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Memorial Sloan Kettering
Cancer Center

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Today there are remarkable opportunities for those seeking a career in urologic oncology. The revolution in molecular biology and advances in sophisticated technology will permanently change the way we care for patients with genitourinary cancers.

Minimally invasive surgical approaches are being developed for almost all urologic cancers.

Image-guided intervention will open the door to treatment of very early cancers.

The ability to characterize these cancers with modern imaging tools — magnetic resonance imaging and spectroscopy, dynamic PET scanning and PET-CT fusion — promises real improvements in preoperative staging and surgical planning.

Genomic and proteomic analyses provide new insights into the biologic potential and growth control mechanisms of these tumors.

Modern clinical evaluative science, or “outcomes research,” provides new objective tools for assessing results.

Patient-completed questionnaires and standardized assessment of individual patient preferences have helped us understand better the concerns of each patient and the effects of cancer and its treatment on quality as well as length of life.

Medical informatics provides new tools — nomograms — to calculate risks for the individual patient.

By embracing such developments, urologic oncologists can achieve better results by providing risk adjusted therapy: treatment tailored to the particular characteristics of the cancer in each individual patient, an approach designed to maximize longevity with the least risk to quality of life.

The Role of Surgery

Amid these exciting advances surgical excellence remains the basis for all progress in our field. For instance the development of modern chemotherapy for germ cell tumors did not eliminate the need for surgery, but challenged surgeons to learn to operate on highly complex tumors while reducing the burden of surgical morbidity. Similarly, chemotherapy for bladder cancer has expanded the role of surgery, with resection of previously inoperable cancers now being common. Future leaders in urologic oncology must be highly skilled and experienced surgeons fully capable of open, free-hand, and robotic-assisted laparoscopic techniques and image-guided therapy in addition to being scholars well versed in the nuances of modern diagnostic and staging procedures, and fully appreciative of the benefits and limitations of all therapeutic modalities, including systemic therapy (immunological and biologic therapy as well as classic chemotherapy) and radiation therapy.

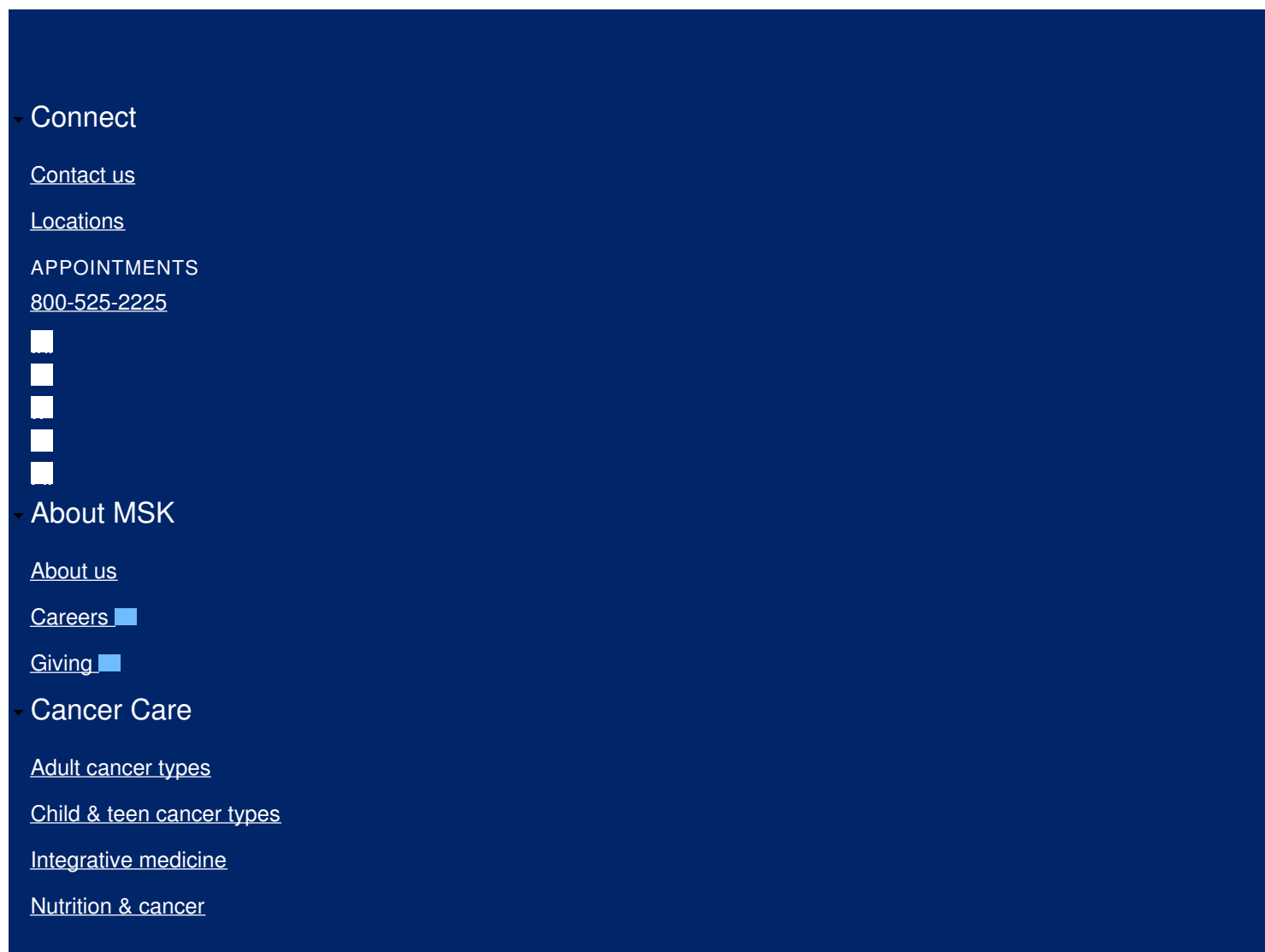
Complete training requires equally intensive exposure to research, whether in the molecular biology laboratory or in statistical methodology. Research experience not only prepares us for the future of cancer care, it also sharpens and disciplines our thinking during a lifetime career in urologic oncology.








Learn More

We welcome your interest in Memorial Sloan Kettering and invite you to participate with us in changing the future of medicine.

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