**The Evergreen State College**

**Graduate Program on the Environment**

### Thesis Prospectus

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**STUDENT AGREEMENT:**

**SIGNATURE: \_Erika Larson\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_12/06/2020\_\_\_\_\_\_**

**FACULTY READER APPROVAL:**

**SIGNATURE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**MES DIRECTOR APPROVAL:**

**SIGNATURE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Provide the working title of your thesis[[1]](#endnote-1).**

Transitioning to Widespread Green Human Body Disposal

1. **In 250 words or less, summarize the key background information needed to understand your research problem and question.**

Mortuary and funerary rituals date back all the way to the back to Neandertals in the Pleistocene Epoch (2.6 million to 11,700 years ago) (L’Engle Williams, 2020). Recent studies have shown that Neandertals carried out mortuary rituals for their dead that included careful and respectful burials (Than, 2013).

Human body disposal continued to change as humans evolved making burials community-oriented and common. As settlements began to form, human bodies were stored in centralized locations within these communities until the 18th century (McRae, 2018). In the 1700s, communities began to create memorials for the deceased. (McGowan, n.d.).

It was not until the civil war that embalming became common in the United States (US) Abraham Lincoln mandated that embalming become common practice following death. This allowed the bodies of Union soldiers to be moved their homes in the North. Embalming then became a common practice among mortuaries. The chemical treatment allowed corpses to decompose and deteriorate slower so that family members and friends could travel to pay their respects (Canning & Szmigin, 2010).

In modern times, the practice of embalming remains a standard stage in preparing a body for funerals. Conservationists started to research the environmental impacts casket burial and cremation had on the land, air, water (Calderone, 2015). Green burial practices are being explored, but organizations, such as The White Eagle Nature Preserve, Moles Greenacres, Woodlawn Cemetery, and Recompose, have had difficulty launching their methods due to legal, social, cultural, and economic barriers that have been established over the past centuries in both society and the funeral industry.

1. **State your research question(s).**

What are the factors that are inhibiting the transition to widespread green human body disposal?

1. **Situate your research problem within the relevant literature. What is the theoretical and/or practical framework of your research problem?**

Green funeral methods are defined as “caring for the dead with minimal environmental impact that aids in the conservation of natural resources, reduction of carbon emissions, protection of worker health, and the restoration and/or preservation of habitat. Green burial necessitates the use of non-toxic and biodegradable materials, such as caskets, shrouds, and urns (Green Burial Council, 2020)”.

This may not seem like an urgent issue felt by people inhabiting the world right now. There is still enough land to bury the baby boomer generation (Schenka, 2017). Once the cemeteries are full, the big issue will be where will these future bodies be laid to rest. Land used to contain these bodies have become limited. Soon, cemeteries and graveyards, in developed areas, will be at maximum capacity, thus causing burials to move farther from the towns and cities, not by choice. Many urban cemeteries in large cities in the United States are running out of space. The land shortage we are experiencing brings up the question of ‘where the bodies will go in the future?’ (Schenka, 2017). This could potentially cause long commutes to bury or visit a loved one, requiring the use of vehicles and public transportation, causing a vast consumption of resources releasing chemicals into the air. The current death rate reported by the Center for Disease Control (CDC) is 867.8 deaths per 100,000 people (CDC, 2018). For one year alone that would require 17,356 square feet of land needed to accommodate 867.8 deaths per 100,000 people per year, assuming all of those people had a traditional burial.

Contamination from traditional burials is an environmental issue in many different environmental facets. Cremation and burial both use ample resources, generate toxins that get distributed in the air, soil, and can put funerary staff at risk for exposure to toxic chemicals such as formaldehyde-based chemicals. These embalming fluids are a mixture of chemicals that can contain methanol, ethanol, phenol, and glutaraldehyde (basicFunerals, 2017) which are known to be cancer causing. The embalming of one person requires a minimum of 3 gallons of the embalming solution (Martin, 2011). According to Andrew Martin from the NYTimes, the average funeral home embalms close to 150 bodies per year. Some homes even outsource the embalming process to places called “trade houses” which can embalm close to 140 bodies per month.

As I review the relevant literature, I am finding that green methods of human body disposal are discussed and evaluated, but there is no work explaining why these are not popular and easily available. The goal is to identify what factors contribute to the lack of mainstream use of green funerary practices.

1. **Explain the significance of this research problem. Why is this research important? What are the potential contributions of your work? How might your work advance scholarship?**

As the human population grows, land use is becoming a problem. Burial grounds and structures used to house bodies and cremation remains are rapidly heading towards maximum capacity, especially in urban areas (Tang, 2019). According to experts there should be enough space for the baby boomer generation, but there is no guarantee for reasonably priced burial plots close to cities of residence for their family members (Schenka, 2017). Traditional burials and cremations would need a reform of their practices. Another issue that has come to light is pollution in the air, land, and water from chemicals and resources being use in funerals. Cremation uses vast amounts of fuel to turn a body into ashes. The residue from the fuel and metal body appliances have released carbon and, metals such as mercury, into the air (Jonker & Olivier, 2012). Bodies buried in caskets are not protected from the elements forever. The caskets begin to deteriorate over time releasing minerals and toxins allowing for seepage and diffusion into surrounding soils (Jonker & Olivier, 2012).

This research will highlight the barriers green burial organizations face while trying to provide a natural and environmentally safe alternatives to cremation and traditional burial. Through this research, I want to identify which barriers (social, cultural, legal, and economic) are inhibiting green burial from going mainstream, and being one of the first options offered by funeral homes and mortuary facilities.

1. **Summarize your study design[[2]](#endnote-2). If applicable, identify the key variables in your study. What is their relationship to each other? For example, which variables are you considering as independent (explanatory) and dependent (response)?**

The design of the research is a qualitative based research approach that will involve interviews and archival data. Potential variables include age which would be my independent variable. There will be two main stages for the data portion of my research design, Data Collection and Data Analysis. To obtain the data, interviews will be conducted, and questionnaires will be sent to funeral and/or mortuary facilities that are local and not local. Majority of these interviews will take place using a program such as zoom or skype since interviews during the Covid-19 pandemic are not an option. Data also will be collected from existing literature, with the plan to use it to help reinforce my claims, as well as provide some information to filly in the gaps that my interviews may not be able to satisfy.

Once my research proposal is finalized, the surveys and interview questions will be put through a human subject review to determine if they are compiled of ethical principles to protect the rights and welfare of the human participants. Once the human subjects review board has approved my research proposal, the next stage of the design will be to start data analysis.

The analysis of the collected data will involve open coding to identify the themes and labels that are contributing to the delay in access and accessibility of green funerary methods.

For this study there will only be one iteration, multiple repetitions will not be conducted.

The timeline for this research is going to be from now to May 2021. There will be multiple phases included such as completing a literature review, writing the content for my thesis, Data collection and analysis, evaluating my research, finalizing my thesis, and finally presenting it in May 2021.

1. **Describe the data that will be the foundation of your thesis. Will you use existing data, or gather new data (or both)? Describe the process of acquiring or collecting data[[3]](#endnote-3).**

The data that will be the foundation for my thesis will be quantitative, and it will consist of new data that will be collected via interviews and questionnaires. The data collection process will be mostly based off of completing interviews with funerary and mortuary professionals using a voice recorder so that the data can be accessed after the interview and be used within context and allow for quotes to be taken out of the interviews without altering someone’s response to a question. These questions will include items such as the amount of green funerary options there are at their facility, and what the reason is if they don’t offer any options.

The data for my thesis will be obtained from formal interviews with personnel who work within the mortuary and funerary field. The desired number of interviews or surveys will be at least 25 different interviews or a combination of interviews and surveys. This way I will have enough data to create a meaningful dataset.

1. **Summarize your methods of data analysis. If applicable, discuss specific techniques that you will use to understand the relationships between variables (e.g., interview coding, cost-benefit analysis, specific statistical analyses, spatial analysis) and the steps and tools (e.g., lab equipment, software) that you will take to complete your analyses.**

For Analysis, open coding will be the main method for separating the data in order into categories and themes within the interview responses. The interview response coding will be organized in a way to determine and weigh the contributing factors defined in the thesis.

I do not need any extra tools to conduct my research. Majority of the work will be done via computer and video conferencing programs, or sending out surveys in the mail. A voice recorder is necessary, but I already have one in my possession.

1. **Address the ethical issues[[4]](#endnote-4) raised by your thesis work. Include issues such as risks to anyone involved in the research, as well as specific people or groups that might benefit from or be harmed by your thesis work, perhaps depending on your results. List any specific reviews you must complete first (e.g., Human Subjects Review or Animal Use Protocol Form).**

A Human Subjects Review (HSR) will be necessary for this research. I will conduct interviews with funerary and mortuary professionals from small businesses, organizations, and corporately run funeral homes. A questionnaire will also be developed to contact facilities not in the local area or people who do not want to participate in a formal interview. The surveys will be sent out with an official letter from me stating that I am a Graduate student working on my final thesis for the Masters of Environmental Studies Program. This letter will state the purpose of the survey, and how their results will be used in the study. Each facility sent a questionnaire will be followed up with a phone call so that there is engagement with a real human being to help reduce the detached feeling of replying to a person they have never met. There will be an included envelope complete with postage and a return address to help encourage returned responses.

Honesty, integrity, and confidentiality are required for this research. The funerary service providers will be entrusting me with potentially sensitive information. They need to know that this information will not be misused or impact them negatively now or in the future. There will be full transparency when describing the study so that all parties are aware how the information will be used allowing for full participation from the interviewer and research participants. A copy of the thesis question and interview questions will be provided for review prior to meeting for the interview.

I will conduct this research with respect, especially when discussing religious and cultural topics relating to funerary customs and rituals. Objectivity in regard to these topics will prevent bias towards the different viewpoints and opinions of the people being interviewed in the research. This is an extremely sensitive topic, there will need to be careful preparation and collaboration with the designated thesis reader.

1. **List specific research permits[[5]](#endnote-5) or permissions you need to obtain before you begin collecting data (e.g. landowner permissions, agency permits).**

No permits will be needed. Permissions to conduct interviews with mortuary staff will require approval from the business or organizations director(s). They will be informed that they can terminate the interview or withdraw their statements at any time. It will be understood that they have no obligation to participate in these interviews. All human subject’s information will be kept confidential, unless they give written consent that I can use their name or information.

1. **Reflect on how your positionality as a researcher could affect your results and how you will account for this in the research process[[6]](#endnote-6).**

I am very open minded, and science based. I genuinely want to know why these green methods aren’t mainstream and easily accessible. I grew up in a secular household, so I may have trouble grasping the religious and belief aspects of my research and data analysis. But I am hoping to have insight from other perspectives by my reader, my family, and reaching out via social media and questionnaires to non-mortuary affiliated people.

I have been to a funeral recently where my Paternal Grandma was given a very traditional funeral. She had the expensive casket, was embalmed, and was laid to rest in a cemetery in plots that her and my Grandpa bought over 35 years ago. I was not very receptive to an open casket with my grandma embalmed in it. It didn’t look like her, and I wish I wouldn’t have seen her that way for the last time. She loved gardening, so it would have made more sense, in my opinion, to return her to nature naturally, sustainably, and as herself. She was one of the type of people who avoided discussing death and dying. She didn’t even draft a will because of it. I am wanting to look into reasons why people are so apprehensive to plan out their burial plans. I am wanting to find out the thought processes behind the decisions and options being have.

I am very untraditional, so I am receptive to new possibilities especially when discussing death and funerals. Even as a little kid, I wanted to be buried with a seedling so I could turn into a tree. I’ve never been interested in having a traditional funeral, and the more I learn about the environmental effects of certain funerary methods the more I want to know why the cheaper and cleaner methods aren’t being used.

I am not currently working with an organization, but I do have interest in consulting with some other organizations in the future such as the Green Burial Council, Moles, White Eagle Natural Preserve, and even the Funeral Directors Association. I have been interested in Epidemiology and Disease Ecology. If a human doesn’t need to be buried with a casket or treated with chemicals due to disease containment, then I don’t comprehend the use of excess resources for returning someone to the Earth especially since people had been doing it for thousands of years prior without them.

1. Provide at least a rough estimate of the costs associated with conducting your research.  Provide details about each budget item so that the breakdown of the final cost is clear.

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| --- | --- | --- | --- |
| Item | Quantity | Cost | Reason |
| Voice Recorder | 1 | $0 | To record interviews |
| Paper (access to letterhead?) | 2 | $15 | Printing of the letters and questionnaires |
| Envelopes 4 1/8” x 9 ½” | 1 box of 45 | $5.00 | To send out questionnaires and letters plus return envelopes |
| Printer Ink | 1 cartridge | $50.00 | To print out the documents |
| Stamps | 2 books of 20 | $22.00 | To mail the envelopes  |
| **Total** |  | **92.00** |  |

1. **Provide a detailed working outline of your thesis.**

# Introduction

* 1. Funeral and Mortuary Services
		1. History and Background
	2. Global Warming
1. Literature Review
	1. Types of Funeral and Mortuary Services
		1. History
		2. Tradition Methods
		3. Green Methods
	2. Environmental Pollution
		1. Degradation of Air Quality
		2. Water Contamination
		3. Soil Contamination
		4. Destruction of land and habitat
	3. Why Green Methods aren’t Easily Accessible?
		1. Social
			1. Social-Status
			2. Status Quo
			3. Transition of Family’s Role
			4. Generational Values
				1. Baby Boomers (1946-1964)
				2. Generation X (1965-1980)
				3. Gen Y or Millennials (1981-1996)
				4. Generation Z (1997-2015)
		2. Legal
			1. Laws of Burial
				1. Cemetery Laws
				2. Zoning Laws
				3. Custody of the Law
				4. Requirements for Burial
			2. Funeral Directors Directives
				1. Embalming
				2. Caskets
			3. Autopsy
				1. Exhumation
		3. Economic
			1. Cost Analysis
				1. Traditional Burial

Burial Plot

Casket

Embalming

Burial

* + - * 1. Cremation

Accessories (Urn, vault, other)

* + - * 1. Green Methods

Natural burial

Cremation (pyre, open fire)

Re-Composting

Alkaline Hydrolysis

Other

* + - 1. Early burial costs vs costs today
		1. Cultural
			1. Religion and Beliefs
			2. Tradition
			3. Climate and Terrain
1. Methods
	1. Data Collection
		1. Interviews with Industry Experts
		2. Questionnaires for Industry Experts (not-local)
			1. Input from other locations in the country
		3. Polling/Questionnaire (non-funerary or mortuary people)
			1. People from all walks of life
2. Statistical Data Analysis
	1. Coding
		1. Theme and Category Identification
3. Results
	1. Factors with most impact
		1. Social
		2. Legal
		3. Economic
		4. Cultural
4. Discussion
5. Conclusion
6. **Provide a specific work plan and a timeline for each of the major tasks in the work plan. Be as realistic as you can, even though you will probably need to alter this schedule as you complete the tasks. Remember that faculty readers take time to return your drafts and that the final polishing and formatting of your thesis for binding will take longer than you ever imagined.**

November- December 2020

Drafting and Finalizing Prospectus and Literature Review

Prospectus Due: **December 6, 2020**

Prospectus Approved by Program Director: **December 11, 2020**

December 2020 - January 2021

Drafting Interview Questions and Questionnaires

 Human Subjects Review and Approval

Start Scheduling Interviews

Start parts of paper that are based on current literature and history

February 2021

Interviews

Surveys sent out

Polling or questionnaire via social media or other method for people from all walks of life

Drafting Introduction & Methods

March 2021

Interviews

Pre-Data Analysis

Coding

Category and Theme Identification

Analysis

Editing Introduction and Methods

Start putting analysis data into the draft

April 2021

Drafting Results and Discussion

Drafting Conclusion

Revision of all sections

Formatting

Draft submitted to Reader

Revision

May 2021

Prepare Presentation

Revisions

Request to Present

Thesis Presentation

Final Thesis to Reader

Final Thesis to MES Director

1. **Who, beyond your MES faculty reader, will support your thesis? Indicate support both within and outside of Evergreen. Be specific about who they are and in what capacity they will support your thesis. If you are working with an outside agency or expert, be specific about their expectations for your data analysis or publication of results.**

Dr. Zachary Colburn will be providing support with tasks related to data and statistical analysis. I have also consulted Shawn Hazboun for support with interviewing and data coding for the analysis stage. I have had correspondence with the Green Burial Council who have expressed interest in my thesis and offered me some advice and guidance on how to proceed. I plan to reach out to organizations that support the transition to green burials such as Moles Farewell Tribute, the National Funeral Directors Association. These have not been pursued since the Human Subjects Review has not been initiated at this time.

1. **List the 3-5 most important references you have used to identify the specific questions and context of your topic, help with issues of research design and analysis, and/or provide a basis for interpretation. For each annotated reference, explain how your project specifically connects to the source by extending, challenging, or responding to the conclusions, methods, or implications. For any other sources cited in this document provide a complete bibliographic citation.**

Bereavement, I. of M. (US) C. for the S. of H. C. of the S. of, Osterweis, M., Solomon, F., & Green, M. (1984). Sociocultural Influences. In *Bereavement: Reactions, Consequences, and Care*. National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK217844/>

This paper is about the sociocultural influences and impacts on a society’s belief about death and dying. This paper discusses the loss to a community’s identity which caused the mourning process to be highly ritualized, and how it has changed as we have progressed to the modern world. The “bureaucratization on modern death control” has led to modern age families and loved ones to be less prepared for death which has led to the survivors being unprepared to deal with the aftermath of losing a loved one. The article then goes on to discuss changes in law, social support, mourning rituals. This paper will be useful in my thesis work because it touches on a lot of the alternative types of rituals that have been ushered in over the years, and the living’s relationship to death.

Brown, A. (2019, November 20). *More People Want a Green Burial, but Cemetery Law Hasn’t Caught Up* [Pewtrusts.org]. PEW. <https://pew.org/2qrRK36>

This article discusses White Eagle Memorial preserve in southern Washington and how it is a new alternative eco-friendly way for burying the dead. It is a nontraditional burial ground that breaks the model of what a "traditional" funeral or burial is. Unlike modern cemeteries which make cemeteries have to be overly manicured areas to lay the dead to rest. These conservation cemeteries are few in number, and slow to get started due to state laws and statutes that did not take into consideration new versions of burial grounds. It also discusses the myths regarding the required steps before you can be buried such as embalming, needing to be buried in a casket, or other laws based upon specific religious beliefs such as the catholic church stating explicitly that "human composting disrespects the body in a manner against church teaching". It is going to be very useful when I am starting to discuss why green burial grounds are so few, and how they are more economical for society, but the commercialization of death has made it so that the average funeral costs $8,000 for things that you are not required to have (embalming/casket/cemetery plot/use of a concrete vault.

Canning, L., & Szmigin, I. (2010, October 6). *Death and disposal: The universal, environmental dilemma*. ResearchGate. <https://www.researchgate.net/publication/232869409_Death_and_disposal_The_universal_environmental_dilemma>

This article discusses the act of human disposal and how it is personal, emotional, societal and environmental. It discusses the convergence of the consumer decision with environmental factors from a multicultural viewpoint. This article will be very useful for my research when I being discussing land use, land space, and impacts of pollution on the environment. It talks about cultural norms when thinking about human body disposal and funerary rites.

1. You are not locked into this title; its purpose is to help you identify the main point or topic of your thesis at an early stage. [↑](#endnote-ref-1)
2. You might discuss selection of case studies, sampling methods, experimental design, and/or specific hypotheses you will test. You should also address any specialized knowledge or skills that are necessary to complete the research. [↑](#endnote-ref-2)
3. If you are planning to use existing data, explain the specific source, contact information, arrangement with collaborating agencies, and expectations about use of data and final products of your research. If you are planning to gather new data, describe specific methods, time, place, and equipment that will be required. [↑](#endnote-ref-3)
4. If you’re not sure where to start, consult a ‘Code of Ethics’ or other similar document from an academic society in an applicable field of study. [↑](#endnote-ref-4)
5. If you are collecting ANY samples or data, even observational data, on public lands (city, county, state and/or federal) it is your responsibility to find out the permit requirements BEFORE you collect data. Conducting research with tribal members/on tribal lands will have different and additional requirements. [↑](#endnote-ref-5)
6. Your *positionality as a researcher* refers to the fact that one’s “…beliefs, values systems, and moral stances are as fundamentally present and inseparable from the research process as [one]’s physical, virtual, or metaphorical presence when facilitating, participating and/or leading the research project…” (The Weingarten Blog 2017). [↑](#endnote-ref-6)