



AAS

Association for
Academic Surgery

Translational Work to Bridge Basic Science and Clinical Ideas

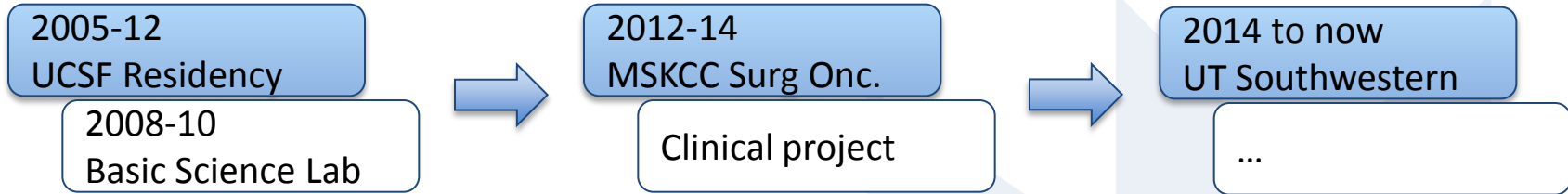
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Disclosures

- None
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My Path



Stat3 and MMP7 Contribute to Pancreatic Ductal Adenocarcinoma Initiation and Progression

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Cancer Cell 19, 441–455, April 12, 2011

Grants

- 1) ACS Resident Research
- 2) NIH F32

J Gastrointest Surg (2016) 20:899–904
DOI 10.1007/s11605-015-3057-z



ORIGINAL ARTICLE

A Pilot Study Evaluating Serum MMP7 as a Preoperative Prognostic Marker for Pancreatic Ductal Adenocarcinoma Patients

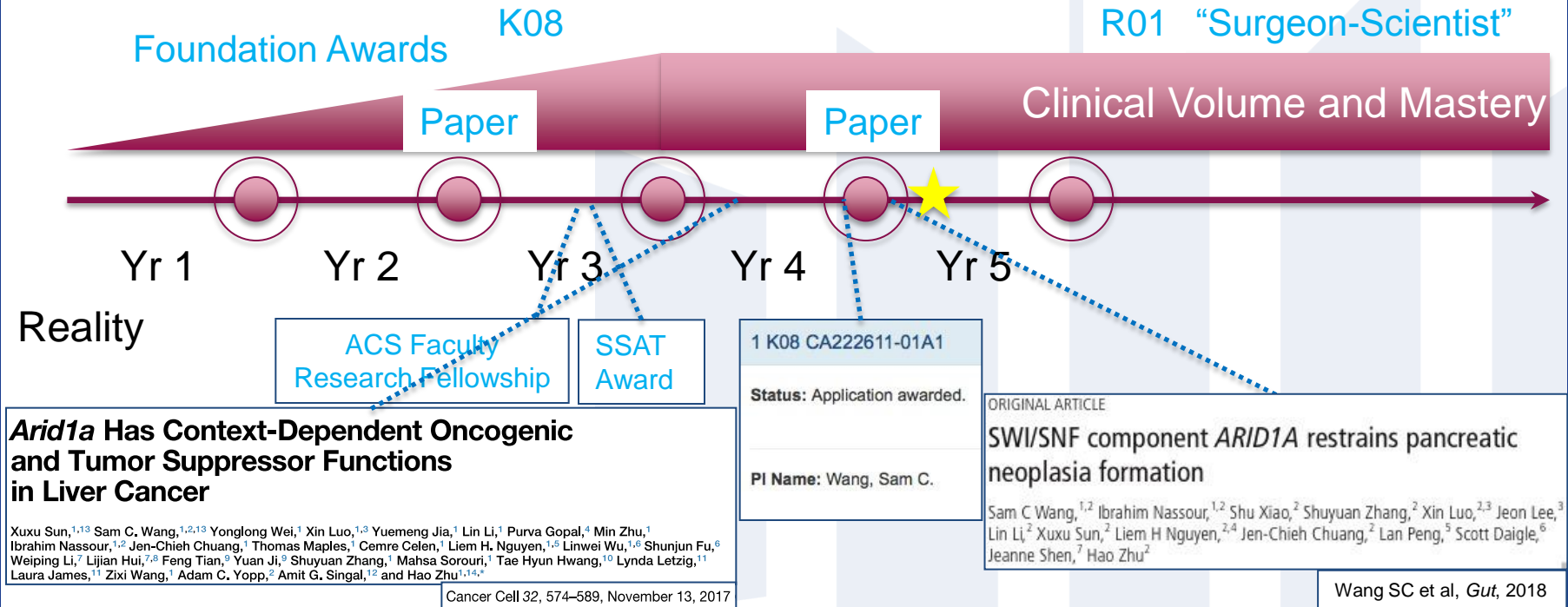
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Setup at UT Southwestern

- 20% clinical
 - County hospital
 - Service model
 - 2 rounding weeks per quarter
 - 1 half-day clinic per 2 weeks
 - GI surgical oncology
 - Plenty of clinical support
 - 1 week clinically busy, 2-4 weeks clinically quiet
- 80% research
 - Joined an established lab
 - Projects:
 - Functionally characterize chromatin remodeler mutations in pancreas and liver cancer
 - Mutational profiling of gastric cancer

My 5 Year Plan

The Plan



Being a Surgeon-Scientist

“ The surgical investigator must be a bridge tender, channeling knowledge from biological science to the patient’s bedside and back again. He traces his origins from both ends of the bridge, he is thus a bastard, and everyone calls him this.

Those at one end of the bridge say that he is not a very good scientist, and those at the other end say he does not spend enough time in the operating room.”

Francis Moore



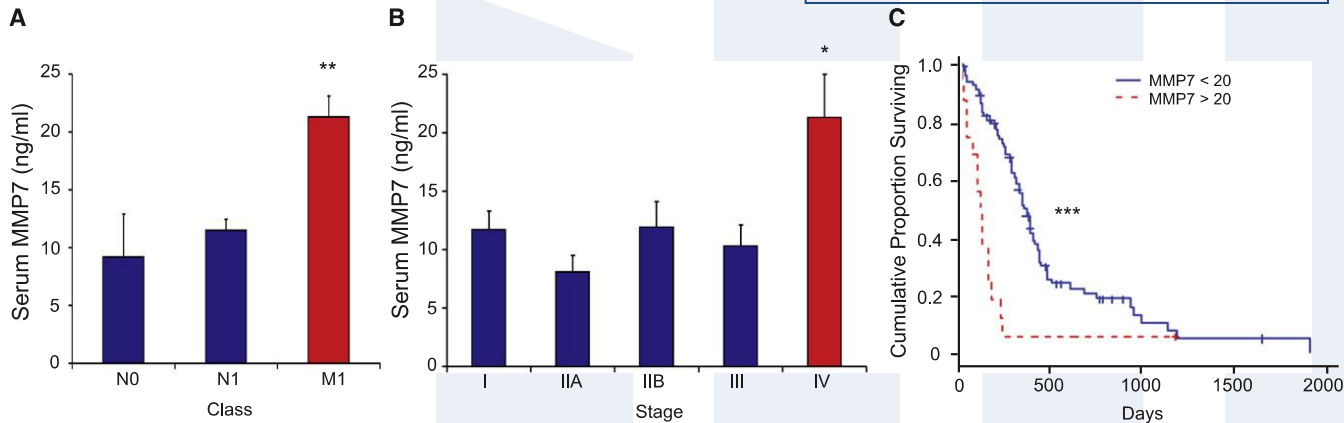
Embrace your surgeon-ness

- Collaboration - What are you bringing to the table?
 - Tissue
 - Surgical model of disease
- Ask clinically relevant questions

Stat3 and MMP7 Contribute to Pancreatic Ductal Adenocarcinoma Initiation and Progression

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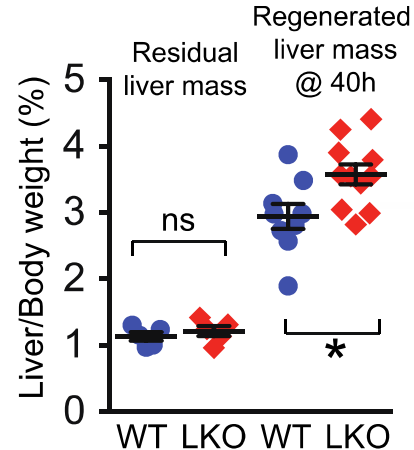
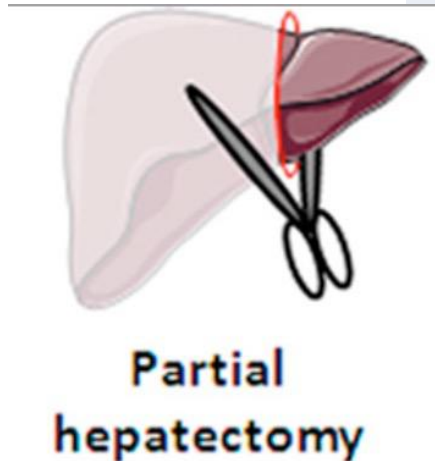


- Start tissue bank with clinical annotation

Suppression of the SWI/SNF Component *Arid1a* Promotes Mammalian Regeneration

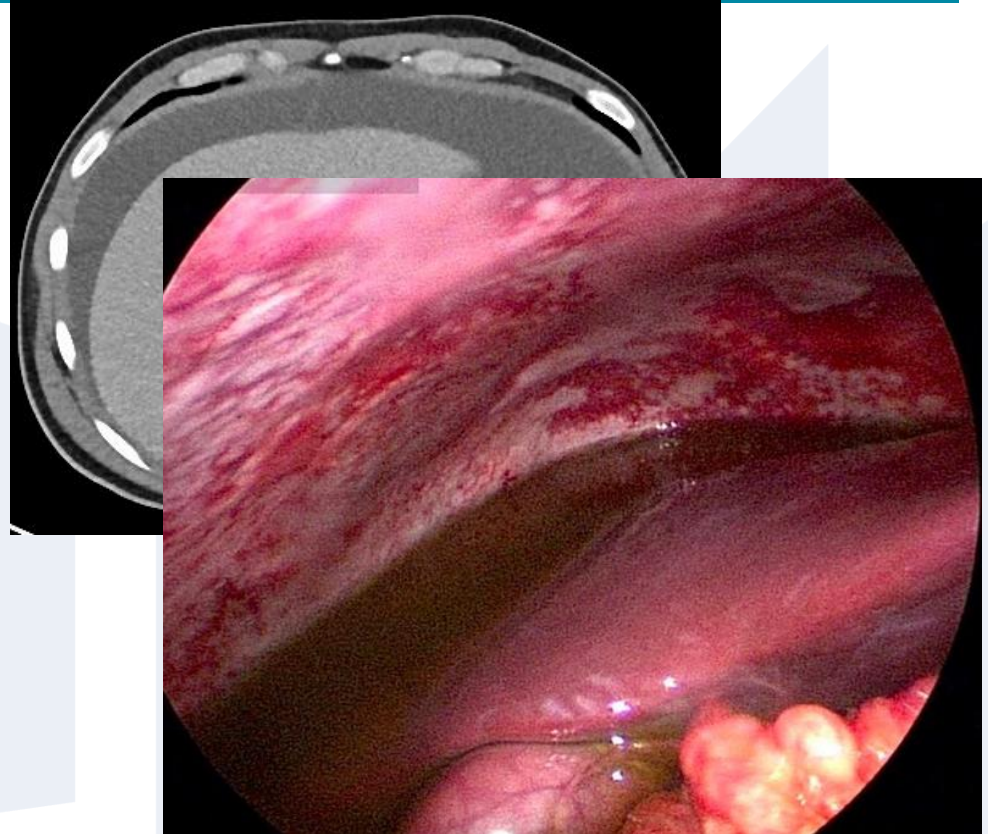
Xuxu Sun,¹ Jen-Chieh Chuang,¹ Mohammed Kanchwala,² Linwei Wu,^{1,3} Cemre Celen,¹ Lin Li,¹ Hanquan Liang,²
Shuyuan Zhang,¹ Thomas Maples,¹ Liem H. Nguyen,^{1,4} Sam C. Wang,^{1,5} Robert A.J. Signer,⁶ Mahsa Sorouri,¹
Ibrahim Nassour,^{1,5} Xin Liu,¹ Jian Xu,¹ Meng Wu,⁷ Yong Zhao,⁷ Yi-Chun Kuo,⁸ Zhong Wang,⁹ Chao Xing,² and Hao Zhu^{1,*}

Cell Stem Cell 18, 456–466, April 7, 2016



Ask Clinically Relevant Questions

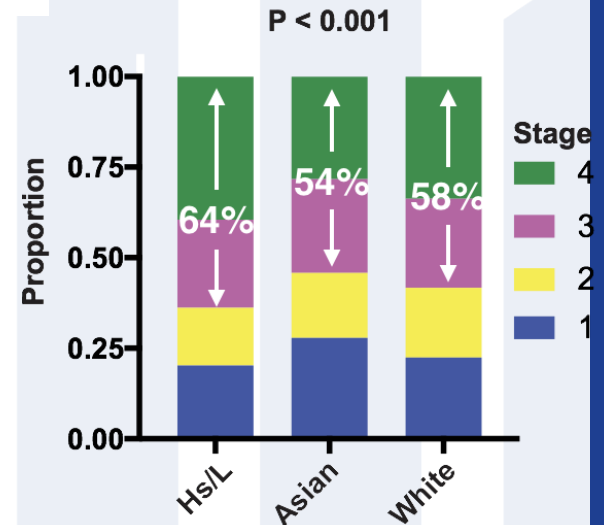
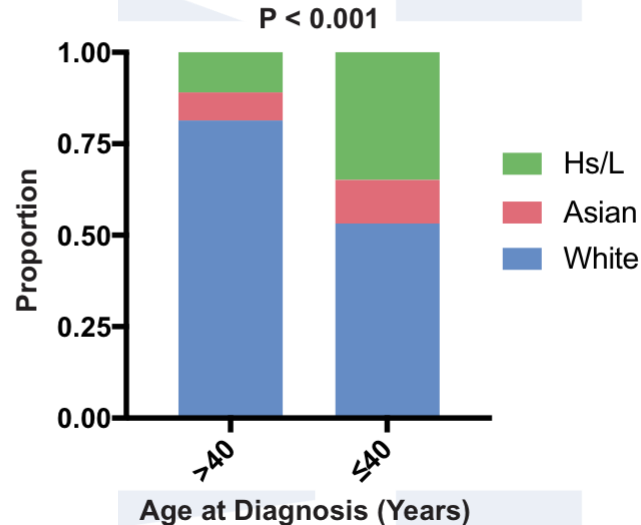
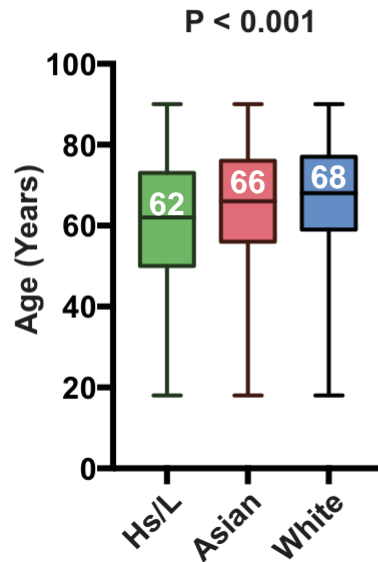
- Hispanic male
- Presented to ED with worsening right flank pain, early satiety
- 20 to 30 pound weight loss over the past 3 months
- 29 years old
- Passed away 2 months later



Ask Clinically Relevant Questions

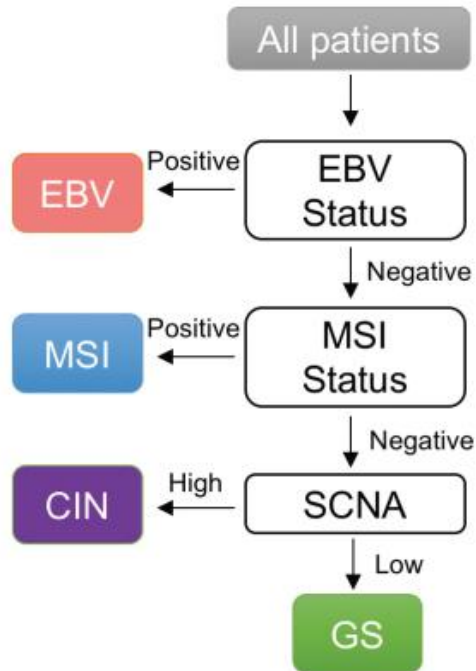
Hispanic/Latino gastric patients present younger and with more advanced disease

National Cancer Database, 2010-2013, 35,574 patients



Ask Clinically Relevant Questions

Molecular classification of gastric cancer from Hispanic/Latino patients



TCGA-defined molecular subtypes

TCGA
cohorts

Ethnicity/ Race (n)	EBV	MSI	CIN	GS
White (172)	10%	22%	48%	20%
Asian (77)	10%	20%	49%	21%

~20% of patients with diffuse/GS disease have germline *CDH1* mutations

Concepts

- Take advantage of your surgeon's
 - Be honest about what you are doing
 - Papers you want to collaborate with you
- Embrace your surgeon's
 - Collaborate: develop a plan to collaborate with you

- 2018.10 Elion AACR
- 2018.06 CPRIT GC grant
- 2018.04 SSAT Health Disparity Update
- 2018.02 Circle of Friends
- 2017.2 SSAT Health Disparity
- 2016.12 Discovery
- 2016.11 CC Translational Pilot
- 2016.10 DeGregorio
- 2016.09 CTM TPP 2
- 2016.08 CPRIT High Risk
- 2016.06 ASA
- 2016.05 CTM TPP1
- 2015 V Foundation
- 2015 UTSW High Risk
- 2015 Gastric R21
- 2015 DoD Grant Gastric

- 2018.06 ACS Activated
- 2018.05 DOCS update
- 2018.05 Am College Surgeons progress report
- 2017.12 Discovery
- 2017.11 K08 resubmit
- 2017.11 ACS-IRG
- 2017.10 ACS resubmit
- 2017.06 DOCS update
- 2017.06 ASAF
- 2017.04 American Cancer Society Initial
- 2017.02 K08 Initial Submission
- 2016.11 AACR Elion
- 2016.10 PanCan Career Dev
- 2016.10 American College of Surgeons
- 2016.09 Shelby
- 2016.08 Ibrahim SUS
- 2016.04 DOCS update
- 2015 SUS
- 2015 DOCS Update
- 2015 Discovery Grant
- 2015 ASA - Liver
- 2015 ACS-IRG
- 2015 ACS Faculty Research
- 2015 AAS
- 2014 UTSW Cancer Ctr - Liver
- 2014 Pews Application
- 2014 DOCS application
- 2014 Discovery Grant
- 2014 ASA application
- 2014 ACS Faculty Research

... you are

... want to

Thanks!

Hao Zhu
Xuxu Sun
Xin Luo
Jen-Chieh Chuang
Lin Li
Thomas Maples
Cemre Celen
Liem H. Nguyen
Shuyuan Zhang
Ibrahim Nassour
Shu Xiao
Jeanne Shen
Lan Peng

Matthew Porembka
Tae Hyun Hwang
Yunku Yeu
Suntrea Hammer
Min Zhu
Ibrahim Nassour

John Mansour
Adam Yopp
Scott Reznik
Deepak Agarwal



UT Southwestern
Medical Center

