

Obtaining the NCI F31: Role of EZH2 in extracellular Hsp90 mediated prostate cancer tumorigenesis

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Interpreting My Scores

- ▶ Score: 17th Percentile
- ▶ Impact Score: 22

- ▶ **Scores from 3 Critiques**

Criteria	A	B	C
Fellowship Applicant	1	1	2
Sponsors, Collaborators, and Consultants	1	2	3
Research Training Plan	3	3	4
Training Potential	2	1	3
Institutional Environment & Commitment	1	1	2

Reviewers' Critiques

Strengths

- ▶ **Applicant:**
 - Previous publications, Letters of recommendation, GPA
- ▶ **Mentoring:**
 - Funding, Strong team of researchers, Addition of senior Co-Sponsor
- ▶ **Training Potential:**
 - Tailored training plan, expertise in mentors, motivation, publication record

Weakness

- ▶ Ambitious Research
- ▶ Linkage of some pathways was not clearly articulated
- ▶ Overall research outcomes and impact were not fully articulated

Understand the NRSA Components

- ▶ Major Components
 - Specific Aims – 1 Page
 - Research Strategy – 6 Pages
 - Sponsor/Co-Sponsor Information
 - Biosketches
 - Responsible Conduct of Research
- ▶ Training Components
- ▶ Read the SF424

Highlighted the Hypothesis

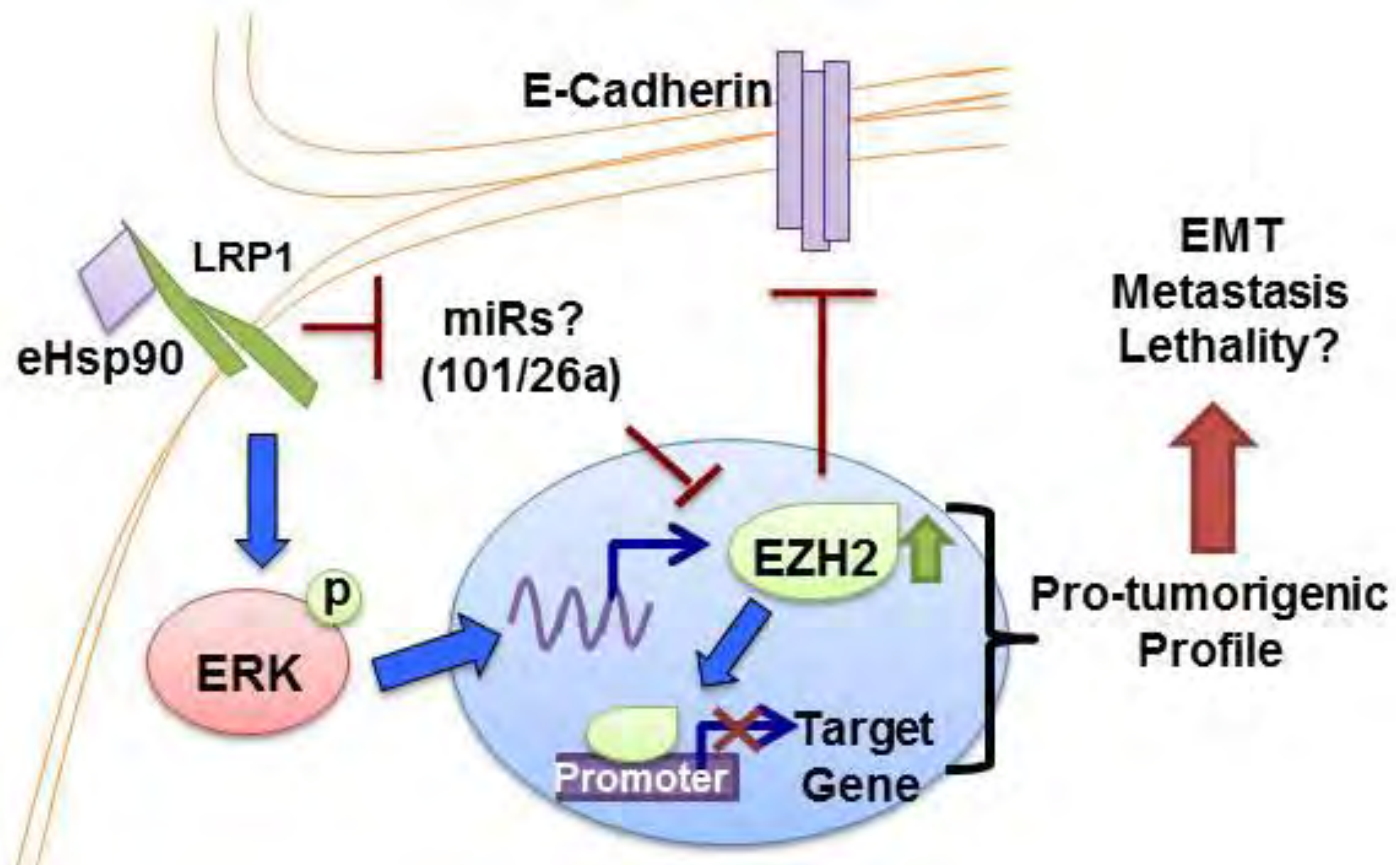
- ▶ *Used Bold Italics to highlight hypothesis within the text*

“eHsp90 promotes PCa tumor progression via activation of ERK, upregulation of EZH2 and suppression of E-cadherin and tumor suppressive genes.”

Research Aims Answered Hypothesis

- ▶ **Bold the Aims** and simplify to answer the hypothesis
- 1. Evaluate the ability of eHsp90 to modulate two distinct pathways resulting in EZH2 upregulation
- 2. Determine the relationship between eHsp90 mediated EZH2 upregulation and promotion of a pro-tumorigenic genetic profile
- 3. Determine whether EZH2 is crucial for eHsp90 mediated EMT and tumorigenic events *in vivo*

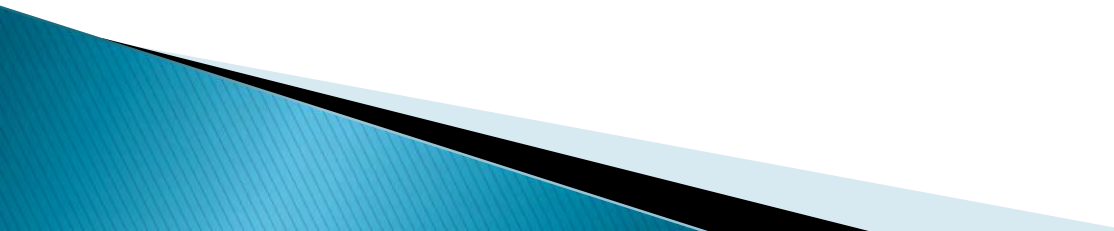
Visualized the Model



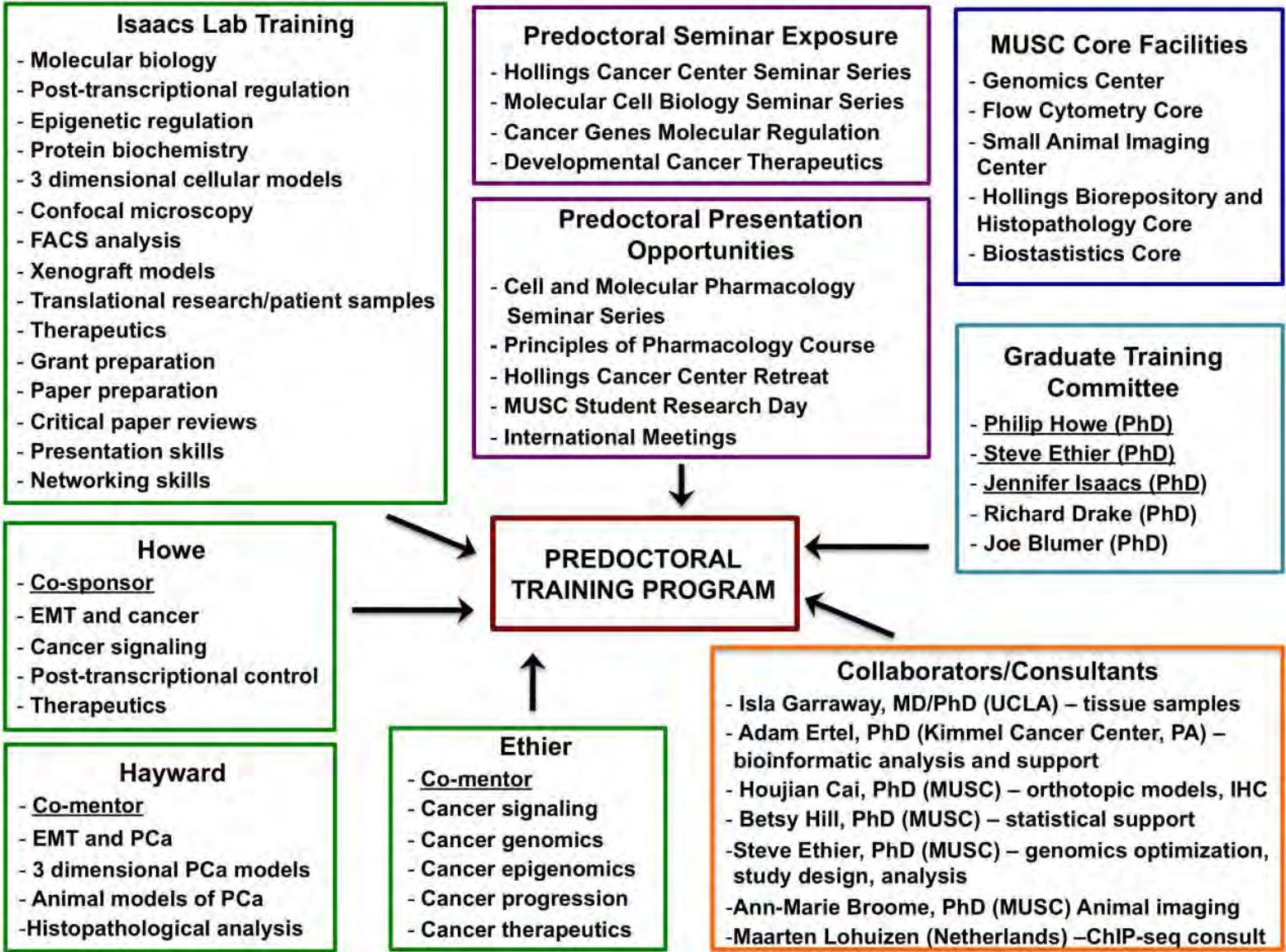
Focused Training Components

- ▶ Key Parts to the Training Sections
 - Sponsor and Institution
 - Contributions
 - Goals for Fellowship
 - Activities Planned
 - Prior Research Experience –> Doctoral Research
 - Sponsor Information
- ▶ **Use the space allowed to be specific about your goals and training potential**

Mentee–Mentor Relationship

- ▶ Developed the project in tandem with mentor
 - ▶ Identified areas of weaknesses in expertise to be compensated with other experts
 - ▶ Utilized facilities available on campus for success (“boiler plates”)
 - ▶ Identified collaborators for components of research using their expertise
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Developed a Tailored Training Program



Activities Planned

- ▶ Year 1: 20% Classwork, 70% Research, 10% collaborative and presentation skills
- ▶ Year 2 & 3: 85% Research, 15% Essential Career Skills
- ▶ Essential Career Skills:
 - Presentation
 - New Scientific Techniques
 - Collaboration and Networking
 - RCR Retreats

Goals for Research and Career

- ▶ Frank goals for my training and career
 - Specified what I planned to accomplish
 - Emphasized areas for focus to improve my skills for career development
 - Expressed enthusiasm, not tired expressions
- ▶ 2 full pages to discuss previous and current research activities
 - Highlighted good and bad experiences, focused on progress and learning
 - Referenced my publications and skills learned in each research experience

In summary

- ▶ Be specific in your plans
 - ▶ Take pride in your research
 - ▶ Don't be afraid to express enthusiasm
 - ▶ Build relationships with other experts
 - ▶ Utilize your campus's facilities
 - ▶ Leave time for pre-review
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