## Principals Teaching Award Interim Report Project Title: Art-Beat: Art and Anatomy Edinburgh

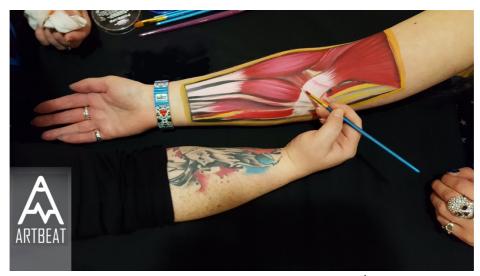
Principal Investigator: Miss Victoria McCulloch (2017 – Present), Dr Nichola Robertson (2015 – 2017)

School/ Department: Anatomy, Biomedical Teaching Organisation, College of Medicine and Veterinary Medicine, University of Edinburgh

Team members: Mrs Kimmie Dunlop, Founder (Non- University team member), Professor Gordon Findlater (Emeritus Professor of Translational Anatomy).

Art and Anatomy Edinburgh were awarded a PTAS grant in March 2015 with the ambition and aims to aid Medical students understanding of Human Anatomy through arts-based methods. Over the past four years we have built up an excellent reputation, not only with the Medical students at the University of Edinburgh, but with new colleagues from around the University and wider afield in Edinburgh, Midlothian, London and our work has even reached Canada!

We have created and run clinically oriented anatomy workshops for Medical students, collaborating with clinicians to bridge the gap in anatomy teaching between pre-clinical and clinical years, thus complimenting the Medical curriculum. Alongside workshops for Medical students we have run numerous public engagement events for all ages. Our main method of teaching has been body painting, using the surface anatomy to identify the underlying musculature and skeletal components, an excellent way to aid Medical students gain an appreciation for the anatomy and to aid the public's understanding of the human body. Over the four years we have expanded our artistic materials to now include clay modelling and drawing in a variety of ways to aid the students learning and to provide them with transferrable skills between practising art and clinical practice.



Medesthai STEAM Education Award 2017, London, 3<sup>rd</sup> November 2017

Through our workshops for Medical students, we found that the students thoroughly enjoyed the mix of using art to revise their anatomy whilst learning the clinical relevance of the anatomy from clinicians. The use of art creates a relaxed environment, allowing for optimum

learning with students commenting that they felt relaxed and found learning more enjoyable in an interactive environment. As our workshops were such a success we started to run public engagement events, which just like the workshops created a relaxed and creative environment for the public to learn about their own anatomy.



Festival of Creative Learning 2018, Art-Beat Presents Clay Hearts, 20th February 2018

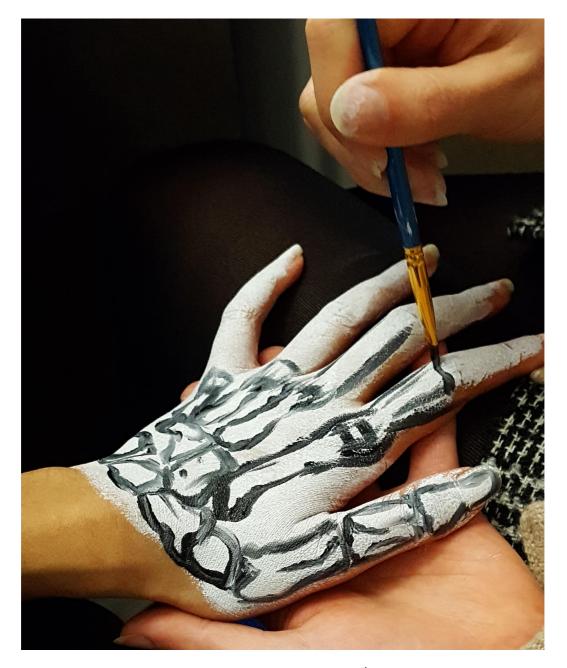
In 2018 we decided to bring Medical students and Art students from Edinburgh College of Art together to form a group of Art-Beat student volunteers. We believed this would be an excellent way for the students to get involved in the project, allow for them to gain teaching experience through teaching fellow students or the public the anatomy, equipping the Medical students with transferrable skills for clinical practice, and enhancing their communication skills. This also gave the Art students the chance to learn more about the human body, whilst bringing an artistic element to our events. We believe that creating a group of student volunteers, running successful events and building up an excellent reputation within and out with the University, we have created a sustainable project which bridges the gap between Art and Anatomy.

The initial project outcomes have been presented locally within the University of Edinburgh and Nationally at two conferences: ASME and ASGBI<sup>i,ii</sup>. The abstract from ASGBI was published in the British Journal of Surgery (Anderson M, Robertson N, Harrison E.M. & Wigmore S.J. Inspiring Future Surgeons - the Art of Anatomy)<sup>iii</sup>, with a full journal article in the process of being written for publication. Photographs of body painting were used to illustrate information in the Oxford Handbook of Clinical Specialities, 2016<sup>iv</sup>.

Other means of disseminating our findings and successes have been through the Anatomy@Edinburgh News page, the Art-Beat Twitter and Facebook page, and through our Instagram account. We are also looking at other ways to disseminate our findings from this project to enhance a wider audience's appreciation for the use of arts-based learning in Anatomy and Medicine.

The benefits to student learning are vast; transferrable skills between practicing art and clinical practice, enhanced communication skills for the student volunteers, encouraging empathy an essential element for any Medical student, creating new relationships and

collaborations between Medical and Art students, and giving the students a relaxed environment to enjoy their learning of anatomy in a fun and interactive manner.



Night at the Museum, University of Edinburgh, 15th January 2019

We believe that our project already benefits other parts of the University, working with the Medical School and the Anatomical Museum, to getting Art students from Edinburgh College of Art involved in helping at our events. We have worked with the University of Glasgow for the past two years at their public engagement events, and have worked with Medisthai in London, a company working with diversely talented individuals across three units; Education, Clinical and Enterprise, who awarded us the STEAM Education Award in 2017. We will continue to grow our network of collaborators to enhance our workshops and events, and to extend our project to reach more of the University to enhance peoples understanding of the Human body through Art, and the clinical importance of knowing our own Anatomy.

### **Financial statement**

This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

### **Appendix 1 Art-Beat: Art and Anatomy Events**

#### 2015

## Art and Anatomy Edinburgh presents: Danny Quirk - Living Lectures

2nd June 2015

A large public engagement event consisting of: lectures, workshops (clay-modelling and body-painting); a live demonstration from world-renowned artist Danny Quirk; tours of the historic resident Artist's flat and a demonstration of the 'Anatomage' table.

#### 2016

#### **Art & Anatomy Edinburgh Student Course**

Session I. Abdomen Tue 22nd March & Mon 18th April 2016
Session II. Thorax Thurs 24th March & Wed 20th April 2016
Session III. Musculoskeletal Mon 4th April & Monday 25th April 2016

#### 2017

## Science Saturday at the National Museum of Scotland

18<sup>th</sup> February 2017

Body painting with children and the public

## Pint of Science 2017, Identify & Identification: Crossing the Great Divides

16th May 2017

Body painting live and interactive demonstration

### BBC Edinburgh Festival, The Human Body, University of Edinburgh joint event

15th August 2017

Body painting with children and the public

### **Anatomical Museum Doors Open Day**

23<sup>rd</sup> September 2017

Anatomical body painting with the public

### Midlothian Zombiology Night, part of Midlothian Science Festival

19th October 2017

Anatomical body painting with children

## Halloween at the Caves, University of Edinburgh

31st October 2017

Anatomical body painting with Medical students

### Medesthai STEAM Education Award 2017, London

3<sup>rd</sup> November 2017

Body painting live demonstration for Q&A as part of our acceptance of the STEAM Education Award 2017

### 2018

#### **Cardiovascular Society**

5<sup>th</sup> February 2018 Colour in hearts

### **Neurology to Neuroscience Conference, Clay brains**

10<sup>th</sup> February 2018

Clay brain modelling with student members of

### Festival of Creative Learning 2018, Art-Beat Presents Clay Hearts

20<sup>th</sup> February 2018

Clay hearts with staff and students at the University of Edinburgh

## MBChB Open Day, University of Edinburgh

6<sup>th</sup> June 2018

Body painting demonstrations for prospective students

#### Hampstead Art Fair with Medesthai, London

23<sup>rd</sup> June 2018

Body painting with the public

### Night at the Museum, University of Glasgow

27<sup>th</sup> September 2018

Body painting with the public

### Halloween at the Caves, University of Edinburgh

31st October 2018

Anatomical body painting with Medical students

### **Art-Beat & Anatomy Society Clay Brains**

1<sup>st</sup> November 2018

Clay brains with Medical students

### Trauma CASE (The Clinical Anatomy Scheme of Edinburgh)

29th November 2018

Body painting of the abdomen for trauma teaching

#### 2019

### Night at the Museum, University of Edinburgh

15th January 2019

Anatomical body painting with Year 5 Medical students

### Night at the Museum 2, University of Glasgow

### 31st January 2019

Anatomical body painting as a teaching and revision method for the public and prospective students

# AIM & Art-Beat Year 1 Medical Students Revision Workshop 1 Cardiovascular

11<sup>th</sup> February 2019

Body painting, arterial pipe cleaners and clay modelling

#### **Neurotheatre Event**

14th March 2019

Stand showing the work we do with live demonstration from Kimmie of clay modelling of the heart as an arts-based learning method.

### AIM & Art-Beat Year 1 Medical Students Revision Workshop 2 Respiration

25<sup>th</sup> March 2019

Clay lungs, body painting

# AIM & Art-Beat Year 1 Medical Students Revision Workshop 3 Locomotor

6<sup>th</sup> May 2019

Body painting, play-dough modelling

### **Body Parts event**

4<sup>th</sup> June 2019

Anatomical body painting with primary school children

### Night at the Museum 2, University of Glasgow

28th November 2019

Anatomical body painting as a teaching and revision method for the public and prospective students.

<sup>&</sup>lt;sup>1</sup> Inspiring Future Surgeons – The Art of Anatomy. Robertson N, Anderson M, Harrison E.M & Wigmore S.J. Association for the Study of Medical Education (ASME) Annual Scientific Meeting 15th-17th July 2015 Oral presentation – presenting author N Robertson

ii Inspiring Future Surgeons - The Art of Anatomy. Anderson M, Robertson N, Harrison E.M. & Wigmore S.J. International Surgical Congress of the Association of Surgeons of Great Britain and Ireland (ASGBI) 22 – 24th April 2015, Manchester. Oral presentation – presenting author M Anderson

iii Inspiring Future Surgeons - The Art of Anatomy. Anderson M, Robertson N, Harrison E.M. & Wigmore S.J. BJS 2015; 102 (S7): 9–87 (DOI 10.1002/bjs.9940)

<sup>&</sup>lt;sup>iv</sup> Oxford Handbook of Clinical Specialities, 10th ed. Baldwin, A., Hjelde, N., Goumalatsou, C., Myers, G. and Collier, J. A. B., 2016. Oxford; Oxford University Press.