

Alexandra M. Niclou

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EDUCATION

May 2019-Present

Ph.D. candidate, Biological Anthropology, **University of Notre Dame**, Notre Dame IN

- Advisor: Dr. Cara Ocobock

August 2017-May 2019 (*transferred to Notre Dame*)

Ph.D. student, Biological Anthropology, **University at Albany (SUNY)**, Albany NY

- Advisor: Dr. Cara Ocobock

May 2017

M.S., Biomedical Anthropology, **Binghamton University**, Binghamton NY

- Advisor: Dr. Gary James

May 2015

B.A., Biochemistry and Molecular Biology, **Clark University**, Worcester MA

- Dean's List Honors Fall 2014 and Spring 2015

PUBLICATIONS

Bilal Ahmed, Pranava Ganesh, Michele Traverse, Gina M. Piekarski, Krista A. Mauro, **Alexandra M. Niclou**, and Alon Yarkoni. Portable versus Fluoroscopic Imaging during Transcatheter Aortic Valve Replacement. *Journal of Structural Heart Disease*. 2019 5(2): 25-37.

Bilal Ahmed, Pranava Ganesh, Michele Traverse, Gina M. Piekarski, Krista A. Mauro, **Alexandra M. Niclou**, and Alon Yarkoni. Portable versus Fluoroscopic Imaging during Transcatheter Aortic Valve Replacement. *Journal of the American College of Cardiology: Cardiovascular Interventions*. 2019 12:4 Supplements S 52.

Alexandra M. Niclou, James GD, and Bovbjerg DH. The Pattern of Circadian Ambulatory Blood Pressure and Heart Rate is Reproducible over Three Months in Women Employed in Sedentary Office Jobs. *American Journal of Human Biology*. 2018 30(5).

PUBLICATIONS IN PREPARATION

Alexandra M. Niclou and Cara Ocobock. Seasonality Differences in BAT Activity and its Effects on Metabolic Rate. 2020 (in preparation for *Am J Hum Bio*).

Cara Ocobock, Sarah Lacy, and **Alexandra Niclou**. Between a Rock and a Cold Place: Neanderthal Biocultural Cold Adaptations. 2020 (in preparation for *Evol Anthropol*).

GRANTS

- 2020** Thermogenesis and energetic costs in humans. **National Science Foundation Dissertation Research Improvement Grant.** PI: Alexandra Niclou Co-PIs: Cara Ocobock & Michaela Howells. (\$26,476). *Awarded.*
- 2020** GSU Conference Grant Proposal. **Graduate Student Union Conference Presentation Grant.** (\$350). *Awarded.*
- 2020** Cold adaptation in a tropical sample? Measuring the metabolic cost of BAT thermogenesis and its association with blood glucose in Samoa. **The Wenner-Gren Foundation.** (\$15,678). *Pending.*
- 2020** Cold adaptation in a tropical sample? Measuring the metabolic cost of BAT thermogenesis and its association with blood glucose in Samoa. **The Explorers Club – Mamont Scholars Grant.** (\$2,700). *Pending.*
- 2020** Cold adaptation in a tropical population? Measuring Brown Adipose Tissue metabolic activity and glucose disposal capacities in Samoa. **The Leakey Foundation.** (\$13,205). *Pending.*
- 2020** Measuring Brown Adipose Tissue metabolic activity and glucose disposal capacities in Samoa. **Graduate Women in Science Fellowship application.** (\$9,996). *Pending.*
- 2019** Measuring variation and metabolic cost of BAT in Samoa. **University of Notre Dame Graduate Student Research Award.** (\$3,648). *Awarded.*

PROFESSIONAL PRESENTATIONS

- Alexandra Niclou** and Cara Ocobock. *Cold adaptations in the tropics? Evidence for undertaking a study on BAT activity in Polynesian samples.* Accepted to the 89th Annual Meeting of the American Association of Physical Anthropologists, April 15-18, 2020, Los Angeles CA. (Poster) (*cancelled due to COVID-19*)
- Alexandra Niclou** and Cara Ocobock. *Seasonal patterns of BAT activity imply metabolic buffering and role in human cold adaptation.* Accepted to the 45th Annual Meeting of the Human Biology Association, April 15-17, 2020, Los Angeles CA. (Poster) (*cancelled due to COVID-19*)
- Alexandra Niclou** and Cara Ocobock. *Seasonal patterns of BAT activity imply energetic buffering and greater metabolism of carbohydrates associated with human cold acclimatization.* Presented at the 3rd College of Science and Engineering Joint Annual Meeting at the University at Notre Dame, November 15, 2019, Notre Dame IN. (Podium Talk)
- Alexandra Niclou** and Cara Ocobock. *Variability in activation rates and energy expenditure of brown adipose tissue in a diverse population.* Presented at the 44th Annual Meeting of the Human Biology Association, March 27-28, 2019, Cleveland OH. (Poster)

Cara Ocobock and **Alexandra Niclou**. *Neanderthal thermoregulation: old ideas and new*. Presented at the 88th Annual Meeting of the American Association of Physical Anthropologists, March 27-30, 2019, Cleveland OH. (Poster)

Bilal Ahmed, Pranava Ganesh, Michele Traverse, Gina M. Piekarski, Krista A. Mauro, **Alexandra M. Niclou**, and Alon Yarkoni. *Portable versus Fluoroscopic Imaging during Transcatheter Aortic Valve Replacement*. Presented at the Cardiovascular Research Technologies Meeting, March 2-5, 2019, Washington DC. (Poster)

A.M. Niclou and G.D. James. *The pattern of circadian ambulatory blood pressure and heart rate is reproducible over three months in women employed in sedentary office jobs*. Presented at the 42nd Annual Meeting of the Human Biology Association, April 19-20, 2017, New Orleans LA. (Poster)

A.M. Niclou and G.D. James. *The pattern of circadian ambulatory blood pressure and heart rate is reproducible over three months in women employed in sedentary office jobs*. Presented at the 10th Annual Binghamton Biomedical Research Conference, April 1, 2017, Binghamton NY. (Poster)

Alexandra Niclou, Yingjiao Wang, and Heather Wiatrowski. *Cloning of glutathione and mercuric reductase genes from *Xanthobacter autotrophicus* PY2*. Presented at **Academic Spree Day**, April 23, 2014, Clark University, Worcester MA. (Poster)

ACADEMIC POSITIONS

Spring 2020

Instructor of Record, BIOS 40340 Human Anatomy, University of Notre Dame

- Supervision of the osteon and corpus lab and exam sections
- Dissection of human corpus for in-person and online teaching purposes
- Recording of osteon and corpus labs for online teaching and exam making

Fall 2019

Teaching Assistant, AANT 10110 Mysteries of the Past, University of Notre Dame

- Holding office hours for student advising
- Occasionally lecturing course
- Exam grading

Spring 2018 and Spring 2019

Teaching Assistant, AANT 317 Exercise Physiology, University at Albany

- Supervision of the lab section
- Holding office hours for student advising
- Occasionally lecturing course
- Exam grading

Fall 2017 and 2018

Teaching Assistant, AANT 304 Human Biomechanics, University at Albany

- Supervision of the lab section

- Holding office hours for student advising
- Occasionally lecturing course
- Exam grading

RESEARCH EXPERIENCE

May 2018-May 2019

Graduate Research, Dr. Cara Ocobock, Advisor, University at Albany

- Goal: Determine the effects of seasonality on brown adipose tissue in a temperate-climate population
- Measuring metabolic rates using a breath-by-breath metabolic unit
- Measuring brown fat activity using cooling suit and thermal camera
- Measuring body composition using skinfold calipers and BIA
- Principal investigator overseeing 8 undergraduate research assistants
- Data analysis using statistical programming language R

January 2016-May 2017

Graduate Research, Dr. Gary D. James, Supervisor, Binghamton University

- Goal: Evaluate reproducibility of ambulatory blood pressure and heart rate variability over 3 months
- Data coding and analysis using SPSS
- Manuscript preparation

January 2016

Field Research, Field Projects International, Los Amigos Biological Station, Peru

- Course on conservation field biology in the Amazonian rainforest
- Participated in primate follows, primate behavioral studies and bird mistnettings
- Learned basic field biology skills such as the use of GPS and telemetry

January 2014-May 2014

Research Assistant, Dr. H. Wiatrowski Laboratory, Clark University

- Assisted PhD student with work on mercury toxicity to soil bacteria
- Trained in performing centrifugation, electrophoresis, PCR, DNA extraction

STUDENTS MENTORED

May 2018-May 2019

Principal Investigator, Undergraduate Student Mentoring, University at Albany

- Trained undergraduate research assistants
- Training in data collection using thermal imaging camera
- Training in data processing
- Mentored undergraduate research assistants: Charles Barranco, Kelsey Briddell, Michelle Chen, Ali Harney, Volodymyr Myshchuk, Anthony Savasta, Samantha Shaiman, Gracelyn Young

INTERNSHIPS AND VOLUNTEERING

June 2016-December 2016

Biomed Internship, UHS Hospitals, Inc., Cardiology Department, Johnson City, NY

- Data sampling and analysis using SPSS
- Project lead by Alon Yarkoni, MD. Goal: To evaluate relation between transcatheter aortic valve replacement (TAVR) procedure and effective recovery in high-risk patients

June-July 2014

Medical Volunteer, Aide au Développement de la Santé Luxembourg, Vientiane, Laos PDR

- Shadowed Prof. Schneider's (MD/PhD) team of cardiac surgeons during interventions on children and infants with severe cardiac deformities at the Mahosot Hospital, Laos
- Learned basic electrocardiography (ECG) procedures
- Observed process of anesthesia, open heart surgery, valve fixing/replacement and reanimation of patient

AWARDS

February 2018

Recipient, Group Exercise Employee of the Month, University at Albany Recreation Center

- Awarded for outstanding communication skills with employer and gym patrons

April 2015

Recipient, Academic All-Conference Student Athlete, NEWMAC

- Awarded for high GPA standards and outstanding athletic performance during the 2015 rowing season

July 2011

Recipient, Henry J. Leir Luxembourg Award, Clark University

- First high school student from the Grand-Duchy of Luxembourg to join Clark University for full 4-year curriculum (\$1,500)

WORK EXPERIENCE

August 2017-May 2018

Group Exercise Instructor, University at Albany Recreation Center, Albany NY

May 2016-May 2017

Group Fitness Instructor, Binghamton University Recreation Center, Binghamton NY

MEMBERSHIPS, CERTIFICATIONS, AND LANGUAGES

- Member of the Human Biology Association (HBA)
- Member of the American Association of Physical Anthropologists (AAPA)

- Member of the American Association for the Advancement of Science (AAAS)
- Member of Capital Science NY
- Certified Online Course Instructor by the Notre Dame Learning's Kaneb Center
- Captain of the Clark Women's Varsity Rowing Team (**July 2013-May 2015**)
- Infant/Child/Adult CPR/AED certification (**April 2016**)
- Native Languages: French, German, Luxembourgish