

Variations in Types of Major Funding Partnerships in College and University Gardens

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**Abstract**

Variations in Types of Major Funding Partnerships in College and University Gardens

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College and university-affiliated public gardens usually have strong programs in scholarship, research, and community outreach. These gardens can benefit from their affiliation with an academic institution through receiving financial resources and expertise, but can also suffer from being positioned as a small part of a large organization. Many college and university gardens, including the University of Washington Botanic Gardens, engage in partnerships with other organizations that are designed to achieve goals in fundraising, programming, membership, volunteer management, and garden maintenance. The purpose of this research was to explore the structures and management of funding collaborations in college and university gardens and to identify patterns and themes that support relationship building. I conducted a broad information search to build an overview of the field, and then I conducted interviews and document reviews to build in-depth case studies for selected gardens. The case study data were analyzed to identify both challenges and successful strategies related to working relationships within the partnerships. The majority of relationship issues within the case studies related to themes of Resources, Identity, Engagement, and Governance. Successful strategies for relationship-building often involved well-developed systems for communication amongst partners, clearly defined and accepted roles and responsibilities for the partners, integrating the gardens into the mission of the academic institution, and the sharing of resources to achieve mutual goals.

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## Chapter 1: Introduction

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### *Statement of Problem*

A public garden is an institution that uses living plant collections for public service through botany and horticulture. Public gardens take on a diversity of forms, functions, purposes, services, and programs.<sup>1</sup> In a 1978 survey of botanic gardens and arboreta, governing authorities of respondents were indicated to include private nonprofits (40%), educational institutions (28%), government (40%), and other (3%), totaling over 100% and implying some public garden models with multiple types of governing bodies.<sup>2</sup> In addition to collaborative governing models, many gardens have also become involved in collaborative efforts with partner organizations in an effort to increase fundraising revenue and broaden program offerings.<sup>3</sup> In a 1991 survey of government-affiliated botanic gardens and arboreta, 89% of respondents had a private nonprofit associated with the garden.<sup>4</sup>

The purpose of this research was to explore the structures and management of funding collaborations in college and university gardens. Information gathered has been used to identify patterns and themes that support relationship building, which then informed recommendations for the University of Washington Botanic Gardens (UWBG). The organizational model at UWBG involves academic institution and local government responsibility for governance and funding in addition to private nonprofit support.

The specific research questions that have guided the research design are the following:

- 1. What are the variations in types of major fundraising partnerships in college and university gardens?***

2. *What functions do the partners serve related to funding?*
3. *What aspects of the partnerships contribute to a successful working relationship?*

## **University of Washington Botanic Gardens Case Overview**

The University of Washington Botanic Gardens (UWBG) provides one example of a university-affiliated garden with an especially complex management structure. The UWBG name was established in 2005,<sup>5</sup> and the garden exists administratively as a center within the University of Washington's School of Forest Resources, positioned within the recently established College of the Environment.<sup>6</sup> The name UWBG recognizes the organizational responsibilities for two properties: the Washington Park Arboretum (WPA) and the Center for Urban Horticulture (CUH)/Union Bay Natural Area (UBNA) sites. The name UWBG was chosen to better reflect the education, research, curation, and services offered by the components.

UWBG staff are responsible for maintaining the plant collections at WPA and take responsibility for the overall direction of its collections, interpretation, research use, and educational and outreach programs. The land at WPA is owned by the City of Seattle, and the park-like functions are managed by Seattle's Parks & Recreation Department. The Arboretum Foundation is a private 501c(3) nonprofit organization, established in 1935 to support and advocate for WPA and is the major fundraising organization for the Arboretum.

The CUH/UBNA site is the other major component of UWBG. At this site, the University wholly owns the land and UWBG staff work in collaboration with the UW Advancement team to address capital and operational funding needs beyond the state funding provided through the University. In 2008, Seattle Parks and Recreation, the College of Forest Resources (now School of

Forest Resources), UWBG, UW Advancement, and the Arboretum Foundation formed a project group to improve working relationships around fundraising. A “donor centric” agreement was reached that indicated a start date of January 2009.

This overview provides some insight into the types of complexities that can arise within the management and fundraising partnerships of college and university gardens. The case of UWBG is expanded upon in Chapter 3 of this study and recommendations are made in Chapter 5.

## ***Background***

Two benchmarking surveys were conducted in 2006/8 to assess national trends in gardens and arboreta related to philanthropy.<sup>7</sup> Key points in the 2008 final report stressed the increasing importance of board contributions in the forms of personal giving, stewardship of endowments, and representation of the garden’s interests through donor and community relations.<sup>8</sup> The study recommended that gardens focus their fundraising efforts on higher-level individual donors as a way to compensate for decreases in grant funding and decreased ability to support membership programs that are based on a retail model.<sup>9</sup>

The economic downturn that began in 2008 initiated a downward trend in corporate and foundation giving as well as government funding of gardens.<sup>10</sup> In the U.S., grantmaking foundations cut their 2009 giving by an estimated 8.4%.<sup>11</sup> However, at the same time, we are experiencing the greatest personal wealth transfer in history, with unprecedented levels of individual giving.<sup>12</sup>

Botanic gardens and arboreta that are affiliated with academic institutions share some unique fundraising advantages and challenges. The gardens often have the opportunity to collaborate with and utilize the expertise of the college or university’s fundraising team, which

manages a database to track alumni and donor information.<sup>13</sup> College and university gardens with established programming generally have a focus on research, scholarship, outreach, and civic engagement. In some cases, the reputation of the academic institution alone can connect the garden to gifting sources, and the affiliation also provides the opportunity for the garden to be included in institution-wide fundraising campaigns.<sup>14</sup>

Often times, however, college and university gardens may feel that they are not especially well connected to the academic community. Peter Olin, former Director of the Minnesota Landscape Arboretum, recommends a variety of strategies that such gardens can employ to reposition their institutions, including attaching the garden to research and academic programs, promoting the garden as a place for donor stewardship, research, classes, and outreach, and cultivating close relationships with the leadership of the larger academic institution.<sup>15</sup> College and university gardens also may be challenged by competition with other programs and fundraising priorities inside their own academic institution. Olin's recommended strategies for addressing this competition include collaborating with colleagues through regular communication, and coordinating fundraising efforts through an organized database of information that tracks donor preferences.<sup>16</sup>

It is also important to remember that not all gardens and arboreta have access to the same funding streams. Extra large gardens and arboreta with total annual operating budgets over \$10 million, have more opportunities for corporate giving, sponsorships, and government grants, largely due to programming, and the nature and depth of research and community outreach that can be achieved with a larger budget.<sup>17</sup>

Though opinion pieces have been written and personal accounts shared, there is a lack of documented research that explores the variety of models for partnerships in public gardens, the

functions of the partners in these collaborations, and the ways in which relationships are managed to achieve successful working relationships.

## **Chapter 2: Methodology**

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### ***Rationale***

The purpose of this research is to contribute to fundamental knowledge and theory in the field of public garden management by exploring structural models involving funding alliances in college and university gardens. To attempt to answer the research questions, I constructed an overview chart of organizational models for several college and university gardens (Table 1), selected cases of supporting partnerships in public gardens to be studied in-depth, conducted interviews with key staff involved with the partnership, and gathered supporting documents. This compiled the data to be analyzed.

The case study analysis is intended to describe various organizational models that illustrate how the gardens fit administratively within their academic institutions, and how garden management partners with their college or university fundraising staff, with boards, and/or with independent organizations outside of their academic institution to raise funds for the garden. Relationships between the public gardens studied and their fundraising partners are examined to identify the challenges that are faced and the strategies that are implemented to address challenges and support healthy working relationships.

The results of this research will be significant to public garden management involved in funding partnerships, and those contemplating such partnerships, by providing guidance regarding challenges faced and strategies for managing the partnerships. Especially in the current economic

climate, it is crucial for public garden leadership to understand the relationships that impact their funding and that they work to nurture and grow those relationships.

Specifically, a case study has been conducted to understand the partnership between UWBG and the Arboretum Foundation (and other partners involved in supporting roles), and the findings of the research have been used to inform recommendations in the management of that partnership.

### ***Limitations***

This study does not assess specific fundraising campaigns or strategies, nor does it evaluate the success of funding partnerships based on the dollar amount raised. Rather, this research is aimed at understanding how organizations can better collaborate under defined constructs to achieve mutual goals. The small sample size and the great diversity of models that exist in North American public gardens determine that all results are not generalizable to all college and university gardens. The diversity of models represented in this research does provide examples of several of the most common relationships engaged in by college and university gardens. The case studies presented here represent a snapshot in time – there is a continual evolution of characteristics such as administrative reporting structures, institutional leadership, and personality dynamics, to name a few. Very different relationships could exist within the very same organizational model at a different time in a garden’s history.

### ***Selection of Cases***

In order to select public gardens for this study, I employed purposive sampling, in which cases for study were selected because they were “information rich” and illuminative. That is, they offered useful manifestations of the phenomenon of interest – funding partnerships in college and

university gardens. Sampling was aimed at insight about the phenomenon, not empirical generalization from a sample to a population.<sup>18</sup>

I used web resources including GuideStar, a nonprofit organization that provides an online database of information about American nonprofit organizations,<sup>19</sup> and the American Public Garden Association's online member garden search,<sup>20</sup> in combination with personal communications and internet research to identify cases for study in which at least one organization is identified as acting primarily as the manager of a college or university garden, and at least one separate organization functions as a partner in funding.

The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size.<sup>21</sup> I completed in-depth case studies on five college or university gardens or museums and their funding partnerships for this research:

Harvard University; Arnold Arboretum

Smith College; Botanic Garden of Smith College

University of Minnesota; Minnesota Landscape Arboretum

University of Washington; Burke Museum of Natural History and Culture

University of Washington; University of Washington Botanic Gardens

Though the Burke Museum is not a garden, the museum is administratively positioned within an academic institution, maintains a relationship with a 501c(3) funding partner, and provided insight about operating as a museum within the University of Washington, which was useful for comparisons with the structure at the University of Washington Botanic Garden. It was

appropriate to include the Burke Museum as a comparative model for botanic gardens as most botanic gardens do consider their organizations to be museums and many are members of the American Association of Museums.

I made first contact with the director of each garden to request participation and suggestions of interview subjects. I then conducted interviews with the director, garden staff, and representatives from partner organizations, as suggested by the director.

## ***Collection of Data***

### **Overview Data**

For the overview chart of organizational models for 20 college and university gardens and museums, I collected publicly-available information from public garden websites, GuideStar, *Public Garden* magazine, and documents such as annual reports and strategic plans that were available through the internet.

### **Interview Methods**

Interviews were conducted both in-person and over the phone. Documentation was collected in-person, through e-mail, and through internet research using GuideStar and websites of participating organizations.

The interview format was a standardized open-ended interview, in which the exact wording and sequencing of questions were determined in advance. All interviewees were asked the same basic questions in the same order. Questions were worded in a completely open-ended format.<sup>22</sup> The strengths of the standardized open-ended interview are that respondents answer the same questions, thus increasing comparability of responses and facilitating organization and analysis of



the data. The criteria that were used to determine interview subjects essentially eliminated the need to individualize questions and determined in advance that the questions were relevant to the subject.

While conducting the interviews, I wrote field notes. I digitally recorded the interviews, transcribed the content, and coded the transcripts into themes for analysis. My interview methodology was approved by the University of Washington Human Subjects Division, with a requirement that the interview recordings and transcripts remain confidential and be destroyed upon completion of this research. The approved protocol included an opportunity for interview subjects to review and correct their transcripts, or to request confidentiality be maintained for any or all of the information they provided during the interview.

## **Documents**

In order to gain a more complete picture of the partnership and any structural agreements, I gathered available supporting documents, including Memorandums of Understanding/Agreement, annual tax reporting forms (IRS 990) and other relevant financial documents regarding the partnership, Articles of Incorporation and bylaws for the supporting partner organizations, annual reports, strategic planning documents, etc.

## ***Analysis of Data***

I used the information gathered to develop an overview chart of organizational models for several college and university gardens. I used information from interviews and document requests to build case studies for each partnership, and I then used cross-case analysis to draw out patterns and themes related to the functionality of relationships.

The writing of case studies involved organizing the raw data into a case record, including all major information that was gained from interviews, documents, and internet research. The information was edited, redundancies were sorted out, and the parts were fitted together to develop the cases. Case study analysis involves organizing the data by specific cases for in-depth study and comparison. Both the writing of each case and the comparison case are types of analysis. The unit of analysis is the case.<sup>23</sup>

I conducted my analysis using the strategy of unique case orientation, which assumes each case is special and unique; the first level of analysis is being true to, respecting, and capturing the details of the individual cases being studied;<sup>24</sup> cross-case analysis follows.

My analysis involved both deductive and inductive analysis. Deductive analysis, analyzing data according to an existing framework, was used to study the variations in types of partnerships according to functions performed by each partner and how the governance mechanisms of the supporting partnership are structured. Inductive analysis involves discovering patterns and themes from the content of the interviews that have substantive significance, which increases and deepens understanding of the phenomenon studied.<sup>25</sup>

Rather than approaching the questions with an expected answer, I used a grounded theory approach to form theories that emerged from a systematic comparative analysis and that were grounded in my fieldwork to explain what was observed.<sup>26</sup> Previous research performed by the Barr Foundation indicates that collaborations in the nonprofit sector are effective in achieving goals but can also be hard, time-consuming, and frustrating.<sup>27</sup> I used the major themes identified in the Barr Foundation report to categorize my results. Those themes include (1) trust and culture, (2) weighing costs and benefits of collaboration, (3) implementation challenges, and (4) understanding roles.<sup>28</sup>

The final step in my analysis was to conduct a comparison of the supporting partnership structure at UWBG to the supporting partnership theories that emerged from the data, and use that comparison to make recommendations for UWBG.

## **Chapter 3: Results**

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Table 1 summarizes the organizational models for 20 college and university gardens and museums, including information about the gardens and museums' size, location, budget, admission fee, membership program, funding information, and administrative position. Of the 20 organizations included, eight indicated that they charge an admission fee. Nine organizations included collections located on the academic institution's central campus, seven indicated their collections are adjacent to the main campus, and eight institutions managed collections that were located entirely off-campus. Four of these gardens included collections in multiple locations, so they met more than one of these criteria. Seven discussed direct connections with the fundraising offices of their academic institution, and two indicated support from their college or university foundation. Nine directors hold faculty appointments, and those organizations who are not led by faculty take on a wider variety of administrative structures. Three gardens discussed maintenance and/or funding partnerships with local municipalities. Sixteen of the organizations indicated that they have a membership program, and nine discussed a connection with a nonprofit partner specifically organized to support their programs. In some cases, the nonprofit organization is synonymous with the membership program, in some the membership program is managed by the nonprofit, and in others, the two are completely separate.

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding Information	Administrative position
<b>California State University – Fullerton; Fullerton Arboretum; Established in 1979<sup>29</sup></b>			
<p><i>Size:</i> 26 acres<sup>30</sup>  <i>Location:</i> On campus<sup>31</sup>  <i>Budget:</i> \$925,723 (2007)<sup>32</sup>  <i>Admission fee:</i> None<sup>33</sup></p>	<p>Friends of the Fullerton Arboretum (Est. 1982) is a nonprofit corporation organized for the sole purpose of supporting the Fullerton Arboretum with membership dues, fundraising events and volunteers.<sup>34</sup></p>	<p>Arboretum income comes from business operations through the Friends, membership revenue, occasional grants and special gifts and support from CSUF and the City of Fullerton.<sup>35</sup></p>	<p>The Fullerton Arboretum is itself an incorporated 501c(3) nonprofit organization.<sup>36</sup> The Director does not hold a faculty appointment.<sup>37</sup> The Arboretum is managed by the Fullerton Arboretum Authority, made up of representatives appointed by the City and the University.<sup>38</sup></p>
<b>Clemson University; South Carolina Botanical Garden; Established in 1958<sup>39</sup></b>			
<p><i>Size:</i> 295 acres<sup>40</sup>  <i>Location:</i> Adjacent to campus<sup>41</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>42</sup></p>	<p>South Carolina Botanical Garden Friends: Funds are administered through the Clemson University Foundation.<sup>43</sup></p>	<p>Clemson University Foundation partners with the Garden to administer gifts.<sup>44</sup></p>	<p>South Carolina Botanical Garden is an Outreach Facility under Clemson’s Public Service Activities, and is listed under the focus areas of Agriculture,<sup>45</sup> Environment,<sup>46</sup> and Youth.<sup>47</sup> The Garden Director is the Clemson University Vice President for Public Service and Agriculture.<sup>48</sup></p>
<b>Connecticut College; Connecticut College Arboretum; Established in 1931<sup>49</sup></b>			
<p><i>Size:</i> 750 acres<sup>50</sup>  <i>Location:</i> Adjacent to and encompassing the main campus<sup>51</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>52</sup></p>	<p>The Arboretum Association (Est. 1931) has no formal or independent structure.<sup>53</sup> Funds are administered through the College Advancement Office.<sup>54</sup></p>	<p><i>Operating budget sources:</i><sup>55</sup>                      50% Endowments                      20% College operating budget                      20% Earned revenue                      10% Annual giving</p>	<p>Connecticut College Arboretum is an independent department.<sup>56</sup> The Director reports to the Provost/Dean of Faculty,<sup>57</sup> and holds an appointment as an adjunct associate professor in the botany department.<sup>58</sup> The Campus Landscape Collection is managed by the Grounds Supervisor, who reports to the Vice President for Administration through the Physical Plant Director.<sup>59</sup></p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>Cornell University; Cornell Plantations; Established in 1945<sup>60</sup></b>			
<p><i>Size:</i> 4975 acres (150-acre arboretum, 25-acre botanical garden, 500-acre central campus, 4300 acres of natural areas)<sup>61</sup>  <i>Location:</i> Adjacent to and encompassing the main campus<sup>62</sup>  <i>Budget:</i> \$2,957,896 (2009)<sup>63</sup>  <i>Admission fee:</i> None<sup>64</sup></p>	<p>A membership program is administered by Cornell Plantations.<sup>65</sup> Higher-level Giving Societies are offered as part of the Cornell University annual fund.<sup>66</sup></p>	<p><i>Operating budget sources:</i><sup>67</sup>                      57.5% Endowments                      28.8% Gifts                      8.1% Cornell endowed                      3.5% Grants                      1.8% Earned revenue</p> <p>Cornell Plantations is included in the Cornell University capital campaign with the goals of endowing staff positions and graduate student fellowships.<sup>58</sup></p>	<p>The Director is an associate professor in the Horticulture Department, within the College of Agriculture and Life Sciences.<sup>69</sup> In collaboration with the Department of Horticulture, Cornell Plantations hosts a graduate fellowship in public garden leadership, a Master of Professional Studies program.<sup>70</sup> The Cornell Plantations website also lists affiliations with several other University departments.<sup>71</sup> The Grounds Department, within Facilities Services, manages the central campus.<sup>72</sup></p>
<b>Duke University; Sarah P. Duke Gardens; Established in the early 1930's<sup>73</sup></b>			
<p><i>Size:</i> 55 acres<sup>74</sup>  <i>Location:</i> On campus<sup>75</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>76</sup></p>	<p>Friends of Duke Gardens Annual Gift Societies funds are administered as part of the Duke Annual Fund.<sup>77</sup></p>	<p><i>Operating budget sources:</i><sup>78</sup>                      ~ 50% Duke University                      ~50% donor gifts, other support</p> <p>The Gardens has an advisory board.<sup>79</sup></p>	<p>The Executive Director does not have a faculty appointment.<sup>80</sup></p>
<b>Harvard University; Arnold Arboretum; Established in 1872<sup>81*</sup></b>			
<p><i>Size:</i> 265 acres<sup>82</sup>  <i>Location:</i> Off campus<sup>83</sup>  <i>Budget:</i> \$11,018,610 (2007)<sup>84</sup>  <i>Admission fee:</i> None</p>	<p>The Friends of the Arnold Arboretum membership program is administered by The Arnold Arboretum.<sup>85</sup></p>	<p><i>Operating budget sources:</i><sup>86</sup>                      84% Endowments                      5.6% Education/Publications                      5% Grants                      3.9% Memberships/Gifts                      3% Enterprise</p> <p>The City of Boston owns the land and maintains the hardscapes.<sup>87</sup></p>	<p>In 2009, the Director of the Arnold Arboretum began reporting to the Provost's Office, as do the directors of other museums at Harvard and the Deans from the science schools.<sup>87</sup> Prior to this change, the Director reported to the Vice President for Administration.<sup>88</sup> The Director position is not a faculty appointment.</p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>Iowa State University; Reiman Gardens; Established in 1995<sup>89</sup></b>			
<p><i>Size:</i> 14 acres<sup>90</sup>  <i>Location:</i> Adjacent to campus<sup>91</sup>  <i>Budget:</i> \$1,600,000 (2008)<sup>92</sup>  <i>Admission fee:</i> \$4 Youth; \$7 Seniors; \$8 Adults; Members free<sup>93</sup></p>	<p>Reiman Gardens CoHorts was started as a membership program in 1995 and was incorporated in 2006 as a 501c(3) to promote and enhance Reiman Gardens.<sup>94</sup></p>	<p><i>Operating budget sources:</i><sup>95</sup>            40% University funding            40% Earned income            20% Endowment, private gifts</p> <p>The Executive Director of Reiman Gardens sits on the Executive Committee of the Reiman Gardens CoHorts' Board.<sup>96</sup></p>	<p>The Director reports to the University's Vice President for Business and Finance and does not hold a faculty appointment.<sup>97</sup> Initially, the Department of Horticulture was responsible for the budget and management. The University assumed the administrative role as the mission and size of the Gardens expanded.<sup>98</sup></p>
<b>North Carolina State University; The JC Raulston Arboretum; Established in 1976<sup>99</sup></b>			
<p><i>Size:</i> 8 acres,<sup>100</sup> within a 38-acre Horticultural Field Lab<sup>101</sup>  <i>Location:</i> Off campus<sup>102</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>103</sup></p>	<p>The Friends of the Arboretum is a member component of the North Carolina Agricultural Foundation, a 403c unit within NCSU.<sup>104</sup></p>	<p>No direct line operating budget is received from the University or the state. Operating support comes from some hard money salary provisions, overhead support for some building operations and repairs, voluntary technical support from individuals, membership dues, and unrestricted donations.<sup>105</sup></p>	<p>The Director holds an appointment as Distinguished Professor in the Department of Horticultural Science, which is within the College of Agriculture and Life Sciences.<sup>106</sup></p>
<b>North Carolina University; The North Carolina Arboretum; Established in 1986<sup>107</sup></b>			
<p><i>Size:</i> 434 acres<sup>108</sup>  <i>Location:</i> Off campus<sup>109</sup>  <i>Budget:</i> \$5,050,000 (2008)<sup>110</sup>  <i>Parking fee:</i> \$8/personal vehicle; Members free<sup>111</sup></p>	<p>A membership program is administered by The North Carolina Arboretum Society, a 501c3 nonprofit that exists solely to support the Arboretum.<sup>112</sup></p>	<p><i>Operating budget sources:</i><sup>113</sup>            59% State funding            23-31% NC Arboretum Society            18% Program fees and services</p> <p>The North Carolina Arboretum and The NC Arboretum Society both have Boards of Directors.<sup>114</sup></p>	<p>The North Carolina Arboretum is an affiliate of the 16-campus University of North Carolina system.<sup>115</sup> The Executive Director does not hold a faculty appointment.<sup>116</sup></p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>Smith College; Botanic Garden of Smith College; Established in 1894<sup>117*</sup></b>			
<p><i>Size:</i> 127 acres<sup>118</sup>  <i>Location:</i> On campus<sup>119</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>120</sup></p>	<p>The Friends of the Botanic Garden is managed by the Garden, and operates under the umbrella of the College’s Advancement department, under the banner of the Friends of Smith.<sup>121</sup></p>	<p>Not available.</p>	<p>The Director has a split appointment – 40% as a professor in the Department of Biological Sciences (teaching a horticulture class each semester) and 60% as Director of the Botanic Garden.<sup>122</sup> The Director is a faculty member and reports to the Dean of Faculty in the Provost’s Office.<sup>123</sup> Previously, the Director reported to the head of the Physical Plant under Campus Facilities and Operations.<sup>124</sup></p>
<b>Swarthmore College; Scott Arboretum of Swarthmore College; Established in 1929<sup>125</sup></b>			
<p><i>Size:</i> 300+ acres<sup>126</sup>  <i>Location:</i> On campus<sup>127</sup>  <i>Budget:</i> \$1,528,912 (2008)<sup>128</sup>  <i>Admission fee:</i> None<sup>129</sup></p>	<p>Associates of the Scott Arboretum membership program is administered by the Scott Arboretum.<sup>130</sup> Associates’ activities are guided by the Council which is made up of four elected officers.<sup>131</sup></p>	<p><i>Operating budget sources:</i><sup>132</sup>                      53.8% Endowment                      31.3% Contributions                      11.4% Scott Associates                      1.8% Recoveries, investments                      1.7% Grants                        Endowment: \$26,546,699 (2008)<sup>133</sup></p>	<p>The Director does not hold a faculty appointment.<sup>134</sup></p>
<b>University of Arkansas; Garvan Woodland Gardens; Established in 1985<sup>135</sup></b>			
<p><i>Size:</i> 210 acres<sup>136</sup>  <i>Location:</i> Off campus<sup>137</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> Under 6 free; \$4.50 Children; \$7.75 Seniors; \$8.75 Adults; Members free<sup>138</sup></p>	<p>A membership program is administered through the Gardens.<sup>139</sup></p>	<p><i>Operating budget sources:</i><sup>140</sup>                      41% Earned revenue                      15% Grants                      13% Endowment                      12% Membership                      19% UA &amp; Cooperative Extension                        The UA Foundation, a 501c(3), manages all private donations.<sup>141</sup></p>	<p>The Gardens is a department of the Fay Jones School of Architecture, and the Gardens’ Executive Director reports directly to the School’s Dean.<sup>142</sup> The Gardens’ original status was as a project of the Landscape Architecture Department.<sup>143</sup> No staff are employed as faculty, though the directorship was originally a ¼-time teaching position.<sup>144</sup></p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>University of California – Berkeley; The University of California Botanical Garden at Berkeley; Established in 1890<sup>145</sup></b>			
<p><i>Size:</i> 34 acres<sup>146</sup>  <i>Location:</i> Adjacent to campus<sup>147</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> \$2 Children 5-12; \$5 Juniors 13-17; \$5 Seniors; \$7 Adults; Members and UCB staff, faculty, and students free<sup>148</sup></p>	<p>A membership program is administered through the Garden.<sup>149</sup></p>	<p><i>Operating budget sources:</i>            66%+ Fundraising and earned revenue<sup>150</sup>            &lt; 50% state funds<sup>151</sup></p> <p>The Friends of the Botanical Garden was established in 1976 as a support group for fundraising and building the volunteer program but dissolved in 1997.<sup>152</sup></p>	<p>The UC Botanical Garden is a non-profit research garden and museum for the University of California at Berkeley.<sup>153</sup> The Director holds a faculty appointment. The Office of the Vice Chancellor for Research has overall managerial responsibility for Berkeley's research enterprise, including the UC Botanical Garden.<sup>154</sup></p>
<b>University of California – Davis; UC Davis Arboretum; Established in 1936.<sup>155</sup> California Center for Urban Horticulture; Established in 2006<sup>156</sup></b>			
<p>UC Davis Arboretum:  <i>Size:</i> 100 acres<sup>157</sup>  <i>Location:</i> Adjacent to campus<sup>158</sup>  <i>Budget:</i> Not available  <i>Parking fee:</i> \$6/car weekdays<sup>159</sup></p> <p>California Center for Urban Horticulture:  <i>Location:</i> On campus<sup>160</sup></p>	<p>The Friends of the UC Davis Arboretum is a membership program administered by the Arboretum.<sup>161</sup></p>	<p>Not available.</p>	<p>The Arboretum is part of the Campus Planning and Community Resources Unit, established in 2009, which is overseen by an Assistant Vice Chancellor.<sup>162</sup></p> <p>The California Center for Urban Horticulture is administered through the College of Agricultural and Environmental Sciences.<sup>163</sup></p> <p>Neither Director holds a faculty appointment.<sup>164, 165</sup></p>
<b>University of Chicago; University of Chicago Botanic Garden; Established in 1997<sup>166</sup></b>			
<p><i>Size:</i> 211 acres<sup>167</sup>  <i>Location:</i> On campus<sup>168</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>169</sup></p>	<p>None</p>	<p><i>Operating budget sources:</i><sup>170</sup>            70% University of Chicago Alterations and Repair shop            25% Endowment            5% One-time gifts</p>	<p>The Botanic Garden is administered by the University's Office of Facilities Services and has no separate staff on a payroll.<sup>171</sup> The University's Office of Development and Alumni Relations accepts gifts to the Botanic Garden Fund.<sup>172</sup></p>



**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>University of Minnesota; Minnesota Landscape Arboretum; Established in 1958<sup>173*</sup></b>			
<p><i>Size:</i> 1137 acres<sup>174</sup>  <i>Location:</i> Off campus<sup>175</sup>  <i>Budget:</i> \$9,600,000 (2009)<sup>176</sup>  <i>Admission fee:</i> \$9 Adults &gt;15; Members free<sup>177</sup></p>	<p>A membership program is administered by the Arboretum.<sup>178</sup></p>	<p><i>Operating budget sources:</i><sup>179</sup>            32% MLA Foundation            25% Earned income            19% University of Minnesota            15% Endowment            8% Membership            1% Other</p> <p>Minnesota Landscape Arboretum Foundation, an official foundation of the University of Minnesota, is the chief fundraising organization for Arboretum programs, maintenance, and capital expenditures.<sup>180</sup></p>	<p>The Minnesota Landscape Arboretum is part of the Department of Horticultural Science within the College of Food, Agricultural and Natural Resource Sciences (CFANS) at the University of Minnesota but is a distinct budgetary unit. The Director holds a tenured faculty position as full professor.<sup>181</sup> The Arboretum hosts several research and extension functions for the Horticultural Science Department.<sup>182</sup></p>
<b>University of North Carolina at Chapel Hill; North Carolina Botanical Garden; Established in 1952<sup>183</sup></b>			
<p><i>Size:</i> 800+ acres<sup>184</sup>  <i>Location:</i> On and off campus<sup>185</sup>  <i>Budget:</i> Not available  <i>Admission fee:</i> None<sup>186</sup></p>	<p>The Botanical Garden Foundation (Est. 1966<sup>187</sup>) is the nonprofit 501c(3) membership organization.<sup>188</sup></p>	<p>The Foundation and its Board of Directors raise nearly 50 percent of the funds for the operating expenses of the Garden.<sup>189</sup></p>	<p>The Director is also a professor in the UNC-CH Department of Biology and Ecology Curriculum.<sup>190</sup></p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>University of Pennsylvania; Morris Arboretum of the University of Pennsylvania; Established in 1932<sup>191</sup></b>			
<p><i>Size:</i> 92 acres<sup>192</sup>  <i>Location:</i> Off campus<sup>193</sup>  <i>Budget:</i> \$5,588,891 (2009)<sup>194</sup>  <i>Admission fee:</i> \$7 Youth, Students, Military, Car-free; \$12 Seniors; \$14 Adults; Members free<sup>195</sup></p>	<p>A membership program is administered through the Arboretum.<sup>196</sup></p>	<p><i>Operating budget sources:</i><sup>197</sup>            31% Contributions            28% Earned income            22% Endowments            15% University support            2% Government support            2% Other</p> <p>The Compton Fund, a supporting organization, exists solely to receive and hold large gifts, and is controlled by a subset of the Arboretum’s Advisory Board of Managers, Arboretum Director, and a University representative.<sup>198</sup></p>	<p>The Director is the University representative at the Arboretum and reports to the University through the Vice President for Business Services.<sup>199</sup> The Director does not hold a faculty appointment.<sup>200</sup> The Arboretum operates under the University’s 501c(3) status.<sup>201</sup></p>
<b>University of Washington; The Burke Museum of Natural History and Culture; Established in 1885<sup>202*</sup></b>			
<p><i>Size:</i> N/A  <i>Location:</i> On campus<sup>203</sup>  <i>Budget:</i> \$4,990,000 (2009)<sup>204</sup>  <i>Admission fee:</i> \$6 Students and Youth; \$7.50 Seniors; \$9.50 General; Members, UW faculty, staff, and students free<sup>205</sup></p>	<p>A membership program is administered through the Museum.<sup>206</sup></p>	<p><i>Operating budget sources:</i><sup>207</sup>            50% State funding            14% Gifts            13% Grants and contracts            13% Earned income            10% Interest</p> <p>The Burke Museum Association, an independent 501c(3), actively supports the Museum through public visibility, raising public and private funds, and providing strong ties to the community.<sup>208</sup></p>	<p>The Director reports to the Dean of Arts and Sciences<sup>209</sup> and holds a faculty appointment in the Department of Anthropology, within the College of Arts and Sciences.<sup>210</sup> Collection Curators hold faculty appointments, some in the College of Arts and Sciences and some in the College of the Environment.<sup>211</sup> The Museum collaboratively hosts the Master of Arts program in Museology.<sup>212</sup></p>

**Table 1. Overview of the Field: Organizational Structures of 20 College and University Gardens and Museums**

Size, Location, Budget, Admission fee	Membership Program	Funding and/or Partnership Information	Administrative position
<b>University of Washington, University of Washington Botanic Garden, Established in 2005<sup>213</sup> (Components est. 1934 and 1983)<sup>214*</sup></b>			
<p><i>Size:</i> 320 acres (230-acre Washington Park Arboretum, 16-acre Center for Urban Horticulture, 74-acre Union Bay Natural Area)<sup>215</sup>  <i>Location:</i> Adjacent to and off campus<sup>216</sup>  <i>Budget:</i> \$2,132,406 (2008)<sup>217</sup>  <i>Admission fee:</i> None<sup>218</sup></p>	<p>A membership program is offered through the Arboretum Foundation<sup>219</sup> but there is no membership program for the University of Washington Botanic Gardens.</p>	<p><i>Operating budget sources:</i><sup>220</sup>            36.6% Self-sustaining units            26.6% State funds            13.9% Restricted obligations funds in reserve            8.5% Arboretum Foundation            3.75% Special project funding            5% Revenue            2.5% Endowment            1.2% Gifts general</p> <p>Seattle Parks and Recreation is a managing partner at the Arboretum.<sup>221</sup> The Arboretum Foundation is a 501c(3) fundraising partner at the Arboretum.<sup>222</sup></p>	<p>UWBG is a part of the School of Forest Resources in the College of the Environment.<sup>223</sup> Directorship is a tenured faculty position. In collaboration with the School of Forest Resources, UWBG hosts associated faculty and their graduate students but has no formal appointments for faculty beyond the Director.<sup>224</sup></p>

\* Asterisk indicates cases included in the in-depth case study analysis.

## ***In-Depth Case Study Analysis***

Results by Case are presented in the following order:

Harvard University; Arnold Arboretum

Smith College; Botanic Garden of Smith College

University of Minnesota; Minnesota Landscape Arboretum

University of Washington; Burke Museum of Natural History and Culture

University of Washington; University of Washington Botanic Gardens

### **Harvard University; Arnold Arboretum**

#### **1. Institutional Overview**

**1.1. Harvard University:** Harvard University is located in Cambridge, Massachusetts,<sup>225</sup> and has an enrollment of about 20,000 students.<sup>226</sup> Harvard was established in 1636<sup>227</sup> and is a private University with 501c(3) nonprofit status.<sup>228</sup>

University Budget: In fiscal year 2008, Harvard University's income and expenses equaled \$3.4 billion.<sup>229</sup> The University holds an endowment of \$36.9 billion (2008).<sup>230</sup>

#### **2. Parties Involved in Study**

The Arnold Arboretum of Harvard University manages a membership program, collaborates with staff in the Harvard University Alumni Affairs and Development Office to coordinate with other fundraising programs within the University, and shares management of the Arboretum property with the City of Boston.<sup>231</sup>

## **2.1. The Arnold Arboretum of Harvard University**

Mission: The Arnold Arboretum of Harvard University discovers and disseminates knowledge of the plant kingdom to foster greater understanding, appreciation, and stewardship of Earth's botanical diversity and its essential value to humankind.<sup>232</sup>

Size: The Arnold Arboretum, located in the Jamaica Plain section of Boston, Massachusetts,<sup>233</sup> encompasses 265 acres,<sup>234</sup> with living collections including 15,176 individual plants belonging to 10,199 accessions representing 3984 taxa.<sup>235</sup> Many of the plants are from historically and botanically important lineages, and are of some of the first introductions to North America.<sup>236</sup> The collections are considered to be one of the largest and best documented woody plant collections in North America and the world.<sup>237</sup>

Brief History: The Arnold Arboretum of Harvard University was founded in 1872 and is the oldest public arboretum in North America.<sup>238</sup> Arboretum staff members work to accomplish their mission through research, horticulture, and education.<sup>239</sup> The Arboretum was first established with a gift from the estate of James Arnold to the President and Fellows of Harvard College, the income from which was to be used for the establishment and support of an arboretum. In 1882, the first Director of the Arnold Arboretum, Charles Sprague Sargent, crafted an agreement with the City of Boston, that the Harvard-owned land on which the arboretum stood would be deeded to the City and then leased back to Harvard, and control of the plant collections would remain with Harvard University. As a result of this agreement, the Arboretum became part of Boston's "Emerald Necklace," the 7-mile-long network of Boston Parks and parkways laid out by Frederick Law Olmsted between 1878 and 1892.<sup>240</sup>

Budget: The Arnold Arboretum operated on an annual budget in fiscal year 2007 of \$11,434,580, which has grown steadily from a budget of \$8.6 million in fiscal year 2002.<sup>241</sup> Income sources in

2007 included endowments (59%), education/publications (5.6%), grants (5%), membership/gifts (3.9%), and enterprise (3%). Expenses were made up of salaries/benefits (59%), services (18%), facilities/operations (13.7%), supplies/equipment (5.1%), University subvention (3.4%), and travel (1.8%).<sup>242</sup>

Programs:

***Collections:*** Management of the Arnold Arboretum's landscape collections is carried out by 12 horticulturists and three arborists, led by the Manager of Horticulture.<sup>243</sup> Highlighted collections include bonsai, "centernarians," conifers, lilacs, rosaceous plants, and the shrub and vine garden.<sup>244</sup> Propagation programs involve growing of wild-collected seed for the collections and for distribution to other institutions.<sup>245</sup>

***Science/Research:*** The Arboretum participates heavily in biodiversity and plant science research both locally and abroad.<sup>246</sup> Staff members participate in plant collection expeditions such as the 1980 Sino-American Botanical Expedition to collect seed from plant specimens in their native habitats.<sup>247</sup> The Arboretum also supports several plant conservation initiatives and institutional collaborations including the Center for Plant Conservation, Botanic Gardens Conservation International, and the North American Plant Collections Consortium.<sup>248</sup>

***Education:*** Programs include a Landscape Institute certificate program for professionals, adult education, field studies for children, family activities, online exhibits, internships, and volunteer opportunities.<sup>249</sup> The Arnold Arboretum also sponsors fellowships in plant science and curation.<sup>250</sup> Twelve- to twenty-four-week paid internship programs combine hands-on training in horticulture with educational classes.<sup>251</sup>

**Library:** The Arnold Arboretum library contains over 40,000 volumes. Part of the collection is housed at the Arboretum, with the rest housed within the Botany Libraries at the Harvard University Herbarium.<sup>252</sup>

**Herbarium:** The Cultivated Herbarium of the Arnold Arboretum holds collections totaling approximately 130,800 specimens of cultivated origin and is one part of the greater Harvard University Herbaria.<sup>253</sup> The Arboretum also maintains a seed herbarium with over 2100 samples, 662 of which are from accessioned plants within the collection.<sup>254</sup>

**Volunteers:** Opportunities for volunteers include positions as school program guides, Arboretum docents, and Arboretum interpreters.<sup>255</sup>

**Membership:** Membership in The Friends of the Arnold Arboretum is offered at eight levels: *Individual: \$35; Household: \$50; Sustaining: \$100; Sponsor: \$200; Patron: \$500; Benefactor: \$1000; Organization: \$150; Student/Teacher: \$20*<sup>256</sup>

**Outreach/Communications:** Publications include *Arnoldia* (a quarterly magazine which contains articles on plant science, ecology and conservation, parks and open spaces, landscape design, history, and current Arboretum activities), *Silva* (the biannual news magazine about Arboretum activities, classes, and special events), a searchable inventory of the plant collections, and Director's reports.<sup>257</sup> The website (<http://www.arboretum.harvard.edu/index.html>) is an important tool for public information and includes interactive tools to present seasonal highlights.<sup>258</sup>

**Position within University:** In 2009, The Arnold Arboretum moved administratively from a reporting structure through the Office of the Vice President for Administration to a position under the Provost's Office. The move was initiated by the Arboretum Director and seemed

appropriate because the Provost oversees all museums at Harvard, including the Harvard Art Museum and the Natural History Museum. Adding to the appropriateness of the move is the strength of the science component at the Arnold Arboretum and the fact that all the Deans from the science schools report to the Provost.<sup>259</sup>

Staff: The Arnold Arboretum currently employs 17 staff members in Administration, 25 in Horticulture, 12 in Public and Professional Programs, and 13 working in Research.<sup>260</sup> The Arboretum is in the midst of a leadership transition. The Director retired in December 2009 and a director search is currently underway.<sup>261</sup>

Functions Performed Related to Funding: While grants come in for all areas of the Arnold Arboretum's functions, including research and education, this section will focus on development and fundraising at the Arboretum. Audrey Rogerson, Director of Development, currently supervises four other people in the Development Office. The majority of the Arboretum's operating support comes from its own endowment income. Even in light of this strong financial footing, leadership at the Arboretum recognizes that it is important to diversify its funding sources. In the past, the fundraising operation has been very membership-driven, but the focus is now changing to major gifts.<sup>262</sup>

Members currently receive an array of benefits, the administration of which all have associated costs to the Arboretum operations, and the program is not strongly tied to a revenue-generating program.<sup>263</sup>

There are currently no advisory committees that come out of the membership. There is no advisory or fundraising board for the Arboretum, though such boards have existed in the past, at the discretion of the Director. Harvard University has a Board of Overseers, and they have the



fiduciary responsibility for Harvard University. Individual schools are allowed to have advisory committees or boards if they wish.<sup>264</sup>

The Arnold Arboretum shares management of the Arboretum property with the City of Boston, who owns the land. The Arboretum's responsibility is to maintain everything growing on the grounds. While the City is in charge of security at the site, there have been times when the city was under more financial stress or special events were occurring, when the Arboretum has chosen to hire additional park rangers.<sup>265</sup>

## **2.2. Harvard University Development Office**

Harvard University is set up as a decentralized University, with a high level of autonomy and responsibility in the hands of the individual schools. The fundraising office is more centralized in order to ensure that the individual schools are in communication and not in competition regarding donor relations. This poses a challenge at times, as each school has their own development team. The heads of the development teams meet regularly with the University Development Office to connect on policies and reporting. The Harvard Development Office maintains a donor database that tracks donor information and donor contacts for all the units. The database has proven to be a useful tool for development directors in coordinating efforts, collaborating with each other, and cultivating positive relationships with donors.<sup>266</sup>

## **2.3. City of Boston Parks and Recreation**

The relationship between the City of Boston and Harvard University's operations at the Arnold Arboretum dates back to the Arboretum's founding. The land that the Arboretum stands on was bequeathed to the University by Benjamin Bussey and was later given by Harvard to the City of Boston to become part of the Olmsted-designed park system. Harvard now leases the

land back from the City for one dollar/year for 1000 years. Harvard agrees to maintain the plantings and the grounds, and the City of Boston agrees to maintain all the hard structures including the roads and paths within the Arboretum, the sidewalk around it, the walls, the fountains, and the drinking fountains. The City is also responsible for security within the Arboretum. An agreement was made at the time of the lease that the Arboretum would remain free and open to the public.<sup>267</sup>

## **Smith College; Botanic Garden of Smith College**

### **1. Institutional Overview**

#### **1.1. Smith College**

Smith College is located in Northampton, Massachusetts.<sup>268</sup> Smith was founded in 1871 and is one of the nation's largest liberal arts colleges for women.<sup>269</sup> The student body includes 2500 students studying on the main campus and 250 studying elsewhere.<sup>270</sup>

College Budget: Smith College has an operating budget of \$190.5 million and a capital budget of \$25.9 million for 2009-10. Smith receives a considerable dollar amount in private gifts. In 2006-7, Smith received \$35.9 million in cash gifts and \$38 million in new commitments, including \$11.3 million raised through The Smith Fund (annual fund), and \$7.43 million in corporate, foundation, and government grants.<sup>271</sup>

### **2. Parties Involved in Study**

The Botanic Garden of Smith College receives funding support through partnerships with The Friends of the Botanic Garden of Smith College and with the Development Office of Smith College.<sup>272</sup>

## **2.1. The Botanic Garden of Smith College**

**Size:** The Botanic Garden of Smith College encompasses the entire 127-acre campus of the College. The collection includes 1200 types of woody trees and shrubs, 2200 types of hardy herbaceous plants, and 3200 types of tender herbaceous plants, totaling approximately 10,000 specimens. In addition to the outdoor campus arboretum, the Botanic Garden at Smith College operates several specialty gardens and the 12,000 square foot Lyman Conservatory. The arboretum and the conservatory are free and open to the public. (The conservatory is open daily, with the exception of some holidays, from 8:30 a.m. to 4:00 p.m.)<sup>273</sup>

**Brief History:** The Botanic Garden of Smith College was formally established in 1894. The campus landscape master plan was laid out as an arboretum by the 1893 plan by the firm Olmsted, Olmsted and Eliot. Under the direction of various leaders over the years, the college acquired new land, built new gardens, and continued to rework the master plan.<sup>274</sup>

**Budget:** While no data is available for The Botanic Gardens of Smith College's budget, personal communications indicated that funding comes from Smith College and the Friends of The Botanic Garden of Smith College. Fundraising for the Botanic Garden is managed through the Development Office of Smith College. In 2000, there was a major renovation of the greenhouses, and the Botanic Garden was a part of the College's capital campaign. The Garden and the Development team worked together to identify donors, host events, etc. As the Garden has increased its infrastructure and staff, the director is exploring grant opportunities to support special projects and exhibitions.<sup>275</sup>

### **Programs**

***Collections:*** Collections include the Conservatory and gardens. Conservatory management involves collections management and tours in addition to organization of two large annual events – the fall chrysanthemum show and spring bulb show. Garden collections include the

Rock Garden, Japanese Garden, President's Garden, Capen Garden, Campus Arboretum, Woodland Garden, Mary Maples Dunn Garden, and the Systematics Garden and Perennial Border.<sup>275</sup>

**Science/Research:** Both staff and students conduct a variety of research projects related to the Botanic Garden's collections, including projects aimed at understanding pests and diseases, plant conservation, and collections history.<sup>276</sup>

**Education:** Botanic Gardens staff members collaborate with faculty in all disciplines to involve the Botanic Garden in courses.<sup>277</sup> The Botanic Gardens offer work study and school year internships for students, plus summer internship programs at Kew Gardens in London and at the Smithsonian Institution.<sup>278</sup> The Botanic Gardens' Curricular Enhancement Program offers course development funding and planning assistance to faculty who are interested in developing courses that incorporate the Botanic Garden and its resources.<sup>279</sup> Staff members plan and facilitate events in the gardens such as dance performances, art exhibits, and teacher workshops.<sup>280</sup>

**Library:** The Botanic Garden of Smith College does not host its own library collection.

**Herbarium:** The herbarium of Smith College holds nearly 60,000 specimens and serves as both a teaching aid and a historical archive.<sup>281</sup>

**Volunteers:** Volunteer opportunities include roles as docents, or garden tour guides. Volunteers are offered a complimentary membership to the Friends organization after completing 40 hours of work.<sup>282</sup>

**Membership:** The Friends of the Botanic Garden of Smith College is the membership group. The Friends of the Botanic Garden offers seven annual membership levels: *Champion: \$2000+; Patron: \$1000; Sustainer: \$500; Contributor: \$150; Household/Family: \$75; Individual: \$50; Student/Recent Alum: \$20*<sup>283</sup>

***Outreach/Communications:*** The Botanic Garden produces a biannual newsletter which highlights the academic connections between the College and the Garden.<sup>284</sup> The website includes an overview of the history and programs at the garden, as well as Kids' Corner, an interactive site for children to learn about the Botanic Gardens.<sup>285</sup> In addition to current art and educational exhibitions, the Botanic Garden owns three traveling exhibits that are available for rental: "The World in a Garden," "Asian Gardens of the 1920's," "Plant Adaptation Up Close," and "Plant Spirals: Beauty You Can Count On."<sup>286</sup>

Position within Academic Institution: The director of the Botanic Garden has a 60% appointment with the garden and a 40% faculty appointment in the biology department. As director, he reports to the Dean of Faculty in the Provost's Office. This reporting structure was established by the current director. The director previously reported to the head of the Physical Plant. In the early 2000's the director submitted a proposal to the President and the Board of Trustees of Smith College that requested that the Botanic Garden be switched over to an academic reporting line. This reporting line is reflective of the administrative position of the Art Museum on campus, whose director also reports to the Provost's Office. The proposal submitted by the director presented comparisons among the functions of the College's physical plant, botanic garden, and art museum which demonstrated the appropriateness of the requested reporting structure. For example, the botanic garden and the art museum both produce newsletters and manage volunteers, neither of which are functions of the physical plant.<sup>287</sup>

Staff: The Botanic Gardens of Smith College employs a staff of 15.<sup>288</sup>

Functions Performed Related to Funding: The Botanic Garden of Smith College offers guided tours, audio tours, support for botany and other academic courses, work study/internships, research, conservatory events (spring bulb show, fall chrysanthemum show), teacher

workshops, garden and collection management, art exhibitions, a friends group membership program, and newsletter publication.<sup>289</sup>

## **2.2. The Friends of the Botanic Garden of Smith College**

Brief History: The Friends of the Botanic Garden of Smith College was established in 1992. The Friends is a membership organization that exists to support the collections and enhance the resources of the Botanic Gardens.<sup>290</sup>

Incorporation or Other Structure: At Smith College there are four Friends groups which exist to support the library, the art museum, the botanic gardens, and the athletics program. The Friends Advisory Committee, made up of Smith College alums, meets once a year to help with directing the expenditures of money that comes in through the Friends group.<sup>291</sup>

Functions Performed Related to Funding: The Friends of the Botanic Garden of Smith College support the work of the Botanic Garden by organizing and sponsoring trips, workshops, and lectures, sponsoring volunteer tour guides, and sponsoring student internship opportunities.<sup>292</sup>

Volunteers for the garden are not required to be members, but as an incentive to contribute more volunteer hours, the Botanic Garden offers its volunteers a complimentary membership in the Friends after they have put in 40 hours of work.<sup>293</sup>

The Friends Advisory Committee does work to help in fundraising initiatives. For example, they have partnered with the other three Friends organizations at Smith College to develop a joint membership solicitation brochure that can be sent to alums and can be folded to highlight each of the four groups, as appropriate.<sup>294</sup>

Staff: The Friends of the Botanic Gardens of Smith College does not employ any staff. Madelaine Zadik, Manager of Education and Outreach for the Botanic Garden, manages the Friends organization.<sup>295</sup>

Budget: The Friends of the Botanic Gardens of Smith College has no budget separate from the funds that are contributed to support the work of the Botanic Garden.<sup>296</sup>

### **3. Structure of the Relationship**

At the annual meeting with the Friends advisory committee, Botanic Garden staff present the finances of the Friends group and what they plan to use the money on. The Friends advisory committee provides direction on how the funds will be spent.<sup>297</sup>

## **University of Minnesota; Minnesota Landscape Arboretum**

### **1. Institutional Overview**

**1.1. University of Minnesota**: The University of Minnesota is composed of five campuses, the largest of which is located in Minneapolis, Minnesota. The University was founded in 1851, and it serves as both the state's land-grant university and its flagship research institution. Total student enrollment in Fall 2009 was 67,364 students.<sup>298</sup>

University Budget: In Fiscal Year 2008-09, the University of Minnesota budget totaled approximately \$3 billion from the following revenue sources: Tuition and student fees (22.9%), State Appropriation (21.9%), Sponsored funding (17.5%), Restricted funds (14.7%), Auxiliary Enterprises (9.8%), Internal Service Organizations (7.6%), and Indirect Cost Recovery (3.7%).<sup>299</sup>

### **2. Parties Involved in Study**

The Minnesota Landscape Arboretum operates under the Department of Horticultural Science within the College of Food, Agricultural and Natural Resource Sciences.<sup>300</sup> The Minnesota Landscape Arboretum Foundation, an official foundation of the University of Minnesota, is the chief fundraising organization for Arboretum programs, maintenance, and capital expenditures.<sup>301</sup>

## **2.1. Minnesota Landscape Arboretum**

Mission: The mission of the Minnesota Landscape Arboretum, as part of the University of Minnesota, is to provide a community and a national resource for horticultural and environmental information, research and public education; to develop and evaluate plants and horticultural practices for cold climates; and to inspire and delight all visitors with quality plants in well designed and maintained displays, collections, model landscapes, and conservation areas.<sup>302</sup>

Size: The 1137-acre Minnesota Landscape Arboretum is located about 33 miles southwest of Minneapolis-St. Paul. The Arboretum includes 32 display and specialty gardens, 45 plant collections, and over 5000 plant species and varieties.<sup>303</sup>

Brief History: The Arboretum was founded in 1958 by Dr. Leon Snyder, then the Head of the Department of Horticultural Science. Throughout the last 50 years, private funding has been raised to purchase the land for the Arboretum, build buildings, gardens, and exhibits, and support 75-100% of the Arboretum's operations.<sup>304</sup> The Arboretum does receive support from the University but is largely self-supporting.<sup>305</sup>

Budget: The Minnesota Landscape Arboretum's 2009 Annual Report indicated an annual operating budget of \$9.6 million. The balance sheet indicates \$23.3 million in assets and \$3.8 million in liabilities. Income to the Arboretum comes from the Minnesota Landscape Foundation – including contributions, interest earnings, and unallocated unrestricted gifts applied to balance Arboretum operations (42%), the University of Minnesota (20%), memberships (9.4%), gift shop revenue (8.5%), facility rentals (4.5%), gatehouse fees (4.3%), in-kind gifts (3%), retail sales (2.1%), adult education (1.6%), restaurant commissions (1.4%), other sources of income (1%), and tours (0.4%). Expenses include buildings, grounds and equipment (29.5%),



development and communications (17.3%), operations (13.8%), education (12.2%), research projects (12.1%), gift shop – expense plus inventory on hand (6.9%), visitor services (3.3%), exhibits (2.5%), Andersen Library (2.3%), and restaurant expenses (0.1%).<sup>306</sup>

Programs:

***Collections:*** Management includes gardens, model landscapes, and natural areas – from woodlands and wetlands to prairie – with extensive collections of northern-hardy plants.<sup>307</sup>

***Science/Research:*** Programs include fruit breeding, woody landscape research, and wetland restoration.<sup>308</sup>

***Education:*** The Minnesota Landscape Arboretum has strongly developed adult education programs, children and family programs, school programs, and community outreach, including urban garden programs.<sup>309</sup>

***Library:*** The Andersen Horticultural Library, located in the visitor center, is the only horticultural research library in the Upper Midwest, with a collection including more than 16,000 volumes and 350 periodicals. The Library maintains an online service and database that provides information on nurseries, plant sources, and plant citations.<sup>310</sup>

***Herbarium:*** The Minnesota Landscape Arboretum does not host an herbarium, though the University of Minnesota holds a vascular plant herbarium collection at the J.F. Bell Museum of Natural History, which holds over 700,000 specimens.<sup>311</sup>

***Volunteers:*** The Arboretum has a strong force of volunteers that assist in many areas of operations, including education, clerical assistance, gardening, and special events/projects.<sup>312</sup>

**Membership:** Standard membership categories include the following: *Individual: \$45; Duo/Family: \$65; Family & Friends: \$85.* Donor memberships include *Friend: \$150-299; Supporting: \$300-499; Sustaining: \$500-000; Associate: \$1000+*<sup>313</sup>

**Outreach/Communications:** Minnesota landscape Arboretum's communications include management of a website and e-newsletter. Each year the Arboretum hosts a major outreach exhibition that is funded by individuals and/or corporate sponsors. Eight to ten artists also install projects annually throughout the gardens. Special events such as Gala in the Gardens and Toast and Taste cultivate relationships with donors and new audiences to build the constituency of the Arboretum. The Auxiliary organizes plant sales, garden tours, and holiday sales.<sup>314</sup>

**Position within University:** The University of Minnesota Landscape Arboretum is part of the Department of Horticultural Science within the College of Food, Agricultural and Natural Resource Sciences at the University of Minnesota. The Arboretum Director, who holds a tenured faculty position as full professor, is hired by and reports to the Head of the Department who reports to the Dean in the College. The Arboretum hosts several research and extension functions for the Horticultural Science Department.<sup>315</sup>

**Staff:** Minnesota Landscape Arboretum staff members are employees of the University of Minnesota. In fiscal year 2009, the Arboretum employees totaled 95-105 in the winter (78 Full-Time Equivalents) and 199 in the summer (105 FTE's). These figures include all employees working in the Arboretum, the Horticultural Research Center, and the Andersen Library.<sup>316</sup>

**Functions Performed Related to Funding:** The Arboretum staff is responsible for operational management of education, research, gardens and collections, and the Andersen Horticultural Library. Management is separate from the Foundation and the endowment. Arboretum management sets budgetary priorities, though they do consult with the executive committee of

the Minnesota Landscape Arboretum Foundation in important matters, such as planning a capital campaign. The Arboretum and the Trustees of the Foundation work in tandem to manage major fundraising initiatives such as a capital campaign, with the Trustees taking leadership and acting as the spokespersons in the community working to get donations.<sup>317</sup>

While Foundation contributions do fund a large portion of operational activities at the Arboretum, there are some functions that take place at the Arboretum that are run and funded by the University of Minnesota's Department of Horticultural Science, including the Horticultural Research Center, which typically has student interns and professors who are carrying on specific horticultural projects and research. The Master Gardener program is housed at the Arboretum, even though it serves the whole state and is funded by the University of Minnesota, not the Arboretum.<sup>318</sup>

The Arboretum has its own development department, which includes one staff member focused on establishing corporate sponsorships. The development staff members work with the Development and Communications committee within the Trustees. They interface on a quarterly basis. The Arboretum's development staff coordinates an annual fund gift drive to raise operating support for regular ongoing business at the Arboretum. Many of the Trustees will come in to write a note on those letters, encouraging people to give. The Arboretum development staff conducts individual stewardship events such as lunches, teas, and tours of the Arboretum. Occasionally, contacts between the development staff and donors are initiated by or coordinated with a Trustee.<sup>319</sup>

## **2.2. Minnesota Landscape Arboretum Foundation**

Brief History: The Minnesota Landscape Arboretum Foundation and its Board of Trustees was established in 1991 by a group of people who wanted to make private donations to the

Arboretum to support purchases of land and plants – to help the Arboretum become a reality.<sup>320</sup>

The Foundation established itself as a nonprofit 501c(3) with Articles of Incorporation and Bylaws guided by the University of Minnesota’s Board of Regents’ “Recommended Guidelines and Procedures for Foundations Operating on Behalf of the University.”<sup>321</sup>

Incorporation or Other Structure: The University of Minnesota Foundation stands as a separate foundation. The Minnesota Landscape Arboretum Foundation is listed in the University of Minnesota’s 2009 Annual Report as a component unit – a “legally separate unit included in the University’s reporting entity because of the significance of its operational or financial relationship with the University (or its other component units).” The Minnesota Landscape Arboretum Foundation (Foundation) is a legally separate, tax-exempt organization dedicated to raising and managing private gifts for the benefit of the Minnesota Landscape Arboretum of the University of Minnesota. The Board of Trustees of the Foundation consists of between 8 and 36 trustees, and the number of trustees must be divisible by four. One fourth of the trustees are appointed by the University of Minnesota. Although the Foundation is an independent organization, the majority of resources that the Foundation holds and invests, including income from its investments are restricted by donors to the activities of the University.<sup>322</sup>

Trustees are asked to serve three three-year terms. A relatively new Trustee mentorship program has been established that matches each new Trustee with an experienced Trustee to help them understand the functions and purposes of the Foundation. Honorary Trustees also sit on the Foundation. The Honorary Trustees are people who were formerly active Trustees.<sup>323</sup>

Functions Performed Related to Funding: Article 2 – Purposes – of The Articles of Incorporation of Minnesota Landscape Arboretum states that the purposes of the Foundation are exclusively charitable and are exclusively for the benefit of the Minnesota Landscape Arboretum of the

University of Minnesota. In summary, Article 2 states that the Foundation may acquire real and personal property in furtherance of its corporate purposes, it may solicit and receive gifts of money and property, invest assets and apply the income, it may expend funds for and engage in the construction of buildings and improvements upon developments, it may advise the Director in policy matters, it may advance generally the art and science of horticulture, and it may do other acts in the accomplishment of the foregoing purposes. Property that is purchased, buildings that are built, and money that is raised by the Foundation is then deeded to the University of Minnesota, so the Foundation does not carry any physical assets on their balance sheet.<sup>323</sup>

The Trustees primarily have the fiduciary responsibility of the Foundation. They are responsible for the investment of the endowment. That investment is actually handled by an investment advisory group that also handles University of Minnesota Foundation endowment and investments.<sup>324</sup>

The second responsibility of a trustee is to be a community liaison and advocate for the Arboretum. They speak on behalf of the arboretum in the community and are personally financial supporters of the arboretum.<sup>325</sup>

Staff: The Minnesota Landscape Arboretum Foundation has no paid staff, though many of their contributions support the salaries of staff members at the Arboretum paid by the University of Minnesota.<sup>326</sup>

Budget: The University of Minnesota 2009 Annual Report lists the Minnesota Landscape Arboretum Foundation's net assets at \$23,329,000.

### 3. Structure of the Relationship

The Foundation has committees and has a governing structure within the Board, set forth in the Bylaws. The Trustees meet quarterly. The Director of the Arboretum meets with the Trustees and the committees, in an informational role. The Director gives a report on current operations and goes over the financial statements. Arboretum staff members coordinate most of the fundraising efforts, such as the annual appeal, and the trustees do a lot of the representation and communication in the community.<sup>327</sup>

Arboretum development staff interacts quarterly with the Development and Communications committee within the trustees.<sup>328</sup> The Arboretum's corporate sponsorship representative interfaces with Trustees to foster connections in the community.<sup>329</sup> The governing documents establish that the Trustees of the Arboretum Foundation are 75% nominated by the Foundation and 25% nominated by the University of Minnesota.<sup>330</sup> The Head of the Department of Horticulture sits on the Board of Trustees.<sup>331</sup>

The Minnesota Landscape Arboretum recently appointed a new Director,<sup>332</sup> and the Foundation had representatives who served on the search committee in an advisory role.<sup>333</sup>

Governing Documents: The Articles of Incorporation of the Minnesota Landscape Arboretum Foundation outline the roles and purposes, the Bylaws establish how the board is made up, what the terms of the board are, how vacancies are filled, etc., and a Memorandum of Agreement outlines the Foundation's acceptance of and adherence to the University of Minnesota Board of Regents' statements regarding relationships of the University of Minnesota to its Foundations and its' recommended guidelines and procedures for Foundations operating on behalf of the University.<sup>334</sup>

The Articles of Incorporation include a dissolution article that states that in the event of disillusion, the assets of the Arboretum Foundation shall be distributed to the Regents of the University of Minnesota, to be used by it for horticultural purposes.<sup>334</sup>

## **University of Washington; Burke Museum of Natural History and Culture**

### **1. Institutional Overview**

**1.1. University of Washington:** The University of Washington is made up of three campuses, with the main campus located in Seattle, Washington. The University indicates an Autumn 2008 enrollment of 41,405 undergraduate, graduate, and professional students. The University was founded in 1861, and was the first public university on the West Coast.<sup>335</sup>

**University Budget:** The University's operating budget in 2009 was \$3.43 billion. In 2009, the University received funding from grants and contracts (31%), patient revenue (27%), tuition (15%), State funding for operations (10%), Auxiliary (4%), gifts (4%), sales and services of educational departments (3%), state funding for capital expenditures (3%) and other sources (3%).<sup>336</sup>

### **2. Parties Involved in Study**

The Burke Museum of History and Culture operates under the University of Washington's College of Arts and Sciences. The Burke Museum Association is a 501c(3) nonprofit organization that serves to support the Burke Museum.<sup>337</sup>

## **2.1. Burke Museum of Natural History and Culture**

Mission: The Burke Museum creates a better understanding of the world and our place in it. The museum is responsible for Washington State collections of natural history and cultural heritage, and for sharing the knowledge that makes them meaningful. The Burke welcomes a broad and diverse audience and provides a community gathering place that nurtures life-long learning and encourages respect, responsibility, and reflection.<sup>338</sup>

Size: The Burke Museum collection includes indigenous Pacific Northwest art, as well as over 12 million specimens and artifacts in 11 areas of specialization: arachnology, archaeology, ethnology, genetic resources, geology, herbarium, herpetology, ichthyology, mammology, ornithology, and paleontology.<sup>339</sup>

Brief History: The Burke Museum was founded by members of the Young Naturalists Society in 1885 and is Washington State's oldest museum. In 1899, the state legislature designated the museum as the Washington State Museum. The Burke was named through a bequest in honor of Judge Thomas Burke in 1962.<sup>340</sup>

Budget: The Burke Museum's 2008-2009 operating budget was \$4.99 million. Sources of funding included an allocation from Washington State (50%), gifts (14%), earned income (13%), grants and contracts (13%), and interest (10%). Expenses included collections and research (44%), exhibits and programs (29%), and operations (27%).<sup>341</sup>

Programs:

***Collections:*** The Burke Museum collection includes over 12 million specimens and artifacts in 11 areas of specialization. Changing exhibits focus on current research and recent discoveries in natural history as well as traditional and contemporary cultural arts.<sup>342</sup>



**Science/Research:** The museum hosts and sponsors a variety of research projects throughout their 11 areas of specialization, from local projects to international collaborations. The museum's research is currently supported by \$8,000,000 in active research grants.<sup>343</sup>

**Education:** The Burke Museum's education programs include museum tours, rentable Burke boxes (which contain artifacts, lesson plans, and activities, to bring lessons from the museum to the classroom), education workshops, summer programs, teacher guides, curricula and activities, and the Burkemobile (an outreach program that delivers a hands-on museum experience to the classroom).<sup>344</sup>

**Library:** The Burke Museum does not host its own library collection.

**Herbarium:** The Burke Museum hosts the UW Herbarium, which has the world's most comprehensive collection of Pacific Northwest vascular plants, nonvascular plants, fungi, lichens, and algae.<sup>345</sup>

**Volunteers:** Community volunteer opportunities at the Burke Museum are available for docents, or for assistants in all collections. The museum's website highlights opportunities in the genetic resources collection, herbarium, ornithology collection, and spider collection.<sup>346</sup>

**Membership:** Memberships at the Burke are available in Basic Membership categories: *Student: \$10; Senior: \$20; Individual: \$30; Dual senior: \$35; UW Family: \$36; Family: \$55; or Premier Membership categories: Cascade Associate: \$100; Northwest Partner: \$250; Pacific Patron: \$500; Director's Circle: \$1000.*<sup>347</sup>

**Outreach/Communications:** The Burke Museum website provides information about the museum, its collections and programs,<sup>348</sup> and interactive tools for online learning such as the online Field Guides of Washington State.<sup>349</sup> A series of special and ongoing events are designed

for the education and enjoyment of members, families, students and community members. The Museum hosts lectures and workshops for the public and for educators.<sup>350</sup>

Position within University: The Director of the Burke Museum has an appointment as a faculty member in the College of Arts and Sciences and reports directly to the Dean of the College of Arts and Sciences. There are only eight museums in the United States that are both University natural history museums and the State museum of natural history and culture. Most, if not all of the others report to the Provost at their University. The reason is that the museums' curators often come from different academic units. At the Burke Museum, curators hold faculty appointments in both the College of Arts and Sciences and the College of the Environment, so it is unclear if the current reporting structure through one College is the most appropriate model for the Museum.<sup>351</sup>

Staff: The Burke Museum staff directory lists 94 employees, working within the areas of administration, archaeology, biology (including arachnida, genetic resources, herbarium, herpetology, ichthyology, malacology, mammalogy, and ornithology), communications, computing, development, education, ethnology, exhibits, geology and paleontology, museology, operation, registrar's office, and web communications.<sup>352</sup>

Functions Performed Related to Funding: In 2005, the Burke Museum had no Director of Development and only one half-time employee to support the membership program. Now, in 2010, there are five people in the Burke Museum's Development Office, which has been built with help from the College of Arts and Sciences Advancement team. One staff member in the Burke Museum's Development Office is the membership associate, who designs strategies to solicit new members, manages the distribution of membership cards and renewal notices, and maintains a database of members for visitor services staff working at the Museum's entrance.

Another Burke staff member is the annual fund associate, who works in a support role for the Board of the Burke Museum Association. The Burke's Director of Development manages relationships with major donors and sets policy, tone, and goals for the whole office.<sup>353</sup>

University-employed staff members at the Museum are responsible for the management functions at the Museum. They choose exhibits and accessions. They determine the budget and run the programming.<sup>354</sup>

## **2.2. Burke Museum Association**

Mission: The Burke Museum Association's mission is to actively support the Burke Museum by increasing public visibility, raising public and private funds to support programming and future expansion, and providing strong ties to the community.<sup>355</sup>

Brief History: Prior to the incorporation of the Burke Museum Association, the Burke Museum had a Development Council, which was a voluntary advisory committee dedicated to fundraising for the museum. Out of the Development Council was born the Burke Museum Association, which was incorporated as a 501c(3) nonprofit organization in 2003. The incorporation of the Association provided the Burke Museum with a nonprofit fundraising board that would have the eligibility and flexibility to solicit grants and gifts outside of the University of Washington's infrastructure.<sup>356</sup>

Incorporation or Other Structure: The Burke Museum Association is a 501c(3) organized and operated for charitable purposes including to aid, support and assist the Burke Museum by gifts, contributions or otherwise.<sup>357</sup> The Board of the Association has nine board meetings and one retreat per year. Committees include fundraising, nominations, and finance.<sup>358</sup>

The Association has formally agreed to assist the University in fundraising, financial management, and oversight of the management and operation of the museum. The Board assists the Museum as the Director requests, and consults with the Dean of the College of Arts and Sciences regarding the hiring and termination of the Director.<sup>359</sup>

Functions Performed Related to Funding: The Association functions mainly as a fundraising board. They may solicit and accept gifts of all types for the Museum, make contributions of gifts to the Museum, and coordinate with the University regarding solicitation of major donor and capital campaign prospects. They have charged themselves with all of the money for the Museum's annual fund, and assist with the fund in two ways: One is a year-end solicitation of people, specifically inviting people to join at the Director's Circle level. When someone joins the Director's Circle, Board members make the thank-you calls. They also alert people who have not yet taken advantage of the benefits from being a Director's Circle member, which helps to foster relationships with those donors. The second way the Association participates in the annual fund is by planning a Curators Dinner as a fundraising event. The Curators Dinner includes a small, silent auction, a dinner, and a small live auction during which they auction off Curator-led field trips. The dinner is followed by an opportunity to go into the collections with the Curators. The annual fund dollars go into the Burke Museum's operating budget, and the Burke Museum Association does not decide on the distribution.<sup>360</sup>

Board members are advisory on a number of committees, and two or three board members participated on the last search committee for the Director in an advisory role to the Dean. The Association acts as a sounding board for the Director, and also serves in an advocacy role. The Board has fiduciary responsibility for the money raised by the Association, but they have no fiduciary responsibility for the Museum itself.<sup>361</sup>

At times it is advantageous for the Association to apply for grants for the museum that would be administratively difficult for the Museum itself to apply for. For example, if a Foundation only allows one annual grant application per institution, and the University of Washington is already submitting an application, the Burke Museum would be unable to do so. In this situation, the Burke Museum Association could apply for the grant and give the money to the Museum as a gift.<sup>362</sup>

Staff: Membership on the Burke Museum Association Board is voluntary. Although the Association's agreement with the University of Washington does allow them to hire personnel, they do not employ any paid staff.<sup>363</sup>

### **3. Structure of the Relationship**

The Director of the Museum attends Board and committee meetings, and provides suggestions and input regarding new Board members. However, formal nominations come from a nominating committee made up of only board members. The Director reports at every Board meeting regarding the operations of the Museum. Committee reports are given at Board meetings, including reports from the finance, fundraising, and nominations committees. The Board also receives a report from museum staff on one aspect of work happening at the museum, in order to keep the Board informed and engaged, so that they are able to be informed advocates of the Museum.<sup>364</sup>

The Director of the Museum is seen as the leader in setting funding priorities and initiating fundraising campaigns. Museum staff works in collaboration with Board members to coordinate annual fund activities. Currently, a capital campaign is being planned for the somewhat near future. The Museum Director, the Board, and the Museum's Development staff have been collaborating with the University of Washington's Advancement Office in the planning stages

and have expressed appreciation for the project management expertise of the Advancement Office.<sup>365</sup>

The Association's formal agreements establish a role for the Board in reviewing and advising the Director regarding all budgets, but as the Board approves the overall management of the Museum, they usually leave budget direction to the Director's discretion.<sup>366</sup>

Governing Documents: Formal legal documents include the Articles of Incorporation of the Burke Museum Association and the Agreement between the Board of Regents of the University of Washington and the Burke Museum Association. The Burke Museum Legal and Operating Status provides a summary overview of the two formal documents.<sup>367</sup>

## **University of Washington; University of Washington Botanic Gardens**

### **1. Institutional Overview**

**1.1. University of Washington**: The University of Washington is made up of three campuses, with the main campus located in Seattle, Washington. The University indicates an Autumn 2008 enrollment of 41,405 undergraduate, graduate, and professional students. The University was founded in 1861, and was the first public university on the West Coast.<sup>368</sup>

University Budget: The University's operating budget in 2009 was \$3.43 billion. In 2009, the University received funding from grants and contracts (31%), patient revenue (27%), tuition (15%), State funding for operations (10%), Auxiliary (4%), gifts (4%), sales and services of educational departments (3%), state funding for capital expenditures (3%) and other sources (3%).<sup>369</sup>

## 2. **Parties Involved in Study**

The University of Washington Botanic Gardens (UWBG) exists administratively as a center within the University of Washington's School of Forest Resources, positioned within the recently established College of the Environment.<sup>370</sup> Washington Park Arboretum, a part of the UWBG, stands on land that is owned by the City of Seattle, and the park-like functions at the Arboretum are managed by the City of Seattle's Department of Parks & Recreation (the City).<sup>371</sup> The Arboretum Foundation is a private 501c(3) nonprofit organization, established in 1935 to support and advocate for Washington Park Arboretum and is the major fundraising organization for the Arboretum.<sup>372</sup>

### 2.1 **University of Washington Botanic Gardens**

UWBG Mission: Sustaining managed to natural ecosystems and the human spirit through plant research, display, and education.<sup>373</sup>

Washington Park Arboretum Mission Statement: The Washington Park Arboretum is a living plant museum emphasizing trees and shrubs hardy in the maritime Pacific Northwest.

Collections are selected and arranged to display their beauty and function in urban landscapes, to demonstrate their natural ecology and diversity, and to conserve important species and cultivated varieties for the future. The Arboretum serves the public, students at all levels, naturalists, gardeners, and nursery and landscape professionals with its collections, education programs, interpretation, and recreational opportunities.<sup>374</sup>

Size: UWBG includes the 230-acre Washington Park Arboretum, the 16-acre Center for Urban Horticulture (CUH), and the 74-acre Union Bay Natural Area (UBNA). The living plant collections contain 10,484 specimens representing 4389 distinct taxa (including 1101 accessions and 1773 specimens of known wild origin).<sup>375</sup>

Brief History: The UWBG name was established in 2005 to recognize the organizational responsibilities for both the WPA and CUH/UBNA properties. The name UWBG was chosen to better reflect the education, research, curation, and services offered by the united components.

WPA was established on December 6, 1934 by an Agreement between the City of Seattle and the Board of Regents of the University of Washington. That agreement set forth the responsibilities of the two parties that remain essentially unchanged today.<sup>376</sup> UWBG staff are responsible for maintaining the plant collections at WPA and take responsibility for the overall direction of its collections, interpretation, research use, and educational and outreach programs.<sup>377, 378</sup> The City is responsible for maintaining the park-like functions, including security and maintenance of hardscapes and turf.<sup>379</sup> The education and arborist programs are based out of WPA facilities, though their programs take place throughout UWBG.<sup>380</sup>

CUH, founded in 1983, is located on property wholly owned by the University of Washington, who manages and operates the grounds and facilities. UWBG staff provides the maintenance of gardens and natural areas. UW Facilities provides lawn maintenance. The Elisabeth C. Miller Library, Otis Douglas Hyde Herbarium, most administrative staff, associated faculty, and their students hold offices within the CUH facilities, though their programs extend throughout UWBG.<sup>381</sup>

Budget: For fiscal year 2007-2008, UWBG had an operating budget of \$2,132,406. Sources of income included self-sustaining units (36.6%), State funds (26.6%), restricted obligations funds in reserve (13.9%), Arboretum Foundation grant (8.5%), revenue (5%), special project funding – for Arboretum collections development, Union Bay Gardens, and other collections (3.75%), endowment income (2.5%), and general gifts (1.2%). Expenses included self-sustaining units (33.8% total: rental facilities – 18.3%, Miller Library – 10.5%, and rare plant care and conservation – 5%), gardens and grounds maintenance (23.7%), administration and



management (13.3%), restricted future obligations (13.2%), public education (12.1%), curation records (6.1%), and the Hyde Herbarium (0.7%).<sup>382</sup>

Precise accounting for expenses is difficult because some staff benefits and overhead expenses are paid centrally from the University, the Director's salary and benefits as well as faculty salaries are paid by the School of Forest Resources, and some grounds maintenance functions are provided by and paid for by the City and UW Facilities. In addition, a half-time Major Gifts Officer for UWBG is provided by the UW Advancement Office via the College of the Environment.<sup>383</sup>

Programs:

**Collections:** The gardens throughout UWBG represent horticultural gardens, exotic and native plants, natural areas, shoreline, regional collections, and special-purpose gardens.<sup>384</sup>

**Science/Research:** Research focuses on a wide range of plant-related issues, including but not limited to rare plant conservation, biology of invasive species, restoration ecology, community ecology, ecosystem management, plant response to climate change, and plant ecophysiology.<sup>385</sup> Rare Care is a self-supporting unit of UWBG that is dedicated to conserving Washington's native rare plants through methods including *ex situ* conservation, rare plant monitoring, research, reintroduction, and education.<sup>386</sup>

**Education:** UWBG offers classes for adults, youth, family, and professional education. They offer school fieldtrips, classes and workshops, conferences, and community-based learning. UWBG facilities host both undergraduate and graduate programs that are administered through the School of Forest Resources.<sup>387</sup> Forty graduate students are advised by the five faculty members based at UWBG.<sup>388</sup> Twenty-one additional research and teaching professors are associated with

UWBG.<sup>389</sup> The UW-Restoration Ecology Network is a certificate program hosted by UWBG that serves as a regional center to integrate student, faculty, and community interests in ecological restoration and conservation.<sup>390</sup>

**Library:** The Elisabeth C. Miller serves as the most important horticultural library in the Northwest. The Miller Library holds over 15,000 books, 500 journal and periodical titles, 1000 nursery catalogs, and video and electronic resources.<sup>391</sup> Library staff also provide public service through the Plant Answer Line, a quick reference service for gardeners.<sup>392</sup>

**Herbarium:** The Otis Douglas Hyde Herbarium collects and houses voucher specimens of all accessioned plants in UWBG, horticulturally significant plants, Washington State noxious weeds, and plants that reflect the research and projects of UWBG faculty, staff, and students. The collection includes approximately 16, 500 specimens.<sup>393</sup>

**Volunteers:** UWBG's volunteer force involves over 500 individuals who provide over 10,000 hours annually to its many programs, including administration, education, research, horticulture, and special projects.<sup>394</sup>

**Membership:** There is no membership program administered by UWBG. The Arboretum Foundation, the main fundraising partner at Washington Park Arboretum, is a membership organization.

**Outreach/Communications:** UWBG manages its website and monthly e-newsletter, *E-Flora*.<sup>395</sup> Local youth employment programs such as Seattle Youth Garden Works and the Student Conservation Association have partnered with UWBG to educate youth through programs at the gardens.<sup>396</sup> Free public tours and audio tours are available at Washington Park Arboretum.<sup>397</sup>

Position within University: UWBG is positioned within the University of Washington's School of Forest Resources, which is within the recently established College of the Environment. Faculty members report directly to the Chair of the School of Forest Resources.

Staff: UWBG employs 37 staff members to support its programs including an Executive Director and two Associate Directors.<sup>398</sup>

Functions Performed Related to Funding: The UWBG staff is responsible for curating and maintaining the collections and staffing the programs. They run the facilities and hire and manage staff. Leadership from UWBG and SFR participate in joint committees with the partner organizations that are designed to facilitate management, master plan implementation, and fundraising.<sup>399</sup>

## **2.2 City of Seattle's Department of Parks and Recreation**

Mission: Seattle Parks and Recreation will work with all citizens to be good stewards of our environment, and to provide safe and welcoming opportunities to play, learn, contemplate, and build community.<sup>400</sup>

Responsibilities: The City owns the land at WPA, and the Arboretum is a part of the City Parks system. City staff is responsible for the park-like functions which include infrastructure, facilities, and basic grounds maintenance. This includes taking care of lawns, roads, paths, plumbing, irrigation, and major building maintenance. They own most of the buildings at WPA. The City is responsible for all of the maintenance at the Japanese Garden, a gated garden located within WPA.<sup>401, 402</sup>

Functions Performed Related to Funding: In addition to paying employees for maintenance responsibilities, the City provides project management for construction of new gardens at WPA

and raises money for new gardens and capital improvements at WPA through taxpayer levies. The City participates in joint committees with the partner organizations that are designed to facilitate management, master plan implementation, and fundraising.<sup>403</sup>

Staff: In 2009, the City employed 3.67 FTE's for maintenance at the Japanese Gardens and 5.5 FTE's for maintenance responsibilities within the rest of WPA. Leadership and staff involved in project management and collaborative committees are not budget-lined specifically for WPA, as they contribute time to WPA projects as well as projects throughout the entire City Parks system. The City estimates indirect support costs by other Parks Division resources to total about \$3500/year.<sup>404</sup>

Budget: For 2009, the City's revenue from gate fees and events in the Japanese Garden totaled \$220,333. Their operating budget for the Japanese Garden was \$297,863 (86% personnel, 14% other). The City receives no revenue from the remainder of WPA, and their operating expenses there in 2009 totaled \$370,226 (97% personnel, 3% other).<sup>405</sup>

### **2.3 Arboretum Foundation**

Mission: The Arboretum Foundation promotes, protects and enhances the Washington Park Arboretum for current and future generations by strengthening and building a diverse and engaged community of donors, volunteers and advocates.<sup>406</sup>

Brief History: In 1935, the citizen Arboretum Advisory Council established the Arboretum Foundation, which was later incorporated as a nonprofit 501c(3). The Foundation was incorporated for the express purpose of providing a repository for funds and raising revenue which could be utilized in helping to establish the Arboretum. The Foundation would provide an endowment for the Arboretum through private gifts, engage in promotional activities to

publicize the Arboretum throughout the world, and supplement the normal budget with special grants or special collections.<sup>407</sup>

Incorporation or Other Structure: The Arboretum Foundation is a private 501c(3) nonprofit organization and is the major fundraising organization for the Arboretum.<sup>408</sup>

The Foundation is overseen by a board of directors made up of eight officers, 17 members at large, and three ex-officio members who are the Executive Director of the Arboretum Foundation, the Superintendent of Seattle Parks and Recreation, and the Executive Director of UWBG. The board serves to govern by setting direction, establishing priorities, and protecting the organization's assets, and to support by volunteering, raising money, advising, and promoting the Foundation to the community.<sup>409</sup>

The Arboretum Foundation is managed by the Executive Director. The Executive Director manages staff, volunteers, and operations, reports to the board of directors, provides overall leadership for the Foundation, and is responsible for the organization's achievement of its mission and goals.<sup>410</sup>

Functions Performed Related to Funding: The Foundation manages membership and volunteer programs.<sup>411</sup> Membership levels include *Individual: \$35; Family \$50; Friend: \$75, Advocate: \$125; Sponsor: \$250; Steward: \$500; Arbor Circle: \$1000+; Garden Club: \$75; Business: \$100.*<sup>412</sup>

The Foundation raises funds to support the education and arborist programs at WPA, implementation of the WPA Mater Plan, and other special events and projects as approved by Foundation leadership. Special fundraising projects have supported the teahouse at the Japanese Garden, the construction of the Graham Visitors Center at WPA, and pond restoration. The Foundation has sponsored master planning efforts for WPA and strategic planning efforts. The Foundation operates the gift shop at the Graham Visitors Center and publishes the

*Washington Park Arboretum Bulletin*, a quarterly horticultural journal. They host plant sales and other fundraising events. The Foundation is also active in advocating for WPA in policy and funding matters. The Foundation participates in joint committees with the partner organizations that are designed to facilitate management, master plan implementation, and fundraising.<sup>413</sup>

Staff: In addition to the Executive Director, the Arboretum Foundation employs a staff to manage its programs, including membership, communications, and fundraising.

Budget: In fiscal year 2009, the Arboretum Foundation's capital budget reported \$1,212,000 in revenues and \$206,092 in expenses. Operating income totaled \$1,142,890 and included funding from individuals (36.6%), events – plant sales (26%), events – fundraising (12%), gift shop (8.3%), transfer from capital campaign for operating expenses (4.4%), grants/foundations (3.5%), plant sales (2.4%), other restricted/pass thru gifts (2%), investments (1.6%), corporate (1.3%), advertising (1%), and Japanese Garden pass thru (0.7%). Operating expenses totaled \$949,458 and included personnel – staff and contract (47%), events – plant sale (19.9%), gift shop (6.6%), events – fundraising (6.3%), bulletin and newsletter expenses (6.1%), individual giving program expense (3%), rent (2%), depreciation expense (1.7%), public relations (0.7%), and miscellaneous/overhead (6.6%). Operating grants and allocations totaled \$229,840 and went to UW – Education (44.5%), UW – Restricted (41.3%), Restricted/pass thru gifts (10.4%), and Japanese Garden (3.7%).<sup>414</sup>

### **3. Structure of the Relationship**

Joint committees have been formed to address management and funding complexities involving UWBG, Seattle Parks and Recreation, and the Arboretum Foundation. These committees include the Arboretum and Botanic Garden Committee, the Master Plan

Implementation Group, and the Joint Fundraising Committee.<sup>415</sup> A fourth committee is in development to address collaborative use of the space at the Graham Visitor Center.<sup>416</sup>

***Arboretum and Botanic Garden Committee (ABGC):*** This committee was established at the founding of the Arboretum, though representation on the committee has shifted over time. ABGC advises the University of Washington, City of Seattle and the Arboretum Foundation on the management and stewardship of the Washington Park Arboretum for the benefit of current and future generations. Current representation includes three appointees by the Mayor of Seattle, three by the President of the University of Washington, one by the Governor of the State of Washington, and two members from the Arboretum Foundation.<sup>417</sup>

***Master Plan Implementation Group (MPIG):*** This group was formed in 2003 by ABGC under the “Memorandum of Agreement: Working Together to Implement the Washington Park Arboretum Master Plan.” MPIG is charged with overseeing the implementation of the 30 projects within the WPA Master Plan. The group is made up of the Executive Director of UWBG, Seattle Parks and Recreation’s Director of Policy and Planning, the Pro Parks Development Manager for the City, and the Executive Director of the Arboretum Foundation.<sup>418</sup>

***Joint Fundraising Committee:*** This committee was established in 2008 and is made up of two representatives each from the University, the City, and the Arboretum Foundation. The committee was designed to create a positive experience for donors, set up a structure for the three parties to collaborate and share information with respect to fundraising activities, to avoid conflicts over fundraising activities, and to increase the ability of all parties to be successful in raising funds. The committee annually sets (and revises) a three-year list of fundraising priorities. The capital projects subcommittee researches and proposes priority capital projects.

The development and advancement subcommittee develops work plans for fundraising activities.<sup>419, 420</sup>

Though committee approval is not required in all matters of fundraising for operating support, the committee meetings facilitate an important forum for discussions on the subject. The parties use this committee as a forum to share and discuss their individual organizations' operating budgets prior to adoption, to discuss the amount and use of the annual Arboretum Foundation gift to UWBG prior to adoption by the Foundation Board, to discuss coordination and timing of annual appeals to donors for operating support, and to discuss fundraising activities for non-capital endowments.<sup>421</sup>

Governing Documents: Given its long history and the bureaucratic parties involved in this partnership, many governing documents have been established and revised over time including, but not limited to, the following:

*Arboretum Foundation Strategic Plan, 2010*

*Graham Visitor Center Memorandum of Understanding, 2009*

*Seattle Parks and Recreation Strategic Action Plan, 2009*

*Proposed Structure for Joint Decision Making for Fundraising, 2008*

*UWBG Strategic Plan, 2006*

*Memorandum of Agreement: Working Together to Implement the Washington Park Arboretum Master Plan, 2003*

*Adoption of the Arboretum Master Plan, 2001*

*RCW 1.20.120, designating the Washington Park Arboretum as an official arboretum of the State of Washington*

*City of Seattle Ordinance #116337, Authorizing the addition of two members of the Arboretum Foundation on the Arboretum and Botanic Garden Committee, 1992*



*Revised Maintenance Agreement for Washington Park Arboretum between the City of Seattle Department of Parks & Recreation and University of Washington Center for Urban Horticulture, 1987*

*City of Seattle and Arboretum Foundation, Arboretum in Washington Park Use Agreement, 1981*

*Articles of Incorporation of the Arboretum Foundation, 1980*

*Seattle City Council Resolution 26153, Amending and adopting a Master Plan Update for the Washington Park Arboretum, 1979*

*Letter of Clarification of the 1934 Agreement, Amended Lease of portion of Washington Park to University of Washington for Arboretum, 1974*

*City of Seattle Ordinance #65130, Agreement Relating to Arboretum and Botanical Garden in Washington Park, 1934*

## **Chapter 4: Discussion**

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While each organizational and partnership model employed by the college and university gardens in this study is unique, common patterns and themes did emerge through the course of this research, such as the reasons behind the partnerships that exist. College and university gardens engage in networks designed to achieve goals in fundraising, programming, membership, volunteer management, and garden maintenance.

Using the Barr Foundation categories of (1) trust and culture, (2) weighing costs and benefits of collaboration, (3) implementation challenges, and (4) understanding roles, to organize interview data, common themes that came up repeatedly in discussions of both challenges and strategies for success were Resources, Identity, Engagement, and Governance. The data collected are discussed below according to those categories. The themes are often interacting and overlapping, so in order to make the analysis more clear, Table 2 sets some parameters on the themes to be discussed:

**Table 2. Analysis Themes That Emerged During Interviews**

Resources	Identity	Engagement	Governance
<ul style="list-style-type: none"> <li>▪ Competition and/or collaboration to secure resources: with own institution, with partners, with other parties within same institution</li> </ul>	<p><u>“External” Audiences</u></p> <ul style="list-style-type: none"> <li>▪ Public perception</li> <li>▪ Public communications</li> <li>▪ Reporting lines within academic institution</li> </ul> <p><u>“Internal” to model</u></p> <ul style="list-style-type: none"> <li>▪ Internal identity of parties relative to one another</li> <li>▪ Perception of responsibilities</li> </ul>	<p><u>“External” Audiences</u></p> <ul style="list-style-type: none"> <li>▪ Public engagement</li> <li>▪ Volunteer engagement</li> <li>▪ Donor engagement</li> <li>▪ Academic integration – student and faculty engagement</li> </ul> <p><u>“Internal” to model</u></p> <ul style="list-style-type: none"> <li>▪ Informing, appreciating partners</li> <li>▪ Inclusion</li> <li>▪ Cultivating internal relationships</li> <li>▪ Personalities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Individual and collaborative responsibilities as mandated by documents: administrative, fiduciary</li> <li>▪ Policies, agreements</li> <li>▪ Processes</li> <li>▪ Programs</li> <li>▪ Organizational capacities</li> <li>▪ Workforce issues</li> <li>▪ Expertise</li> </ul>

In this analysis, “External” Audiences include parties that are external to the specific organizational funding model at the garden, and so parties who might normally be thought of as internal, such as the greater academic institution, volunteers, and donors are here considered to be external. “Internal” Audiences are limited to the parties being explored within the model – the governing and funding partners immediately involved in the garden’s operations.

The following discussion represents challenges and strategies that were discussed by interview subjects. At times, there may be some overlap of categories. For example, there may be a “Governance” solution to a “Resources” problem, or an “Engagement” strategy may be used to address an “Identity” challenge.

## **Trust and Culture: Challenges**

### ***Resources***

Many interview subjects felt challenged by competition for financial resources that was damaging to the trust and culture within funding partnerships. This competition sometimes existed between the garden and its parent academic institution – in some cases, the academic institution saw the garden as competition for private donors who should instead be directing their gifts toward other fundraising priorities within the school. Financial resource competition existed between some gardens and their partner organization(s) when the partners were not working toward mutual and agreed-upon goals. In one case, multiple partners working to support one garden individually approached prospective donors for different priorities without knowledge of each others' requests. This not only communicated to donors that there was competition for resources and illustrated a troubling lack of communication and coordination amongst partners, but also displayed a lack of direction and identity for the partnership as a whole.

Perceived imbalances of power in the relationships studied resulted from differences in the level of recognition established through academic reporting structure, different levels of input on decision-making regarding shared projects, and different levels of funding responsibility overall. These imbalances of power contributed to some feelings of defensiveness and competition for resources.

Financial competition was cited between a garden and other departments, museums, or divisions within its own academic institution. Intra-institutional resource competition was fueled by the presence of many independent fundraising programs within a larger institution that had allegiances to their own programs and were independently pursuing funding without strong

centralized systems for collaboration, such as regular meetings and a shared database of donor information.

Representatives from several of the gardens studied indicated that challenges resulted from inadequate operational funding provided by their academic institutions. It was often felt that this was perpetuated by a culture at the college or university level that did not recognize the garden as an important resource for research and education, and did not include the garden as a high-priority organization that was integral to carrying out the mission of the academic institution. The garden representatives reported that schools would reduce operational support proportionally in response to increases in a garden's ability to support itself. For example, growth in a garden's earned income, grant funding, membership program, or private contributions would be met with funding cuts from the academic institution, which would then prevent any net growth in the garden's operating abilities. In the current economic climate, the funding resources coming from the parent organization of gardens based at public institutions had been adversely affected by reductions in state funding. Likewise, the budgets of gardens based at private institutions had been adversely affected by reductions in endowment earnings and private giving.

### ***Identity***

External identity challenges often related to the culture of the community in which a garden was located and concerned a lack of clarity in the public's perception of how the garden operated within a partnership structure. Interview subjects discussed how a garden's purpose and mission could become muddled by the public's pre-conceived ideas about the roles and reputations of parks, academic institutions, and supporting organizations. Partnerships involving a public college or university garden and a public parks system were especially impacted by public perception as this partnership structure inherently introduced a considerable amount of public process and public

input to decision-making surrounding issues of garden and facility development and access. A lack of clarity in a garden's public identity led to marketing and communications challenges for some gardens as they tried to communicate the value and purpose of the gardens. Lack of clarity regarding the overall mission of collaborations made it difficult for individual partner organizations to provide complete but clear public information while avoiding confusing or conflicting messages.

Academic reporting lines were also cited as a source of challenges to the trust and culture inside an organization. Some interview subjects viewed a garden's position within its academic institution as an indicator of the importance of the garden to the school and whether the school truly viewed the garden as a museum. Resentment arose within institutions when some parties had more direct reporting lines to high-level academic administrators than others. Some garden representatives whose organizations were positioned within low-level reporting structures reported that their position made it more difficult for them to integrate the garden into the larger academic community.

In some partnerships more than others, the culture and the level of trust were greatly challenged by a lack of internal clarity concerning identity. Partnership structures naturally made it more difficult to develop a singular identity, especially when the partners were legally separate operating organizations, each with a paid staff. The presence of staff working across a garden with multiple properties detracted from an identity as one team working toward common goals. Garden representatives indicated that one of the most disruptive forces to developing a clear and cohesive mission was actually personality- or behaviorally-driven, when individuals would bring personal agendas to leadership boards and be unable to see the partnership as the "big picture." Lack of clarity surrounding roles and responsibilities, at high levels or in day-to-day activities, also detracted from a strong internal culture.

***Engagement***

Interview subjects discussed challenges from a culture that fostered low levels of engagement from some parties who were committed to act solely in an advisory capacity for the garden. They cited lack of direct fiduciary responsibility for the garden as a possible source of the ambivalence and feared that this might lead to the failure of fundraising campaigns. At the same time, some representatives from supporting organizations complained about not being engaged enough by their partners in major decisions that would affect their individual organization, such as choosing new leadership for a partner organization.

***Governance***

Governance structures challenged the trust and culture within some partnerships when the partners felt that there was a lack of clarity regarding roles and responsibilities. This lack of clear and specific governing documents contributed to situations in which one organization would feel that its partner had crossed a boundary, the partner would feel that they were operating within their defined role, and the situation would build animosity and undermine trust between parties.

Cumbersome governance agreements, or partnerships with organizations involving multiple levels of bureaucracy also was damaging to the culture of some partnerships, simply by creating processes that made forward progress slow and difficult. Again, the involvement of a public agency in a partnership introduced some additional requirements of public process and approval. By their nature, partnerships involved multiple organizations, each with their own processes, and the layering of those processes was frustrating and at times damaging to the morale within the partnership.

## **Trust and Culture: Strategies**

### ***Resources***

Building organizational resources in the form of building organizational capacity was cited more frequently by interview subjects as a strategy for success than was building up the organization's funding resources. I believe this was because increased organizational capacity naturally enabled the gardens to build their funding resources. Multiple interview subjects discussed participation in workshops aimed at building the capacity of board leadership, management, and staff to both operate within a partnership structure and to achieve successful outcomes for individual responsibilities, such as grant writing. Several garden representatives cited the partnership structure itself as a mechanism for building capacity because the involvement of multiple organizations provided several opportunities for individuals with a wide array of expertise to become involved in supporting the garden. For example, partnerships with academic units provided gardens with individuals who have scientific expertise and organizational affiliations that were used to build a more valuable plant collection; centralized fundraising offices within academic institutions provided individuals with fundraising expertise and systems for targeting and tracking communications; affiliations with public park systems provided staff with expertise in facilities maintenance and capital project management; involvement of nonprofit partners often provided individuals with expertise in grant-writing and event planning, as well as connections to corporate sponsors or individual donors.

Some garden representatives discussed the development of strategies to integrate the garden into every part of the academic institution in order to build resources. Resources built through such integration included public recognition that the garden is an integral part of the academic institution, recognition of the educational and scientific importance of the garden by

institutional leadership, and support from faculty, staff, students, and alumni who might not otherwise be involved in the garden's community. These strategies involved incorporating the garden into a wide range of curricula and events developed by departments across campus, which offered opportunities for the garden staff to communicate their relevance to those within other disciplines such as math and art. Integration strategies also included incorporating the garden into the fundraising priorities of the central fundraising office for the academic institution, which for some gardens meant that garden improvements were listed priorities for major capital campaigns.

### ***Identity***

A positive and cohesive internal identity for a garden and its funding partners established the gardens studied as internally strong and externally understandable and appealing organizations. With a clear identity communicated to the public, the physical space of the gardens could then serve as a place that could be used to cultivate a donor base and host donor events in support of the gardens, for the larger academic institution, and for the larger community of partner organizations. The existence of well-developed and specific planning documents (strategic plans, master plans) provided a useful tool for setting the common identity and vision for partners.

Good working relationships at the gardens studied always involved a team of partners working together as one organization in support of the garden. That communal identity, for college and university gardens and their partners, generally included components of education, research, and visitorship. Interview subjects stressed the importance of recognizing the contributions that each of the partners brought to the garden. Communications such as newsletters were used to build public recognition of the academic role of some gardens by describing its research and education programs. Gardens that identified with and shared maintenance responsibilities with public park systems benefited from a positive public perception and public willingness to financially support



parks. Nonprofit supporting organizations acted as community liaisons and advocates for the gardens as a whole. Frequent, consistent, and constructive communication helped to work through problems or misunderstandings and foster this communal identity.

### ***Engagement***

When supporting partnerships were formed and individuals were chosen to serve within partner organizations, many interview subjects stressed the importance of clarity regarding the goals of the partnership and expectations of the individuals. People who were seen as desirable partners within supporting partner organizations possessed the ability to be effective advocates for a garden – people who were willing to be engaged, build relationships, and support the goals of the managing institution(s). One interview subject stated that the “most important relationship in any organization is between the president of the board and the executive director. And if that’s solid and good, then everything else can be solid and good.”

To foster trust and a positive culture within funding partnerships, many of the relationships studied had built-in interactions that promoted engagement. Individuals who served on advisory or fundraising boards attended fundraising events organized by their partners, invited friends and colleagues to those events, and made personal financial contributions. Partner organizations designed initiatives to support and boost fundraising campaigns run by some gardens. For example, one partner organization established a challenge fund to match individual contributions to its garden’s annual fund appeal. Within many partnerships, parties engaged and demonstrated respect for their partners by asking them to serve in advisory roles for decision-making processes. In the partnerships studied, organizations often asked their partners to weigh in on decisions that would affect the overall partnership, even if the partner had no formal role in the decision-making process (i.e. hiring new leadership for one of the partner organizations). Open communication was

repeatedly cited as an important strategy for maintaining a positive working relationship. This included regular reports on garden operations to the funding partners, which helped the partners to feel involved and provided information those partners could use when advocating for the gardens with the public. Frequent and complete communication was cited as essential between separate parties that were involved in the same fundraising arena.

Another set of strategies aimed at building an external culture of support surrounding the gardens included various activities designed to engage new audiences and broaden the garden's constituencies. Some activities included hosting social and fundraising events specifically designed for the 25 to 40-year-old age group. One garden approached the idea of broadening constituencies by operating satellite programs that facilitated community garden sites in underserved urban areas. Another institution developed mobile educational kits, complete with curriculum plans, that carried their mission off-site and into the classroom. For college and university gardens, broadening their impact to support academic departments not traditionally associated with botanic gardens (botany, horticulture) was an engagement strategy that worked to build a stronger culture of support for the garden within the academic institution.

### ***Governance***

In some cases, governance structures were built or amended to improve the culture surrounding the partnership. This sometimes was done to create formal roles in decision-making for a partner when previously the role had been solely advisory. For example, one partner group gained formal representation on the committee responsible for governing decisions at the garden. In another example, the executive director of a garden served as a voting member on the executive committee of the supporting partner's governing board. These types of agreements were sometimes necessary for partners to understand the interests and challenges faced by one another.

## **Weighing Costs and Benefits of Collaboration: Challenges**

### ***Resources***

Collaboration with partners sometimes result in negative unintended consequences for an organization's financial resources. As discussed above, when a supporting partner was able to provide significant funding for a college or university garden, the academic institution responded by reducing the amount that it provided to fund the garden's operations, thus eliminating any net gain to the garden from the collaboration. In some places, this led to salaries that were officially on the academic institution's payroll but their funding was completely reliant on gifts from partners that had to be requested and approved annually.

### ***Identity***

Affiliation with an academic institution presented challenges for a garden and its partners to most effectively run the organization. In some cases when a garden had strong programs in education and research that physically took place outside of the main campus of the academic institution, representatives from partner organizations indicated that administrative infrastructure imposed by the educational institution felt cumbersome, and did not always meet the garden's greatest needs at the time. For example, some interview subjects from partner organizations felt that their garden as an organization was already conducting well-developed scientific programming and could benefit more from the leadership of a strategic business manager than they could from the contributions of a leader who is a member of the faculty but did not have the same management expertise.

Partnership structure itself was costly to some gardens' ability to establish a strong identity. When responsibilities were divided among partners, the result sometimes perpetuated an idea that the supporting partner was operating in a direction separate from that of the garden, which created

problems in communicating with donors. In some cases, supporting partners struggled to communicate messaging when they were fundraising for a project they would not also be managing.

### ***Engagement***

Organizations working together to support a garden at times felt restricted from engaging donors and the public as they might if they were operating as a singular organization. Some partnerships included policies that restricted who could engage certain parties when, and in what ways. Engaging members of the garden was sometimes difficult under a collaborative model if the managing body imposed restrictions on what the supporting partner could offer in terms of access to the gardens or restrictions on the types of benefits that could be offered to members.

Internally, engagement in collaborative models required a considerable investment of time and resources from the leadership involved. Leadership felt that they were contributing a lot of work toward individuals who were not members of their own staff. Collaboration also required that leadership spend a considerable amount of time attending committee meetings and providing information to their partners. Not only were the leaders of the partner organizations involved in these non-financial investments, but partners whose operations extend beyond the activities at the garden (i.e. park systems, academic institutions) also committed to the partnership the time and expertise of staff members who were not specifically assigned to the partnership, such as fundraising experts or project managers. These contributions of time were difficult to measure and shifted over time as relationships and priorities changed.

### ***Governance***

Collaborative decision-making structures were sometimes seen as costly to partners because the partnership agreements limited the flexibility and freedom in decision making that organizations would have had if operating independently. Introduction of multiple organizations

often introduced more levels of review and approval in decision-making and restricted the partners from entering freely into agreements with other parties.

## **Weighing Costs and Benefits of Collaboration: Strategies**

### ***Resources***

Collaborations studied for this research contributed a great deal to college and university gardens in terms of financial resources, flexibility, expertise, and reputation. By definition, formal funding partnerships helped to diversify the sources of funding relied upon by a garden. Most academic institutions studied had centralized fundraising offices who lent expertise and staff to the gardens' fundraising efforts. Partner groups fundraised for and gave gifts toward operating and capital budgets of the gardens. Academic institutions with strong financial standing were sometimes cited as sources of supplemental funding and loans for major property acquisitions made by the garden and/or their partners. The partnerships studied aligned gardens with organizations that had different levels of political power, flexibility in approaching donors, and abilities to leverage funds from sources that were not available to all partner organizations as individuals. Academic institutions contributed expertise and reputation to strengthen the research and education programs at several gardens. Partner organizations contributed individuals with higher levels of expertise in fundraising and project management than those possessed by garden staff alone. Some partners had more flexibility to act for the interests of the garden in an advocacy role through political lobbying, and some played a greater role in building public support by engaging neighbors, managing volunteer programs, and producing public communication materials.

### ***Identity***

Affiliation with an academic institution helped the gardens studied to establish their identities as respected scholarly institutions and outdoor classrooms. While the gardens were often

rather small components of their larger academic institutions, collaborations with partners proved to be beneficial in building stronger public identities for the gardens studied.

### ***Engagement***

Membership and volunteer programs and partnerships with external organizations all have proven to be good vehicles for positive public engagement for the gardens studied. Partnerships with external organizations extended both the network of supporters and the volunteer bases for gardens. Partnerships provided more opportunities to engage the public through marketing and communications produced by multiple organizations and distributed to multiple audiences (assuming a consistent message).

Internally, the collaborations provided structures through which partners could give and take as needed – as organizations would undergo transitions or face inconsistent resources. Advisory boards and committees served as sounding boards for managing leadership to explore new ideas and directions for the organization. Serving on fundraising and advisory boards provided a high level of engagement for prospective donors, and encouraged higher levels of giving.

### ***Governance***

Through their legal status, partner organizations that were independent nonprofit organizations provided a granting and advocacy vehicle that was not available to all gardens that were positioned administratively within academic institutions. For example, nonprofit parents were able to pursue granting opportunities to secure funding for the garden's priorities when the academic institution's grant request would prioritize other projects instead. Some of the funding and public communications activities were more easily managed by the nonprofit organizations who could operate outside of the bureaucracies that existed within especially large institutions.

## **Implementation Challenges**

### ***Resources***

Most interview subjects expressed that the management of funds was the most confusing part of their collaborations. As more major partnerships entered a network it became exponentially more complicated. Interview subjects from two cases indicated that they had experienced difficulty with the transfer of donor gifts from one partner to another. This happened when unclear language defining the intended use of a financial contribution led to an interpretation of the donor's intentions by a party that was not the original recipient of the gift. In both cases, the partners felt frustration that, in their opinions, the donors' wishes had not been preserved by the partner who administered the funds. The partnership structure and transfer of money between organizations made it more difficult to ensure that the gift was used as the donor intended. In other cases, gardens struggled from receiving donor gifts that had been negotiated by a separate partner organization. Very narrow and specific restrictions on gifts caused difficulty for the garden management by preventing those funds from being available to address the most pressing needs of the garden. This especially became a challenge when a partner would provide a garden with a gift for capital projects but was unable to support the additional and ongoing maintenance for the projects.

Another frequently-cited resource challenge regarded perceptions of which partner was paying for which programs, staff, and services. Garden staff positions that were hired and officially paid by the academic institution but whose salaries were funded by a partner were essentially dependent on an uncertain funding source. This arrangement led many to feel that multiple organizations were "in charge" of the position or program. Academic institutions in most cases imposed overhead charges on the garden's operating budget which were sometimes perceived as

unfair or irrelevant to the garden's facilities. True representations of the garden's operating costs were difficult to reflect accurately because some services and funds, such as human resources and faculty salaries were centrally provided by the academic institution. Fundraising partners who employed their own staff members had to raise money both to support the garden but also to support their own organization's operating costs. And while sometimes these partnerships allowed one partner to help out financially when another could not cover its full responsibilities, partners with stronger financial capacity were hesitant to provide the supplemental funds for fear that they would never be relieved of that additional funding responsibility.

When centralized fundraising information systems were in place for multiple parties, including partners or other bodies internal to the academic institution, those parties had to be willing to compromise, collaborate, share information, and trust one another. This was sometimes challenging for institutions with long-held allegiances and previously incompatible information systems. These systems of collaboration and cooperation sometimes required that one partner had to step aside and pass up potential funding opportunities in order to allow another party to pursue the opportunity and to support the working relationship.

### ***Identity***

The partnership structures studied ranged from simple to complex, and always presented at least some challenge in structuring both internal and external communications so as not to confuse people about the identity of the place. Internally, any lack of clarity in governance structures led to ambiguities regarding identity and responsibilities. This ambiguity at times led to administrative duplications (i.e. multiple partners producing public marketing and communications pieces that did not reflect a consistent identity.)



Most of the garden leadership representatives interviewed struggled to communicate the identity and importance of their botanic garden to both their academic administration and to the public – the value of scientific collections vs. a pretty park to be used for donor relations or a natural area for recreation. Reporting lines under a departmental structure within the academic institution which perpetuated the identity of the garden solely as a subset of the department created a barrier to presenting the garden as a museum that crosses interdisciplinary lines.

### ***Engagement***

Partnership models studied presented a number of implementation challenges related to keeping all partners informed and engaged. Partners expected to be well-informed and expected their council to be sought in important issues. Hurt feelings and communication breakdowns resulted when a partner did not feel sufficiently engaged. When boards served specifically in a fundraising or advisory role, or did not have fiduciary responsibility for the organization, it was felt that the lack of formal responsibility reduced the level of commitment on the part of board members compared to that of a governing board.

Leaders of any partner organization who were seen as weak or controversial created difficulties in keeping all parties engaged and maintaining a collective team-oriented culture amongst partners. Leaders at college and university gardens are often faculty members, but the skills required of such leaders, including a considerable amount of public speaking, staff management, and relationship building, were cited as difficult to find within the pool of candidates who were also qualified educators and researchers. Leaders within parks systems or nonprofit partner organizations also needed to demonstrate a commitment to maintaining the health of the partnership, not just their own organization, in order to maintain a healthy working relationship.

### ***Governance***

Governance structures sometimes felt limiting to the scope of action and participation that was allowed certain partners. Agreements which set forth rules for how parties could (and could not) approach and interact with donors and the public felt restrictive to some parties who believed they could more effectively raise funds without these restrictions. Supporting partners at times felt frustration over not being allowed to participate in decision-making structures at the implementation level for projects they have financially supported.

### **Implementation Strategies**

#### ***Resources***

Utilizing the expertise of central fundraising staff within the academic institution helped some gardens improve capacity and/or expertise in handling major campaigns and donor relations. This expertise was used to help channel funds to the garden in ways that would have more impact on their total budget. For example, in order to avoid central budget reductions as a response to donor gifts, one garden worked with donors to fund projects that would not fall within the normal operations supported by the academic institution, such as specific internship programs. At some gardens, endowments were created to fully support some staff positions to provide ongoing funding that was more stable than support from an annual gift.

Supporting partnerships marked by a high level of trust often resulted in a large portion of resources being contributed by supporting partners as unrestricted gifts to the garden management. Large, unrestricted gifts were preferable to garden management because the funds streamlined budgeting processes, helped to establish clearer roles and responsibilities concerning funding and management, and allowed the garden management to maintain control over operational funding priorities.

One interview subject remarked on the administrative burden associated with managing a membership program that did not seem to be the most efficient means of fundraising for their garden. For membership programs that are based on a philanthropic or mission-based model rather than a revenue-generating retail model, for example at a garden with no gate, no admission fee, and no gift shop or restaurant, the interview subject felt that the membership program could be more efficiently replaced by an annual fund appeal, in which donors could receive the same benefits as they do through the membership program, but the administrative responsibilities would be reduced to occurring once annually, rather than on an ongoing basis.

### ***Identity***

Gardens studied utilized their partners as spokespersons to communicate the mission and the importance of the garden to the community. The right mix of partners has helped gardens to establish themselves as places for education, research, and enjoyment. In cases where the partners worked together and presented a united front, they felt that they were very successful in donor relations.

Several of the gardens successfully communicated their identity as a vital element of the greater academic institution and embedded themselves in the mission of the institution by working with faculty in a variety of disciplines to incorporate the garden into curriculum. One garden developed a program that provided stipends and expertise to help develop curricula that incorporated the gardens. The program managers thought beyond the academic disciplines that are formally connected with botanic gardens such as botany and horticulture, and found ways to incorporate the gardens into courses in math, history, and art. Another garden hosts graduate fellowships in plant research and curation, which not only demonstrates the quality of the institution to its academic community, but allows the garden staff to educate and cultivate the next

generation of experts in the field. This integration with the curriculum and professional development opportunities of the academic institution helped to build constituency in terms of support from faculty and students, who are also potential future donors.

It was seen by many interview subjects as especially important to communicate the benefits of working as one team to the staff of the organizations within a partnership. Working on projects that crossed organizational boundaries, such as fundraising campaigns and the development of marketing materials, helped staff members to work together and built relationships among the people in the organizations who were communicating with the public on the front lines. This encouraged staff to realize that it was to their advantage to be more fully integrated with partner organizations. As one interview subject stated, “people need to shake hands at all levels – not just at the top.”

### ***Engagement***

The collaborations studied provided more opportunities to reach and engage with donors, simply because the involvement of more organizations broadened the communities reached. One garden representative indicated that donors have been known to give more when they feel involved. Supporting partners often hosted fundraising events for donors, who would invite their friends and colleagues. In some of the gardens studied, corporate sponsorships were established through the appointment of board members who were associated with the corporation.

Internally at some gardens studied, it has proven to be beneficial to appoint and engage board members who are not just prospective donors, but who also possess expertise that could benefit the garden as a whole. Interview subjects considered it to be desirable that board members have experiences that make them capable of providing leadership and organizational advice – people who have run successful companies, management consultants, finance experts, investment

experts, people who could provide a garden's leader with professional advice about tasks such as developing an operating budget, looking at certain business models for various enterprise units within their organizations, thinking and planning strategically, navigating through organizational change, and moderating staff morale.

Marketing and communications materials were used by some gardens to engage the academic administration and the donor community. In one case a newsletter that highlighted student internship experiences increased contributions toward the garden's internship program. Newsletters were also used by some to inform the garden's constituencies about upcoming projects, campaigns, or areas of need. This information then increased the ability of the garden's members and friends to understand the identity of the garden and communicate the mission and values to the greater public.

### ***Governance***

Consistent, established, and agreed-upon forums for joint decision making seemed to be effective structures for accomplishing mutual goals. While it was seen as important to involve all relevant parties, it was also suggested that these processes be streamlined as much as possible for the sake of efficiency. Lack of efficiency was seen as a detriment to keeping all parties engaged.

It may take several years for board members to become well-integrated into an organization, but most organizations still supported term limits for their board members as a means of introducing fresh perspectives. It was stated as important for members of fundraising or advisory boards to remember that their supporting roles and responsibilities were different from those of a governing board. This was accomplished generally by board leadership with a strong sense of the appropriate role, mentorships for new board members to help them understand how the

relationship between the organizations functions, and board members' regular participation in board training events.

Many interview subjects found it very useful for the managing leadership of the garden to participate in the decision-making forum of the supporting partner organization. In some cases the role was formal, and the garden director held a voting position on the board's executive committee, and in some cases the role was advisory and informal but still very present. Even when the garden director's role on the partner organization's board was a non-voting role, representatives from the partner organization often cited the opinion of the director as the voice that would set direction for the board's decision-making.

## **Understanding Roles: Challenges**

### ***Resources***

The biggest challenge in terms of resources seemed to be that when roles were not well understood or responsibilities were overlapping, administrative and functional duplications resulted, which wasted resources. For example, when two partners produced marketing materials for a garden, both were paying for services that likely could have been produced collaboratively. When two partners were devoting resources to the development of separate fundraising plans for a garden, it was not only inefficient, but it also gave the impression to donors that the partner organizations were not operating in sync.

### ***Identity***

Lack of clarity in roles was the single greatest contributor to identity challenges in the gardens studied. When roles were not well understood by the parties involved in a partnership, it created difficulties in communicating internally within each organization and within the partnership, and externally to the academic administration and to the public.

Internally, supporting partners felt at times that they had a managing role and at times felt that they had an advisory role, which caused people to overstep boundaries in some cases and resulted in an absence of responsibility in some cases. Lack of clarity about identity and purpose also resulted when a supporting organization had to raise funds in support of its own operations in addition to the funds it raised to support the garden.

College and university gardens exist on lands that serve as research facilities, public parks, and college campuses. It was difficult for some board members of supporting organizations who were more accustomed to serving on a governing board to understand the role of the academic institution in the garden's operations. Rather than the board being responsible for directing the garden's leadership, it was the garden's decision-making structure within the academic institution and under academic leadership that determined the expectations and the processes involved in the operations of the garden.

### ***Engagement***

Challenges of engagement were cited both in cases of parties being over-engaged, beyond the scope of their responsibilities, and under-engaged, where the partner did not show adequate interest in acting in its role as a partner. Over-engagement was generally cited when a supporting partner was formally engaged in an advisory role but was not charged with a management role, and individuals attempted to overstep that boundary. Under-engagement generally resulted when a fundraising board had no fiduciary responsibility for the institution that it operated to support. Difficulties also arose when a lack of clarity about roles in a partnership causes an individual to misrepresent the relationship or to present the relationship in a negative light to the public.

## ***Governance***

Governance challenges related to understanding roles often occurred simply because individuals did not understand the governance structure of a partnership and so acted outside of their formal responsibilities. In the case of a supporting partnership or a fundraising board, the board president is not the boss of the garden's director, and the board is not fiduciarily responsible for the garden. Differences in formal roles and relationships between advisory or fundraising boards and formal governing board were continually discussed as governance challenges.

## **Understanding Roles: Strategies**

### ***Resources***

In order to clarify roles and make the best use of resources, partners in the models studied worked to seek agreement on funding priorities and methods of fundraising. In most cases, garden management was given primary responsibility for setting these priorities and supporting partners were consulted on and involved in supporting any major projects or campaigns. Once projects were determined, partners were assigned fundraising responsibilities such as public outreach or grant writing based on which organization was most competent and best positioned to perform the tasks.

Strategic planning processes, board and management retreats, and the acquisition of assistance from outside consultants were all strategies used by organizations studied to develop concrete priorities and to assign responsibilities to specific partners in plans to reach mutual goals. These concrete planning documents were cited as effective tools that could be used to define and enforce roles and responsibilities when parties felt that the roles had become unclear or that someone was overstepping the boundaries set by the agreements.



### ***Identity***

Clear and specific marketing was used in most models studied to identify and recognize supporting partners but primarily to present the garden as one organization, which helped the partners to communicate a cohesive identity to the public. Faculty leadership at most gardens worked to solidly communicate the educational and research roles of the organization to the public, build intra-institutional support for the garden, and communicate to the other partners about the academic world.

In order to build a strong internal identity amongst partner organizations, some partnership models included committee structures for the partners to make important funding decisions together through a consensus-based process. Some interview subjects felt strongly that it was important to develop fundraising programs that involved staff from partner organizations working together to communicate internally that the success of the garden was the priority they were all working toward and not the success of one partner over another.

### ***Engagement***

Interview subjects from all of the gardens studied stressed that the leaders within these collaborations must understand the importance of the relationship between partners to ensure that they were working together to support the garden. This relationship-building was supported by trainings for board members, executive directors, and staff that were aimed at helping team members at all levels understand how the relationship works.

Involving partners in decision-making was one strategy used to keep partners informed and engaged. When individuals with expertise in project planning, fundraising, design, etc. could cross the boundaries and assist their partners in major initiatives, it helped to build capacity and increase the success of the operation overall. This resource and information-sharing across partners also

helped to avoid any miscommunications or mixed messages by ensuring that all partners were involved. Communication about challenges and successes in joint decision-making forums helped partners understand the contributions and the needs of the other parties so that they could work cooperatively to support one another.

### ***Governance***

Well-written and specific governance documents, such as articles of incorporation, by-laws, and agreements between academic institutions and their supporting partners, helped parties to clarify and understand roles and responsibilities. Founding documents or articles of incorporation generally defined the purposes and powers of an organization. Bylaws concerned specifics of board structure, term limits, how to fill vacancies, etc.

Most interview subjects who worked within systems that involved legally separate partner organizations preferred the separation of governance and fiduciary responsibilities by organization. They felt that this helped to clarify that the nonprofit partner was not charged with a management role and was free of fiduciary responsibility for the organization. Leadership from most of such partner organizations preferred this arrangement so that they could focus the efforts and resources of their organization on raising funds to support the garden.

## **Chapter 5: Recommendations**

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### ***Recommendations for University of Washington Botanic Gardens***

One could look at the organizational model at UWBG and say it is too cumbersome and should be abandoned. I am certain that, in moments of frustration, some have made that suggestion. I do not, however, think that a major overhaul of the partnership or the elimination of any of the parties involved is likely or realistic. This management and funding system made up of

three separate but overlapping sets of organizational responsibilities (not to mention the associated complications from the managing entities' positions within two much larger organizations) is indeed cumbersome and is not one that would likely be recommended today to an organization in its planning stages. It is easy for roles and responsibilities to become muddled, and it is easy for personal agendas to introduce competition into the relationship, especially when all parties feel so fiercely emotional about protecting and preserving the Arboretum and Botanic Gardens.

In spite of the complicated realities, each party involved in the UWBG model contributes unique resources and supports the Arboretum and Botanic Gardens in unique ways. So, accepting the model that exists as the base and the starting point for future growth and improvement, I have used the data gathered in the course of this research to identify what I believe are the most important strengths and weaknesses associated with the partnership model at UWBG. From those strengths and weaknesses, I have recommended some strategies that I believe should be employed to help the partners at UWBG work together more efficiently, to clarify roles, and to unify under one strong identity.

### **Strengths of the UWBG Model**

This is what I believe is working well in the funding partnership at UWBG:

- The partnership model at UWBG provides an extremely valuable diversity of available funding sources. Whereas some gardens have to be fully self-supporting as singular organizations, or are in partnerships that actually restrict their options for funding, UWBG participates in formal partnerships with both City Parks, who can raise funding for special projects through tax levies, and the Arboretum Foundation, a private nonprofit solely dedicated to raising funds to support the Arboretum and Botanical Garden.

- All parties involved in the partnership at UWBG are extremely passionate about the value of the Arboretum and Botanical Garden.
- The WPA Master Plan provides a specific and tangible vision that is quite useful in making the case for funding to both public and private audiences.
- Strategic planning efforts for all partners are relatively recent (within the last five years) and appear to be mostly in-sync.
- The joint committees formed by the partners to collaborate on issues of governance, master plan implementation, and fundraising provide valuable forums for planning, communication, and overall engagement.

### **Weaknesses of the UWBG Model**

- The Arboretum Foundation was formed “to promote, foster and assist in the establishment, development, growth and maintenance of an Arboretum, Botanical Garden and Herbarium to be located in the area in Seattle, King County, Washington set apart for that purpose at the Park Board of the City of Seattle, the same to be under the supervision of the University of Washington.” Then the collections of that Arboretum and Botanical Garden grew beyond the boundaries of the land given by the City at Washington Park. The fact that the collections, programming, and functions (including the aforementioned Herbarium) that are supervised by the University of Washington have physically expanded, and the supporting partners have remained (for the most part) tied to the original physical boundaries has created problems for the health of the partnership. Resources have been further stretched and strained as partners struggle with the geographic appropriateness of funding support. This partnership is already quite difficult to communicate both externally and internally, and the fact that the participation of all partners is not consistent across the gardens contributes to the identity struggles.

- Throughout the history of the Washington Park Arboretum, both the City and the University of Washington have failed to supply adequate resources to maintain the grounds and collections to the level appropriate for a world class botanical garden. They have also failed to fully fund the related programming, and have relied on the Arboretum Foundation for operational support. While capital funds from the City's Pro Parks and Parks and Green Spaces Levies are an important exception, this overall funding scenario reflects that neither "parent" organization values and prioritizes the Arboretum and Botanic Gardens as the botanically, scientifically, educationally, and recreationally unique asset that it is. This lack of adequate funding for maintenance and programming has introduced and perpetuated a defensive posture amongst partners.

Therefore, the three most pressing questions that I see facing UWBG, in this climate of economic instability, diminished funding resources, and leadership transition are the following:

- 1. How should UWBG and its partners strategically approach current and future funding challenges in a way that can allow the organization to effectively pursue its mission and achieve the facilities and staffing levels set forth in the master plans?***
- 2. How can UWBG and its partners build an identity, both within the partnership and without, that is understood, respected, and therefore effective in communicating messages and building constituencies?***
- 3. How can UWBG and its partners integrate the Arboretum and Botanic Gardens into the community, the City, and the University in a way that will establish the gardens as an asset to be valued and funded appropriately?***

## **Recommendations**

*Question #1: How should UWBG and its partners strategically approach current and future funding challenges in a way that can allow the organization to effectively pursue its mission and achieve the facilities and staffing levels set forth in the master plans?*

**Form a committee made up of partners and outside experts to specifically address resource development and strategy.** The Joint Fundraising Committee, recently formed at the end of 2008, is an important forum for the partners' collaboration on private fundraising, but its duties are not robust enough. Strong representation from University of Washington Advancement should be included on a committee designed specifically to address the major funding challenges of UWBG. Input should be sought from experts such as John Howell at Seattle consulting firm Cedar River Group, given his familiarity with the partnership, as well as experts from local foundations such as the Bill and Melinda Gates Foundation and the Seattle Foundation, who are familiar with the unique state and local challenges and opportunities in nonprofit sustainability. This committee of partner representatives and nonprofit management experts should be charged with the development of a collaborative strategy to establish more reliable and diverse funding streams for the future of UWBG. With recent declines in state and local funding (and an over-reliance on these funding sources), UWBG needs to significantly increase its earned income and private giving income. Among the ideas discussed by this committee could be recommendations such as the following:

- City Parks' leadership could address funding shortfalls by proposing an admission fee to the Arboretum as a special use park.
- More special events or exhibits with admissions fees could provide additional revenue and marketing opportunities.

- The membership program of the Arboretum Foundation should be evaluated for efficiency and effectiveness and should be expanded to capture the individuals and organizations currently supporting UWBG facilities and programs that occur outside the Arboretum.
- Outreach and education programs should be evaluated according to costs and benefits (both financial and non-financial), so that partners can collaborate to effectively develop revenue-generating programs such as professional development conferences.
- Increasing the presence of revenue-generating programs will require hiring of additional support staff, whose funding will need to be incorporated into the development of the collaborative resource strategy.

*Question #2: How can UWBG and its partners build an identity, both within the partnership and without, that is understood, respected, and therefore effective in communicating messages and building constituencies?*

Because this is a question of building a collective identity, these strategies are directed to all partners – the University of Washington, Seattle Parks and Recreation, and the Arboretum Foundation.

**Build a common identity by supporting a common collection.** One of the most confusing aspects of this partnership model is the message of UWBG as one collection and one organization, countered with the message that the portion of collections and programs that occur at WPA are separated out for support by the partner organizations. Understandably, this piece of the identity conflict was amplified when the name UWBG was implemented in 2005 to better reflect the education, research, curation, and services offered by the united components. However, the collections and programs offered by the united components have been growing for decades. I believe the time is

appropriate for the Arboretum Foundation to formally commit its support to the entire Arboretum and Botanical Garden, not just the portion on the land owned by the City. I feel that the Arboretum Foundation could better serve its mission from the perspective that it was incorporated to support the functions, not the physical space within those boundaries. This is the one action that would unilaterally eliminate a majority of the identity challenges present in this partnership.

**Divide and conquer, but give everybody credit all the time.** It has been established that resources are limited. It is important to streamline processes as much as possible to improve efficiency. The partners should work together to identify duplicative functions. One example of how the partners have already begun to work in this direction is the formation of the Joint Fundraising Committee. This committee provides a forum through which the partners can strategically plan which organization is best positioned to succeed with specific fundraising strategies and proceed accordingly. This does not mean that any one partner should operate in isolation or that joint projects are not sometimes the best strategy. What it does mean is that the forum for communication and engagement has been built, and the result of this process should be decisions that can be accepted, trusted, and relied upon.

One example that could be addressed is the fact that both UWBG and the Arboretum Foundation produce newsletters for their communities. A unified, centralized message would be better communicated by one newsletter (or e-newsletter) that includes information about all of the partners' activities relating to the Arboretum and Botanic Gardens. Community members who want to support the Arboretum and Botanic Gardens should not be forced to pick and choose between the organizations; neither should they receive a flood of messaging that is confusing because it comes from different sources. All media and marketing should be comprehensive and consistent, and should recognize all the partners.



**Staff (and volunteers, and members, and boards) should shake hands at all levels.** The benefits of collaboration that are available to organizational leadership should be available to staff of all three organizations at all levels. The leadership of the partner organizations should communicate about ways in which each of their staffs could benefit from expertise available from the others'. This could involve projects that, by design, position staff from partner organizations to work together to accomplish a goal and could include projects such as event planning, communications, continuing education, and fundraising. Sharing staff in this way could also be a strategy for addressing any identified administrative duplications. Representatives from the most successful working partnerships studied in this research frequently remarked that they "work together as one."

Networks of trust and communication should be constructed, encouraged, and nurtured in order to improve the effectiveness of staff performance overall, but also to communicate to staff members the value of acting as one alliance rather than separate heads on one body. The staff, members, volunteers, and board members who engage in the day-to-day work of these organizations are the ones who touch the most individuals as representatives of the Arboretum and Botanical Garden. If they feel supported as part of a healthy alliance, they will communicate the identity of the Arboretum and Botanical Garden as one entity.

**Communication builds trust.** All interview subjects indicated that over the last few years, communication within this partnership has improved considerably. It is important for the partners to continue to communicate internally about everything that affects the others in order to avoid misunderstandings internally and misrepresentation externally. Being inclusive, being sensitive, and being appreciative are all engagement strategies that have been successful in the partnership models studied for this research. In order to build a community identity, each partner needs to be given the freedom to fulfill its responsibilities and be given support and trust to do so. The only way

to achieve a trusting successful relationship is for the parties to respect each others' roles and contributions and to continually ensure that communication is occurring collectively. Keeping all partners well informed is another strategy that builds the capacity of the individuals to act as advocates for the Arboretum and Botanical Garden in the community.

*Question #3: How can UWBG and its partners integrate the Arboretum and Botanical Garden into the community, the City, and the University in a way that will establish the gardens as an asset to be valued and funded appropriately?*

Because each partner in this model contributes unique resources, I am recommending strategies for each organization to address this question.

### **UWBG**

**Develop educational programming to support the integration of UWBG into curriculum and events campus-wide.** Use the Curriculum Enhancement Program at the Botanic Garden at Smith College as a model. At Smith, the Botanic Garden offers assistance and resources to faculty in any discipline who are interested in utilizing the Botanic Garden in their classes. For example, they have created a traveling exhibit that illustrates the mathematics of spiral patterns in plants, and dance classes hold their performances – inspired by plant movement – outside in the Botanic Garden. This type of program provides opportunities to develop relationships with staff, faculty, and students in programs such as math, business, history, music, and beyond.

**Explore the appropriateness of the UWBG academic reporting structure.** UWBG is positioned within the School of Forest Resources but holds no formal faculty appointments (other than the position of Director) or student majors. Several of the college and university gardens researched for

this study have recently shifted their garden's alignment within their academic institution to resemble that of most college and university museums, with a Director reporting directly to upper-level administration – frequently in the Provost's Office. At the University of Washington, the Burke Museum of Natural History and Culture and the Henry Art Gallery also currently report through academic units. In light of this apparent trend in the field, and as a response to new budgeting systems that are based on academic and research metrics not applicable to the museums, I recommend that UWBG leadership consult with leadership from the other two museums on campus to discuss proposing a coordinated shift in reporting structure.

### **Arboretum Foundation**

**Aim to diversify the constituency of the Arboretum and Botanical Garden.** The first action in the mission statement of the Arboretum Foundation is to *promote* the Washington Park Arboretum. As the nonprofit partner, the Foundation is best positioned to engage the stakeholders in the community. This includes promoting relationships between the Arboretum and its neighbors, as well as reaching further out into the community to build constituencies of people from age groups and cultural backgrounds that differ from the traditional botanic garden community. Communicating the identity of the Arboretum and Botanical Garden to a diverse public and prioritizing ways to involve a diverse community would broaden the base of support throughout the City and beyond and could help alleviate any negative perceptions. As the official arboretum of the State of Washington, managed by the State University and the City Parks, the Arboretum should strive to be accessible and relevant to all people.

### **Seattle Parks and Recreation**

**Continue levy support for special projects, and increase maintenance funding.** Projects within the WPA Master Plan have been included in the last two Seattle Parks' voter-approved levies. Through

these measures, Seattle Parks and Recreation has ensured public support of projects at the Arboretum, both through votes and tax dollars. However, increased maintenance and operations funding are also needed to support the management of the gardens, especially as more gardens are built. One way to raise maintenance support for the arboretum and other such tourist attractions and cultural institutions would be through the creation of a cultural district. According to Americans for the Arts, the United States is home to over 100 arts and cultural districts, which are defined as geographic areas of a city where there is a high concentration of cultural facilities.<sup>422</sup> These cultural districts are managed collaboratively to support the cultural resources of a city, and often establish funding by adding a percentage to their local sales or property tax, thus capturing some of the positive externalities that residents and visitors receive from the cultural institutions and redirecting those funds to the improvement of the facilities.

**Continue to clearly communicate the purpose and identity of Washington Park Arboretum as a special use park and a component of the University of Washington Botanic Gardens.** The Parks website is networked to the UWBG website and includes a clear explanation of the relationships involved in the space. Links to current and relevant information about the Arboretum are available on the site.

### ***Conclusions and Directions for Future Research***

This research presents an overview of 20 organizational models that illustrates the breadth of variety in funding partnerships engaged in by college and university gardens. The in-depth case studies were developed using personal interviews and document reviews to better understand the working relationships in five of those partnership models. The data gathered in these case studies revealed patterns of both challenges and strategies that emerged related to themes of resources, identity, engagement, and governance. While many of the challenges cost the gardens' leadership a

great deal of time and effort, the benefits of partnering with other organizations are great and include contributions such as a diversity of resources and a broader constituency. Relationship-building is especially important during times of limited economic growth, when partners can supply unique expertise and access to alternative sources of funding.

I recommend that future research should focus on the specific fundraising programs and strategies that are employed by college and university gardens and their partners, including the specific designs for shared responsibilities, and cost to benefit ratios, in order to determine which approaches are most efficient and effective.

## End Notes

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1. Richard W. Lighty, "The Origin and Characteristics of the Public Garden in the United States," (paper, presented at the XXI International Horticulture Congress, Hamburg, Germany, 1982), quoted in Elizabeth Marie Butler, "Some Characteristics That May Affect the Ability of Public Gardens to Generate Operating Revenue" (master's thesis, University of Delaware, 1998), vii.
2. Philip G. Correll, "Botanical Gardens and Arboreta of North America: An Organizational Survey" (master's thesis, University of Delaware, 1981), 10.
3. Butler, "Some Characteristics," 17, 22, 23, 32-34, 39
4. Cheryl B. Lowe, "Funding Strategies for Government-Affiliated Gardens" (master's thesis, University of Delaware, 1998), 83.
5. "About Us," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about.shtml>.
6. Ibid.
7. Lynne LaMarca Heinrich, Willard E. White, and Tina Donahoo, "National Trends in Gardens & Arboreta Philanthropy: Benchmarking Study (2002 -2008)" (study, Marts & Lundy, 2008).
8. Ibid., 2.
9. Ibid., 3.
10. Ibid.
11. Steven Lawrence and Reina Mukai, "Foundation Growth and Giving Estimates, Current Outlook" (report, Foundation Center, 2010), 1.
12. Heinrich, "National Trends," 2.
13. Peter Olin, "Fundraising Issues for College and University Gardens," *Public Garden* 18, no. 4 (2003): 14.
14. Ibid.
15. Ibid, 15.
16. Ibid., 15 – 16.
17. Heinrich, "National Trends," 39 – 40.
18. Michael Quinn Patton, *Qualitative Research & Evaluation Methods* (Thousand Oaks, California: Sage Publications, 2002), 40.
19. <http://www2.guidestar.org/>
20. <http://www.publicgardens.org/Custom/GardenSearch.aspx>
21. Patton, *Qualitative Research & Evaluation Methods*, 227.
22. Ibid., 349.
23. Ibid, 447 – 452.
24. Ibid., 41.
25. Ibid, 453 – 454.
26. Anselm Strauss and Juliet Corbin, *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Thousand Oaks, CA: SAGE Publications, 1998), 22, quoted in Michael Quinn Patton, *Qualitative Research & Evaluation Methods* (Thousand Oaks, California: Sage Publications, 2002), 454.
27. Roy Ahn, "Nonprofit/Nonprofit Collaboration in Boston" (report, Barr Foundation, 2006), 4.

28. Ibid., 12 – 21.
29. "Our Gardens," *Fullerton Arboretum*, [http://fullertonarboretum.org/gar\\_ourgardens.php](http://fullertonarboretum.org/gar_ourgardens.php).
30. Ibid.
31. "Mission and History," *Fullerton Arboretum*, [http://fullertonarboretum.org/info\\_missionhistory.php](http://fullertonarboretum.org/info_missionhistory.php).
32. Department of the Treasury, Internal Revenue Service, Form 990, Return of Organization Exempt From Income Tax, Fullerton Arboretum Authority, 2007.
33. "Hours and Directions," *Fullerton Arboretum*, [http://fullertonarboretum.org/h\\_hoursdirections.php](http://fullertonarboretum.org/h_hoursdirections.php).
34. "Mission and History," *Fullerton Arboretum*, [http://fullertonarboretum.org/info\\_missionhistory.php](http://fullertonarboretum.org/info_missionhistory.php).
35. "Giving Opportunities," *Fullerton Arboretum*, [http://fullertonarboretum.org/support\\_giving.php](http://fullertonarboretum.org/support_giving.php).
36. "Giving Opportunities," *Fullerton Arboretum*, [http://fullertonarboretum.org/support\\_giving.php](http://fullertonarboretum.org/support_giving.php).
37. "Arboretum Staff," *Fullerton Arboretum*, [http://fullertonarboretum.org/info\\_contacts.php](http://fullertonarboretum.org/info_contacts.php).
38. "Mission and History," *Fullerton Arboretum*, [http://fullertonarboretum.org/info\\_missionhistory.php](http://fullertonarboretum.org/info_missionhistory.php).
39. "About the SCGB," *South Carolina Botanical Garden*, 2009, <http://www.clemson.edu/public/scbg/about/>.
40. Ibid.
41. "Directions," *South Carolina Botanical Garden*, 2009, <http://www.clemson.edu/public/scbg/visiting/directions.html>.
42. "About the SCGB," *South Carolina Botanical Garden*, 2009, <http://www.clemson.edu/public/scbg/about/>.
43. "Friends of the Garden," *South Carolina Botanical Garden*, 2009, <http://www.clemson.edu/public/scbg/support/friends.html>.
44. Ibid.
45. "Agriculture," *Clemson Public Service Activities*, 2009, [http://www.clemson.edu/public/focus\\_areas/agrisystems.html](http://www.clemson.edu/public/focus_areas/agrisystems.html).
46. "Environment," *Clemson Public Service Activities*, 2009, [http://www.clemson.edu/public/focus\\_areas/environment.html](http://www.clemson.edu/public/focus_areas/environment.html).
47. "Youth," *Clemson Public Service Activities*, 2009, [http://www.clemson.edu/public/focus\\_areas/youth.html](http://www.clemson.edu/public/focus_areas/youth.html).
48. "SCBG Staff," *South Carolina Botanical Garden*, 2009, <http://www.clemson.edu/public/scbg/about/staff.html>.
49. "History of the Arboretum," *Connecticut College Arboretum*, 28 October 2009, <http://www.conncoll.edu/green/arbo/8583.htm>.
50. Ibid.
51. Ibid.
52. "Hours, Rules, and Regulations," *Connecticut College Arboretum*, 10 August 2009, <http://www.conncoll.edu/green/arbo/8605.htm>.

53. Glenn Dryer, "Connecticut College Arboretum," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 27.
54. Ibid.
55. Ibid.
56. Ibid.
57. "Arboretum Staff," *Connecticut College Arboretum*, 26 February 2010, <http://www.conncoll.edu/green/arbo/8611.htm>.
58. Ibid.
59. Dryer, "Connecticut College Arboretum," 27.
60. "Plantations History," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/about/history>.
61. "About Cornell Plantations," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/about>.
62. Ibid.
63. Donald A. Rakow, "Cornell Plantations Annual Report 2009," (annual report, Cornell Plantations, 2009), 4.
64. "Visitor Information," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/visitor-info>.
65. "Membership," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/get-involved/membership>.
66. Ibid.
67. Rakow, "Cornell Plantations Annual Report 2009," 4.
68. "Far Above...The Campaign for Cornell," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/get-involved/giving/campaign>.
69. "Donald A. Rakow Faculty Profile," *Cornell University Department of Horticulture*, 2007, <http://hort.cals.cornell.edu/cals/hort/people/faculty.cfm?netId=dr14>.
70. "Graduate Fellowships," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/learning/graduate-fellowships>.
71. "Affiliations," *Cornell Plantations*, 2010, <http://www.cornellplantations.org/about/affiliations>.
72. "Grounds Operations: Mission and Scope of Services," *Cornell University Facilities Services Facilities Management*, 2005, [http://www.fm.cornell.edu/fm/grounds/fmn\\_groundsopmission.cfm](http://www.fm.cornell.edu/fm/grounds/fmn_groundsopmission.cfm).
73. "History," *The Sarah P. Duke Gardens*, <http://www.hr.duke.edu/dukegardens/history.htm>.
74. "Volunteer," *The Sarah P. Duke Gardens*, [http://www.hr.duke.edu/dukegardens/volunteer\\_horticulture.htm](http://www.hr.duke.edu/dukegardens/volunteer_horticulture.htm).
75. "Directions," *The Sarah P. Duke Gardens*, <http://www.hr.duke.edu/dukegardens/directions.htm>.
76. "Admission," *The Sarah P. Duke Gardens*, <http://www.hr.duke.edu/dukegardens/admission.htm>.
77. "Support Duke Gardens," *The Sarah P. Duke Gardens*, [http://www.hr.duke.edu/dukegardens/support\\_duke\\_gardens.htm](http://www.hr.duke.edu/dukegardens/support_duke_gardens.htm).
78. "About the Gardens," *The Sarah P. Duke Gardens*, [http://www.hr.duke.edu/dukegardens/about\\_the\\_gardens.htm](http://www.hr.duke.edu/dukegardens/about_the_gardens.htm).



79. "Board of Advisors," *Flora, Newsletter of The Friends of The Sarah P. Duke Gardens*, Spring Issue no. 54, 2.
80. "Staff," *The Sarah P. Duke Gardens*, <http://www.hr.duke.edu/dukegardens/staff.htm>.
81. "Our History," *The Arnold Arboretum of Harvard University*, 15 June 2009, <http://www.arboretum.harvard.edu/aboutus/history.html>.
82. Ibid.
83. Ibid.
84. Robert E. Cook, "The Arnold Arboretum of Harvard University, Director's Report: 2003 – 2007," *Arnoldia* 65, no. 4 (2008): 33.
85. "The Friends of the Arnold Arboretum," *Arnold Arboretum of Harvard University*, 20 March 2010, <http://www.arboretum.harvard.edu/programs/membership.html>.
86. Cook, "The Arnold Arboretum of Harvard University, Director's Report: 2003 – 2007," 33.
87. Audrey Rogerson, Director of External Relations at The Arnold Arboretum of Harvard University, interviewed by Jessica A. Farmer, April 1, 2010.
88. Cook, "The Arnold Arboretum of Harvard University, Director's Report: 2003 – 2007," 32.
89. "History," *Reiman Gardens*, 2010, <http://www.reimangardens.com/index.cfm?nodeID=5725>.
90. Ibid.
91. Ibid.
92. Anne Krapfl and Teddi Barron, "Butterfly house seasonal closing reflects budget woes at garden," *Inside Iowa State*, 5 October 2007, <http://www.iastate.edu/Inside/2007/1005/reiman.shtml>.
93. "Admission Rates," *Reiman Gardens*, 2010, [http://www.reimangardens.com/en/visitor\\_and\\_tour\\_information/admission.cfm](http://www.reimangardens.com/en/visitor_and_tour_information/admission.cfm).
94. Reiman Gardens' CoHorts, *By-Laws*, 2006, [http://www.reimangardens.com/documents/filelibrary/images/august\\_8\\_2006/ByLawspdf.pdf](http://www.reimangardens.com/documents/filelibrary/images/august_8_2006/ByLawspdf.pdf).
95. Krapfl and Barron, "Butterfly house."
96. Reiman Gardens' CoHorts, *By-Laws*, 2006, [http://www.reimangardens.com/documents/filelibrary/images/august\\_8\\_2006/ByLawspdf.pdf](http://www.reimangardens.com/documents/filelibrary/images/august_8_2006/ByLawspdf.pdf).
97. "Vice President for Business and Finance Organization Chart, *Iowa State University*, 23 March 2010, <http://www.vpbf.iastate.edu/pdf/orgchart.pdf>.
98. "Department of Horticulture Facilities," *Iowa State University Department of Horticulture*, 2005 – 2009, <http://www.hort.iastate.edu/facilities/>.
99. "About Us," *JC Raulston Arboretum*, 19 June 2009, <http://www.ncsu.edu/jcraulstonarboretum/about/about.html>.
100. Ibid.
101. Robert E. Lyons and Nancy Doubrava, "The JC Raulston Arboretum," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 32.
102. Ibid.
103. "Visit," *JC Raulston Arboretum*, 19 June 2009, <http://www.ncsu.edu/jcraulstonarboretum/visit/visit.html>.
104. Lyons and Doubrava, "The JC Raulston Arboretum," 33.
105. Ibid.

106. Ibid, 32.
107. "About Us," *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/>.
108. Ibid.
109. Ibid.
110. The North Carolina Arboretum, "Report to Stakeholders: The North Carolina Arboretum and The North Carolina Arboretum Society: FY 2007 – 2008," 12.
111. "Plan a Visit," *The North Carolina Arboretum*, <http://ncarboretum.org/plan-a-visit/>.
112. "The NC Arboretum Society," *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/the-nc-arboretum-society>.
113. The North Carolina Arboretum, "Report to Stakeholders," 12.
114. "Board of Directors," *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/board-of-directors/>.
115. "History," *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/history/>.
116. "Staff," *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/staff/>.
117. "History," *The Botanic Garden of Smith College*, 30 April 2010, <http://www.smith.edu/garden/History/history.html>.
118. "Gardens," *The Botanic Garden of Smith College*, 11 July 2008, <http://www.smith.edu/garden/Gardens/gardens.html>.
119. Ibid.
120. "Visitor Info," *The Botanic Garden of Smith College*, 20 September 2007, <http://www.smith.edu/garden/Home/visitorinfo.html>.
121. Madelaine Zadik, "Botanic Garden of Smith College," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 35.
122. Ibid.
123. Madelaine Zadik, Manager of Education and Outreach, The Botanic Garden of Smith College, interviewed by Jessica A. Farmer, February 19, 2010.
124. Zadik, "Botanic Garden of Smith College," 35.
125. "Our History," *The Scott Arboretum of Swarthmore College*, <http://scottarboretum.org/aboutus/history.html>.
126. Ibid.
127. Ibid.
128. The Scott Arboretum of Swarthmore College, "Year in Review, 2008," 7.
129. "General Visitor Information," *The Scott Arboretum of Swarthmore College*, <http://scottarboretum.org/visitorinfo/>.
130. "Membership," *The Scott Arboretum of Swarthmore College*, <http://scottarboretum.org/membership/>.
131. The Scott Arboretum of Swarthmore College, "Year in Review, 2008," 9.
132. Ibid., 7.
133. Ibid., 6.
134. "Staff," *The Scott Arboretum of Swarthmore College*, <http://scottarboretum.org/aboutus/staff.html>.

135. Bob Byers, "Garvan Woodland Gardens," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 28.
136. Ibid.
137. Ibid.
138. "Visit the Gardens," *Garvan Woodland Gardens*, 2010, <http://www.garvangardens.org/visit/>.
139. "Membership," *Garvan Woodland Gardens*, 2010, <http://www.garvangardens.org/join/>.
140. Byers, "Garvan Woodland Gardens," 28.
141. Ibid.
142. Ibid.
143. Ibid.
144. Ibid.
145. "About Us," *University of California Botanical Garden*, [http://botanicalgarden.berkeley.edu/about\\_us/about\\_us.shtml](http://botanicalgarden.berkeley.edu/about_us/about_us.shtml).
146. Ibid.
147. Ibid.
148. "Plan Your Trip," *University of California Botanical Garden*, [http://botanicalgarden.berkeley.edu/visit/plan\\_trip.shtml](http://botanicalgarden.berkeley.edu/visit/plan_trip.shtml).
149. "Membership," *University of California Botanical Garden*, [http://botanicalgarden.berkeley.edu/get\\_involved/membership.shtml](http://botanicalgarden.berkeley.edu/get_involved/membership.shtml).
150. Paul Licht, Director's Column, *University of California Botanical Garden Newsletter*, Summer/Fall, 2009, [http://botanicalgarden.berkeley.edu/about\\_us/images/press/archived\\_newsletters/34-3-4.pdf](http://botanicalgarden.berkeley.edu/about_us/images/press/archived_newsletters/34-3-4.pdf).
151. "About Us," *University of California Botanical Garden*, [http://botanicalgarden.berkeley.edu/about\\_us/about\\_us.shtml](http://botanicalgarden.berkeley.edu/about_us/about_us.shtml).
152. Ibid.
153. "About Us," *University of California Botanical Garden*, [http://botanicalgarden.berkeley.edu/about\\_us/about\\_us.shtml](http://botanicalgarden.berkeley.edu/about_us/about_us.shtml).
154. Ibid.
155. "About Us," *UC Davis Arboretum*, [http://arboretum.ucdavis.edu/about\\_us.aspx](http://arboretum.ucdavis.edu/about_us.aspx).
156. "History," *California Center for Urban Horticulture*, 2007-08, <http://ccuh.ucdavis.edu/about-us/history-and-boards>.
157. "About Us," *UC Davis Arboretum*, [http://arboretum.ucdavis.edu/about\\_us.aspx](http://arboretum.ucdavis.edu/about_us.aspx).
158. Ibid.
159. "Plan Your Visit," *UC Davis Arboretum*, [http://arboretum.ucdavis.edu/plan\\_your\\_visit.aspx](http://arboretum.ucdavis.edu/plan_your_visit.aspx).
160. "Contact Us," *California Center for Urban Horticulture*, <http://ccuh.ucdavis.edu/contact>.
161. "Join the Friends," *UC Davis Arboretum*, [http://arboretum.ucdavis.edu/join\\_the\\_friends.aspx](http://arboretum.ucdavis.edu/join_the_friends.aspx).
162. "Campus Planning and Community Resources," *UC Davis Administrative and Resource Management*, 12 March 2010, <http://arm.ucdavis.edu/organization/cpcr.html>.
163. "Programs, Institutes and Centers," *UC Davis College of Agricultural and Environmental Sciences*, <http://caes.ucdavis.edu/departments/centers/centers>.

164. "Kathleen Socolofsky," Search: *UC Davis People*,  
[http://www.ucdavis.edu/search/directory\\_results.shtml?filter=Kathleen%20Socolofsky](http://www.ucdavis.edu/search/directory_results.shtml?filter=Kathleen%20Socolofsky).
165. "Executive Director with wealth of horticultural experience," *California Center for Urban Horticulture*, <http://ccuh.ucdavis.edu/about-us/dave-bio>.
166. Richard C. Bumstead, "The University of Chicago Botanic Garden," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 29.
167. "Facts for Journalists," *The University of Chicago*, <http://news.uchicago.edu/more/facts.php>.
168. Bumstead, "The University of Chicago Botanic Garden," 29.
169. Ibid.
170. Ibid, 30.
171. Ibid, 29.
172. "The University of Chicago Botanic Garden," *The University of Chicago Botanic Garden*,  
<http://botanicgarden.uchicago.edu/index.html>.
173. "Backgrounder," *Minnesota Landscape Arboretum*,  
<http://www.arboretum.umn.edu/background.aspx>.
174. "Arboretum Celebrates National Public Gardens Day on May 7," *Minnesota Landscape Arboretum*, 14 April 2010, <http://www.arboretum.umn.edu/NatlPublicGardensDay.aspx>.
175. "Directions/Map," *Minnesota Landscape Arboretum*,  
<http://www.arboretum.umn.edu/directions.aspx>.
176. Minnesota Landscape Arboretum, "Annual Report FY2009," 2009,  
[http://www.arboretum.umn.edu/UserFiles/File/MNLA\\_AnnualReport-09.pdf](http://www.arboretum.umn.edu/UserFiles/File/MNLA_AnnualReport-09.pdf), 15.
177. "Plan Your Visit," *Minnesota Landscape Arboretum*,  
<http://www.arboretum.umn.edu/planyourvisit.aspx>.
178. "Join," *Minnesota Landscape Arboretum*, <http://www.arboretum.umn.edu/join.aspx>.
179. "Annual Report FY2009," Minnesota Landscape Arboretum, 2009, 15.
180. "Position Announcement, Professor and Director," *Minnesota Landscape Arboretum*,  
<http://www.arboretum.umn.edu/directorposition.aspx>.
181. Ibid.
182. "Research," *Minnesota Landscape Arboretum*,  
<http://www.arboretum.umn.edu/arbresearchhome.aspx>.
183. Laura Cotterman, "History," 12 January 2006, *North Carolina Botanical Garden*,  
<http://ncbg.unc.edu/pages/2/>.
184. Laura Cotterman, "Facts about the North Carolina Botanical Garden," 25 June 2009,  
<http://ncbg.unc.edu/pages/5/>.
185. Ibid.
186. Laura Cotterman, "Visiting the North Carolina Botanical Garden," 15 March 2010, *North Carolina Botanical Garden*, <http://ncbg.unc.edu/visit/>.
187. Laura Cotterman, "History,"
188. Laura Cotterman, "Botanical Garden Foundation," 21 April 2010, *North Carolina Botanical Garden*, <http://ncbg.unc.edu/pages/9/>.
189. Ibid.

190. Laura Cotterman, "Staff Directory," *North Carolina Botanical Garden*, 5 May 2010, <http://ncbg.unc.edu/pages/3/>.
191. "History of the Morris Arboretum," *Morris Arboretum of the University of Pennsylvania*, [http://www.business-services.upenn.edu/arboretum/about\\_history.shtml](http://www.business-services.upenn.edu/arboretum/about_history.shtml).
192. "General Information For Visiting," *Morris Arboretum of the University of Pennsylvania*, <http://www.business-services.upenn.edu/arboretum/visit.shtml>.
193. "Directions to Morris Arboretum," *Morris Arboretum of the University of Pennsylvania*, [http://www.business-services.upenn.edu/arboretum/visit\\_directions.shtml](http://www.business-services.upenn.edu/arboretum/visit_directions.shtml).
194. Morris Arboretum of the University of Pennsylvania, "Annual Report, July 2008 – June 2009," 2009, 23.
195. "Hours and Fees," *Morris Arboretum of the University of Pennsylvania*, [http://www.business-services.upenn.edu/arboretum/visit\\_hours.shtml](http://www.business-services.upenn.edu/arboretum/visit_hours.shtml).
196. "Membership Information," *Morris Arboretum of the University of Pennsylvania*, <http://www.business-services.upenn.edu/arboretum/membership.shtml>.
197. "Annual Report, July 2008 – June 2009," Morris Arboretum of the University of Pennsylvania, 2009, 23.
198. Paul W. Meyer, "Morris Arboretum of the University of Pennsylvania," in "College and University Gardens, Profiles of Seven Diverse Institutions," *Public Garden* 18, no. 4 (2003): 33.
199. *Ibid.*, 34.
200. *Ibid.*
201. *Ibid.*
202. "History," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/history.php>.
203. "Contact Us," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/contact.php>.
204. Burke Museum of History and Culture, "Annual Report 2008-2009," 2009, 41. <http://www.washington.edu/burkemuseum/FY09AnnualReport.pdf>.
205. "Hours & Information," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/visit/hours.php#admission>.
206. "Membership," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/join/membership.php>.
207. "Annual Report 2008-2009," Burke Museum of History and Culture.
208. "Burke Museum Association," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/assoc.php>.
209. Julie Stein, Director of the Burke Museum of Natural History and Culture, interviewed by Jessica A. Farmer, February 18, 2010.
210. *Ibid.*
211. *Ibid.*
212. "UW Museology," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/museology.php>.
213. "History," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/history.shtml>.

214. Ibid.
215. "Fact Sheet," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/factsheet.shtml>.
216. "Directions and Maps," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/visit/directions.shtml>.
217. "Operation Budget for UW Botanic Gardens FY07/08," Appendix 13 in "Review of College of Forest Resources Centers, Cooperatives and Programs," *University of Washington Botanic Gardens*, 15 December 2008, [http://depts.washington.edu/uwbg/docs/UWBG\\_5YearPlan.pdf](http://depts.washington.edu/uwbg/docs/UWBG_5YearPlan.pdf).
218. "Plan Your Visit," *University of Washington Botanic Gardens*, 28 April 2010, [http://depts.washington.edu/uwbg/visit\\_hours.shtml](http://depts.washington.edu/uwbg/visit_hours.shtml).
219. "Membership," *Arboretum Foundation*, <http://www.arboretumfoundation.org/membership/membership.cfm?CFID=34789493&CFTOKEN=13530769>.
220. "Operation Budget for UW Botanic Gardens FY07/08," *University of Washington Botanic Gardens*.
221. "Washington Park Arboretum," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/gardens/wpa.shtml>.
222. "About the Arboretum Foundation," *Arboretum Foundation*, <http://www.arboretumfoundation.org/about/about.cfm>.
223. "Fact Sheet," *University of Washington Botanic Gardens*.
224. "Associated Faculty," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/research/faculty.shtml>.
225. "Contacts." *Harvard University*, 2010, <http://www.harvard.edu/about/contacts.php>.
226. "Harvard at a Glance," *Harvard University*, 2010, <http://www.harvard.edu/about/glance.php>.
227. Ibid.
228. Department of the Treasury, Internal Revenue Service, Form 990, Return of Organization Exempt From Income Tax, President and Fellows of Harvard College, 2007.
229. "Harvard at a Glance," *Harvard University*.
230. Ibid.
231. Audrey Rogerson, Director of External Relations at The Arnold Arboretum of Harvard University, interviewed by Jessica A. Farmer, April 1, 2010.
232. "Our Mission," *The Arnold Arboretum of Harvard University*, 26 October 2009, <http://www.arboretum.harvard.edu/aboutus/mission.html>.
233. "Hours and Services," *The Arnold Arboretum of Harvard University*, 03 May 2010, <http://arboretum.harvard.edu/visitors/hours.html>.
234. "Our History," *The Arnold Arboretum of Harvard University*.
235. "Inventory," *The Arnold Arboretum of Harvard University*, 8 March 2010, <http://arboretum.harvard.edu/plants/inventory.html>.
236. Ibid.
237. Ibid.
238. "About," *The Arnold Arboretum of Harvard University*, 13 October 2009, <http://arboretum.harvard.edu/aboutus/aboutus.html>.

239. "Our Mission," *The Arnold Arboretum of Harvard University*.
240. "Our History," *The Arnold Arboretum of Harvard University*.
241. Robert E. Cook, "The Arnold Arboretum of Harvard University, Director's Report: 2003 – 2007," 33.
242. Ibid.
243. "Landscape Collections and Care," *The Arnold Arboretum of Harvard University*, 18 June 2009, <http://www.arboretum.harvard.edu/plants/grounds.html>.
244. Ibid.
245. "Propagation," *The Arnold Arboretum of Harvard University*, 18 June 2009, <http://www.arboretum.harvard.edu/plants/propagation.html>.
246. "Science," *The Arnold Arboretum of Harvard University*, 21 December 2009, <http://www.arboretum.harvard.edu/research/research.html>.
247. "Sino-American Botanical Expedition," *The Arnold Arboretum of Harvard University*, 18 June 2009, <http://www.arboretum.harvard.edu/plants/sabe.html>.
248. "Institutional Collaborations for Plant Conservation," *The Arnold Arboretum of Harvard University*, 18 June 2009, [http://www.arboretum.harvard.edu/plants/conservation\\_collaboration.html](http://www.arboretum.harvard.edu/plants/conservation_collaboration.html).
249. "Education," *The Arnold Arboretum of Harvard University*, 10 May 2007, <http://www.arboretum.harvard.edu/programs/education.html>.
250. "Science," *The Arnold Arboretum of Harvard University*.
251. "Isabella Welles Hunnewell Internship Program," *The Arnold Arboretum of Harvard University*, 21 January 2010, <http://arboretum.harvard.edu/programs/intern.html>.
252. "Library Holdings," *The Arnold Arboretum of Harvard University*, 22 December 2009, [http://www.arboretum.harvard.edu/library/about\\_lib.html](http://www.arboretum.harvard.edu/library/about_lib.html).
253. "Herbaria," *The Arnold Arboretum of Harvard University*, 11 January 2010, <http://www.arboretum.harvard.edu/plants/herbarium.html>.
254. Ibid.
255. "Volunteer Opportunities," *The Arnold Arboretum of Harvard University*, 15 March 2010, <http://www.arboretum.harvard.edu/programs/volunteer.html>.
256. "The Friends of the Arnold Arboretum," *The Arnold Arboretum of Harvard University*.
257. "Publications," *The Arnold Arboretum of Harvard University*, 25 March 2010, <http://www.arboretum.harvard.edu/publications/publications.html>.
258. "Interactive Map," *The Arnold Arboretum of Harvard University*, 03 March 2007, [http://arboretum.harvard.edu/visitors/map.html?myURL=/plants/plants.html&myLayer=high\\_May](http://arboretum.harvard.edu/visitors/map.html?myURL=/plants/plants.html&myLayer=high_May).
259. Rogerson interview, April 1, 2010.
260. "Arnold Arboretum Staff," *The Arnold Arboretum of Harvard University*, 14 May 2010, <http://arboretum.harvard.edu/aboutus/staff.html>.
261. Rogerson interview, April 1, 2010.
262. Ibid.
263. Ibid.
264. Ibid.
265. Ibid.

266. Ibid.
267. Ibid.
268. "Visiting Smith," *Smith College*, [http://www.smith.edu/about\\_visit\\_directions.php](http://www.smith.edu/about_visit_directions.php).
269. "About Smith," *Smith College*, <http://www.smith.edu/aboutsmith.php>.
270. "Just the Facts," *Smith College*, [http://www.smith.edu/about\\_justthefacts.php](http://www.smith.edu/about_justthefacts.php).
271. Ibid.
272. Madelaine Zadik, Manager of Education and Outreach, The Botanic Garden of Smith College, interviewed by Jessica A. Farmer, February 19, 2010.
273. "Fast Facts," *The Botanic Garden of Smith College*, 20 June 2008, <http://www.smith.edu/garden/Home/fastfacts.html>.
274. "History," *The Botanic Garden of Smith College*, 30 April 2010, <http://www.smith.edu/garden/History/history.html>.
275. Zadik interview, February 19, 2010.
276. "Academics," *The Botanic Garden of Smith College*, 09 May 2005, <http://www.smith.edu/garden/Academics/research.html>.
277. Zadik interview, February 19, 2010.
278. "Work Study & Internships," *The Botanic Garden of Smith College*, 14 August 2009, <http://www.smith.edu/garden/Academics/students.html>.
279. "Curricular Enhancement Program," *The Botanic Garden of Smith College*, 8 March 2010, <http://www.smith.edu/garden/Academics/curricularenhancement.html>.
280. "Events," *The Botanic Garden of Smith College*, 16 April 2010, <http://www.smith.edu/garden/Home/events.html>.
281. "Herbarium," *The Botanic Garden of Smith College*, 23 July 2008, <http://www.smith.edu/garden/collections/herbarium.html>.
282. Zadik interview, February 19, 2010.
283. "Friends of the Botanic Garden Mail-In Membership Form," *The Botanic Garden of Smith College*, <http://www.smith.edu/garden/Friends/memberform.html>.
284. "Botanic Garden News," *The Botanic Garden of Smith College*, 03 May 2010, <http://www.smith.edu/garden/Newsletter/botgarnews.html>.
285. Jane Connolly, "Kids Corner," *Smith College Botanic Garden*, 2004, <http://www.smith.edu/garden/kidscorner/index.htm>.
286. "Traveling Exhibitions," *The Botanic Garden of Smith College*, 30 June 2009, <http://www.smith.edu/garden/exhibits/traveling-exhibitions.html>.
287. Zadik interview, February 19, 2010.
288. "Staff," *The Botanic Garden of Smith College*, 04 June 2008, <http://www.smith.edu/garden/Home/staff.html>.
289. "Welcome to the Botanic Garden of Smith College," *The Botanic Garden of Smith College*, 16 April 2010, <http://www.smith.edu/garden/home.html>.
290. "Friends of the Botanic Garden," *The Botanic Garden of Smith College*, 2 March 2010, <http://www.smith.edu/garden/Friends/friends.html>.
291. Zadik interview, February 19, 2010.



292. "Friends of the Botanic Garden," *The Botanic Garden of Smith College*, 2 March 2010, <http://www.smith.edu/garden/Friends/friends.html>.
293. Zadik interview, February 19, 2010.
294. Ibid.
295. Ibid.
296. Ibid.
297. Ibid.
298. "About the U," *University of Minnesota*, 27 April 2010, <http://www1.umn.edu/twincities/about.php>.
299. Robert H. Bruininks, "President's Recommended FY2009-10 Annual Operating Budget," (presentation to the University of Minnesota Board of Regents, June 12 2009).
300. "About Us," *Minnesota Landscape Arboretum*, 15 August 2007, <http://www.arboretum.umn.edu/aboutus.aspx>.
301. Mary H. Meyer, Interim Director and Professor at the Minnesota Landscape Arboretum, interviewed by Jessica A. Farmer, October 20, 2009.
302. "About Us," *Minnesota Landscape Arboretum*, 15 August 2007, <http://www.arboretum.umn.edu/aboutus.aspx>.
303. Mary H. Meyer, "Minnesota Landscape Arboretum Statistical Summary 2009," September 2009, <http://www.arboretum.umn.edu/UserFiles/File/statisticalsummary09rev.pdf>.
304. "University of Minnesota Landscape Arboretum, A Position Statement," sent by Mary H. Meyer in an e-mail message to the author, December 15, 2009.
305. Meyer interview, October 20, 2009.
306. "Annual Report FY2009," Minnesota Landscape Arboretum, 2009, 15.
307. "Gardens and Collections," *Minnesota Landscape Arboretum*, 30 September 2009, <http://www.arboretum.umn.edu/gardensandcollections.aspx>.
308. "Research," *Minnesota Landscape Arboretum*, 13 March 2009, <http://www.arboretum.umn.edu/arbresearchhome.aspx>.
309. "Learn," *Minnesota Landscape Arboretum*, 15 November 2007, <http://www.arboretum.umn.edu/learn.aspx>.
310. "Library," *Minnesota Landscape Arboretum*, 3 October 2007, <http://www.arboretum.umn.edu/library.aspx>.
311. "Herbarium," *University of Minnesota*, <http://www.wildflowers.umn.edu/>.
312. "Volunteer," *Minnesota Landscape Arboretum*, 5 November 2009, [http://www.arboretum.umn.edu/volunteer\\_opportunities.aspx](http://www.arboretum.umn.edu/volunteer_opportunities.aspx).
313. "Categories of Membership," *Minnesota Landscape Arboretum*, 31 July 2007, <http://www.arboretum.umn.edu/categoriesofmembership.aspx>.
314. Polly McCrea, President of the Board of Trustees, Minnesota Landscape Arboretum Foundation, interviewed by Jessica A. Farmer, December 8, 2009.
315. Meyer interview, October 20, 2009.
316. "Annual Report FY2009," Minnesota Landscape Arboretum, 2009.
317. Meyer interview, October 20, 2009.
318. Ibid.

319. Meyer interview, October 20, 2009.
320. McCrea interview, December 8, 2009.
321. University of Minnesota, "Recommended Guidelines and Procedures for Foundations Operating on Behalf of the University," sent by Mary H. Meyer in an e-mail message to the author, December 15, 2009.
322. University of Minnesota, "Consolidated Financial Statements for the Years Ended June 30, 2009 and 2008, Independent Auditor's Report, and Management's Discussion and Analysis," [http://www.finsys.umn.edu/controller/um\\_annualrpt2009.pdf](http://www.finsys.umn.edu/controller/um_annualrpt2009.pdf).
323. McCrea interview, December 8, 2009.
324. "Restated Articles of Incorporation and Restated Bylaws of Minnesota Landscape Arboretum Foundation," sent by Mary H. Meyer in an e-mail message to the author, December 15, 2009.
325. Meyer interview, October 20, 2009.
326. Ibid.
327. McCrea interview, December 8, 2009.
328. Ibid.
329. Meyer interview, October 20, 2009.
330. Ibid.
331. "Restated Articles of Incorporation and Restated Bylaws of Minnesota Landscape Arboretum Foundation," sent by Mary H. Meyer in an e-mail message to the author, December 15, 2009.
332. Judy Hohmann, "Arboretum Hires New Director, Edward L. Schneider to start this summer," 20 March 2010, <http://www.arboretum.umn.edu/ArboretumNamesNewDirector.aspx>.
333. McCrea interview, December 8, 2009.
334. "Restated Articles of Incorporation and Restated Bylaws of Minnesota Landscape Arboretum Foundation," sent by Mary H. Meyer in an e-mail message to the author, December 15, 2009.
335. "UW By the Numbers, Academic Departments," *University of Washington*, 14 April 2008, <http://admit.washington.edu/Numbers>.
336. University of Washington, "Annual Report 2009," 2009, [http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009\\_Annual\\_Report.pdf](http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009_Annual_Report.pdf), 12.
337. Julie Stein, Executive Director of the Burke Museum of Natural History and Culture, interviewed by Jessica A. Farmer, February 18, 2010.
338. "Mission Statement ~ July 2009," *The Burke Museum of History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/mission.php>.
339. "Research & Collections," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/collections/index.php>.
340. "History," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/history.php>.
341. Burke Museum of History and Culture, "Annual Report 2008-2009," 34.
342. "Exhibits," *The Burke Museum of Natural History and Culture*, <http://www.washington.edu/burkemuseum/exhibits/index.php>.
343. Burke Museum of History and Culture, "Annual Report 2008-2009," 35.
344. "Education," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/education/index.php>.

345. Burke Museum of History and Culture, "Annual Report 2008-2009," 9.
346. "Volunteer," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/join/volunteer.php>.
347. "Membership," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/join/membership.php>.
348. "Burke Museum of Natural History and Culture," <http://www.washington.edu/burkemuseum/>.
349. "Field Guides of WA State," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/fieldguide/index.php>.
350. "Events," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/events/index.php>.
351. Stein interview, February 18, 2010.
352. "Staff Directory," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/staff.php>.
353. Stein interview, February 18, 2010.
354. Ibid.
355. "Burke Museum Association," *The Burke Museum of Natural History and Culture*, 2010, <http://www.washington.edu/burkemuseum/info/assoc.php>.
356. Mary Dunnam, President of the Burke Museum Association Directors, interviewed by Jessica A. Farmer, March 31, 2010.
357. "Articles of Incorporation of Burke Museum Association, sent by Carolyn Zick, Executive Assistant to the Director of The Burke Museum of Natural History and Culture, in an e-mail to the author, February 17, 2010.
358. Dunnam interview, March 31, 2010.
359. "Burke Museum Association Legal and Operating Status," 1 July 2009, sent by Carolyn Zick, Executive Assistant to the Director of The Burke Museum of Natural History and Culture, in an e-mail to the author, February 17, 2010.
360. Dunnam interview, March 31, 2010.
361. Ibid.
362. Ibid.
363. Ibid.
364. Stein interview, February 18, 2010, and Dunnam interview, March 31, 2010.
365. Ibid.
366. Dunnam interview, March 31, 2010.
367. Stein interview, February 18, 2010.
368. "UW By the Numbers, Academic Departments," *University of Washington*, 14 April 2008, <http://admit.washington.edu/Numbers>.
369. University of Washington, "Annual Report 2009," 2009, [http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009\\_Annual\\_Report.pdf](http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009_Annual_Report.pdf), 12.
370. Ibid.
371. "Washington Park Arboretum," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/gardens/wpa.shtml>.

- <sup>372</sup>. "About the Arboretum Foundation," *Arboretum Foundation*, <http://www.arboretumfoundation.org/about/about.cfm>.
- <sup>373</sup>. "About Us," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about.shtml>.
374. "Washington Park Arboretum History/Mission," *University of Washington Botanic Gardens*, accessed 28 February 2010, <http://depts.washington.edu/wpa/history.htm>.
- <sup>375</sup>. "Fact Sheet," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/factsheet.shtml>.
376. Henry Schmitz, *The Long Road Travelled, An Account of Forestry of the University of Washington* (Seattle, WA: Arboretum Foundation, 1973), 194-197.
377. Sandra Lier, Executive Director of University of Washington Botanic Gardens, interviewed by Jessica A. Farmer, September 3, 2009.
378. Fred Hoyt, Associate Director of University of Washington Botanic Gardens, interviewed by Jessica A. Farmer, September 2, 2009.
379. Timothy Gallagher, former Superintendent, Seattle Parks and Recreation, interviewed by Jessica A. Farmer, November 10, 2009.
380. Hoyt interview, September 2, 2009.
381. Ibid.
382. "Operation Budget for UW Botanic Gardens FY07/08," *University of Washington Botanic Gardens*.
383. Ibid.
384. "Gardens," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/gardens.shtml>.
385. "Research & Science," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/research.php>.
386. "Rare Care," *University of Washington Botanic Gardens*, <http://courses.washington.edu/rarecare/>.
387. "Education at UWBG," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/education.shtml>.
388. "Fact Sheet," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/factsheet.shtml>.
389. "Associated Faculty," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/research/faculty.shtml>.
390. "Restoration Ecology Network," *University of Washington*, <http://depts.washington.edu/uwren/>.
391. "General Information and Frequently Asked Questions," *Elisabeth C. Miller Library*, 24 February 2010, [http://depts.washington.edu/hortlib/using\\_library/faq.shtml](http://depts.washington.edu/hortlib/using_library/faq.shtml).
392. "Plant Answer Line," *Elisabeth C. Miller Library*, 06 May 2010, <http://depts.washington.edu/hortlib/collections/pal.shtml>.
393. "Otis Douglas Hyde Herbarium," *University of Washington Botanic Gardens*, <http://depts.washington.edu/hydeherb/collections.shtml>.

394. "Volunteer," *University of Washington Botanic Gardens*, 13 May 2010, <http://depts.washington.edu/uwbg/support/volunteer.shtml>.
395. "Fact Sheet," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/factsheet.shtml>.
396. "Community Based Learning and Service," *University of Washington Botanic Gardens*, 28 April 2010, [http://depts.washington.edu/uwbg/education/community\\_learning.shtml](http://depts.washington.edu/uwbg/education/community_learning.shtml).
397. "Tours," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/visit/tours.shtml>.
398. "UWBG Staff," *University of Washington Botanic Gardens*, 28 April 2010, <http://depts.washington.edu/uwbg/about/staff.shtml>.
399. Hoyt interview, September 2, 2009.
400. "About Parks and Recreation," *Seattle Parks and Recreation*, 31 December 2009, <http://www.seattle.gov/parks/aboutus.htm>.
401. Gallagher interview, November 10, 2009.
402. Donald Harris, Property and Acquisition Services Manager, Seattle Parks and Recreation Department, interviewed by Jessica A. Farmer, October 16, 2009.
403. Gallagher interview, November 10, 2009, and Harris interview, October 16, 2009.
404. Gallagher interview, November 10, 2009.
405. Parks document, 2008-2009 contributions to the Washington Park Arboretum.
406. "About the Arboretum Foundation," *Arboretum Foundation*, <http://www.arboretumfoundation.org/about/about.cfm>.
407. Henry Schmitz, *The Long Road Travelled*, 198-199.
408. Paige Miller, Executive Director of the Arboretum Foundation, interviewed by Jessica A. Farmer, February 18, 2010.
409. State of Washington, "Articles of Incorporation of The Arboretum Foundation," April 2, 1980.
410. Arboretum Foundation, "2010-2012 Strategic Plan," Adopted April 15, 2009.
411. Miller interview, February 18, 2010.
412. "Membership," *Arboretum Foundation*, <http://www.arboretumfoundation.org/membership/membership.cfm?CFID=34566191&CFTOKEN=98258246>.
413. Miller interview, February 18, 2010.
414. Arboretum Foundation document outlining 2008-2009 income and expenses.
415. Lier interview, September 3, 2009.
416. Miller interview, February 18, 2010.
417. "Arboretum and Botanical Garden Committee (ABGC)," *University of Washington Botanic Gardens*, <http://depts.washington.edu/wpa/abgc/>.
418. Seattle Parks and Recreation, University of Washington, and Arboretum Foundation, "Implementing the Master Plan for Washington Park Arboretum," Autumn 2003.
419. Miller interview, February 18, 2010.
420. Seattle Parks and Recreation, University of Washington, and Arboretum Foundation, "Proposed Structure for Joint Decision Making for Fundraising," December 20, 2008.
421. Ibid.

422. "Research," *Americans for the Arts*, 5 May 2009,  
[http://www.artsusa.org/information\\_services/research/impact\\_areas/arts\\_environments/001.asp](http://www.artsusa.org/information_services/research/impact_areas/arts_environments/001.asp)

## References

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- "About." *The Arnold Arboretum of Harvard University*. 13 October 2009.  
<http://arboretum.harvard.edu/aboutus/aboutus.html>.
- "About Cornell Plantations." *Cornell Plantations*. 2010. <http://www.cornellplantations.org/about>.
- "About Parks and Recreation." *Seattle Parks and Recreation*. 31 December 2009.  
<http://www.seattle.gov/parks/aboutus.htm>.
- "About Smith." *Smith College*. <http://www.smith.edu/aboutsmith.php>.
- "About the Arboretum Foundation." *Arboretum Foundation*.  
<http://www.arboretumfoundation.org/about/about.cfm>.
- "About the Gardens." *The Sarah P. Duke Gardens*.  
[http://www.hr.duke.edu/dukegardens/about\\_the\\_gardens.htm](http://www.hr.duke.edu/dukegardens/about_the_gardens.htm).
- "About the SCGB." *South Carolina Botanical Garden*. 2009.  
<http://www.clemson.edu/public/scbg/about/>.
- "About the U." *University of Minnesota*. 27 April 2010. <http://www1.umn.edu/twincities/about.php>.
- "About Us." *JC Raulston Arboretum*. 19 June 2009.  
<http://www.ncsu.edu/jcraulstonarboretum/about/about.html>.
- "About Us." *Minnesota Landscape Arboretum*. 15 August 2007.  
<http://www.arboretum.umn.edu/aboutus.aspx>.
- "About Us." *The North Carolina Arboretum*. <http://ncarboretum.org/about-us/>.
- "About Us." *UC Davis Arboretum*. [http://arboretum.ucdavis.edu/about\\_us.aspx](http://arboretum.ucdavis.edu/about_us.aspx).
- "About Us." *University of California Botanical Garden*.  
[http://botanicalgarden.berkeley.edu/about\\_us/about\\_us.shtml](http://botanicalgarden.berkeley.edu/about_us/about_us.shtml).
- "About Us." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/about.shtml>
- "Academics." *The Botanic Garden of Smith College*. 09 May 2005.  
<http://www.smith.edu/garden/Academics/research.html>.
- "Admission Rates." *Reiman Gardens*. 2010.  
[http://www.reimangardens.com/en/visitor\\_and\\_tour\\_information/admission.cfm](http://www.reimangardens.com/en/visitor_and_tour_information/admission.cfm).

- "Admission." *The Sarah P. Duke Gardens*. <http://www.hr.duke.edu/dukegardens/admission.htm>.
- "Affiliations." *Cornell Plantations*. 2010. <http://www.cornellplantations.org/about/affiliations>.
- "Agriculture." *Clemson Public Service Activities*. 2009.  
[http://www.clemson.edu/public/focus\\_areas/agrisystems.html](http://www.clemson.edu/public/focus_areas/agrisystems.html).
- Ahn, Roy. "Nonprofit/Nonprofit Collaboration in Boston." report, Barr Foundation.
- "Arboretum and Botanical Garden Committee (ABGC)." *University of Washington Botanic Gardens*.  
<http://depts.washington.edu/wpa/abgc/>.
- "Arboretum Celebrates National Public Gardens Day on May 7." *Minnesota Landscape Arboretum*.  
14 April 2010. <http://www.arboretum.umn.edu/NatIPublicGardensDay.aspx>.
- Arboretum Foundation. "2010-2012 Strategic Plan." Adopted April 15, 2009.
- "Arboretum Staff." *Connecticut College Arboretum*. 26 February 2010.  
<http://www.conncoll.edu/green/arbo/8611.htm>.
- "Arboretum Staff." *Fullerton Arboretum*. [http://fullertonarboretum.org/info\\_contacts.php](http://fullertonarboretum.org/info_contacts.php).
- "Arnold Arboretum Staff." *The Arnold Arboretum of Harvard University*. 14 May 2010.  
<http://arboretum.harvard.edu/aboutus/staff.html>.
- "Associated Faculty." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/research/faculty.shtml>.
- "Backgrounder." *Minnesota Landscape Arboretum*.  
<http://www.arboretum.umn.edu/background.aspx>.
- "Become a Member." *Connecticut College Arboretum*. 18 August 2009.  
<http://www.conncoll.edu/green/arbo/8571.htm>.
- "Board of Advisors." *Flora, Newsletter of The Friends of The Sarah P. Duke Gardens*. Spring Issue no. 54.
- "Board of Directors." *The North Carolina Arboretum*. <http://ncarboretum.org/about-us/board-of-directors/>.
- "Botanic Garden News." *The Botanic Garden of Smith College*. 03 May 2010.  
<http://www.smith.edu/garden/Newsletter/botgarnews.html>.
- Bruininks, Robert H. "President's Recommended FY2009-10 Annual Operating Budget." Presentation to the University of Minnesota Board of Regents, June 12 2009.
- Bumstead, Richard C. "The University of Chicago Botanic Garden." In "College and University Gardens, Profiles of Seven Diverse Institutions." *Public Garden* 18, no. 4 (2003).

- "Burke Museum Association." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/info/assoc.php>.
- "Burke Museum of Natural History and Culture." 2010.  
<http://www.washington.edu/burkemuseum/>.
- Burke Museum of History and Culture. "Annual Report 2008-2009." 2009.  
<http://www.washington.edu/burkemuseum/FY09AnnualReport.pdf>.
- Butler, Elizabeth Marie. "Some Characteristics That May Affect the Ability of Public Gardens to Generate Operating Revenue." master's thesis, University of Delaware.
- Byers, Bob. "Garvan Woodland Gardens." In "College and University Gardens, Profiles of Seven Diverse Institutions." *Public Garden* 18, no. 4 (2003).
- "Campus Planning and Community Resources." *UC Davis Administrative and Resource Management*. 12 March 2010. <http://arm.ucdavis.edu/organization/cpcr.html>.
- "Categories of Membership." *Minnesota Landscape Arboretum*. 31 July 2007.  
<http://www.arboretum.umn.edu/categoriesofmembership.aspx>.
- "Community Based Learning and Service." *University of Washington Botanic Gardens*. 28 April 2010.  
[http://depts.washington.edu/uwbg/education/community\\_learning.shtml](http://depts.washington.edu/uwbg/education/community_learning.shtml).
- Connolly, Jane. "Kids Corner." *Smith College Botanic Garden*. 2004.  
<http://www.smith.edu/garden/kidscorner/index.htm>.
- "Contact Us." *California Center for Urban Horticulture*. <http://ccuh.ucdavis.edu/contact>.
- "Contact Us." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/info/contact.php>.
- "Contacts." *Harvard University*. 2010. <http://www.harvard.edu/about/contacts.php>.
- Cook, Robert E. "The Arnold Arboretum of Harvard University, Director's Report: 2003 – 2007." *Arnoldia* 65, no. 4 (2008): 1 – 56.
- Correll, Philip G. "Botanical Gardens and Arboreta of North America: An Organizational Survey." master's thesis, University of Delaware.
- Cotterman, Laura. "Botanical Garden Foundation." 21 April 2010. *North Carolina Botanical Garden*, <http://ncbg.unc.edu/pages/9/>.
- Cotterman, Laura. "Facts about the North Carolina Botanical Garden." 25 June 2009.  
<http://ncbg.unc.edu/pages/5/>.



- Cotterman, Laura. "History." 12 January 2006, *North Carolina Botanical Garden*.  
<http://ncbg.unc.edu/pages/2/>.
- Cotterman, Laura. "Staff Directory." *North Carolina Botanical Garden*. 5 May 2010.  
<http://ncbg.unc.edu/pages/3/>.
- Cotterman, Laura. "Visiting the North Carolina Botanical Garden." 15 March 2010. *North Carolina Botanical Garden*, <http://ncbg.unc.edu/visit/>.
- "Curricular Enhancement Program." *The Botanic Garden of Smith College*. 8 March 2010.  
<http://www.smith.edu/garden/Academics/curricularenhancement.html>.
- "Department of Horticulture Facilities." *Iowa State University Department of Horticulture*. 2005 – 2009. <http://www.hort.iastate.edu/facilities/>.
- Department of the Treasury. Internal Revenue Service. Form 990. Return of Organization Exempt From Income Tax. Fullerton Arboretum Authority. 2007.
- Department of the Treasury. Internal Revenue Service. Form 990. Return of Organization Exempt From Income Tax. President and Fellows of Harvard College. 2007.
- "Directions." *South Carolina Botanical Garden*. 2009.  
<http://www.clemson.edu/public/scbg/visiting/directions.html>.
- "Directions." *The Sarah P. Duke Gardens*. <http://www.hr.duke.edu/dukegardens/directions.htm>.
- "Directions and Maps." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/visit/directions.shtml>.
- "Directions to Morris Arboretum." *Morris Arboretum of the University of Pennsylvania*.  
[http://www.business-services.upenn.edu/arboretum/visit\\_directions.shtml](http://www.business-services.upenn.edu/arboretum/visit_directions.shtml).
- "Directions/Map." *Minnesota Landscape Arboretum*.  
<http://www.arboretum.umn.edu/directions.aspx>.
- "Donald A. Rakow Faculty Profile." *Cornell University Department of Horticulture*. 2007.  
<http://hort.cals.cornell.edu/cals/hort/people/faculty.cfm?netId=dr14>.
- Dryer, Glenn. "Connecticut College Arboretum." In "College and University Gardens, Profiles of Seven Diverse Institutions." *Public Garden* 18, no. 4 (2003): 26 – 27.
- "Education." *The Arnold Arboretum of Harvard University*. 10 May 2007.  
<http://www.arboretum.harvard.edu/programs/education.html>.
- "Education." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/education/index.php>.

- "Education at UWBG." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/education.shtml>.
- "Environment." *Clemson Public Service Activities*. 2009.  
[http://www.clemson.edu/public/focus\\_areas/environment.html](http://www.clemson.edu/public/focus_areas/environment.html).
- "Events." *The Botanic Garden of Smith College*. 16 April 2010.  
<http://www.smith.edu/garden/Home/events.html>.
- "Executive Director with wealth of horticultural experience." *California Center for Urban Horticulture*. <http://ccuh.ucdavis.edu/about-us/dave-bio>.
- "Exhibits." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/exhibits/index.php>.
- "Events." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/events/index.php>.
- "Fact Sheet." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/about/factsheet.shtml>.
- "Facts for Journalists." *The University of Chicago*. <http://news.uchicago.edu/more/facts.php>.
- "Far Above...The Campaign for Cornell." *Cornell Plantations*. 2010.  
<http://www.cornellplantations.org/get-involved/giving/campaign>.
- "Fast Facts." *The Botanic Garden of Smith College*. 20 June 2008.  
<http://www.smith.edu/garden/Home/fastfacts.html>.
- "Friends of the Botanic Garden." *The Botanic Garden of Smith College*. 2 March 2010.  
<http://www.smith.edu/garden/Friends/friends.html>.
- "Friends of the Botanic Garden Mail-In Membership Form." *The Botanic Garden of Smith College*.  
<http://www.smith.edu/garden/Friends/memberform.html>.
- "Friends of the Garden." *South Carolina Botanical Garden*. 2009.  
<http://www.clemson.edu/public/scbg/support/friends.html>.
- "Gardens." *The Botanic Garden of Smith College*. 11 July 2008.  
<http://www.smith.edu/garden/Gardens/gardens.html>.
- "Gardens." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/gardens.shtml>.
- "Gardens and Collections." *Minnesota Landscape Arboretum*. 30 September 2009.  
<http://www.arboretum.umn.edu/gardensandcollections.aspx>.

- "General Information and Frequently Asked Questions." *Elisabeth C. Miller Library*. 24 February 2010. [http://depts.washington.edu/hortlib/using\\_library/faq.shtml](http://depts.washington.edu/hortlib/using_library/faq.shtml).
- "General Information for Visiting." *Morris Arboretum of the University of Pennsylvania*. <http://www.business-services.upenn.edu/arboretum/visit.shtml>.
- "General Visitor Information." *The Scott Arboretum of Swarthmore College*. <http://scottarboretum.org/visitorinfo/>.
- "Giving Opportunities." *Fullerton Arboretum*. [http://fullertonarboretum.org/support\\_giving.php](http://fullertonarboretum.org/support_giving.php).
- "Graduate Fellowships." *Cornell Plantations*. 2010. <http://www.cornellplantations.org/learning/graduate-fellowships>.
- "Grounds Operations: Mission and Scope of Services." *Cornell University Facilities Services Facilities Management*. 2005. [http://www.fm.cornell.edu/fm/grounds/fmn\\_groundsopmission.cfm](http://www.fm.cornell.edu/fm/grounds/fmn_groundsopmission.cfm).
- "Harvard at a Glance." *Harvard University*. 2010. <http://www.harvard.edu/about/glance.php>.
- Heinrich, Lynne LaMarca, Willard E. White, and Tina Donahoo, "National Trends in Gardens & Arboreta Philanthropy: Benchmarking Study (2002 -2008)" study, Marts & Lundy.
- "Herbaria." *The Arnold Arboretum of Harvard University*. 11 January 2010. <http://www.arboretum.harvard.edu/plants/herbarium.html>.
- "Herbarium." *The Botanic Garden of Smith College*. 23 July 2008. <http://www.smith.edu/garden/collections/herbarium.html>.
- "Herbarium." *University of Minnesota*. <http://www.wildflowers.umn.edu/>.
- "History." *California Center for Urban Horticulture*. 2007-08. <http://ccuh.ucdavis.edu/about-us/history-and-boards>.
- "History." *Reiman Gardens*. 2010. <http://www.reimangardens.com/index.cfm?nodeID=5725>.
- "History." *The Botanic Garden of Smith College*. 30 April 2010. <http://www.smith.edu/garden/History/history.html>.
- "History." *The Burke Museum of Natural History and Culture*." 2010. <http://www.washington.edu/burkemuseum/info/history.php>.
- "History." *The North Carolina Arboretum*. <http://ncarboretum.org/about-us/history/>.
- "History." *The Sarah P. Duke Gardens*. <http://www.hr.duke.edu/dukegardens/history.htm>.
- "History." *University of Washington Botanic Gardens*. 28 April 2010. <http://depts.washington.edu/uwbg/about/history.shtml>.

- "History of the Morris Arboretum." *Morris Arboretum of the University of Pennsylvania*.  
[http://www.business-services.upenn.edu/arboretum/about\\_history.shtml](http://www.business-services.upenn.edu/arboretum/about_history.shtml).
- "History of the Arboretum." *Connecticut College*. 28 October 2009.  
<http://www.conncoll.edu/green/arbo/8583.htm>.
- Hohmann, Judy. "Arboretum Hires New Director, Edward L. Schneider to start this summer." 20 March 2010. <http://www.arboretum.umn.edu/ArboretumNamesNewDirector.aspx>.
- "Hours & Information." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/visit/hours.php#admission>.
- "Hours and Directions," *Fullerton Arboretum*, [http://fullertonarboretum.org/h\\_hoursdirections.php](http://fullertonarboretum.org/h_hoursdirections.php).
- "Hours and Fees." *Morris Arboretum of the University of Pennsylvania*. [http://www.business-services.upenn.edu/arboretum/visit\\_hours.shtml](http://www.business-services.upenn.edu/arboretum/visit_hours.shtml).
- "Hours and Services." *The Arnold Arboretum of Harvard University*. 03 May 2010.  
<http://arboretum.harvard.edu/visitors/hours.html>.
- "Hours, Rules, and Regulations." *Connecticut College Arboretum*. 10 August 2009.  
<http://www.conncoll.edu/green/arbo/8605.htm>.
- "Institutional Collaborations for Plant Conservation." *The Arnold Arboretum of Harvard University*. 18 June 2009. [http://www.arboretum.harvard.edu/plants/conservation\\_collaboration.html](http://www.arboretum.harvard.edu/plants/conservation_collaboration.html).
- "Interactive Map." *The Arnold Arboretum of Harvard University*. 03 March 2007.  
[http://arboretum.harvard.edu/visitors/map.html?myURL=/plants/plants.html&myLayer=high\\_May](http://arboretum.harvard.edu/visitors/map.html?myURL=/plants/plants.html&myLayer=high_May).
- "Inventory." *The Arnold Arboretum of Harvard University*. 8 March 2010.  
<http://arboretum.harvard.edu/plants/inventory.html>.
- "Isabella Welles Hunnewell Internship Program." *The Arnold Arboretum of Harvard University*. 21 January 2010. <http://arboretum.harvard.edu/programs/intern.html>.
- "Join." *Minnesota Landscape Arboretum*. <http://www.arboretum.umn.edu/join.aspx>.
- "Join the Friends." *UC Davis Arboretum*. [http://arboretum.ucdavis.edu/join\\_the\\_friends.aspx](http://arboretum.ucdavis.edu/join_the_friends.aspx).
- "Just the Facts." *Smith College*. [http://www.smith.edu/about\\_justthefacts.php](http://www.smith.edu/about_justthefacts.php).
- "Kathleen Socolofsky." Search: *UC Davis People*.  
[http://www.ucdavis.edu/search/directory\\_results.shtml?filter=Kathleen%20Socolofsky](http://www.ucdavis.edu/search/directory_results.shtml?filter=Kathleen%20Socolofsky).
- Krapfl, Anne and Teddi Barron. "Butterfly house seasonal closing reflects budget woes at garden." *Inside Iowa State*. 5 October 2007. <http://www.iastate.edu/Inside/2007/1005/reiman.shtml>.

“Landscape Collections and Care.” *The Arnold Arboretum of Harvard University*. 18 June 2009.  
<http://www.arboretum.harvard.edu/plants/grounds.html>.

Lawrence, Steven and Reina Mukai. “Foundation Growth and Giving Estimates, Current Outlook” report, Foundation Center.

“Learn.” *Minnesota Landscape Arboretum*. 15 November 2007.  
<http://www.arboretum.umn.edu/learn.aspx>.

“Library.” *Minnesota Landscape Arboretum*. 3 October 2007.  
<http://www.arboretum.umn.edu/library.aspx>.

“Library Holdings.” *The Arnold Arboretum of Harvard University*. 22 December 2009.  
[http://www.arboretum.harvard.edu/library/about\\_lib.html](http://www.arboretum.harvard.edu/library/about_lib.html).

Licht, Paul. Director’s Column. *University of California Botanical Garden Newsletter*, Summer/Fall, 2009. [http://botanicalgarden.berkeley.edu/about\\_us/images/press/archived\\_newsletters/34-3-4.pdf](http://botanicalgarden.berkeley.edu/about_us/images/press/archived_newsletters/34-3-4.pdf).

Lighty, Richard W. “The Origin and Characteristics of the Public Garden in the United States.” (paper, presented at the XXI International Horticulture Congress, Hamburg, Germany, 1982). Quoted in Elizabeth Marie Butler. “Some Characteristics That May Affect the Ability of Public Gardens to Generate Operating Revenue.” (master’s thesis, University of Delaware, 1998). vii.

Lowe, Cheryl B. “Funding Strategies for Government-Affiliated Gardens.” master’s thesis, University of Delaware.

Lyons, Robert E. and Nancy Doubrava. “The JC Raulston Arboretum.” In “College and University Gardens, Profiles of Seven Diverse Institutions.” *Public Garden* 18, no. 4 (2003): 32 – 33.

“Membership.” *Arboretum Foundation*.  
<http://www.arboretumfoundation.org/membership/membership.cfm?CFID=34789493&CFTOKEN=13530769>.

“Membership.” *Cornell Plantations*. 2010. <http://www.cornellplantations.org/get-involved/membership>.

“Membership.” *Garvan Woodland Gardens*. 2010. <http://www.garvangardens.org/join/>.

“Membership.” *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/join/membership.php>.

“Membership.” *The Scott Arboretum of Swarthmore College*.  
<http://scottarboretum.org/membership/>.

“Membership.” *University of California Botanical Garden*.  
[http://botanicalgarden.berkeley.edu/get\\_involved/membership.shtml](http://botanicalgarden.berkeley.edu/get_involved/membership.shtml).

- "Membership Information." *Morris Arboretum of the University of Pennsylvania*.  
<http://www.business-services.upenn.edu/arboretum/membership.shtml>.
- Meyer, Mary H. "Minnesota Landscape Arboretum Statistical Summary 2009." September 2009.  
<http://www.arboretum.umn.edu/UserFiles/File/statisticalsummary09rev.pdf>.
- Meyer, Paul W. "Morris Arboretum of the University of Pennsylvania." in "College and University Gardens, Profiles of Seven Diverse Institutions." *Public Garden* 18, no. 4 (2003): 33 – 34.
- Minnesota Landscape Arboretum. "Annual Report FY2009." 2009.  
[http://www.arboretum.umn.edu/UserFiles/File/MNLA\\_AnnualReport-09.pdf](http://www.arboretum.umn.edu/UserFiles/File/MNLA_AnnualReport-09.pdf).
- "Mission and History." *Fullerton Arboretum*.  
[http://fullertonarboretum.org/info\\_missionhistory.php](http://fullertonarboretum.org/info_missionhistory.php).
- "Mission Statement ~ July 2009." *The Burke Museum of History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/info/mission.php>.
- Morris Arboretum of the University of Pennsylvania. "Annual Report July 2008 – June 2009." 2009.
- Olin, Peter. "Fundraising Issues for College and University Gardens." *Public Garden* 18, no. 4 (2003): 14 – 16.
- "Operation Budget for UW Botanic Gardens FY07/08." Appendix 13. In "Review of College of Forest Resources Centers, Cooperatives and Programs." *University of Washington Botanic Gardens*. 15 December 2008. [http://depts.washington.edu/uwbg/docs/UWBG\\_5YearPlan.pdf](http://depts.washington.edu/uwbg/docs/UWBG_5YearPlan.pdf).
- "Otis Douglas Hyde Herbarium." *University of Washington Botanic Gardens*.  
<http://depts.washington.edu/hydeherb/collections.shtml>.
- "Our Gardens." *Fullerton Arboretum*. [http://fullertonarboretum.org/gar\\_ourgardens.php](http://fullertonarboretum.org/gar_ourgardens.php).
- "Our History." *The Arnold Arboretum of Harvard University*. 15 June 2009.  
<http://www.arboretum.harvard.edu/aboutus/history.html>.
- "Our History." *The Scott Arboretum of Swarthmore College*.  
<http://scottarboretum.org/aboutus/history.html>.
- "Our Mission." *The Arnold Arboretum of Harvard University*. 26 October 2009.  
<http://www.arboretum.harvard.edu/aboutus/mission.html>.
- Patton, Michael Quinn. *Qualitative Research & Evaluation Methods*. Thousand Oaks, California: Sage Publications, 2002.
- "Plan a Visit." *The North Carolina Arboretum*. <http://ncarboretum.org/plan-a-visit/>.

- "Plan Your Trip." *University of California Botanical Garden*.  
[http://botanicalgarden.berkeley.edu/visit/plan\\_trip.shtml](http://botanicalgarden.berkeley.edu/visit/plan_trip.shtml).
- "Plan Your Visit." *Minnesota Landscape Arboretum*.  
<http://www.arboretum.umn.edu/planyourvisit.aspx>.
- "Plan Your Visit." *UC Davis Arboretum*. [http://arboretum.ucdavis.edu/plan\\_your\\_visit.aspx](http://arboretum.ucdavis.edu/plan_your_visit.aspx).
- "Plan Your Visit." *University of Washington Botanic Gardens*. 28 April 2010.  
[http://depts.washington.edu/uwbg/visit\\_hours.shtml](http://depts.washington.edu/uwbg/visit_hours.shtml).
- "Plant Answer Line." *Elisabeth C. Miller Library*. 06 May 2010.  
<http://depts.washington.edu/hortlib/collections/pal.shtml>.
- "Plantations History." *Cornell Plantations*. 2010. <http://www.cornellplantations.org/about/history>.
- "Position Announcement, Professor and Director." *Minnesota Landscape Arboretum*.  
<http://www.arboretum.umn.edu/directorposition.aspx>.
- "Propagation," *The Arnold Arboretum of Harvard University*, 18 June 2009,  
<http://www.arboretum.harvard.edu/plants/propagation.html>.
- "Programs, Institutes and Centers." *UC Davis College of Agricultural and Environmental Sciences*.  
<http://caes.ucdavis.edu/departments/centers/centers>.
- "Publications." *The Arnold Arboretum of Harvard University*. 25 March 2010.  
<http://www.arboretum.harvard.edu/publications/publications.html>.
- Rakow, Donald A. "Cornell Plantations Annual Report 2009." annual report, Cornell Plantations.
- "Rare Care." *University of Washington Botanic Gardens*. <http://courses.washington.edu/rarecare/>.
- Reiman Gardens' CoHorts. *By-Laws*. 2006.  
[http://www.reimangardens.com/documents/filelibrary/images/august\\_8\\_2006/ByLawspdf.pdf](http://www.reimangardens.com/documents/filelibrary/images/august_8_2006/ByLawspdf.pdf).
- "Report to Stakeholders: The North Carolina Arboretum and The North Carolina Arboretum Society: FY 2007 – 2008." The North Carolina Arboretum. 2008.
- "Research." *Minnesota Landscape Arboretum*. 13 March 2009.  
<http://www.arboretum.umn.edu/arbresearchhome.aspx>.
- Research." *Americans for the Arts*. 5 May 2009.  
[http://www.artsusa.org/information\\_services/research/impact\\_areas/arts\\_environments/001.asp](http://www.artsusa.org/information_services/research/impact_areas/arts_environments/001.asp)
- "Research & Collections." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/collections/index.php>.

- "Research & Science." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/research.php>.
- "Restoration Ecology Network. *University of Washington*. <http://depts.washington.edu/uwren/>.
- "SCBG Staff." *South Carolina Botanical Garden*. 2009.  
<http://www.clemson.edu/public/scbg/about/staff.html>.
- Schmitz, Henry. *The Long Road Travelled, An Account of Forestry of the University of Washington*.  
 Seattle, WA: Arboretum Foundation, 1973.
- "Science." *The Arnold Arboretum of Harvard University*. 21 December 2009.  
<http://www.arboretum.harvard.edu/research/research.html>.
- Seattle Parks and Recreation, University of Washington, and Arboretum Foundation. "Implementing the Master Plan for Washington Park Arboretum." Autumn 2003.
- Seattle Parks and Recreation, University of Washington, and Arboretum Foundation. "Proposed Structure for Joint Decision Making for Fundraising." December 20, 2008.
- "Sino-American Botanical Expedition." *The Arnold Arboretum of Harvard University*. 18 June 2009.  
<http://www.arboretum.harvard.edu/plants/sabe.html>.
- "Staff." *The Botanic Garden of Smith College*. 04 June 2008.  
<http://www.smith.edu/garden/Home/staff.html>.
- "Staff." *The North Carolina Arboretum*. <http://ncarboretum.org/about-us/staff/>.
- "Staff." *The Sarah P. Duke Gardens*. <http://www.hr.duke.edu/dukegardens/staff.htm>.
- "Staff." *The Scott Arboretum of Swarthmore College*. <http://scottarboretum.org/aboutus/staff.html>.
- "Staff Directory." *The Burke Museum of Natural History and Culture*. 2010.  
<http://www.washington.edu/burkemuseum/info/staff.php>.
- State of Washington. "Articles of Incorporation of The Arboretum Foundation." April 2, 1980.
- Strauss, Anselm and Juliet Corbin. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: SAGE Publications, 1998. Quoted in Michael Quinn Patton. *Qualitative Research & Evaluation Methods*. Thousand Oaks, California: Sage Publications, 2002.
- "Support Duke Gardens." *The Sarah P. Duke Gardens*.  
[http://www.hr.duke.edu/dukegardens/support\\_duke\\_gardens.htm](http://www.hr.duke.edu/dukegardens/support_duke_gardens.htm).
- "The Friends of the Arnold Arboretum." *Arnold Arboretum of Harvard University*. 20 March 2010.  
<http://www.arboretum.harvard.edu/programs/membership.html>.



“The NC Arboretum Society,” *The North Carolina Arboretum*, <http://ncarboretum.org/about-us/the-nc-arboretum-society>.

“The University of Chicago Botanic Garden.” *The University of Chicago Botanic Garden*. <http://botanicgarden.uchicago.edu/index.html>.

“Tours.” *University of Washington Botanic Gardens*. 28 April 2010. <http://depts.washington.edu/uwbg/visit/tours.shtml>.

“Traveling Exhibitions.” *The Botanic Garden of Smith College*. 30 June 2009. <http://www.smith.edu/garden/exhibits/traveling-exhibitions.html>.

University of Minnesota. “Consolidated Financial Statements for the Years Ended June 30, 2009 and 2008, Independent Auditor’s Report, and Management’s Discussion and Analysis.” [http://www.finsys.umn.edu/controller/um\\_annualrpt2009.pdf](http://www.finsys.umn.edu/controller/um_annualrpt2009.pdf).

University of Washington. “Annual Report 2009.” 2009. [http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009\\_Annual\\_Report.pdf](http://f2.washington.edu/fm/uw-annual-reports/sites/default/files/file/2009_Annual_Report.pdf).

“UW By the Numbers, Academic Departments.” *University of Washington*. 14 April 2008. <http://admit.washington.edu/Numbers>.

“UW Museology.” *The Burke Museum of Natural History and Culture*. 2010. <http://www.washington.edu/burkemuseum/info/museology.php>.

“UWBG Staff.” *University of Washington Botanic Gardens*. 28 April 2010. <http://depts.washington.edu/uwbg/about/staff.shtml>.

“Vice President for Business and Finance Organization Chart, *Iowa State University*, 23 March 2010, <http://www.vpbf.iastate.edu/pdf/orgchart.pdf>.

“Visit.” *JC Raulston Arboretum*. 19 June 2009. <http://www.ncsu.edu/jcraulstonarboretum/visit/visit.html>.

“Visit the Gardens.” *Garvan Woodland Gardens*. 2010. <http://www.garvangardens.org/visit/>.

“Visiting Smith.” *Smith College*. [http://www.smith.edu/about\\_visit\\_directions.php](http://www.smith.edu/about_visit_directions.php).

“Visitor Info.” *The Botanic Garden of Smith College*. 20 September 2007. <http://www.smith.edu/garden/Home/visitorinfo.html>.

“Visitor Information.” *Cornell Plantations*. 2010. <http://www.cornellplantations.org/visitor-info>.

“Volunteer.” *The Burke Museum of Natural History and Culture*. 2010. <http://www.washington.edu/burkemuseum/join/volunteer.php>.

- "Volunteer." *The Sarah P. Duke Gardens*.  
[http://www.hr.duke.edu/dukegardens/volunteer\\_horticulture.htm](http://www.hr.duke.edu/dukegardens/volunteer_horticulture.htm).
- "Volunteer." *Minnesota Landscape Arboretum*. 5 November 2009.  
[http://www.arboretum.umn.edu/volunteer\\_opportunities.aspx](http://www.arboretum.umn.edu/volunteer_opportunities.aspx).
- "Volunteer Opportunities." *The Arnold Arboretum of Harvard University*. 15 March 2010.  
<http://www.arboretum.harvard.edu/programs/volunteer.html>.
- "Washington Park Arboretum." *University of Washington Botanic Gardens*. 28 April 2010.  
<http://depts.washington.edu/uwbg/gardens/wpa.shtml>.
- "Washington Park Arboretum History/Mission." *University of Washington Botanic Gardens*.  
Accessed 28 February 2010. <http://depts.washington.edu/wpa/history.htm>.
- "Welcome to the Botanic Garden of Smith College." *The Botanic Garden of Smith College*. 16 April 2010. <http://www.smith.edu/garden/home.html>.
- "Work Study & Internships." *The Botanic Garden of Smith College*. 14 August 2009.  
<http://www.smith.edu/garden/Academics/students.html>.
- "Year in Review, 2008." The Scott Arboretum of Swarthmore College. 2008.
- "Youth." *Clemson Public Service Activities*. 2009.  
[http://www.clemson.edu/public/focus\\_areas/youth.html](http://www.clemson.edu/public/focus_areas/youth.html).
- Zadik, Madelaine. "Botanic Garden of Smith College." In "College and University Gardens, Profiles of Seven Diverse Institutions." *Public Garden* 18, no. 4 (2003).

## Appendix A: Interview Guide

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### UNIVERSITY OF WASHINGTON INTERVIEW GUIDE

Researcher: Jessica Farmer, Researcher and Master's candidate, College of Forest Resources & Daniel J. Evans School of Public Affairs. 206.729.0709

Faculty advisor: Sarah Reichard, College of Forest Resources. 206.616.5020

#### Professional Background on interview subject:

- Can you tell me about your history and current position with your organization?
  - Follow up questions could include probing related to the subject's current job title, time spent in his/her current position, relevant employment history, or historical relationship with the partner organization.

#### Functions of the supporting partnership:

- What functions does your partner organization serve? (*fundraising, membership, programs, complete garden management, gift shop management, etc.*)
  - Do both organizations participate in fundraising to support the garden? Can you describe the fundraising program of each? The effectiveness of each?
- Can you talk me through the evolution or history of the partnership?

#### Governance/Structure:

- How is the relationship between the two organizations structured? How are the roles defined?
- What types of documents or agreements exist to outline the governance structure?
- How do you feel about the degree of consensus regarding perception of roles?
- What challenges have you faced related to the governance structure?
- What degree of control does the garden have (if any) over:
  - Appointing board members of the partner organization?
  - Determining distribution of funds raised by the partner to support the garden?
- What control (if any) does the partner organization have over the garden management, planning, allocation of funds to specific projects?
- What implementation challenges have been faced by the staff of each organization as they work to perform their role(s)?

- What is the process for making changes to the partnership, if one or both parties decide that something needs to change?

Productivity, Usefulness of relationship:

- Can you discuss the financial and non-financial investments that your organization contributes to the partnership?
- How do you feel about the degree of benefit (or return on investment) that your organization receives from the partnership?
- What aspects of the relationship work well to support the garden's mission?
- Can you speak specifically to the successful aspects of the partnership?
- What aspects of the relationship are sources of conflict?
- What do you think would be useful for the future?

## **Appendix B: List of Interview Subjects**

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Harvard University; Arnold Arboretum

- Audrey Rogerson, Director of External Relations, The Arnold Arboretum of Harvard University

Smith College; Botanic Garden of Smith College

- Madelaine Zadik, Manager of Education and Outreach, The Botanic Garden of Smith College

University of Minnesota; Minnesota Landscape Arboretum

- Polly McCrea, President, Minnesota Landscape Arboretum Foundation
- Mary H. Meyer, Interim Director and Professor, University of Minnesota Landscape Arboretum

University of Washington; Burke Museum of Natural History and Culture

- Mary Dunnam, President, Burke Museum Association Directors
- Julie Stein, Executive Director, Burke Museum of Natural History and Culture

University of Washington; University of Washington Botanic Gardens

- Timothy Gallagher, former Superintendent, Seattle Parks and Recreation Department
- Donald Harris, Property and Acquisition Services Manager, Seattle Parks and Recreation Department
- Fred Hoyt, Associate Director, University of Washington Botanic Gardens
- John Howell, Partner, Cedar River Group
- Sandra Lier, Executive Director, University of Washington Botanic Gardens
- Paige Miller, Executive Director, Arboretum Foundation