Dr. Chet Hammill

Following Dr. Hammill’s lead:

• Image Guided Surgery:
  - The current generation of robotics have miniaturized instruments with which we can perform complex intra-abdominal tasks.
  - Image Guided Surgery: Our surgeons currently use intraoperative ultrasound to diagnose and guide procedures in real time. While this in itself was a breakthrough, there is tremendous potential for integrating real time 3-D ultrasound, CT and even MRI imaging into the operating room.
  - Following Dr. Hammill’s lead: Our team performs ground-breaking procedures utilizing robotic technology and partners with industry sponsors to help develop the image guidance technologies to make our procedures safer and more precise.

Dr. Pippa Newell

IMMUNO-ONCOLOGY IN LIVER AND PANCREAS CANCER

Dr. Pippa Newell

The journal Science deemed immunotherapy the Breakthrough of the Year in 2013(1). This news arrived as results from several clinical trials documented the power of the immunotherapeutic approach to treat cancer, including tumors historically resistant to chemotherapy. The Liver and Pancreas Surgeons at The Oregon Clinic are actively collaborating with scientists at Providence Cancer Center and The Earle A. Chiles Research Institute (EACRI) to develop lab research and clinical trials to study the effect of newly available immunotherapy agents, including anti-PD-1 and anti-OX40, on liver, biliary and pancreas cancers. These antibodies are used to target specific molecules on immune cells. Specifically, these antibodies release the brakes on T lymphocytes, allowing the T cells to attack cancer cells.

Our clinical trials and scientific research interests in hepatobiliary and pancreatic cancers include:

Hepatocellular Carcinoma (HCC)
- 90% of HCC tumors arise in environment of chronic inflammation, which in the U.S. is most commonly caused by viral hepatitis, heavy alcohol use, and fatty liver disease.
- Providence Cancer Center is one of 10 research institutions in the Bristol-Myers Squibb International Immuno-Oncology Network. As such, we are one of a handful of centers in this country (Fig. 1). CT scans are used to measure tumor growth. We are one of a few centers on the West Coast with this technology, made possible by funding from the Mundock Trust and the Providence Portland Medical Foundation. Dr. Newell’s project is also funded by the Collins Medical Trust.
- Dr. Newell is investigating the combination of stereotactic radiation (SBRT) plus anti-PD-1 in a mouse model of HCC. In this model, a Small Animal Radiation Research Platform (SARRP) is used to deliver stereotactic radiation to liver tumors in mice (Fig. 1). NSBRT plus anti-PD-1 is a promising approach for liver cancer.
- Dr. Newell’s project is also funded by the Collins Medical Trust.

Pancreatic Adenocarcinoma (PDA)
- 90% of our patients undergoing pancreas resections are enrolled in a clinical trial. From 2010-2014, we enrolled over 270 patients in trials studying the immune populations in the blood and in tumors of patients undergoing pancreatic and liver surgery for benign, malignant, and pre-cancerous tumors (2).
- We recently completed accrual of 20 patients to a Phase I clinical trial combining immune therapy with chemoradiotherapy for patients with borderline and locally advanced PDA. We are working with our collaborators in medical oncology, radiation oncology, and scientists at the EACRI to design a follow up study for future patients. We plan to begin enrollment in this next trial by Spring 2015.
- Our scientific collaborator Michael Gough, PhD, was recently awarded a prestigious NIH RO1 grant as well as an American Cancer Society grant to study the role of the immune system in treatment of pancreatic cancer. This funding will bring in over $2 million to support our research in this area over the next 5 years. Todd Ciccornet, MD, one of our collaborators, was awarded the 2014 Fredman Family Foundation – Pancreatic Cancer Action Network – AACR Research Acceleration Network Grant along with co-investigator Dung Le of Johns Hopkins. This awards $1 million to fund a clinical trial in immunotherapy for advanced pancreatic cancer at Providence Cancer Center and Johns Hopkins.

References
UPDATE ON PANCREATIC CANCER
by Dr. Paul Hansen, MD, FACS

Dr. Paul Hansen

Current Management of Pancreatic Cancer

In the 1970’s, the 5-year, overall survival of a patient diagnosed with testicular cancer was <5%. 30 years later, the 5-year survival was >95%. This miraculous transition was not the result of a wonder drug, but it was the result of a incremental, hard earned steps, each adding a piece to the puzzle.

Today, the 5-year overall survival of patients with pancreatic cancer remains <5%. We are beginning, however, to see an upward trend in the curve. Earlier diagnosis, safer approaches to curative surgery, new drugs showing meaningful increases in response rate and survival times, and the promise of immune-oncology, and genetics are giving us hope.

Pancreatic cancer presents a number of unique challenges to care givers. There are few symptoms early in the course of disease, and diagnosis, staging, and treatment require a true team approach from specialized clinicians.

Minimally Invasive Pancreatic Surgery

Laparoscopic techniques have been widely applied in general surgery for over 20 years now. However, the complexity of pancreatic surgery and the potential for complications has slowed the introduction into this field. The pancreatic surgeons of The Oregon Clinic have been pioneers in developing the techniques required to overcome the unique challenges of this procedure. Since 2009, our group has been the only surgical practice in the Pacific Northwest to offer totally laparoscopic pancreaticoduodenectomy.

Minimally Invasive Procedures Offered:
- Liver Resection
- Liver Tumor Ablation
- Bile Duct Reconstruction
- Whipple Procedure
- Distal Pancreas Resection

To view our minimally invasive surgery videos, visit us on YouTube: youtube.com/DrHammill

Surgical ‘Pre-Habilitation’

Pancreatic surgery is one of the most physically and psychologically stressful events a patient or family will ever face. Like a marathon, there is increasing recognition that preparation is paramount to assure an optimal outcome.

Our program has initiated a thorough process of pre-operative evaluation and pre-treatment:
- Evaluation by a high-risk peri-operative hospitalist
- Evaluation and education by a nutritionist
- Evaluation and training by a physical therapist
- Psycho-social distress screening and intervention
- Preoperative management of anemia
- Smoking cessation program

PERI-OPERATIVE HOSPITALIST

High Risk Peri-Operative Hospitalist

In an effort to provide the highest standard of care, we work with a Providence employed specially trained, high-risk surgery, Peri-Operative Hospitalist to co-manage our patients.

Educated and experienced with medical issues related to major pancreatic and liver surgeries, Dr. Campbell meets patients preoperatively and actively co-manages them in the postsurgical setting.

We have demonstrated a number of benefits of this co-management, including a reduction in post-discharge emergency department visits and 30 day re-admissions, as well as increased satisfaction of patients, nurses, and physicians.

We believe medical co-management will become the standard of care for high-risk surgical patients nation wide. To evaluate the effectiveness of the Peri-Operative Hospitalist, we have collected data over the last year and will present it at our National Society meeting, the AHPBA, in Miami, March 2015.

MEET OUR SURGEONS

Paul D. Hansen, MD, FACS

Co-Director: Providence HBP Fellowship
Residency: UC San Francisco
Fellowships: MSL, UCSF & Portland
HBP, Royal College of Surgeons, London

Ron Wolf, MD, FACS

Co-Director: Providence HBP Fellowship
Residency: UC Davis
Fellowship: Surgical Oncology
Memorial Sloan-Kettering, NYC

Chet Hammill, MD, FACS

Medical Director: Legacy Liver & Pancreas Surgery Program
Residency: University of Hawaii
HBP, Providence Cancer Center

Pippa Newell, MD, FACS

Medical Director: Providence Liver Cancer Program
Residency: Mount Sinai
Fellowship: HBP, Providence Cancer Center

GASTROINTESTINAL & MINIMALLY INVASIVE SURGEONS NEWSLETTER • WINTER 2015

2

GASTROINTESTINAL & MINIMALLY INVASIVE SURGEONS NEWSLETTER • WINTER 2015

3

MEETING PROGRESSIVE ADVANCEMENTS IN CANCER CARE

“Our goal is to provide an outstanding patient and referring physician experience.”

Dedicated Focus on Liver and Pancreas Surgery

We perform:
- Over 200 liver, bile duct, and pancreas cases per year
- More than 30% of all pancreas surgery in Oregon
- More than 25% of all liver surgery in Oregon

Liver and Pancreas Cases Per Year

- Pancreas
- Liver

Back:
- Drs. Newell, Hayman, Hammill, Bresn, Ahmad, O’Brien, Zaido, Swanson, Wolf
- Front: Drs. Hansen, Jamison, Akbadi-Wahid, Dunst, Whiteford, Reavis

Focused Areas of Expertise

All 15 partners believe that true mastery of practice requires a dedication and focus on a defined field of surgery:
- Liver, Biliary & Pancreas
- Gastric & Esophageal
- Colon & Rectal
- General Surgery
- Endocrine Surgery
- Vein Surgery