

**Report on the UCI ADVANCE Dependent Care Awards  
Program**

**Funded through the Elsevier Foundation New Scholars  
Program**

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## INTRODUCTION

The University of California's ADVANCE program was initiated in 2001 with the university's receipt of the National Science Foundation's Institutional Transformation Award. In 2006 the NSF grant ended and UCI institutionalized the program. In 2008 the program applied for and received an Elsevier Foundation New Scholars Program Grant to enhance its professional development program. Elsevier Foundation New Scholars Program is a national competition dedicated to increasing the participation of women in science, technology, engineering and mathematics (STEM) in our nation's universities, colleges, and laboratories. This grant, along with matching funds from the Executive Vice Chancellor and Provost's office for faculty in the schools of the Arts, Humanities, and Department of Education, allowed for qualifying tenure and tenure track faculty parents of infants and toddlers to apply for dependent-related expenses during research and conference travel.<sup>1</sup> This program complements the University of California's "Family Friendly" policies and ensures that UCI remains a national center for world-class research, education and service to both the community and the state of California.

In 2008 UCI's ADVANCE Program for Faculty Equity and Diversity started a pilot program to manage the award, distribute the calls for applications and oversee the selection of Travel Awards. It issued calls in spring and fall of 2008, 2009, and 2010 to all tenure-track Assistant Professors and beginning in spring 2009, the call was extended to Associate Professors within two years of tenure. The call originally invited all parents of children aged 24 months and younger (then it was modified to include parents of all children younger than 36 months of age) to apply for travel awards with the purpose of

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1. The School of Law was not included because it didn't have Assistant or beginning Associate Professors.

subsidizing childcare costs associated with conference and research meeting participation. The UCI ADVANCE Program Advising Committee (APAC) reviewed, evaluated and recommended recipients to the ADVANCE director.

While other aspects of the ADVANCE Program address gender equity in hiring and promotion, mentoring, and socialization into male-dominate sub-fields, this novel award addresses a major hurdle for faculty parents' continuing participation in the major career-building events and activities of their fields. Juggling the demands of career and family is a known strain on pre-tenure faculty. Attending academic conferences and research events is essential for beginning faculty members in order to disseminate their research, build robust collegial networks, and aid their graduate students in initiating their own reputations and findings. Yet, as with many occupations and professions, the crucial formative period--in this case, the tenure track period--overlaps with the critical childbearing and childrearing years. New parents, normally among the lowest-paid faculty, are already burdened with high childcare expenses, and the additional costs associated with childcare for essential travel to disseminate new knowledge can present a significant hurdle and often a career barrier. Other members of the American Association of Universities (AAU), including Stanford University and Harvard University have recognized this need and established similar programs for their junior faculty.

In this report, we overview the application process, responses, awards, and the benefits to faculty recipients. We first describe the call and its eligibility requirements, followed by a description of the applicants. We overview the awards and the uses recipients made of them. We review applicant responses and pay special attention to their expected benefits. We find that applicants expect—and report receiving—benefits

from meeting and conference participation that address key promotion points outlined in the *Advancement and Promotion at Irvine: A Handbook of Advice for Tenure-track and Tenured Faculty*. Of the faculty who provided a report reviewing their conference and meeting experience, the vast majority met their expected benefits listed in their applications and many others mentioned additional benefits beyond what they included in the applications. We provide both quotes and tables from our qualitative coding to demonstrate these benefits. We conclude that beyond faculty appreciation, this program assists scholars in pursuing promotion-related activities in accordance with University guidelines.

## **THE CALL FOR APPLICATIONS**

Qualifying tenure and tenure-track faculty were invited to apply on-line for ADVANCE Dependent Care Travel Awards in fall and spring of 2008, 2009 and 2010. The application deadline allowed ample time for faculty completion. The call specified that the maximum amount available for each award was \$1000 and explained that funding may be used for “after hours care at an alternate location, or travel expenses related to child and care-giver or other related expenses.”<sup>2</sup> Eligibility for awards was limited to tenure-track Assistant Professors in the first two calls, and extended to Associate Professors within two years of tenure who are parents of a child thirty-six months or younger (at time of application), and are at least a “50% Primary Care Giver.”

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2. The funding is considered taxable by the Internal Revenue Service and the California Franchise Tax Board.

## **DEPENDENT CARE TRAVEL AWARD APPLICANTS**

To apply to the Dependent Care Travel Award Program, applicants completed a four-page electronic application regarding basic demographics, their dependent child and childcare arrangements, a budget, details about and evidence of the conference/research meeting to which the applicant planned to attend and how they thought their attendance might impact their careers, and some questions on the applicants' awareness of certain UC family-friendly policies.

A total of 93 faculty applied for ADVANCE Dependent Care awards between spring 2008 and fall 2010, with an average of fifteen applicants per call. Seventy-three percent of applicants were female and 91% were Assistant Professors. At the time of application, applicants had been at UCI for 2 to 3 years. Ninety-one percent of all applicants agreed that “the costs or availability of child care influenced their decisions to participate at a professional conference or research meeting since joining the UCI Faculty” (See Table 1).

**Table 1. Applicant Demographics**

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>3 Year Mean</b>
<b>Number of Applicants</b>	13	14	12	15	22	17	93
<b>Percent Female</b>	69%	57%	75%	73%	77%	82%	73%
<b>Percent Assistant</b>	100%	100%	92%	80%	82%	100%	91%
<b>Mean PhD Year</b>	2003	2004	2003	2004	2004	2005	-
<b>Mean UCI Hire Year</b>	2004	2005	2006	2006	2006	2007	-
<b>Mean Years at Current Rank</b>	-	-	2.818	2.067	2.727	3.058	2.677
<b>Percent of applicants indicating childcare affects participation</b>	82%	70%	100%	93%	91%	100%	91%

**The Distribution of Applicants across Schools on Campus**

Applicants were not evenly spread throughout the schools on campus. When considering the absolute number of applications, the faculty in the Schools of Social Sciences produced the most applications (21), followed by Business (14), Education (14), Physical Sciences (13), and Social Ecology (11). Faculty in most of the other schools produced a moderate number of applications: Information and Computer Science (6), Humanities and Health Sciences (each with 4), and Biology and Engineering, (each with 3). The School of the Arts produced no applications (see Table 2).

It is also important to consider the proportion of eligible faculty members who applied for awards. Due to the absence of data on parenting among UCI faculty at large and an assumption that, hypothetically, any adult could be a parent, we use a definition of “eligible” that errs on the side of over-inclusion and represents the maximum number of applicants from each school by rank. This means that we consider a faculty to be “eligible” if their rank, at Assistant or Associate Professor, fits the call. In the first two calls, only Assistant Professors were eligible, so we use the number of Assistant Professors as our base. For spring 2009 through spring 2010 we use a weighted figure.

Because only Associate Professors within two years of tenure were eligible, and the normal number of years in the Associate rank is six years, we take one-third of the number of Associate Professors as an approximation of the number of Associate Professors eligible for the award. We use the number of Assistant Professors plus one-third of the number of Associate Professors as our base for these grant cycles. Because the number applying in any one cycle is small, we also calculate an average for the total applicants and recipients over the 3-year period.

Of course, our usage of “eligible” here accounts only for rank and does not reflect the reality of parenting practices of UCI faculty. Certainly there are numerous biological and social factors that affect the decision to raise a child, but unfortunately we lack sufficient data to address them. For these reasons, we refer to it as “rank-eligible.” However, we do acknowledge that the percent female faculty in each school differs and this could affect application rates. Because one aspect of the program's eligibility requires that the applicant must be responsible for at least 50% of the child's care, we suspect that women are more likely to fit that criteria, as we see that the majority of the applicants were female. Therefore, it may be the case that schools with higher percent female faculty members produce a higher percentage of applications. To test this possibility, we provide the percent female among rank-eligible faculty members by school and correlate these with the percentage applicants in each school.

As a proportion of rank-eligible faculty, both the Department of Education (17%) and the School of Business (15.1%) produced large amount of applications as compared to other schools.<sup>3</sup> The schools of Social Ecology (9.9%), Social Sciences (8.8%),

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3. Because we do not have information on the number of Assistant and Associate Professors during Fall 2010, we include only the prior terms for this discussion.

Physical Sciences (6.2%), and Information and Computer Science (6.0%) each produced applications equaling over five percent of rank-eligible faculty. The other schools— Biological Sciences (2.4%), Engineering (2.2%), Humanities (1.4%), and Health Sciences (1.2%)--produced far less, proportionately. Lastly, we note that the School of Arts didn't have any applications during the period; we suspect this may be due to a greater emphasis on showcasing their work in venues than academic conferences and meetings (see Table 2).

The percent female of rank-eligible faculty appears to perhaps influence the distribution of applicants across schools. Correlating the percent of rank-eligible female faculty with the average percent of applicants yielded a Pearson's correlation coefficient of .509, which has a p-value that's on the cusp of statistical significance at 0.054. Of the four schools with the highest percent female faculty, two produced a high percent of applications (Education and Social Ecology) and two produced little to none (Humanities and Arts). Of the schools with mid-range percent female faculty, in one a very high percent of Assistant/beginning Associate Professors submitted applications (Business), one produced a moderate percent (Social Sciences) and one produced a low percent (Biology). Of the schools with a low percentage of eligible female faculty, in all but two (Physical Sciences and Information and Computer Science, where we have a moderate percent) we find a relatively low percentage of applications (Health Sciences and Engineering).



**Table 2. The Percent Female Faculty and the Distribution of Applicants across Schools, Controlling for the Number Rank-Eligible<sup>+</sup> Faculty Members**

	Mean Percent Female of Eligible	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	2.5 Year Average
<b>Arts</b>	48%	0% 0/12	0% 0/13	0% 0/20	0% 0/20	0% 0/20	0/NA	0.0%
<b>Biology</b>	45%	0% 0/23	0% 0/18	4% 1/26	4% 1/26	4% 1/26	0/NA	2.4%
<b>Business</b>	44%	15% 2/13	6% 1/18	10.5% 2/19	25% 4/16	19% 3/16	2/NA	15.1%
<b>Education</b>	84%	10% 1/10	11% 1/9	10% 1/10	18% 2/11	36% 4/11	5/NA	17.0%
<b>Engineering</b>	13%	5% 1/21	0% 0/24	3% 1/30	0% 0/31	3% 1/31	0/NA	2.2%
<b>Health Science</b>	40%	0% 0/28	0% 0/33	4% 2/45	0% 0/45	2% 1/45	1/NA	1.2%
<b>Humanities</b>	59%	0% 0/32	3% 1/37	0% 0/58	2% 1/51	2% 1/51	1/NA	1.4%
<b>ICS</b>	35%	5% 1/20	5% 1/21	0% 0/25	10% 2/20	10% 2/20	0/NA	6.0%
<b>Physical Sciences</b>	36%	3% 1/30	7% 2/27	6% 2/34	6% 2/33	9% 3/33	3/NA	6.2%
<b>Social Ecology</b>	56%	0% 0/9	9% 1/11	12.5% 2/16	7% 1/14	21% 3/14	4/NA	9.9%
<b>Social Sciences</b>	43%	17% 7/42	16% 7/44	2% 1/56	4% 2/56	5% 3/56	1/NA	8.8%

+ The number rank-eligible for the total is calculated as follows: for spring 2008 - fall 2008 the number of Assistant Professors. For spring 2009 - spring 2010: the number of Assistant Professors plus one-third the number of Associate Professors. The average percent of applicants includes all terms except for Fall 2010.

## **Expectations Regarding the Conference**

### *Location and Type of Participation*

When applying for the award, applicants were asked to describe both the conference or meeting they planned to attend as well as how they expected to participate in the conference or research meeting. Due to the great number and diversity of applicant destinations, we have provided the names of the conferences and meetings in Appendix

1. With regard to participation, applicants indicated one or more forms. They listed types that are almost identical to those reported by recipients (see Table 4 below).

#### *Anticipated Benefits of the Award*

In 2008 the Office of Academic Personnel (2008:22) published *Advancement and Promotion at Irvine: A Handbook of Advice for Tenure-Track and Tenured Faculty*, which outlines the steps leading to a successful tenure review and movement up the ranks. It states that “relationships with professional colleagues outside of the University help to establish one's visibility as a scholar.” In particular, it suggests that “Participation in conferences and other professional meetings also helps you establish professional contacts. The presentation of papers at these meetings (which require less lead time than does journal publication) can help make your work more widely known” (UCI: 29).

We asked applicants to explain how attending the professional conference or research meeting in question would help their careers. Many applicants mentioned that networking would be a major positive outcome of attending the conference/research meeting. They also frequently mentioned that presenting their research results would increase their visibility and professional development and provide feedback that would improve it.

#### *Participating in Highly Selective Meetings*

The UCI (2008:29) handbook also notes that “Small meetings where you can engage in serious intellectual discussions with colleagues can often be more helpful than larger, more anonymous meetings with a national network of colleagues.” Several of our

applicants sought funding for highly exclusive or prestigious opportunities to share their research findings. One applicant wrote:

This is a high-level meeting of theorists and experimentalists who set the direction for particle physics in the era of the new particle collider, the large Hadron Collider in Switzerland. Participation will give me excellent visibility--important for my tenure application--and the opportunity to influence the direction of the field.

Others emphasized the extent to which presenting at a prestigious venue would benefit their careers:

Presenting my paper in such a competitive conference (acceptance rate about 5%) will give me great public exposure.

This is an invited talk, and such invitations are viewed as an indicator of one's scholarly recognition.

This meeting is ranked as the top conference in the finance profession. Attending this conference will allow me to interact with other productive researchers and to promote my current research projects.

The Utah Winter Accounting Conference gathers accounting scholars (including many journal editors and reviewers) from across the country for two days of academic presentations. This conference is 'by-invitation' only and is highly selective.

Presenting my paper in such a competitive conference (acceptance rates less than 10%) will give me great public exposure....

Giving this invited talk (besides being a big honor) will give me the chance to share my work with a new community of researchers from France and other European countries.

This is one of the most prominent gatherings to discuss social investing in 2010, and it will represent a unique opportunity for high-level academics and practitioners to meet with one another.

This relatively small but highly focused meeting is designated to the field that I work in. I will have the opportunity to present recent work from my lab and get to know my colleagues in the field.

Applicants to our program, in accordance with the UCI Handbook of Advice, were well aware of the benefits of speaking at the conferences and research meetings to which they had been invited (or to which their papers were accepted).

### *Making Contacts and Networking with Top Scholars*

The UCI (2008:29) handbook also emphasizes interaction with the top scholars in one's field: "Remember that in the tenure review assessment of your professional reputation, you will be asked to give your department Chair a list of potential outside reviewers. These reviewers should be senior faculty (full professors) at well-regarded universities, and it helps if you and your work are already known to them." Many applicants stressed the value of meeting senior scholars in their fields. For example:

To present work there sends a signal that one does top quality work; papers/special session proposals undergo a very competitive blind review process. It also gives junior people, especially those who have the opportunity to present their work in progress, great exposure to the top researchers in the field and cutting edge research. Networking opportunities abound

[My] paper will be discussed by a senior expert in field.

These conferences are attended by many prominent transportation professionals, both from the academia, the private sector, and the government.

By presenting our results at this meeting, I will be able to publicize our findings, discuss them with the leaders in the field and to further establish my scientific reputation.

Two applicants specifically mentioned how making contacts with senior scholars might matter for their tenure case:

Sauder School of Business (UBC) is a premier university with top scholars in my field, two of whom do very similar work to me and sit on editorial boards of the top journals. I will be coming up for tenure next year, so exposure and networking opportunities like these are most helpful, particularly since I am the sole invited speaker for the day.

Participation in this meeting ... will provide access to a network of senior researchers working on this topic - many of whom would be ideal candidates to evaluate my application for tenure at UCI.

### *Seeking Opportunities for Publication*

The UCI handbook (2008:28) also warns that “It is important to remember that a strong record of research and teaching will be given much greater weight than will successful networking when it comes time for promotion or tenure review.” Many of our applicants recognized the importance of professional meetings in furthering their publication records.

### *Building towards Publications: Collaborations*

Several mentioned meetings with existing collaborators or establishing new collaborations:

Participation in this conference will allow me to present my research to a critical scientific audience, to engage in discussion with highly regarded researchers in my field, and to cultivate new collaborations.

It will assist me in establishing collaborative activities with colleagues across the country who have similar research foci. Additionally, I will be able to collaborate with a colleague on a manuscript we will co-author. We will use the time to plan the manuscript and construct a timeline for writing.

By meeting with co-authors, it will also help me further improve my work.

[I will be] meeting with best scientists in the this field, developing collaboration, increasing awareness on my research.

### *Building towards Publications: Obtaining Feedback on Existing Work*

Some applicants sought feedback on book manuscripts or had book manuscripts for which they sought publishers. One applicant seeking feedback for ongoing projects stated that

The data I collect and the feedback from the lectures will be the basis for journal articles, book chapters and a book.

Many recognized the helpful role of feedback from peers and top scholars in preparing their papers for publication:

Accepting these invitations and participating in the events would provide important visibility for my research, an opportunity to receive feedback before I submit the articles for publication.

The presentations of my research work at this conference would help me publicize the insights generated from these projects, and at the same time, it may help me collect some helpful comments and suggestions to improve the work.

### *Building towards Publications: Direct Opportunities*

Two applicants mentioned direct opportunities for publishing conference papers. One said:

Participation in this meeting involves an invitation to submit a paper for a Special Journal Issue.

And the other:

I have to write a new paper for the UCD workshop, to be published in a special journal issue.

Others mentioned more distant opportunities for publication:

I have recently shifted my research focus from adolescent to early childhood literacy. Presenting this paper will provide an opportunity to disseminate my new research in a relevant community. It may also lead to opportunities for publication.

### *Service to Professions*

Several applicants mentioned service to professional organizations. Service sometimes included leadership positions within their respective fields. One such applicant specified:

Being elected to a position as an international professional association is a great recognition and I have to fulfill my duties.

Together these comments indicate that the applicants to this program were aware of the career benefits of attending top-ranked and smaller meetings, networking, making contacts with top scholars in their fields, sustaining existing collaborations and building new ones, and using the conference/research meeting as an opportunity to turn their conference papers into publications. They proposed to use the funds from this program to take advantage of these benefits.

## **RECIPIENTS OF AWARDS**

The vast majority of applicants (82%) received funding. With a few exceptions, applicants who reported that they had a child within the eligible age range and were planning to attend a conference or research meeting received funding. The lowest proportion of applicants receiving grants in one application period was 57% in fall 2008 and the highest proportion was 100% in both fall 2009 and fall 2010 (see Table 3). Those denied funding either had no children, had children beyond the age range, were not responsible for at least 50% of the child's primary care, or were otherwise less competitive applicants during terms when the program may have faced budget constraints.

Of those receiving awards, the average amount was \$874, with a low of \$789 in spring 2010 and a high of \$1,086 in spring 2009. Amounts were based upon requests, with a cap of \$1,000; exceptions to the cap were considered when extra funds were available and a strong case was made for them. Applicants received an average of 99% of the amount requested, with a low of 87% in spring 2009 and a high of 115% in spring 2008. Seventy-eight percent of awardees were female (with a low of 62.5% awardees in

fall 2008 and a high of 89% in spring 2009). Ninety-one percent of recipients were Assistant Professors (with a low of 80% recipients in fall 2009 and a high of 100% in spring and fall 2008, and fall 2010). Awardees had an average of 2.8 years at their rank at the time of the award. Ninety-two percent of all awardees agreed that “the costs or availability of child care influenced their decisions to participate at a professional conference or research meeting since joining the UCI Faculty” (see Table 3). Due to the high acceptance rate, characteristics of the recipients largely resemble those of the applicants. As such, to avoid redundancy in the text, we have included the discussion of the number of awardees by school in Appendix 2.

**Table 3. Award Recipient Demographics**

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>3 Year Mean</b>
<b>Number of Awardees</b>	10	8	9	15	17	17	76
<b>Percent Awarded</b>	80%	57%	75%	100%	77%	100%	82%
<b>Mean Amount Awarded</b>	\$838	\$819	\$1086	\$824	\$789	\$940	\$874
<b>Median Amount Awarded</b>	\$950	\$1000	\$1000	\$960	\$800	\$1000	\$1000
<b>Mean of 100 * Award/Requested</b>	115	93	87	98	89	109	99
<b>Percent Female</b>	80%	62.5%	89%	73%	82%	82%	79%
<b>Percent Assistant</b>	100%	100%	89%	80%	82%	100%	91%
<b>Mean PhD Year</b>	2003	2004	2002	2004	2003	2005	-
<b>Mean UCI Hire Year</b>	2004	2006	2005	2006	2005	2007	-
<b>Percent of Recipients indicating childcare affects participation</b>	80%	86%	100%	93%	88%	100%	92%

### **Types of Participation**

Applicants were asked to describe the nature of their participation at the conference or research meeting. The majority of recipients (51%) over the three year period indicated that they were to be an “invited speaker,” 44% said they planned to network, 27% were to participate on a panel, 14% to present a poster, and 31% had other plans for participation.



**Table 4. Types of Participation\* at Conferences and Research Meetings**

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>3 year Mean</b>
<b>Invited Speaker</b>	30%	37.5%	56%	60%	65%	59%	51%
<b>Networking Opportunity</b>	10%	25%	44%	67%	41%	53%	44%
<b>Other</b>	30%	0%	33%	27%	41%	41%	31%
<b>Panel Participant</b>	10%	25%	22%	40%	23%	35%	27%
<b>Poster Presentation</b>	20%	12.5%	22%	20%	0%	18%	14%

\* Participation is for non-mutually exclusive responses in percents, and excludes non-awardees

Participation as an invited speaker, which we consider to be the most prestigious type of participation, was a low frequency participation type in the first two grant cycles (30%-37%) and more prevalent in the last four cycles (56%-65%). This pattern of increase over time is also evident for “other” types of participation as well as networking.

### **The Type of Child Care**

The aim of the Dependent Care Award Program is to enable parents of infants and toddlers, who would otherwise be unable to attend conferences and research meetings, to attend those meetings. Barriers to travel for parents working in tenure-track positions are multifold, are different for mothers and fathers, and vary by the age of the child. There are many scenarios describing how parents care for their children, including parents who alternate care giving responsibilities, part- or full-time in-home childcare by a caregiver, care outside the home in a (private or public) childcare facility or care by friends or relatives. As parents establish their care routines, they aim to accommodate their children’s needs as well as to provide time for the research, teaching, and service required

of their positions. Barriers arise when routines are broken due to children's illness or parent's travel. Outside of children's very real emotional needs that arise around illness and travel, are practical issues that need to be solved. Of these practical issues, arguably the most important is the need to figure out how the child will be cared for in the absence of the parent. If the child is cared for outside the home, issues such as transportation to and from the child care facility and the need for extra care hours must be addressed. If the child is cared for by a care giver in the home, then extra hours must be arranged. If the parents share in the child care, then a replacement for the traveling spouse must be arranged. All of these options require additional funds than are normally spent on child care.

Lactating mothers have fewer options. Because separation between mother and child is difficult, especially if the separation is extended, traveling with the child may be a better option. Yet traveling to a conference with a child requires advanced planning and resources. For instance, does the conference or research meeting provide a child care option? If so, what are its hours of operation? Alternatively, the faculty member might choose to travel with her spouse or child care provider. For a number of reasons, including lack of resources at home or children's separation issues, male faculty members might also choose to travel with their child to a conference .

Awards by the Dependent Care Award Program helps tenure-track parents to overcome these obstacles by allowing them to follow one of two major strategies: bringing the child to the conference or research meeting or acquiring extra childcare at home. Table 5 displays the percentage of award recipients that used the awards in these different ways.

**Table 5. Purposes for Which Awards were Used\***

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>3 Year Mean</b>
<b>Additional childcare at home</b>	40%	37.5%	33%	40%	35%	53%	42%
<b>Childcare at Professional conference or meeting venue</b>	30%	25%	22%	13%	12%	18%	20%
<b>Travel expenses for child and caregiver</b>	70%	75%	67%	73%	53%	59%	62.5%
<b>Other</b>	0%	0%	22%	7%	18%	0%	9.00%

\* Figures are non-mutually exclusive responses in percents, and exclude non-awardees

The option selected most often in every grant cycle (62.5% of all recipients over the 3 year period) was travel expenses for child and caregiver. Twenty percent requested funds to pay for childcare at conferences or meetings. Less requested (42%) were funds to pay for increased expenses at home. Nine percent requested funds for other purposes. These figures add up to more than 100% because some recipients requested funds for both types of care. Overall, an average of 65% traveled with children and 35% exclusively arranged for care at home.

### **Awareness of Family-Friendly Policies**

The Dependent Care Award Program is one of many efforts on campus to equalize gender disparities and unequal family responsibilities for tenure-track faculty. The ADVANCE Program initiated and has now institutionalized a host of gender equity and mentoring programs on campus, and the University of California, Irvine has developed family-friendly policies.

UCI's Academic Personnel Procedures identifies its policy of Active Service-Modified Duties as a period of modified duties, most commonly, when the faculty

member does not teach. Parents that are responsible for at least 50% of child care responsibilities may be granted this status (and/or Childbearing Leave) for up to two quarters. The UCI policy of stopping the clock for the care of a child or children allows for a delay in the eight-year tenure clock for parents with at least 50% of child care responsibilities. Paid childbearing leave (usually six weeks, but extensions are possible) are provided by the university for the purpose of childbirth and recovery. No duties are required during childbearing leaves. Unpaid parental leaves (for a combined total absence from campus of up to one year for each birth or adoption) are also provided if necessary. The university also offers part-time tenure-track appointments and reduction in percentage of time of an appointment to accommodate family needs. Each of these policies is described in detail in Appendix 3.

We asked applicants whether or not they were aware of these policies. Table 6 shows awareness as indicated by award recipients over the three-year term of the grant program. We find considerable disparity in recipients' awareness of these policies. The vast majority of recipients were very aware of the Active Service, Modified Duties policy. An average of 78% indicated that they were very aware of it, but there is no indication that awareness improved over the span of the grant period. Likewise, an average of 85% was very aware of the Tenure Clock Extension policy, and there was no improvement over time.

Awareness of paid and unpaid leave was much less developed. Only 20% indicated that they were very aware of the policies, 64% said they were somewhat aware and 14% that they were unaware of these policies. The policy for which there was the least awareness was Part-time Tenure Track Appointments. Only 1% was very aware and 22% somewhat aware of this policy. Seventy-six percent indicated that they were

unaware of this option. Although there appears to be some improvement in awareness over time for both the paid and unpaid leave policies and part-time appointments, word about these policies needs to be disseminated in a way that captures the attention of the affected faculty.

**Table 6. Percent of Recipients Aware of UCI Family-Friendly Policies**

		Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	3 Year Mean
<b>Active Service, Modified Duties</b>	<b>Not Aware</b>	0%	25%	0%	13%	12%	0%	8%
	<b>Somewhat Aware</b>	10%	0%	11%	13%	18%	23%	14%
	<b>Very Aware</b>	90%	75%	89%	73%	71%	76%	78%
		(10)	(8)	(9)	(15)	(17)	(17)	(76)
<b>Tenure Clock Extension</b>	<b>Not Aware</b>	0%	12.5%	0%	0%	0%	0%	1%
	<b>Somewhat Aware</b>	10%	12.5%	22%	7%	12%	18%	13%
	<b>Very Aware</b>	90%	75%	78%	93%	88%	82%	85%
		(10)	(8)	(9)	(15)	(17)	(17)	(76)
<b>Paid and Unpaid Leave</b>	<b>Not Aware</b>	30%	12.5%	0%	7%	18%	18%	14%
	<b>Somewhat Aware</b>	70%	75%	89%	67%	59%	53%	64%
	<b>Very Aware</b>	0%	12.5%	11%	27%	23%	29%	20%
		(10)	(8)	(9)	(15)	(17)	(17)	(76)
<b>Part-time Tenure Track Appointment</b>	<b>Not Aware</b>	100%	62.5%	67%	87%	76%	65%	76%
	<b>Somewhat Aware</b>	0%	25%	33%	13%	23%	35%	22%
	<b>Very Aware</b>	0%	12.5%	0%	0%	0%	0%	1%
		(10)	(8)	(9)	(15)	(17)	(17)	(76)

We have an opportunity to see if application to the Dependent Care Award Program itself increases awareness of family-friendly policies. The form applicants completed provided a link to UCI family-friendly policies. If some applicants clicked on this link while completing the application, they should become more aware of these policies. Here we compare policy awareness of first-time recipients to second, third, and fourth-time award

recipients over the three year span of the program. We find that in fact, receipt of an award exposed recipients to information about these family friendly policies. For all policies except for paid and unpaid leave, there is a statistically significant relationship between the number of awards received and awareness of these policies (see Table 7).

**Table 7. Awareness of Family-Friendly Policies by Number of Previous Dependent Care Awards.**

	<b>Number of Previous Applications</b>	<b>Not Aware</b>	<b>Somewhat Aware</b>	<b>Very Aware</b>	<b>n</b>	<b>tau (one-tailed)</b>	<b>p-value</b>
<b>Active Service, Modified Duties</b>	0	15%	17%	67%	52	0.169	0.040
	1	4%	12.5%	83%	24		
	2	0%	22%	78%	9		
	3	0%	20%	80%	5		
	4	0%	0%	100%	2		
<b>Tenure Clock Extension</b>	0	4%	19%	77%	52	0.191	0.026
	1	0%	8%	92%	24		
	2	0%	0%	100%	9		
	3	0%	20%	80%	5		
	4	0%	0%	100%	2		
<b>Paid and Unpaid Leave</b>	0	22%	63%	16%	51	0.133	0.081
	1	17%	62.5%	21%	24		
	2	0%	78%	22%	9		
	3	20%	60%	20%	5		
	4	0%	50%	50%	2		
<b>Part-time Tenure Track Appointment</b>	0	86%	11%	2%	52	0.253	0.005
	1	75%	21%	4%	24		
	2	78%	22%	0%	9		
	3	40%	60%	0%	5		
	4	0%	100%	0%	2		

## **REPORT OF AWARD USE**

Within one month of attendance to conferences or professional meetings, award recipients were expected to submit a report to the ADVANCE Program Office, indicating

how the award was used and how it contributed toward the individual's advancement to tenure. A template of the report accompanied the award letter and an electronic copy of the report was made available online.

The comments recipients made on the Use Reports related to their actual experiences at the conferences and research meetings rather than their expectations of their participation, as reported from the applications. Appendix 4 explains our coding scheme for these benefits. The most common benefit recipients mentioned was that attending the conference or research meeting promoted their research (82%). A majority (56%) mentioned general networking as a benefit, and just under half mentioned research feedback (47%), collaboration (44%), and developing new projects (41%). Just around a quarter listed the development of new contacts (26%), a high-powered audience (26%), and promotion of their status in the field (26%). Less frequently mentioned benefits were knowledge gained through the conference/research meeting (18%), the honor bestowed on the participant (15%), help towards mid-career or tenure case (15%), sustaining existing contacts (9%), helping students to network (3%), and service to the profession (2%) (see Table 8).

**Table 8. Percent Mentioning Various Career Benefits**

<b>Types of Benefits</b>	<b>Percent</b>	<b>n</b>
	General	56% 34
	New Contacts	26% 34
<b>Networking</b>	Sustain Contacts	9% 34
	Collaboration	44% 34
	Students Mentioned	3% 34
<b>Honor or Status Matters</b>	"Honor" or "Privilege" Mention	15% 34
	Complimentary Toward Audience	26% 34
	Research	82% 34
<b>Promotion</b>	Research Feedback	47% 34
	Self	26% 34
	Tenure or Mid-Career Appraisal	15% 34
<b>Other</b>	New Project	41% 34
	Knowledge Gained	18% 34
	Service	12% 34

### **Location of Child Care and Benefits Experienced**

Perhaps in part due to lactation demands, female faculty were more likely to opt for travel with their child (63%, with an additional 8% opting for both travel with their child and extra child care at home) than were male faculty (39% traveled with their child and 9% opted for both).

Next we consider whether or not the location of the child care (home or at the conference) impacted the reported benefits of participation. Table 9 shows that faculty that traveled with their child (and those who used the award for both travel and at home care) reported more benefits in most categories. They experienced more general networking, more new contacts, more collaboration, and more feedback. Those arranging for child care at home reported more new projects as a conference/research meeting benefit.



**Table 9. Percent Reporting Benefits by Child Location**

		<b>Child Location</b>		
		<b>Home</b>	<b>Conference</b>	<b>Both</b>
	<b>General</b>	37.5%	67%	67%
<b>Networking</b>	<b>New Contacts</b>	0%	29%	33%
	<b>Sustain Contacts</b>	0%	9%	0%
	<b>Collaboration</b>	25%	43%	67%
	<b>Students Mentioned</b>	0%	5%	0%
<b>Honor or Status Matters</b>	<b>"Honor" or "Privilege" Mention</b>	12.5%	9%	33%
	<b>Complimentary Toward Audience</b>	12.5%	33%	0%
	<b>Research</b>	87.5%	81%	67%
<b>Promotion</b>	<b>Research Feedback</b>	37.5%	57%	0%
	<b>Self</b>	25%	33%	0%
	<b>Tenure or Mid-Career Appraisal</b>	0%	19%	0%
<b>Other</b>	<b>Knowledge Gained</b>	0%	29%	0%
	<b>Service</b>	12.5%	9%	0%
	<b>New Project</b>	50%	38%	33%

### **Comments on the Benefits Experienced**

#### *Special Opportunities*

Five recipients mentioned special opportunities that they were able to take advantage of due to their Dependent Care Award. One recipient said:

I was invited to this conference to give one of the keynote addresses .... This was a very important professional opportunity for me, as junior faculty are rarely asked to deliver keynote addresses at international conferences.

Another stated:

I presented my paper in a special session (special sessions are the most prestigious tracks to participate in since they are peer reviewed with an acceptance rate of 35-40%) that was very well attended and also was invited to talk about my work in the doctoral consortium along with a select few other junior and senior colleagues. I also met co-authors while there.

A third recipient said:

Participation as a member of this panel was a unique opportunity. I was identified by the Royal Society of Canada for membership on this panel (these expert panels are the Canadian equivalent of the National Academies of Science Working Groups); as the junior member (by over 20 years) I was able to meet and connect

with senior scholars in the field who would make excellent letter writers for my tenure case and some of whom have now taken a mentorship role on my current research project.

The fourth recipient stated:

Being asked to attend this conference as the keynote speaker was a great honor for me. It gave me a chance to present my work to a whole new audience, and to form new collaborations with colleagues in Europe. It also demonstrates to my colleagues here (none of whom work in my field of cognitive development) that my work is known and respected internationally. I feel that it will definitely strengthen my CV, when I go up for tenure in 2011.

And the fifth recipient stated:

This conference was sponsored by the ...three main organizations in the field of statistics. The list of invited speakers could not be more impressive....The quality of this workshop was the highest I have ever seen. I learned about the most current research activities in our field.

These recipients may not have been able to take advantage of these important opportunities had they not been funded through this program.

### *Important New Contacts*

Making new contacts was mentioned frequently; here are a few representative comments regarding such new contacts:

I gave a talk on the research in my lab ... which was received with great interest and which resulted in lots of discussions with other scientists in the field. At this conference, I was able to network, establish new contacts (2 meeting participants will be giving talks in our departmental seminar series!), which was critical for establishing myself in the field.

I also presented my work in the poster session, and through many interesting discussions, I was able to establish new connections and expand my network of colleagues.

It was a very successful and important international conference attended by members of government offices in the EU, academics and public intellectuals and has kept me in the international arena, which is important for the work I do.

It was especially important to meet with colleagues who are specialists ... and based outside of the USA, with whom I do not have a chance to interact as often as with the US-based experts.

*Found Book Publisher or Possible Book Publisher*

Some junior faculty choose to build their tenure cases by publishing a book. Because most Assistant Professors have not yet established their reputations, the book publishing process involves an extended time of research and writing before it is ready to be submitted to a scholarly press. Once the manuscript is completed, authors must make initial contacts with the right editors at conferences in order to introduce their projects to them. Three recipients made such contacts at the conferences funded through the Dependent Care Award Program that led to further interest in their book projects. One recipient said the contact led to the publication of his/her book:

It was at the 2008 MPSA conference that I met with the Cambridge editor to pitch my book proposal. That meeting went well, which began the process leading to my forthcoming book (due out in March).

Another stated that the meeting led to the next level with the editor:

The Cultural Wealth of Nations Conference was part of a new research project in which I am engaged. With my co-organizer... we submitted an edited book proposal to Stanford University Press and have just recently heard that the Chief Editor ... is interested in discussing this proposal with us.

Another mentioned that:

I was able to receive feedback on a new research project I'm developing as well as have an extended meeting with the editor from Duke University Press I'm currently working with on my first book manuscript.

*Turned the paper into an Article now Published or Under Review*

Most junior faculty choose to publish articles, which are usually products of shorter-term projects. Two recipients mentioned that feedback from the conference helped to finalize

an article which is now in press or under submission. One recipient advanced two article projects in this way:

I received useful feedback, which I was able to incorporate into these articles. The first one has been accepted for publication ... (one of the central interdisciplinary journals of scholarship focused on Eastern Europe and Eurasia). I am planning to submit the second one to *Organizational Studies* soon.

A second recipient stated that feedback helped him/her complete the article and send it out for review:

Attending these conferences benefits my career in several dimensions: first, my general reputation in the field was greatly enhanced; second, I established 2 new research collaborations with professors from other universities; third, I received great comments and suggestions for the paper presented at the conference, which helped me significantly improve the paper. The paper is now under review by a top journal in finance.

*Conference Attendance Helped to Make Progress on Projects (Articles or Grant Proposals)*

A couple of award recipients reported making progress on papers they aim to publish.

One recipient said:

A written report and series of publications are also planned based on the work of our panel. Thus, in addition to the prestige of serving on this panel, this trip also created the opportunity to publish and continue to work with leading experts in the field of child development.

Another said:

The data I collected will contribute to a series of journal articles. Giving the invited lectures allowed me to disseminate preliminary findings and make important professional contacts. I see these activities as central to my research agenda, professional development and my timely progress through the merit and promotion process.

And one respondent applied for grants in response to ideas developed at the conference:

I met and exchanged ideas with many researchers. Upon my return, I wrote two grant proposals based on the ideas I developed during the workshop and submitted them to NSF.

### *The Value of Small Conference or Department Colloquium*

A couple of recipients noted the value of attending a small meeting. One that attended a small conference said:

Not only did the paper benefit from the feedback I received from the audience and the discussant, attending the conference also allowed me to network and meet both senior and junior colleagues in my field. The conference is relatively small, and I had several fruitful interactions over coffee breaks and meals.

The other attended a department colloquium:

Because of this award, I was able to accept a Colloquium invitation .... I gave a talk on my group's research and was able to meet with many of the physics faculty there.

### *New Collaborations*

Four recipients mentioned new collaborations that they developed at the conference or research meeting:

One potential collaboration (with a faculty member at the Univ. of Utah) was also initiated during this meeting.

The travel funds allowed me to spend more time at conferences to participate in mentoring and networking events. As a result of attending some of these events, I was able to gain traction on some potential future collaborations.

One of the positive outcomes of this visit was a new collaboration ...which arose from a conversation we had on the day of my talk.

I met with one colleague who teaches a similar course that I teach and we discussed ways to use a new web-based environment for video analysis. We also discussed collecting data and writing a joint paper about teachers' use of this tool. Additionally, I met with two colleagues to discuss potential publications that we might write following a symposium in which we all presented this past spring.

### *Existing Collaborations*

Two recipients were able to meet with existing collaborators at the conferences they attended. One said that:

I continued to work with my coauthors ...who also attended that conference. One project ...was completed, and one new project was initiated. That was a very productive meeting. Also, there is no doubt that this meeting will influence my career in many aspects in future. For example, after the meeting (and, up to some extent, as a result of my participation in the meeting) I was invited to write a chapter for the monograph.

Another recipient stated:

I reaffirmed contacts with colleagues from all over the world whom I rarely see and was introduced to some quite prominent scholars in my field. I also used the opportunity to have a quick working meeting with one of my colleagues who attended about our edited volume which is currently under review at Stanford University Press.

### *Valuable Feedback*

Many recipients mentioned receiving valuable feedback on their papers. Following are a few representative statements:

The comments from the discussant and the conference participants help improve my paper a lot. Furthermore, presenting my paper in such a high profile conference gave me great public exposure, which helps advance my future career.

The paper that I presented... was well received and the comments that I received will help me strengthen the arguments so I can prepare the paper for publication.

### *Dealing with Work-Family Balance*

Bringing a child into a family changes everyday routines, is accompanied by a host of new emotions, and oftentimes brings visits by extended-family and friends. Even when the new child is not the first in the family, parents must rearrange their lives to accommodate the child while they struggle to maintain their existing obligations and their work schedules. While the demands of day-to-day work at the university may be alleviated by use of family-friendly policies, the pressure to maintain one's scholarly reputation and on-going projects looms large. The Dependent Care Award Program was seen by recipients as a valuable aid that allowed them to juggle these often-times

conflicting demands. Here are some representative comments concerning the unique situations that the award allowed them to resolve:

During the week of the conference, the regular nanny for my son (then 20 months old) also had to be away. My husband and son ended up traveling with me to Pittsburgh, and on to Michigan where my husband had to give a talk while I visited the Upjohn Institute for Employment Research the following week. We had to devise a complicated child-care arrangement, but in the end, traveling together was good as it allowed me to be productive. Without the Award, I would have had to ask one of my co-authors to possibly present our paper at the Econometric Society Meetings and I would not have had a chance to exchange ideas with colleagues at the Meetings and later with potential future collaborators at the Upjohn Institute.

While I knew attending the workshops and conferences organized by ISBA would be crucial for my career, I was hesitant to go since I did not feel comfortable to leave my wife and my infant son alone for a week. With the financial support from the ADVANCE program, we decided to go together. I could attend the workshop with piece of mind.

I used the funds to purchase an airplane ticket for my daughter to join me on a trip to the University of Pittsburgh. My wife had to attend a concurrent business trip and my visit to U Pitt would have not been possible without bringing my daughter along.

I used the ADVANCE funds to pay for a nanny so that I could travel to the University of Tennessee / Oak Ridge National Laboratory Biophysics Summer School in July. I was invited to give a lecture .... Without this award, I would not have been able to afford to leave my 4-month old daughter and stay overnight at the conference, as my husband (the father) works in Chicago during the week.

I would have to decline this important invitation if my husband could not join me to help take care of our then 10-month old son. (At that point I was still nursing, so physical co-presence of my son was necessary).

In the Fall of 09 I was given a Dependant care award to go to a conference at the University of Edinburgh, which I had hoped to bring my son to (I am responsible for 50% of his care and was breastfeeding at the time). At the very last minute however we had to leave my son home with his father due to an increase in h1N1 cases across the UK (my son was a preemie and it was too dangerous and too late for him to be vaccinated or to risk exposure). We incurred a number of change and cancellation fees, had I not been giving a plenary, and had I not been given the dependant care award and planning on taking him, I probably would not have gone at all. I went for a shorter period of time, (and it was incredibly difficult and I won't go to another conference without him until he is older and in day care!) and my husband who was planning on coming and taking care of him there stayed

home and cared for him in Irvine while I went to the conference. (So we used the award for childcare a little differently than originally planned, but it did allow me to go to the conference and to make my presentation).

My wife and I used the \$380 to pay for my wife's Mom to come out from Chicago and help with the kids during the days I was gone. We couldn't have afforded to have her out here otherwise.

With the funds provided by your program, I was able to offset the cost of the \$1304.65 plane ticket for another adult to accompany me to the conference to watch my 15-month old daughter. This gave me flexibility to actively participate in the conference, present my research, network with colleagues, and have several meetings with the taskforce. Traveling with a childcare provider relaxed time restrictions for how long I could participate in the conference and avoided the difficulty of tackling language issues in trying to arrange a local and unfamiliar childcare provider. With the dependent care award, I was able to attend all three days of the conference as well as meetings after sessions were over each day.

I used the funds to fly my mother in to care for my daughter (who has special needs) and also to pay a trained caregiver some overtime while I was away.

I was granted a Dependent Care Travel Award of \$254 to be used for airfare for my 1 year-old daughter to travel with me to Northern California. She was able to stay with my parents while I attended the conference. If she had not been able to accompany me on this trip, I would not have been able to attend this meeting.

I was apprehensive about traveling so soon after my son was born. However, this award allowed me to have him travel with me at this early age and to ensure that he was well cared for while I attended the meetings. I am extremely grateful for this type of support offered through UCI Advance as it lessened the burden of balancing work and family demands right after the transition to parenthood!

I have a four-year-old son who attends the UCI Early Childhood Education Center full time. But due to university budget cuts, the center was closed the week of June 14-18. My husband did not have enough vacation time at work to be able to take the week off, and we have no family in the area. So we had to find alternate child care in order for me to be able to attend the conference. Using the UCI Advance Program / Elsevier Foundation Travel Award, we were able to pay for my husband's mother to fly over from her home in England, to stay with us and take care of our son while I was away.

The award allowed my husband and son to travel with me, which was wonderful as the conference and hotel were located in the same venue and I was able to see my son between panels and he was able to join the conference for all the meals (where he met a number of interesting academics and another baby!). It was the ideal situation and in keeping with how I work at home, both available and present for him and yet able to do my own work.



### *Praise for the Program*

Just about all of the recipients indicated appreciation for the awards they received, and several indicated special praise for the program. Here are some of those comments:

I strongly believe that such a program is key to helping faculty with young children keep up with the professional demands and career development.

The Advance award really was a great boon to my family and my career. I greatly appreciate it.

I feel that my research program and career development benefited a lot from attending the conference, and I am grateful to the UCI ADVANCE Program and the Elsevier Foundation for supporting me with the Dependent Care Travel Award.

In sum, I have benefitted a lot from this award. I am grateful to the University for providing me with this opportunity.

The ADVANCE program is a wonderful effort to assist faculty members with young children in actively participating in their field and facilitating their professional success.

In general, the Dependent Care Travel Award helped me to release my financial burden in taking care of the baby, which allowed me to focus more on getting exposure to the field. As a junior female professor, I greatly appreciate the generosity of the Elsevier Foundation for providing such wonderful award.

I strongly believe that these kinds of initiatives are necessary to help women and men academics with small children manage the work-family balance.

The grant made it possible to attend this meeting with my 4 1/2 month old son, and my husband as his caregiver. When I mentioned this grant to colleagues at the conference, they were deeply impressed, stating that this was a great way of supporting women in science.

Overall, I have benefited a lot from this award. I am grateful to the University for providing me with this opportunity.

This is a wonderful program that has enabled me to participate in scientific meeting(s) that I otherwise would have to miss. Thank you to the organizers for making this possible!.

I want to thank again the ADVANCE program for everything it does to support the gender equity and work-family balance. The program is a tremendous asset to UCI and I hope it will continue in the future.

The conference was an important meeting of international academics working on Iran and the first opportunity I have had since pregnancy to present new research. This and Edinburgh, earlier in the year were invaluable trips as I had been on bed-rest for most of my pregnancy, and having had a preemie, I've been out of visible circulation and it has been important to present my research and reconnect with colleagues.

### Comparison of Benefits across STEM and Non-STEM Schools

A comparison of various reported benefits by STEM and non-STEM schools reveals similar benefits across types, with some differences. Junior faculty in STEM schools tend to report more general networking, new contacts and progress toward mid-career or tenure review, whereas faculty in the non-STEM schools tend to report more work with existing collaborators and receipt of feedback. All other types of benefits are equally reported by faculty in both types of schools (see Table 10).

**Table 10. Comparison of Benefits across STEM and Non-STEM Schools**

		Not STEM	STEM
Networking	General	50%	70%
	New Contacts	21%	40%
	Sustain Contacts	12.5%	0%
	Collaboration	46%	40%
Honor or Status Matters	Students Mentioned	0%	10%
	"Honor" or "Privilege" Mention	21%	0%
	Complimentary Toward Audience	29%	20%
Promotion	Research	83%	80%
	Research Feedback	54%	30%
	Self	25%	30%
Other	Tenure or Mid-Career Appraisal	12.5%	20%
	Knowledge Gained	16.667	20.000
	Service	12.500	10.000
	New Project	41.667	40.000

## Comparison of Expected and Actual Benefits

Next we consider how recipients' reports of the actual benefits they gained compare to their expectations. An overwhelming percent of recipients reported that their attendance at the conference or research meeting either met or exceeded their expectations. Over 80% met or exceeded their expectations regarding the honor or status associated with their participation; over 85% met or exceeded their expectations about promoting their own visibility or specific research projects; and over 85% met or exceeded their expectations regarding networking and collaborations (see Table 11).

**Table 11. Comparison of Expected Benefits and Realized Benefits**

		More Expectations than Occurrences	Same Expectations as Occurrences	More Occurrences than Expectations
	<b>General</b>	15%	67%	18%
		5/33	22/33	6/33
	<b>New Contacts</b>	15%	67%	18%
		5/33	22/33	6/33
<b>Networking</b>	<b>Sustain Contacts</b>	0%	91%	9%
		0/33	30/33	3/33
	<b>Collaboration</b>	9%	63%	27%
		3/33	21/33	9/33
<b>Honor or Status Matters</b>	<b>Students Mentioned</b>	0%	100%	0%
		0/33	33/33	0/33
	<b>"Honor" or "Privilege" Mention</b>	12%	82%	6%
		4/33	27/33	2/33
<b>Promotion</b>	<b>Complimentary Toward Audience</b>	18%	70%	12%
		6/33	23/33	4/33
	<b>Research</b>	9%	67%	24%
		3/33	22/33	8/33
<b>Other</b>	<b>Research Feedback</b>	12%	67%	21%
		4/33	22/33	7/33
	<b>Self</b>	15%	73%	12%
		5/33	24/33	4/33
<b>Other</b>	<b>Benefit Tenure Appraisal</b>	9%	88%	3%
		3/33	29/33	1/33
	<b>Benefit Learning</b>	9%	76%	15%
		3/33	25/33	5/33
	<b>Benefit Service</b>	3%	91%	6%
		1/33	30/33	2/33

## CONCLUSION

The call for applications to the Dependent Care Award Program went to faculty in all schools who were in the eligible ranks. Nevertheless, we found that response to the program was distributed unequally across campus. Faculty in certain schools were much more responsive than those in other schools, and there was one school where there were no applications at all. Some of these differences may have to do with differential expectations for conference and research participation across schools, but no doubt, there were other factors involved. We saw that the percent female among the eligible faculty appears to affect the proportion that applied. We also have to keep in mind that the parenting rate among faculty in different schools may differ. That is, junior faculty, and especially female junior faculty in some schools may delay childbearing until after they receive tenure. This may render our proxy of the percent eligible across schools less effective. Nevertheless, it is important to make sure that the calls for applications reach every eligible faculty member and that the calls clearly and concisely explain the benefits offered. If it is true that women in STEM disciplines delay childbearing until after tenure review, expanding the program to all Associate Professors may help to reach more female faculty in STEM schools.

The perceived need for this program is high: over ninety percent of applicants and recipients agreed that the cost and availability of child care affects their conference participation. And all applicants indicated multiple career benefits that accrue from conference and research meeting participation.

We asked applicants to anticipate the benefits they would experience if awarded funds through this program. We saw that on the whole, applicants were in sync with the UCI Academic Personnel manual's emphasis on making contacts with colleagues to increase one's visibility in the field, with attending meetings where serious intellectual discussion could occur (rather than large anonymous meetings), and the importance of developing their research records. This is evidenced by applicants mention of networking, presenting their research, making contacts with top scholars, maintaining and establishing new collaborations, getting feedback to improve their papers, and taking advantage of direct publishing opportunities that were associated with the conferences or research meetings they attended. We think that this award allowed faculty with small children to overcome barriers to fulfilling activities expected of successful tenure candidates.

The vast majority of applicants (82%) received funding. Like applicants, recipients were more likely to be female (79%) than male, and they were distributed across schools in much the same ways as were applicants. Most recipients traveled to conferences and research meetings where they were invited speakers, and fewer were panel participants or presented posters. Most opted to travel with their child to the conference or research meeting (65%) rather than arrange for child care at home (but some arranged for additional child care at home also).

We found uneven awareness of UCI family-friendly policies. Two policies (Active Service, Modified Duties and Tenure Clock Extension) were widely known, one was not as well known (paid and unpaid leave), and one was not known at all (part-time tenure track appointments). Knowledge tended to improve once recipients participated in

the Dependent Award Program. More should be done to disseminate information about these policies.

Female faculty were more likely to travel with their child, and those who traveled with their child reported more of certain types of benefits than did those who arranged for child care at home.

We found a high degree of correspondence between expected and actual experiences at conferences and research meetings. In their reports of actual experiences at the conferences and research meetings recipients explained how their research was promoted, that they networked, received valuable feedback, worked with new and existing collaborators, began new projects, and made new contacts. Their detailed descriptions of their experiences revealed that the awards allowed junior faculty with small children to take advantage of special opportunities, secure book publishers, turn papers into published articles and grant proposals, to establish new collaborations and maintain existing ones, and to utilize feedback from their visits to make significant progress on their articles.

Many recipients commented on how the award helped them to maintain work-family balance. They appreciated the ability to attend to their careers in a way that didn't compromise the care of their infants and toddlers. They expressed a considerable amount of praise for the program, its novelty and its effectiveness.

Without this program, junior faculty without children are much more able (and therefore likely) than their peers with children to travel to important conferences and research meetings in their fields. Because travel to such meetings leads to substantial career benefits, junior faculty with children are likely to miss out on these opportunities,

and their research profiles are likely to suffer. We saw that the Dependent Care Award Program aided junior faculty with children in making that travel happen, and we expect that this is one step in helping to boost their research profiles to the levels of their junior faculty peers without children. Overall, we conclude that beyond faculty appreciation, this program assists junior scholars in pursuing promotion-related activities in accordance with University guidelines, and in this way it filled an important gap in junior faculty parents' needs.

## **ADDENDUM – Report of Usage of Fall 2010 Dependent Care Travel Awards**

By June, 2011, thirteen of the seventeen recipients of the 2010 fall travel awards submitted their Report of Award Use forms. While we could not include them in the above analysis, we provide a short summary of these reports here.

Six of the thirteen recipients reported attendance at international meetings and seven attended national conferences. One recipient co-organized a conference and another recipient organized a seminar. Most of the recipients presented talks; one presented the keynote address at a conference and another participated as a member of an expert panel assembled by the Royal Society of Canada. In addition, several recipients chaired sessions/symposia, one served as a discussant, one taught a workshop, and another organized a seminar. Almost all recipients stated that the benefits derived from their presentations were considerable. Almost half (46%, six of thirteen) noted that they either established new collaborations or worked with existing collaborators at the conference; almost half (46%, six of thirteen) established new contacts; and almost half (46%, six of thirteen) reported that their participation increased their visibility in their field. Following is a sampling of their comments regarding these career benefits.

Several recipients reported new developments on research papers due to their conference participation. One recipient reported: “In terms of advancing my career, attending professional conferences is very important....One of the papers I presented at the conference has already been published by a peer-reviewed journal. The second one is being revised to be sent for publication.” Another said: “There is no doubt that this meeting will influence my career in many aspects in future. Currently I am working on a new paper...that we started during the meeting. I have met in person many people whose papers I knew for a long time, and whose works influenced my interests a lot. My recent results were recognized by the leading experts in the field, who provided many helpful



comments.... I already received several invitations to international conferences related to ...the field that I just entered, and the scientific community where I was not known before. This is clearly related to my recent results...but also to my role as an organizer of the workshop.”

Two recipients reported that their attendance helped with student networking. One wrote: “I was able to present my research in a well-attended symposium as well as support the two graduate students and one undergraduate student presenting our research in three poster sessions.” The other reported that: “My student was invited by one of the senior participants... to visit England to continue to work on a project...that they started there.”

Six award recipients stressed how travel to conferences greatly enhanced their professional exposure: “At the conference, I chaired a symposium which allowed me to intensively network with a number of well-regarded colleagues in my field...The invited talk ...at McGill University got me in touch with a very well-respected group of researchers in my field;” “Giving this talk was an outstanding opportunity to present my work at the international level, and there were many great people in my field with whom I was able to network at the event. As a second year Assistant Professor, this is of critical importance to my career and tenure case [and] gave my work great exposure;” “[My attendance] benefited my career by allowing me to stay intellectually connected to my field beyond my more narrowly-focused department;” “This enabled me to increase my exposure as this is a well-known conference in my field of research with an extremely high level of attendance;” “The conference and presentation were very well attended...This experience will benefit my career greatly by contributing to the visibility of my work in international context.”

In some fields, researchers must organize seminars at other universities to further their research. One recipient stated: “As I work in a large collaboration, individual seminars are my primary mechanism for building my professional reputation. This funding allowed me to travel to give seminars and interact with colleagues.”

One recipient commented about how the childcare funding allowed her to fully experience the meeting, including the social events at which important contacts are often made: “I was able to chair a session at the meeting and made two presentations about my research. Also, I attended many social events at the evenings and met and talked with many leading scholars....I had a great opportunity to fully participate in various research activities at the conference and to publicize my research work.”

The recipient that participated in an expert panel commented, “A number of new opportunities for collaboration emerged from this meeting and attendance and participation in this expert panel would not have been possible (or would have been extremely taxing) without the support of the Dependent Care Travel Award.”

One recipient recounted the award's benefits and lamented, “I am sad to see the DCTA program end. It has been a huge help to me as a junior faculty member with young children. I have had the opportunity to develop relationships with internationally-known scholars, several of whom will likely provide letters for my tenure file. Thank you.”

Like the earlier award recipients, the fall 2010 award recipients reported substantial career benefits derived from their conference attendance. Additionally, the award recipients expressed considerable appreciation for the flexibility the award offered as a means to simultaneously attend the conference and provide quality care for their infants and children.

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## **List of Appendices**

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## **Appendix 1. Applicant Destinations**

Applicants requested funding for travel to professional association meetings, specialized conferences, specific university departments, and research meetings. In the Social and Behavioral Sciences and Humanities, professional association meetings included: American Educational Research Association; American Society of Criminology; Industrial Organization Society; American Economic Association; Association for Consumer Research Conference; Law & Society Association; Association of Family and Conciliation Courts; American Finance Association; Production and Operations Management Society; American Political Science Association; Southern Political Science Association Annual Meeting; Modern Language Association; International Sociological Association; Financial Management Association; European Association for Research in Industrial Economics; Association for Consumer Research; European Congress of Community Psychology; Society for the Advancement of Socio-Economics; American Studies Association; Gerontological Society of America; American Psychological Association; International Conference of the Learning Sciences; American Accounting Association; Learning, & Society Conference; Society for Research in Child Development; and Sociology of Education Association Conference. In the Physical and Biological Sciences they included: American Astronomical Society and Aspen Center for Physics; American Association of Immunologists; The International Society for Bayesian Analysis; Society for Neuroscience; American Institute of Chemical Engineers; European Molecular Biology Organization; Fuel Cell Science, Engineering, and Technology Conference; and Federation of American Societies of Experimental Biology.

Applicants' destinations for planned travel to specialized conferences included: Transportation Research Forum; Department of Energy; Utah Winter Accounting

Conference; Fermi National Accelerator Lab; Institute for Operations Research and The Management Sciences; Reseau Neurosciences Cognitives du Developpment; Initiative for financial innovation and risk management; National Science Foundation site visit; Contribution of Psychology to School Teaching and Learning; National Reading Conference; XVIII Simposium de Educacion; Royal Society of Canada, Expert Panel Meetings; National Academies workshop; International Symposium on Human Chlamydial Infections; International Conference on Program Comprehension; and Games, "Tourism and Seductions of Difference," an international critical tourism studies conference.

Some applicants applied for funds to visit particular departments or research teams. Departments in the following universities were listed as destinations: University of Arizona; University of Michigan; UC Berkeley; UC Davis; Carnegie-Mellon University, University of Texas at Austin; University of Washington, Seattle; Boston University; Joint Carnegie-Mellon-Pittsburgh; University of Florida; Math Science Partnership Learning Network; Alexander von Humboldt Seminar Series; Mcgill University; National University of Singapore; National Taiwan University; EU Center of Excellence; Collegio Carlo Alberto, Franca e Diego de Castro Foundation; Hanoi Architecture University in Vietnam; Royal University of Phnom Penh, Cambodia; Peking University; University of Turin; Ischia ADVANCED School of Organic Chemistry; Universiti Sains Malaysia; and the London School of Business.

## Appendix 2. Recipients by School

Like applicants, recipients were not evenly spread throughout the schools on campus.

When considering the absolute number of recipients, faculty in the Schools of Social Sciences received the most awards (15), followed by faculty in Business (13), Education (11), Physical Sciences (12), and Social Ecology (9). Faculty in most of the other schools received fewer awards: Four faculty in Information and Computer Science, three in each of Humanities and Health Sciences, and three each in Biology and Engineering. Faculty in the School of the Arts received no awards because they produced no applications (see Table A1).

**Table A1. The Number and Percent of Applicants That Received Awards by Schools**

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>3 Year Mean</b>
<b>Arts</b>	- (0/0)	- (0/0)	- (0/0)	- (0/0)	- (0/0)	- (0/0)	- (0/0)
<b>Biology</b>	- (0/0)	- (0/0)	100% (1/1)	100% (1/1)	100% (1/1)	- (0/0)	100% (3/3)
<b>Business</b>	100% (2/2)	0% (0/1)	100% (2/2)	100% (4/4)	100% (3/3)	100% (2/2)	93% (13/14)
<b>Education</b>	100% (1/1)	100% (1/1)	0% (0/1)	100% (2/2)	50% (2/4)	100% (5/5)	79% (11/14)
<b>Engineering</b>	100% (1/1)	- (0/0)	100% (1/1)	- (0/0)	100% (1/1)	- (0/0)	100% (3/3)
<b>Health Science</b>	- (0/0)	- (0/0)	50% (1/2)	- (0/0)	100% (1/1)	100% (1/1)	75% (3/4)
<b>Humanities</b>	- (0/0)	0% (0/1)	- (0/0)	100% (1/1)	100% (1/1)	100% (1/1)	75% (3/4)
<b>ICS</b>	0% (0/1)	100% (1/1)	- (0/0)	100% (2/2)	50% (1/2)	- (0/0)	67% (4/6)
<b>Physical Sciences</b>	100% (1/1)	100% (2/2)	50% (1/2)	100% (2/2)	100% (3/3)	100% (3/3)	92% (12/13)
<b>Social Ecology</b>	- (0/0)	100% (1/1)	100% (2/2)	100% (1/1)	33% (1/3)	100% (4/4)	82% (9/11)
<b>Social Sciences</b>	71% (5/7)	43% (3/7)	100% (1/1)	100% (2/2)	100% (3/3)	100% (1/1)	71% (15/21)
<b>Total</b>	77% (10/13)	57% (8/14)	75% (9/12)	100% (15/15)	77% (17/22)	100% (17/17)	82% (76/93)

A high proportion of applicants in each school received funding, with a range from 67% in Information and Computer Science to a high of 100% in Biology and Engineering (see Table A1). Those that didn't receive funding were generally denied due to failure to meet the program requirements.

Next we consider the distribution of awards across schools accounting for the number of rank-eligible faculty. The distribution of recipients across schools was a bit more even than it was for applicants, with a similar rank-order of successful applicants across schools from top to bottom. Again, Education, Business, Social Ecology, Physical Science, Social Science and Information and Computer Science ranked at the top and Arts, Humanities, Health Sciences, Biology, and Engineering ranked towards the bottom (see Table A2).

**Table A2. Distribution of Award Recipients across Schools, Controlling for the Number of Rank-Eligible<sup>+</sup> Faculty Members**

	<b>Spring 2008</b>	<b>Fall 2008</b>	<b>Spring 2009</b>	<b>Fall 2009</b>	<b>Spring 2010</b>	<b>Fall 2010</b>	<b>2.5 Year Mean</b>
<b>Arts</b>	0% 0/12	0/13	0/20	0/20	0/20	0/NA	0.00%
<b>Biology</b>	0% 0/23	0/18	1/26	1/26	1/26	0/NA	3.85%
<b>Business</b>	15% 2/13	0/18	2/19	4/16	3/16	2/NA	18.75%
<b>Education</b>	10% 1/10	1/9	0/10	2/11	2/11	5/NA	18.18%
<b>Engineering</b>	5% 1/21	0/24	1/30	0/31	1/31	0/NA	3.23%
<b>Health Science</b>	0% 0/28	0/33	1/45	0/45	1/45	1/NA	2.22%
<b>Humanities</b>	0% 0/32	0/37	0/58	1/58	1/51	1/NA	1.96%
<b>Information and Computer Science</b>	0% 0/20	1/21	0/25	2/20	1/20	0/NA	5.00%
<b>Physical Sciences</b>	3% 1/30	2/27	1/34	2/33	3/33	3/NA	9.09%
<b>Social Ecology</b>	0% 0/9	1/11	2/16	1/14	1/14	4/NA	7.14%
<b>Social Sciences</b>	12% 5/42	3/44	1/56	2/56	3/56	1/NA	5.36%

+ The number rank-eligible for the total is calculated as follows: for spring 2008 - fall 2008 the number of Assistant Professors. For spring 2009 - spring 2010: the number of Assistant Professors plus one third the number of Associate Professors. The average percent of applicants includes all terms except for Fall 2010.



## Appendix 3. UCI Family Friendly Policies

### Active Service-Modified Duties

- This is not a leave; the appointee remains in service to the University, but with modified duties. For most appointees, this means a period in which the faculty member does not teach.
- Partial or full relief from teaching should **not** result in the assignment of additional teaching duties before or after the Active Service-Modified Duties quarter in order to offset the teaching relief.
- Eligibility for a period of active service-modified duties shall normally extend from 3 months prior to 12 months following the birth or adoption of a child and may be granted to any academic appointee who has **50% or more** responsibility for the child.
- The total period of Childbearing Leave plus Active Service-Modified Duties for a birth mother (who has a full-time appointment of at least one full academic year) may not exceed two quarters for each birth. If she gives birth during the summer she is eligible for a total period of active service-modified duties of two quarters.
- All other eligible academic appointees are eligible for a total period of Childbearing Leave plus Active Service-Modified Duties of one quarter. (APM Policy 760-28).
- Central funding for the purpose of providing ladder rank faculty teaching replacement is allocated to the affected academic department.

### Stopping the Clock for the Care of a Child or Children

- This is not a leave; it is a stoppage of the eight-year clock in certain titles for purposes of childrearing. Mothers and fathers, adoptive or natural, who have 50% or more responsibility for care of an infant or newly adopted child under the age of five are eligible to request a Stop the Clock.
- Such requests must be made within two years of the birth or adoption of the child and must be exercised before July 1 of the academic year in which a promotion review is to occur (no later than the second half of his/her actual fifth year).
- Any assistant professor **who is not currently undergoing review for advancement to tenure** or, in the case of those in the In Residence Series, for promotion to Associate Professor in Residence, and who falls under the provisions of APM-133 may be granted a stoppage of the eight-year clock on the limitation of service as provided in these policies.
- A request for a Stop the Clock may not be made **after** the sixth year has begun. Also, a Stop the Clock will not be granted for a faculty member who has primary responsibility for a young child when that child is born or adopted during the year of the tenure or promotion review.
- **NOTES:** (1) Quarters "off the clock" due to Childbearing Leave, Parental Leave, and/or Primary Responsibility may not exceed one year for each event of

childbirth or adoption. (2) Because the review cycle is conducted in terms of full, not partial, years, and partial years count toward the next full year, exclusion of one or two quarters for an academic year appointee or up to three quarters for a fiscal year appointee will not necessarily affect the timing of the tenure or promotion review.

### **Childbearing Leave**

- Childbearing Leave is granted for the purpose of childbirth and recovery. It usually lasts about six weeks but may be extended due to medical reasons (APM Policies 133-17-g, 760-25).
- During a childbearing leave, no duties shall be required by the University [APM 760-25-a].
- In the quarter of a childbearing leave, there must be full relief from teaching duties [APM 760-28-a].
- If eligible for Family and Medical Leave (FML), up to 12 workweeks of the childbearing leave will run concurrently with FML [APM 760-25-d].
- Central funding for the purpose of providing ladder rank faculty teaching replacement is allocated to the affected academic department.

### **Parental Leave**

- Parental Leave is leave without salary granted for the purpose of child care.
- Normally, this leave combined with Childbearing Leave and/or Active Service-Modified Duties may not exceed one year for each birth or adoption (APM Policies 133-17-g, 760-27, and 760-35).
- If eligible for Family and Medical Leave (FML), up to 12 workweeks of the parental leave will run concurrently with FML [APM 760-27-b].

### **Part-Time Appointment and Reduction in Percentage of Time of an Appointment to Accommodate Family Need**

- Academic appointees may be eligible for appointment to a part-time position or may be eligible to reduce their percentage of time of an appointment from full time to part time for a specified period of time or permanently to accommodate family needs. The Chancellor has authority to approve such appointments.
- Members of the Health Sciences Compensation Plan who reduce the percentage of time of their appointment remain under the same terms of the Plan during the period that their appointment is reduced.

Sources: UCI Academic Personnel website: <http://www.ap.uci.edu/APP/index.html> and UCI ADVANCE website: <http://advance.uci.edu/>.

## **Appendix 4. Coding Scheme for Open-Ended Questions Regarding the Benefits Applicants and Recipients Perceived**

### **Networking**

**General.** This was coded as “1” when "networking" was mentioned in a general sense. Also coded as “1” when broad statements like "meet one-another" were made. Otherwise, coded as “0.”

**New Contacts.** Coded as “1” when respondent expressed an interest in making new contacts or branching into a new community of scholars. Otherwise, coded as “0.”

**Sustain Contacts.** Coded “1” when respondent expressed an interest in "keeping in touch/contact" with acquaintances previously made. Otherwise, coded as “0.”

**Collaboration.** Coded as “1” when respondent indicated a benefit in meeting with collaborators or collaborating on a project at the conference. Otherwise, coded as “0.”

**Students Mentioned.** Coded “1” when the respondent mentioned her/his Students. Otherwise, coded as “0.”

### **Tenure or Mid-Career**

Coded “1” when Tenure or Mid-Career Appraisal was specifically mentioned or when some benefit was mentioned regarding a career milestone, like tenure or mid-career review. Otherwise, coded as “0.”

### **Honor and Status/Hierarchy Awareness**

Coded “1” when the word "honor" or "privilege" was used. Otherwise, coded as “0.”

### **Complimentary Toward Audience.**

Coded “1” when adjectives like "experts," "critical audience," or "top" were used or where there was an other sentiment expressed that the indicated that the respondent had a desire to impress. Otherwise, coded as “0.”

### **Service.**

Coded “1” when respondent mentioned service activities like a position in an organization or holding some official role at the conference. Otherwise, coded as “0.”

### **Promotion.**

#### **Research.**

Coded “1” when a presentation was mentioned, words like "dissemination" or "new findings" was used, or when the respondent expressed an interest in manuscript "shopping." Otherwise, coded as “0.”

**Research Feedback.** Coded “1” when the respondent showed interest in receiving feedback, criticism, and/or review from peers at the event. Otherwise, coded as “0.”

**Self.** Coded “1” when words like "visibility," "exposure," "advertise," or "reputation" were used. The sentiment here is that the respondent was interested

in presenting her or himself as an academic personality. Otherwise, coded as “0.”

**Gain Knowledge.**

Coded “1” when respondent expressed benefit in learning new material from the conference. Respondent used words and phrases like "learn" or "keep on top of the field." Also, when a desire to attend sessions not necessarily related to their own presentations was expressed. Otherwise, coded as “0.”

**New Project.**

Coded “1” when respondent gave some evidence that a new project was begun at the conference or was inspired shortly thereafter as a result of the conference. Otherwise, coded as “0.”