

MARIYAM I. ISA
CURRICULUM VITAE

Department of Sociology, Anthropology, and Social Work
Texas Tech University
Lubbock, TX 79409
mari.isa@ttu.edu

PRESENT POSITION

Assistant Professor of Anthropology, Department of Sociology, Anthropology, and Social Work
Texas Tech University

EDUCATION

Ph.D.	Anthropology	Michigan State University	2020
M.A.	Anthropology	Michigan State University	2016
B.S.	Anthropology	Michigan State University	2014
B.S.	Human Biology, Honors	Michigan State University	2014

Areas of Interest:

Biological Anthropology, Forensic Anthropology, Human Osteology, Bone Biomechanics, Trauma Analysis, Forensic Fractography of Bone, Personal Identification

Ph.D. Dissertation: "Experimental Investigations of Blunt Force Trauma in the Human Skeleton"

Funding: National Science Foundation Graduate Research Fellowship (Award No. DGE1424871)

PUBLICATIONS

Journal Articles (*Peer Reviewed)

- *2019 **Isa MI**, Fenton TW, Goots AC, Watson EO, Vaughan PE, Wei F. Experimental investigation of cranial fracture initiation in blunt human head impacts. *Forensic Science International* 300:51-62.
- *2018 **Isa MI**, Fenton TW, DeLand TS, Haut RC. Assessing impact direction in 3-point bending of human femora: incomplete butterfly fractures and fracture surfaces. *Journal of Forensic Sciences* 63(1):38-46.
- *2017 **Isa MI**, Hefner JT, Markey MA. Application of the Stephan et al. chest radiograph comparison method to decomposed human remains. *Journal of Forensic Sciences* 62(5):1304-1307.
- 2015 Morton SG, **Isa MI**, Wrobel GD. Caves Were the Houses of the Earth Lord, Right? Insight into the Domestic Economy of Central Belize from the Cave Context. *Research Reports in Belizean Archaeology* 12: 107-114.

OTHER WRITING**Technical Reports**

- 2018 Final Project Overview. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013.
- 2018 Semi-Annual Progress Report #6. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 31 December 2018.
- 2018 Semi-Annual Progress Report #5. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 30 June 2018.
- 2017 Semi-Annual Progress Report #4. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 30 December 2017.
- 2017 Semi-Annual Progress Report #3. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 30 June 2017.
- 2016 Semi-Annual Progress Report #2. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 31 December 2016.
- 2016 Semi-Annual Progress Report #1. *Building A Science of Adult Cranial Fracture*. National Institute of Justice Award No. 2015-DN-BX-K013. 30 June 2016.

Forensic Case Reports

Year	Case #	County (MI)	Type of Case
2019	007-19	Eaton	Biological Profile/Trauma Analysis
2019	F.3.79	Van Buren	Biological Profile/Trauma Analysis Cold Case
2018	068-18	Ingham	Positive Medical ID
2018	044-18	Gratiot	Positive Medical ID
2017	059-17	Genesee	Biological Profile/Trauma Analysis/ID
2017	058-17	Genesee	Biological Profile/Trauma Analysis/ID
2017	057-17	Ingham	Positive Medical ID
2017	029-17	Isabella	Positive Medical ID
2017	027-17	Macomb	Trauma Analysis
2017	026-17	Genesee	Trauma Analysis/ID
2017	020-17	Ingham	Positive Medical ID
2017	019-17	Genesee	Positive Medical ID
2017	018-17	Shiawassee	Biological Profile
2017	017-17	Wexford	Biological Profile/Trauma Analysis
2017	016-17	Genesee	Positive Medical ID
2017	015-17	Genesee	Positive Medical ID
2017	014-17	Ingham	Positive Medical ID
2017	013-17	Ingham	Positive Medical ID
2017	009-17	Ingham	Positive Medical ID
2017	007-17	Genesee	Positive Medical ID
2017	006-17	Clinton	Trauma Analysis
2017	004-17	Ionia	Positive Medical ID
2017	003-17	Ingham	Positive Medical ID
2016	076-16	Genesee	Positive Medical ID/Trauma Analysis
2016	075-16	Genesee	Positive Medical ID
2016	074-16	Jackson	Positive Dental ID

2016	073-16	Jackson	Positive Medical ID
2016	072-16	Newaygo	Positive Medical ID
2016	071-16	Ingham	Positive Medical ID
2016	070-16	Ingham	Trauma Analysis
2016	068-16	Genesee	Positive Medical ID
2016	066-16	Presque Isle	Human vs. Non-Human Identification
2016	065-16	Genesee	Positive Medical ID
2016	037-16	Ingham	Positive Medical ID
2016	030-16	Gratiot	Positive Medical ID
2016	013-16	Barry	Positive Medical ID
2015	039-15	Ingham	Positive Medical ID
2015	028-15	Ingham	Positive Medical ID
2015	016-15	Gratiot	Positive Medical ID
2015	001-15	Jackson	Positive Dental ID
2014	035-14	Kalamazoo	Trauma Analysis

AWARDS AND HONORS

- 2020 Graduate School Dissertation Completion Fellowship, Michigan State University (\$7000)
- 2020 Forensic Science Foundation Student Travel Grant (\$1500)
- 2018 College of Social Science Research Scholars Award, Michigan State University (\$2129)
- 2017 Kenneth E. Corey Research Enrichment Award, Michigan State University (\$2,082)
- 2015 Graduate Research Fellowship (GRFP), National Science Foundation (\$34,000/year)
- 2014 Ellis R. Kerley Paper Award, Ellis R. Kerley Forensic Sciences Foundation
- 2014 Rasmussen Graduate Fellowship Award, Michigan State University (\$5,000)
- 2014 Grand Prize, Michigan State University Undergraduate Research and Arts Forum (\$500)

INVITED PRESENTATIONS

- 2019 The science of broken bones. Presented at the Indiana Medical History Museum Forensic Science Lecture Series; October 16, 2019; Indianapolis, IN.
- 2019 Experimental approaches to the interpretation of blunt force cranial fracture. Presented at the Minnesota Coroner's and Medical Examiners' Association 36th Annual Forensic Science Seminar; October 3-4, 2019; Minneapolis, MN.

CONFERENCE PRESENTATIONS

- 2020 Application of fractography in trauma analysis of complex long bone fractures. Isa MI, Fenton TW, Antonelli A, Vaughan PE, Wei F. Presented at the American Academy of Forensic Sciences 72nd Annual Scientific Meeting; February 17-21, 2020; Anaheim, CA.
- 2020 Collaborative approaches in the identification of transgender and gender variant decedents. Michael AR, Isa MI, Redgrave A, Redgrave LB. Poster presented at the American Academy of Forensic Sciences 72nd Annual Scientific Meeting; February 17-21, 2020; Anaheim, CA.

- 2019 A decade of experimental research on blunt force cranial fracture. Fenton TW, **Isa MI**. Presented at the American Association of Anatomists Annual Meeting at Experimental Biology; April 6-9, 2019; Orlando, FL.
- 2019 Experimental investigation of blunt force fracture in the human mandible. **Isa MI**, Fenton TW, Goots AC, Wei F, Haut RC. Presented at the American Academy of Forensic Sciences 71st Annual Scientific Meeting; February 18-23, 2019; Baltimore, MD.
- 2018 Blunt force experiments in the human mandible. **Isa MI**, Goots AC. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 8th Annual Meeting; October 19-21, 2018; Roscommon, MI.
- 2018 Building a science of adult cranial fracture. **Isa MI**, Fenton TW. Presented at the National Institute of Justice Forensic Science Research and Development Symposium at the American Academy of Forensic Sciences 70th Annual Scientific Meeting; February 19-24, 2018; Seattle, WA.
- 2018 Initiation and propagation of fractures in blunt impacts to unconstrained human cadaver heads. **Isa MI**, Fenton TW, Goots AC, Watson EO, et al. Presented at the American Academy of Forensic Sciences 70th Annual Scientific Meeting; February 19-24, 2018; Seattle, WA.
- 2018 The influence of implement shape on fracture pattern and defect size in experimental blunt cranial impacts. Watson EO, Fenton TW, **Isa MI**, Goots AC, et al. Presented at the American Academy of Forensic Sciences 70th Annual Scientific Meeting; February 19-24, 2018; Seattle, WA.
- 2018 Estimating points of impact in multiple blunt force cranial trauma: lessons from experimental impacts. Goots AC*, **Isa MI**, Fenton TW, Watson EO, et al. Presented at the American Academy of Forensic Sciences 70th Annual Scientific Meeting; February 19-24, 2018; Seattle, WA.
- 2017 Building a science of cranial fracture part 1: fracture initiation and propagation. **Isa MI**. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 7th Annual Meeting; October 20-22, 2017; Roscommon, MI.
- 2017 Congenital anomalies as evidence of biological affinity among Maya burials in caves and rock shelters in Central Belize. Biggs JA, Michael AR, **Isa MI**. Presented at the Midwest Conference on Mesoamerican Archaeology and Ethnohistory; March 10-11, 2017; Detroit, MI.
- 2017 Concentrated 4-point bending and fracture behavior in human femora. **Isa MI**, Fenton TW, Vaughan PE, Wei F, Haut RC. Presented at the American Academy of Forensic Sciences 69th Annual Scientific Meeting; February 13-18, 2017; New Orleans, LA.
- 2016 In pursuit of butterfly fractures: 4-point bending experiments in human femora. **Isa MI**. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 6th Annual Meeting; October 28-30, 2016; Roscommon, MI.
- 2016 Understanding the Role of Contact Area in Adult Cranial Fracture Variation. **Isa MI**, Fenton TW, Vaughan PE, Haut RC. Presented at the American Academy of Forensic Sciences 68th Annual Scientific Meeting; February 22-27, 2016; Las Vegas, NV.
- 2016 Changing economic landscapes in Late Antique Tuscany: osteological analysis of burials from an abandoned workshop. Streetman EN, Vogelsberg CCM, **Isa MI**, Fenton TW, Sebastiani A. Presented at the American Association of Physical Anthropologists 85th Annual Meeting; April 13-16, 2016; Atlanta, GA.
- 2015 An Update on Cranial Impact Experiments: New Directions in Understanding Fracture Variation. **Isa MI**. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 5th Annual Meeting, September 24-27, 2015; Roscommon, MI.
- 2015 Fracture Characteristics of Fresh Human Femora Under Controlled Three-Point Bending. **Isa MI**, Fenton TW, DeLand TS, Haut RC. Presented at the American Academy of Forensic Sciences 67th Annual Scientific Meeting; February 16-21, 2015; Orlando, FL.

- 2015 Experimental and Computational Validations of the Initiation and Propagation of Cranial Fractures in the Adult Skull. Fenton TW, **Isa MI**, Vaughan PE, Haut RC. Presented at the American Academy of Forensic Sciences 67th Annual Scientific Meeting; February 16-21, 2015; Orlando, FL.
- 2014 Controlled Three-Point Bending in Fresh Human Femora. **Isa MI**. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 4th Annual Meeting; September 26-28, 2014; Roscommon, MI.
- 2014 Fracture Initiation and Propagation in Pediatric Blunt Cranial Trauma. **Isa MI**, Fenton TW, Vollner JM, Niespodziewanski ER, Deland TS, deJong J, Haut RC. Presented at the American Academy of Forensic Sciences 66th Annual Scientific Meeting; February 17-22, 2014; Seattle, WA.
- 2013 Interactive Landscapes: Exploring Movement and Exchange Across the Ritual Cavescape of Central Belize. **Isa MI**, Morton SG. Presented at the Chacmool Archaeological Conference; November 8-10, 2013; Calgary, AB, Canada.
- 2013 Cranial Fracture Initiation: Why Does It Matter? **Isa MI**. Presented at the Forests, Lakes, and Grasslands Forensic Anthropologists 3rd Annual Meeting; September 27-29, 2013; Roscommon, MI.

TEACHING EXPERIENCE

Texas Tech University Undergraduate Courses

- 2020 ANTH 3303: Forensic Anthropology
2020 ANTH 4320: Forensic Archaeology

Michigan State University Undergraduate Courses

- 2019 ANP 441: Osteology and Forensic Anthropology
2018 ISS 315: Globalization and a Cultural History of Capitalism (Teaching Assistant)
2017 ANP 270: Women and Health (online)
2016 ANP 200: Navigating Another Culture (Teaching Assistant, online)
2016 Forensic Anthropology and Human Identification Study Abroad (Lab Instructor)

LABORATORY AND FIELD EXPERIENCE

- 2018-19 **Osteologist and Field Crew**
Interconnected Mobility of People and Economy along the River Ombrone (IMPERO) Archaeological Project.
Directors: Dr. Alessandro Sebastiani (University of Buffalo) and Dr. Michelle Hobart (The Cooper Union for the Advancement of Science and Art)
- 2016-19 **Graduate Research Fellow**
Campus Archaeology Program (CAP), Michigan State University.
Directors: Dr. Lynne Goldstein (2016-2018) and Dr. Stacey Camp (2018-2019)
- 2016-17 **Laboratory Manager**
Forensic Anthropology Laboratory, Michigan State University.
Director: Dr. Todd Fenton

- 2015-19 **Osteologist**
Analysis of the human remains from the early Christian church cemetery (6th-12th century AD) of Roselle (ancient Rusellae).
Directors: Dr. Mariagrazia Celuzza (Archaeological and Art Museum of the Maremma, Grosseto, Italy) and Dr. Todd Fenton (Michigan State University)
- 2014 **Field Crew**
Belize River East Archaeological (BREA) Survey Project
Director: Dr. Eleanor Harrison-Buck (University of New Hampshire)

PROFESSIONAL AFFILIATIONS

- 2015-Present American Academy of Forensic Sciences

Last Updated 2020