

# INFLAMMATION AND CANCER: EVIDENCE FROM THE WOMEN'S HEALTH INITIATIVE

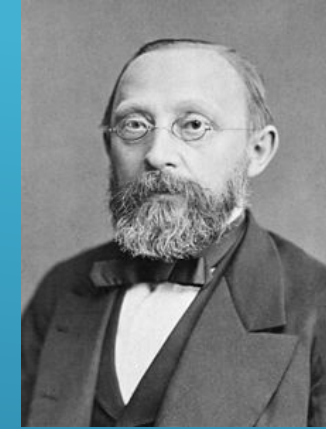
WHI Investigators Meeting

May, 2016

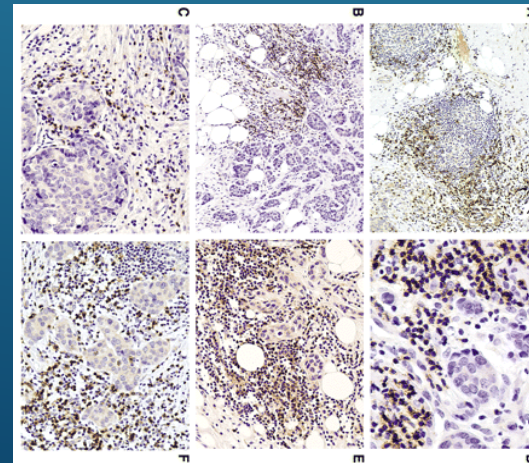
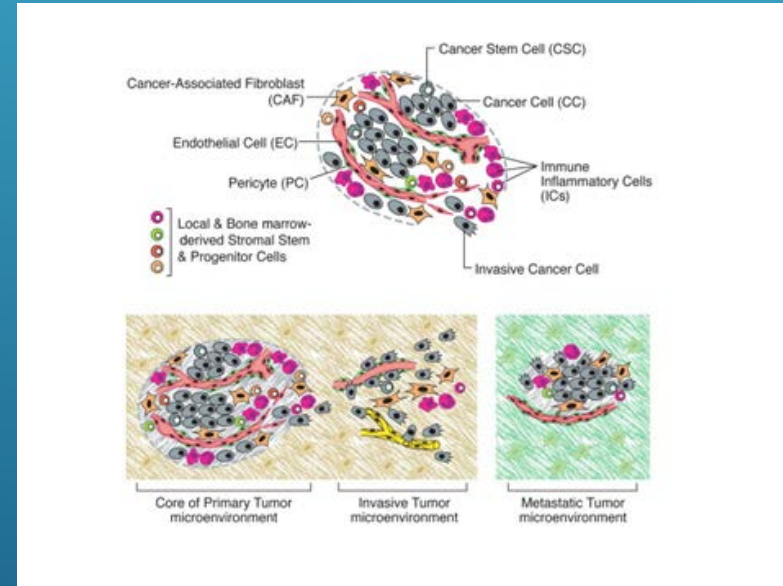
Columbus, Ohio

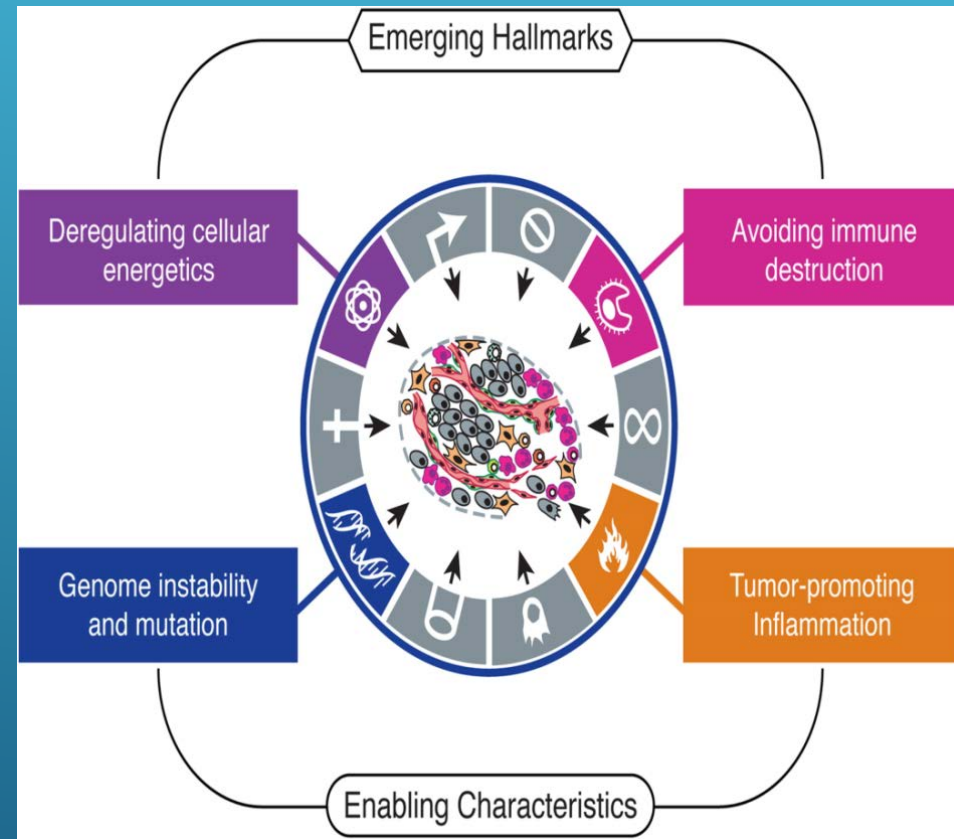
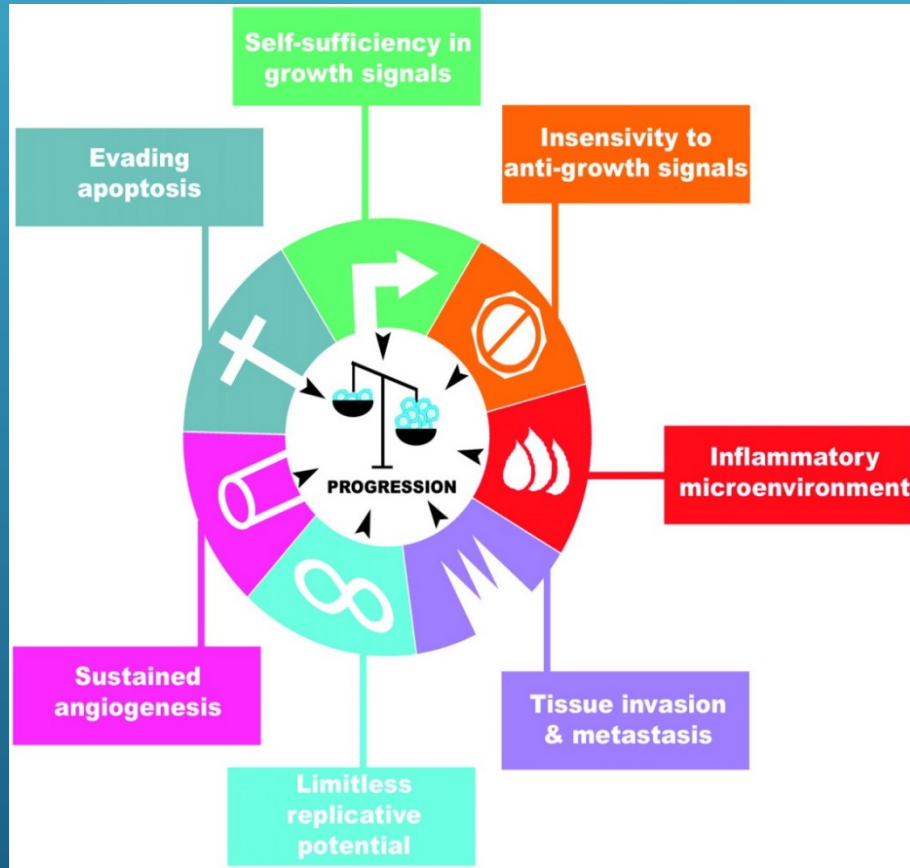
A series of several parallel white lines of varying thicknesses, slanted diagonally from the bottom left towards the top right, set against a solid blue background.

# RUDOLF VIRCHOW (FATHER OF PATHOLOGY)

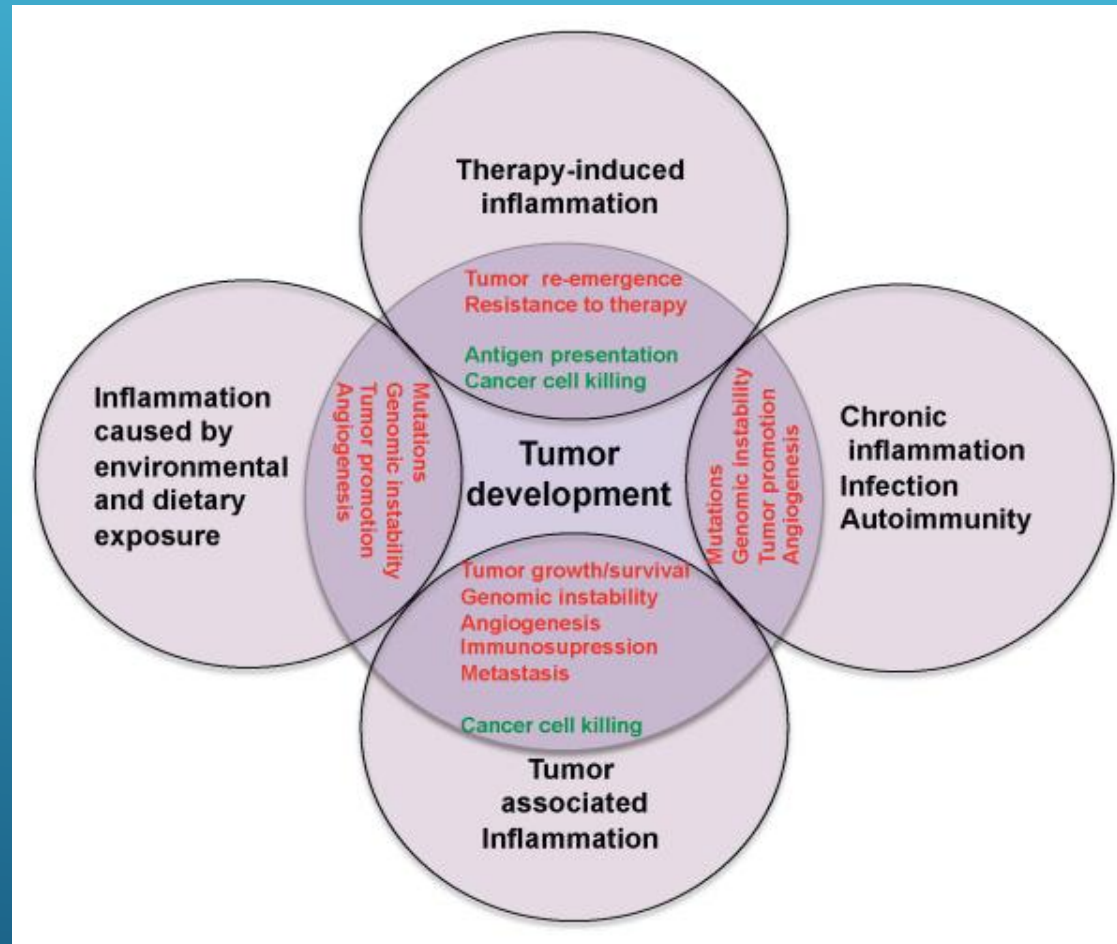


- ▶ First to link of inflammation to cancer
- ▶ “lymphoreticular infiltration” of cancer reflects the origin of cancer at sites of inflammation (1863)





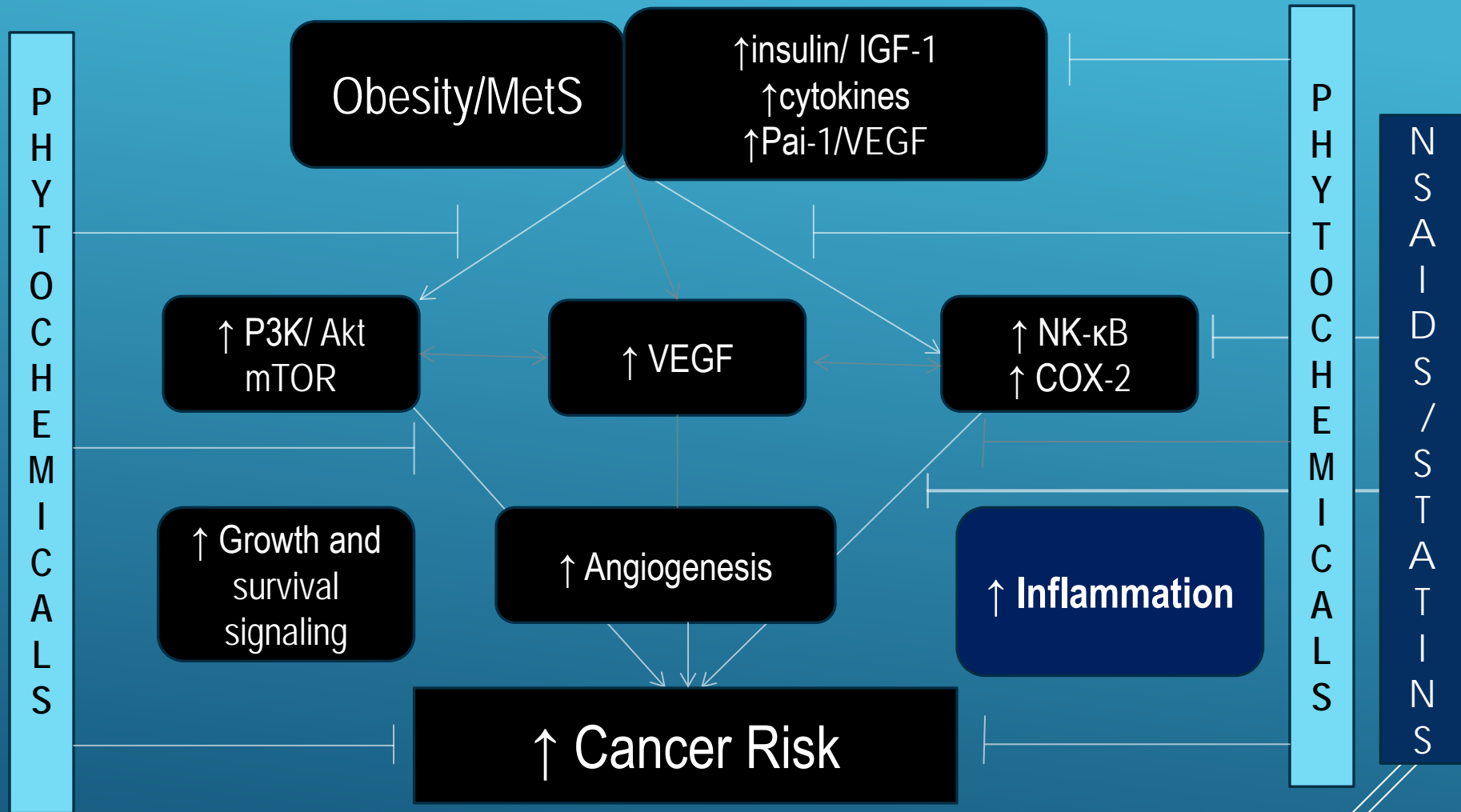
# INFLAMMATION: HALLMARK OF CANCER



# INFLAMMATION AND THE CANCER CONTINUUM

# INFLAMMATORY CONDITIONS AND TUMORGENESIS

Pathogenic Condition	Associated Neoplasm	Aetologic Agent
Silicosis	Lung, mesothelioma	asbestos
Bronchitis	Lung	tobacco
Cystitis	Bladder	catheters
Gingivitis	Oral squamous cell	Poor dental hygiene
IBD, Crohn's, UC	Colorectal	unknown
Chronic pancreatitis	Pancreatic	alcoholism
Reflux esophagitis	Esophageal	Gastric acids
Skin inflammation	Melanoma	UV light



## INTER-RELATED MECHANISTIC TARGETS FOR DIETARY COMPONENTS AND PHARMACEUTICALS

▶ Michael Simon, MD, Professor and WHI PI, Karmanos Cancer Center

▶ Do statins reduce cancer risk and progression?

▶ Theodore Brasky, PhD, Assistant Professor, The Ohio State University

▶ NSAIDs and aspirin: Are these effective, over-the-counter, anti-inflammatory, anti-cancer agents?

▶ Fred Tabung, PhD, Post-doctoral Fellow, Harvard University

▶ Can diet modulate inflammation to reduce cancer risk and improve cancer survival?



# INFLAMMATION & CANCER: EVIDENCE FROM WHI