The Gastrointestinal Cancer Center

Roswell Park is the only National Cancer Institute (NCI) designated comprehensive cancer center in Upstate and Western New York.

What Sets Us Apart

- **Our high-volume experience** in laparoscopic, robot-assisted, and complex gastrointestinal cancer surgery
- **Robotic and laparoscopic** approaches for esophagectomy, advanced gastric cancer, colorectal, liver and pancreas surgery
- **Liver & Pancreas Tumor Center** dedicated to multidisciplinary care for hepatopancreatobiliary cancers
- **Liver-directed therapies** such as microwave ablation, chemoembolism and radioembolism for both destination and bridge-to-transplant therapies
- **Endoscopy Center** that offers advanced procedures such as endoscopic ultrasound and double balloon enteroscopy
- **Robust portfolio of clinical trials** offering the latest approaches in novel chemotherapy, targeted and immunotherapy agents and Peptide Receptor Radionuclide Therapy (PRRT)
The Gastrointestinal Center

Our multidisciplinary team — surgical, medical and radiation oncologists, plus experts in gastroenterology, endoscopy, pathology and diagnostic and interventional radiology — work together to develop individual patient-care strategies using evidence-based guidelines for the following malignancies and associated conditions:

- Ampullary and duodenal cancer
- Anal cancer
- Barrett’s esophagus
- Colon and rectal cancer or polyps
- Cystic pancreatic and liver tumors
- Esophageal cancer
- Gallbladder and bile duct cancers
- Gastric cancer
- Liver cancer and liver metastases
- Metastatic tumors to the liver
- Neuroendocrine tumors (carcinoid and islet cell)
- Pancreatic cancer
- Small intestine tumors
- Inherited familial gastrointestinal cancer syndromes and associated cancers

We surround our patients and their families with other important care services to help maximize the benefit of cancer treatment, promote healing, relieve cancer’s burden and aim for a higher level of lifelong wellness.

These services include:

- **Nutrition Services** to provide strategies for nausea, constipation, taste changes, difficulty chewing and swallowing, and resist loss of muscle mass.
- **Supportive & Palliative Care Center** to address symptoms, improve quality of life and ease anxiety and emotional distress.
- **Rehabilitation Center** to combat pain and neuropathy, and maximize strength, mobility and function before, during and after cancer treatment.
- **Sexual Health Clinics** to address side effects that impact intimacy.
- **Survivorship Care Center** to provide care, surveillance, screenings, symptom management, and social support and guidance.
The **Endoscopy** Center

This state-of-the-art center for advanced endoscopy services features five treatment suites equipped with the latest technology for endoscopic procedures.

We offers minimally invasive options for diagnosis, biopsy and treatment of gastrointestinal conditions, including some services unavailable elsewhere in the region. On-site pathology within the center can provide immediate, mid-procedure review and diagnosis.

**Our Endoscopic Services Include:**

- Endoscopic ultrasound (EUS) and Esophagogastroduodenoscopy (EGD)
- Endoscopic retrograde cholangiopancreatography (ERCP) and cholangioscopy
- Endoscopic vacuum-assisted sponge therapy
- EUS-guided fine needle aspiration and EUS-assisted ERCP
- Electrohydraulic lithotripsy of complex bile duct stones
- Colonoscopy
- Radiofrequency ablation
- Enteral stenting
- Endoscopic drainage of pancreatic pseudocysts
- Capsule endoscopy
- Double balloon enteroscopy
- Endoscopic mucosal resection

**Unique Capabilities**

Roswell Park offers several treatment approaches unavailable elsewhere in the region, including:

- Peptide Receptor Radionuclide Therapy (PRRT) for neuroendocrine tumors
- Cytoreductive Surgery/HIPEC for colorectal cancer, appendiceal adenocarcinoma, DPAM and peritoneal mesothelioma
- Gamma Knife Radiosurgery for metastases to the brain
- Intraoperative Radiotherapy to treat positive margins with tumor excision
- NanoKnife ablative procedures for unresectable or difficult-to-reach liver and pancreas tumors
- Radioembolization (SIR-Spheres or Theraspheres) for unresectable liver tumors
- Photodynamic Therapy for a nonsurgical approach to Barrett’s esophagus and early malignancy
- Sacral Nerve Stimulation in conjunction with pelvic floor therapy to address fecal incontinence.

We conduct specialized, *multidisciplinary tumor boards* specific to gastroesophageal, hepatopancreaticobiliary and colorectal cases.
At Roswell Park, we don’t just follow the National Comprehensive Cancer Network (NCCN) clinical practice guidelines used around the world; we write them.

Steven Nurkin, MD, MS, Chief of Colorectal Surgery, serves on the NCCN panels that establish the best practices for treatment of colon, rectal, anal and small bowel cancers.

**COLON and RECTAL Cancer Care**

We are the region’s elite resource for the treatment of colon and rectal malignancies.

**HERE’S WHY:**

- **Surgical expertise in laparoscopic, robotic and single-incision surgery.** Most of our patients avoid a permanent colostomy. Nearly 70% of operations are performed robotically.
- **Endoscopic approaches** including robotic techniques to avoid major surgery for early cancers.
- **Treatments at the forefront of cancer care,** incorporating tumor profiling and microsatellite instability testing to use the latest chemotherapy combinations, immunotherapies and targeted agents.
- **Clinical trials** of the latest emerging options.
- **Support services integrated into care,** including fertility preservation, pelvic floor rehabilitation, nutrition counseling, ostomy support, mental health services, survivorship care and more.

**SPECIALIZED Programs for COLORECTAL Care**

To fill a critical need of patients with unique presentations, we offer these dedicated clinical programs:

<table>
<thead>
<tr>
<th><strong>COLORECTAL LIVER METASTASES</strong></th>
<th><strong>RECURRENT RECTAL CANCER</strong></th>
<th><strong>YOUNG ONSET COLORECTAL CANCER</strong></th>
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<tr>
<td>In conjunction with our hepatobiliary surgeons, we offer several surgical options to resect liver metastases and spare and regenerate healthy liver tissue, plus liver-directed therapies such as ablation, radioembolization, and hepatic arterial infusion pump to deliver chemotherapy to the liver.</td>
<td>Offering multivisceral surgical resections, intraoperative radiation therapy and support from nutrition, pelvic floor rehabilitation, and physical and occupational therapy.</td>
<td>This program integrates key ancillary services — fertility preservation, genetic screening, pelvic floor rehabilitation, sexual health clinic, mental health, social support and more — into the clinical care pathway for younger patients.</td>
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**HIGH RISK Colorectal Cancer Screening**

Providing early detection and preventive options for high-risk patients due to:

- Hereditary cancer syndromes
- Early onset polyps
- High number or rare types of polyps

**COMPLEX Polypectomy Program**

We offer endoscopic approaches — mucosal resection, submucosal dissection, full thickness resection, and robotic/ transanal surgery — to treat complex colon and rectal polyps and avoid major surgery.
Sarbajit Mukherjee, MD, MS, serves on the National Comprehensive Cancer Network (NCCN) panels that write the clinical practice guidelines for the treatment of esophageal, esophagogastric junction and gastric cancer.

Roswell Park is a high-volume center for minimally invasive esophagectomy and gastrectomy with 500+ minimally invasive esophagectomies — 150+ robotic esophagectomies — and has published a large volume series on minimally invasive gastrectomy in the last decade, placing us among the top in the state and the nation.

We achieve exceedingly low complication rates in the following key indicators:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Roswell Park</th>
<th>International rates in high volume centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-day mortality rate</td>
<td>&lt;1%</td>
<td>3-5%</td>
</tr>
<tr>
<td>Anastomotic leak rate</td>
<td>2%</td>
<td>10-33%</td>
</tr>
<tr>
<td>Pneumonia/Infection rate</td>
<td>5%</td>
<td>20-25%</td>
</tr>
<tr>
<td>Lymphatic leak rate</td>
<td>2%</td>
<td>10-15%</td>
</tr>
<tr>
<td>Stricture rate</td>
<td>1%</td>
<td>5-25%</td>
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</table>

These complex cancers are on the rise and our comprehensive approach is key to achieving optimal oncologic and functional outcomes.

All cases are presented to a multidisciplinary tumor board to review and collaboratively determine the best individualized treatment plan, including surgical approach, innovative clinical trials, targeted therapy and combination chemoimmunotherapy based on patients’ tumor characteristics.

ESOPHAGEAL, GASTRIC, GASTROESOPHAGEAL JUNCTION CANCER EXPERTISE

Our Surgical Options Include:

- Ivor Lewis esophagectomy
- McKeown esophagectomy
- Transhiatal esophagectomy
- Using alternate conduits if stomach is not usable like colon interposition and small bowel interposition
- Proximal gastrectomy with double tract reconstruction
- Total gastrectomy with or without jejunal pouch
The latest technologies and therapies to deliver state-of-the-art treatments for these high-need patients.

**LIVER & PANCREAS Tumor Center**

This center brings together a multidisciplinary team of experts focused on rare and complex hepatopancreaticobiliary cancers and conditions.

**Christos Fountzilas, MD**, serves on the NCCN panel that writes the guidelines for the treatment of pancreatic adenocarcinoma.

**Renuka Iyer, MD**, Chief of GI Oncology, serves on the NCCN panel that writes the treatment guidelines for hepatocellular carcinoma and biliary tract cancers.

**LIVER**

**Highlights of our program include:**

- **High volume of complex liver resections** and we offer minimally invasive techniques in appropriately selected patients.
- **Multidisciplinary management for complex cancers** such as hilar or intrahepatic cholangiocarcinoma, that include interventional radiologists, surgeons, endoscopists and medical oncologists to achieve best outcomes.
- **Colorectal liver metastases program** offers unique techniques such as hepatic artery infusion pump, parenchymal sparing liver resection, and portal vein embolization to make patients eligible for curative intent liver resection.
- **Comprehensive portfolio of clinical trials** both in neoadjuvant and adjuvant setting.

**PANCREAS**

- **Single-day patient consultation and treatment planning.** Patients get appropriate imaging and consultation with multidisciplinary team — surgeon, medical oncologist, dietitian, genetics, and other relevant specialties — all in one day, so treatment can begin quickly.
- **Robot-assisted Whipple procedures.** We are the only high-volume center outside NYC for robotic pancreatic resections for tumors in head of pancreas.
- **High-volume experience with complex vascular reconstructions** both arterial and venous reconstructions for borderline and locally advanced pancreatic tumors.
- **Rare procedures such as enucleation and central pancreatectomy for benign pancreatic tumors**
- **High risk pancreatic cancer screening** that includes complete physical exam, laboratory testing and screening every six months with endoscopic ultrasound alternated with magnetic resonance cholangiopancreatography.

**Designation by the**

NATIONAL PANCREAS FOUNDATION CENTER

WE ARE THE REGION’S ONLY NPF CENTER FOR PANCREATIC CANCER.
Neuroendocrine tumors are more prevalent than pancreas and gastric cancers combined. With few approved treatments and limited data for evidence-based medicine, patients benefit from dedicated multidisciplinary care that includes therapeutic endoscopists, interventional radiologists, endocrinologists and surgical and medical oncologists who specialize in these unique tumors.

**Studies show that outcomes are better when care is coordinated and optimally sequenced.**

**Our INTERVENTIONAL RADIOLOGY Team**

- Four fellowship-trained interventional radiologists with extensive liver oncology experience.
- Offer complete array of liver directed therapies including microwave ablation, chemoembolization and radioembolization.
- 2nd largest volume in the nation for SIR-Spheres embolizations.

**OUR APPROACH INCLUDES:**

- Surgical resection and/or ablative therapies
- Liver-directed therapies
- Novel imaging with gallium-68 and copper-64 dotatate PET
- Medical treatments using sandostatin, lanreotide, targeted agents and temozolamine-based combinations
- Peptide receptor radionuclide therapy (PRRT)
- Clinical trials of novel drugs

**Expertise in treating NEUROENDOCRINE TUMORS**

Moshim Kukar, MD, FACS, Chief, UGI, HPB and Endocrine Surgery, serves on the NCCN panel that write the treatment guidelines for Neuroendocrine Tumors.

**Clinical GENETICS Services**

Our team of board-certified medical genetic counselors will review your patient’s personal and family history to determine individual hereditary cancer risk assessment.

**OTHER SERVICES INCLUDE:**

- Genetic testing using multi-gene panels
- Options for prevention, surveillance and screening
- Guidance regarding risk in family members
Meet the Team

**Surgical Oncology**
1. Benjamin Calvo, MD, FACS
2. Leonid Cherkassky, MD
3. Moshim Kukar, MD, FACS
4. Gary Mann, MD, FACS
5. Steven Nurkin, MD, MS, FACS
6. Zachary Stiles, DO, MS

**Colorectal Surgery**
7. Anthony Dakwar, MD, FACS

**Medical Oncology**
8. Christos Fountzilas, MD, FACP
9. Renuka Iyer, MD
10. Anuradha Krishnamurthy, MBBS
11. Sarbajit Mukherjee, MD, MS
12. Kannan Thanikachalam, MD
13. Deepak Vadehra, DO

**Radiation Oncology**
14. Nadia Malik, MD
15. David Mattson, MD

**Gastroenterology**
16. Andrew Bain, MD
17. Kevin Robillard, MD
18. Sehrish Jamot, MD
19. Anoop Prabhu, MD

**Interventional Radiology**
20. Omar Hasan, MD
21. Michael Petrozziello, MD
22. Steven Steer, MD, MS
23. Garin Tomaszewski, MD

**Diagnostic Radiology**
24. Benjamin McGreevy, MD
25. Charles Roche, MD

**Nuclear Medicine**
26. Dominick Lamonica, MD
27. Paul Grant, DO

**Surgical Pathology**
28. Charles LeVea, MD
29. Kazunori Kanehira, MD

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**REFER A PATIENT**

Call us today to discuss a case, confirm a diagnosis or refer a patient.

**716-845-RPMD** (716-845-7763)

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You may prefer to receive cancer care closer to home at one of our Roswell Park Care Network practices. Visit [RoswellPark.org/CareNetwork](http://RoswellPark.org/CareNetwork) for a list of locations, providers and the services they offer.

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Elm & Carlton Streets | Buffalo, NY 14263 | RoswellPark.org/RPMD | 716-845-RPMD (716-845-7763)

National Cancer Institute-Designated Comprehensive Cancer Center | National Comprehensive Cancer Network Member

Blue Distinction Center for Cellular Immunotherapy - CAR-T | Blue Distinction Center for Cancer Care | Blue Distinction Center for Transplants