advances in the research fields of interest to the foundation. They would represent innovative departures in research, rather than extensions or expansions of existing programs. Proposed research that cuts across traditional boundaries of scientific disciplines is encouraged.

By August 1st, anyone interested in submitting an application to the BYI program should email the following materials to Judith Andersson (jfa4@duke.edu, 681-8925) in the Office of Research Support (ORS):

- Draft four-page proposal (incorporating all references, diagrams, and drawings)
- Curriculum vitae (two-page maximum)
- Letter endorsing the proposed application from the candidate's chair or dean

The four-page proposal and two-page CV will also be required for submission to the Beckman Foundation; the versions submitted for internal review should be regarded as drafts of those that will be sent to the sponsor, should the proposal be selected to go forward. Please refer to the program announcement for further information on the required materials.

For more information about the grant and eligibility see http://www.beckman-foundation.com/byi_guides.html

Finally, please feel free to contact Judith Andersson with any questions regarding the internal review process.

Other Funding Opportunities

June 14 – Deadline for preliminary application for \$100,000 **V Scholar Grant**.

June 30 – Deadline for up to \$20,000 from **Children's Leukemia Research Association**.

July 1 – Deadline for \$300,000 **Avon Breast Cancer Research Bridge Program**.
Deadline for **American Heart Association-Established Investigator Award** for up to \$100,000.

August 15 – Deadline for up to \$25,000 for hematological research as part of **JP McCarthy Developmental Grant Program**.

John Perfect, M.D.

During his 30 years at Duke, Dr. Perfect has worked on balancing a career in research and clinical care. Much of his research has focused on fungal infectious diseases, in particular those involving *C. neoformans*. “Duke is the perfect storm for fungal infection research. Its location in the south east, its capacity to provide good care and its wide range of disease presentations have allowed me to make progress developing anti fungal treatments,” he said.

During a fellowship at Duke in 1977, he served as an experimental pathologist studying pathogenic fungi on a molecular basis. He followed that with coursework at Woods Hole where he manipulated *C. neoformans* to alter its ability to affect disease. Collaborations with other Duke faculty blasted him off into a new arena, he said. Work with Stefan Johnsson, M.D. and Joseph Heitman, MD., Ph.D., encouraged him to work on *Cryptococcus* as a model system.

Perfect has made a point of fostering relationships with other researchers at Duke, creating a large network of PIs and scientists to work on grants as well as creating the Duke University Mycology Research Unit. Collaboration “creates a synergy with other faculty that bridges the clinical and basic sciences. Part of the reason I’ve been able to do this is the quality of the personnel available,” says Perfect. Mentoring the next generation of research clinicians has also been a major focus.

Over the past 10 years, Perfect has mentored 18 people who have gone into academics. “The idea is not to just mentor. It’s to give something back. The ability of the people here at Duke



John B. Perfect, M.D.

Professor, Department of Medicine,
Division of Infectious Diseases

Director, Duke University Mycology
Research Unit (DUMRU)

enhances the mentorship experience. It’s gratifying to influence another generation of quality science and quality people.”

Every year, he serves as an attending physician for two weeks where he gets to see first hand the quality of care that each patient receives. He’s tried to help patients every step of the way. The only real obstacle Perfect runs up against has to do with money. “Endowments should help more and go beyond bridging grants,” said Perfect. Though he just received a continuation of his R01 grant, he still has trouble getting the funding he needs.

“Faculty need support dealing with rules and regulations so they can focus on the actual science. The infrastructure needs to help the lives of faculty easier.”

From *Inquiry*

The science & research supplement to Inside Duke Medicine. To submit, send an email to editorinside@mc.duke.edu.

Common virus could be key to fighting brain cancer

By targeting a common virus, doctors may be able to extend the lives of patients diagnosed with the most prevalent and deadly type of brain tumor, according to a study led by researchers in Duke’s Preston Robert Tisch Brain Tumor Center.

A type of herpes virus called human cytomegalovirus (CMV) is found in up to 80 percent of Americans, though it normally produces very few clinical symptoms, and is dormant in most people. However, more than 80 percent of patients newly diagnosed with the brain cancer glioblastoma multiforme (GBM) exhibit detectable CMV in their blood as well as in their tumors. The Duke team thought this might provide an opportunity to target brain tumors by going after the virus.

Mentally demanding jobs provide cognitive benefits

Doing a job that is intellectually demanding creates thinking abilities that pay dividends into retirement — regardless of intelligence or years of education, according to new research from the Duke University Medical Center.

“Our society is expected to live and work longer than previous generations, so we sought to understand how an individual’s occupation affected cognition later in life,” said Guy Potter, Ph.D., assistant professor of psychiatry at Duke and the study’s lead author. “Our study found that jobs with more intellectual demands were associated with better performance in memory and other cognitive abilities post-retirement, even after accounting for the influences of age, education and intelligence.” Potter noted, this study illustrates how a number of smaller influences like these can accumulate over the lifespan to have a positive or negative effect on brain health in later life.

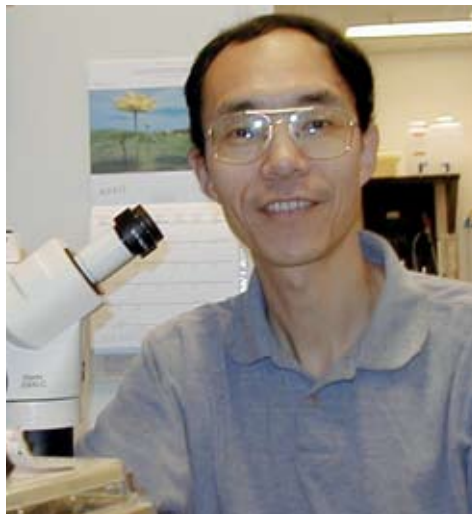
Guoping Feng, Ph.D.

Assistant Professor, Department of Neurobiology

In the search to identify how our brains operate, Guoping Feng is studying how neurons communicate. “A synapse is only a couple of microns wide spatially but contains thousands of proteins.”

The key to translating behavior at the neuronal level to psychiatric behavior has been developing animal models of these disorders. Feng’s lab made a significant breakthrough in 2007 when they developed a mouse model of obsessive-compulsive disorder. “These mice lacking the gene encoding SAPAP3 protein exhibited excessive grooming, to the point of hair loss and skin injury,” said Feng. Using these mouse models, he examines how the development assembly of proteins translates at the behavioral level and how mutations lead to abnormal behavior.

His research has focused on the striatum, a part of the brain involved in controlling movement, emotions and decision-making. Abnormalities in this area in mice lead to obsessive grooming



behaviors reminiscent of OCD in humans. Further encouraging findings include the fact that selective serotonin reuptake inhibitors seem to lessen excessive grooming and anxiety in mice, implicating the glutamate synapse as a location of action.

Feng collaborates with Bill Wetzell in

medical psychiatry and Nicole Calakos of the Center for Translational Neuroscience. Future research goals include change the targets for drugs to modulate glutamate synapses for schizophrenia. The other aims of his research are the genetics of psychiatric disorders.

“Genetics is a hot topic right now. Up until now, psychiatry has been a black box. The DSM [Diagnostic and Statistical Manual] represents the whole of our knowledge about psychiatric disorders. However, within the next five or ten years, neurobiology will be the basis of mental illness research.”

Feng’s lab, in collaboration with George Augustine, Ph.D. has developed remarkable tools for tracking proteins in live animals using fluorescence and using beams of light to stimulate photosensitive neurons within the brain. Using this novel, non-invasive technique, he hopes to understand the role these neurons play in neurological disease.

“Within the next five or ten years, neurobiology will be the basis of mental illness research.”

Kennedy Undergoes Neurosurgery at Duke Hospital

On June 2, Duke Medicine's standard of excellence was made apparent as Allan Friedman, M.D. and a team of clinicians and staff performed a delicate neurosurgical procedure on Massachusetts Senator Edward M. Kennedy to remove a malignant glioma.

According to Friedman, the surgery was a success. The Preston Robert Tisch Brain Tumor Center is widely known as one of the leading centers of its type in the country and has received the highest rating of "Outstanding" by a National Cancer Institute peer review group's evaluation of the Duke Comprehensive Cancer Center over the last ten years.

Friedman's team's surgical success was aided by an advanced anesthesiological technique that allows patients to remain awake during the procedure while blocking the pain of incision, noted John Keifer, M.D. of the Division of Anesthesiology. This makes it easier for physicians to avoid critical speech-controlling areas of the brain.

Duke has led a review of patient responses during such surgeries to determine the most effective means of breathing assistance and anesthesia and is leading the way in such procedures, says Keifer.

Sen. Kennedy returned home and will now undergo a series of chemotherapy and radiation treatment at Massachusetts General Hospital in Boston.



The historic Bell Building will be demolished in the Fall to make way for a new expansion to Duke University Hospital. Construction on the new building will begin in the Spring. PHOTO MARK SCHREINER

DUH addition, learning center updates

Duke Medicine learned in late April that the N.C. Department of Health and Human Services had given permission for an important hospital expansion at Duke University Hospital to move forward.

The project, known as the Major Hospital Addition will modernize 160 beds and add 16 new operating suites.

Duke University Health System had filed a Certificate of Need (CON) with the state of North Carolina in October 2007.

The 160 modernized beds will be strategically designed as four 24-bed intensive care units and two 32-bed intermediate/step-down care units. The hospital's current intensive care units are already running at capacity, as is step-down care space. The current complement of operating room suites at Duke University Hospital is already used in excess of the state's definition of capacity levels.

The proposed hospital addition will be located between Duke University Hospital's North building and the Duke South clinics, an area that is currently occupied by the Bell Building. Demolition of that historic research building and

groundbreaking for the new building will begin in Spring 2009.

A website for project plans, pictures and news is planned to launch later this year.

Learning Center

The Duke Endowment of Charlotte announced in April that it is giving \$50 million to the Duke University Medical Center to help build a medical education facility and to develop a leading edge facility for the McGovern-Davison Children's Health Center.

James B. Duke's original gift in 1925 created the School of Medicine, hospital and nurses' home.

Plans call for \$35 million to go toward the construction of a School of Medicine Education Center, which will enhance opportunities for medical students to learn and interact with one another, instructors and clinical and basic research faculty in one location. School leaders have already begun to seek innovative ideas for this learning center.

Read a feature story from Inside Duke Medicine at <http://tinyurl.com/3pvw9g>.



Vice Dean for Education, Edward Buckley, M.D., presents a Master Clinician/Teacher Award to Michael Platt, Ph.D. during a ceremony held on May 1.

Spring Faculty Meeting Awards

At the Spring Faculty Meeting on May 1, the School of Medicine presented the following awards:

The Leonard B. Tow Humanism in Medicine Award was presented to **Louise Markert, M.D., Ph.D.**, professor of pediatrics, for her pioneering work related to the treatment of patients with DiGeorge syndrome. The award recognizes compassion and sensitivity in the delivery of health care.

The Leonard Palumbo Jr. Faculty Achievement Award was presented to **Ronald N. Goldberg, M.D.**, for his impact on patient care practices in the Neonatal Intensive Care Unit at Duke University Hospital and the training of many young physicians in the Department of Pediatrics. The award recognizes a member of the School of Medicine faculty who displays dedication to compassionate patient care and excellence in the teaching and mentoring of young physicians.

The Gordon G. Hammes Faculty Teaching Award was presented to **Theodore Slotkin, Ph.D.**, professor of pharmacology and cancer biology. The award recognizes continuing excellence in teaching and mentoring, and exemplary commitment to the education of graduate students within the basic science departments and graduate training programs of the School of Medicine.

The Ruth and A. Morris Williams Jr. Faculty Research Prize was presented to **Priya Sunil Kishnani, M.D.**, professor of pediatrics, for her role in the development and ultimate FDA approval of Myozyme as the first treatment for Pompe disease, a rare genetic muscle disorder. The prize recognizes groundbreaking research in basic or clinical science in alternate years; this year, the prize is for clinical science research.

Jon Gockerman, M.D., Michael Platt, Ph.D., and **Barbara Sheline, M.D.**, received Master Clinician/Teacher Awards.

Awards

Researcher **Erich Jarvis, Ph.D.** has been selected as one of the 56 newest Howard Hughes Medical Institute (HHMI) investigators, selected from over 1,000 applications. Through this program, the HHMI identifies highly creative investigators at distinguished universities, research institutes, and medical schools across the United States who span the full range of leading-edge biological and biomedical research. With this appointment, Jarvis will receive research funding from HHMI for a period of five years.

Ann Brown has been appointed as a fellow in the Executive Leadership in Academic Medicine (ELAM) Program for Women. ELAM is the only national program dedicated to preparing senior women faculty for leadership at academic health centers (AHCs). The new fellows represent 46 medical, dental, and public health schools.

Daniel Lew, Ph.D., has been elected Fellow of the American Academy of Microbiology, Class of 2008. The Academy, the honorific leadership group within the American Society for Microbiology, recognizes excellence, originality, and creativity in the microbiological sciences. Dr. Lew will be recognized at the Academy Fellows Luncheon and Meeting at the 108th ASM General Meeting in Boston, Massachusetts on Wednesday, June 4, 2008.

Welcome

The Duke University School of Medicine would like to recognize the following new, and newly appointed, faculty members, current as of May 2008:



Nicholas Bandarenko III
Associate Professor
of Pathology
Effective June 1, 2008



Devon James Godfrey
Assistant Professor
in Radiation Oncology –
Track IV
*Effective March 1, 2008
through June 30, 2009*



Harrison N. Jones
Assistant Professor
in Surgery
Effective March 1, 2008



David Guy Kirsch
Associate Professor of
Radiation Oncology
Effective March 1, 2008



Anastasia P. Litvintseva
Assistant Research
Professor of Molecular
Genetics and Microbiology
*Effective May 9, 2008
through June 30, 2009*



Gary Herbert Lyman
Professor of Medicine
Effective May 1, 2008



Christopher Paul Manik
Assistant Professor of
Medicine – Track IV
*Effective March 1, 2008
through June 30, 2009*



Perri Anne Morgan
Assistant Professor
in Community and
Family Medicine
*Effective February 1, 2008
through June 30, 2009*

Cagla Eroglu Bagnat

Assistant Professor of Cell Biology
Effective June 1, 2008

Michel Bagnat

Assistant Professor of Cell Biology
Effective June 1, 2008

David Michael Brass

Assistant Professor in Pediatrics – Track V
Effective March 1, 2008 through June 30, 2009

Jamal Chalabi

Medical Instructor in the Department
of Medicine
Effective March 12, 2008

Jeffrey Kyle Covington

Medical Instructor in the Department
of Community and Family Medicine
Effective March 1, 2008

Sandesh Dev

Assistant Professor of Medicine – Track IV
Effective June 1, 2008 through June 30, 2009

Laura Jane Fish

Medical Instructor in the Department
of Community and Family Medicine
Effective April 1, 2008

Ute Hochgeschwender

Associate Research Professor of Neurobiology
Effective April 1, 2008 through June 30, 2009

Eugene E. Lee

Assistant Clinical Professor of Anesthesiology
Effective March 1, 2008 through June 30, 2009

Joseph E. Lucas

Assistant Research Professor in the Institute
for Genomes Sciences and Policy
Effective March 1, 2008 through June 30, 2009

CONTINUED NEXT PAGE

Welcome, continued



Alexander Perez
Assistant Professor of Surgery
Effective April 1, 2008



Geoffrey Stuart Pitt
Associate Professor of Medicine
Effective June 1, 2008



Kevin V. Shianna
Assistant Research Professor in the Institute for Genome Science and Policy
Effective June 1, 2008 through June 30, 2009



Linton Lopaka Yee
Associate Professor of Pediatrics – Track IV
Effective March 1, 2008 through June 30, 2009

Jeffrey M. Peppercorn
Assistant Professor of Medicine
Effective April 1, 2008

Julie Hanson Ostrander
Assistant Professor in Medicine – Track V
Effective February 1, 2008 through June 30, 2009

Veshana Sinthal Ramiah
Medical Instructor in the Department of Medicine
Effective February 1, 2008

Kristin Caruana Scott
Assistant Research Professor in the Institute for Genome Sciences and Policy
Effective March 1, 2008 through June 30, 2009

Noa Segall
Assistant Professor in Anesthesiology – Track V
Effective June 1, 2008 through June 30, 2009

Barry Raymond Stripp
Professor in Medicine
Effective April 1, 2008

Hans Ludger Tillmann
Assistant Professor of Medicine
Effective December 3, 2007

Pierluigi Tricoci
Medical Instructor in the Department of Medicine
Effective March 1, 2008

Zhiping Zhang
Assistant Professor of Medicine – Track V
Effective June 1, 2008 through June 30, 2009

Please submit appointment information by July 7 for inclusion in the next issue of *the Abstract*. Send to abstract@duke.edu

Childcare options for faculty

Choosing a child care provider can be a difficult decision. Duke contracts with the Child Care Services Association, a non profit child care resource and referral agency, to help Duke affiliated families access affordable high-quality child care for their children from birth through age 12. This service is offered free of charge to Duke affiliated families.

For more information about this program, Duke affiliated families may contact the CCSA by calling 403-6950 (Durham), 967-3272 (Orange) or 779-2220 (Wake). CCSA may also be reached via email at info@childcareservices.org. You may also visit the CCSA website at <http://www.childcareservices.org/>

For more information on childcare and babysitting services, visit <http://www.hr.duke.edu/family/care.html>

Emergency Updates

When a deadly steam-line explosion forced the evacuation of the Levine Science & Research Center on May 14, the university activated its emergency Web site for the first time. In crisis situations at Duke, this blog is the main avenue for communicating updates.

All Duke Medicine employees are encouraged to bookmark the site, and to subscribe to the RSS newsfeed (find an explanation of RSS, and instructions for subscribing, at the blog).

<http://www.emergency.duke.edu/>

DUSONnet

Faculty and staff of the Duke School of Nursing have a new intranet for sharing school news, events and policy changes.

<http://dusonnet.nursing.duke.edu/>



From left to right: Ken Fowler, Allison Kruszewski, Ben Carlson, Jackie Soderling, Frank Mason (sitting), Scott Soderling, Krissey Lloyd, and John Lloyd

Building Lab Spirit

All work and no play can make for dull laboratories! Scott Soderling, Assistant Professor in Cell Biology, energizes his team with regular group outings:

“We do one big event in our lab each year. Last year was white-water rafting and rock climbing. This year we will probably kayak out to one of the

barrier islands and camp for the weekend (end of June). Other events we do as a lab are lunches, baseball games, even a roller derby one night.”

If your lab has found unique ways to interact outside of the research or clinical setting, drop us a line: abstract@mc.duke.edu.