

IDENTIFYING INFORMATION:

NAME: Dean, David

POSITION TITLE: Associate Professor

PRIMARY ORGANIZATION AND LOCATION: The Ohio State University, Columbus, Ohio, United States

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	RECEIPT DATE	FIELD OF STUDY
City University of New York, New York, New York, United States	PHD	05/1993	Biological Anthropology (Anatomy)
Temple University, Philadelphia, Pennsylvania, United States	MS	05/1986	Biological Anthropology (Anatomy)
Case Western Reserve University, Cleveland, Ohio, United States	BS	12/1981	Biology / Biological Anthropology (2 degrees)

Appointments and Positions

2013 - present Associate Professor, The Ohio State University, Columbus, Ohio, United States

1994 - 2013 Associate Professor, Case Western Reserve University, Cleveland, Ohio, United States

1992 - 1994 Postdoctoral Researcher, New York University, New York, New York, United States

Products**Products Most Closely Related to the Proposed Project**

1. Hoelzle DJ, Thurston B, Vazquez-Armendariz J, Babinec T, Olivas-Alanis LH, Niezgoda S, Daehn G, Gao RX. Kinematic analysis of engagement and bending capabilities of a point-of-care, incremental skeletal fixation plate bending system. Manufacturing Letters. 2024 October 15. Available from: <https://doi.org/10.1016/j.mfglet.2024.09.185>
2. Vazquez-Armendariz J, Tejeda-Alejandre R, Zhang A, Rodriguez CA, Dean D. Melt electrowriting on out-of-plane surfaces: The challenge of controlling the electric field for textile biomanufacturing. Procedia CIRP. 2024 August 30; 125:172-177. Available from: <https://doi.org/10.1016/j.procir.2024.08.030>
3. Chen Y, Zhang J, Babinec T, Thurston B, Daehn G, Dean D, Loparo K, Hoelzle D, Gao RX. Machine Learning-Enhanced Model Predictive Control for Incremental Bending of Skeletal Fixation Plates. International Symposium on Flexible Automation. 2024 August 29; 87882:V001T05A003. Available from: <https://doi.org/10.1115/ISFA2024-140948>
4. Olivas-Alanis LH, Sanguedolce M, Souza JM, Dean D. Finite Element Analysis for the Virtual Surgical Planning of Stiffness-matched Personalized Load-bearing Percutaneous Implants. Procedia CIRP. 2024 August 12; 125:66-71. Available from: <https://doi.org/10.1016/j.procir.2024.08.012>

5. Thurston B, Vazquez-Armendariz J, Olivas-Alanis LH, Dean D, Daehn G. Robotic Bending of Craniomaxillofacial Fixation Plates. *Procedia CIRP*. 2024 August 03. Available from: <https://doi.org/10.1016/j.procir.2024.08.037>

Other Significant Products, Whether or Not Related to the Proposed Project

1. Khattab NR, Olivas-Alanis LH, Chmielewska-Wysocka A, Emam H, Brune R, Jahadakbar A, Khambhampati S, Lozier J, Safaei K, Skoracki R, Elahinia M, Dean D. Evaluation of stiffness-matched, 3D-printed, NiTi mandibular graft fixation in an ovine model. *Biomed Eng Online*. 2024 Oct 26;23(1):105. PubMed Central PMCID: [PMC11515221](https://pubmed.ncbi.nlm.nih.gov/PMC11515221/).
2. Dean D, Rodriguez CA, Vazquez-Armendariz JO, Tejeda Alejandro R., inventors. Ohio State Innovation Foundation, assignee. A multi-adaptable melt electrowriting system and method of using the same. WIPO (PCT) WO2023215858A1. 2023 November 11.
3. Dean D, Daehn G, Groeber M, Niezgoda S., inventors. Systems and methods for point-of-need manufacturing. United States 18020152. 2023 September 09.
4. Dean D, Olivas-Alanis LH, Thurston B, Vazquez J, Hoelzle D, Groeber M, Niezgoda S, Morris J, Emam H, Skoracki R, VanKoeveering K, Rodriguez C, Yun Y, Iaquinto J, Ripley B, Daehn G. Virtual Surgical Planning for Point-of-Care Manufacturing. *Procedia CIRP*. 2024 August 16; 125:90-95. Available from: <https://doi.org/10.1016/j.procir.2024.08.016>
5. Vazquez-Armendariz J, Olivas-Alanis LH, Groeber M, Niezgoda S, Morris JM, Emam H, Skoracki R, Cao J, Ripley B, Iaquinto J, Daehn G, Dean D. Workflow for Robotic Point-of-Care Manufacturing of Personalized Maxillofacial Graft Fixation Hardware. *Integrating Materials and Manufacturing Innovation*. 2023 April 08; 12:92-104. Available from: <https://doi.org/10.1007/s40192-023-00298-3>

Certification:

I certify that the information provided is current, accurate, and complete. This includes but is not limited to current, pending, and other support (both foreign and domestic) as defined in 42 U.S.C. § 6605.

I also certify that, at the time of submission, I am not a party to a malign foreign talent recruitment program.

Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Dean, David in SciENCv on 2025-02-05 12:45:46