MLA Conference
Graduate Student Expo

April 11, 2013
University of Arizona
School of Landscape Architecture and Planning
CALA Student Expo Schedule 2013
Thursday, April 11th:

MLA/Planning presentations
7:45am........Light breakfast
   (MLA - Dinsmore room, Planning - Archon Seminar Room)
8:00...........Introductions
8:10...........Desneige Hallbert
8:30...........Aaron Liggett
8:50...........James Melnick
9:10...........Christian Pedersen
9:30...........Kexin Zhao
9:50...........Break
10:00........Kelly Van Den Berg
10:20........Deryn Davidson
10:40........Lori Radcliffe-Myers
11:00........Sara Sullivan
11:20........Cylphine Bresdin
11:40........Lunch Break (50 min)
12:30........Micaela Machado
12:50........Kawthar Rayyan
1:10...........Yuxin Wang
1:30...........Xi Wang
1:50...........Amy Booth
2:10...........Break
2:20...........Charlie Ware
2:40...........Kevin Quach
3:00...........Li Lu
3:20...........Libby Pruitt
Desneige Hallbert
Pilgrim Hot Springs

Chair: Ron Stoltz
Members: Margaret Livingston, Zachary Babb

A Master Plan bringing together geothermal energy, history and Inupiaq culture to create a sustainable and economically viable eco-tourism destination to the Seward Peninsula, Alaska.

Pilgrim Hot Springs is a historic landscape in northwestern Alaska on the Seward Peninsula. It is located 60 miles north of Nome, the terminus of the famous Iditarod dogsled race. Once a Catholic orphanage, today it is a hot springs soaking destination for those who know of its existence and are able to access it. Now under the ownership of Unaataq, LLC, a consortium of seven Native corporations and regional non-profits, plans to renovate the site are just beginning. This master’s report will assist Unaataq, LLC, in the design of a Master Plan to reinvigorate Pilgrim Hot Springs using ecological, historical, and cultural sensitivity to drive the design. This Master Plan uses the concept of integrating recreation, conservation, and education to create an economically feasible ecotourism base camp from which other tourism opportunities based on the Seward Peninsula can be accessed. Pilgrim Hot Springs will provide creative options for year round human comforts and recreation for both local and non-local visitors while sustainably harvesting geothermal energy to operate off the grid. It will also create agricultural opportunities for the resort and the local native communities for year round consumption and economic gain.
As mass tourism is spreading throughout Latin America, haphazard growth is threatening the environment and local communities. In an effort to mitigate social and environmental impacts an alternative approach to tourism development utilizes principles of ecotourism and smart growth to balance tourism, community and environmental goals. With a goal of creating authentic Mexican experiences at Las Palmas a protected park, small mixed use community, and low impact resort are interconnected, functioning together to maintain a healthy environment and encourage cultural exchanges.

Aaron Liggett
Las Palmas: an approach towards sustainable tourism development in Baja California Sur, Mexico

The Coast Guard has traditionally been the underdog of the military services: small in numbers, substantially less funding and more operational missions in comparison to our Department of Defense counterparts. Doing more with less has become the Coast Guard’s informal motto. Base design is no exception; function takes priority to support operational requirements. These small bases are usually adjacent to a body of water, highly functional and little space is reserved for recreation or ecological services. The small amount of green space is typically designed one dimensionally with low maintenance being the only goal. In Maximizing Minimal Green Space, the design demonstrates that even small amounts of green space can be utilized to provide valuable ecological services and recreational opportunities while still respecting security, low maintenance requirements and functionality.

Libby Pruitt
Maximizing Minimal Green Space: Re-thinking Land Use on Coast Guard Bases

Chair: Mark Fredrickson
Members: Ron Stoltz, Beth Scott

Chair: Ron Stoltz
Members: Margaret Livingston, Oscar Blazquez
Many people who love dogs or enjoy being around dogs have limited spaces that allow dogs to interact with other dogs and people. Dog parks have not been around for very long compared to other types of parks and as such, do not have a lengthy set of guidelines to follow. There have been the occasional exceptions to this, such as Cosmo Dog Park in Gilbert, Arizona.

While some parks do exist that maintain good design, design aesthetic, and overall function there is a range of parks that are underutilized. The Southwest in general requires plenty of shade and water in order to be utilized and face a distinct problem when choosing types of groundcover. This design serves to function as not only a functional space, but an ideal destination for dog owners and dogs alike.
The Oakland Athletics Baseball team has been lobbying for years to move to San Jose, a wealthier city than the current one they are in. The current ballpark of the Athletics, Oakland Coliseum, opened in September 18, 1966 and has housed the Athletics ever since 1968. With many teams in Major League Baseball relocating to newer sports facilities, the Athletics would like to do the same. One possible site for the Athletics' new sports facility is in Downtown Oakland. With the city in a state of recovery, the Athletics could potentially play a hand in the revitalization of the downtown, stimulating new growth within the city. This project intends to use the ballpark to potentially aid and accelerate growth in Downtown Oakland while strengthening Oakland's economy. This is done by gathering research information of selected literature and review the information to inform the design. Case studies of successful ballparks and their designs follow the literature review to support the design decisions. The design process includes a site inventory and analysis, conceptual diagrams, and a master plan. The results: A newly established ballpark district that includes a Market Street redevelopment, reworked public transportation, and the expansion of the San Francisco Bay Trail among other developments.

Chair: Oscar Blazquez
Members: Margaret Livingston, Ron Stoltz

I am developing a sensory garden for the Arizona School for the Deaf and Blind (ASDB) that provides extensive sensory richness, educational opportunities, promote cultural awareness. Examining, developing and incorporating various renditions of the 5 Design Principles of DeafSPACE has produced an innovative spatial design for a sensory garden experience. Beardown.

Christian Pedersen
Sensory Garden Experience

Chair: Oscar Blazquez
Members: Margaret Livingston, Ron Stoltz

Kevin Quach
Envisioning Oakland: The Ballpark District

Chair: Oscar Blazquez
Members: Margaret Livingston, Ron Stoltz
It is common for the education of architecture and landscape architecture to separate the technical (build) from the design (studio). Another line of thought is that in order for a well-rounded education in architecture and landscape architecture, design must be met with the act of building. This allows for a healthy balance from conceptualization to construction, which in turn, may foster stronger, integrated design skills. Familiarization with the construction process from materials and construction methods to budgeting and project management offers increased experience and understanding and can foster confidence and assurance crucial to decision making throughout academic and professional careers. This process can also lead to innovation and expansion of theory in the field due to the physical implementation and testing of ideas and concepts. As a growing number of architectural graduates are beginning their career and thriving in the design-build sector, this model of education is to evolve as a cornerstone in the curriculum of an architecture or landscape architecture program.

Alleys are underutilized corridors that can potentially provide many valuable uses in cities. Alleys can be used for multiple purposes during the day and night: conventional functions, dog walking, water harvesting, and as renewable energy showcases, to name a few. In addition, they can become welcoming and popular linear gathering spaces. On a grander scale, they can be used as networks and connections between destinations. This project proposes to evaluate the current challenges and opportunities of alleys in central Tucson, to create multiple design templates for safe, social, and green alleys, and to enhance the connectivity to Tucson Modern Streetcar Areas.

Chair: Margaret Livingston
Members: Lauri Johnson, Oscar Blazquez
As the popularity of golf grew in the 1990’s and real estate along golf courses brought in high property values, the building of golf courses in the Southwest boomed. However, supply of golf courses outgrew the demand for golf. The National Golf Foundation predicts that 500-1,000 golf courses nationwide will close within the next 5 years. Cities and developers are facing a new problem: What to do with these defunct golf courses? This project explores the redesign of a struggling golf course community in order to accommodate a larger variety of users and rehabilitate the ecosystem to provide services to the community by managing stormwater and creating amenities. The design also attempts to rehabilitate and enhance an important riparian floodplain along Tanque Verde wash.

Kelly Van Den Berg

Metamorphosis: A master planned community renovation, from struggling golf course to vibrant desert community

It has been suggested that the natural world establishes one of the most significant contexts children encounter during their most critical years of development. When children are allowed to interact with nature, they are able to make essential connections between humans, animals, natural systems, and gain a better understanding of the world at large. Unfortunately, within the span of a few decades, more and more children are losing touch with the natural world; the way they comprehend and interact with the outdoors is radically changing. To battle the current indoor trends, outdoor learning environments are springing up all over the country.

This project serves to further examine outdoor educational facilities and to tailor a modified outdoor nature center prototype into the base of Palo Duro Canyon State Park in the Texas Panhandle. A final master plan will examine ways to implement various educational strategies for children while respecting the existing canyon ecosystem and ingraining a sense of stewardship into the nature center’s young visitors.

Amy Booth

Linking Children and Nature through Design: Integrating nature education for children of the Texas Panhandle into Palo Duro Canyon

Chair: Margaret Livingston
Members: Oscar Blazquez, Ron Stoltz

Chair: Lauri Johnson
Members: Margaret Livingston, Beth Scott
Xi Wang

Arroyo Chico Riparian Design: Integrating stormwater management with greenway enhancement

Enhance the ecological and social function of Arroyo Chico by landscape design

This Project aims at rehabilitating degraded riparian system in desert climate and urban context. It explores landscape approach of a rehabilitation project. Arroyo Chico Wash in Tucson is chosen as the study site. An analysis will be made to assess the wash system and site context, give assessment and develop an appropriate solution. A riparian park that implements water management infrastructures will be designed on the site and create economical and ecological benefits for surrounding communities. It also seeks principles for similar projects.

Chair: Margaret Livingston
Members: Ron Stoltz, Lauri Johnson

Deryn Davidson

Making Room for Nature: Addressing the emotional and physical restorative needs of patients, family and staff at Tucson Medical Center for Children

As concern for the health and wellbeing of children grows in a society geared toward a more sedentary lifestyle, many doctors and therapists, are pointing to the importance of access to, and time spent interacting with the natural world. The idea of using the restorative properties of nature in healing has been around since ancient times and there is currently a renaissance in the health care industry looking at the importance of incorporating gardens into the design of health care facilities once again. Although research is currently being conducted, relatively little is known about exactly how time spent in nature is beneficial, but there is strong evidence that it is. The theory of biophilia, introduced by E.O. Wilson in the 1980s, begins to hint at possibilities. Wilson suggests that humans have an innate bond with other living systems and benefit from interacting with these systems. This project proposes to explore the importance for children in health care facilities to have access to the natural world while using the biophilia hypothesis as a framework for design. Furthermore, the benefits of outdoor areas for the families (particularly siblings) of child patients and the staff of the health care facilities will be explored. Through the use of literature and case reviews, data is collected and synthesized to determine the elements best used to strengthen the designs for children’s therapeutic environments.

Chair: Margaret Livingston
Members: Ron Stoltz, Oscar Blazquez
Lori Radcliffe-Myers

“A Landscape of Memories:” A Master Plan Design for the Crawford Town Hall

As we continue to lose valuable landscapes to the pressures of growth and development, we need to keep in mind the history and memories that some of these landscapes hold. They help tell the stories of our past and hold a special place in the hearts and minds of many. Historic buildings are typically recognized for their value and are often restored, helping to preserve a part of a community’s past; however, the landscape surrounding the building may not be treated the same. This master’s project develops a master plan for the newly restored Crawford town hall that may help revitalize the area by designing programmed spaces that utilize the surrounding property and provide areas of interest and activity for the community.

Yuxin Wang

Yangchun Lake Sub-Urban Center Master Plan

Urbanization in China is rapidly improving with the economic growth. But the development that ignores environment has caused lots of environmental problems in Chinese cities, especially the large ones. As the capital of Hubei Province, Wuhan is fifth among China cities for its size and its economic production. Because of extreme urbanization and high dense population in Wuhan city, some significant issues have been constantly emerged: lack of adequate wastewater management and water resources protection, urgent need for efficient solution to sludge treatment and disposal, serious urban flooding because of the natural flow or urban lakes and streams restriction, degradation of water quality, and so on. These issues have been seriously impacted the quality life in the city. Along with the urbanization, the conflicts between urban development and ecosystem are inescapable. How can urban development balance environmental sensitivity to support ecological health in the vulnerable urban ecosystem and mitigate the problems in the city?

This project tries to redesign a master plan for Yangchun Lake sub-urban center in Wuhan city and find suitable ways to mitigate these problems with attention to the environmental, functional, economic, social and aesthetics aspects of the proposed solutions. The design will balance the urban development and environmental protection, support and enhance the development of a new ecological urban center.

Chair: Beth Scott
Members: Margaret Livingston, Helen Walthier

Chair: Mark Fredrickson
Members: Margaret Livingston, Oscar Blazquez
As important spaces of innovation and learning, the quality of university campuses directly affects their users. Surrounding communities are also significantly impacted by these large economic engines. In Jordan, almost one third of the population is enrolled in an educational facility. Insufficient educational facilities and increasing number of students led to the establishment of the Hashemite University (HU) in the city of Zarqa, a neighboring community of Amman, in 2000. As is the case in many universities in the kingdom, the landscape of the campus appears neglected, treated as leftover space rather than needed functional spaces. The campus lacks a sense of place; a collegial and attractive place that creates memories. This research examines campus landscape design of Jordanian universities, with emphasis on HU. This research also assesses international trends in campus design, studying the notion of applying international standards to this Arab campus. The goal of this work is to redesign the HU campus, uncovering its unique character and improving the sense of place, purpose, and quality. Specifically, the design reconnects the university with the surrounding community and provides the area with social, psychological, and economic benefits.

Eldora Mountain Resort is a small ski resort outside of Nederland, CO generally used for day skiing. While major destination and day skiing resorts such as Vail, Aspen, and Breckenridge continue to dominate the I-70 corridor, Eldora has a unique opportunity to accommodate skiers and mountain enthusiasts of northern Colorado, as there are no other ski resorts in its immediate surroundings. The resort currently lacks on-site lodging and has limited use during the warm months, with the exception of hiking. This project explores the redesign of Eldora Mountain Resort to integrate year-round recreational opportunities, while focusing on the how the resort can be designed to better connect with its natural environment.

Chair: Beth Scott
Members: Mark Fredrickson, Ron Stoltz
Cylphine Bresdin

Theory and Design Considerations of a Saline Ecological Landscape: A constructive method to reduce brine waste volume

Abstract
Pertinent abiotic and biotic factors and their interdependencies necessary to comprehend the ecology of saline systems are investigated and evaluated. An ecological landscape design for a saline system is proposed as a constructive method to reduce volume as saline water is processed through an evapotranspiration induced directional saline gradient. Site design is design of an idea of ecosystem pattern based on a foundation of waste brine and consists of a linear sequence of ecotopes, each displaying its own ecological community in relation to salinity and site context. Biota is relinquished to self-organization. Potential for research use of the ecosystem is illustrated.

Research Question
What are the abiotic and biotic considerations necessary to design an ecological landscape which is based on an evapotranspiration induced gradient of saline waste water?

Micaela Machado

A Prison Retrofit - From Prison to Community Resource

This Master’s Report focuses on a hypothetical sustainable retrofit of the Wilmot Department of Corrections prison facility in Tucson, AZ. It’s about a transformation of the prison for what it is and envisioning what it could be. It creates a beneficial relationship between the Wilmot D.O.C. and the Tucson community. It aims at utilizing natural resources and preserving dwindling ones and it reaches to educate and rehabilitate the prisoners. The sustainable goals of this Master’s Report include: Solar power, on-site wastewater management and on-site food production. This Master’s Report is to serve as a role model for other designs or retrofits of like establishments. It aims at creating ways for the prison to belong to and to contribute to the community. Another goal of this Master’s Report is to help spread the word of the possibilities at our fingertips, to demonstrate these techniques at all levels including residential and provide resources to get started. A portion of this Master’s Report includes a website providing in-depth information and resources. Please visit the site and spread the word of the changes we can make in the places that need it most.

www.aprisonretrofit.com

Chair: Beth Scott
Members: Oscar Blazquez, Ed Glenn

Big hugs and kisses to my family, friends and classmates. Thanks for all the support.

Chair: Beth Scott
Members: Ron Stoltz, Deb North