

# LOS ANGELES

ITALIAN COMMUNITY

## Representing the human body - Art and science in the Italian Renaissance

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LOS ANGELES - Behind the worldly renowned Renaissance of painting, sculpture, music and architecture that developed in Italy and then spread throughout Europe, there was a parallel and less known cultural movement: a “scientific Renaissance”. The desire for knowledge characterized in those centuries is indeed at the origin of the most important discoveries in human anatomy.

In Italy, anatomy became part of the curriculum for medical schools, starting from the most ancient universities of Bologna and Padua. Here, physicians and students met to dissect and analyze bodies. It might sound a little disturbing, but it is due to the courage and curiosity of these early scientists that we now have a perfect map of the “human machine”.

This fascinating story is the subject of research by Kevin Petti, Ph.D. Professor of Anatomy and Physiology at San Diego Miramar College. “I’ve always been fascinated by the arts,” he starts telling us. “Once, at a conference, I was captivated by the images shown from medieval and Renaissance anatomy texts, and that’s how I started to investigate more about them. These images were rendered by Italian anatomists and artists”. The result is an interdisciplinary research about the human body that Professor Petti has been conducting for years, incorporating it into his courses at Miramar College and all over the U.S. through a series of lectures at universities, conferences, and Italian community groups.

“Arts and science were tightly connected in the Renaissance,” he tells us. Have you ever won-

dered why statues and paintings from that period are so accurate? It isn’t because we Italians have it in our blood; it’s because, besides scientists, also artists used to dissect and analyze human bodies. “Public dissections would see the participation not only of students, but also artists who wanted to reproduce the human body in its perfection. Also, scientists and artists worked closely during the Renaissance. Look at the ancient anatomy textbooks... the images they contain are beautiful; they not only have highly accurate reproductions of the body, but also elaborate decorations and sceneries. They are like paintings, works of art. The reason is that scientists themselves used to commission that kind of work to artists”. Everyone was looking for beauty in the Renaissance, from the scientist to the artist.

But where did the bodies come from? Since bodies quickly decompose, they had to be immediately acquired by the universities after their death. “And what’s the best way to know when a person is about to die?” Petti asks. “By knowing when they are going to be executed... And having your body given to science was part of the punishment. In fact, according to the Christian Church at that time, a body that is dismembered cannot partake in the Resurrection. Some people would also hang around hospitals trying to find available cadavers, but that was more for private research, like for example Michelangelo or Leonardo would do. But most of the bodies belonged to executed prisoners.”

As the practice of dissection for the study of human anatomy grew beyond Italy, the demand

for bodies became very high, and there are traces of a sort of *black market*. The dark side of this bright cultural phase saw the increase of criminals looking for poor people to kill, in order to sell their bodies to researchers. In the 19th century, London experi-

of bodies is still influenced by cultural and religious boundaries. “For most of the world’s great religions the body is God’s greatest creation,” explains Petti, “and so the idea to dismember it still creates issues.” But working on real bodies is fundamental, not to

dark sides, the story of human anatomy as a formalized science began in Italy during the Renaissance. “The places where these early scientists operated are still there, you can actually go visit them!” says Dr Petti. But not many people are aware of this. This is why, together with Exclusively Italian owner Laura Bianconcini, Kevin Petti has managed to converge his research into a tour of Italy focused on venues in the cultural history of anatomy. First experienced by him in 2009, the project was repeated in 2012 as *Anatomia Italiana*, involving professors and scholars from the U.S. and Canada. Many of them transformed the experience into lectures or university courses. Petti will be taking another group in the summer 2013.

“Being in those places in Padua, where William Harvey studied the circulation of blood and functioning of the heart, or at Galileo’s podium, where he used to lecture or to stand at the spot Leonardo dissected, it’s very moving and compelling. And the incredible thing is that not many people go there, not many know about all this...”

Which is why Dr. Petti and Bianconcini are working on developing deeper relationships with Italy, with the intent to plan future exchanges and make Dr. Petti’s *Anatomia Italiana* a recurring occasion that will involve not only scholars, but also students and people willing to learn more about this. In the meantime, Kevin Petti will be at the IIC in Los Angeles for a lecture next March 21st, to present his “scientific Renaissance”. He will highlight historic dissections theatres, and museums filled with amazingly accurate anatomical wax models that were used for medical education centuries ago. He will display beautiful anatomical renderings from the Renaissance. He will connect art and science, and maintain that this could only occur in the milieu of the Italian Peninsula.

More info at [www.AnatomiaItaliana.com](http://www.AnatomiaItaliana.com)



Kevin Petti, Ph.D. Professor of Anatomy and Physiology at San Diego Miramar College

enced a series of murders for this purpose. Baltimore, Philadelphia and New York became known for the Resurrectionists, who used to unbury cadavers for the same purpose. Although grave robbing did occur in Italy, it did not attain such a level of criminality.

Even if human dissection was legally conducted at the Italian universities, the practice was only partially accepted by the society of that time. Dissections, in fact, were often performed during Carnival. That time of year was cold enough to make a body last longer, and the cultural atmosphere of the festivity permitted transgression.

We are now in the 21st century, and scientific research has different rules. And yet, the dissection

discover something new – as every component of the human body has been discovered already-, but because students need to work on them before working on their future patients.

“Today’s donors are people who are at the end of their life” Petti says. “They are often approached by universities and are asked if they want to donate their body to science. It’s like donating your organs. Patients have to be totally conscious and aware of their decision. In my lab,” he continues, “students are allowed to dissect bodies, and at the end of each semester we have a function to commemorate the donor, as a sign of respect for that person and for their generous gift of body donation.”

Among discoveries, beauty and