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|  | **Joanna Grace Shaw**  [jgshaw2@illinois.edu](mailto:jgshaw2@illinois.edu)  +1 (423) 774-8017 |  |

Education

**PhD The University of Illinois; Urbana-Champaign**, Urbana, IL, US In Progress

* Biological Anthropology.
* The biological embodiment of work and labor on immune function and the susceptibility and response to severe infections.

**MSc The University of Glasgow**, Glasgow, Scotland, UK 2016

* Cancer Sciences. Upper Second, Merit (~3.7 GPA)
* The epigenetic regulation of stage 3 and stage 4 human bladder cancer.

**BS The University of the South**; Sewanee, TN, USA 2015

* Major in Biology, GPA 3.17 (Biology 3.33)

Minor in Anthropology (GPA 3.5)

Summary of Qualifications

* Biosafety Level 2+
* Animal Biosafety Level 1 (mice & newts)
* Aseptic technique
* Cell and tissue culture (primary & secondary)
* High throughput cell-based and biochemical assays
* Florescence polarization assay
* Time-resolved fluorescence energy transfer assay
* Cellular caspase and proliferation assay
* Flow cytometry
* DNA and RNA isolation
* Monocyte isolation from whole blood
* Confocal Microscopy
* Colony forming unit assay
* qRT-PCR, Southern blotting, and Gel electrophoresis
* Immunohistochemistry and Western blots
* Bacterial culture and rearing
* Gram stain, Acid fast stain, Endospore stain, viable plate count
* Proficient in Microsoft Office and Prism

Professional Experience

**The University of Illinois, Champaign-Urbana;** Urbana, IL, USA

2019-Present

* **Division of Research Safety** – Administrative Assistant
  + Assisted Institutional Biosafety Committee in approving research proposals and maintaining labs remain up to date on safety precautions and regulations.
  + **Contact:** Tina McGill (tmcgill@illinois.edu)
* **The Brinkworth Lab** – Graduate Research Scientist
  + Conducted research on macrophage clearance of *Yersinia pestis*. Trained, managed, and organized personnel on various BSL2 techniques and procedures.
    - Monocyte isolation, primary cell culture, confocal microscopy, colony forming unit, flow cytometry, RNA and DNA isolations, bacterial culture.
  + **Contact:** Jessica Brinkworth (jfbrinkw@illinois.edu)

**Vanderbilt University**; Nashville, TN, USA

2017-2019

* **The Fesik Lab** - Research Associate I
  + Performed routine biochemical and cellular assays to screen the effectiveness of new small-molecule drug compounds against WDR5, and epigenetic target implicated in leukogenesis and other cancers.
    - FPA, TR-Fret, tissue culture, cellular caspase and proliferation, western blotting, flow cytometry.
  + **Contact:** John Sensintaffer ([john.l.sensintaffar@vanderbilt.edu](mailto:john.l.sensintaffar@vanderbilt.edu))   
     Shaun Stauffer ([stauffs2@ccf.org](mailto:stauffs2@ccf.org))

**The University of Glasgow**, Southern General Hospital; Glasgow, Scotland, UK 2016-2017

* **The Iwata Lab** - Graduate Research Scientist
  + Proposed and conducted independent research under the guidance of Dr. Iwata. Investigated the cancer stem cell model of invasive bladder cancer and its recurrence mediated by epigenetic regulations.
  + Under the guidance of Dr. Iwata and Clare Orange, built a comprehensive tissue micro array of human bladder cancer specimens for the National Health Service of the Greater Glasgow and Clyde area.
    - Immunohistochemistry, tissue micro array construction
  + **Contact:** Tomoko Iwata ([tomoko.iwata@glasgow.ac.uk](mailto:tomoko.iwata@glasgow.ac.uk))

**The University of the South**; Sewanee, TN, USA

2013-2015

* **Department of Biology** - Lab Assistant
  + Performed basic laboratory tasks including inventory, preparation, and maintenance of lab materials at both BSL1 and BSL2 safety levels.
    - Tissue culture, bacterial culture, RNA and DNA isolation
  + Cared for research newts and mice
    - Animal Biosafety Level 1
  + **Contact:** Kataren J. Ray ([kjjohnso@sewanee.edu](mailto:kjjohnso@sewanee.edu))

Teaching Experience

**Teaching Assistant**

* The University of Illinois, Urbana-Champaign; Urbana, Illinois, USA
  + **2022:** Anthropology 240: Biological Anthropology
  + **2021:** Anthropology 101: Introduction to Anthropology

Anthropology 143: Biology of Human Behavior

* + **2020:** Anthropology 103: Anthropology in a changing World

Anthropology 246: Forensic Anthropology

* + **2019**: Anthropology 143: Biology of Human Behavior.
* The University of the South; Sewanee, TN, USA
* **2014-2015**: Biology 233: Intermediate and Molecular Cell Biology (Lab)

**Curriculum Building**

* The University of Illinois, Urbana-Champaign; Urbana, Illinois, USA
  + **2020-2021**: Updated curriculum of Anthropology 143 for fall semester of 2020 & 2021.
    - **Contact**: (jelinek@illinois.edu)

**Guest Lectures**

* **October 2020** – The University of the South; Sewanee, TN, USA
  + Lecture on bioanthropology and human immune evolution for Dr. Celeste Ray’s ([cray@sewanee.edu](mailto:cray@sewanee.edu)) World Prehistory class.
* **September 2018** - The University of the South; Sewanee, TN, USA
  + Lecture on bioanthropology and paleoepidemiology for Dr. Celeste Ray’s ([cray@sewanee.edu](mailto:cray@sewanee.edu)) World Prehistory class.

Leadership Experience

* + **2021-Present** – LEAD Mentorship Program – Graduate Mentor
  + **2021-Present –** Graduate Anthropology Student Association – Treasurer & Biological Anthropology Representative
  + **2021-Present –** Association of Biological Anthropologists – Treasurer
  + **2021-Present** – Colloquia and Intellectual Community Committee for Anthropology
  + **2020** – Labor Health Equity Action Project – Volunteer Coordinator
  + **2016 –** Glasgow Student Dance Company – Competition Coordinator and Choreographer
  + **2015-2016 –** Glasgow University Cancer Sciences Student Advisory Board
  + **2010-2011** – Sewanee Perpetual Motion – President and Choreographer
  + **2010-2011 –** Alpha Delta Theta Sorority - Alumna Chair
  + **2009-2010 –** Sewanee Perpetual Motion - Media and Publicity Chair and Choreographer
  + **2009-2010 –** Alpha Delta Theta Sorority - Rush Chair

Academic Conferences, Presentations, & Impact

**Poster Presentation**

* **March 2022** – The American Association of Biological Anthropologists; Denver, Colorado, USA
  + Human immune variation and the future of sepsis management: Proposal of a non-infectious autoimmune phenotype
* **April 2016** – The University of Glasgow/NHS Education for Scotland Conference; Glasgow, Scotland, UK
  + Early diagnosis of pancreatic cancer through screening methods using viral nanoparticles
* **April 2011 –** The University of the South; Sewanee, Tennessee, USA
  + Examination of the validity of the “5 Second Rule”

**Panelist**

* **October 2021** – The University of Illinois, Urbana-Champaign; Urbana, Illinois, USA
  + Panel for Navigating Mentorship Relationships in Graduate School (Contact: Dr. Kathryn Clancy, [kclancy@illinois.edu](mailto:kclancy@illinois.edu))
* **June 2021** – Clustermarket Ltd., London**,** UK
  + Panel on Normalizing Mental Health in the Scientific World (Contact: Hanne Linden, [hlinden@clustermarket.com](mailto:hlinden@clustermarket.com))
* **August 2020** – The University of Illinois, Urbana-Champaign; Urbana, IL, USA
  + Panel for Creating an Inclusive Classroom (Contact: Ross Wantland, [wantland@illinois.edu](mailto:wantland@illinois.edu))

**Impact**

* **December 2020** – The News Gazette, Champaign, IL, USA
  + Article on the impacts of the Labor Health Equity Action Project (LHEAP) that I was an active participant and organizer of.
    - Gilberto, R. (2020, December 8). Town Hall | Pandemic exposing public-health inequities right here at home. *The News Gazette*.

Honors & Awards

**Honors**

* **Order of the Gownsmen** (2013): Society for academic excellence that works in parallel with the student government for the University of the South.
* **Sigma Alpha Pi - National Society of Leadership and Success** (2013): Society that recognizes students that display outstanding achievements and leadership skills in professional and vocational education institutions in the United States.

**Awards**

* **Outstanding Teaching Award for Teaching Assistants** (2020): Awarded by the department of Anthropology at UIUC for performance in teaching Biology 143: Biology of Human Behavior.

**Scholarships**

* **Saltire ­**- $4000 (2015): Awarded by the Scottish government in collaboration with Scottish universities to scholars with promise to become influential leaders and innovators in their future careers in the areas of science, technology, creative industries, healthcare and medical sciences, or renewable and clean energy.
* **Pearl of Promise, Nautilus Award** - $2000 (2011): Awarded by the Chattanooga Chamber of Commerce to a woman in high school with a strong aptitude in math and sciences in a typically male-dominated field.
* **Tennessee Hope** - $16000 (2011): Merit based scholarship awarded to high school graduates with high academic achievement to continue their studies at Tennessee universities and colleges.

Publications

* Brinkworth J, **Shaw JG**. *On race, human variation, and who gets and dies of sepsis.* Yearbook of Biological Anthropology. 2022; In review.
* Guarnaccia AD, Rose KL, Wang J, Zhao B, Wang CE, Geurazzi K, Hill Salisha, Woodley CM, Hansen TJ, Lorey SL, **Shaw JG**, Payne WG, Weissmiller AM, Olejniczak ET, Fesik S, Lui Q, Tansey WP. *Impact of WIN site inhibitor on the WDR5 interactome.* Cell Press. 2021; 34(3): 108636.
* Chacon-Simon S, Wang F, Thomas L, Phan J, Zhao B, Olejniczak E, Macdonal J, **Shaw JG**, Schlund C, Payne W, Creighton J, Stauffer S, Waterson A, Tansey W, Fesik S. *Discovery of WD Repeat-Containing Protein 5 (WDR5)-MYC inhibitors using fragment-based methods and structure-based design.* Journal of Medicinal Chemistry. 2020; 63(8):4315–4333.
* Tian J, Teuscher K, Aho ER, Avarado J, Mills J, Meyers K, Gogliotti R, Han C, Macdonald J, Sai J, **Shaw J**, Sensintaffer J, Zhao B, Rietz T, Thomas L, Payne W, Moore W, Scott G, Kondo J, Inoue M, Coffey R, Tansey W, Stauffer S, Lee T, Fesik S. *Discovery and Structure-Based Optimization of Potent and Selective WD repeat domain 5 (WDR5) Inhibitors Containing a Dihydroisoquinolinone Bicyclic Core*. Journal of Medicinal Chemistry. 2020; 63(2):656-675.
* Macdonald J, Chacón-Simon S, Han C, Wang F, **Shaw JG**, Howes JE, Sai J, Yuh J, Camper D, Alicie BM, Alvarado J, Nikhar S, Payne W, Aho ER, Bauer JA, Zhao B, Phan J, Thomas L, Rossanese OW, Tansey W, Waterson AG, Stauffer S, Fesik S. 2019. *Discovery and optimization of salicylic acid-derived sulfonamide inhibitors of the WDR5:MYC protein-protein interaction*. Journal of Medicinal Chemistry. 2019; 62(24):11232-11259
* Aho ER, Wang J, Gogliotti RD, Howard GC, Phan J, Acharya P, Macdonald JD, Cheng K, Lorey SL, Lu B, Wenzel SA, Loshake AM, Alvarado J, Wang F, **Shaw JG**, Zhao B, Weissmiller AM, Thomas LR, Vakoc CR, Hall M, Hiebert SW, Liu Q, Stauffer SR, Fesik SW, Tansey WP. 2018. *Displacement of WDR5 from Chromatin by a Pharmacological WIN Site Inhibitor with Picomolar Affinity*. Cell Press. 2019; 26(11):2916-2928.
* Wang F, Jeon K, Salovich JM, Macdonald JD, Alvarado J, Gogliotti RD, Phan J, Olejniczak ET, Sun Q, Wang S, Camper D, Yuh JP, **Shaw JG**, Sai J, Rossanese OW, Tansey WP, Stauffer SR, Fesik SW. 2018. *Discovery of Potent 2-Aryl-6,7-dihydro-5H-pyrrolo[1,2-a]imidazoles as WDR5-WIN-Site Inhibitors Using Fragment-Based Methods and Structure-Based Design*. Journal of Medicinal Chemistry. 2018; 61(13):5623-5642.

Volunteer Experience and Leadership

**Volunteer**

* Labor Health Equity Action Project in Rantoul, Illinois (2020)
* Pick-up for Pints community litter and recycling program in Nashville, TN (2018-2019)
* USA Climbing: Collegiate National Championship in Murfreesboro, TN (2019)
* Gay Men’s Health Crisis of NYC (2014)
* Animal Harbor Animal Shelter in Winchester, TN (2013-2015)