PANCREATIC CANCER NEWS & UPDATES – OCTOBER 2012

PANCREATIC CANCER ACTION NETWORK AND COMMUNITY NEWS

Abstracts of papers submitted to the Joint 43rd Meeting of the APA and the 17th Meeting of the IAP

http://journals.lww.com/pancreasjournal/Fulltext/2012/11000/Abstracts_of_Papers_Submitted_to_the_Joint_43rd.29.aspx

The Joint 43rd Meeting of the American Pancreatic Association and the 17th Meeting of the International Association of Pancreatology took place October 31–November 3, 2012, in Miami, Florida. This open access issue of *Pancreas* includes abstracts submitted to the meeting, and the final program can be viewed here: http://www.american-pancreatic-association.org/images/stories/program_10.24_7p_3.pdf.

AACR Annual Meeting 2013: Abstract submissions now open

http://www.aacr.org/home/scientists/meetings--workshops/aacr-annual-meeting-2013/abstracts.aspx

Deadlines for the 2013 American Association for Cancer Research Annual Meeting in Washington, DC are now open. Abstract submission deadline: Thursday, November 15; late-breaking abstract submission deadline: Monday, January 28; clinical trials placeholder abstracts – final results and conclusions deadline: Friday, March 1.

2013 GI Cancers Symposium: Three days of high-impact science and education

http://www.gicasym.org/?cmpid=db_gi_reg_etoc_-_all_10-20-12_gihtml

Register for the 2013 Gastrointestinal Cancers Symposium (January 24-26 in San Francisco, CA) for three days of translational research, novel clinical therapies, and state-of-the-art science in GI oncology. The 2013 program features daily special sessions entitled *A Decade in Review*, which will highlight the triumphs and challenges for each disease site during the past decade. Housing and early registration deadline is December 19, 2012.

TCGA: Agenda available & last chance to register for 2nd Annual Scientific Symposium

http://www.capconcorp.com/meeting/2012/TCGASymposium/agenda.asp

The agenda is now available for The Cancer Genome Atlas' 2nd Annual Scientific Symposium: Enabling Cancer Research Through TCGA, November 27-28, 2012, Crystal City, Virginia.

Cancer tissue resource from Oncomatrix

http://www.oncomatrix.com/products/Cancer/Search2.asp

Over 2600 cancer cases in repository. Comprehensive resource for molecular biology of cancer: total RNA, genomic DNA, frozen tumor and matched normal tissues, and formalin-fixed paraffin-embedded tissues and tissue sections from a variety of cancer cases, supported by case-related clinical and pathological information.

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).

Clinical studies of safety and effectiveness of Orphan Products Research Project Grant (R01)

http://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/WhomtoContactaboutOrphanProductDevelopment/ucm134580.htm

The Food and Drug Administration (FDA) is announcing the availability of grant funds for the support of FDA's Office of Orphan Products Development (OPD) grant program. The goal of FDA's OPD grant program is to support the clinical development of products for use in rare diseases or conditions where no current therapy exists or where the proposed product will be superior to the existing therapy.

Funding opportunities in extracellular RNA communication

http://commonfund.nih.gov/exrna/grants.aspx

The recent finding that RNA molecules are secreted in the extracellular space and act as endocrine signals to alter the phenotypes of target cells represents a novel paradigm in intracellular signaling. Extracellular RNAs (exRNAs) have both protective and pathogenic roles in a variety of human disease. To address critical needs and opportunities in this nascent field, the NIH Common Fund has launched the Extracellular RNA Communication program.

Funding Opportunity Announcements for the new NCI National Clinical Trials Network Program

http://ctep.cancer.gov/investigatorResources/default.htm

The NIH released the 6 Funding Opportunity Announcements (FOAs) for the new NCI National Clinical Trials Network (NCTN) Program. The website includes links to the new FOAs and NCTN Program Guidelines. Each FOA lists the NCI/DCTD (Division of Cancer Treatment and Diagnosis) staff and other NCI staff (along with the appropriate email addresses) to which questions may be addressed.

Pancreas Cancer Research Fellowship at Virginia Mason Cancer Center

http://jobs.virginiamason.org/job/Seattle-Pancreas-Cancer-Research-Fellowship-Job-WA-98101/1913701/

Virginia Mason Cancer Center in Seattle is now accepting applications for a Pancreas Cancer Research Fellowship (PCRF) program and hopes to have their first PCRF fellow start on July 1, 2013 (the beginning of the next academic year). Vincent J. Picozzi, Jr., MD (Medical Advisory Board) is the Fellowship Director for this program. More information about the Digestive Disease Institute can be found here: https://www.virginiamason.org/ddi.

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."

LETTER TO THE EDITOR: Senate should pass cancer bill now

http://www.washingtontimes.com/news/2012/oct/18/senate-should-pass-cancer-bill-now/

Julie Fleshman, JD, MBA, President and CEO of the Pancreatic Cancer Action Network, wrote this Letter to the Editor published in *The Washington Times*, discussing the passage of the Recalcitrant Cancer Research Act in the House, and the need for the Senate to follow the House's lead.

Pancreatic Cancer Action Network grant recipient receives Merit Award

Florencia McAllister, MD, recipient of the 2012 Samuel Stroum – Fellowship grant, was recently awarded a 2013 ASCO Conquer Cancer Foundation Merit Award from the ASCO Conquer Cancer Foundation Board of Directors and the Gastrointestinal Cancers Symposium Program Committee. Dr. McAllister was also invited to give an oral presentation at the Gastrointestinal Cancers Symposium in January, on her abstract titled "TH17 cells promote early pancreatic tumorigenesis." Congratulations!

U.Va. Cancer Initiative invests $300,000 in public-private research partnerships

http://news.virginia.edu/content/uva-cancer-initiative-invests-300000-public-private-research-partnerships

The University of Virginia's Cancer Center Technology Partnership Initiative has awarded funding to three projects bringing University and industry researchers together to accelerate treatments for brain, breast, and pancreatic cancers. U.Va. surgeon Dr. Todd Bauer and biomedical engineer Dr. Kimberly Kelly (recipient of the 2007 Laurie and Paul MacCaskill – Career Development Award) are working in partnership with Charlottesville-based biotechnology firm iTi Health Inc. to develop a molecular-based imaging technique to detect liver metastases in pancreatic cancer.

Van Andel Institute scientist to lead search for pancreatic cancer clues

http://www.vai.org/en/NewsRoom/press-release-10-18-12.aspx

The National Cancer Institute (NCI) has chosen a Van Andel Institute scientist to head a $2.3 million project to develop new molecular biomarkers for pancreatic cancer. Brian Haab, PhD, Head of Van Andel Institute's Laboratory of Cancer Immunodiagnostics, will lead the five-year study in collaboration with researchers at Emory University, Fred Hutchinson Cancer Research Center, Palo Alto Research Center, University of Georgia, and University of Pittsburgh Medical Center. The project will make use of several new developments to address the problem of identifying the diagnostic glycans in CA 19-9-low patients.

NET Cancer Day

http://netcancerday.org/

November 10 is Worldwide NET Cancer Awareness Day, to raise awareness of neuroendocrine cancers.

U.S. investment in biomedical and health research on downward trend

http://www.researchamerica.org/release_2012october25_investmentreport

Biomedical and health research and development (R&D) spending from all sources declined by more than $4 billion or 3% between FY10 and FY11 according to Research!America's *2011 U.S. Investment in Health Research* report (http://www.researchamerica.org/uploads/healthdollar11.pdf). This represents the first drop in overall spending since Research!America began compiling the data in 2002.

BIOLOGY OF CANCER

Pancreatic cancer genomes reveal aberrations in axon guidance pathway genes

http://www.ncbi.nlm.nih.gov/pubmed/23103869

Pancreatic Cancer Action Network write-up:

http://pancan.org/section_research/strategic_research_program/news/topic_sequence_genomes_pancretic_cancer.php

- Journal: *Nature*
- Institution(s): Garvan Institute of Medical Research, New South Wales, Australia and many others
- Corresponding author(s): Sean Grimmond
- PanCAN affiliated authors:
    - Mayo Clinic: Gloria Petersen
    - Johns Hopkins: Ralph Hruban, Anirban Maitra, Christine Iacobuzio-Donahue, James Eshleman
    - UCSF: Margaret Tempero
    - CRUK: David Tuveson
- Major finding: This paper is out of the Australian pancreatic cancer effort of the International Cancer Genome Consortium (ICGC). Pathway-based analysis of recurrently mutated genes recapitulated clustering in core signaling pathways in pancreatic ductal adenocarcinoma, and identified new mutated genes in each pathway. The authors also identified frequent and diverse somatic aberrations in genes described traditionally as embryonic regulators of axon guidance, particularly SLIT/ROBO signaling.

Concurrent PEDF deficiency and Kras mutation induce invasive pancreatic cancer, adipose-rich stroma

http://www.ncbi.nlm.nih.gov/pubmed/22234980

- Journal: *Gut*
- Institution(s): Northwestern University, Chicago, IL and others
- Corresponding author(s): Paul Grippo
- PanCAN affiliated authors:
    - First/corresponding author Paul Grippo, PhD: 2007 Nancy Daly Riordan – Career Development Award
    - Middle author Mark Talamonti, MD: Medical Advisory Board
- Major finding: The authors' data highlight the importance of lipid metabolism in the tumor microenvironment and identify pigment epithelium-derived factor (PEDF), a non-inhibitory SERPIN, as a critical negative regulator of both adiposity and tumor invasion in the pancreas.

XZH-5 inhibits STAT3 phosphorylation and enhances the cytotoxicity of chemotherapeutic drugs
http://www.ncbi.nlm.nih.gov/pubmed/23056374

- Journal: *PLoS One*
- Institution(s): Huazhong University of Science and Technology, Wuhan, Hubei, People's Republic of China and others
- Corresponding author(s): Aiguo Liu and Jiayuh Lin
- PanCAN affiliated author: Final/corresponding author Jiayuh Lin, PhD: 2009 Pilot Grant
- Major finding: The authors' results indicate that a non-peptide, cell-permeable, small molecule named XZH-5 may be a potential therapeutic agent for breast and pancreatic cancers with constitutive Signal Transducers and Activators of Transcription 3 (STAT3) signaling.

Long non-coding RNAs and cancer: a new frontier of translational research?
http://www.ncbi.nlm.nih.gov/pubmed/22266873

- Journal: *Oncogene*
- Institution(s): IRCSS-National Cancer Institute, Aviano (PN), Italy and others
- Corresponding author(s): George Calin
- PanCAN affiliated author: Final/corresponding author George Calin, MD, PhD: 2009 Seena Magowitz – Pilot Grant
- Major finding: The authors of this review article define long non-coding RNAs (lncRNAs) and present a cancer-oriented list of lncRNAs, list some tools (for example, public databases) that classify lncRNAs or that scan genome spans of interest to find whether known lncRNAs reside there, and describe some of the functions of lncRNAs and the possible genetic mechanisms that underlie lncRNA expression changes in cancer, as well as current and potential future applications of lncRNA research in the treatment of cancer.

Aptamer-mediated delivery of chemotherapy to pancreatic cancer cells
http://www.ncbi.nlm.nih.gov/pubmed/23030589

- Journal: *Nucleic Acid Therapeutics*
- Institution(s): Duke University School of Medicine, Durham, NC and others
- Corresponding author(s): Rebekah White
- PanCAN affiliated author: Final/corresponding author Rebekah White, MD: 2007 Seena Magowitz – Career Development Award
- Major finding: The authors utilized a nuclease resistant RNA aptamer that binds and is internalized by epidermal growth factor receptor (EGFR) on pancreatic cancer cells to deliver gemcitabine-containing polymers into EGFR-expressing cells and inhibit cell proliferation in vitro. This approach to cell type-specific therapy can be adapted to other targets and to other types of therapeutic cargo.

Insights into the epigenetic mechanisms controlling pancreatic carcinogenesis
http://www.ncbi.nlm.nih.gov/pubmed/23073473

- Journal: *Cancer Letters*
- Institution(s): Mayo Clinic, Rochester, MN and others
- Corresponding author(s): Martin Fernandez-Zapico

- PanCAN affiliated author: Final/corresponding author Martin Fernandez-Zapico, MD: 2007 Carole and Bob Daly – Career Development Award
- Major finding: A noteworthy characteristic of epigenetic-based inheritance is its reversibility, which is in contrast to the stable nature of DNA sequence-based alterations. Given this nature of epigenetic alterations, it becomes imperative that our understanding of epigenetic-based events promoting and maintain pancreatic ductal adenocarcinoma continues to grow.

Activation of nuclear factor-κB in acinar cells increases the severity of pancreatitis in mice
http://www.ncbi.nlm.nih.gov/pubmed/23041324

- Journal: *Gastroenterology*
- Institution(s): University of Texas M.D. Anderson Cancer Center, Houston, TX and others
- Corresponding author(s): Craig Logsdon and Baoan Ji
- PanCAN affiliated author: Corresponding author Craig Logsdon, PhD: Scientific Advisory Board
- Major finding: The level of NF-κB activation correlates with the severity of acute pancreatitis in mice. Longer periods of activation lead to chronic pancreatitis. These findings indicate that strategies to inactivate NF-κB might be used to treat patients with acute or chronic pancreatitis.

Prostaglandin E2 regulates pancreatic stellate cell activity via the EP4 receptor
http://www.ncbi.nlm.nih.gov/pubmed/23090667

- Journal: *Pancreas*
- Institution(s): UT MD Anderson Cancer Center, Houston, TX
- Corresponding author(s): Vijaya Ramachandran
- PanCAN affiliated author: Middle author Craig Logsdon, PhD: Scientific Advisory Board
- Major finding: The authors' data indicate that prostaglandin E2 (PGE2) regulates pancreatic stellate cell profibrotic activities via prostaglandin E4 (EP4) receptor, thus suggesting EP4 receptor as useful therapeutic target for pancreatic cancer to reduce desmoplasia.

Human epididymis protein 4 is up-regulated in gastric and pancreatic adenocarcinomas
http://www.ncbi.nlm.nih.gov/pubmed/23084584

- Journal: *Human Pathology*
- Institution(s): Vanderbilt University School of Medicine, Nashville, TN and others
- Corresponding author(s): James Goldenring
- PanCAN affiliated author: Middle author Anirban Maitra, MBBS: 2004 Career Development Award and Chair, Scientific Advisory Board
- Major finding: The authors' results suggest that human epididymis protein 4 (HE4) is up-regulated during gastric and pancreatic carcinogenesis.

APE1/Ref-1 regulates STAT3 transcriptional activity and APE1/Ref-1-STAT3 targeting inhibits survival
http://www.ncbi.nlm.nih.gov/pubmed/23094050

- Journal: *PLoS One*
- Institution(s): Indiana University School of Medicine, Indianapolis, IN and others
- Corresponding author(s): Melissa Fishel

- PanCAN affiliated author: Middle author Anirban Maitra, MBBS: 2004 Career Development Award and Chair, Scientific Advisory Board
- Major finding: Overall, this work demonstrates that the transcriptional activity of STAT3 is directly regulated by the redox function of APE1/Ref-1 endonuclease, and that concurrent blockade of STAT3 and APE1/Ref-1 redox synergize effectively inhibit critical pancreatic ductal adenocarcinoma cell functions.

Arousal of cancer-associated stromal fibroblasts: Palladin-activated fibroblasts promote invasion
http://www.ncbi.nlm.nih.gov/pubmed/23076142

- Journal: *Cell Adhesion & Migration*
- Institution(s): University of Washington Medical Center; Seattle, WA
- Corresponding author(s): Teri Brentnall
- PanCAN affiliated author: Commentary author Teri Brentnall, MD: Emeritus Scientific Advisory Board
- Major finding: Invasive tunneling occurs as a result of the development of invadopodia-like cellular protrusions in the palladin-activated fibroblasts and the addition of a wounding/inflammatory trigger. Abrogation of palladin reduces the invasive capacity of these cells. Cancer-associated fibroblasts also play a role in cancer resistance and immuno-privilege, making the targeting of activators of these cells of interest for oncologists.

A combinatorial extracellular matrix platform identifies cell-extracellular matrix interactions
http://www.ncbi.nlm.nih.gov/pubmed/23047680

- Journal: *Nature Communications*
- Institution(s): Massachusetts Institute of Technology, Cambridge, MA and others
- Corresponding author(s): Sangeeta Bhatia
- PanCAN affiliated author: Middle author Tyler Jacks, PhD: 2012 Blum-Kovler – Innovative Grant
- Major finding: The authors report a novel-screening platform capable of measuring phenotypic responses to combinations of extracellular matrix molecules. The authors' platform allowed them to interrogate interactions between metastatic cells and their microenvironments, and identify extracellular matrix and integrin interactions that could serve as therapeutic targets.

Genome-wide characterization of pancreatic cancer patients using next generation sequencing
http://www.ncbi.nlm.nih.gov/pubmed/23071490

- Journal: *PLoS One*
- Institution(s): Translational Genomics Research Institute (TGen), Phoenix, AZ and others
- Corresponding author(s): Daniel Von Hoff
- Major finding: The authors' goal was to genomically characterize individual pancreatic adenocarcinoma (PAC) patients to understand the range of aberrations that are occurring in each tumor. While sequencing of more patients is needed, the high resolution genomic and transcriptomic information they have acquired provides valuable information on the molecular composition of PAC and helps to establish a foundation for improved therapeutic selection.

Lipocalin2 promotes invasion, tumorigenicity, gemcitabine resistance in pancreatic adenocarcinoma
http://www.ncbi.nlm.nih.gov/pubmed/23056397

- Journal: *PLoS One*
- Institution(s): University of Toronto, Toronto, Ontario, Canada
- Corresponding author(s): Ming Sound Tsao
- Major finding: The authors' overall results demonstrate that the small secreted protein lipocalin2 (LCN2) plays an important role in the malignant progression of pancreatic ductal carcinoma and is a potential therapeutic target for this disease.

Autophagy creates a CTL epitope that mimics tumor-associated antigens
http://www.ncbi.nlm.nih.gov/pubmed/23071732

- Journal: *PLoS One*
- Institution(s): Aichi Cancer Center Research Institute, Nagoya, Japan and others
- Corresponding author(s): Ayako Demachi-Okamura and Kiyotaka Kuzushima
- Major finding: The authors demonstrate a unique cytotoxic T-lymphocyte (CTL) epitope generated from the ubiquitous protein puromycin-sensitive aminopeptidase, which is presented via HLA-A24 on leukemic and pancreatic cancer cells but not on normal fibroblasts or EBV-transformed B lymphoblastoid cells. Ubiquitously expressed proteins may be sources of specific tumor-associated antigens when processed through a unique mechanism involving autophagy.

Exosomal lipids impact Notch signaling and induce death of human pancreatic tumoral SOJ-6 cells
http://www.ncbi.nlm.nih.gov/pubmed/23094054

- Journal: *PLoS One*
- Institution(s): Aix-Marseille Université, Marseille, France and others
- Corresponding author(s): Dominique Lombardo
- Major finding: The authors demonstrated a major role for lipids in interactions between Synthetic Exosome-Like Nanoparticles (SELN) and tumor cells, and in the ensued cell death. To their knowledge this is the first report on such effects of lipidic nanoparticles on tumor cell behavior. This may have implications in tumor progression.

EMT and pancreatic tumor initiating CD44+/EpCAM+ cells are inhibited by γ-secretase inhibitor IX
http://www.ncbi.nlm.nih.gov/pubmed/23094026

- Journal: *PLoS One*
- Institution(s): Medical University Hospital, Tuebingen, Germany and others
- Corresponding author(s): Ruben Plentz
- Major finding: The authors demonstrate a central role of Notch signaling pathway in pancreatic cancer pathogenesis and identify an effective approach to inhibit selectively epithelial mesenchymal transition (EMT) and suppress tumorigenesis by eliminating pancreatic tumor initiating CD44+/EpCAM+ cells.

Gene therapy of pancreatic cancer targeting the K-Ras oncogene
http://www.ncbi.nlm.nih.gov/pubmed/23099885

- Journal: *Cancer Gene Therapy*
- Institution(s): Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

- Corresponding author(s): Sarah Kraus
- Major finding: The aim of this study was to selectively kill Ras-transformed cells by overexpressing the pro-apoptotic protein, p53 upregulated modulator of apoptosis (PUMA) under a Ras-responsive promoter. This treatment modality may become a useful, effective, and safe approach to selectively target Ras-mutated tumor cells.

Paclitaxel and CYC3, an aurora kinase A inhibitor, synergise in pancreatic cancer cells
http://www.ncbi.nlm.nih.gov/pubmed/23037716

- Journal: *British Journal of Cancer*
- Institution(s): University of Cambridge, Cambridge, UK and others
- Corresponding author(s): Y. Lin
- Major finding: The combination of lower doses of paclitaxel and CYC3, a novel aurora kinase A inhibitor, merits further investigation with the potential for an improved therapeutic index in vivo.

STAT5b as molecular target in pancreatic cancer-inhibition of tumor growth, angiogenesis, metastases
http://www.ncbi.nlm.nih.gov/pubmed/23097626

- Journal: *Neoplasia*
- Institution(s): University of Regensburg Medical Center, Regensburg, Germany and others
  Corresponding author(s): Sven Lang
- Major finding: Recently, the transcription factor signal transducer and activator of transcription 5b (STAT5b) was associated with tumor progression in human solid cancer. Hence, the authors assessed whether STAT5b might serve as an anticancer target in ductal pancreatic adenocarcinoma. Taken together, the authors' results suggest that STAT5b might be a potential novel target for human pancreatic cancer.

Desmoplasia in pancreatic cancer. Can we fight it?
http://www.ncbi.nlm.nih.gov/pubmed/23125850

- Journal: *Gastroenterology Research and Practice*
- Institution(s): University of Athens, Greece and others
- Corresponding author(s): Muhammad Wasif Saif
- Major finding: In this review article, the authors discuss such new developments to fight the desmoplastic reaction, including inhibitors of the epidermal growth factor, fibroblast growth factor, the hedgehog pathway, as well as new molecular targets like CD40 agonist and its effects on T cells, extracellular matrix modifying enzymes such as LOXL2 inhibitor and novel tumor penetrating peptides for delivery of drugs.

Impact of tumor progression on cancer incidence curves
http://www.ncbi.nlm.nih.gov/pubmed/23054397

- Journal: *Cancer Research*
- Institution(s): Fred Hutchinson Cancer Research Center, Seattle, WA and others
- Corresponding author(s): E. Georg Luebeck
- Major finding: Studies of colorectal and pancreatic cancer using the multistage-clonal-expansion (MSCE) model have identified two phases of the incidence curves. The authors conclude that

cancer incidence curves can harbor significant information about hidden processes of tumor initiation, premalignant clonal expansion and malignant transformation, and even some limited information on tumor growth before clinical detection.

A novel therapeutic regime to eradicate solid tumors with an induction of tumor-specific immunity
http://www.ncbi.nlm.nih.gov/pubmed/23091113

- Journal: *Clinical Cancer Research*
- Institution(s): Queen Mary University of London, UK and others
- Corresponding author(s): Yaohe Wang
- Major finding: The antitumor efficacy of either adenovirus or vaccinia virus alone or sequential combination of the two viruses was examined in pancreatic and kidney cancer Syrian hamster models. The authors' findings demonstrate that sequential treatment of tumors with oncolytic adenovirus and vaccinia virus is a promising approach for cancer therapy and that T cell responses play a critical role.

The NAD+-dependent histone deacetylase SIRT6 promotes cytokine production and migration
http://www.ncbi.nlm.nih.gov/pubmed/23086953

- Journal: *Journal of Biological Chemistry*
- Institution(s): University of Genoa, Italy and others
- Corresponding author(s): Santina Bruzzone
- Major finding: The authors' results implicate a role for the sirtuin SIRT6 in pancreatic cancer cells in the synthesis of Ca2+-mobilizing second messengers, in the regulation of Ca2+-dependent transcription factors, and in the expression of pro-inflammatory, pro-angiogenic and chemotactic cytokines. SIRT6 inhibition may help combat cancer-induced inflammation, angiogenesis and metastasis.

Matricellular protein CCN1/Cyr61 is a critical regulator of Sonic Hedgehog in pancreatic carcinogenesis
http://www.ncbi.nlm.nih.gov/pubmed/23027863

- Journal: *Journal of Biological Chemistry*
- Institution(s): Kansas City VA Medical Center, Kansas City, MO and others
- Corresponding author(s): Snigdha Banerjee
- Major finding: CCN1 is a matricellular protein and a member of the CCN family of growth factors. These extensive studies propose that targeting CCN1 can provide a new treatment option for patients with pancreatic cancer since blocking CCN1 simultaneously blocks two critical pathways (i.e., Sonic Hedgehog and Notch1) associated with the development of the disease as well as drug resistance.

Toll-like receptor 7 regulates pancreatic carcinogenesis in mice and humans
http://www.ncbi.nlm.nih.gov/pubmed/23023703

- Journal: *Journal of Clinical Investigation*
- Institution(s): New York University School of Medicine, New York, NY
- Corresponding author(s): George Miller
- Major finding: Since pancreatic tumorigenesis requires stromal expansion, the authors proposed that toll-like receptor 7 (TLR7) ligation modulates pancreatic cancer by driving stromal

inflammation. Accordingly, they found that mice lacking TLR7 exclusively within their inflammatory cells were protected from neoplasia. These data suggest that targeting TLR7 holds promise for treatment of human pancreatic cancer.

A novel EPAC specific inhibitor suppresses pancreatic cancer cell migration and invasion
http://www.ncbi.nlm.nih.gov/pubmed/23066090

- Journal: *Molecular Pharmacology*
- Institution(s): The University of Texas Medical Branch, Galveston, TX and others
- Corresponding author(s): Xiaodong Cheng
- Major finding: The authors' studies show that exchange protein directly activated by cAMP (EPAC1) plays an important role in pancreatic cancer cell migration and invasion, and thus represents a potential target for developing novel therapeutic strategies for pancreatic cancer.

BML-275, an AMPK inhibitor, induces DNA damage, G2/M arrest and apoptosis
http://www.ncbi.nlm.nih.gov/pubmed/23076030

- Journal: *International Journal of Oncology*
- Institution(s): Georgetown University, Washington, DC and others
- Corresponding author(s): Insoo Bae
- Major finding: The authors' findings suggest that BML-275, a well-known inhibitor of adenosine monophosphate-activated protein kinase (AMPK), exerts its antitumor effects by inducing reactive oxygen species generation, DNA damage, and apoptosis via inhibition of the AMPK pathway and by inducing G2/M arrest via a pathway independent of AMPK, implicating its potential application as an antitumor agent for pancreatic cancer.

Mucin (Muc) expression during pancreatic cancer progression in spontaneous mouse model
http://www.ncbi.nlm.nih.gov/pubmed/23102107

- Journal: *Journal of Hematology & Oncology*
- Institution(s): University of Nebraska Medical Center, Omaha, NE
- Corresponding author(s): Surinder Batra
- Major finding: The authors' study reinforces the potential utility of the KrasG12D;Pdx1-Cre (KC) murine model for determining the functional role of mucins in pancreatic cancer (PC) pathogenesis by crossing KC mice with corresponding mucin knockout mice and evaluating mucin based diagnostic and therapeutic approaches for lethal PC.

Tissue tolerable plasma (TTP) induces apoptosis in pancreatic cancer cells in vitro and in vivo
http://www.ncbi.nlm.nih.gov/pubmed/23066891

- Journal: *BMC Cancer*
- Institution(s): Ernst-Moritz-Arndt University, Greifswald, Germany
- Corresponding author(s): Lars Ivo Partecke
- Major finding: The authors' data suggest possible future intra-operative applications of TTP to reduce microscopic residual disease in pancreatic cancer resections. Further promising applications include other malignancies (central liver/lung tumors) as well as synergistic effects combining TTP with chemotherapies. Yet, adaptations of plasma sources as well as of the

composition of effective components of TTP are required to optimize their synergistic apoptotic actions.

Interactions of everolimus and sorafenib in pancreatic cancer cells
http://www.ncbi.nlm.nih.gov/pubmed/23054975

- Journal: *The AAPS Journal*
- Institution(s): State University of New York at Buffalo, NY and others
- Corresponding author(s): William Jusko
- Major finding: This study examined the effects of everolimus (targets the mammalian target of rapamycin) and sorafenib (inhibits the Raf-mitogen-activated protein kinase, vascular endothelial growth factor, and platelet-derived growth factor pathways) on proliferation of two pancreatic cancer cell lines. The in vitro data for two pancreatic cancer cell lines suggest that a combination of these two drugs would be no more efficacious than the individual drugs alone, consistent with the drug interaction analysis that indicated slight antagonism for growth inhibition.

EGFR and HER2 inhibition in pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23076814

- Journal: *Investigational New Drugs*
- Institution(s): Dublin City University, Glasnevin, Dublin, Ireland and others
- Corresponding author(s): Naomi Walsh
- Major finding: The aim of this study was to investigate the effect of lapatinib, a selective inhibitor of EGFR/HER2 tyrosine kinases, on pancreatic cancer cell lines both alone and in combination with chemotherapy. Based on the authors' in vitro results, lapatinib may provide clinical benefit in EGFR positive pancreatic ductal adenocarcinoma.

miR-143 inhibits the metastasis of pancreatic cancer and an associated signaling pathway
http://www.ncbi.nlm.nih.gov/pubmed/23070684

- Journal: *Tumor Biology*
- Institution(s): Central South University, Changsha, China
- Corresponding author(s): Weijia Sun
- Major finding: This study suggested that miR-143 plays a central role in the invasion and metastasis of pancreatic cancer and miR-143 is a potential target for pancreatic cancer therapy.

Tumorigenesis: Pushing pancreatic cancer to take off
http://www.ncbi.nlm.nih.gov/pubmed/23037449

- Journal: *Nature Reviews Cancer*
- Institution(s): *Nature* editorial offices, London, UK
- Corresponding author(s): Sarah Seton-Rogers
- Major finding: This review article describes the progression from acinar-to-ductal metaplasia (ADM) to pancreatic intraepithelial neoplasia (PanIN) to pancreatic ductal adenocarcinoma (PDA) and the roles of injury, inflammation, and oncogenic KRAS.

ETIOLOGY

Telomere length and pancreatic cancer: A case–control study

http://www.ncbi.nlm.nih.gov/pubmed/23093543

- Journal: *Cancer Epidemiology, Biomarkers & Prevention*
- Institution(s): University of Wisconsin Carbone Cancer Center, Madison, WI and others
- Corresponding author(s): Lisa Boardman
- PanCAN affiliated author: Middle author Gloria Petersen, PhD: Scientific Advisory Board
- Major finding: Short telomeres in peripheral blood are associated with an increased risk for pancreatic cancer across most of the distribution of length, but extremely long telomeres may also be associated with higher risk.

Gallstones, cholecystectomy, chronic pancreatitis, and risk of pancreatic cancer in diabetic patients

http://www.ncbi.nlm.nih.gov/pubmed/23053420

- Journal: *Journal of Gastroenterology*
- Institution(s): China Medical University, Taichung, Taiwan and others
- Corresponding author(s): Shu-Yu Lyu
- Major finding: The authors' data suggest that the risk of pancreatic cancer is moderately increased in patients with diabetes, especially those using insulin therapy. The risk is greatly increased for diabetic patients with chronic pancreatitis.

Diabetes mellitus and cancer risk: Review of the epidemiological evidence

http://www.ncbi.nlm.nih.gov/pubmed/23066889

- Journal: *Cancer Science*
- Institution(s): Kyushu University, Fukuoka, Japan
- Corresponding author(s): Toshiharu Ninomiya
- Major finding: The aim of this review is to summarize recent epidemiological evidence of an association between diabetes and total cancer and specific sites of cancer, and to consider causal associations between these diseases.

Diabetes and risk of pancreatic cancer: a pooled analysis from pancreatic cancer cohort consortium

http://www.ncbi.nlm.nih.gov/pubmed/23112111

- Journal: *Cancer Causes & Control*
- Institution(s): National Cancer Institute, Bethesda, MD and others
- Corresponding author(s): Joanne Elena
- Major finding: The authors' findings provide support for a relationship between diabetes and pancreatic cancer risk. The absence of association in those with the longest duration of diabetes may reflect hypoinsulinemia and warrants further investigation.

Insights into pancreatic cancer etiology from pathway analysis of genome-wide association study data

http://www.ncbi.nlm.nih.gov/pubmed/23056513

- Journal: *PLoS One*
- Institution(s): University of Texas Health Science Center, Houston, TX and others
- Corresponding author(s): Donghui Li

- Major finding: Using the gene set ridge regression in association studies (GRASS) method, the authors analyzed 197 pathways identified from the Kyoto Encyclopedia of Genes and Genomes database in 3,141 pancreatic cancer patients and 3,367 controls with European ancestry. The authors' findings provide new perspectives on genetic susceptibility to and molecular mechanisms of pancreatic cancer.

Incidence of gastrointestinal cancers by ethnic group in England, 2001-2007
http://www.ncbi.nlm.nih.gov/pubmed/23092766

- Journal: *Gut*
- Institution(s): University of Oxford, Oxford, UK and others
- Corresponding author(s): Raghib Ali
- Major finding: The risk of gastrointestinal cancers varies greatly by individual ethnic group, including within those groups that have traditionally been grouped together (South Asians and Blacks). Many of these differences are not readily explained by known risk factors and suggest that important, potentially modifiable causes of these cancers are still to be discovered.

The incidence of pancreatic cancer in BRCA1 and BRCA2 mutation carriers
http://www.ncbi.nlm.nih.gov/pubmed/23099806

- Journal: *British Journal of Cancer*
- Institution(s): Familial Breast Cancer Research, Toronto, Ontario, Canada and others
- Corresponding author(s): Steven Narod
- Major finding: The risk of pancreatic cancer is approximately doubled in female BRCA carriers. The poor survival in familial pancreatic cancer underscores the need for novel anti-tumoral strategies.

Association of body mass index and risk of death from pancreas cancer in Asians
http://www.ncbi.nlm.nih.gov/pubmed/23044748

- Journal: *European Journal of Cancer Prevention*
- Institution(s): Aichi Medical University School of Medicine, Nagakute, Japan and others
- Corresponding author(s): John Potter
- Major finding: The authors aimed to examine the association between body mass index (BMI) and the risk of death from pancreas cancer in a pooled analysis of data from the Asia Cohort Consortium. The data do not support an association between BMI and the risk of death from pancreas cancer in these Asian populations.

Fructose consumption and cancer: is there a connection?
http://www.ncbi.nlm.nih.gov/pubmed/22922366

- Journal: *Current Opinion in Endocrinology, Diabetes & Obesity*
- Institution(s): University of Maryland, Baltimore, MD
- Corresponding author(s): Nawfal Istfan
- Major finding: Whereas glucose favors overall growth kinetics, fructose enhances protein synthesis and appears to promote a more aggressive cancer phenotype. Fructose has become ubiquitous in our food supply, with the highest consumers being teens and young adults.

Therefore, understanding the potential health consequences of fructose and its role in chronic disease development is of critical importance.

Obesity and cancer risk: evidence, mechanisms, and recommendations
http://www.ncbi.nlm.nih.gov/pubmed/23050962

- Journal: *Annals of the New York Academy of Sciences*
- Institution(s): University of Maryland School of Medicine, Baltimore, MD
- Corresponding author(s): Ivana Vucenik
- Major finding: Epidemiological studies have shown that obesity is associated with increased risk of several cancer types, including colon, breast, endometrium, liver, kidney, esophagus, gastric, pancreatic, gallbladder, and leukemia, and can also lead to poorer treatment and increased cancer-related mortality. The link between obesity and cancer underscores the recommendation to maintain a healthy body weight throughout life as one of the most important ways to protect against cancer.

Night work and the risk of cancer among men
http://www.ncbi.nlm.nih.gov/pubmed/23035019

- Journal: *American Journal of Epidemiology*
- Institution(s): University of Quebec, Canada
- Corresponding author(s): Marie-Élise Parent
- Major finding: Results suggest that night work may increase cancer risk at several sites, including pancreatic, among men. There was no evidence of increasing risk with increasing duration of night work, with risks generally being increased across all duration categories.

PREVENTION

New report: Thousands of pancreatic cancers in the U.S. can be prevented
http://www.aicr.org/press/press-releases/aicr-pancreatic-cancer-prevention-update.html
Report: http://www.aicr.org/assets/docs/pdf/education/cup-pancreatic-cancer-2012.pdf
Pancreatic Cancer Action Network write-up:
http://pancan.org/section_research/strategic_research_program/news/topic_new_american_institute_for_cancer_research_report.php
The American Institute for Cancer Research (AICR) and the World Cancer Research Fund (WCRF) released a report which estimates that being lean can prevent 19 percent of pancreatic cancer cases that occur in the United States every year.

The combination of HDAC inhibitor vorinostat + synthetic triterpenoids reduces tumorigenesis
http://www.ncbi.nlm.nih.gov/pubmed/23042302

- Journal: *Carcinogenesis*
- Institution(s): Dartmouth Medical School, Hanover, NH and others
- Corresponding author(s): Karen Liby
- Major finding: The authors show that the histone deacetylase inhibitor vorinostat (suberoylanilide hydroxamic acid (SAHA)) and the methyl ester or ethyl amide derivatives of the synthetic triterpenoid 2-cyano-3,12-dioxooleana-1,9(11)-dien-28-oic acid (CDDO-Me and CDDO-Ea,

respectively) cooperated to inhibit the de novo synthesis of nitric oxide in various models of cancer, including a pancreatic cancer mouse model.

EARLY DETECTION, DIAGNOSIS, AND PROGNOSIS

Comparative analysis of traditional and coiled fiducials implanted during EUS for pancreatic cancer

http://www.ncbi.nlm.nih.gov/pubmed/23078921

- Journal: *Gastrointestinal Endoscopy*
- Institution(s): Johns Hopkins Hospital, Baltimore, MD
- Corresponding author(s): Mouen Khashab
- PanCAN affiliated authors:
    - Final author Joseph Herman, MD: 2008 Blum-Kovler – Career Development Award
    - Middle author Mimi Canto, MD: Medical Advisory Board
- Major finding: In pancreatic cancer patients receiving stereotactic body radiation therapy, visibility was significantly better for traditional fiducials (TFs) compared with Visicoil fiducials (VFs). The degree of fiducial migration was not significantly different for TFs and VFs. There was no significant difference in the mean number of fiducials placed, indicating a similar degree of technical difficulty for TF and VF deployment.

Plasma shh levels reduced in pancreatic cancer patients

http://www.ncbi.nlm.nih.gov/pubmed/22513293

- Journal: *Pancreas*
- Institution(s): University of Michigan, Ann Arbor, MI
- Corresponding author(s): Juanita Merchant
- PanCAN affiliated author: Middle author Diane Simeone, MD: 2010 The Randy Pausch Family – Innovative Grant and member, Scientific Advisory Board
- Major finding: The goal of this study was to develop an enzyme-linked immunosorbent assay to detect human Shh in blood and determine its levels in subjects with and without pancreatic cancer. Sonic hedgehog (Shh) is secreted from tissues and organs into the circulation, but its activity is blocked by plasma proteins. Reduced plasma levels were found in pancreatic cancer patients, but alone were not sufficient to predict pancreatic cancer.

Altered plasma apolipoprotein modifications in patients with pancreatic cancer

http://www.ncbi.nlm.nih.gov/pubmed/23056525

- Journal: *PLoS One*
- Institution(s): National Cancer Center Research Institute, Tokyo, Japan and others
- Corresponding author(s): Tesshi Yamada
- Major finding: The authors have constructed a robust quantitative mass spectrometry profiling system and used it to validate alterations of modified apolipoproteins in multiple cohorts of patients with pancreatic cancer.

Risk of peritoneal carcinomatosis by endoscopic ultrasound-guided fine needle aspiration

http://www.ncbi.nlm.nih.gov/pubmed/23065024

- Journal: *Journal of Gastroenterology*
- Institution(s): Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan

- Corresponding author(s): Kenji Ikezawa
- Major finding: The authors found that EUS-FNA for pancreatic cancer did not significantly increase the risk of peritoneal carcinomatosis.

Clinical usefulness of repeated pancreatic juice cytology via endoscopic naso-pancreatic drainage tube
http://www.ncbi.nlm.nih.gov/pubmed/23053424

- Journal: *Journal of Gastroenterology*
- Institution(s): Chiba University, Chiba, Japan
- Corresponding author(s): Rintaro Mikata
- Major finding: The endoscopic naso-pancreatic drainage (ENPD) method was found to have high diagnostic yield, especially for tumors less than 20 mm or located in the pancreatic head, and might be useful for the diagnosis of early-stage pancreatic cancer.

Diagnostic ability and factors affecting accuracy of EUS-FNA for pancreatic solid lesions
http://www.ncbi.nlm.nih.gov/pubmed/23090002

- Journal: *Journal of Gastroenterology*
- Institution(s): Aichi Cancer Center Hospital, Nagoya, Japan and others
- Corresponding author(s): Kenji Yamao
- Major finding: Endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) for pancreatic solid lesions yielded a high accuracy and low complication rate. Both cytological and cell-block preparations and on-site cytopathological evaluation contributed to improve the accuracy. The diagnostic ability of EUS-FNA was less for smaller lesions, and repeated procedures may be needed if malignancy is suspected.

Serum CA19-9, cathepsin D, and matrix metalloproteinase-7 as diagnostic panel for pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23065739

- Journal: *Proteomics*
- Institution(s): Sungkyunkwan University School of Medicine, Seoul, Korea and others
- Corresponding author(s): Soo-Youn Lee
- Major finding: The authors' findings indicate that a serum biomarker panel consisting of CA19-9, cathepsin D, and MMP-7 may provide the most effective screening test currently feasible for pancreatic ductal adenocarcinoma.

Pancreatic ductal adenocarcinoma is associated with a distinct urinary metabolomic signature
http://www.ncbi.nlm.nih.gov/pubmed/23096698

- Journal: *Annals of Surgical Oncology*
- Institution(s): University of Alberta, Edmonton, AB, Canada
- Corresponding author(s): Vanessa Davis
- Major finding: Urinary metabolomics detected distinct differences in the metabolic profiles of pancreatic cancer compared with healthy controls and benign pancreatic disease. These preliminary results suggest that metabolomic approaches may facilitate discovery of novel pancreatic cancer biomarkers.

Malignant progression in IPMN: Cohort analysis of patients selected for resection or observation
http://www.ncbi.nlm.nih.gov/pubmed/23111706

- Journal: *Annals of Surgical Oncology*
- Institution(s): Memorial Sloan-Kettering Cancer Center, New York, NY
- Corresponding author(s): Peter Allen
- Major finding: Invasive disease was identified in 39% of patients with intraductal papillary mucinous neoplasms (IPMN) selected for initial resection and 11% of patients selected for initial surveillance. Ten patients developed carcinoma in a region separate from the radiographically identified IPMN, representing 2.8% of the study population. Diagnostic, operative, and surveillance strategies for IPMN should consider risk not only to the index cyst but also to the entire gland.

EUS-FNA characteristics of primary adenocarcinoma vs. other malignant neoplasms of the pancreas
http://www.ncbi.nlm.nih.gov/pubmed/23061060

- Journal: *Canadian Journal of Gastroenterology*
- Institution(s): University of Wisconsin, Madison, WI
- Corresponding author(s): Deepak Gopal
- Major finding: Adenocarcinoma was more likely to be present in the head of the pancreas, have lymph node and vascular involvement, as well as evidence of pancreatic duct and common bile duct obstruction. Of all malignant pancreatic lesions analyzed by endoscopic ultrasound fine-needle aspiration (EUS-FNA), 25% were non-primary pancreatic adenocarcinoma, suggesting that FNA is crucial in establishing a diagnosis and may be helpful in preoperative planning.

Evaluation of the metabolic response to cyclopamine therapy in pancreatic cancer xenografts
http://www.ncbi.nlm.nih.gov/pubmed/23066442

- Journal: *Translational Oncology*
- Institution(s): University of Heidelberg, Mannheim, Germany and others
- Corresponding author(s): Hany Kayed
- Major finding: The new generations of clinically implemented positron emission tomography (PET)-computer tomography (CT) scanners with high-resolution reconstruction detect a minimal response of pancreatic cancer xenografts to low-dose short-term cyclopamine therapy without changes in tumor size and offer potential for preclinical translational imaging.

Down regulation of CAII is associated with tumor differentiation, poor prognosis in pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23090763

- Journal: *Journal of Surgical Oncology*
- Institution(s): China Medical University, Shenyang, China and others
- Corresponding author(s): Ming Dong
- Major finding: This study suggests the clinical significance of carbonic anhydrase (CA)I, CAII, and p53 expression in pancreatic cancer and provides evidence for the CA inhibitor acetazolamide (AZ) as a potential target for controlling pancreatic cancer.

Pancreatic cancer: Image enhancement by endoscopic ultrasonography-elastography
http://www.ncbi.nlm.nih.gov/pubmed/23026905

- Journal: *Nature Reviews Gastroenterology & Hepatology*
- Institution(s): University of Bologna/Hospital of Imola, Bologna, Italy
- Corresponding author(s): Mohamad Eloubeidi
- Major finding: Endoscopic ultrasonography (EUS) has a key role in diagnostic algorithms for pancreatic neoplasms. The benefits of EUS over cross-sectional imaging are that EUS has higher sensitivity for detecting small lesions (<2 cm) at a potentially curable stage and the opportunity for tissue acquisition by fine-needle aspiration (FNA), which is safe and accurate.

Early diagnosis of pancreatic cancer: challenges and new developments
http://www.ncbi.nlm.nih.gov/pubmed/23075238

- Journal: *Biomarkers in Medicine*
- Institution(s): University of Nebraska Medical Center, Omaha, NE
- Corresponding author(s): Surinder Batra
- Major finding: The present review discusses the challenges and advances in biomarkers including serological signatures, circulating tumor cells, autoantibodies, epigenetic markers, and miRNAs that are being explored to detect pancreatic cancer at early stages. Considering the long time gap between the development of malignant lesions and full-blown primary and metastatic pancreatic cancer, unique opportunities are being contemplated for the development of potential diagnostic and prognostic markers.

TREATMENT

A preclinical evaluation of minnelide as a therapeutic agent against pancreatic cancer
http://www.ncbi.nlm.nih.gov/pubmed/23076356
Pancreatic Cancer Action Network write-up:
http://pancan.org/section_research/strategic_research_program/news/topic_novel_drug_from_chinese_plant.php
University of Minnesota press release: http://www.health.umn.edu/healthtalk/2012/10/17/minnelide-targets-pancreatic-cancer/

- Journal: *Science Translational Medicine*
- Institution(s): University of Minnesota, Minneapolis, MN
- Corresponding author(s): Ashok Saluja
- PanCAN affiliated author: Middle author Selwyn Vickers, MD: Emeritus Scientific Advisory Board
- Major finding: The authors had previously shown that triptolide, a diterpenoid, is effective against pancreatic cancer cells in vitro as well as in vivo. They synthesized a water-soluble analog of triptolide, named Minnelide, and tested it both in vitro and in multiple independent yet complementary in vivo models of pancreatic cancer. The results suggest that Minnelide shows promise as a potent chemotherapeutic agent against pancreatic cancer, and support the evaluation of Minnelide in clinical trials against this deadly disease. *See perspective article below.*

Perspective: Pancreas cancer meets the thunder god
http://www.ncbi.nlm.nih.gov/pubmed/23076355

- Journal: *Science Translational Medicine*
- Institution(s): University of Washington School of Medicine, Seattle, WA and others
- Corresponding author(s): Sunil Hingorani
- PanCAN affiliated author: First/corresponding author Sunil Hingorani, MD, PhD: 2005 Dr. Lawrence A. Mack and Roselle Mack Memorial – Career Development Award and 2007 Pilot Grant
- Major finding: *Perspective on minnelide article above.* The commenters conclude that a new formulation of a natural product shows remarkable activity against pancreatic ductal adenocarcinoma across a number of preclinical model systems. These findings set the stage for a clinical trial.

Optimizing the administration of fixed-dose gemcitabine plus capecitabine, alternating-week schedule
http://www.ncbi.nlm.nih.gov/pubmed/21552099

- Journal: *American Journal of Clinical Oncology*
- Institution(s): University of California, San Francisco, CA and others
- Corresponding author(s): Margaret Tempero
- PanCAN affiliated authors:
    - First author Andrew Ko, MD: 2003 Career Development Award
    - Final author Margaret Tempero, MD: Scientific Advisory Board
- Major finding: This dosing schedule of fixed-dose rate gemcitabine plus capecitabine is active in patients with advanced pancreatobiliary cancers. Given its favorable toxicity profile and convenience, this regimen represents an appropriate front-line option for this patient population and may serve as the foundation on which new investigational agents are added in future trial design.

Keys to personalized care in pancreatic oncology
http://www.ncbi.nlm.nih.gov/pubmed/23045599

- Journal: *Journal of Clinical Oncology*
- *Editorial in response to:*

Open-label, multicenter, randomized phase iii trial of adjuvant chemoradiation plus interferon alfa-2b versus fluorouracil and folinic acid for patients with resected pancreatic adenocarcinoma
http://www.ncbi.nlm.nih.gov/pubmed/23008325

- Institution(s): University of Texas MD Anderson Cancer Center, Houston, TX and Johns Hopkins, Baltimore, MD
- PanCAN affiliated authors:
    - Chris Crane, MD: Medical Advisory Board
    - Christine Iacobuzio-Donahue, MD, PhD: 2007 Pilot Grant and Scientific Advisory Board
- Major finding: The CapRI (Combined Chemoradioimmunotherapy for Pancreatic Adenocarcinoma) trial failed to show significant improvement in survival for the Virginia Mason Medical Center regimen in an unselected population. However, the 3.6-month longer median survival suggests that some patients may have benefited from the experimental regimen. Discovery of a predictive marker is necessary if further study of this regimen is to be warranted.

Effect of pemetrexed on innate immune killer cells and adaptive immune T cells
http://www.ncbi.nlm.nih.gov/pubmed/22996369

- Journal: *Journal of Immunotherapy*
- Institution(s): Rush University Medical Center, Chicago, IL and others
- Corresponding author(s): Janet Plate
- Major finding: Although pemetrexed therapy increased activation of a subset of natural killer (NK) cells to produce interferon gamma (IFNγ), addition of gemcitabine abated those responses, decreasing IFNγ-producing NK cells, whereas NK cells producing interleukin-2 without IFNγ at this timepoint positively correlated with survival. Innate immunity and adaptive immunity thus are important in defense against pancreatic cancer. Progression-free interval and survival were longer than observed in a phase III trial where gemcitabine preceded pemetrexed suggesting that a larger trial of pemetrexed preceding gemcitabine is warranted.

Surgical strategy for pancreatic body/tail carcinoma: Who should undergo distal pancreatectomy
http://www.ncbi.nlm.nih.gov/pubmed/23046987

- Journal: *Surgery*
- Institution(s): Wakayama Medical University, Wakayama, Japan
- Corresponding author(s): Hiroki Yamaue
- Major finding: Distal pancreatectomy with en-bloc celiac axis resection (DP-CAR) was a feasible and safe procedure, similar to standard distal pancreatectomy. DP-CAR should be reserved for patients without tumor infiltrating either the portal venous or arterial systems.

BMS-754807, small molecule inhibitor of IGF-1R / insulin receptor, enhances gemcitabine response
http://www.ncbi.nlm.nih.gov/pubmed/23047891

- Journal: *Molecular Cancer Therapeutics*
- Institution(s): University of Texas, Southwest Medical Center, Dallas, TX
- Corresponding author(s): Roderich Schwarz
- Major finding: The strong antitumor activity of BMS-754807, an inhibitor of insulin-like growth factor receptor and insulin receptor, in experimental pancreatic ductal adenocarcinoma (PDAC) supports the potential of BMS-754807-induced mechanisms for clinical PDAC therapy.

Effects of 12-O-tetradecanoylphorbol-13-acetate in combination with gemcitabine
http://www.ncbi.nlm.nih.gov/pubmed/23041978

- Journal: *International Journal of Oncology*
- Institution(s): Rutgers, The State University of New Jersey, Piscataway, NJ and others
- Corresponding author(s): Allan Conney
- Major finding: In this study, the effects of 12-O-tetra-decanoylphorbol-13-acetate (TPA) alone or in combination with gemcitabine were investigated in pancreatic cancer cells cultured in vitro or grown in immunodeficient nude mice. The authors conclude that clinical trials with TPA alone or in combination with gemcitabine on patients with pancreatic cancer are warranted in order to confirm their promising results.

Neoadjuvant therapy in resectable pancreatic cancer: A critical review
http://www.ncbi.nlm.nih.gov/pubmed/23122322

- Journal: *Cancer Treatment Reviews*
- Institution(s): San Raffaele Scientific Institute, Milan, Italy
- Corresponding author(s): Michele Reni
- Major finding: In this review, the authors conclude that there is currently no straightforward evidence to support the routine clinical use of neoadjuvant treatment in resectable pancreatic cancer. Only a properly designed randomized trial testing combination chemotherapy regimens selected on the basis of their efficacy and activity against metastatic disease can address this issue.

Current concepts and novel targets in advanced pancreatic cancer

- Journal: *Gut*
- Institution(s): Philipps University Marburg, Marburg, Germany
- Corresponding author(s): Thomas Gress
- Major finding: This review provides an overview on current and emerging concepts as well as novel targets for systemic treatment of advanced pancreatic cancer. Combination therapies incorporating drugs directed against these new targets may open new avenues for improving the efficacy of current treatment approaches and overcoming the devastating prognosis of pancreatic cancer patients.

Targeting the Ras-ERK pathway in pancreatic adenocarcinoma
http://www.ncbi.nlm.nih.gov/pubmed/23085856

- Journal: *Cancer and Metastasis Reviews*
- Institution(s): Beaujon University Hospital , Clichy, France and others
- Corresponding author(s): Eric Raymond
- Major finding: In this review, the authors describe the role of the Ras–ERK pathway in pancreatic carcinogenesis and as a new therapeutic target for the treatment of pancreatic ductal adenocarcinoma.

The "malignant truth" about the recurrence of pancreatic intraductal papillary mucinous neoplasms
http://www.ncbi.nlm.nih.gov/pubmed/23070419
The "malignant truth" about the recurrence of pancreatic intraductal papillary mucinous neoplasms – reply
http://www.ncbi.nlm.nih.gov/pubmed/23070420

- Journal: *Archives of Surgery*
- Letters in response to:

Fate of the pancreatic remnant after resection for an intraductal papillary mucinous neoplasm: a longitudinal level II cohort study
http://www.ncbi.nlm.nih.gov/pubmed/22351878

AB Science reports phase 3 results of masitinib in combination with Gemzar® for pancreatic cancer
http://www.ab-science.com/file_bdd/1351622639_abscienceresultph3pancreasvdefuk.pdf

- Company: AB Science, Paris, France

- Major finding: Masitinib in combination with Gemzar® significantly extended median OS by 6 and 2.7 months in two independent patient populations, representing 65% and 45% of the overall population; namely, patients with a genetic biomarker – collected from simple blood sample – indicative of aggressive disease progression, and patients with cancer pain. Full data has been submitted for presentation at the American Society of Clinical Oncology (ASCO) Gastrointestinal Cancers Symposium (24-26 January 2013, in San Francisco, California).

NewLink Genetics launches Phase 3 clinical trial of algenpantucel-L immunotherapy
http://investors.linkp.com/releasedetail.cfm?ReleaseID=712478

- Company: NewLink Genetics Corporation, Ames, IA
- Major finding: NewLink Genetics Corporation announces launching of an open-label, randomized, multi-institutional Phase 3 study in patients with borderline resectable or locally advanced unresectable pancreatic cancer. Patients will be randomized to receive standard of care FOLFIRINOX plus or minus algenpantucel-L (HyperAcute®-Pancreas) immunotherapy.

Threshold Pharmaceuticals announces agreement with U.S. FDA for planned Phase 3 trial of TH-302
http://investor.thresholdpharm.com/releasedetail.cfm?ReleaseID=713686

- Company: Threshold Pharmaceuticals, Inc., South San Francisco, CA
- Major finding: Threshold Pharmaceuticals, Inc. announced that the U.S. Food and Drug Administration (FDA) has reached agreement with the U.S. affiliate of Merck KGaA, Darmstadt, Germany, Threshold's partner for the development and commercialization of TH-302, covering a Special Protocol Assessment (SPA) for a Phase 3 randomized trial of TH-302 in patients with metastatic or locally advanced unresectable pancreatic cancer. TH-302 is a hypoxia-targeted drug designed to be activated under tumor hypoxic conditions.

Nuvilex reports additional safety and efficacy data from second Phase 2 pancreatic cancer trial
http://www.nuvilex.com/news/preview.php?id=224&cat_id=4&p=#ontitle

- Company: Nuvilex, Inc., Silver Spring, MD
- Major finding: Additional safety and efficacy data from a second Phase 2 pancreatic cancer clinical trial were presented at the International Society for Cell & Gene Therapy of Cancer (ISCGT) 2012 Conference. The trial data presented used the same encapsulated cytochrome P450 expressing cells followed by chemotherapy to treat pancreatic cancer that were used in the previously published trial and confirmed results generated in the previous trial.

Oncolytics Biotech completes patient enrollment in U.S. Phase II clinical trial investigating REOLYSIN®
http://www.oncolyticsbiotech.com/news_items/details?press_release_id=1912

- Company: Oncolytics Biotech Inc., Calgary, AB, Canada
- Major finding: Oncolytics Biotech Inc. announced that it has completed patient enrollment in its U.S. Phase II clinical trial using intravenous administration of REOLYSIN, a proprietary variant of the reovirus, in combination with gemcitabine in patients with advanced or metastatic pancreatic cancer (REO 017).

MorphoSys's partner OncoMed advances the HuCAL antibody OMP-59R5 into Phase 1b/2 clinical trial
http://www.morphosys.com/pressrelease/morphosyss-partner-oncomed-advances-hucal-antibody-omp-59r5-phase-1b2-clinical-trial-pancreatic-canc

- Company: MorphoSys AG, Planegg, Germany
- Major finding: MorphoSys AG announced that its collaboration partner OncoMed Pharmaceuticals has advanced the HuCAL (human combinatorial antibody library) antibody OMP-59R5 into the next stage of clinical development. OMP-59R5, which is part of OncoMed's Notch pathway collaboration with GlaxoSmithKline, is now being evaluated in a Phase 1b/2 trial in the US in first-line advanced pancreatic cancer patients.

Drug trials: often long on hype, short on gains – The delusion of 'significance' in drug trials
http://www.clinicaloncology.com//ViewArticle.aspx?ses=ogst&d=Solid+Tumors&d_id=148&i=ISSUE%3a+October+2012&i_id=902&a_id=21989
In this *Clinical Oncology News* piece, Dr. Markman discusses the concept of statistical significance in cancer clinical trials. He comments, "Of course, the term *significant* should always be modified by the all-important adverb *statistically* when reported at meetings like American Society of Clinical Oncology (although that's not always the case), but when results like these get translated to headlines that patients (and even community oncologists) read, that modifier often disappears." He uses the survival advantage of adding erlotinib to treat pancreatic cancer patients as a classic example.

OPDP tells Genentech to pull Tarceva vis aids
http://www.mmm-online.com/opdp-tells-genentech-to-pull-tarceva-vis-aids/article/263414/
The Office of Prescription Drug Promotion put Genentech on notice with a letter saying the company's visual aids for its cancer drug Tarceva were misleading, and ordered the drug maker to pull the pancreatic cancer and non-small cell lung cancer visual aids.

CANCER CONTROL, SURVIVORSHIP, AND OUTCOMES RESEARCH

Effect of socioeconomic status on surgery for pancreatic adenocarcinoma
http://www.ncbi.nlm.nih.gov/pubmed/23025956

- Journal: *The American Surgeon*
- Institution(s): Harbor-UCLA Medical Center, Torrance, CA
- Corresponding author(s): Byrne Lee
- Major finding: Multivariate analysis revealed that low and middle socioeconomic status and race were significant predictors of resection. Ongoing study of access to health care may help define the means to eliminate the disparities in the care of patients with pancreatic adenocarcinoma.

Patients' expectations about effects of chemotherapy for advanced cancer
http://www.ncbi.nlm.nih.gov/pubmed/23094723

- Journal: *New England Journal of Medicine*
- Institution(s): Dana–Farber Cancer Institute, Boston, MA and others
- Corresponding author(s): Jane Weeks
- Major finding: Many patients receiving chemotherapy for incurable cancers may not understand that chemotherapy is unlikely to be curative, which could compromise their ability to make informed treatment decisions that are consonant with their preferences. Physicians may be

able to improve patients' understanding, but this may come at the cost of patients' satisfaction with them.

Research participants' high expectations of benefit in early-phase oncology trials
http://www.ncbi.nlm.nih.gov/pubmed/23091107

- Journal: *Journal of Clinical Oncology*
- Institution(s): Duke University, Durham, NC and others
- Corresponding author(s): Kevin Weinfurt
- Major finding: In early-phase oncology trials, patients' reported expectations of benefit differed according to how patients were queried and were associated with patient characteristics. These findings have implications for how informed consent is obtained and assessed.

Can centralization of cancer surgery improve social welfare?
http://www.degruyter.com/view/j/fhep.2012.15.issue-3/fhep-2012-0016/fhep-2012-0016.xml?format=INT

- Journal: *Forum for Health Economics & Policy*
- Institution(s): Rice University and Baylor College of Medicine, Houston, TX
- Corresponding author(s): Meei-Hsiang Ku-Goto
- Major finding: The authors use their estimates to simulate the change in social welfare resulting from redirecting patients at low-volume hospitals to high-volume facilities. Simulations indicated that centralizing pancreatic cancer surgery is unambiguously welfare enhancing.

Incidence and drug treatment of emotional distress after cancer diagnosis
http://www.ncbi.nlm.nih.gov/pubmed/23059746

- Journal: *British Journal of Cancer*
- Institution(s): University of Aberdeen, UK and others
- Corresponding author(s): Gert Laekeman
- Major finding: This study quantified the higher incidence of new emotional distress in cancer patients in the first year post diagnosis. Clinicians should be aware of the possibility of emotional distress at any time in the year after cancer diagnosis.

***Journal of Clinical Oncology* update on progress in cancer survivorship care and research**
http://jco.ascopubs.org/content/30/30/3655?etoc

- Journal: *Journal of Clinical Oncology*
- Institution(s): University of California, Los Angeles, CA and others
- Corresponding author(s): Patricia Ganz
- Major finding: This special series issue of *JCO* reflects the maturation of the field of cancer survivorship clinical care and health care delivery, with an array of articles that examine many of the untoward immediate, persistent, and late effects of cancer treatment.