

## Interprofessional Cancer Research Training - Marriott et al. Appendix B. Application Scoring Rubrics.

Appendix B contains admissions scoring criteria for evaluating high school trainees and peer mentors applying to participate in a cancer research training program. Admissions questions and scoring rubrics are included for the Introduction, Immersion, and Intensive programs as well as for evaluating peer mentor applications. Differences in scoring across program years, if present, are described within each section.

### Introduction Program

#### Cohort 2 – 2020 Introduction Application Scoring Rubric

Instructions: Each application is reviewed by two people who score it using the criteria below. Scores will be tabulated on a companion excel sheet.

#### Summary of Scoring Components

Section	Component	Points Possible	% of Total Score
A	GPA (removed after 2019)	<del>Was 20</del>	<del>Was 24%</del>
B	Short Answer 1: Reason to participate and what they want to gain from program	30	was 29% now 30%
C	Short Answer 2: Interest raising experience in science	20	was 12% now 20%
D	Short Answer 3: Interest in future research summers	20	was 18% now 20%
E	Recommendation	30	was 18% now 30%
	Total Points	100	100%

## Details of Scoring Components and Rubric

A) Grade Point Average (GPA) - FOR REFERENCE ONLY: GPA was removed from admissions criteria after the 2019 program. When it was used, reviewers were instructed not to round the applicant's GPA and count only the "ones" and the "tenths" place (i.e. 3.53 = 3.5, therefore 16 points), using practices modeled after BUILD EXITO.

Criteria	Score
0-2.0	0
2.1	1
2.2	2
2.3	3
2.4	4
2.5	5
2.6	6
2.7	7
2.8	8
2.9	9
3.0	10
3.1	11
3.2	12
3.3	13
3.4	14
3.5	15
3.6	16
3.7	17
3.8	18
3.9	19
4.0	20

A) Total Points (0-20) – This is for reference; does not factor in 2020 score: \_\_\_\_\_

**B) Short Answer 1: Please describe the reason you would like to participate in this program and what you are hoping to gain from this experience.**

Criteria - Reason to participate	Score
Essay not included or completed or non-responsive to question.	0
Unclear, vague description of reason to participate	2
Clear but brief description of reason to participate	6
Compelling description of reason to participate	10

Criteria – What they are hoping to gain	Score
No explanation of what they are hoping to gain	0
Unclear, vague description of what they are hoping to gain	2
Clear but brief description of what they are hoping to gain	6
Compelling description of what they are hoping to gain from KSP	10

<b>Criteria – Student's interest in research in essay</b>	<b>Score</b>
No inclusion of research in essay	0
Unclear, vague description of being interested in research in essay	2
Clear but brief description of being interested in research	6
Compelling description of research being of interest to student	10

B) Total Points (0-30; partial component scores allowed, e.g. 8): \_\_\_\_\_

**C) Short Answer 2: Tell us about one of your favorite science or math experiences thus far (it could be a class, camp, program, science fair, or something that raised your interest).**

<b>Criteria – Interest-raising Experience</b>	<b>Score</b>
Unclear, vague description of experience.	0
Clear description of experience.	5
Compelling description of experience.	10

<b>Criteria – Connection between experience and interest</b>	<b>Score</b>
No to minimal connection between experience and interest in research, science or health.	0
Clear connection between experience and interest in research, science, or health.	5
Compelling connection between experience and interest in research, science, or health.	10

C) Total Points (0-20; partial scores allowed): \_\_\_\_\_

**C) Short Answer 3:** This program includes research opportunities over future summers. Please indicate your level of interest when participating in research training beyond this 7-day experience.

<b>Criteria – Interest in future summers</b>	<b>Score</b>
No interest in future summers	0
Unclear, vague description of interest in future summers	5
Some interest in future summers	10
Clear description of interest in future summers.	15
Compelling description of interest in future summers	20

C) Total Points (0-20; partial scores allowed): \_\_\_\_\_

**D) Reference:** Please have a teacher (i.e., teacher, community leader, coach, counselor), or someone who knows you and your academics/work submit a recommendation for you via the link on our website. The questionnaire should be

completed by someone who can speak about your curiosity, problem solving abilities, and perseverance.

D.1 Strength of Relationship with Student (i.e. how well do they know the student?)

This does not go into the scoring criteria, but helps staff understand how well the teacher knows the student so appropriate weight can be placed on their rankings. Initial analysis found scores were lower for students who had known their recommender for less time.

<b>Criteria –</b>	<b>Action</b>
NOTE: If reference is a family member, regardless of length of time known	Caution
Teacher knows student moderately well (or less) for <1 year	Caution
Teacher knows student moderately well for 1-2 years	Caution
Teacher knows student moderately well for 2+ years	Proceed
Teacher knows student very well for <1 year	Proceed
Teacher knows student very well for >1 year	Proceed

NOTE: If no recommendation is available for the student, select “No Rec” in scoring sheet

D1) Enter Caution, Proceed or No Rec from drop-down menu: \_\_\_\_\_

D.2 What do you want the admissions team to know about this applicant? (open prompt scored by reviewers)

<b>Criteria – Teacher perspective on student attributes</b>	<b>Score</b>
Reference not included/completed or non-responsive	0
Reference is not able to describe student’s curiosity, problem-solving, or perseverance	1
Reference is vague in describe student’s curiosity, problem-solving, or perseverance	2
Reference is clear in description of describe student’s curiosity, problem-solving, or perseverance	5
Reference writes mildly compelling description of student’s curiosity, problem-solving, or perseverance	7
Reference writes compelling description of student’s curiosity, problem-solving, or perseverance	10

D2) Total Points (0-10; partial scores allowed): \_\_\_\_\_

D.3 Teacher’s Overall recommendation:

<b>Criteria</b>	<b>Score</b>
Not able to recommend	0
Recommends with reservation	1
Recommends	5
Highly recommends	10

D3) Total Points (0-10; NO partial scores): \_\_\_\_\_

D.4 Teacher perspective on student attributes (Rated 1-5 on Likert scale; 5 highest; with a Not Observed option)

<b>Criteria – Recommender perspective on student attributes</b>		
Creativity/innovation	Oral communication	Cooperativeness
Intellectual ability	Written communication	Reliability
Problem solving ability	Initiative	Ability to work independently
Motivation	Self-discipline	Perseverance
Leadership		

<b>Criteria</b>	<b>Score</b>
Overall Average at or below 3.5	1
Overall Average of 3.6	2
Overall Average of 3.7	2
Overall Average of 3.8	3
Overall Average of 3.9	3
Overall Average of 4.0	4
Overall Average of 4.1	4
Overall Average of 4.2	5
Overall Average of 4.3	5
Overall Average of 4.4	6
Overall Average of 4.5	7
Overall Average of 4.6	7
Overall Average of 4.7	8
Overall Average of 4.8	9
Overall Average of 4.9	9
Overall Average of 5.0	10

E) Total Points (0-10; no partial scores; a 4.79 would be 8 points): \_\_\_\_\_

Preliminary analysis of 2020 introduction data found that recommender components fell into four factors, with items within that factor traveling together. Composite scores were captured for future analysis, but did not factor into admissions decisions.

Average scores to report in scoring document (see next page to know details)

Factor	Components	Average Score	Student's <b>Average</b> Score
F1	Creativity/Innovation Problem Solving Ability Motivation Initiative Perseverance <i>Intellectual Ability</i> <i>Work Independently</i>	e.g. 4.80	
F2	Cooperativeness Reliability	e.g. 4.33	
F3	Leadership Self-Discipline	e.g. 5.0	
F4	Oral Communication Written Communication	e.g., 5.0	
Overall Score	All components	e.g. 4.77	

**H) Staff/Reviewer Recommendation Decision**

Yes	Student has a solid application and should be admitted to the program if spots available
Maybe	Student may have a good application, but either red flags exist or the applicant may not have all qualifications (e.g., 11 <sup>th</sup> grade, outside target school, etc.)
No	Student application is not strong enough for the program and/or other red flags exist that would place the student in the “no” category rather than wait list.

**I) Comments**

REQUIRED! Please write a brief blurb about the candidate and what you think their strengths/weaknesses are. Please also include a description of student’s diversity (e.g., first generation college student, racial/ethnic background, disadvantaged background, etc.).

**Final decisions will use these comments to help decide!**

From Cohort 1 - 2019 Introduction Application Scoring Rubric for Letters of Recommendation

The former process for asking for a letter of a recommendation - free form prompt

**E) Reference #1:** Please include a letter of recommendation from a teacher, community leader, coach, counselor, or someone who can speak about your curiosity, problem-solving abilities, and perseverance.

<b>Criteria – Teacher perspective on student attributes</b>	<b>Score</b>
Reference not included/completed or non-responsive	0
Reference is not able to describe student’s curiosity, problem-solving, or perseverance	1
Reference is vague in describe student’s curiosity, problem-solving, or perseverance	2
Reference is clear in description of describe student’s curiosity, problem-solving, or perseverance	3
Reference writes mildly compelling description of student’s curiosity, problem-solving, or perseverance	5
Reference writes compelling description of student’s curiosity, problem-solving, or perseverance	7

<b>Criteria – Teacher perspective on student success in program</b>	<b>Score</b>
Reference not included/completed or non-responsive	0
Reference does not think the student would be successful in the program	1
Reference is vague about student’s ability to be successful in the program	2
Reference is clear about student’s ability to be successful in the program	4

Reference writes mildly compelling description about student's ability to be successful in the program	6
Reference wholeheartedly believes the student has potential to be successful in the program	8

E) Total Points (0-15): \_\_\_\_\_

### Peer Mentor Application and Scoring Rubric

## Immersion Program (2020, Cohort 1) -- Application Scoring Rubric

### Instructions

Each application will be reviewed by two people who will score it using the criteria below. Scores will be tabulated on a companion excel sheet.

Key differences in scoring since Introduction application:

- Removed GPA as scoring component
- Removed reference letter since we met these students previously and have knowledge/feedback from resident advisors and program staff.

### Summary of Scoring Components

Section	Component	Points Possible	% of Total Score
A	Short Answer 1: Describe how your curiosity was sparked in the field of science during your experience at OHSU last summer.	25	19% now 22%
B	Short Answer 2: Why are you applying for this next two-summer experience? (For example, what are you hoping to gain? What do you want to learn more about? What questions do you still have?)	40	31% now 35%
C	Short Answer 3: How do you see cancer research playing a role in your community?	20	16% now 17%
D	Short Answer 4: Please describe your commitment in participating in this program over the next two summers	30	23% now 26%
E	Feedback from Program Staff	14	11%
	Total Points	85	100%

### Details of Scoring Components and Rubric

**A) Short Answer 1: Describe how your curiosity was sparked in the field of science during your experience at OHSU last summer.**

Criteria - Curiosity example	Score
Essay not included or not completed or non-responsive to question.	0



Unclear, vague description of what sparked curiosity	3
Clear but brief description of what sparked curiosity	6
Compelling description of what sparked curiosity	10

<b>Criteria – Implementation of curiosity</b>	<b>Score</b>
No explanation of what they want to do based on that curiosity	0
Unclear, vague description of what they want to do based on that curiosity	3
Clear but brief description of what they want to do based on that curiosity	6
Compelling description of what they want to do based on their curiosity	10

<b>Criteria – Student’s interest in research in essay</b>	<b>Score</b>
No inclusion of research in essay	0
Unclear, vague description of being interested in research in essay	1
Clear but brief description of being interested in research	3
Compelling description of research being of interest to student	5

A) Total Points (0-25): \_\_\_\_\_

**B) Short Answer 2: Why are you applying for this next two-summer experience? (For example, what are you hoping to gain? What do you want to learn more about? What questions do you still have?)**

(Note: scholars expressed concern about committing for two summers when they were just getting to know the topic, so application scoring was revised to consider only the next summer, which was also communicated to applicants as a change)

<b>Criteria - Reason for applying</b>	<b>Score</b>
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description of why they are applying	3
Clear but brief description of why they are applying	6
Compelling description of why they are applying	10

<b>Criteria – What they are hoping to gain</b>	<b>Score</b>
No explanation of what they are hoping to gain	0
Unclear, vague description of what they are hoping to gain	3
Clear but brief description of what they are hoping to gain	6
Compelling description of what they are hoping to gain from KSP	10

Note: Strongest applicants will focus on the science training experiences rather than wanting tours and time with peers. Peer support is super important for sustaining trajectories in research, but we are hoping to accept candidates where it is not their primary goal.

<b>Criteria – What they want to learn more about</b>	<b>Score</b>
No explanation of what they want to learn more about	0
Unclear, vague description of what they want to learn more about	3
Clear but brief description of what they want to learn more about	6
Compelling description of what they want to learn more about	10

Note: Curiosity about science and research are especially encouraged.

<b>Criteria – Student's interest in research in essay</b>	<b>Score</b>
No inclusion of research in essay	0
Unclear, vague description of being interested in research in essay	3
Clear but brief description of being interested in research	6
Compelling description of research being of interest to student	10

Note: This is a two summer experience that will heavily focus on research; a commitment to learning about research is encouraged.

C) Total Points (0-40): \_\_\_\_\_

**C) Short Answer 3: How do you see cancer research playing a role in your community?**

<b>Criteria - Cancer research's role in community (general)</b>	<b>Score</b>
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description of the role of cancer research in local community	3
Clear but brief description of the role of cancer research in their local community	6
Compelling description of the role of cancer research in their local community	10

<b>Criteria - Action steps (either personal or for reducing disparities)</b>	<b>Score</b>
No description of how action can be taken based on this research	0
Unclear, vague description of how action can be taken based on the research	3
Clear but brief description of how action can be taken based on the research	6
Compelling description of how action can be taken based on the research	10

D) Total Points (0-20): \_\_\_\_\_

**D) Short Answer 4: Please describe your commitment in participating in this program over the next two summers**

<b>Criteria – Interest in two summers</b>	<b>Score</b>
No interest in future summers	0
Unclear, vague description of interest in future summers	1
Some interest in future summers.	5
Clear description of interest in future summers.	10
Compelling description of interest in future summers	15

<b>Criteria –Conflicting demands</b>	<b>Score</b>
Conflict described that <u>highly</u> limits participation; no description provided for how that student could manage the conflict	0
Conflict described that <u>somewhat</u> limits participation; no description provided for how that student could manage the conflict	3
Conflict described that <u>highly</u> limits participation; some description provided about how that conflict could be managed	5
Conflict described that <u>somewhat</u> limits participation; some description provided about how that conflict could be managed	8
Conflict described that <u>highly</u> limits participation; clear description provided about how that conflict could be managed to still participate	12
Conflict described that <u>somewhat</u> limits participation; clear description provided about how that conflict could be managed to still participate	13
No conflict for participation described	15

D) Total Points (0-30): \_\_\_\_\_

**Removed from scoring criteria:**

**E) Scholar reference:** This is a group decision based on scholar's participation in the Introduction program. It is not expected that all reviewers will be able to comment. Please leave score blank if you do not know. This was removed immediately prior to scoring because liaisons reported that they did not know scholars across regions equally well enough to give an accurate reference. Discarded rubrics included for reference.

<b>Criteria – Student attributes</b>	<b>Score</b>
<del>Student did not display or displayed minimal curiosity, problem-solving, or perseverance during program</del>	<del>1</del>
<del>Student displayed some curiosity, problem-solving, or perseverance during program</del>	<del>3</del>
<del>Student displayed strong curiosity, problem-solving, or perseverance during program</del>	<del>5</del>

<b>Criteria – Professional attributes</b>	<b>Score</b>
<del>Student did not interact professionally with peers or staff (e.g., engagement, reliability, punctuality)</del>	<del>1</del>
<del>Student had some professional challenges with peers or staff (e.g., engagement, reliability, punctuality)</del>	<del>2</del>
<del>Student acted professionally with peers and staff</del>	<del>3</del>

<b>Criteria – Likelihood of success</b>	<b>Score</b>
<del>Student would have challenges being placed in a long-term research environment; limited evidence of likely success or strong evidence of wrong fit</del>	<del>1</del>
<del>Student may succeed with the long-term research placement; limited evidence</del>	<del>2</del>
<del>Student would likely succeed being placed in a long-term research environment; strong evidence of likely success</del>	<del>3</del>

<b>Criteria – Student need for this program</b>	<b>Score</b>
<del>Student has other options to be successful without Knight Scholars Program (program not needed)</del>	<del>1</del>
<del>Student could be successful without Knight Scholars Program (program would help, but not needed)</del>	<del>2</del>
<del>Student needs Knight Scholars Program in order to be successful (program needed)</del>	<del>3</del>

E) Total Points (0-14): \_\_\_\_\_

**F. Reviewer recommendation**

<b>Recommendation</b>	<b>Definition</b>	<b>Category</b>
Definitely Yes	Student has a solid application and should be admitted to the program – top quality applicant	1
Likely Yes	Student may have a good application, but not the top tier. Admit if spots exist. No red flags.	2
Maybe – discuss	Student may have a good application, but either red flags exist or the applicant may not have all qualifications or be able to commit to the program	3
No	Student application is not strong enough for the program and/or other red flags exist that would place the student in the “no” category rather than wait list.	4

**G. Comments**

Please write a brief blurb about the candidate and what you think their strengths/weaknesses are. Please also include a description of student’s diversity (e.g., first generation college student, racial/ethnic background, disadvantaged background, etc.) **Final decisions will use these comments to help decide!**

## Intensive Program (2022, Cohort 1) -- Application Scoring Rubric

### Knigh Scholars Program - 2022 Intensive Application Scoring Rubric

**Instructions:** Each application will be reviewed by two people who will score it using the criteria below. Scores will be tabulated on a companion excel sheet .

#### Summary of Scoring Components

Section	Component	Points Possible	% of Total Score
A	Short Answer 1: How did this past 2021 summer influence your thoughts on cancer research?	30	30%
B	Short Answer 2: What would you want to study next summer during your 2022 Intensive placement?	20	20%
C	Short Answer 3: Look on the <a href="#">Knight Cancer Institute website</a> . Please indicate specific researchers or labs with whom you would like to work.	20	20%
D	Short Answer 4: Describe your commitment to participating in this Intensive Program next summer.	30	30%
E	Feedback from Program Staff		
Total Points		100	100%

#### Details of Scoring Components and Rubric

##### A) Short Answer 1: How did this past 2021 summer influence your thoughts on cancer research?

Criteria - Reflections on cancer research	Score
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description of their thoughts on cancer research	10
Clear but brief description of their thoughts on cancer research	15
Compelling description of their thoughts on cancer research	20

Total Points (0-20): \_\_\_\_\_

##### B) Short Answer 2: What would you want to study next summer during your 2022 Intensive placement?

Criteria - What scholars want to study	Score
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description of what they want to study	5
Clear but brief description of what they want to study	10
Compelling description of what they want to study	15

<b>Criteria – Where are scholars hoping to grow</b>	<b>Score</b>
No explanation of where they are hoping to grow	0
Unclear, vague description of where they are hoping to grow	5
Clear but brief description of where they are hoping to grow	10
Compelling description of where they are hoping to grow	15

Total Points (0-30): \_\_\_\_\_

**C) Short Answer 3: Look on the [Knight Cancer Institute website](#). Please indicate specific researchers or labs with whom you would like to work.**

<b>Criteria - Specified researchers or labs with whom they would like to work</b>	<b>Score</b>
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description of researchers or labs	3
Clear but brief description of researchers or labs	6
Compelling description of researchers or labs	10

<b>Criteria - Reasons for selecting researchers or labs</b>	<b>Score</b>
Essay not included or not completed or non-responsive to question.	0
Unclear, vague description	3
Clear but brief description	6
Compelling description	10

C) Total Points (0-20): \_\_\_\_\_

**D) Short Answer 4: Describe your commitment to participating in this Intensive Program next summer.**

<b>Criteria – Commitment</b>	<b>Score</b>
No interest	0
Unclear, vague description of interest	1
Some interest	5
Clear description of interest	10
Compelling description of interest	15

<b>Criteria –Conflicting demands</b>	<b>Score</b>
Conflict described that <u>highly</u> limits participation; no description provided for how that student could manage the conflict	0
Conflict described that <u>somewhat</u> limits participation; no description provided for how that student could manage the conflict	3
Conflict described that <u>highly</u> limits participation; some description provided about how that conflict could be managed	5
Conflict described that <u>somewhat</u> limits participation; some description provided about how that conflict could be managed	8
Conflict described that <u>highly</u> limits participation; clear description provided about how that conflict could be managed to still participate	12
Conflict described that <u>somewhat</u> limits participation; clear description provided about how that conflict could be managed to still participate	13
No conflict for participation described	15

D) Total Points (0-30): \_\_\_\_\_

#### E) Staff/Reviewer Recommendation

Yes	Student has a solid application and should be admitted to the program if spots available
Maybe	Student may have a good application, but either red flags exist or the applicant may not have all qualifications (e.g., under 16, outside target school, etc.)
No	Student application is not strong enough for the program and/or other red flags exist that would place the student in the “no” category rather than wait list.

#### F) Comments REQUIRED!

Please write a brief blurb about the candidate and their strengths/weaknesses.  
**Final decisions will use these comments to help decide!**