PANCREATIC CANCER NEWS & UPDATES – JUNE 2013

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PANCREATIC CANCER ACTION NETWORK AND COMMUNITY NEWS

PanCAN news:

Pancreatic cancer and the funding key to fighting it

http://thehill.com/blogs/congress-blog/healthcare/304059-pancreatic-cancer-and-the-funding-key-to-fighting-it#ixzz2VqXCyX39

Julie Fleshman, president and CEO of the Pancreatic Cancer Action Network, wrote this blog for *The Hill*. Julie states: "The Pancreatic Cancer Action Network's strategy is to build a critical mass of scientists working and excelling in the field of pancreatic cancer that will translate into better diagnostic tools and improved treatment options. But this goal is dependent on federal and private pancreatic cancer research funding."

Pancreatic cancer advocates call on Congress to protect medical research funding from sequestration

http://pancan.org/section_about/news_press_center/2013_press_releases/06_17_13_pr.php#.UeMqBkG1GSo

Over 550 people from across the country, including nearly 100 pancreatic cancer survivors, will participate in the Seventh Annual Pancreatic Cancer Advocacy Day on June 18, 2013 to thank Congress for passing the *Recalcitrant Cancer Research Act* and tell them that their fight isn't over. Advocates from the Pancreatic Cancer Action Network will call on Congress to support a permanent fix to sequestration and provide sustained adequate funding for the National Institutes of Health (NIH) and the National Cancer Institute (NCI).

Pancreatic cancer working group recommends 4 new research initiatives to help speed advancements

http://pancan.org/section_about/news_press_center/2013_press_releases/06_27_13_pr.php#.UeMqf0G1GSo

NCI report: http://deainfo.nci.nih.gov/advisory/ctac/0313/PCwgReport.pdf

The report entitled "Pancreatic Cancer: Scanning the Horizon for Focused Interventions," was made public by the NCI, and includes four recommended research initiatives identified by a working group of leading experts in the field of pancreatic cancer research. The meeting report will form the basis for the full report required by the *Recalcitrant Cancer Research Act*. The full report is expected to be given to Congress later this year.

Grantee promotion: Oliver McDonald

http://www.mc.vanderbilt.edu/root/vumc.php?site=vmcpathology&doc=43255

We are pleased to announce that Oliver McDonald, MD, PhD, recipient of the 2012 The Daniel and Janet Mordecai Foundation – Pathway to Leadership Grant, has been promoted to Assistant Professor, Department of Pathology, Microbiology and Immunology, at Vanderbilt University Medical Center. Dr. McDonald underwent his mentored phase of his grant as a clinical/research fellow at Johns Hopkins in the laboratory of Chris Iacobuzio-Donahue, MD, PhD (2007 Pilot Grant and Scientific Advisory Board).

Pancreas cancer: A glimmer of hope

http://www.sccablog.org/2013/06/pancreatic-cancer-a-glimmer-of-hope/

Seattle Cancer Care Alliance posted this interview with Sunil Hingorani, MD, PhD (2007 Pilot Grant and 2005 Dr. Laurence A. Mack and Roselle Mack Memorial – Career Development Award) discussing PEGPH20 and an overview of what makes pancreatic cancer so difficult to treat.

Funding opportunities:

FY13 Peer Reviewed Medical Research Program – Discovery Award

http://cdmrp.army.mil/funding/pa/13prmrpda_pa.pdf

- Pre-Application (Letter of Intent) deadline: July 23, 2013
- Through the DOD, the PRMRP Discovery Award includes pancreatitis as one of the topic areas. Please note that applications are required to include an explanation of how the proposed project has military relevance.

Clinical Assay Development Program (CADP)

http://cadp.cancer.gov/

The NCI Clinical Assay Development Program (CADP) is requesting project applications from investigators in academia, government and industry seeking clinical assay validation resources. These resources are designed to assist with the development of assays that may predict therapy response or prognostic behavior of a diagnosed cancer, primarily for use in clinical trials. Remaining 2013 application deadline: October 15.

Share your federal funding experiences: Help our advocacy efforts

http://www.pancan.org/section_research/resources_for_scientists/form_funding_experiences.php

Have you struggled to receive grants from the NCI or other federal institutions? Have you been successful? We're looking for information to help us understand what is working well for pancreatic cancer researchers and what could be improved (including, but not limited to, funding levels). We will use this information in our public policy efforts. Please click above and share your stories (they can be submitted anonymously).

Support of the Cancer Genome Atlas Program (TCGA): Funding opportunity

http://www.fdbdo.com/s12-335/

Financial support is available for submissions to the TCGA pancreas project. Please see the note from Kenna Shaw, PhD of the TCGA Program Office:

"Because of the poor prognosis and overall public health impact, pancreatic ductal adenocarcinoma has been selected to be studied by TCGA. However, the pancreatic cancer project might end before it even begins unless more collaborators provide tissue samples. The collapse of this research project would be a lost opportunity for the pancreatic cancer community ... If you have frozen, untreated samples in your tissue bank accompanied by blood, please help by providing them, either retrospectively or prospectively, to TCGA."

Meetings:

Save the date: 2013 Gigi Shaw Arledge Conference on Pancreatic Disease

http://pancreasmd.org/pdf/event_pancreatic_disease_flyer_20130909.pdf

- Monday, September 9, 2013, 8:00am–7:00pm, NewYork-Presbyterian/Columbia University Medical Center
- This event is co-chaired by Ken Olive, PhD (2011 Tempur-Pedics Retailers – Career Development Award) and Tim Wang, MD (2013 Innovative Grant). The keynote speaker is Ralph Hruban, MD (Emeritus Scientific Advisory Board), and other speakers include many other Pancreatic Cancer Action Network research grant recipients and Scientific Advisory Board members.

Other community news:

Pancreatic Cancer Research Team (PCRT) celebrates its 10-year anniversary

http://www.prweb.com/releases/2013/6/prweb10786441.htm

Pancreatic Cancer Research Team (PCRT) is celebrating its 10th anniversary of accelerating new and effective medicines to patients with pancreatic cancer.

Ventana Medical Systems, Inc. and Translational Genomics Research Institute (TGen) join forces

http://www.ventana.com/site/page?view=press-release-jun25-2013

Ventana Medical Systems, Inc., a member of the Roche Group, and the Translational Genomics Research Institute (TGen) announced a collaborative research agreement to discover and develop diagnostic markers for treating cancer. The first project under the umbrella research agreement will focus on diagnostic, prognostic and drug biomarkers for pancreatic cancer.

Cancer Immunotherapy Awareness Month

http://www.cancerresearch.org/get-involved/cri-events/cancer-immunotherapy-awareness-month

June is Cancer Immunotherapy Awareness Month! With so many exciting advances in therapies that strengthen the immune system's power to conquer cancer, it's time to increase the public's awareness of this revolutionary new treatment approach.

ASCO, AAHPM join forces to deliver evidence-based palliative care interventions

http://connection.asco.org/Magazine/Article/id/3576/ASCO-AAHPM-Join-Forces-to-Deliver-EvidenceBased-Palliative-Care-Interventions.aspx

ASCO and the American Academy of Hospice and Palliative Care Medicine (AAHPM) are collaborating on a joint initiative to support delivery of high-quality palliative care in medical oncology. The initiative, funded by the Agency for Health Care Research Quality, aims to address the complex care needs of patients with advanced cancer, including relief or prevention of symptoms—one goal of palliative care in oncology practice.

Pancreatic cancer: tackling the tumour by targeting its surroundings

http://cordis.europa.eu/fetch?CALLER=EN_NEWS_FP7&ACTION=D&DOC=1&CAT=NEWS&QUERY=013f85468038:b63b:20924352&RCN=35839

The EPC-TM-NET ('Targeting the tumor microenvironment to improve pancreatic cancer prognosis') project is tackling the disease from a different angle. Instead of focusing on the tumor itself, the team is

using its EUR 3 million grant from the EU's Seventh Framework Programme (FP7) to study the microenvironment surrounding the tumor. Recent research has shown that a tumor's microenvironment, including blood vessels, connective tissue and a variety of other cells, play a major role keeping tumor cells under control.

Searching for cancer biomarkers

http://www.miamialum.org/s/916/interior-3-col.aspx?sid=916&gid=1&pgid=5786&cid=10881&ecid=10881&crid=0&calpgid=397&calcid=10413

A Pancreatic Cancer Action Network volunteer shared this article from his college alumni magazine. Dr. Michael Kennedy, an Ohio Eminent Scholar and professor of chemistry and biochemistry, is using a mouse model to search for biomarkers in the early detection of pancreatic cancer. The metabolic profiling is done by nuclear magnetic resonance spectroscopy, using a powerful magnet.

BIOLOGY OF CANCER

An iPSC line from human pancreatic ductal adenocarcinoma undergoes early to invasive stages
http://www.ncbi.nlm.nih.gov/pubmed/23665962

- Journal: *Cell Reports*
- Institution(s): University of Pennsylvania, Philadelphia, PA
- Corresponding author(s): Kenneth Zaret
- PanCAN-affiliated authors:
    - Andy Rhim, MD: 2013 Career Development Award
    - Ben Stanger, MD, PhD: 2007 Ralph H. Hruban, MD – Career Development Award
- Major finding: The authors hypothesized that if human pancreatic ductal adenocarcinoma (PDAC) cells were converted to pluripotency and then allowed to differentiate back into pancreatic tissue, they might undergo early stages of cancer. Although most induced pluripotent stem cell (iPSC) lines were not of the expected cancer genotype, one PDAC line, when injected into immunodeficient mice, generated pancreatic intraepithelial neoplasia (PanIN) precursors to PDAC that progressed to the invasive stage. Rare events allow iPSC technology to provide a live human cell model of early pancreatic cancer and insights into disease progression.

Canonical Wnt signaling is required for pancreatic carcinogenesis
http://www.ncbi.nlm.nih.gov/pubmed/23761328

- Journal: *Cancer Research*
- Institution(s): University of Michigan, Ann Arbor, MI and others
- Corresponding author(s): Marina Pasca di Magliano
- PanCAN-affiliated authors:
    - Diane Simeone, MD: 2010 The Randy Pausch Family – Innovative Grant and Scientific Advisory Board
    - Matthias Hebrok, PhD: 2011 Abby Sobrato – Innovative Grant and 2008 Michael C. Sandler – Pilot Grant
    - Marina Pasca di Magliano, PhD: 2009 Paul Mitchell – Career Development Award
- Major finding: Together, these approaches demonstrated that ligand-mediated activation of the Wnt/β-catenin pathway is required to initiate pancreatic cancer. Moreover, they establish that Wnt signaling is also critical for progression of pancreatic cancer, a finding with potential therapeutic implications.

HuR is a post-transcriptional regulator of core metabolic enzymes in pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23807417

- Journal: *RNA Biology*
- Institution(s): Thomas Jefferson University, Philadelphia, PA
- Corresponding author(s): Jonathan Brody and Jordan Winter
- PanCAN-affiliated author: Jonathan Brody, PhD: 2010 Skip Viragh – Career Development Award
- Major finding: The authors' findings establish the RNA-binding protein HuR as a critical regulator of pancreatic cancer cell metabolism and survival under acute glucose deprivation. Further explorations into HuR's role in cancer cell metabolism should uncover novel therapeutic targets

that are critical for cancer cell survival in a metabolically compromised tumor microenvironment.

Pancreatic cancers rely on a novel glutamine metabolism pathway to maintain redox balance
http://www.ncbi.nlm.nih.gov/pubmed/23759579

- Journal: *Cell Cycle*
- Institution(s): Weill Cornell Medical College; New York, NY and others
- Corresponding author(s): Lewis Cantley and Alec Kimmelman
- PanCAN-affiliated authors:
    - Costas Lyssiotis, PhD: 2013 Pathway to Leadership Grant
    - Alec Kimmelman, MD, PhD: 2010 Career Development Award
- Major finding: Finally, in addition to providing several new metabolic therapeutic targets in pancreatic cancer, the findings from this study also suggest that inhibition of glutamine metabolism in pancreatic cancer may synergize with therapies that increase reactive oxygen species, such as chemotherapy and radiation.

Snail cooperates with KrasG12D to promote pancreatic fibrosis
http://www.ncbi.nlm.nih.gov/pubmed/23761168

- Journal: *Molecular Cancer Research*
- Institution(s): Northwestern University, Chicago, IL and others
- Corresponding author(s): Hidayatullah Munshi
- PanCAN-affiliated author: Paul Grippo, PhD: 2007 Nancy Daly Riordan – Career Development Award
- Major finding: Together these results suggest that the transcription factor Snail contributes to pancreatic tumor development by promoting fibrotic reaction through increased TGF-β signaling.

MUC1 induces drug resistance in pancreatic cancer via upregulation of multidrug resistance genes
http://www.ncbi.nlm.nih.gov/pubmed/23774063

- Journal: *Oncogenesis*
- Institution(s): University of North Carolina at Charlotte, Charlotte, NC
- Corresponding author(s): Pinku Mukherjee
- PanCAN-affiliated author: Pinku Mukherjee, PhD: 2007 Pilot Grant
- Major finding: This is the first report to show that MUC1 (CD227, a membrane tethered mucin glycoprotein) can directly regulate the expression of multidrug resistance (MDR) genes in pancreatic cancer cells, and thus confer drug resistance.

Isolation, culture and genetic manipulation of mouse pancreatic ductal cells
http://www.ncbi.nlm.nih.gov/pubmed/23787893

- Journal: *Nature Protocols*
- Institution(s): University of Pennsylvania, Philadelphia, PA and others
- Corresponding author(s): Anil Rustgi

- PanCAN-affiliated author: Anil Rustgi, MD: 2013 Skip Viragh – Inaugural Research Acceleration Network Grant (co-PI) and Scientific Advisory Board
- Major finding: Here the authors describe a protocol for isolating mouse pancreatic ductal epithelial cells and ductlike cells directly in vivo. Isolated cells can be cultured, manipulated by lentiviral transduction to modulate gene expression and directly used for molecular studies. This approach is fast, affordable, results in cells with high viability, can be performed on the bench and is applicable to virtually all genetic and nongenetic disease models of the pancreas.

Expression of core 3 synthase in human pancreatic cancer cells suppresses tumor growth, metastasis
http://www.ncbi.nlm.nih.gov/pubmed/23754791

- Journal: *International Journal of Cancer*
- Institution(s): University of Nebraska, Omaha, NE
- Corresponding author(s): Michael (Tony) Hollingsworth
- PanCAN-affiliated author: Tony Hollingsworth, PhD: Scientific Advisory Board
- Major finding: These findings indicate that expression of core 3 derived O-glycans in pancreatic cancer cells suppresses tumor growth and metastasis through modulation of glycosylation of mucins and other cell surface and extracellular matrix proteins.

The evolution of the cancer niche during multistage carcinogenesis
http://www.ncbi.nlm.nih.gov/pubmed/23760023

- Journal: *Nature Reviews Cancer*
- Institution(s): New York University School of Medicine, New York, NY and others
- Corresponding author(s): Mary Helen Barcellos-Hoff or David Lyden or Timothy Wang
- PanCAN-affiliated author: Tim Wang, MD: 2013 Innovative Grant
- Major finding: In this Perspectives article, the authors propose the novel concept that the tumor microenvironment is built through rate-limiting steps during multistage carcinogenesis.

Metabolism: Taking it all in
http://www.ncbi.nlm.nih.gov/pubmed/23739049

- Journal: *Nature Reviews Cancer*
- Institution(s): *Nature* editorial office, London, UK
- Corresponding author(s): Sarah Seton-Rogers
- Major finding: This review discusses Commisso, *et al*'s *Nature* paper from last month (http://www.ncbi.nlm.nih.gov/pubmed/23665962). Overexpression of oncogenic RAS has been shown to cause macropinocytosis, which is a type of endocytosis used by cells to take in extracellular fluid and its contents. Whether this process has any functional consequences or is involved in tumorigenesis is unclear.

Pancreatic cancer genomes: Toward molecular subtyping and novel approaches to diagnosis, therapy
http://www.ncbi.nlm.nih.gov/pubmed/23757204

- Journal: *Molecular Diagnosis & Therapy*
- Institution(s): Johns Hopkins University School of Medicine, Baltimore, MD
- Corresponding author(s): Laura Wood

- Major finding: This review discusses the molecular alterations underlying pancreatic neoplasms as well as the clinical impact of these alterations for diagnosis and treatment.

EVI1 oncogene promotes KRAS pathway through suppression of microRNA-96
http://www.ncbi.nlm.nih.gov/pubmed/23752186

- Journal: *Oncogene*
- Institution(s): University of Tokyo, Tokyo, Japan
- Corresponding author(s): Masashi Fukayama
- Major finding: Collectively, the present findings suggest that ecotropic viral integration site 1 (EVI1) overexpression and KRAS mutation converge on activation of the KRAS pathway in early phases of pancreatic carcinogenesis and propose EVI1 and/or miR-96 as early markers and therapeutic targets in this dismal disease.

Cavin-1 is essential for the tumor-promoting effect of caveolin-1 and enhances its prognostic potency
http://www.ncbi.nlm.nih.gov/pubmed/23770857

- Journal: *Oncogene*
- Institution(s): Fudan University, Shanghai, China
- Corresponding author(s): X-J Yu
- Major finding: Caveolin-1 exhibits a stage-dependent, functional fluctuation during pancreatic cancer development, but the underlying mechanisms remain unclear. Here, the authors report that cavin-1, a structural protein of caveolae, modulates the oncogenic function of caveolin-1 and cooperates with caveolin-1 to enhance pancreatic cancer aggressiveness.

FOXL1, a novel candidate tumor suppressor, inhibits tumor aggressiveness and predicts outcome
http://www.ncbi.nlm.nih.gov/pubmed/23801748

- Journal: *Cancer Research*
- Institution(s): NCI/NIH, Bethesda, MD and others
- Corresponding author(s): S. Perwez Hussain
- Major finding: The Forkhead Box L1 (FOXL1) transcription factor regulates epithelial proliferation and development of gastrointestinal tract, and has been implicated in gastrointestinal tumorigenesis in mouse models. Taken together, the authors' findings suggest that FOXL1 expression is a candidate predictor of clinical outcome in patients with resected pancreatic ductal adenocarcinoma and it plays an inhibitory role in pancreatic tumor progression.

PanIN-specific regulation of Wnt signaling by HIF2
http://www.ncbi.nlm.nih.gov/pubmed/23749643

- Journal: *Cancer Research*
- Institution(s): University of Pittsburgh, Pittsburgh, PA and others
- Corresponding author(s): Farzad Esni
- Major finding: Thus, with oncogenic Ras expressed in the pancreas, HIF2α modulates Wnt-signaling during murine pancreatic intraepithelial neoplasia (mPanIN) progression, by maintaining appropriate levels of both Smad4 and β-catenin.

Metformin inhibits pancreatic cancer cell, tumor growth and downregulates Sp transcription factors
http://www.ncbi.nlm.nih.gov/pubmed/23803693

- Journal: *Carcinogenesis*
- Institution(s): Texas A&M University, College Station, TX and others
- Corresponding author(s): Stephen Safe
- Major finding: The results demonstrate for the first time that the anticancer activities of metformin are also due, in part, to downregulation of Sp transcription factors and Sp-regulated genes.

Hypoxia inducible factor-1 alpha plays a pivotal role in hepatic metastasis of pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23798470

- Journal: *Journal of Hepato-Biliary-Pancreatic Sciences*
- Institution(s): Kagoshima University Graduate School of Medical and Dental Sciences, Kagoshima, Japan
- Corresponding author(s): Sonshin Takao
- Major finding: Hypoxia inducible factor-1α plays a pivotal role in hepatic metastasis through its association with the expression of angiogenic factors in pancreatic ductal adenocarcinoma patients. These results may contribute future therapeutic strategies to prevent pancreatic cancer metastasis.

Hedgehog signaling regulates hypoxia induced EMT and invasion via a ligand-independent manner
http://www.ncbi.nlm.nih.gov/pubmed/23786654

- Journal: *Molecular Cancer*
- Institution(s): Xi'an Jiaotong University, Xi'an Shaanxi Province, China and others
- Corresponding author(s): Qingyong Ma and Jun Xu
- Major finding: The authors' findings suggest that Hedgehog (Hh) signaling modulates hypoxia induced pancreatic cancer epithelial to mesenchymal transition (EMT) and invasion in a ligand-independent manner. Thus, Hh signaling may represent a promising therapeutic target for preventing pancreatic cancer progression.

A bioengineered metastatic pancreatic tumor model for investigation of chemotherapeutic drugs
http://www.ncbi.nlm.nih.gov/pubmed/23747489

- Journal: *Journal of Biotechnology*
- Institution(s): Shanghai Second Military Medical University, Shanghai, China and others
- Corresponding author(s): Hao Yin
- Major finding: The authors bioengineered a metastatic pancreatic tumor model with homogenous human CD133+CXCR4+ cancer stem cells (CSC) and a polyglyconate/gelatin electrospun scaffold. This metastatic tumor model showed an increased incidence of tumor formation, an accelerated tumorigenesis and a significant hepatic metastasis, therefore offering scientists a proven platform to study chemotherapeutic drugs.

Bioluminescent orthotopic model of pancreatic cancer
http://www.jove.com/video/50395/bioluminescent-orthotopic-model-of-pancreatic-cancer-progression

- Journal: *The Journal of Visualized Experiments*
- Institution(s): Monash University and others
- Corresponding author(s): Erica Sloan
- Major finding: To better understand the interaction of cancer cells with the pancreatic microenvironment, the authors demonstrate an orthotopic model of pancreatic cancer that permits non-invasive monitoring of cancer progression. This orthotopic model is suited to both syngeneic and xenograft models and may be used in pre-clinical trials to investigate the impact of novel anti-cancer therapeutics on the growth of the primary pancreatic tumor and metastasis.

ETIOLOGY

Nutrients from fruit and vegetable consumption reduce the risk of pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23620017

- Journal: *Journal of Gastrointestinal Cancer*
- Institution(s): Mayo Clinic, Rochester, MN and others
- Corresponding author(s): Rick Jansen
- PanCAN-affiliated author: Gloria Petersen, PhD: Scientific Advisory Board
- Major finding: The authors conclude that most nutrients obtained through consumption of fruits and vegetables may reduce the risk of developing pancreatic cancer.

Meat-related mutagens and pancreatic cancer: Null results from a clinic-based case-control study
http://www.ncbi.nlm.nih.gov/pubmed/23632817

- Journal: *Cancer Epidemiology, Biomarkers & Prevention*
- Institution(s): Mayo Clinic, Rochester, MN and others
- Corresponding author(s): Rick Jansen
- PanCAN-affiliated author: Gloria Petersen, PhD: Scientific Advisory Board
- Major finding: The results do not support an association between well-done meat or meat-related mutagen intake and pancreatic cancer and contrast with generally increased risks reported in previous studies.

Intake of coffee, decaffeinated coffee, or tea does not affect risk for pancreatic cancer: EPIC study
http://www.ncbi.nlm.nih.gov/pubmed/23756220

- Journal: *Clinical Gastroenterology and Hepatology*
- Institution(s): University Medical Center Utrecht, Utrecht, The Netherlands and others
- Corresponding author(s): H. Bas Bueno–de–Mesquita
- Major finding: Based on an analysis of data from the European Prospective Investigation into Nutrition and Cancer cohort, total coffee, decaffeinated coffee, and tea consumption are not related to the risk of pancreatic cancer.

ORIGIN: No increase in cancer with insulin in dysglycemia

http://www.medscape.com/viewarticle/806904

- *American Diabetes Association (ADA) 73rd Scientific Sessions abstract: http://app.core-apps.com/tristar_ada13/abstract/8e1f4aba4bb7cc3029ac8292506799ad*
- Institution(s): Juravinski Cancer Centre, Hamilton, ON, Canada
- Corresponding author(s): Louise Bordeleau
- Major finding: In this trial insulin glargine had a neutral effect on overall and cancer (CA) specific outcomes including CA-specific mortality. Exposure to metformin and HbA1c levels during study did not alter CA risk.

High prevalence of BRCA1 and BRCA2 germline mutations with loss of heterozygosity

http://www.ncbi.nlm.nih.gov/pubmed/23658460

- Journal: *Clinical Cancer Research*
- Institution(s): Icahn School of Medicine at Mount Sinai, New York, NY and others
- Corresponding author(s): Aimee Lucas
- Major finding: The authors show a high prevalence of *BRCA1/2* mutations with loss of heterozygosity (LOH) in an Ashkenazi Jewish cohort of surgically resected pancreatic ductal adenocarcinoma and neoplastic lesions, suggesting that these germline mutations are causal in selected individuals.

Pancreatic cancer risk after loss of a child: A register-based study in Sweden during 1991-2009

http://www.ncbi.nlm.nih.gov/pubmed/23788670

- Journal: *American Journal of Epidemiology*
- Institution(s): Karolinska Institutet, Stockholm, Sweden
- Corresponding author(s): Jiaqi Huang
- Major finding: Overall, loss of a child was associated with an odds ratio of 1.09 for pancreatic cancer. Although other explanations are possible, our findings provide some evidence that psychological stress may be associated with pancreatic cancer.

EARLY DETECTION, DIAGNOSIS, AND PROGNOSIS

Endoscopically acquired pancreatic cyst fluid microRNA 21 and 221 are associated with invasive cancer
http://www.ncbi.nlm.nih.gov/pubmed/23752880

- Journal: *American Journal of Gastroenterology*
- Institution(s): Yale School of Medicine, New Haven, CT and others
- Corresponding author(s): Timothy Donahue
- PanCAN-affiliated authors:
    - James Farrell, MD: Medical Advisory Board
    - Dave Dawson, MD, PhD: 2008 Seena Magowitz – Career Development Award
- Major finding: In this small single-center study, microRNAs (miRs) are potential pancreatic cyst fluid diagnostic biomarkers. In particular, miR-21 is identified as a candidate biomarker to distinguish between benign, premalignant, and malignant cysts. Additionally miR-221 may be of use in the identification of more advanced malignant disease.

Detection of pancreatic cancer in mice by ultrasound imaging of thymocyte differentiation antigen 1
http://www.ncbi.nlm.nih.gov/pubmed/23791701

- Journal: *Gastroenterology*
- Institution(s): Stanford University, Stanford, CA and others
- Corresponding author(s): Jürgen Willmann
- PanCAN-affiliated authors:
    - Ru Chen, PhD: 2006 Career Development Award
    - Teri Brentnall, MD: Emeritus Scientific Advisory Board
- Major finding: The authors have identified and validated Thymocyte Differentiation Antigen 1 (Thy1) as a marker of pancreatic ductal adenocarcinoma that can be detected by ultrasound molecular imaging in mice. The development of a specific imaging agent and identification of Thy1 as a new biomarker could aid in the diagnosis of this cancer and management of patients.

Gene expression profiling classifies ampullary carcinomas into biliary-like and intestinal-like subtypes
http://www.ncbi.nlm.nih.gov/pubmed/23776447

- Journal: *PLoS One*
- Institution(s): The University of Texas M. D. Anderson Cancer Center, Houston, TX and others
- Corresponding author(s): Michael Overman
- PanCAN-affiliated author: Huamin Wang, MD, PhD: 2007 Skip Viragh – Career Development Award
- Major finding: Gene expression analysis discriminated pancreatic adenocarcinomas from other periampullary carcinomas and identified two prognostically relevant subgroups of ampullary adenocarcinomas. Histological subtype was an independent prognostic factor in ampullary adenocarcinomas.

Survival is associated with genetic variation in inflammatory pathway genes
http://www.ncbi.nlm.nih.gov/pubmed/23360921

- Journal: *Annals of Surgery*

- Institution(s): Mayo Clinic, Rochester, MN
- Corresponding author(s): Kaye Reid-Lombardo
- PanCAN-affiliated author: Gloria Petersen, PhD: Scientific Advisory Board
- Major finding: Single nucleotide polymorphisms (SNPs) in the inflammatory pathway genes MAPK8IP1 and SOCS3 were associated with increased overall survival in patients undergoing potentially curative resection and may be used in the future as markers to predict survival. Future research is needed to determine the functional relevance of these loci.

Integration of KRAS testing in the diagnosis of pancreatic cystic lesions: 618 pancreatic cysts
http://www.ncbi.nlm.nih.gov/pubmed/23743931

- Journal: *Modern Pathology*
- Institution(s): The University of Pittsburgh Medical Center, Pittsburgh, PA
- Corresponding author(s): Aatur Singhi
- Major finding: In summary, KRAS mutations were highly specific for mucinous differentiation, but were inadequate in identifying mucinous cystic neoplasms. Future molecular studies and the combination of other fluid markers are required to improve the detection and classification of pancreatic mucinous neoplasms by endoscopic ultrasound fine-needle aspiration.

Value of CA 19-9 in predicting response and therapy control in first-line therapy
http://www.ncbi.nlm.nih.gov/pubmed/23785668

- Journal: *Frontiers in Gastrointestinal Cancers*
- Institution(s): Universitätsmedizin Berlin – Charité, Berlin, Germany
- Corresponding author(s): Uwe Pelzer
- Major finding: Serum carbohydrate antigen 19-9 (CA 19-9) levels can separate patients with differing mortality risks at baseline. Patients with stabilization or high response of CA 19-9 after 6-8 weeks of treatment had no significant differences in survival rates, whereas patients with increased CA 19-9 had significantly lower survival rates, indicating an early treatment failure.

An engineered anti-CA19-9 cys-diabody for PET imaging and targeting of liposomal nanoparticles
http://www.ncbi.nlm.nih.gov/pubmed/23827791

- Journal: *Journal of Surgical Research*
- Institution(s): UCLA, Los Angeles, CA and others
- Corresponding author(s): James Tomlinson
- Major finding: The authors' results show that the anti-CA19-9 cys-diabody targets pancreatic cancer providing specific molecular imaging in tumor xenograft models. Furthermore, the cys-diabody– polymerized liposomal nanoparticles (PLN) conjugate demonstrates target-specific binding of human pancreatic cancer cells with the potential to deliver targeted treatment.

Intravital FLIM-FRET imaging reveals dasatinib induced spatial control of Src in pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23749641

- Journal: *Cancer Research*
- Institution(s): The Beatson Institute for Cancer Research, Glasgow, UK and others
- Corresponding author(s): Paul Timpson and Kurt Anderson

- Major finding: The authors analyzed the spatiotemporal regulation of Src activity in response to the anti-invasive Src inhibitor dasatinib in alive animal model of pancreatic cancer using a FLIM-FRET (fluorescence-lifetime imaging microscopy with fluorescence resonance energy transfer) Src-biosensor to monitor drug targeting efficacy in vivo. They show that in contrast to conventional techniques, FLIM-FRET analysis allows for accurate, time-dependent, live monitoring of drug efficacy and clearance in live tumors.

Putative predictive biomarkers of survival in patients treated with gemcitabine and ganitumab
http://www.ncbi.nlm.nih.gov/pubmed/23741071

- Journal: *Clinical Cancer Research*
- Institution(s): Amgen, Inc., Thousand Oaks, CA and others
- Corresponding author(s): Ian McCaffery
- Major finding: Baseline circulating factors of the insulin-like growth factor (IGF) axis may predict overall survival benefit from ganitumab (monoclonal antibody inhibitor of IGF-1 receptor) plus gemcitabine in metastatic pancreatic adenocarcinoma.

LAMC2: A promising new pancreatic cancer biomarker identified by proteomic analysis
http://www.ncbi.nlm.nih.gov/pubmed/23798558

- Journal: *Molecular & Cellular Proteomics*
- Institution(s): University of Toronto, Toronto, ON, Canada and others
- Corresponding author(s): Eleftherios Diamandis
- Major finding: LAMC2 (laminin, gamma 2) exhibited diagnostic complementarity with CA19.9 by showing significant elevation in pancreatic ductal adenocarcinoma patients with clinically low CA19.9 levels.

Potential epigenetic biomarkers for the diagnosis and prognosis of pancreatic ductal adenocarcinomas
http://www.ncbi.nlm.nih.gov/pubmed/23782251

- Journal: *Expert Review of Molecular Diagnostics*
- Institution(s): Mercer University, Savannah, GA and others
- Corresponding author(s): Shi-Wen Jiang and Jinping Li
- Major finding: The authors begin with an overview on the available biomarkers, and subsequently discuss the recent development in epigenetic biomarkers, including DNA methylation, miRNA and histone modifications in diversified specimens of cell lines, xenograft, cancer tissues, pancreatic juice and patient blood. These findings raise the possibility for clinical application of epigenetic biomarkers towards screening, early diagnosis, prognosis, chemosensitivity prediction and recurrence surveillance of pancreatic ductal adenocarcinoma patients.

Incidentally discovered pancreatic intraepithelial neoplasia: What is its clinical significance?
http://www.ncbi.nlm.nih.gov/pubmed/23748606

- Journal: *Annals of Surgical Oncology*
- Institution(s): Memorial Sloan-Kettering Cancer Center, New York, NY
- Corresponding author(s): Peter Allen

- Major finding: Pancreatic intraepithelial neoplasia (PanIN) was identified in 26 % of patients who underwent resection for histopathology other than pancreatic ductal adenocarcinoma. The presence of PanIN of any grade did not result in an appreciable cancer risk in the pancreatic remnant after short-term follow-up.

Increased neutrophil-lymphocyte ratio is a poor prognostic factor in primary operable, inoperable PC
http://www.ncbi.nlm.nih.gov/pubmed/23799847

- Journal: *British Journal of Cancer*
- Institution(s): Medical University of Graz, Graz, Austria
- Corresponding author(s): Martin Pichler
- Major finding: Risk prediction for cancer-related end points using neutrophil-lymphocyte ratio (NLR) does add independent prognostic information to other well-established prognostic factors in patients with pancreatic cancer (PC), regardless of the undergoing therapeutic modality. Thus, the NLR should be considered for future individual risk assessment in patients with PC.

Tumor recurrence is independent of pancreatic fistula in patients after pancreaticoduodenectomy
http://www.ncbi.nlm.nih.gov/pubmed/23810574

- Journal: *Journal of the American College of Surgeons*
- Institution(s): Thomas Jefferson University, Philadelphia, PA
- Corresponding author(s): Adam Berger
- Major finding: Patients with pancreatic fistula (PF) after pancreaticoduodenectomy (PD) were not found to have a significant increase in local or peritoneal recurrence. Therefore, in this analysis, postoperative PF does not appear to serve as an adverse prognostic marker.

Splenic vein thrombosis associated with increase in pancreas-specific complications, reduced survival
http://www.ncbi.nlm.nih.gov/pubmed/23797883

- Journal: *Journal of Gastrointestinal Surgery*
- Institution(s): Thomas Jefferson University, Philadelphia, PA
- Corresponding author(s): Harish Lavu
- Major finding: Distal pancreatectomy and splenectomy (DPS) for pancreatic ductal adenocarcinoma can be performed safely in patients with splenic vein thrombosis (SVT), but with higher intraoperative blood loss, increased pancreas-specific complications, and a trend towards lower long-term survival rates. This paper was presented as a poster at the 53rd annual meeting of the Society for Surgery of the Alimentary Tract and at the 46th annual meeting of the Pancreas Club, San Diego, CA, May 2012.

Clinical significance of coagulation assays in metastatic pancreatic adenocarcinoma
http://www.ncbi.nlm.nih.gov/pubmed/23765155

- Journal: *Journal of Gastrointestinal Cancer*
- Institution(s): University of Istanbul, Capa, Istanbul, Turkey
- Corresponding author(s): Faruk Tas

- Major finding: Serum D-dimer level is elevated among metastatic pancreatic adenocarcinoma (MPA) patients with higher serum CA19-9 and higher international normalized ratio levels seem to be a poor prognostic factor in MPA.

Multifocal branch-duct IPMNs of the pancreas: magnetic resonance (MR) imaging pattern, evolution
http://www.ncbi.nlm.nih.gov/pubmed/23801393

- Journal: *La radiologia medica*
- Institution(s): Azienda Ospedaliero Universitaria Integrata - Policlinico "G.B. Rossi", Verona, Italy
- Corresponding author(s): Riccardo Manfredi
- Major finding: Multifocal intraductal papillary mucinous neoplasm (IPMN) of the branch ducts shows a very slow growth and evolution over time. In our study, only 3/108 patients showed mural nodules which, however, did not require any surgical procedure, indicating that careful nonoperative management may be safe and effective in asymptomatic patients.

Three-dimensional contrast-enhanced ultrasonography of IPMN: A comparison with MRI
http://www.ncbi.nlm.nih.gov/pubmed/23770711

- Journal: *Pancreas*
- Institution(s): University of Bologna, Bologna, Italy
- Corresponding author(s): Riccardo Casadei
- Major finding: Even if magnetic resonance imaging (MRI) remains the criterion standard technique for the diagnosis of intraductal papillary mucinous neoplasms (IPMNs), 3D-contrast-enhanced ultrasound (CEUS) can be safely used to follow patients with IPMNs of less than 1 cm.

Repeat EUS-FNA for pancreatic lesions at tertiary referral center will alter initial inconclusive result
http://www.ncbi.nlm.nih.gov/pubmed/23799217

- Journal: *Journal of Gastrointestinal and Liver Diseases*
- Institution(s): University of Texas MD Anderson Cancer Center Houston, TX
- Corresponding author(s): Manoop Bhutani
- Major finding: A repeat endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) for solid pancreatic lesions with initial inconclusive diagnosis at a tertiary referral center establishes a diagnosis in the majority of patients.

Endoscopic ultrasonography for pancreatic cancer: current and future perspectives
http://www.ncbi.nlm.nih.gov/pubmed/23730519

- Journal: *Journal of Gastrointestinal Oncology*
- Institution(s): University of Turin, Italy
- Corresponding author(s): Claudio De Angelis
- Major finding: In the near future there will be great opportunities for the development of diagnostic and therapeutic endoscopic ultrasound (EUS) and pancreatic pathology could be the best testing bench.

TREATMENT

News from the American Society of Clinical Oncology (ASCO) Annual Meeting:

Aduro announces poster presentations of Phase 2 pancreatic cancer clinical trials at ASCO

http://www.businesswire.com/news/home/20130520005070/en

- *ASCO abstract: http://meetinglibrary.asco.org/content/112374-132*
- Institution(s): Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins University, Baltimore, MD and others
- Presenter: Dung Le
- PanCAN-affiliated authors:
    - Vince Picozzi, MD: Medical Advisory Board
    - Liz Jaffee, MD: Emeritus Scientific Advisory Board
- Major finding: GVAX is composed of GM-CSF-secreting allogeneic pancreas cancer cell lines and administered with low-dose cyclophosphamide (CY) to inhibit regulatory T cells. CRS-207 is a live-attenuated *Listeria monocytogenes* engineered to express human mesothelin. Combined CY/GVAX pancreas and CRS-207 was generally well-tolerated. The significant difference in overall survival (OS) between treatment arms met the criteria for early stopping. This indicates that the combination immunotherapy may extend OS for metastatic pancreatic ductal adenocarcinoma patients with minimal toxicity and should continue to be developed as an effective therapy.

Halozyme's Phase 1b clinical trial of PEGPH20 with gemcitabine indicates positive activity

http://www.halozyme.com/Investors/News-Releases/News-Release-Details/2013/Halozymes-Phase-1b-Clinical-Trial-Of-PEGPH20-With-Gemcitabine-Indicates-Positive-Activity-Against-Pancreatic-Cancer/default.aspx

- *ASCO abstract: http://meetinglibrary.asco.org/content/113132-132*
- Institution(s): Fred Hutchinson Cancer Research Center, Seattle, WA and others
- Presenter: Sunil Hingorani
- PanCAN-affiliated author: Sunil Hingorani, MD, PhD: 2007 Pilot Grant and 2005 Dr. Laurence A. Mack and Roselle Mack Memorial – Career Development Award
- Major finding: PEGPH20 is a PEGylated version of human recombinant hyaluronidase. In preclinical studies, PEGPH20 depleted pancreatic cancers of their high hyaluronan (HA) content. PEGPH20 in combination with gemcitabine is generally well tolerated in advanced pancreatic cancer and shows promising efficacy, especially in patients with high intratumoral HA content.

NewLink Genetics' algenpantucel-L shows encouraging disease-free, overall survival in Phase 2 study

http://investors.linkp.com/releasedetail.cfm?ReleaseID=768574

- *ASCO abstract: http://meetinglibrary.asco.org/content/114881-132*
- Institution(s): NewLink Genetics, Ames, IA and others
- Presenter: Gabriela Rossi
- PanCAN-affiliated authors:
    - Mary Mulcahy, MD: Emeritus Medical Advisory Board
    - Mark Talamonti, MD: Medical Advisory Board

- Major finding: Hyperacute rejection of tissues expressing the carbohydrate α(1,3)Gal xenoantigen is a potent innate immune defense mechanism that was leveraged to treat resected pancreatic cancer patients by immunization with genetically modified allogeneic tumor cells expressing αGal moieties (algenpantucel-L). The addition of algenpantucel-L to standard of care for resected pancreatic cancer may improve survival. Immunological monitoring of algenpantucel-L immunotherapy with this biomarker is feasible and might predict patient response to therapy. A multi-institutional, phase III study is currently underway.

Analyses of MPACT trial evaluating ABRAXANE® combination therapy
http://newsroom.celgene.com/press-release/product/analyses-mpact-trial-evaluating-abraxane-combination-therapy-treatment-advance

- *ASCO abstract: http://meetinglibrary.asco.org/content/116827-132*
- Institution(s): Virginia G. Piper Cancer Center Clinical Trials at Scottsdale Healthcare/TGen, Scottsdale, AZ and others
- Presenter: Dan Von Hoff
- Major finding: MPACT was a large, international study performed at community and academic centers. Nab-paclitaxel plus gemcitabine (G) was superior to G across all efficacy endpoints, had an acceptable toxicity profile, and is a new standard for the treatment of metastatic pancreatic cancer that could become the backbone for new regimens.

JASPAC 01 trial: S-1 noninferior to gemcitabine for unresectable pancreatic cancer
http://chicago2013.asco.org/jaspac-01-trial-s-1-noninferior-gemcitabine-unresectable-pancreatic-cancer

- *ASCO abstract: http://meetinglibrary.asco.org/content/116237-132*
- Institution(s): Shizuoka Cancer Center, Shizuoka, Japan and others
- Presenter: Akira Fukutomi
- Major finding: A comparison trial of S-1, a novel oral fluoropyrimidine agent, versus gemcitabine for adjuvant treatment of unresectable pancreatic cancer determined that S-1 was noninferior to gemcitabine and well tolerated in the adjuvant setting.

PARP inhibitor shows activity in pancreatic, prostate cancers among patients carrying BRCA mutations
http://www.uphs.upenn.edu/news/News_Releases/2013/05/domchek/

- *ASCO abstract: http://meetinglibrary.asco.org/content/112220-132*
- Institution(s): Chaim Sheba Medical Center, Tel Hashomer, Israel and others
- Presenter: Bella Kaufman
- Major finding: In the largest clinical trial to date to examine the efficacy of PARP inhibitor therapy in BRCA 1/2 carriers with diseases other than breast and ovarian cancer, the oral drug olaparib was found to be effective against advanced pancreatic and prostate cancers. Prolonged responses to olaparib across all tumor types support the hypothesis that therapy directed against a genetically-defined target has activity regardless of anatomic organ of origin.

Chemoradiotherapy offers no advantage in locally advanced pancreatic cancer
http://chicago2013.asco.org/chemoradiotherapy-offers-no-advantage-locally-advanced-pancreatic-cancer

- *ASCO abstract: http://meetinglibrary.asco.org/content/116391-132*
- Institution(s): Hôpital Beaujon, Clichy, France and others
- Presenter: Pascal Hammel
- Major finding: The authors aimed to define the role of 1) chemoradiotherapy (CRT) after disease control with gemcitabine, 2) erlotinib in locally advanced pancreatic cancer (LAPC). Administering CRT is not superior to continuing chemotherapy (CT) in patients with controlled LAPC after 4 months of CT.

Final results from the phase III TeloVac trial in pancreatic cancer
http://www.businesswire.com/news/home/20130603005934/en/Final-Results-Phase-III-TeloVac-Trial-Pancreatic

- *ASCO abstract: http://meetinglibrary.asco.org/content/111300-132*
- Institution(s): University of Birmingham, Birmingham, UK and others
- Presenter: Gary William Middleton
- Major finding: GV1001, a promiscuous class II epitope encompassing aa 611-626 of hTERT led to the development of CD4+ clones recognizing hTERT in patients with advanced pancreatic cancer (APC). Overall survival (OS) with concurrent gemcitabine/capecitabine (GemCap)/GV1001 was not different to that with GemCap alone. OS with sequential GV1001 was not statistically different to GemCap alone as it did not meet the criterion for statistical significance. The addition of a T helper epitope vaccine to GemCap did not improve outcome compared to GemCap alone.

Encouraging results in breast and pancreatic cancers for patients treated with Peregrine's bavituximab
http://ir.peregrineinc.com/releasedetail.cfm?ReleaseID=768614

- *ASCO abstract: http://meetinglibrary.asco.org/content/116054-132*
- Institution(s): Beth Israel Deaconess Medical Center/Harvard Medical School, Boston, MA and others
- Presenter: Shuchi Sumant Pandya
- Major finding: Bavituximab is a monoclonal antibody directed against phosphatidylserine that causes vascular shutdown and reactivation of the innate and adaptive immunity in animal models. In this patient population with extensive disease burdens and limited treatment options, gemcitabine plus bavituximab was well tolerated and demonstrated moderate activity in tumor response and survival.

Sorrento Therapeutics, Inc., IGDRASOL present Phase I clinical data for CynviloqTM plus gemcitabine
http://sorrentotherapeutics.com/sorrento-therapeutics-inc-and-igdrasol-present-phase-i-clinical-data-for-the-combination-of-cynviloqtm-paclitaxel-polymeric-micelle-plus-gemcitabine-for-treatment-of-advanced-pancreatic-cancer-at/

- *ASCO abstract: http://meetinglibrary.asco.org/content/116059-132*
- Institution(s): Igdrasol, Fountain Valley, CA

- Presenter: n/a (booth)
- Major finding: The (nab-Pac)/Gemcitabine (Gem) combination has recently been shown to impart a significant survival advantage over Gem alone in patients with metastatic pancreatic cancer. The goal of this study was to define a non-biologic, nanoparticle paclitaxel (NBN-Pac) which has a similar toxicity profile and utilizes the same albumin-mediated transport mechanism. NBN-Paclitaxel formulation has superior anti-tumor activity vs. Taxol and Gem in in vitro toxicity assays, preclinical models of pancreatic cancer, as well in a phase I clinical study in patients with advanced pancreatic cancer.

Fox Chase study: for metastatic pancreatic cancer, treatment and survival decrease with advanced age
http://www.fccc.edu/information/news/press-releases/2013/2013-05-29-ASCO-Pancreatic-Cancer.html

- *ASCO abstract: http://meetinglibrary.asco.org/content/111231-132*
- Institution(s): Fox Chase Cancer Center, Philadelphia, PA and others
- Presenter: Namrata Vijayvergia
- Major finding: Elderly metastatic pancreatic cancer patients have shorter overall survival, are less likely to receive chemotherapy, and if treated receive fewer agents compared to younger patients. These differences cannot be explained solely by performance status or disease characteristics and warrant further study.

Other treatment news:

Mitoxantrone targets human ubiquitin-specific peptidase 11 and is a potent inhibitor of survival
http://www.ncbi.nlm.nih.gov/pubmed/23696131

- Journal: *Molecular Cancer Research*
- Institution(s): Thomas Jefferson University, Philadelphia, PA and others
- Corresponding author(s): Jonathan Brody
- PanCAN-affiliated author: Jonathan Brody, PhD: 2010 Skip Viragh – Career Development Award
- Major finding: Ubiquitin-specific peptidase 11 (USP11), an enzyme that interacts with BRCA2, was recently discovered to play a key role in DNA double-strand break repair and may be a novel therapeutic target. One of the USP11 inhibitors, mitoxantrone, affected pancreatic ductal adenocarcinoma (PDA) cell survival. The authors' findings establish a model for rapid discovery of FDA approved compounds by complementing in vitro biochemical experiments with cell culture studies. Further, they provide a strong rationale to study mitoxantrone in pre-clinical and early-phase clinical settings for the treatment of PDA.

Anti-tumour efficacy of capecitabine in a genetically engineered mouse model of pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23840665

- Journal: *PLoS One*
- Institution(s): Cancer Research UK Cambridge Research Institute, Cambridge, UK
- Corresponding author(s): Frances Richards
- PanCAN-affiliated author: Dave Tuveson, MD, PhD: 2003 Career Development Award and Emeritus Scientific Advisory Board

- Major finding: These data suggest that capecitabine could be considered as an alternative to gemcitabine in future, rationally designed, combination treatment strategies for advanced pancreatic cancer.

Recent progress in pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23757124

- Journal: *CA: A Cancer Journal for Clinicians*
- Institution(s): The Johns Hopkins University School of Medicine, Baltimore, MD
- Corresponding author(s): Ralph Hruban
- PanCAN-affiliated authors:
    - Joe Herman, MD: 2008 Blum-Kovler – Career Development Award and Medical Advisory Board
    - Ralph Hruban, MD: Emeritus Scientific Advisory Board
- Major finding: It is clear that multidisciplinary care that provides comprehensive and coordinated evaluation and treatment is the most effective way to manage patients with pancreatic cancer.

Adjuvant therapy for resectable pancreatic adenocarcinoma: Review of treatment, future directions
http://www.ncbi.nlm.nih.gov/pubmed/23810287

- Journal: *Cancer Treatment Reviews*
- Institution(s): B.O.C. Oncology Centre, Nicosia, Cyprus and others
- Corresponding author(s): Panteleimon Kountourakis
- Major finding: Promising new agents and molecules of prognostic as well as predictive value under evaluation offer intriguing data, despite issues surrounding adjuvant therapy strategies. In this article, the authors sought to review the different therapeutic adjuvant modalities and future directions.

Pancreatic cancer: advances in treatment, results and limitations
http://www.ncbi.nlm.nih.gov/pubmed/23797123

- Journal: *Digestive Diseases*
- Institution(s): University of Heidelberg, Heidelberg, Germany
- Corresponding author(s): Markus Büchler
- Major finding: This Review summarizes the current evidence and discusses available treatment options for both locally advanced and metastatic pancreatic adenocarcinoma.

EORTC intergroup trial opens for patients with resected head of pancreas adenocarcinoma
http://medicalxpress.com/news/2013-06-eortc-intergroup-trial-patients-resected.html
European Organisation for Research and Treatment of Cancer (EORTC) trial 40084-22084 has two primary objectives: to determine if adding erlotinib to gemcitabine adjuvant chemotherapy will improve survival as compared to gemcitabine alone following resection of head of pancreas adenocarcinoma, then, following adjuvant chemotherapy, determine if concurrent fluoropyrimidine and radiotherapy improves survival for patients who have no evidence of progressive disease.

Impact of adjuvant radiotherapy on survival after resection: Data from the National Cancer Data Base
http://www.ncbi.nlm.nih.gov/pubmed/23771249

- Journal: *Annals of Surgical Oncology*
- Institution(s): Emory University School of Medicine, Atlanta, GA and others
- Corresponding author(s): David Kooby
- Major finding: Adjuvant chemotherapy with radiotherapy is associated with improved overall survival after pancreatic adenocarcinoma (PAC) resection in a large population from the National Cancer Data Base (NCDB). On the basis of these analyses, radiotherapy should be a part of adjuvant therapy for PAC.

SBRT in unresectable pancreatic cancer: preliminary results of a mono-institutional experience
http://www.ncbi.nlm.nih.gov/pubmed/23799996

- Journal: *Radiation Oncology*
- Institution(s): Istituto Clinico Humanitas, Rozzano, Milano, Italy and others
- Corresponding author(s): Filippo Alongi
- Major finding: The authors' preliminary results show that stereotactic body radiotherapy (SBRT) can obtain a satisfactory local control rate for unresectable locally advanced and recurrent pancreatic adenocarcinoma. This fractionation schedule is feasible, and no G ≥ 3 toxicity was observed. SBRT is an effective emerging technique in the multi-modality treatment of locally advanced pancreatic tumors.

Preoperative gemcitabine-based chemoradiation therapy for resectable and borderline resectable
http://www.ncbi.nlm.nih.gov/pubmed/23799421

- Journal: *Annals of Surgery*
- Institution(s): Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan
  Corresponding author(s): Osamu Ishikawa
- Major finding: In the resected cases, the locoregional control was comparable between patients with resectable (PC-R) and borderline resectable (PC-BR) pancreatic cancer after preoperative chemoradiation therapy. The survival rate for the patients with PC-BR was lower than the rate for those with PC-R due to a higher incidence of peritoneal and distant recurrence in the patients with PC-BR.

Dysplasia at the surgical margin is associated with recurrence after resection of non-invasive IPMN
http://www.ncbi.nlm.nih.gov/pubmed/23782351

- Journal: *HPB*
- Institution(s): Memorial Sloan-Kettering Cancer Center, New York, NY
- Corresponding author(s): Timothy Frankel
- Major finding: In this study, dysplasia at the margin after a pancreatectomy for non-invasive intraductal papillary mucinous neoplasm (IPMN) was associated with recurrence in the remnant gland, but not at the resection margin. While this finding may warrant closer follow-up, it does not identify a gland at higher risk for the subsequent development of invasive disease.

A phase II of personalized peptide vaccination for chemotherapy-resistant advanced pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23784011

- Journal: *Oncology Reports*
- Institution(s): Kurume University School of Medicine, Kurume, Fukuoka, Japan
- Corresponding author(s): Tetsuro Sasada
- Major finding: In the present study, a phase II study of personalized peptide vaccination (PPV) was conducted, in which vaccine antigens were selected and administered based on the pre-existing IgG responses to 31 different pooled peptides, for 41 chemotherapy-resistant advanced pancreatic cancer patients. Due to the safety profile and the potential clinical efficacy, the conduction of additional clinical trials of PPV for chemotherapy-resistant advanced pancreatic cancer patients is warranted.

Treatment of borderline resectable pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23793524

- Journal: *Current Treatment Options in Oncology*
- Institution(s): MD Anderson Cancer Center, Houston, TX
- Corresponding author(s): Matthew Katz
- Major finding: Following completion of multimodality therapy, patients with borderline resectable pancreatic cancer can expect a duration of survival as favorable as that of patients who initially present with resectable tumors. Coordination among a multidisciplinary team of physicians is necessary to maximize these complex patients' short- and long-term oncologic outcomes.

Comparison of 3 treatment strategies for locally advanced and borderline resectable pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23730507

- Journal: *Journal of Gastrointestinal Oncology*
- Institution(s): Yale University School of Medicine, New Haven, CT
- Corresponding author(s): Bryan Chang
- Major finding: Treatment with chemotherapy followed by chemoradiation therapy is associated with improved median overall survival and metastasis free survival compared with chemotherapy alone. This strategy may select for patients who are less likely to develop early metastases and therefore have a better prognosis.

Comparative benefits of nab-paclitaxel over gemcitabine or polysorbate-based docetaxel
http://www.ncbi.nlm.nih.gov/pubmed/23803690

- Journal: *Carcinogenesis*
- Institution(s): The University of Texas Southwestern Medical Center Dallas, TX and others
- Corresponding author(s): Roderich Schwarz
- Major finding: The superior antitumor activity of nab-paclitaxel provides a strong rationale for considering nab-paclitaxel as first-line monotherapy in pancreatic ductal adenocarcinoma.

Case study – Gemcitabine plus Nab-Paclitaxel, chemoradiation in locally advanced pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23730523

- Journal: *Journal of Gastrointestinal Oncology*

- Institution(s): University of Cincinnati, Cincinnati, OH
- Corresponding author(s): Olugbenga Olowokure
- Major finding: The authors present a case of a 52 year old female with locally advanced pancreatic cancer with elevated CA19-9 at diagnosis who received gemcitabine + nab-paclitaxel followed by gemcitabine-based chemoradiation who underwent surgical resection despite persistent stable disease on radiographic studies and was found to have complete pathologic response.

Phase I trial of AEG35156 an antisense oligonucleotide to XIAP plus gemcitabine
http://www.ncbi.nlm.nih.gov/pubmed/22441342

- Journal: *American Journal of Clinical Oncology*
- Institution(s): Arizona Cancer Center, Tucson, AZ
- Corresponding author(s): Glen Weiss
- Major finding: AEG35156 is an antisense oligonucleotide (ASO) that targets the X-linked inhibitor of apoptosis mRNA. The maximum-tolerated dose is AEG35156 500 mg plus gemcitabine 1000 mg/m2 given on days 1, 8, and 15 every 28 days. AEG35156 plus gemcitabine failed to show significant clinical activity in advanced pancreatic ductal adenocarcinoma.

A phase I study investigating the safety, pharmacokinetics of bioavailable curcumin (Theracurmin(®))
http://www.ncbi.nlm.nih.gov/pubmed/23543271

- Journal: *Cancer Chemotherapy and Pharmacology*
- Institution(s): Kyoto University Hospital, Kyoto, Japan and others
- Corresponding author(s): Masashi Kanai
- Major finding: Pancreatic or biliary tract cancer patients who failed standard chemotherapy were eligible for this study. Repetitive systemic exposure to high concentrations of curcumin achieved by Theracurmin(®) did not increase the incidence of adverse events in cancer patients receiving gemcitabine-based chemotherapy.

Two-cohort phase I of oxaliplatin + gemcitabine, oxaliplatin, gemcitabine, + erlotinib, radiotherapy
http://www.ncbi.nlm.nih.gov/pubmed/22547007

- Journal: *American Journal of Clinical Oncology*
- Institution(s): Ohio State University, Columbus, OH
- Corresponding author(s): Bert O'Neil
- Major finding: Weekly oxaliplatin 50 mg/m2/wk combined with gemcitabine 200 mg/m2/wk and standard radiotherapy for pancreatic cancer has acceptable toxicity and interesting activity.

PG545, an angiogenesis and heparanase inhibitor, reduces primary tumor growth and metastasis
http://www.ncbi.nlm.nih.gov/pubmed/23696215

- Journal: *Molecular Cancer Therapeutics*
- Institution(s): University of Texas Southwestern Medical Center, Dallas, TX and others
- Corresponding author(s): Rolf Brekken
- Major finding: The authors evaluated the therapeutic potential of PG545, an angiogenesis and heparanase inhibitor, in experimental pancreatic ductal adenocarcinoma (PDAC). Their results

highlight the potent antitumor activity of PG545 and support the further exploration of heparanase inhibitors as a potential clinical strategy for the treatment of PDAC.

BIBF 1120 (nintedanib), triple angiokinase inhibitor, induces hypoxia but not EMT, blocks progression
http://www.ncbi.nlm.nih.gov/pubmed/23729403

- Journal: *Molecular Cancer Therapeutics*
- Institution(s): University of Texas Southwestern Medical Center, Dallas, TX
- Corresponding author(s): Rolf Brekken and David Gerber
- Major finding: In summary, BIBF 1120 (nintedanib, a tyrosine kinase inhibitor that targets VEGF receptor, platelet-derived growth factor receptor, and fibroblast growth factor receptor) showed potent antitumor and antiangiogenic activity in preclinical models of lung and pancreatic cancer where it induced hypoxia but not epithelial-to-mesenchymal transition (EMT). The absence of EMT induction, which has been implicated in resistance to antiangiogenic therapies, is noteworthy. Together, these results warrant further clinical studies of BIBF 1120.

Inflammatory monocyte mobilization decreases patient survival: a role for targeting CCL2/CCR2 axis
http://www.ncbi.nlm.nih.gov/pubmed/23653148

- Journal: *Clinical Cancer Research*
- Institution(s): Washington University School of Medicine and Alvin J. Siteman Cancer Center, St. Louis, MO
- Corresponding author(s): David Linehan
- Major finding: Inflammatory monocyte recruitment is critical to pancreatic cancer progression, and targeting CCR2 may be an effective immunotherapeutic strategy in this disease.

Sensitization of pancreatic cancer to chemoradiation by the Chk1 inhibitor, MK8776
http://www.ncbi.nlm.nih.gov/pubmed/23804422

- Journal: *Clinical Cancer Research*
- Institution(s): University of Michigan, Ann Arbor, MI
- Corresponding author(s): Meredith Morgan
- Major finding: The authors' results suggest that the selective Chk1 inhibitor MK8776 selectively sensitizes homologous recombination repair-proficient pancreatic cancer cells and xenografts to gemcitabine-radiation and support the clinical investigation of MK8776 in combination with gemcitabine-radiation in locally advanced pancreatic cancer.

Inhibition of protein phosphatase 2A radiosensitizes by modulating CDC25C/CDK1 and HRR
http://www.ncbi.nlm.nih.gov/pubmed/23780887

- Journal: *Clinical Cancer Research*
- Institution(s): University of Michigan, Ann Arbor, MI
- Corresponding author(s): Meredith Morgan
- Major finding: Collectively, the authors' data demonstrate that protein phosphatase (PP2A) inhibition radiosensitizes pancreatic cancer both in vitro and in vivo via activation of CDC25C/CDK1 and inhibition of homologous recombination repair (HRR), and provide proof-of-

concept evidence that PP2A is a promising target for the improvement of local therapy in pancreatic cancer.

An undesired effect of chemotherapy: gemcitabine promotes pancreatic cancer cell invasiveness
http://www.ncbi.nlm.nih.gov/pubmed/23740244

- Journal: *Journal of Biological Chemistry*
- Institution(s): University of South Alabama, Mobile, AL
- Corresponding author(s): Ajay Singh
- Major finding: Together, these findings reinforce the role of CXCL12/CXCR4 signaling in gemcitabine resistance and point toward an unintended and undesired effect of chemotherapy.

Multimodal treatment eliminates cancer stem cells, leads to long-term survival in primary xenografts
http://www.ncbi.nlm.nih.gov/pubmed/23825539

- Journal: *PLoS One*
- Institution(s): Spanish National Cancer Research Centre (CNIO), Madrid, Spain and others
- Corresponding author(s): Christopher Heeschen
- Major finding: The authors embarked on a large-scale investigation on the effects of combining chemotherapy, hedgehog pathway inhibition, and mTOR inhibition in a preclinical mouse model of pancreatic cancer. This multimodal therapeutic strategy should be further explored in the clinical setting as its success may eventually improve the poor prognosis of patients with pancreatic ductal adenocarcinoma.

Prospective, phase 1/2 study of everolimus and temozolomide in pancreatic neuroendocrine tumor
http://www.ncbi.nlm.nih.gov/pubmed/23733618

- Journal: *Cancer*
- Institution(s): Dana-Farber Cancer Institute, Boston, MA and others
- Corresponding author(s): Jennifer Chan
- Major finding: Temozolomide and everolimus can be safely administered together in patients with advanced pancreatic neuroendocrine tumors, and the combination is associated with encouraging antitumor activity. Future studies evaluating the efficacy of combination therapy compared to treatment with either agent alone are warranted.

Safety, tolerability, pharmacokinetics, pharmacodynamics of long-acting release of pasireotide
http://www.ncbi.nlm.nih.gov/pubmed/23765178

- Journal: *Cancer Chemotherapy and Pharmacology*
- Institution(s): Cedars-Sinai Medical Center, Los Angeles, CA and others
- Corresponding author(s): Edward Wolin
- Major finding: This study demonstrated that a new, once-monthly, intramuscular long-acting release formulation of pasireotide (SOM230), a novel multireceptor ligand somatostatin analog, was well tolerated in patients with advanced gastroenteropancreatic neuroendocrine tumor. Steady state levels of plasma pasireotide were achieved after three injections.

Immunomedics reports first results Phase IB study of ^{90}Y-clivatuzumab in metastatic pancreatic cancer
http://www.immunomedics.com/pdfs/news/2013/pr07032013.pdf

- Company: Immunomedics, Inc., Morris Plains, NJ
- Major finding: Immunomedics, Inc., a biopharmaceutical company primarily focused on the development of monoclonal antibody based products for the targeted treatment of cancer, autoimmune and other serious diseases, today announced encouraging results from the Phase Ib study with clivatuzumab labeled with the radioisotope, yttrium-90 (90Y), in patients with metastatic pancreatic cancer who had received at least 2 prior treatments..

Prima Biomed to move forward with phase 2 clinical program for CVac™ in pancreatic, other cancers
http://www.primabiomed.com.au/announcements/pdf/2013/2013_06_25_announcement.pdf

- Company: Prima BioMed Ltd, Sydney, Australia
- Major finding: CVac is Prima's lead product, a personalized immunocellular therapy targeted at mucin 1 overexpressing cancer cells. Each trial will be a randomized study of CVac as adjuvant therapy in combination with standard of care versus standard of care alone.

CANCER CONTROL, SURVIVORSHIP, AND OUTCOMES RESEARCH

Does increasing insurance improve outcomes for US cancer patients?
http://www.ncbi.nlm.nih.gov/pubmed/23773721

- Journal: *Journal of Surgical Research*
- Institution(s): University of Massachusetts, Worcester, MA and others
- Corresponding author(s): Jennifer Tseng
- PanCAN-affiliated author: Jennifer Tseng, MD: 2006 Samuel Stroum – Young Investigator Award
- Major finding: Health insurance coverage at a community level appears to influence survival for patients with cancer. Additional investigations are needed to examine whether individual versus community associations exist and how best to surmount barriers to cancer care.

The role of physical activity in cancer prevention, treatment, recovery, and survivorship
http://www.cancernetwork.com/survivorship/content/article/10165/2146815

- Journal: *Oncology*
- Institution(s): Memorial Sloan-Kettering Cancer Center, New York, NY
- Corresponding author(s): Jyothirmai Gubili
- Major finding: An informal review of literature on exercise and cancer was undertaken in order to examine the role of exercise in cancer prevention, treatment, rehabilitation, and late survivorship. Population-wide studies show that cancer incidence decreases with increasing physical activity levels. Further research is needed to determine the various amounts and intensities of exercise required for optimum cancer prevention, recovery, and survival.