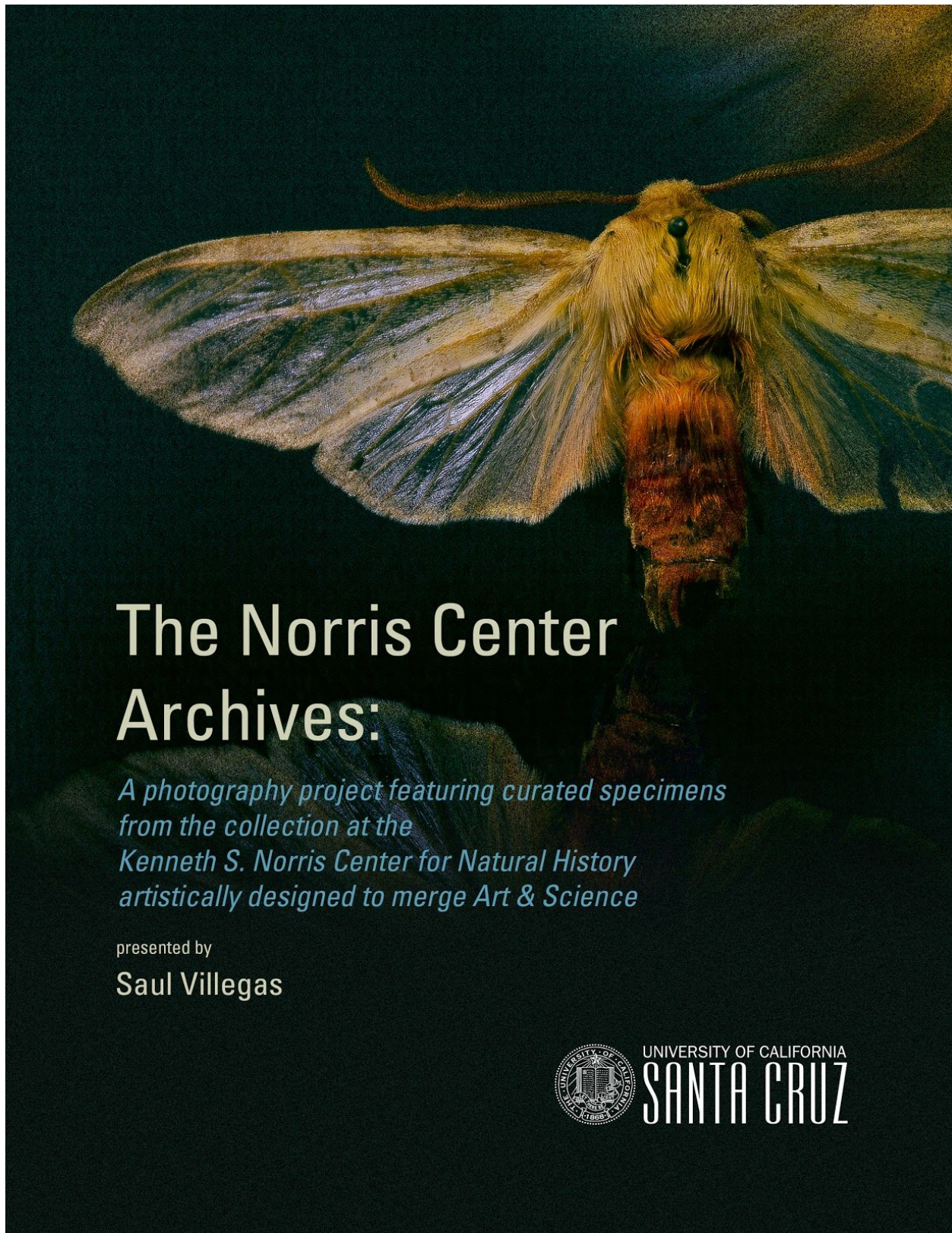




# The Norris Center Archives:

*A photography project featuring curated specimens  
from the collection at the  
Kenneth S. Norris Center for Natural History  
artistically designed to merge Art & Science*

presented by

**Saul Villegas**



UNIVERSITY OF CALIFORNIA  
**SANTA CRUZ**

**A letter from Emeritus Faculty**

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Dear Chancellors and Deans Award Committee,

I am in full support of Saul Villegas receiving this award. His research and creative efforts have been extraordinary. This work was created Winter quarter with an attention and dedication that I have not seen before in an undergraduate. In a quarter broken by strike and virus, Saul was a significant figure, often sitting alone in the digital lab designing and printing this work. Hours were spent in the creation of this imagery. There is no question that he is deserving of the highest award for his photographic project. A full letter of support will be forthcoming as needed.

Norman Locks

Professor Emeritus in Art

## Abstract

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Introducing photographs of the specimen collection from the Kenneth S. Norris Center for Natural History to the UCSC campus in an artistic way channels creativity through themes in Art and Natural Science. *The Norris Center Archives* project centers around highlighting specimens in a visually stimulating way. Using the principles and elements of design, the subjects photographed will be viewed in an exciting contemporary digitized style. In producing this work, the intersectionality of these subjects aimed for students in all majors can be beneficial to the university, its libraries, and collections. Encouraging experimental academic growth and discovery, propelling the arts and sciences as a collective.

Having a collection of specimens from birds, reptiles, moths, and bones at UCSC is a great resource for students, researchers, and instructors to have access to. Being curious as to what the Kenneth S. Norris Center for Natural History housed, began an exploration of ideas to benefit the center which led to my art research. Do collections such as the Norris Center for Natural History in its sophisticated classification system get unnoticed because of missing visual information via catalog online? Can there be a design implementation which provides students across the campus with a more in depth innovative way to view the collection, while also serving as an extension to the centers' physical location by extending into the virtual environment? The Public Library of Science<sup>1</sup> explains, "institutions began to computerize their specimen catalogs, primarily to improve collection management and then later to increase the visibility of collections to potential users." As an undergraduate student majoring in art here at UCSC, I am interested in producing photographs that investigate blurring the boundaries of art and science.

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<sup>1</sup> David E. Schindel and Joseph A. Cook, "The next Generation of Natural History Collections," PLOS Biology (Public Library of Science), <https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.2006125>.

My vision for the *Norris Center Archives* project is to introduce the audience to the specimen collection by using dynamic digital filters to edit the photographs. By doing so, I engage the viewer with a dialogue through a fictional context of capturing the specimens' physical objectivity in their environment and utilizing art methods to shift the viewer's perception. Challenging the notion of how we see these specimens in alternative angles from that of scientific illustration creates an opportunity to view them as art instead of taxidermied objects. An important factor in this series was to photograph and design with different lighting situations to make the specimens appear as alive versus dead. I became interested in STEAM (Science, Technology, Engineering, the Arts, Mathematics) last quarter while working on a project that introduced science themes produced artistically to convey a scientific concept. US National Library of Medicine<sup>2</sup> explains, "Manipulative visual arts such as sketching, photography, and origami have been proposed as effective cross-training for spatial intelligence." By designing this project, the concept of continuing the tradition of taxonomy and the introduction of digitized art cataloging becomes a vital way to gain perspective on our understanding of natural history while remaining creative and innovative using digital editing software—leading to a variety of new ways to conduct analysis.

The Natural Sciences Collections Association points out the "value of specimens" lie in the importance of providing a physical specimen for study as opposed to viewing through a photograph<sup>3</sup> which can be limiting. Challenging that notion, my project seeks to provide

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<sup>2</sup> Verónica A Segarra et al., "STEAM: Using the Arts to Train Well-Rounded and Creative Scientists," *Journal of microbiology & biology education* (American Society of Microbiology, April 27, 2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5969448/>.

<sup>3</sup> "NatSCA," The Importance of Natural Science Collections | Natural Sciences Collections Association, <http://natsca.org/importance-of-natural-science-collections>.

knowledge about the specimens through a digital design approach which offers a visual about the specimens, but also captures the collection in a way that is viewable in an alternative format and not susceptible to damage and missing information due to mishandling or deterioration of the physical models. These photographs are virtually accessible and not limited to the physical location of the Natural History museum. The artworks presented also provide engaging visuals that assist in drawing people into the Norris Center and provides a platform via a digital media that supports the university's website and beyond.

The process of this project began by contacting the Norris Center, allowing me to make visits to the center to become aware of the specimens and connecting with Alex Krohn, Assistant Director of Kenneth S. Norris Center for Natural History. The photography sessions started by the introduction of the functions of the center as well as the locations of the specimens to familiarize myself with them and to carry out a plan for the photographs. Throughout the Winter 2020 quarter I utilized the opportunity to engage in research about scientific illustration and its connection to the arts by experimenting in the ways the specimens were to be photographed. Finding other artists such as Rosamond Purcell<sup>4</sup> through research suggested by Krohn enabled me to have more freedom with the project as well as allowing myself the opportunity to cultivate ideas throughout its development. Using Purcell's work and legitimacy in the science community, I began to understand that the role as an artist interpreting scientific data can be credible and understood. A colorimetry field guide<sup>5</sup> was used in reference to understanding principles and elements of light which will be later introduced in the subsequent photographs

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<sup>4</sup> <https://news.harvard.edu/gazette/story/2018/04/zoology-through-the-artists-lens/>.

<sup>5</sup> R.W. G. Hunt and M.R. Pointer, *Measuring Colour* (John Wiley & Sons, Ltd, 2011), 10-190.



comparisons. Understanding the science of color assists in navigating our field of vision and our interpretation of imagery presented.

The *Project Development in Photography* course originally taught by Kathleen Perry Dyer, superseded by emeritus faculty Norman Locks (who took over in Winter quarter in Dyer's absence) was essential in the metamorphosis of the imagery series through critiques and further image manipulation. That is why the *Norris Center Archives* project is displayed as a dual presentation; one being representational of the natural history traditional angle of photographed specimens, and the other being a whimsical zoetrope style adaptation of them.

When asked about the reason why I chose to express an interest in this project and the methods used to execute it, I reply with this personal statement,

The idea of introducing science into art has to deal with resolving predisposed ideas of the separation between these two subjects as my own experience has encountered. As a young artist growing up in the Central Valley in California, the interest in the sciences was always one that was not encouraged through my instructors early on in my education. While navigating higher education, I've been curious to research materials that are not easily accessible to the public let alone to the greater population in rural areas. By introducing information once deemed only for academia, the vastness of information creates a dialogue with others in an appealing way to be able to become innovative in learning, and in doing so, allow others to explore areas in education they also have found missing in theirs. By adding artistic stylizations to my photography work, the inquiry of subject matter can become a beacon of inspiration for the individual who wishes to investigate art and science as a collective. In doing so, the conditioning ideologies of

public school education are challenged. By using my personal experience and utilizing this unique perspective, my aim for these artworks are to share the knowledge evident in the transition of learning traditional material and altering it to find a way to inspire and engage other artists, students, and academics. These digitally curated photographs seek to also resolve the idea of specimens enclosed in a space foreign to their nature. The ephemeral energy is captured by delineating the auras in a way that envisions the specimens individuality as found when living. By streaming this artistic energy the specimens become hyperobjects, giving them life beyond their codification. The process of analyzing information becomes individualistic and fosters wonder and discovery in the university for the student open to new experiences and challenges. My project provides a visual guide in how to achieve that inquiry through research, creativity, and self—driven exploration.

As a tier 1 research university at UCSC, it is imperative that colleges within the university intersect while presenting opportunities such as this project to engage and discover inherent possibilities of learning outside your major. The *Norris Center Archives* project serves as an expression of academia and artistry, laying the premise of creating an art conversation with the sciences. Having more resources to enhance the collection will result in more students exploring the center. Imagery intentionally designed by artists provides the viewer a never-before-seen experience which proves that artists play an important part in the processes of developing and presenting information who's access to understanding would be limited to otherwise. In my response to those previous personal experiences of felt placed limitations through hierarchical and systematic attitudes within the sciences versus the arts conversations,

*“The series of images and artist statements I create bridges appreciation for those who seek to understand their potential. In turn, educational artistic approaches become accessible to all who believe they too have the right to create their own perception of academia.”* The motto adapted by the University of California, and derived by the book of Genesis *Let there be light*<sup>6</sup> is one of my main inspirations for completing and venturing in the direction of learning and disseminating my experiences of the past and present. I seek to acknowledge and propel further interests in art research—related projects like the one presented for the near future. The Norris Center as well as the University of California, Santa Cruz, and UC systems wide will be able to utilize these carefully curated artworks for inspiration to create, while encouraging many others to challenge authority in a way that is respectable and true to their own cause.

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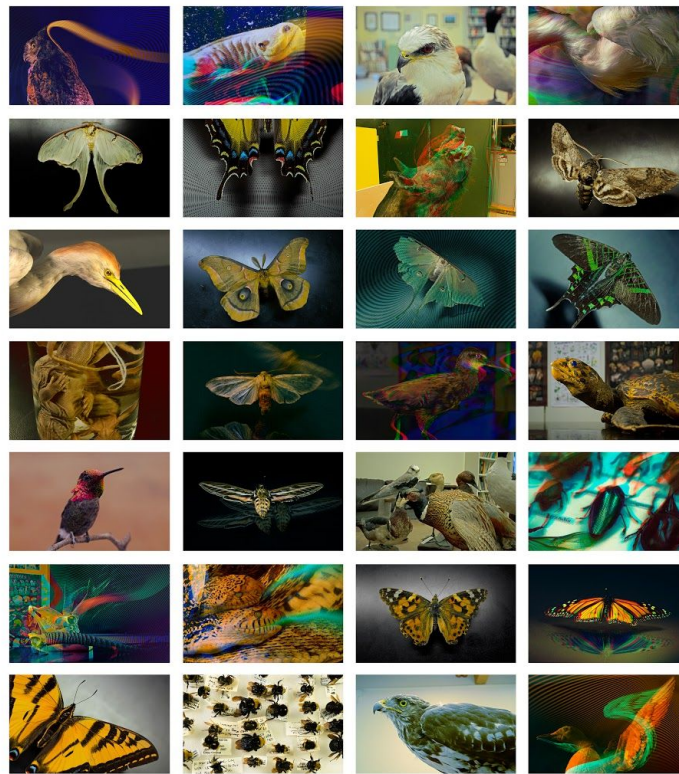
<sup>6</sup> Imagery found in my upbringing as a Catholic has inspired me through the decades to explore themes that are important to humanity. The motto *Let there be light* adapted by the UC system is the understanding of information vast in its form is available, reoccurring, and created for others in their own capacities to be able to spread the word, (or in my case) images which are a refraction of light.

<https://www.kingjamesbibleonline.org/Genesis-1-3/>.



## The Norris Center Archives

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WINTER 2020

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UNIVERSITY OF CALIFORNIA  
SANTA CRUZ

*The Norris Center Archives Index Poster*  
Digital Design  
13" x 19"  
2020



*The Norris Center Archives*

Digital Design (28 selected from curated group) fine art prints in archival photobook

13" x 19"

2020



# MODERNO

## SAUL VILLEGAS

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**College:** Porter

**Faculty Approved Sponsor:** Norman Locks

**Grade Level:** Junior

**Course:** Art 156 Project Development in Photography

**Art Portfolio:** <https://www.modernobysaulvillegas.com/>

**Research Art Project:** The Norris Center Archives

Submitted on March 29, 2020

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