**A. GENERAL OVERVIEW**

Dr. \*\*\*\* has held a Faculty position for six years (2016-2022). In 2016, Dr. \*\*\*\* was appointed Assistant Research Professor in the Department of Anatomy and Cell Biology at the Indiana School of Medicine (IUSM). In 2017, Dr. \*\*\*\* was recruited as an Assistant Research Professor to the Department of Medicine, Division of Hematology and Oncology, at IUSM, where he was provided start-up funds, office and laboratory space, and administrative support to start his laboratory and independent research. In 2020, Dr. \*\*\*\* was recruited to the University of Arkansas for Medical Sciences (UAMS) and appointed Assistant Professor in the Department of Physiology and Cell Biology (Basic Scientist, Track Tenure). Drs. Smyth (Dean, UAMS College of Medicine) and Bellido (Chair, UAMS Physiology and Cell Biology Department) recommend consideration of Dr. \*\*\*\*’s time in rank at both institutions: 2 years with UAMS and 3 years in the Department of Medicine at IUSM (see letter attached). For this reason, this Promotion and Tenure packet summarizes Dr. \*\*\*\*’s accomplishments since his appointment as Faculty in the Department of Medicine at IUSM (2017-2020) and UAMS (2020-2022).

Dr. \*\*\*\*’s time/effort distribution at his current position is shown below:

* Research/Scholarly Activities: 30 hours/wk for (40 hr/wk \* 75% time/effort = 30 hr/wk).
* Teaching/Mentoring Activities: 4 hours/wk for (40 hr/wk \* 10% time/effort = 4 hr/wk).
* Leadership/Administrative Service: 6 hours/wk for (40 hr/wk \* 15% time/effort = 6 hr/wk).

**B. GENERAL OVERVIEW OF RESEARCH AND SCHOLARLY ACTIVITIES**

The \*\*\*\* laboratory investigates how cancer cells alter the biology of bone cells in the tumor microenvironment to identify targetable factors for treating cancer in bone. Current independent funded projects in his laboratory investigate bone-targeted therapies to treat cancer that grow in bone (translational research), the crosstalk between osteocytes and cancer cells, and the mechanisms underlying cancer-induced bone disease (basic research). He also collaborates in NIH-funded projects investigating the role of p62 in hematological cancers and the role of osteocytes in Paget’s disease. Dr. \*\*\*\* collaborates with industry to characterize the effects of Aplidin, a new marine-derived therapeutic agent, on bone and cancer cells.

* **Research and Scholarly Activities**
* **Research productivity:**
	+ Dr. \*\*\*\* has published 56 peer-reviewed manuscripts, 26 since appointed Faculty in 2017, including 13 publications as corresponding or last author.
	+ Since 2017, Dr. \*\*\*\* averages ~4 publications per year as first, last, or corresponding author.
	+ Since 2017, his manuscripts have received 1932 citations (Google Scholar 8/31/22).
* **Top 5 publications (mentored students):**
* **\*\*\*\* J**, Anderson J, Cregor MD, Carlesso N, Mohammad KS, Plotkin LI, Roodman GD, and Bellido T. Bidirectional Notch signaling activated by interactions between multiple myeloma cells and osteocytes drives tumor cell proliferation and osteoclast recruitment. Cancer Research 2016; 76(5):1089-100. Journal Impact Factor: 12.71
* **\*\*\*\* J**, Anderson J, Cregor MD, Condon KW, Plotkin LI, Bellido T, and Roodman GD. Genetic Sost deletion and pharmacological inhibition of Sclerostin prevent multiple myeloma-induced bone disease without affecting tumor growth. Leukemia. 2017; 31(12):2686-2694. Journal Impact Factor: 11.53
* Sabol HM, Amorim T, Ashby C, Halladay D, Anderson J, Cregor M, Sweet M, Nookaew I, Kurihara N, Roodman GD, Bellido T, and **\*\*\*\* J**#. Notch3 signaling between myeloma cells and osteocytes in the tumor niche promotes tumor growth and bone destruction. Neoplasia. 2022 (in press). #corresponding author. Journal Impact Factor 5.71
* Sabol HM, Ferrari A, Adhikari M, Amorim T, McAndrews K, Anderson J, Lehal R, Cuevas PL, Helms JA, Kurihara N, Sharmin K, Cregor M, Srinivasan V, Ebetino FH, Boeckman Jr R, Roodman GD, Bellido T, and **\*\*\*\* J**#. Targeting Notch inhibitors to the myeloma bone marrow niche decreases tumor growth and bone destruction without gut toxicity. Cancer Research. 2022; 81(19):5102-5114. #corresponding author. Journal Impact Factor 12.71
* 5. **\*\*\*\* J#**, McAndrews K, Wu G, Orr DL, Ferrari AJ, Tu X, Srinivasa V, Roodman GD, Ebetino FH, Boeckman Jr. RK, Bellido T. The Notch pathway regulates the bone gain induced by PTH anabolic signaling. FASEB Journal. 2022; 36(3):e22196). #corresponding author. Journal Impact Factor 5.19
* **Extramural Funding:**
	+ Dr. \*\*\*\* is involved as PI, co-PI, or co-I for ~ $600K/year in direct cost grant dollars.
	+ Dr. \*\*\*\* covers 75% of his annual salary with extramural funds.
	+ After joining UAMS, Dr. \*\*\*\* was awarded an NIH-NCI MERIT Award (R37 mechanism), given to early-stage investigators with applications that receive a score within the NCI pay line for experienced investigators. R37 awards are eligible for up to 7 years of funding.
	+ Co-investigator (1) and site PI (2) in three additional NIH R01 awards.
* **International/National/Regional Reputation:**
	+ Dr. \*\*\*\* (or members of his lab) has given 65 presentations/seminars: Invited lectures (16), Oral presentations (14), Poster presentations (23), and Chaired sessions (8).
	+ Member of 3 Editorial Boards: Current Osteoporosis Reports, Osteoporosis and Mineral Metabolism Journal, and Journal of Cancer Treatment and Metastasis.
	+ 59 manuscripts peer-reviewed and ad-hoc Reviewer for international (8), national (25), and institutional (14) grants since 2017.
	+ Standing member of the NIH Tumor Host Interactions Study Section.
* **Honors and Awards**
* 7 international, 12 national, and 3 regional peer-reviewed awards.
* 7 national, peer-reviewed awards to mentored students.
* 6 news releases by UAMS and local news media.
* Named Rising Start 2022 by the UAMS Division of Research and Innovation.

**C. GENERAL OVERVIEW OF TEACHING AND MENTORING ACTIVITIES**

As Faculty at Indiana University (2017-2020), 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. A major contribution of Dr. \*\*\*\* to the UAMS teaching mission is the mentoring activities he participates in. Since being appointed Assistant Professor, Dr. \*\*\*\* has mentored at all educational levels, including college, medical, technicians, graduate students, and postdoctoral fellows.

* **Teaching and Mentoring**
* Participation in local teaching activities
* Cell Biology, NBDS 5111, 1hr, UAMS Grad School 2021-present
* Hematology, MOCU-8106, 1h, UAMS Med School 2022-present
* Biology of Cancer, BIOC6103, 2h, UAMS Grad School 2022-present
* Favorable Evaluations of teaching activities
* Cell Biology, NBDS 5111 rating: 92% out of 100% (100% being the best)
* Hematology, MOCU-8106 rating: 4.7 out of 5.0 (5 being the best)
* Biology of Cancer, BIOC6103 rating: 99% out of 100% (100% being the best)
* Mentoring
* Dr. \*\*\*\* has mentored undergraduate students (3), medical students (3), technicians (2), graduate students (5), and postdoctoral fellows (3).
* Member of 5Advisory Committees for Ph.D. students.
* Collectively, his mentees have 38presentations at national/international/local scientific meetings, 8 peer-reviewedpublications, and 7awards at international/national/local meetings.
* Other
* Created a Summer Program for undergraduate students: PRO program.

**D. GENERAL OVERVIEW LEADERSHIP AND ADMINISTRATIVE SERVICE**

Dr. \*\*\*\* has participated in high-impact international, national, institutional, and departmental committees to promote education and research activities.

* **Leadership and Administration**
* Departmental: Physiology and Cell Biology, UAMS
	+ Member, Faculty Search Committee 2020-present
	+ Co-organizer, Physiology Seminar Series 2020-present
	+ Vice-Chair for Research 2020-present
* College/University
	+ Leader, Junior Faculty Forum (UAMS) 2020-present
	+ Member, Patent and Copyright Committee (UAMS) 2021-present
	+ Interviewer Graduate School GPIBS program (UAMS) 2021-present
	+ Director, PRO summer program (INBRE, UAMS) 2022-present
	+ Member, Institutional Animal Care and Use Committee (IUSM) 2019-2020
* **Editorial Board Service**
* Section Editor, Current Osteoporosis Reports, Osteocyte section 2019-present
* Editorial board, Osteoporosis and Mineral Metabolism Journal 2021-present
* Youth Editorial Board, Journal of Cancer Treatment and Metastasis 2021-present
* Co-editor Special Issue, Frontiers of Oncology 2021-present
* **Peer-review Study Section Service**
* Standing Reviewer for the Endocrine Fellows Foundation 2019-present
* Standing Reviewer for the Tumor Host Interactions study section\* 2022-present

\*Formerly known as Tumor Microenvironment

* **Advocate for Science and/or Health Care Policy**
* Member, HuBLe Methods Committee 2019-present

International Federation of Musculoskeletal Research Societies (IFMRS)

* Co-chair Education Advisory Committee 2020-present

American Society for Bone and Mineral Research (ASBMR)