A Message from the UTMC CEO

Great Opportunity in Times of Change

David Morlock  
Chief Executive Office UTMC-Exec VP UT

Times of change can bring uncertainty, but they also present great opportunity. Working together we can make this period of change a time where we grow and strengthen our hospital, our Health Science Campus and our university.

I, like you, am committed to our mission at the UT Medical Center and to advancing this University. I look forward to working with you as we continue to improve patient safety, quality and satisfaction to make the region's only academic medical center the best hospital in this market.

The leadership team in place to move us toward that goal is focused on delivering the safest and highest quality care for our patients.

Dr. Carl Sirio is now serving as chief operating officer for UTMC, as well as chief clinical and chief medical officer. He also has the additional role of senior associate dean for clinical affairs for the UT College of Medicine and Life Sciences.

The leadership team also includes Dr. Bryan Hinch as chief medical information officer, Dan Barbee is vice president for clinical services, Monecca (Mo) Smith is chief nursing officer and Angie Ackerman is the outcome management director.

I congratulate Norma Tomlinson, who joined the organization in 2005 and currently serves as associate vice president of UTMC, on her retirement Sept. 12. We will miss her experience and institutional knowledge, which has been extremely helpful to me as I assumed my new role, and thank her for all she has done to create a wonderful environment for our patients and students.

The University of Toledo Health Science Campus is special because it affords our academic professionals the opportunities to work with clinicians to improve patient care and advance medical treatments. We have truly unique translational research being conducted in our laboratories and groundbreaking clinical trials underway in our clinics.

I am also encouraged by the growing number of collaborations with those in the basic sciences and other fields on Main Campus with Health Science Campus faculty that will lead to untold discoveries and advancements.
The talented faculty and staff here at UT have a strong record for competitive grant awards from external funding agencies and I offer my support and that of our administration in those pursuits.

There is a lot of change at our University and it is a busy time for UTMC as we implement the Affordable Care Act and prepare for a visit from the Joint Commission, but I know our strong collaborative spirit will allow us to work together to ensure a bright future. I look forward to working with you.

Our Department – Radiation Oncology

Changhu Chen, MD
Professor & Chair
Department of Radiation Oncology

The UTMC Department of Radiation Oncology was established in early 1980’s by Dr. Ralph R. Dobelbower Jr, M.D., an expert in intraoperative radiation therapy. After he retired in 1997, Dr. John Feldmeier, D.O., led the department for 15 years until December 2012. The department during this time was located in the university hospital basement, with one physician, three physicists, two linear accelerators (radiation treatment machines), and a high-dose-rate brachytherapy (internal radiation) unit. The department was relocated to the Eleanor N. Dana Cancer Center in February 2013 with a state-of-the-art Varian Truebeam linear accelerator and a 4D PET-CT simulator. With Drs. Krishna Reddy, M.D., Ph.D., and Nicholas Sperling, Ph.D., joining the faculty, and the recent addition of a brand new Varian Edge radiosurgery suite, we are now providing the most advanced radiation therapy for patients in the greater Toledo area and Northwest Ohio.

There are currently six faculty members in radiation oncology, including two clinical radiation oncologists and four medical physicists. Dr. Ismael Parsai leads the medical physics division. There are 12 supporting staff, including a clinic manager, Mrs. Michelle Giovanoli, and an administrator, Mr. Hesham Youssef.

The department at the Dana Cancer Center hosts our clinic, radiation therapy equipment, and medical physics division. Each patient is evaluated for radiation therapy by one of our radiation oncologists. If radiation therapy is indicated, the patient undergoes a CT-simulation process for treatment planning. After the physicians delineate the radiation therapy targets and critical surrounding structures, they prescribe a specific radiation treatment regimen. Our physics/dosimetry group then works to customize an individualized radiation treatment plan, which is a highly complex process of radiation beam design and calculation. Once the plan is reviewed, revised, and finally approved by the treating physician, it is uploaded into the treatment machine and ready to be utilized for patient treatment.

In radiation therapy, the accuracy of patient positioning and set-up is crucial for targeting of the tumor and optimal sparing of the surrounding critical normal tissues. Each of our radiation machines (linear accelerators) is equipped with a cone beam CT scanner. A quick CT scan of the patient in the treatment position allows us to visualize the target and surrounding normal structures in real-time, before each dose of radiation is actually delivered. This process of image-guided radiation therapy (IGRT) is state-of-the-art, and a routine practice in our clinic.

Tumors in the lungs, liver, and many other locations in the body often move with breathing. Our 4-dimensional CT simulation captures tumor motion during the respiratory cycle. When we plan radiation treatment, this target motion can be accounted for, guaranteeing proper treatment of a moving target.

For the majority of definitive radiation therapy cases, intensity-modulated radiation therapy (IMRT) is used. This technique allows the intensity of radiation in each beam to be modulated to ensure that the tumor targets receive the desired radiation dose, while achieving maximal sparing of surrounding normal tissues.

When cancer spreads from its primary site to other locations in the body (metastasizes), palliative chemotherapy has traditionally been the only treatment option. Our faculty has extensive expertise and experience in using stereotactic radiosurgery (SRS), “surgery without knife.” SRS utilizes high dose, precisely delivered radiation treatment to eradicate metastases in the brain, lung,
liver, spine, or almost any other part of the body. It is non-invasive, pain free, and does not require hospital stay. SRS is delivered in only one to five total sessions, and patients are able to go home right after treatment. It is highly effective, usually with an 80-90% chance of eradicating the metastatic lesions being targeted (Figure 1).

UTMC is one of the first five institutions in the world to have the dedicated Varian Edge radiosurgery suite (Figure 2). With the Edge, we are able to treat tumors ranging from 3 mm to 20 cm in size.

The Edge system offers the patients:

- Faster treatment: With a dose rate of up to 2,400 monitor units per minute, it offers rapid stereotactic treatments in only 10-20 minutes compared to other systems that can take well over an hour per session.
- Increased comfort: The six degrees (6D) of freedom treatment couch provides the accuracy, precision and flexibility needed to optimally position and adjust patients, allowing them to be comfortable and breathe freely during treatment. The patient positioning/set-up accuracy on this system is within 1 mm.
- Real-time imaging: An advanced motion management package makes it possible to better compensate for tumor motion during treatment. The 2.5mm multi-leaf collimator provides a distinct cutting “edge” for radiosurgery treatments. The system utilizes a face-recognition mechanism to monitor and correct patient positioning throughout treatment and can track tumor motion in real time.
- Cost-effective medicine: The Edge can accurately treat the vast majority of what a proton center can do at a fraction of the cost.

With our expertise, experience, and cutting-edge technology, we now provide patients in the northwest Ohio region with specialized radiation treatment services which previously were only available at Ann Arbor, Cleveland, or Columbus. We pride ourselves on our multidisciplinary approach to diagnosing and treating cancer, and work closely with cancer care providers from other specialties, including medical oncology, surgery, urology, gynecology, integrative care, pain management, and nutrition. Our team of cancer specialists meets weekly as a group to discuss every cancer case, and create the best individualized treatment plans.
In addition to providing clinical service, we teach a growing number of medical students and medical oncology fellows who are interested in radiation oncology. Additionally, Dr. Parsai oversees an accredited medical physics graduate program, with several current M.S. and Ph.D. candidates. There have been numerous graduates from our medical physics program who have gone on to become chief physicists at prestigious academic centers.

Our faculty is active in research. Dr. Reddy is leading our clinical research efforts, and Dr. Parsai has been successful in medical physics research with continuous extramural funding. Our ultimate goal is to continue to grow and expand in every aspect, and ultimately build a strong academic radiation oncology department. Visit us at http://utmc.utoledo.edu/centers/cancer/radiation-oncology/index.html

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**New Opportunities For Research Publication**

Ronald McGinnis, M.D.
Interim Dean
College of Medicine & Life Sciences

Just as the Internet is transforming traditional teaching models in medical education, it also is changing the publication model for scholarly work as evidenced by the growth in open access journals no longer tied to the volume/issue cycles of traditional printing. Medical schools around the world are adopting this concept to facilitate publication resulting from early research involvement of students and the transition to academic medicine of residents and fellows.

I would like to congratulate the Editorial Staff for launch of UT’s new online journal, Translation: The University of Toledo Journal of Medical Sciences. The Journal will welcome original articles describing novel results of basic and clinical research, case reports, and reviews. The review process will be rapid and will be applied uniformly, while recognizing the restrictions imposed by clinical training and curricular scheduling on early career stage investigators, where the flexibility to complete additional experiments is not available. Support from the faculty both within and outside of the institution is essential as a source of expert peer review through critique of the design, conduct, analysis and communication of results while upholding excellence in early stage work.

Translation will serve to highlight the growing momentum of clinical and translation research within professional and graduate programs. In 2013 52% of residents and fellows participated in clinical research resulting in 51 conference presentations. In 2012 we experienced a 40% increase in the number of 1st year medical students involved in the summer research program. As a final part of the experience, all these students present their work at the Summer Research Forum, with many of these progressing to presentation at national meetings. Approximately 50 students per year choose the MSBS program as an entry path to medical school. All are required to complete scholarly projects during the summer following their didactic work. For many of these projects, preparation of a manuscript for faculty review and publication in Translation can be an appropriate milestone in their scholarly development.

I would urge all faculty in research mentoring roles to encourage manuscript submission to further showcase the excellent accomplishments within our institution.

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**The Newly enrolling clinical trials**

A Randomized, Double Blind, Cross-over Trial Comparing The Safety and Efficacy Of Insulin Degludec and Insulin Glargine, With or Without OADs In Subjects With Type 2 Diabetes (SWITCH 2)
Dr. Hejeebu - Medicine

Efficacy and Safety of ADS – 5102 (Amantadine HCL) Extended Release Capsules for the Treatment of Levodopa Induced Dyskinesia in Parkinson’s Disease Patients
Dr. Elmer - Neurology
A Phase 2B, Twelve-week Multi-Center, Randomized Double-Blind, Placebo Controlled, Parallel Group Study, To Determine the Safety, Tolerability and Efficacy of Two Doses of Once Daily P2B001 in Subjects with Early Parkinson’s Disease (PD)
Dr. Elmer - Neurology

Prospective Neo-Adjuvant REGISTRY Trial Linking MammaPrint, Subtyping and Treatment Response: Neoadjuvant Breast Registry - Symphony Trial (NBRST)
Dr. Mohamed - Medicine

A multicenter, doubled-blind, randomized, placebo-controlled, Phase 3 study to assess the efficacy and safety of oral BPS-314d-MR Added-on to treprostinil, inhaled (Tyvaso ®) in subjects with pulmonary arterial hypertension
Dr. Moukarbel - Medicine

The Intravascular Cooling in the Treatment of Stroke 2/3 (ICTuS 2/3) Trial
Dr. Tietjen - Neurology

Contact Us

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