



First-in-the-World Treatment Makes Many Inoperable Tumors More Operable at Massey

Massey now offers one of the most precise systems to treat cancerous and non-malignant tumors and other abnormalities. The new system may improve patient outcomes by enabling physicians to reach more tumors and treat them more effectively, including those near blood vessels and other critical structures in the brain or spinal column.

The new **Trilogy™ Image-Guided Treatment Center** is a partnership between the Harold F. Young Neurosurgery Center and the department of radiation oncology. This team is literally the first in the world to combine two state-of-the-art technologies for image-guided radiosurgery. The system combines Trilogy, a premier linear accelerator made by Varian, and ExacTrac, an advanced X-ray positioning system made by BrainLAB.



Image-Guided Radiosurgery

Together these systems enable doctors to visualize and target tumors within 0.4 millimeters of accuracy. Plus doctors can spare more healthy tissue around the tumors.

(Continued on page 2)

New Rad-Onc Chair Appointed

Mitchell S. Anscher, MD, has been appointed chair of the department of radiation oncology, effective June 1, 2006. **Please read the full story on page 6.**

Researchers Identify a New Class of Anti-Cancer Drugs Based on Platinum

Massey researchers have created a new platinum-based, anti-cancer agent able to overcome acquired drug resistance by first modifying the way it is absorbed into cancer cells and then attacking the DNA of those cancer cells. The findings may help researchers design a new generation of anti-cancer drugs that selectively target cancer cells, reduce resistance and side effects, and expand the range of tumors that can be treated by platinum.

In the Dec. 26 issue of *Inorganic Chemistry*, **Nicholas Farrell, PhD**, professor and chair in the department of chemistry and lead author of the study, reported on the design of a new trinuclear platinum compound and demonstrated that its cellular absorption is significantly greater than that of neutral cisplatin, as well as other multi-nuclear platinum compounds. The enhanced uptake into cancer cells takes advantage of weak molecular interactions on the cells' surface.

(Continued on page 3)

Highlights in this Issue ...

- Dr. Paul Dent and team advance breast cancer research, page 2.
- Rosemary LaVista answers ten questions, page 4.
- Massey named a beneficiary of Ukrop's Monument Avenue 10K, page 5.
- Nancy McCain, RN, DSN, opens stress-management study for women undergoing chemotherapy, page 7.

(Trilogy...Continued from page 1)

The non-invasive procedure is performed on an outpatient basis and provides a high degree of safety and comfort.

Because the system allows for precise, high doses, the length of treatment can be considerably shorter than with conventional radiation.

“This stereotactic radiosurgery can be delivered in a single dose instead of over several weeks,” said **Ted Chung, MD, PhD**, of Massey’s radiation oncology team. “Side effects are minimal, and patients can get on with their lives sooner,” he added.

“Using the system’s robotics and sophisticated image guidance, we can verify the tumor’s exact position with unprecedented precision,” said **William Broaddus, MD, PhD**, the team’s neurosurgery leader. “And the increased accuracy we have in brain radiosurgery also can be applied to the spine and other parts of the body.”

“While many technologies offer three-dimensional image guidance, our combined system offers a fourth dimension – it accounts for a patient’s breathing in real-time – so we can target the radiation beam to a fraction of a millimeter,” added **Stanley Benedict, PhD**, associate professor and chief of clinical physics.

Unlike other “non-invasive” treatments, the Trilogy and ExacTrac systems do not require doctors to screw frames into patients’ heads to immobilize them.

Initially the group will treat mostly brain and spinal cord tumors, and later this year will treat other tumors and lesions of the breast, prostate and lungs.

The new combined systems and treatment suite enhance the existing stereotactic radiosurgery program, which was developed by the two departments in 1991 and since has treated more than 400 patients. For more information, please visit:

www.massey.vcu.edu/trilogy.

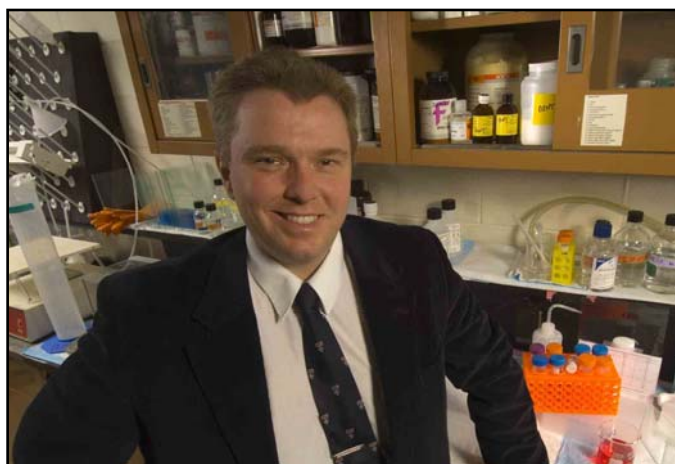
Welcome New Faculty

Ray Lee joins the hem-onc team as a GI oncologist with specialization in cancer of the pancreas and new drug development. He attended medical school at National Taiwan University and earned his PhD at Duke University. He interned and did his residency at Duke, and was a fellow at the University of Washington and Fred Hutchinson Cancer Center. Welcome, Dr. Lee!

MASSEY RESEARCHERS MAKE PROMISING ADVANCE IN BREAST CANCER

Two new drugs, when combined, killed up to 75 percent of breast cancer tumor cells in mice and suppressed the re-growth of tumors, according to Massey researchers.

The findings, published recently in *Cancer Biology and Therapy*, may also have implications for prostate cancer, lymphoma, myeloma and other hematologic cancers.



Paul Dent, PhD, associate professor of biochemistry and radiation oncology, led the team that combined two novel drugs, UCN-01 and a MEK 1/2 inhibitor, which are known to inhibit protein kinases, part of tumor survival signaling pathways.

“In addition to potentially inhibiting cells and suppressing tumor growth, these drugs are also part of a modern class of drugs that are less toxic to non-cancerous cells,” said Dent. “We are eager to move these exciting findings from the labs to patients.”

When studied separately, the drugs killed only a small percentage of the cells to which they were exposed. Combined, however, the result was quite startling. “Within five days, we saw profound tumor cell death,” Dent said. “Three researchers in the group operated the same studies independently, and they all saw very similar results.”

Dent holds the Universal Corp. Distinguished Professorship in Cancer Cell Signaling. The first author on the paper was **William Hawkins, MS**, a VCU research specialist with appointments in biochemistry and anatomy and neurobiology.

To view the abstract and access the full study, visit, <http://www.landesbioscience.com/journals/cbt/abstract.php?id=2286>.

Lower Dalton to Open Soon: Massey Clinic Space Expands from 19 to 33 Exam Rooms

As one of several growth initiatives slated to propel Massey forward in 2006, patient treatment clinics will expand significantly at the flagship location.

In March, oncology services will open “Lower Dalton” on the basement level of North Hospital, boasting 14 new exam rooms, two procedure rooms, two physician workrooms, and the cancer rehabilitation clinic. This supplements the existing 19 exam rooms and two physician workrooms in Upper Dalton.

“As our patient volumes have increased steadily over the years, we created a master plan to allow for this expansion and better serve our patients,” said [Mary Ann Hager, RN](#), director of clinical oncology services. “Planning and construction has been underway for more than a year, so we’re excited to finally move into the new space.”

Services in Lower Dalton will be phased in and will include: Breast Health Center, Surgical Oncology, Chest Tumor Center, Gynecology Oncology Clinic, GI Tumor Center, Hematology Coagopathy Clinic, and Pain Clinic.

Lotus Notes Has Arrived

by [Thom Mattauch](#), Network Manager

As part of a University-wide initiative, the IT team began migrating email users to the Lotus Notes servers on January 20. As a result, Massey now has a more stable and robust mail system: we now have shared calendar access, personal information management, instant messaging, conference capabilities, and much more.

Lotus Notes has a user-friendly Web availability. You can access your Notes account from the Internet by logging on to <http://webdirect1.vcu.edu>, where you will have access to all of the same capabilities you have through Lotus Notes at work. Here are some useful links to bookmark:

- VCU Mail Anywhere FAQ: <http://beech.vcu.edu/das/vmawebhome.nsf/webcontent/FAQFacultyStaff>
- eID Account Site: <http://www.ts.vcu.edu/faq/accounts/>
- Massey IT Support Email: masseyit@vcu.edu

Massey Fundraising

The Richmond Symphony Orchestra presents an evening of Judaic Music at Temple Beth-El on Saturday, March 25 at 8:00 p.m. Proceeds benefit VCU Massey Cancer Center and the Temple. Tickets are \$35 - \$100; please call the Symphony box office at 788-1212 or visit www.bethelrichmond.org/symphony.htm for more information.

(Trinuclear platinum compound... Continued from page 1)

New Class of Anti-Cancer Drugs

These results underscore the importance of the new compound’s “non-covalent” interactions, prior to the attack on DNA. Non-covalent interactions minimize potential side reactions and produce changes in the structure of proteins and DNA, which is different from currently used drugs. This research was selected as the cover article for the print version of the journal *Inorganic Chemistry*, Issue 26.

Researchers compared the cytotoxicity and cellular concentrations of three anti-cancer drugs including the phase II clinical drug, BBR 3464, cisplatin and the new trinuclear platinum compound. In a laboratory model, human ovarian cancer cells were exposed to each drug.

“In platinum anti-tumor chemistry our objective is to design and develop complexes acting by new mechanisms of action,” said Farrell. “Resistance to current drugs is due to poor cellular absorption and an increased ability of the cell to process or repair the damage caused by the chemotherapeutic agent.

“Our novel compound was designed to overcome resistance by emphasizing new modes of DNA binding, and in the process we have found that the amount of platinum drug entering cells is increased,” he said. “The effectiveness of a platinum drug in killing cells is directly related to its concentration inside the cell.”

This work was supported by a grant from the National Institutes of Health. Researchers in the departments of chemistry and biology, pharmacology and toxicology collaborated on this research. Researchers included [Amanda L. Harris, PhD](#); [Xiaohong Yang, PhD](#); [Alex Hegmans, PhD](#); [Lawrence Povirk, PhD](#); and [John J. Ryan, PhD](#). [Lloyd Kelland, PhD](#), from the Institute of Cancer Research in England also contributed to this work.

10 Questions for Rosemary LaVista

1. What is your role at Massey?

I am in charge of fundraising efforts for Massey Cancer Center, including major gifts, annual giving, special events, commemorative giving and planned giving. Luckily, I have an incredibly able and dedicated staff who get things done. Special events are what most people are familiar with – AnthemLIVE, Anthem Blue Goo, Bizarre Bazaar, Women & Wellness – and most recently, the upcoming Ukrop’s Monument Avenue 10K.

Other fundraising takes place under the public horizon, and helps us to bring in over \$5 million in philanthropic support each year. Lately, the job has involved helping to secure Massey’s stake in the Research Initiative in the Governor’s Budget. It’s never dull!

2. What are some of your challenges?

I think my biggest challenge was coming in at the end of a highly successful campaign that raised almost \$70 million in private support. Would there be any major donors left? Thankfully, there are, and they helped us go over our goal last year. The other part of that challenge is that some people think that now we don’t need any additional funding. All of us at Massey know that the opposite is the case. The money from the Campaign has been spent according to goals – and now we have additional needs.

There’s tremendous competition for philanthropic money with so many campaigns underway in Richmond. Fortunately, Massey Cancer Center has such a wonderful reputation in the community that it continues to draw people to support us.

3. How long have you been here and what has changed for the better in that time?

I came in September 2004, as Gaston was leaving. Probably the best thing that has changed is that I am catching up to my learning curve! We’re working hard in the development office to shore up our systems with such features as on-line giving and a smoother gift acknowledgment system.

Our event schedule has nearly doubled, with all of them bringing in more money than ever before. The Board started off being terrific and with their restruc-



Rosemary LaVista, Executive Director, Development

turing project and increased involvement — they are spectacular!

4. What’s the best part of our work?

People. Fundraising definitely has a bottom line element (no money, no mission), but it’s the people I work with at Massey, the clinical and research staff who make Massey the world-class institution it is, and our Advisory Board who are exceptionally dedicated. Most of all, it’s the donors whose passion for why they give is inspirational.

5. Where did you get your education and training and how did you come to this line of work?

I received a degree in English from the University of Dayton, with graduate work in communications at Syracuse University and University of Rochester.

I started in public relations and then was asked to start a development program for an independent K – 12th grade school. It struck both sides of my brain – a chance to be creative and numbers-driven. I’ve since worked in health-care development for the last 17 years, including my last job for 8 years as VP for Development at ENH, a health care system associated with Northwestern Medical School. It cemented my admiration for academic medicine, and I

(Continued on page 5)

(10 Questions ... Continued from page 4)

was so thankful to have this position at Massey open when my husband and I moved to Richmond.

6. With all the worthy causes, how do you keep the funding spotlight on Massey's cancer research?

The spotlight is falling automatically on our new research building. We've taken many donors through it with hard hats and they have told us how having a state-of-the-art building helps them understand the magnitude of the research enterprise.

7. What do you like to do outside of work?

Read lots, play golf badly, travel as much as we can, including getting back to Chicago to see our year-old grandson.

8. What are you doing now?

I am taking ballet classes at the Richmond Ballet, trying to hold out hope that grace comes with age. Our daughter gave them to me for Christmas, knowing that I used to take lessons a long, long ago. I'm having a great time... one step at a time.

9. Have you ever had something akin to a "Eureka" insight?

Never try to read a donor's mind, especially if you think they aren't interested in giving. They'll surprise you...again and again.

10. What's on the horizon for you and the development office?

We're looking to raise \$17 million over the next two years to ensure that our world-class researchers have the necessary resources. We're hoping that Massey will get funding from the research initiative now under consideration in the state budget that we'll work to match in philanthropic support. It will still leave an ambitious private funding goal, but our board is ready for that challenge.

We'd love to move closer to the Center (we're now located on S. 14th Street), so that we could interact more with Massey staff. We're developing a grateful patients program, and it will depend on that proximity.

Put Cancer on the Run....

Massey is a beneficiary of this year's Ukrop's Monument Avenue 10K Race at 8 a.m. on Saturday, April 1. The course is flat and scenic, and runners and walkers are welcome to this "hip" race, which ends with a celebration at Monroe Park. You can win great prizes, too! Ukrop's Super Markets has generously donated two \$1,000 Gift Cards – one will be awarded to the overall top fundraiser in the Individual category, and the other to the top-producing 5-Person Team.



Participants are encouraged to raise money through pledges from friends, relatives, co-workers and neighbors.

Getting started is easy! To sign up just visit the 10k Pledge Program on the Richmond Sports Backer's website: www.sportsbackers.org/10kpledgeprogram.htm

Volunteers are needed, too! Massey has agreed to provide over 1,100 volunteer hours to support the event. (March 29, 30, 31 and April 1). For a volunteer sign-up form, please e-mail: kacanfield@vcu.edu

Colorectal Cancer Seminar Hailed as a Big Success

Massey's Community Education Committee hosted another successful event with a free seminar titled "The Facts about Colon Cancer" on Nov. 5 at the First Baptist Church of South Richmond. More than 100 attendees learned about the third-most common cancer affecting men and women in the United States which, if detected early, is highly treatable. If detected late, it is often fatal.

Featured speakers and panelists from Massey included James Shaw, MD, Alton Hart, Jr., MD, MPH, and Resa Jones, PhD, MPH. They discussed colorectal cancer, risk factors, prevention, nutrition, screening guidelines and new advances in science. Manny Deese, a colon cancer survivor and former Richmond City Manager, also shared his experience.

(Continued on page 6)

(Seminar Success ... Continued from page 5)

“The attendees evaluated the program at 95 percent and above for every aspect presented,” said [Becky Hartt-Minor](#), Massey’s cancer information manager. “The format we’ve developed proves that people want information from community experts,” she added. Partnering with Massey were the Sisters Network and the NCI’s Cancer Information Service.

Care Pages

Attention all patient care staff and volunteers: Please remember to share the good news about CarePages with our patients. In less than 10 minutes, patients can easily create a private Web page that lets friends and family know how their treatment is going. The service is entirely free. Massey CarePages visitor Jennifer W. sent these comments recently after visiting her friend's page:

"I'm touched that this service is provided for those who are going through a difficult time -- it's a great resource. It's much more efficient than calling on cell phones and e-mailing."

For more information or promotional materials, please contact [Carrie Cybulski](#) or [Andrea Butler](#).



New Massey Building Update

The new research building is finally nearing completion, as is the healing garden, according to [John Collinson](#), operations manager for Massey. Researchers will begin to move in during March.

The new patient parking garage is open under the new building with 103 spaces dedicated exclusively to Massey. Patients should continue to pull up at the valet parking circle in front of North Hospital in order to have their car parked in the new garage. College Street is also now open; however, we will continue to ask patients to avoid using it until all construction activity ends.

Mark your calendar: The development office is planning grand opening festivities for May 5 and 6, with a black-tie gala fundraiser on the 5th and a dedication ceremony open to all on the 6th.

New Radiation Oncology Chair Appointed

[Mitchell S. Anscher, MD](#), has been appointed chair of the department of radiation oncology effective June 1. Dr. Anscher is a distinguished VCU school of medicine alumni, class of 1981. He completed post-graduate medical training in internal medicine and radiation oncology, the later being at Duke University Medical Center.



At Duke, Anscher joined the faculty, rising to the rank of professor. He is double-boarded in internal medicine and radiation oncology. His administrative roles at Duke include the vice-chairmanship of the department of radiation oncology and clinical director.

[Dr. Gordon Ginder](#), Director, Massey Cancer Center, notes that Dr. Anscher’s research interests include the prevention of radiation-induced tissue injury. “We are very pleased to have attracted someone of Dr. Anscher’s stature as chair of our outstanding radiation oncology group here,” Ginder said. “At the same time, I want to sincerely thank Dr. Doug Arthur for the excellent leadership he has shown as interim chair, and we look forward to his continued valuable leadership here at Massey.”

Dr. Anscher is an internationally known authority in the treatment of prostate and lung cancer. His expertise in these areas has been recognized by appointment to various Federal and professional society panels including the National Comprehensive Cancer Network Practice Guidelines for Prostate Cancer Panel, the American College of Radiology Panel on Radiation Oncology-Prostate Work Group and the NCI Late Effects on Normal Tissues IV Lung Committee.

He serves a principal investigator on several industry-sponsored pre-clinical and clinical studies evaluating novel approaches to prevent radiation-induced lung injury and is a co-investigator on two NIH grants, and a Department of Defense grant. Dr. Anscher has authored 119 papers in peer review journals and authored 13 book chapters. Dr. Anscher and his wife, Sherry, have three children.

New Stress-Management Study for Women Opens

Women preparing to undergo chemotherapy for Stage I or Stage II breast cancer may be eligible to participate in a free study at Massey to determine whether stress-management techniques can improve their immune systems' response to treatment.

The study, backed by a \$3 million grant from the National Cancer Institute, will evaluate whether complementary strategies for stress management can ease psychological distress, positively affect physical symptoms, reduce fatigue, and enhance immune function in breast cancer patients.

Nancy L. McCain, RN, DSN, the principal investigator and a member scientist at Massey, said, "Participants have the opportunity to share their breast cancer journey with researchers who are pooling a large body of knowledge that may very well improve breast cancer treatment for future generations of women."

McCain, a professor in adult health nursing and an expert in psychoneuroimmunology, the study of mind-body-spirit interactions, adds, "Psychological and physical stress generate a series of hormonal and biochemical interactions in the body that can influence health. We cannot completely eliminate stress from a person's life, but by employing a variety of complementary mind-body interventions, positive changes in the neuroendocrine-immune system should follow."

The study will test whether two complementary approaches -- *tai chi* training and spiritual-growth groups -- can reduce perceived stress and enhance coping strategies. *Tai chi* is a meditation in motion that focuses on slow, graceful movements to increase strength and flexibility and to improve balance and circulation.

Participants will randomly be assigned to a stress management group of *tai chi*, spiritual growth, or to a control group with no stress management training. These "mind-body-spirit" interventions will be evaluated using multiple biological markers to shed light on a study participant's health status over time.

To be eligible for the study, women must be at least 21 years old; have early-stage breast cancer; have a treatment plan that includes chemotherapy; and have no previous history of cancer. They need to enroll in the study before their first cycle of chemotherapy.

Massey Movers

The staff of Medical/Surgical Oncology voted Carol Hudson, RN, as preceptor of the year for 2005, and celebrated with a lunch, cake and a gift . . . The Bone Marrow Transplant program's ranking among HSC centers for patient volume moved from 34th to 17th last year . . . **Kudos** and hearty thanks to Martha D. Wellons for 30 years of service and to Audrey Clayton for her 25 years of contributions . . . Alton Hart, MD, and Jill Laird, RN, nurse manager, Thomas Palliative Care unit, are set to speak Feb. 25th at a seminar titled **Breast Cancer: Care Options and Reconstruction** hosted by the Virginia Breast Cancer Foundation . . . James Shaw, MD, will speak on colorectal cancer to the Dept. of Environmental Quality as part of the CommonHealth program.

(Continued from previous column)

If assigned to the *tai chi* or spiritual growth groups, participants will be asked to attend a 90-minute group meeting once a week for 10 weeks during their chemotherapy treatment. Additionally, all participants will be asked to answer a confidential questionnaire and provide urine and blood samples seven times over a two-year period.

To evaluate fatigue, participants will also be asked to walk in a hallway or on a treadmill for six minutes, seven times over a two-year period.

The two study sites are Massey's flagship location on the MCV campus of VCU, and the Stony Point facility.

Co-investigators on the project are, from the VCU School of Nursing: Patricia Gray, PhD, associate professor and chair of adult health nursing; Inez Tuck, PhD, professor and chair of integrative systems; R.K. Elswick, Jr., PhD, associate professor of biostatistics and nursing; Sadeeka Al-Majid, PhD, and Jo Robins, PhD, adult health nursing; Gayle Roux, PhD, maternal-child nursing; and Jeanne Walter, PhD, project director.

Additional co-investigators from Massey include Harry D. Bear, MD, PhD, chair of surgical oncology and director of the Breast Health Center; and Thomas J. Smith, MD, professor and division chair, hematology/oncology.

For more information, contact Dr. Jeanne Walter, 804-828-0727.

Inclement Weather Procedure

Do you need to report to work in the face of snow, sleet, ice, hurricanes, tornadoes, and other natural disasters? It depends... and you can find the answer on VCU's inclement weather procedure, available on-line at

<http://www.hr.vcu.edu/weather.htm>.

Listen for announcements on the major area radio and television stations or call **VCU-OPEN (828-6736)** to find out the operating plan in effect during times of threatening weather conditions. This information will also be on www.vcu.edu/alert/.

When inclement weather or other emergency conditions cause one campus to remain open while the other closes, employees follow instructions that affect the campus on which they are housed or to which they primarily report. If day classes are in session on a particular campus, offices are also open.

VCU Health System employees follow a separate procedure for inclement weather and emergency conditions. This procedure is also on the Web site.

Safety

Safety is an issue at the forefront of the news today and the VCU campus is no exception. VCU offers a Security Escort Service to assist you in safely getting to your vehicle or another building on either campus: **828-WALK** (828-9255). The VCU Transit buses are also available between campuses.

For more information on campus security and alerts, visit the Alert Web site at www.vcu.edu/alert/. For information on VCU Transit, visit the Parking and Transportation Web site at www.bsv.vcu.edu/vcupark/.

Questions? Contact **Jeannie Chewning**, personnel administrator at 827-0943 or jkchewning@vcu.edu.

Contact Center Point

We welcome contributions, story ideas and feedback. Please send news, events, and announcements to the editors for inclusion in the next edition of the newsletter.

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A New Massey Web Site Is Coming... Stay tuned.

VCU Massey Cancer Center Beta
A National Cancer Institute-designated Cancer Center

Search

Make an appointment
Find a physician

Discover Massey
Support Massey
News and community

For patients
For medical professionals

Palliative care

discovering.
teaching.
healing.

Types of cancer

Research at Massey

Headlines

Women undergoing chemotherapy for breast cancer may participate in stress-management study

Introducing a world-wide first in image-guided radiosurgery

Race to support Massey in the Ukrop's Monument Avenue 10k7

Clinical trials at Massey

Virginia Commonwealth University