**APPENDIX**

**STANFORD ORTHO SUMMER RESEARCH PROGRAM**

**Research Curriculum**

**Instructional Sessions held every Monday at 12pm PST**

(These will all be recorded and potentially shared outside the university)

**Pre-course work**

-CITI Training, Group 7 (send me copy of your certificate)

-EPIC Training, Permission (if applicable)

-HIPPA for Researchers, etc. trainings in STARS

-Send KH proposed work plan for the summer

-Complete pre-program survey by June 14th

-Send headshot w/ short bio to Katie by June 14th

**(June 14-18)**

1). Research 101, Designing a Strong Research Question/Study

Lecturer: Faes Kerkhof

Assignment: Group Activity planned

**(June 21-25)**

2) Using Citation Managers, Bibliography - Zotero

Lecturer: Danika Baskar

Assignment: Download Zotero, and create a bibliography of 10 references (in preparation for your literature review), and do a small literature search

*(Optional):*

Harnessing the Power of Big Data

Lecturer: Thompson Zhuang, Stanford Medical Student

**(June 27-July 2)**

3). Literature Review vs. Literature Search

Lecturer: Katie Hastings

Assignment: Write a literature review on orthopaedic topic (discuss w/ PI which topic), using references from last weeks assignment

*(Optional):*

Data collection methods - how to work in REDCap

Lecturer: Ann Richey, Clinical Research Coordinator (Peds)

Assignment: download redcap, watch the following tutorials

**(July 5-9)** (2-part lecture series)

*Monday at 12pm*

4). Biostatistics 101, Part 1: Data analysis, common statistical tests used in ortho research

Lecturer: Nicole Segovia, Research Analyst

Assignment: TBD

*Tuesday at 12pm*

Biostatistics 101, Part 2: How to interpret study data

Lecturer: Jayme Kolstov, PhD, Senior Biostatistician

Assignment: Watch additional via by Kristin Sainani (“How to interpret study results”)

**(July 11-17)**

5). Grant Searching, Writing and Grantsmanship

Lecturer: Elizabeth Seckel, Phd (Grant Writing Academy)

Assignment: Review articles

**(July 19-July 23)**

*Monday at 12pm*

6). Scientific Writing Practices - Introduction vs. Discussion

Lecturer: Faes Kerkhof, PhD

Assignment: Pre-lecture reading

*Tuesday at 12pm*

Scientific Writing Practices - Methods vs. Results

Lecturer: Andrea Finlay, PhD

Assignment: Readings for after the class

**(July 25-July 31)**

7) Good Presentation (Poster, Oral) Practices

Lecturers: Katie Hastings,

Assignment: Prepare slides for your presentation, pair up with one student and practice presentation (5 min. total)

**(August 2-6)**

8) How the publication process works

Lecturers: Josey Oquendo, MS4 Stanford

Topics:

How does the publication process work, submit a manuscript

How to decide which journal - working with mentors

Authorship conversations

Process of peer review

What is an impact factor

Open access vs. peer review (costs)

**Faculty Lectures** (Lectures will take place randomly throughout the week (2x per week)

Week 1 (June 14-18):

*June 14*

*9-10am -* Welcome Orientation w/ Katie Hastings and Nicole Parish, HR Manager

*June 16*

11-11:30am: Kevin Shea- Welcome, program goals, and my path to orthopaedic surgery

12-1pm: Michael Galvez (Peds Hand Surgeon)- Culture, Teams (Diversity and Decision Making)

Week 2 (June 21-25):

*June 23*

*12-1pm: Student Ambassadors (Gaby Joseph, Mark Sanchez, Josey Oquendo) -* Introductions

*June 25*

12-1pm: Dr. Michael Gardner - Introduction to Fracture Care

Week 3 (June 28-July 2):

*June 30*

11-12pm: Dr. Steven Frick - Leadership in Orthopaedics

*July 2*

12-1pm: Dr. Kevin Shea - Introduction to Biomechanics and Cadaver Research

Week 4 (July 5-9)

*July 7*

1-2pm: Dr. Emily Kraus- Introduction to the Female Athlete Program

Week 5 (July 12-17)

*July 14*

11:30-12:30pm - Dr. Kali Tileston – Diversity in Orthopaedic Surgery

*July 16*

11-12pm- Dr. Marc Tompkins, University of Minnesota - Balancing family, volunteer, and professional life

Week 6 (July 19-23)

*July 21*

12-1pm: Dr. Raffi Avedian, Residency Director - Applying to Orthopaedic Surgery Residency

*July 23*

12-1pm: *Student Ambassadors (Ericka von Kaeppler, Gaby Joseph, Mark Sanchez, Josey Oquendo* – Second Session, Q&A

Week 7 (July 26-30)

*July 28*

11:30-12:30pm: Dr. Meghan Imrie- Family Planning and Orthopaedic Surgery

*July 30*

12-1pm: Dr. Natham Grimm, Idaho Sports Medicine Institute - Systematic vs. Meta-analysis Reviews

Week 8 (August 2-6)

*Aug 3*

12-1pm: Dr. Derek Amanatullah - How to Create a Network of Mentors As You Move into the Future

Aug 4

12-1pm: Dr. John Vorhies - Global Health and Orthopaedic Surgery: Rainbow Project

*Aug 6*

12-1pm: Dr. Amy Ladd *–* Life after Summer 2021- What Should I Do Now?