

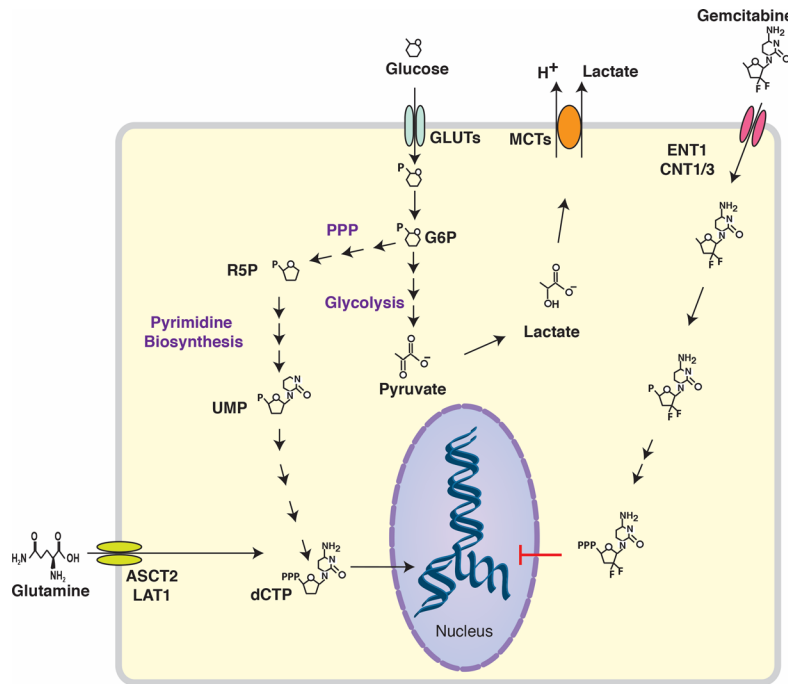
Early/Mid-Career Grant/Funding Strategies

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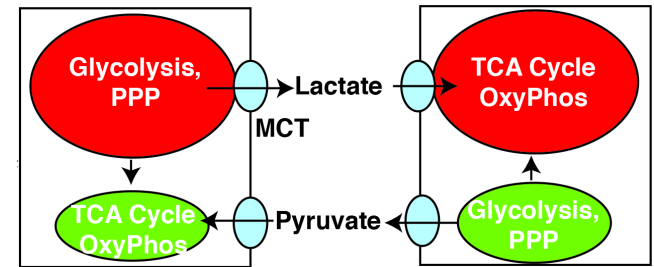
Molecular & Biochemical Etiology Program
Fred & Pamela Buffett Cancer Center
Epplery Institute for Research in Cancer

Metabolic Reprogramming in Cancer

Metabolic Adaptations in Therapy Response



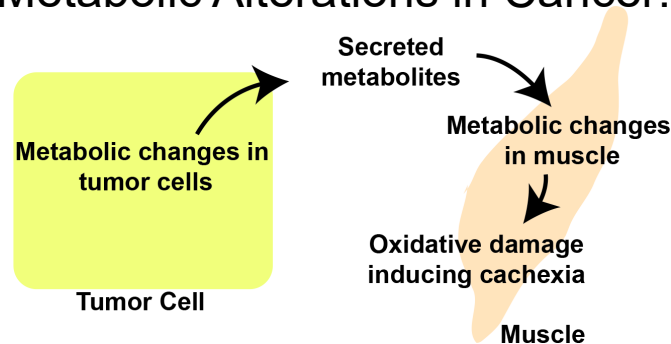
Tumor Stromal Metabolic Interaction



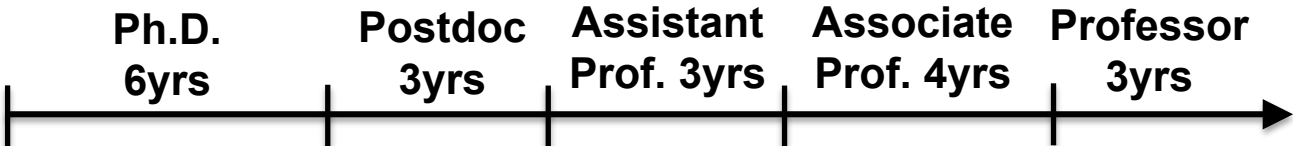
Tumor Cell

Stellate Cell

Systemic Metabolic Alterations in Cancer: Cachexia



Career Timeline



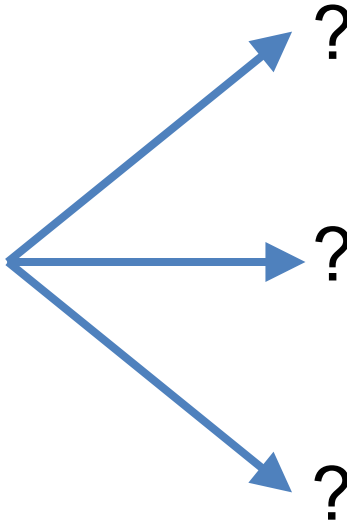
Pancreatic cancer

Metabolism

Cancer Metabolism/
Tumor-Stromal interactions

Cancer Cachexia

Personalized
Medicine



Secured the first R01, what's next?

Quality of the research program is the single most important thing!!!



Things that helped for the second R01

Maintaining the research focus area

Diversification of research topics

Clinical collaborations – in the process of initiating 3 clinical trials

Fewer and more effective proposals

Making sure the proposal is strong rather than a rushed one



Things that helped for the second R01

Serving on grant review committees –for understanding expectations.

Talking to the NIH Program Directors.

- Understanding the expectations of the review panels
- Expanding the research dollars
 - Supplements (Diversity and Administrative)
- Acquiring Equipment
- Extensions and timelines for competitive renewal



Things that helped

Collaborative approach to research

Incorporating the feedback from senior investigators

Having an outstanding research technician

Comments from Grants Editor

General presentation and flow

Explaining the research to non-experts



Things that did not help

Listening to senior Professors- too detail oriented

Not being very careful with some of the recruitments

Being too slow with publications



Things that helped with the competitive renewal

Productivity on the 1st proposal

Collaborations

Having a strikingly novel idea

–Not an incremental advancement

Talking to the NIH Program Director



Things that helped the overall research in the lab

Creating a good lab culture
stimulating inquisitiveness
promoting good lab citizenship
watching out carefully for the bad actors

Collaborations – expertise beyond our skills

Ensuring good lab management
a trusted technician/senior personnel

Delegating responsibilities - wisely



Things that helped the career

Knowing what the tenure process entails and fulfilling the requirements

Teaching, Research, Service

Avoiding very engrossing services e.g. IACUC if possible

Serving on grant study sections

Reviewer/scientific editor roles in scientific journals

Collaborations

Don't give up – publications and funding



Things that helped: Collaborations

Improving the scope of research without revamping your resources

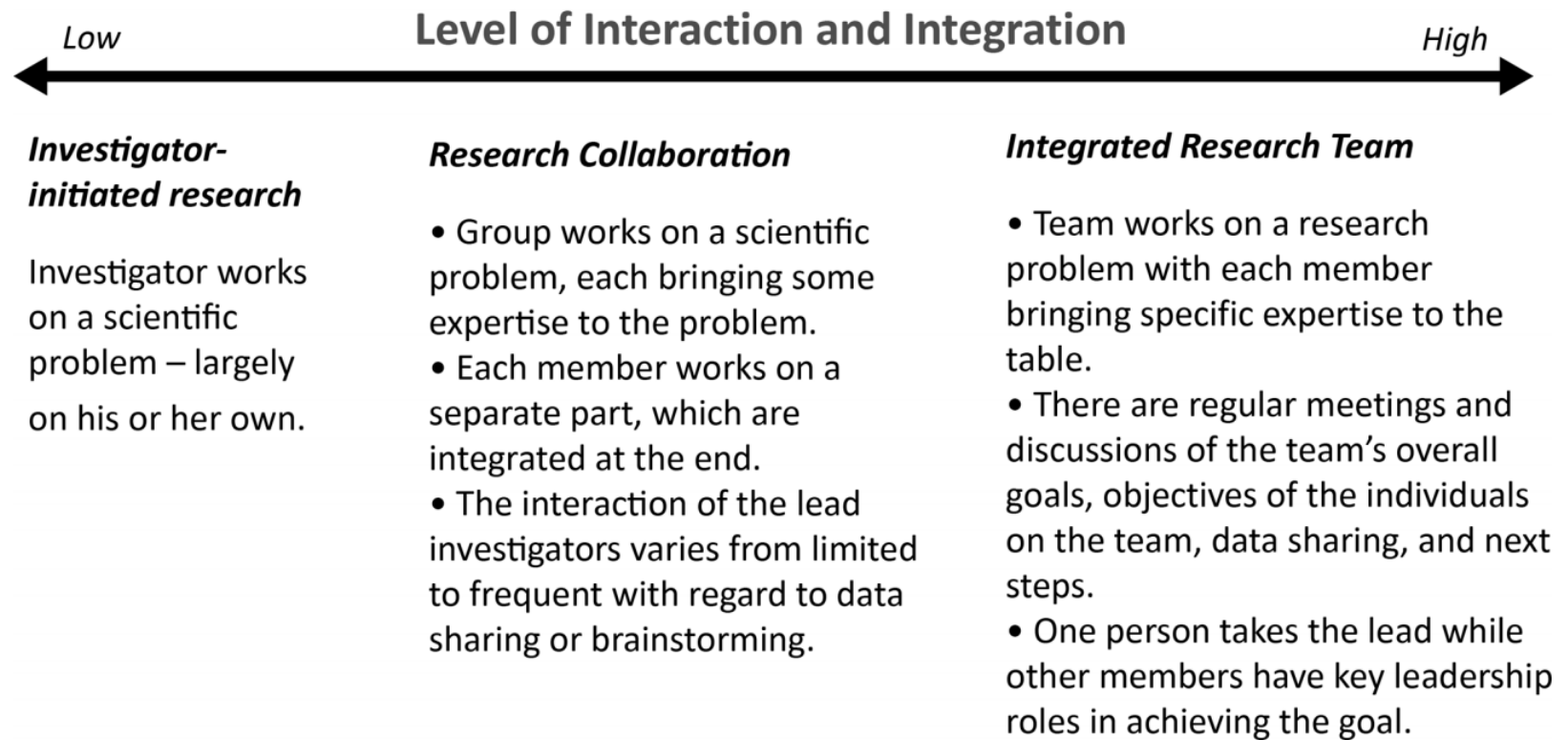
Incorporating the state-of-art technologies

Utilizing clinical resources



What is a Scientific Research Team?

.....think of it as a continuum.....



Things that helped: Collaborations

Caveats:

Need mutual interest and clearly defined goals

- Publications
- Grants
- Clinical Trials

Need *Team Awareness*

Trust

Should not be a one-way traffic.



Individual grants

Vs.

Program project, center, multi investigator awards

- Lab research centric
- Credit for your research focus
- Being a leader in the field

- Synergy with others' research
- Opportunities to develop unique resources
- Publications as a team

Some of the multi-PI projects I participated in: U54, SPORE, PPG



Future directions to take/research goals

- Quality of Science
- Ensuring the quality of trainees – long-term focus in research

Self Awareness: what you are good at, what you like, and how you want to contribute to science.

Most importantly - Have fun!

