**A. OVERVIEW OF TEACHING AND MENTORING**

Below are the Teaching and Mentoring activities for Dr. \*\*\*\*, which currently account for 10% of his time/effort as Faculty at the University of Arkansas for Medical Sciences (UAMS). The highlights of this section include:

* **Teaching and Mentoring Activities**

4 hours/wk for Teaching/Mentoring (40 hr/wk \* 10% time/effort = 4 hr/wk)

* 1.5 hr/wk technician and postdoc mentoring, including experimental design discussions and communication/presentation of data.
* 1.5 hr/wk graduate student mentoring, including experimental design discussions and communication/presentation of data.
* 1 hr/wk didactic teaching
* **Criteria 1: Participation in local teaching activities**
* **4** didactic lectures for Graduate School and **1** for Medical School.
* **Criteria 2: Favorable Evaluations of teaching activities**
* Cell Biology, NBDS 5111, 1hr lecture, rating: 92% out of 100%.
* Hematology, MOCU-8106, 1h lecture, rating: 4.7 out of 5.0.
* Biology of Cancer, BIOC6103, 2h lecture, rating 94% out of 100%.
* **Criteria 3: Mentoring**
* Dr. \*\*\*\* has mentored undergraduate students, medical students, technicians, graduate students, and postdoctoral fellows (**Table 1**).
* Member of **5** Advisory Committees for Ph.D. students.
* **38** student presentations at national/international/local scientific meetings.
* **8 peer-reviewed** publications with trainees.
* **7** student awards for oral or poster presentations at international/national/local meetings.

|  |  |  |
| --- | --- | --- |
| **Activity** | **Total** | **Since UAMS appointment** |
| Postdoctoral fellows | 3 | 2 |
| Graduate students | 5 | 2 |
| Medical students | 3 | 1 |
| Undergraduate students | 3 | 1 |
| Technicians | 2 | 1 |

**Table 1**. Summary of Dr. \*\*\*\*'s Mentoring activities since appointment as Assistant Professor (Indiana University, 2017-2020, UAMS, 2020-2022).

* **Other**
* Created a **Junior Faculty Forum** through the Cancer Institute.
* Created **a Summer Program for undergraduate students** through the Arkansas IDeA Network of Biomedical Research Excellence (INBRE).

**B. TEACHING STATEMENT/PHILOSOPHY**

Dr. \*\*\*\* has benefited from supportive mentors and excellent teachers and views teaching and mentoring as an essential part of being a Faculty member. Dr. \*\*\*\* aims to create a learning/mentoring environment that is **engaging**, **safe**, and **respectful**. Dr. \*\*\*\* promotes acceptance, tolerance, and inclusion in his classroom/laboratory and encourages students/mentees to respect and celebrate diversity. As detailed below, applying these ideas has allowed Dr. \*\*\*\* to have several enriching and rewarding teaching and mentoring experiences.

Dr. \*\*\*\*'s strives to prepare course content that is thoughtful, connects concepts to tangible applications and demonstrations, and is delivered engagingly. Dr. \*\*\*\* believes it is critical to maintaining a positive yet challenging classroom environment to foster student confidence and encourage active participation. His in-person or virtual lectures are dynamic and interactive, including student participation and active learning exercises when appropriate. Dr. \*\*\*\* carefully reads student evaluations and incorporates constructive criticisms into the course material for the following year. Moreover, he updates lectures and learning exercises to remain current with new research, concepts, and field changes.

Over the years, Dr. \*\*\*\* has trained and mentored students and laboratory staff at various levels and taught them laboratory procedures and basic bone and cancer biology concepts. Dr. \*\*\*\* believes in creating a direct dialogue with the lab trainees to help them discover answers for themselves. Dr. \*\*\*\* holds weekly one-on-one meetings with each member of his laboratory and rotating students. These meetings are designed to discuss data, design experiments and next steps, and troubleshoot experiments. These regular meetings are complemented by an "open-door" policy, where Dr. \*\*\*\* remains available as needed for additional questions and provides guidance for laboratory protocols, data analysis, and writing of manuscripts. All members of the \*\*\*\* lab participate in the weekly lab meeting, where housekeeping issues, animal experiments, data, and weekly activities are discussed in a group setting. Dr. \*\*\*\* encourages all members to participate in the discussions and assures all points of view are respected. Dr. \*\*\*\* motivates his trainees to attend other meetings and seek other opinions on their data/projects. Although not mandatory, each member is encouraged to complete an Individual Developmental Plan. In the laboratory setting, Dr. \*\*\*\* follows a three-step process for teaching new skills: (1) Provide an established protocol and demonstrate the procedure with explanations where the mentee is expected to take notes and ask questions, (2) the trainee performs the procedure with supervision from Dr. \*\*\*\* or a trained member of his lab, and (3) the mentee performs the procedure independently and discuss the results with Dr. Delagdo-Calle and the group.

**D. DIDACTIC TEACHING**

As Faculty at Indiana University, Dr. \*\*\*\* had 100% protected time for research. However, he freely enrolled in local teaching activities during his first years as junior Faculty. Since he arrived at UAMS, he has embraced a more active role in teaching at both Graduate School and Medical School (**Table 2**).

|  |  |  |
| --- | --- | --- |
| **Lectures/presentations** | **Total** | **Since UAMS appointment** |
| Graduate School | 5 | 4 |
| Medical School | 1 | 1 |

**Table 2**. Summary of Dr. \*\*\*\*'s Teaching activities since appointment as Assistant Professor (Indiana University, 2017-2020, UAMS, 2020-2022).

**D1. Graduate school**

1. Lecture: "Osteocytes: key regulators of bone metabolism" Spring 2016

Biomedical Master of Science Seminar course

1hr lecture

Marian University, Indianapolis, IN, US

2. Lecture: "Osteocytes: key regulators of bone metabolism" Spring 2017

1hr lecture

Biomedical Master of Science Seminar course

Marian University, Indianapolis, IN, US

3. Lecture: "The Cell Biology of Bone Metabolism" Fall 2021/2022

1hr lecture

Cell Biology, NBDS 5111, Spring. Course director: M MacNicol.

UAMS, Little Rock, AR, US

4. Lecture: "The Rational Treatment of Cancer" Spring 2022

2hr lecture

Biology of Cancer, BIOC6103, Spring. Course director: S. Kendrick.

UAMS, Little Rock, AR, US

**D2. Medical School**

1. Lecture: “The define elements of Blood” Spring 2022

1hr lecture

Hematology, MOCU-8106, Spring. Course director: J. Ware

UAMS, Little Rock, AR, US

**D4. Teaching evaluations scores**

Listed in **Table 3** below are the overall available evaluations for lectures taught by Dr. \*\*\*\* since 2017. Full course evaluations can be found in **Appendix 1**.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Course** | **Year** | **Score** | **Number of Instructors** | **Rank** |
| Biomedical Master of Science Seminar course | 2016 | Not evaluated | Not provided | Not provided |
| Biomedical Master of Science Seminar course | 2017 | Not evaluated | Not provided | Not provided |
| Cell Biology, NBDS 5111 | 2021 | 92 (100) | 17 | 5 |
| Hematology, MOCU-8106 | 2022 | 4.7 (5.0) | Not provided | Not provided |
| Biology of Cancer, BIOC6103 | 2022 | 94 (100) | Not provided | Not provided |
| Cell Biology, NBDS 5111 | 2022 | Not available yet | Not available yet | Not available yet |

|  |
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| **Table 3.** Summary of Dr. \*\*\*\*'s Teaching Evaluations since appointment as Assistant Professor (Indiana University, 2017-2020, UAMS, 2020-2022). |

**Student comments:**

*Cell Biology, NBDS 5111*

1. Dr. \*\*\*\* was a good lecturer. I appreciated how he emphasized which slides contained the most important information for the exam.
2. Dr. \*\*\*\* was an excellent lecturer that kept the class engaged and was very organized.
3. Dr. \*\*\*\* was engaging, and presented the material in a clear manner.
4. I enjoyed everything about Dr. \*\*\*\*'s lecture. The content was very easy to follow and he made very clear what he expected us to focus on for the exam. His in-class dynamic activity was very interesting and fun and allowed us to take a small part in the research his laboratory does. The homework was also very helpful for the exam. Dr.\*\*\*\*'s enthusiasm for his portion of the course was great.
5. I greatly appreciated this lecture and the ppt. The slides had the perfect amount of information and images, as well as a great logical order that communicated the ideas clearly. I also appreciated the "Choose your own adventure" style to describe the research being done.

*Hematology, MOCU-8106*

1. Dr. \*\*\*\* was very knowledgeable and conveyed the information in an accessible and interesting way.
2. I really enjoyed his lecture!
3. Loved his PowerPoint and its format in lecture 2, very organized and easy to follow.
4. Great introduction lecture. I really appreciated the ILA to help assist learning of the material.
5. Dr. \*\*\*\* was very knowledgeable and conveyed the information in an accessible and interesting way.

*Biology of Cancer, BIOC6103*

1. I liked that the homework showed the rational treatment of cancer through an example from the literature. It helped increase my understanding and solidified the rationale for learning this material.

2. I thought the homework did well to provoke questions in experimental design regarding the treatment of cancer. The paper was just enough to spark interest in the subject.

3. The homework was a good way to review apply what had been discussed during the lecture.

4. Dr. \*\*\*\* lecture was very clear and easy to follow. I appreciated that he took the time to seek out and present material that had been updated since the last edition of the book had been published.

5. He is an entertaining lecturer, although maybe a five minute break in the middle would've been great. I don't say this just for him but maybe for all lectures that anticipate reaching the 2 hour mark. I really enjoyed how the lecture included the historical importance of cancer therapies.

6. I really liked the translational approach in this lecture. I liked that the instructor explained the material very thoroughly and gave examples throughout the lecture. I appreciated that the instructor went over the homework assignment paper and explained the main key points in class.

**E. MENTORING ACTIVITIES**

A major contribution of Dr. \*\*\*\* to the UAMS teaching mission is the mentoring activities he participates in. Since being appointed Assistant Professor in 2017, Dr. \*\*\*\* has mentored at all educational levels, including college, medical, technicians, graduate students, and postdoctoral fellows (**Table 1**). Dr. \*\*\*\* has directed three master's thesis and is the director of the graduate work of two Ph.D. students. He also serves on the Advisory Committee of three additional Ph.D. students at UAMS. Below is a list of mentees with whom Dr. \*\*\*\* has worked closely over the years.

**E2. Postdoctoral and Staff mentoring**

**Postdoctoral fellows-Current**

1. Dr. XXXX (Little Rock, AR, US) 2020-present

Project: Role of osteocytes in metastatic breast cancer.

Accomplishments: co-author in 2 manuscripts, 1 oral presentation, and 3 poster presentations.

2. XXXX (Little Rock, AR, US) 8/2022-present

Project: Role of osteocytes in metastatic breast cancer

**Postdoctoral fellows-Past**

3. Dr. XXXX (Indianapolis, IN, US) 2019-2020

Project: Role of osteocytes in multiple myeloma bone disease

Current position: postdoctoral fellow, University of Pittsburgh, US

Accomplishments: co-author in 2 manuscripts and 2 poster presentations.

**Technical personnel-current**

1. XXXX (Little Rock, AR, US) 2020-present

Project: Multiple myeloma bone disease.

Accomplishments: 2 poster presentations, co-author in 1 manuscript

**Technical personnel-past**

2. XXXX (Indianapolis, IN, US) 2017-2019

Project: Effects of Aplidin on bone cells.

Current position: Purdue Veterinary School

Accomplishments: 19 poster presentations, co-author in 1 manuscript

**E2. Graduate student mentoring**

**Graduate students-Current**

1. XXXX (Little Rock, AR, US; 2nd year GPIBS-CBP track) 2020-present

Project: Bone-Targeted Therapies to treat Multiple Myeloma.

Accomplishments: 3 first author manuscripts, 5 oral presentations, 4 poster presentations, and a New Investigator Award by the Cancer and Bone Society.

2. XXXX (Little Rock, AR, US; 1st year GPIBS-CBP track) 2022-present

Project: Osteocyte-myeloma communication through FGF23

Accomplishments: 3 poster presentations.

3. XXXX (Little Rock, AR, US; visiting student) 08/2022-present

Project: Targeting mesenchymal stem cells in the bone niche

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| Email from XXXX, current graduate student recruited to UAMS by Dr. \*\*\*\*. |

**Graduate students-Past**

1. XXXX (Indianapolis, IN, US; co-mentored with Drs. Bellido/Roodman) 2017-2018

Project: Role of osteocytes in multiple myeloma bone disease

Current position: 5th year Ph.D. student, Indiana University School of Medicine

Accomplishments: one first author manuscript, one co-author manuscript, 9 poster presentations, and a Best Poster Presentation Award at the Indiana Cancer Center Research Day Symposium.

2. XXXX (Indianapolis, IN, US; Master student) 2018-2019

Project: Role of osteocytes in multiple myeloma bone disease.

Current position: 3rd year Ph.D. student, University of Pennsylvania, US

Accomplishments: one co-first author manuscript, one co-author manuscript, 5 oral presentations, 6 poster presentations, Best Oral Basic presentation at SEIOMM, ASBMR Young Investigator Award, Charles Turner Award, and Best Poster Presentation Award at the Marian University Poster Symposium.

3. XXXX: (Indianapolis, IN, US; Master student) 2018-2019

Project: Role of Sclerostin in the regulation of body composition

Current position: 2nd year medical student, Marian University, US

Accomplishments: one co-author manuscript, 3 oral presentations, and 4 poster presentations.

4. XXXX (Indianapolis, IN, US; Master student) 2018-present

Project: Bone-Targeted Notch inhibition in multiple myeloma.

Current position: 2nd year graduate student, UAMS

Accomplishments: 3 poster presentations.

5. XXXX (Little Rock, AR, US; GPIBS rotating graduate student) 2021

Project: role of FGF23 on multiple myeloma bone disease.

Current position: 2nd year graduate student, UAMS

**Master Thesis directed\***

1. XXXX (Indianapolis, IN, US) 2019

 Master thesis: Inhibition of Notch Signaling in the Myeloma-bone Marrow Niche simultaneously Decreases Tumor Growth and prevents Bone Loss without Inducing Gut toxicity.

 Marian University

2. XXXX (Orr) (Indianapolis, IN, US) 2019

 Master thesis: Bone-derived Sclerostin regulates whole-body adipose tissue via paracrine and endocrine actions on adipocyte precursors.

 Marian University

3. XXXX (Indianapolis, IN, US) 2020

 Master thesis: Role of Notch receptor 3 signaling in multiple myeloma disease.

 Marian University

 *\*Marian University (Indianapolis, IN, US) and Indiana University have an agreement by which Mater students at Marian University can perform the research component of the curriculum (1 year) in the laboratories of Faculty based in Indiana University. Thus, although Dr. \*\*\*\* did not have an appointment at Marian University was able to direct the thesis of three master's students from Marian University. Dr. \*\*\*\* served as the thesis director and chair of the Thesis Advisory Committee, which included two Faculty from Marian University.*

**Ph.D. candidate Advisory mentoring committee**

1. XXXX (Little Rock, AR, US) 2020-present

Role: Chair

Principal Advisor: \*\*\*\* \*\*\*\*

2. XXXX (Little Rock, AR, US) 2021-present

Role: member

Principal Advisor: Maria Almeida

3. XXXX (Little Rock, Arkansas, US) 2022-present

Role: member

Principal Advisor: Intawat Nookaew

4. XXXX (Little Rock, Arkansas, US) 2021-present

Role: member

Principal Advisor: Hong-yu Li

5. XXXX (Little Rock, Arkansas, US) 2022-present

Role: Chair

Principal Advisor: \*\*\*\* \*\*\*\*

**E1. Medical student mentoring**

**Medical students-current**

1. XXXX (Little Rock, Arkansas, US) 2022

Project: Bone-targeted therapies to treat cancer in bone.

Current position: unknown

Accomplishments: 1 poster presentation.

**Medical students-past**

2. XXXX (Indianapolis, IN, US) 2014

Project: Role of MMP14 in PTH signaling

Current position: unknown

Accomplishments: 2 poster presentations.

3. XXXX (Indianapolis, IN, US) 2015

Project: role of MMP14 in PTH signaling

Current position: Residency, Anesthesiology, Icahn School of Medicine Mount Sinai

Accomplishments: one co-author paper, and 2 poster presentations.

4. XXXX (Indianapolis, Indiana, US) 2016

Project: role of MMP14 in PTH signaling

Current position: Residency, Orthopedic Surgery, University of Lousiville

Accomplishments: one co-author paper.

5. XXXX (Indianapolis, Indiana, US) 2016

Project: Role of Sclerostin in MM-induced bone disease

Current position: unknown

6. XXXX (Indianapolis, Indiana, US) 2017

Project: role of Sclerostin in MM-induced bone disease

Current position: Resident Physician, Jefferson Health-Jefferson Torresdale Hospital

Accomplishments: 5 poster presentations.

7. XXXX (Indianapolis, Indiana, US) 2017

Project: role of Notch signaling on the skeletal actions of PTH

Current position: Residency, Surgery-Plastic Surgery, Indiana University School of Medicine

Accomplishments: one co-author paper, and one poster presentation.

**E1. Graduate student mentoring**

**Undergraduate students-current**

1. XXXX (Little Rock, AR, US) 2022

Project: generating luciferase-expressing breast cancer cells

Current position: applying to medical school

Accomplishments: 1 poster presentation.

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| Email from XXXX, an summer undergraduate student in Dr. \*\*\*\*'s lab in 2022.  |

**Undergraduate students-past**

2. James Bell (Indianapolis, Indiana, US) 2018-2019

Project: Inhibition of Notch signaling in multiple myeloma.

Current position: unknown

Accomplishments: 4 poster presentations

3. Megan Sweet (Indianapolis, Indiana, US) 2019-2020

Project: role of Sclerostin in the cross-talk between bone and distant organs.

Current position: Master Student, Biological Sciences, Virginia Tech.

Accomplishments: one co-author paper, 4 co-authorships in poster presentations

|  |
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| **Email with solid fill****Snip not available to view in template** |
| E-mail from XXXX, an undergraduate student in Dr. \*\*\*\*'s lab in 2019. |

**H. CURRICULUM DEVELOPMENT**

Since he arrived at UAMS, Dr. \*\*\*\* has taken the lead role in creating new programs for Junior Faculty through the Cancer Institute, and for undergraduate students through the Arkansas IDeA Network of Biomedical Research Excellence (Arkansas INBRE).

**Winthrop P. Rockefeller Cancer Institute Junior Researchers Forum** 2020-present

Role: Founder and leader

Description: Upon his arrival at UAMS, Dr. \*\*\*\* quickly identified the need for a Junior Faculty group. He reached out to Winthrop P. Rockefeller Cancer Institute(WPRCI) leadership with the idea of creating a Junior Faculty group and obtained their support. The WPRCI Junior Faculty Group was created as a peer group to serve the unique needs of junior basic, translational, and clinical Faculty to promote their success in scientific discovery, funding, publications, mentoring, networking, and service to the WPRCI, UAMS community, and the state of Arkansas. The goals of this forum are:

1. Provide a forum for junior Faculty to interact and discuss challenges they face in establishing successful independent research programs
2. Disseminate resources and opportunities unique to junior Faculty
3. Foster collaborations and facilitate communication among junior faculty investigators
4. Provide a venue to raise specific concerns or questions to WPRCI leadership

The target group members were any WPRCI junior faculty starting an independent research program in basic, translational, and/or clinical sciences. Examples include but are not limited to Assistant Professors and Research Assistant Professors.More than 40 Junior faculty are currently included in this group. Dr. XXXX and XXXX joined this effort and worked with Dr. \*\*\*\* to organize the virtual monthly meetings (the second Friday of the month).

Since its creation, this forum has hosted lectures and Q&A sessions with representatives of the IBC, IRB, WPRCI mentoring program, Human resources, K mentoring writing program, and the TRI Mock study section, as well as research presentations by our members. In addition, this group completed a survey to identify the needs of the UAMS Junior Faculty, which was shared with WPRCI leadership and guides the activities selected for the monthly meetings. Lastly, the group created a database with professional and scientific information to share resources and find members' common scientific interests.

**Professional Research Opportunity (PRO) Summer program** 2022-present

Role: Director

Description: Dr. \*\*\*\* developed a program to create an avenue to attract and retain technical personnel to UAMS. With the support of Drs. XXXX and XXXX and Ms. XXXX and XXXX, from the INBRE. Dr. \*\*\*\* created the program, generated the ad, evaluated the applications and assigned host laboratories, and organized and coordinated the program scheduled. This pilot program is co-sponsored by the Arkansas INBRE (NIH P20 GM103429), the Center for Musculoskeletal Disease Research (P20 GM125503), and the Department of Physiology and Cell Biology at UAMS. It supports four students per year.

In this program, undergraduate students are exposed to an alternative career path as a research technologist in biomedical research through participation in the daily operations of either a research laboratory or a Core facility. This internship includes interactions with lab personnel, research technologists, and core facility users. In addition, interns are involved in experimental design considerations, data collection/analysis/delivery, and laboratory/core administration. Upon completing this internship, students will have unique insights into how a professional research technologist operates both scientifically and professionally, and will also gain the connections and tools to launch a career in biomedical research. Selected students are hosted by Faculty and scientists in the Arkansas IDeA Network of Biomedical Research Excellence (INBRE), the Center for Musculoskeletal Disease Research (CMDR), and the College of Medicine at UAMS. The PRO fellowships are designed for students with a solid background in science who wish to participate in an internship designed to explore a professional, scientific career as a research technologist, develop their technical skills, and are interested in pursuing a professional career in biomedical research.

Specifics of the Undergraduate Student PRO Internship

1. Internships are available for Arkansas undergraduate students who will be either rising juniors or seniors in the fall semester majoring in science (e.g., biology & chemistry) for a professional research experience in Biomedical research at UAMS.
2. An internship includes a $6,000 stipend, a $400 travel award to attend a regional or national meeting after completing the program, a research supply budget ($1,800), and university privileges for the participants on campus, including the use of the library, computer laboratories, and recreational facilities.
3. A primary goal of the PRO Internship Program is to involve Arkansas students from groups traditionally underrepresented in science in a stimulating research experience.
4. Participating students will prepare a poster presentation for Professional Research Day at the end of the 10-week program.

In 2022, two students joined this pilot program, XXXX, hosted by the Ambrogini laboratory in Internal Medicine, Division of Endocrinology, and XXXX, hosted by the Bellido laboratory in the Department of Physiology and Cell Biology.

A draft of the schedule for this program is shown below.

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**PRO Summer Program Schedule**

**May 23 – July 29, 2022**

***Students are required to attend all workshops.***

|  |  |
| --- | --- |
| ***May 23*** | **Orientation for UAMS Students**Biomed 2, Rayford Auditorium, Room 106-2 |
| **9:45 AM** | **Welcome/Introduction**Lawrence Cornett, Ph.D., INBRE Program DirectorUAMS, BioMed 2, Rayford Auditorium, Room 106-2 |
| **10:00 AM - 12:00 Noon** | **Radiation & Laboratory Safety Training**Laura Hanson, James Bishop and Nathan WilliamsOccupational Health & Safety(*There will be a* ***5-minute break*** *between the two trainings.*)UAMS, BioMed 2, Rayford Auditorium, Room 106-2 |
| **1:00 – 2:00 PM** | **Kristen Sterba, Ph.D., UAMS, Associate Provost for Students & Administration*****Topic: "Mentee-Mentor Relationships"***UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF via Zoom |
| **2:00 – 2:30 PM** | **Program Instructions**\*\*\*\* \*\*\*\*, PRO Summer Program DirectorUAMS, BioMed 1, Room 155-2 |
| **May 24** | Students and mentors/lab personnel are asked to arrange a designated place to meet for the student to report to work. Please keep in mind students will not have badge access to buildings/floors. |
| **May 27****11:00 AM – 1:00 PM** | Weekly PRO activity**Christy Simecka/Robin Mulkey****UAMS Animal Facility tour**BioMed 1, Lobby, 1st floor |
| **May 30** | **UAMS Memorial Day Holiday** |
| **June 2** **6:00 PM** | **Social Event****Painting with a Twist****Biomed 2 Atrium (snacks and drinks provided)** |
| **June 3****11:00 AM – 1:00 PM** | Weekly Workshop Speaker**Antiño Allen, Ph.D., UAMS, Dept. of Pharmaceutical Sciences****Topic: "Preparing A Curriculum Vitae"**UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF via Zoom |
| **June 8****11:00 AM – 1:00 PM** | Weekly PRO activity **Julie Crawford****Musculoskeletal COBRE Histology Core**WPRCI, 8th floor lobby |
| **June 10****11:00 AM – 1:00 PM**  | Weekly Workshop Speaker **Grover Miller, Ph.D., UAMS, Dept. of Biochemistry & Molecular Biology** **Topic: "Writing and Talking Science"**UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF via Zoom |
| **June 15****11:00 AM – 1:00 PM** | Weekly PRO activity**Stuart Berryhill****Musculoskeletal COBRE Imaging Core**BioMed 2, Lobby, 2nd floor  |
| **June 16****6:00 PM** | **Social Event****Movie Night****Rayford Auditorium (snacks and drinks provided)** |
| **June 17****11:00 AM – 1:00 PM** | Weekly Workshop Speaker **Kristen Sterba, PhD, UAMS** **Associate Provost for Students & Administration****Topic: "Networking"**UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF via Zoom |
| **June 17** | **Half-Way essays due to Dr. \*\*\*\* by 5:00 PM**  |
| **June 22****11:00 AM – 1:30 PM** | Weekly Workshop Panel Discussion**"Careers"**Panelist:Smit Patel, M1, UAMSDennis Province, Ph.D., Dept. of Biochemistry & Molecular Biology, UAMSOktawia DeYoung, PharmD, Dept. of Pharmacy Practice, UAMSSamantha Kendrick, Ph.D., Dept. of Biochemistry & Molecular Biology, UAMSKatie Seely, Ph.D., Arkansas Health DepartmentDaniel Eldridge, DVM, MS, Division of Laboratory Animal Medicine, UAMSJerry Ware, Ph.D., Dept. of Physiology & Cell Biology, UAMSUAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF Via Zoom |
| **June 24****11:00 – 1:00 PM** | Weekly PRO activity**Jeff Kamykowski****UAMS Microscopy core** Biomedical Research Building II, Room 136-2 |
| **June 30****6:00 PM** | **Social Event****Karaoke Night****Institute on Aging, Jo Ellen Ford Auditorium (snacks and drinks provided)** |
| **July 4** | **UAMS Independence Day Holiday** |
| **July 7****6:00 – 8:00 PM** | **Dinner Seminar Speaker****Robert Eoff, PhD****Professor, Department of Biochemistry & Molecular Biology****Topic: "From Possum Trot to PI or How I Learned to Stop Worrying About Funding and Love the Science"****Winthrop P. Rockefeller Cancer Institute****Sam Walton Auditorium, 10th Floor, Room 1026** |
| **July 8****9:00 – 11:15 AM****12:30 Noon – 1:30 PM** | **UAMS Tour of Research****9:00 – 9:30 AM Proteomics Facility****9:35 – 10:05 AM Medical Informatics****10:10 – 10:40 AM Microscopy Facility****10:45 – 11:15 AM In Vivo Pharmacology**UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF Via Zoom**Charles O'Brien, PhD****UAMS, Dept. of Internal Medicine Endocrinology & Metabolism****Topic: "Transgenic Mice and Human Gene Therapy"**UAMS, BioMed 2, Rayford Auditorium, Room 106-2; UAF Via Zoom |
| **July 11****Noon – 2:00 PM** | Weekly PRO activity**Lunch with Melinda Gunnel and Milena Dimori**Topic: "Alternative careers paths in Biomedical Research"UAMS, Biomed 1, Room B205/207 |
| **July 27****7:30 AM – 3:30 PM** | **9th Annual Summer Research Symposium**UAMS, I Dodd. Wilson |
| **July 29****11:00 AM – 2:30 PM** | **Wrap-Up Meeting****UAMS, BioMed 2, Rayford Auditorium, Room 106-2****Final essays due to Dr. \*\*\*\* by 5:00 PM** |

**Comments from participants**

*The summer PRO program at UAMS has truly been the most satisfying experience of my learning career. I was taught numerous lab techniques such as RNA extraction and isolation, qPCR, and genotyping. Through weekly workshops, I was able to learn about so many different job options that are available and get real insight into what I could potentially do in the future with my degree. Even though this internship is structured like a 9-5 job most days, the experience is much more fulfilling. More than just learning how to pipette or run a gel, this internship has taught me about networking, preparing a CV, and how to communicate like a scientist. Overall, this has been a great experience and I truly appreciate the PRO program, Dr. \*\*\*\*, and Dr. Bellido for this opportunity.*

*-Jo Meeks, PRO program summer intern*

*Thank you for the opportunity to talk with the students.  It was a pleasure to meet with them and to talk about our group's research project and my experience as a research technician.  It was also nice to get to know Milena!  Both students expressed how much they have learned in the program and how much they have already benefitted from the experience.  Thanks for providing them this opportunity!*

*-Melinda Gunnel, PRO program mentor*