

**PROGRAM ASSESSMENT REPORT (PAR)**

**Dietetic Internship Program**

**California State University, Chico**

**Spring, 2004**

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## **I. Introduction: The Setting**

### **California State University, Chico**

California State University, Chico (CSUC) was established in 1887 as a California Normal School for teacher training and is the second oldest member of the 22-campus CSU system. California State University, Chico is a comprehensive university serving Northern California and other regions of the state, as well as the nation and the world, through instruction, research, and public service.

By creating and maintaining selected quality undergraduate and graduate programs, CSUC integrates liberal and applied learning to provide students with the knowledge, skills, and moral and intellectual virtues that form the basis for life-long learning and contribution. Students are inspired to explore the frontiers of knowledge, the integration of ideas, and the connecting of thought to actions. The importance of scholarship and public service is emphasized and affirmed. In addition, the university's extensive continuing education and public service programs serve the needs of its varied constituencies.

#### **COLLEGES, SCHOOLS AND DEPARTMENTS:**

Within Academic Affairs, subject disciplines are grouped into various administrative units based on commonality of the curriculum. There are seven colleges, each

representing a major segment of the academic community and administered by a dean; two interdisciplinary units; and the School of International Programs and Graduate Studies. Within the colleges are individual departments that define the specific disciplines and several schools that either link together departments (Schools of the Arts, Communication, Education, and Engineering) or operate in lieu of a department, i.e. the School of Nursing. The Dietetic Internship is part of the Nutrition and Food Sciences Program, which is housed in the Department of Biological Sciences, within the College of Natural Sciences.

## **NUTRITION AND FOOD SCIENCES PROGRAM**

CSU, Chico has graduated students meeting ADA didactic program requirements since 1969. The Nutrition and Food Sciences (NFSC) Program, now located in the College of Natural Sciences as an adjunct program in the Department of Biological Sciences, was formerly housed in the College of Agriculture within the School of Human Environmental Sciences. With restructuring in 1992, all nutrition and food science courses and programs were relocated as home economics programs were phased out.

A formal Master's degree in Nutritional Sciences at CSU, Chico has been offered since 1985. Before that time, graduates of didactic programs wrote "Special Major" Master's degrees to increase their knowledge in nutrition and food sciences. Since the late 1970's, students have been obtaining Master's degrees, usually in order to become Registered Dietitians through the now extinct Master's - plus six- month experience route. More than twenty graduates became registered prior to 1988 and have been

gainfully employed in the vast geographical area of Northern California, serving in a variety of community, clinical and foodservice administration positions.

In order to continue to provide dietitians for this area, as well as to allow residents of the area to have the opportunity to become Registered Dietitians, an AP4 was developed in 1990. The program was approved, but did not go into effect until January 1993 due to re-structuring at the University. Since the inception of the AP4, twenty-two graduate students completed the program. All passed the Registration Examination, and all are gainfully employed, nearly all at facilities and agencies in this geographical region.

#### Changes in the Program

The original AP4 was designed to be integrated with the MS in Nutritional Sciences. Students enrolled for the rotations to obtain unit credit, which could then be counted toward their MS degree. The units were awarded through the Center for Regional and Continuing Education at CSU Chico, for which tuition was paid. In 1996 it was deemed to be more economically advantageous to run the program through the University Foundation and the College of Natural Sciences. The cost to the student remained the same, and units were not necessary as the students had completed all, or nearly all, of the 30 units required for their MS degree by the time they began the internship. This change also resulted in greater financial flexibility for operation of the program.

#### Current Status

In 1995 the AP4 applied for and received Developmental Accreditation as a Dietetic Internship. In 1999, the CSU, Chico Dietetic Internship was granted full

accreditation status. The DI is now half-way to its next accreditation in 2009. Since 1999, 17 interns have completed the program, 2 are currently in rotations and 4 have been selected for next year.

## **B. Resources**

### **Administration**

The Program Director, Dr. Kirks, has been responsible for the administration of the program since the inception of the AP4, including the interface with the University as well as the American Dietetic Association. The day-to-day operation of the program is the responsibility of the Dietetic Internship Coordinator, Marsha Miller-Sherer, MS, RD, who is also the Food Service Director of Oroville Elementary Unified School District. Ms. Miller-Sherer plans the schedules and sets up the rotations for the interns, as well as meeting with them for the internship class meetings semi-monthly. Form 3 for Ms. Miller-Sherer is located in Appendix A.

The Dietetic Internship is one program in the global Nutrition and Food Sciences (NFSC) Program, which also houses a Didactic Program in Dietetics (DPD) as well as an MS in Nutritional Science. NFSC is part of the Department of Biological Sciences, in the College of Natural Sciences. The Program Coordinator and Graduate Coordinator for Nutrition and Food Sciences is Kathryn Silliman, PhD, RD. The Chair of the Department of Biological Sciences is Patricia Edelmann, PhD., and the Dean of the College of Natural Sciences is James Houpis, PhD. The DPD Director is Faye Johnson, EdD, RD.

## **Facilities**

All facilities used for the internship are JCAHO accredited. Enloe Medical Center (EMC) is the primary facility utilized in the Chico area. EMC consists of an acute care facility, a rehabilitation facility, a home-health care facility, an out-patient care facility, an ambulatory pediatric clinic and Home Health Services. Enloe also has consultant contracts for its Registered Dietitians to serve long-term care facilities in the nearby communities of Willows, Biggs and Gridley.

Feather River Hospital, located in nearby Paradise, is a full-service hospital as is Oroville Hospital in nearby Oroville, CA. Interns who are placed primarily at both Oroville and Feather River go to Enloe Medical Center for specific clinical training in trauma as well as total parental nutrition and enteral nutrition, as the level of acuity is much higher at the Enloe facility. Fremont -Rideout Hospital in Marysville, which has been used twice in the past 5 years, also has a high level of acuity, as does Mercy Medical Center, located 75 miles north of Chico in Redding, CA, where one student was placed in 2002-2003.

Also added in 2002-2003, with continuation into the current year is a Kaiser Permanente Hospital in Vallejo, CA, located 150 miles southwest of Chico. Another new addition in the 2003-2004 year was f Oroville Elementary Unified School District for a portion of the foodservice administration rotation. Documentation in Forms 2 and 3 for all new facilities are available in **Appendix A**. The DI also used pediatric clinics at University of California Davis Medical Center (UCDMC) in Sacramento, which had been added as an elective rotation in 1997-1998, and had been one of the strongest electives

we have had. However, this year UCDCMC began its own accredited dietetic internship and has informed us that they will not be able to host our interns for the time being.

## **Staff Support**

The Nutrition and Food Sciences Program has a full-time clerical person who is able to type and duplicate materials as well as to receive and process requests for information regarding the program. Assistance with typing materials for intern classes and up-dating the Student Handbook are also handled in the NFSC office. The Department Manager for the Dept. of Biological Sciences processes checks received as well as purchase orders for the University Foundation, who handles the financial accounts. The budget for the program allows for the hiring of additional clerical help as needed, such as preparing a Self-Study and readying for a site visit.

## **Budget**

Prior to 1996, students paid tuition to the CSU Chico Office of Continuing and Regional Education. A large percentage of the money (approximately 40%) was charged and received by that unit. Students at that time received academic unit credit for some portions of the internship, because it was not feasible for the regular-session of the University (i.e. College and Departments) to hire an instructor for such a few students. In 1995, it was determined that in order to encourage students to complete the MS degree, we needed to refrain from admitting them into the DI until they had completed data

collection for the thesis. Also, since the MS degree is only 30 units, it was not necessary to obtain unit (course) credit for the internship.

Thus, the DI program was moved to the College of Natural Sciences and an account was set up through the University Foundation, an entity separate from the academic aspect of the University, which handles accounts for grants and contracts. . The Clinical Instructor's (now termed "Dietetic Internship Coordinator") salary is the same as it was before this transfer, and the fee charged by the Foundation is very little in comparison, i.e. 10% compared to the former 40%. Thus, there was more financial flexibility in that funds were available for books, supplies and travel to DEP functions for the Program Director and Coordinator. The cost to each intern is currently \$3200 for the program. This amount covers the salary of the Dietetic Internship Coordinator (Marsha Miller), plus workmen's compensation costs. Travel expenses are additional. The program is almost completely self- supporting, and has purchased our own computers and software, as well as many other office supplies. Travel to the Annual Area I DEP meeting in Asilomar is part of the budget, and occasionally part of travel to the annual ADA – Food and Nutrition Conference and Exposition.

Support for the program by the Department of Biological Sciences is given in 1 unit of assigned time per year for the Program Director, and 3 units for preparation of accreditation documents, i.e. Self-Study and the Program Assessment Report. The University pays the Annual Maintenance Fees to ADA and covers the costs of Accreditation site visits. Clerical support is discussed in "Staff Support" on page 6.

## **II. Outcomes Assessment and Goal Achievement**

### **A. Program Goal Achievement**

**Goals for the program from the 1999 Accreditation Self-Study were stated as follows:**

1. To prepare graduates to meet eligibility requirements for becoming Registered Dietitians as established by the Commission on Dietetic Registration. i.e.
  - (a) to successfully complete all of the program competencies and
  - (b) are able to Pass the Registration Examination.
2. To prepare graduates who will be able to fulfill employment requirements for entry-level dietitians
3. To provide Registered Dietitians with graduate degrees who will meet the needs for food and nutrition services professionals in Northern California.
4. To prepare dietetic professionals who will take leadership roles in service to the profession of dietetics.

### **Assessment Methods:**

In order to assess goal achievement of the CSU, Chico Dietetic Internship, several methods of collecting data were utilized. These included a survey of past interns who graduated between 1999 and 2003; a survey of preceptors for the program, a survey of employers; a review of individual intern files; and a review of the RD examination scores. The NFSC Program has held two Advisory Board meetings in the past five years, including a recent one in October, 2003. Because each individual program in Nutrition and Food Sciences needs an Advisory Board, and the pool for members is

relatively small given the size of the community, this Board is a combination Advisory Board for our DPD, DI and MS Programs. A portion of these meetings is devoted to discussion of each of the programs. Input from Board members regarding the DI at these meetings was also reviewed.

#### Instrument 1: Survey of Graduate Interns

The survey of intern graduates was designed to measure the respondent's perception of their skills as dietetics professionals. The survey was derived from an instrument in the Winter, 2001, issue of "DEP-Line." The article, "Program Evaluation by Graduates of a Dietetic Internship," by Laura Harkness of Kent State University. (Vol. 22, No. 4, p 6-8, 10) contained a questionnaire for graduates of a combined MS, DI program. The survey items utilized the Performance Requirements for entry-level dietitians, and allowed the respondent to rank their perceived level of skill in a range of 1 (low) to 5 (high). It was decided to use this survey because the program is similar to ours, and the core competencies in our DI program were developed from these Performance Requirements. Further, had we used the individual competencies themselves, the survey would have been too long and the results less meaningful.

The survey was sent to all 17 interns who completed the program from 1999 through 2003; 15 surveys were returned. A mean score for each item was calculated, and comments aggregated. Mean values for each item is noted on the survey as well as the list of comments are located in **Appendix B**.

### Instrument 2: Survey of Preceptors

This survey was designed to assess strengths and weaknesses of the internship as seen by the dietetics professionals who have worked most closely with them. The instrument contains open-ended questions and we were more interested in qualitative than quantitative data. The survey was sent to all preceptors (n=24) who have sponsored interns in the previous 5 years. Sixteen surveys were returned. This survey and comments from each item are located in **Appendix C**.

### Instrument 3: Survey of Employers

Because of new privacy laws, it was much more difficult to obtain information from employers than in the past. The post-intern survey requested the graduate to indicate who their employer was, and to sign the form giving permission to contact the employer. Even with this permission, several employers refused to complete the survey as they saw it as an “employee evaluation” for which they did not feel they had authority to complete. Nevertheless, 7 of the 10 employers who received the survey did respond. This survey with a summary of results is found in **Appendix D**. The items in the survey were a collapsed form of those in the post-intern survey which made the survey shorter for improved response as well as being more appropriate for employers in the types of questions asked.

### Advisory Board

The most recent meeting of the Advisory Board was held to assist in the preparation of this PAR document. Several Board members are also preceptors, so that there is an overlap of input into this process. The Minutes from the October Advisory

Board meeting, showing comments regarding the Dietetic Internship, is located in **Appendix E.**

#### Intern Assignments

Files from interns during the last 5 years were also reviewed. All competencies check sheets, case studies, projects and rotation evaluations (Mid – and Final) were checked off as being complete for each intern.

#### Registration Examination

Score sheets for the Registration Examination as received from the Commission on Dietetic Registration (CDR) were also reviewed. Fifteen took the exam from 1998-2002, 12 of which were in the cohort being evaluated here. One took the exam in January-June, 2003. Since then four more have taken the exam and reported passing, although, at the time of this writing, the official ACT scores for these graduates have not been received. Summary of scores on the exam from ACT are located in **Appendix F.**

#### **Outcomes of Assessments:**

The findings of these surveys have produced the following results of Goal Achievement: (Goals are re-stated to facilitate reading).

**Goal 1:** To prepare graduates to meet eligibility requirements for becoming Registered Dietitians as established by the Commission on Dietetic Registration (CDR) i.e.

- (a) to successfully complete all of the program competencies and
- (b) are able to Pass the Registration Examination

Outcome:

(a) All interns who began the program completed all the competencies according to the competency check-sheets. Mid-evaluation and final-evaluation of rotations were all completed successfully. The Final Evaluation by the Coordinator, Intern and Director were all favorable.

Items on the post-intern survey were scored on a scale of 1-5. Any item which received a mean score of less than 3.5 was evaluated by reviewing the competencies for that item and the activities associated with the individual competencies. Items of concern were:

No. 5 – Participate in legislative and public policy processes as they affect food, food security and nutrition (Mean = 2.8)

No.15 – Participate in the design and evaluation of quality management program.  
(3.3)

No. 18 – Supervise foodservice operations to meet the food and nutrition needs of target markets (3.4)

No. 19: Supervise the development of cost effective food service to produce food which meets nutritional guidelines, cost parameters and consumer acceptance. (3.4)

The survey also determined that 7 graduates work in clinical dietetics, 5 in community nutrition and 1 each in foodservice management, education and research and administrative dietetics. In the portion of the survey that asked the graduate to indicate items which they perceived as needing more emphasis, nearly all of the items were

mentioned at least once, but the items above (5, 15, 18 and 19) were noted more than once.

As a result of the lower scores in these items, changes are being made in the assignments for interns during the program itself, and an academic course will be added to the graduate program that will enhance management knowledge and skills. Section C, pg. 16, provides further discussion of this issue. However, it should be pointed out here, that entry level dietitians do not have the years of experience to give them as much confidence in supervision and management unless that is the type of position that they took following the internship and have developed skills in this area. It is even more likely that those graduates not working in management lack confidence in these skills. Concerning item number 5, a history of involvement in the State and local dietetics association will give graduates more familiarity with their role in the legislative process regarding the profession of dietetics.

(b) From the time of the Masters-plus 6 months route, through the years of the AP4, and until this time, CSU Chico has had a 100% pass rate on the RD exam for those taking the test the first time. In this last cohort, all but one of the interns passed the Registration Examination; this occurred only in the past year. The student who did not pass has been unavailable for comment, but is employed in an acute care facility and is thus required to re-take the examination. The student was actually a top performer in the MS program at CSU, Chico, and it is expected that she will pass the exam within the next year.

In reviewing the summary sheets from ACT, CSU graduates have consistently scored above the national mean in the total scores as well as the sub-scores for food and nutrition, and for foodservice (see Appendix F for scores.)

**Goal 2:** To prepare graduates who will be able to fulfill employment requirements for entry-level dietitians.

**Outcome:** All graduates of the CSU, Chico, Dietetic Internship (1999-2003) were employed in an entry level position in dietetics within 6 months of completing the program. The number of months they had worked after the internship ranged between 1 and 48; hours worked range from 32-40 hours per week. The median beginning salary was \$35,000 and ranged from \$25,000 to over \$45,000 per year. Certificates awarded post-internship included adult weight management, CRN, MS, and LD.

**Goal 3:** To provide Registered Dietitians with graduate degrees who will meet the needs for food and nutrition services professionals in Northern California.

**Outcome:** Ninety percent of the completing interns work as food and nutrition professionals in Northern California. One is currently on a long-term maternity leave, and one works for the Department of Health in the State of Washington. The results of the survey sent to employers, as well as the comments, were excellent. The items were rated 4.0-5.0 on a scale of 1-5, and comments were laudatory, indicating the strength of training in our dietetic internship.

**Goal 4:** To prepare dietetic professionals who will take leadership roles in service to the profession of dietetics.

Outcome: Several interns have developed their careers to the point that they are officers in the local dietetic association, and/or serve on the CSU, Chico NFSC Advisory Board, and/or serve as preceptors for the DI program, and/or are mid-level managers in their departments.

**Short and Long-Term Goals from Self-Study:**

Other goals that were set for the Program as a result of the 1999 Self – Study were as follows:

**New short term goals** included forming an alliance with the graduate program in Nutritional Sciences at UC Davis, whereby we would be able to offer unfilled internship positions in our program to their graduate students who wished to obtain the R.D. credential.

Outcome: The CSU, Chico Dietetic Internship now participates in the “Pre-Select Option,” so that any additional slots go into the national match pool. Additionally, UC Davis Medical Center now offers an accredited DI program. Thus, such an alliance is unfeasible.

**Long term goals:** At the Advisory Board meeting on September 25, 1998, prior to the site visit for accreditation, it was decided to not only extend the internship to UC Davis students, but to try and get clinical facilities in the Davis-Sacramento area to participate in the Chico program. (Note: Sacramento and Davis are adjacent cities, 100 miles south of Chico.) With more facilities, we would have been able to take more students and have a greater pool of resources to use for intern experience, as well as

extend the program to a larger geographical area. In 1997-98, one of the three interns commuted from the Sacramento area, and in 1998-99, two of the three were from communities closer to Sacramento than to Chico. It was planned that in 1999-200, we would send letters followed by phone calls to hospitals in the Greater Sacramento area inviting their participation in the program. Personal visits were to be made to those facilities interested. As a result we had hoped to increase the intern class size from 3-4 to 5-6 per year.

Outcome: Following accreditation in 1999, we contacted 3 large hospitals in Sacramento, but found them reluctant to begin participation. Shortly thereafter, CSU, Sacramento, a sister-campus, initiated plans to form a DI, and UC Davis Medical Center, also located in Sacramento, was accredited with a DI, thereby making two internships available in that area. Last year we did have one student commuting from Sacramento for our MS program, but she withdrew from our pre-select list to go through national matching. She is currently a dietetic intern at CSU, Sacramento, and was at the top of their match list. Since our students/applicants have an MS degree, and usually some experience, they are excellent candidates for both of the Sacramento – based DI, and the alternative for students from that area has been met.

### **B. Program Strengths/Weaknesses**

Based on the outcome assessments that have been done, the strengths and weaknesses of the program are summarized as follows:

#### **Strengths of DI Program:**

1. It is small and personalized. Ratio of student to preceptor and of Coordinator to intern is very low.

2. Interns have completed MS Program, so they have an advanced knowledge base.
3. Interns are a little older, more mature and more self-directed than typical new DPD graduates.
4. The Program has a good track record. The interns do well and facilities/preceptors are happy with them and are willing to take new interns.
5. Employers are very pleased with the dietitians who graduate from the CSU, Chico dietetic internship.
6. There is good and frequent communication between CSUC and the facilities.
7. Graduates work in the geographical area and become preceptors themselves.
8. The DI meets its goals, i.e. pass exam, prepared for entry-level jobs, and work in region as well as take leadership roles in the profession of dietetics.
9. DI is associated with the DPD and MS in same institution.
10. The Program is set up so students can do all programs here, if desired.
11. Our survey shows the interns are pleased with their training.
12. It is a very cost effective program. It is relatively inexpensive for the interns, and the program is well supported financially with the fees we receive.

**Weaknesses:**

1. Lower level of acuity than internships in larger, metropolitan areas. However, addition of Kaiser Permanente in Vallejo and Mercy Medical Center in Redding has higher acuity levels. Loss, at least temporarily, of UCDCM for pediatrics rotation.
2. Preparation for involvement in the legislative process has been weak.

3. Graduates do not have the confidence in some areas of management that they do in clinical or community nutrition.
4. Distance and expense of going to Sacramento makes it unfeasible for some interns to do rotations there, i.e. State Departments.
5. Ours is a well-established program but in a remote area with limited facilities. Distance education may allow more facilities and more potential dietitians to participate in this program.

**C. *Changes To Be Implemented as Results of This Evaluation.***

1. Legislative activities have been and will continue to be increased as well as enhanced. Up until this time, the interns have had a two-hour class on legislative process and activities of dietitians within the federal, state and local levels. The interns have also had an assignment of writing a letter to a law maker regarding an issue affecting dietetics.

This year, however, the interns have been added to the e-mail list-serv regarding day – to –day activities and actions so that they are more aware that the profession is very actively involved in the legislative process. We will also have each intern meet individually with Dr. Silliman, who is the legislative liaison for the local North Valley Dietetic Association, to become more familiar with the role of dietitians in the legislative process. As a point of information concerning this result in the survey, it should also be noted that the respondents were entry – level dietitians and will gain more confidence in this aspect of dietetics with more experience.

2. Some aspects of management are not as strong as we would like them to be.

Students have scored well in this area of the Registration Examination, however. In order to increase confidence in this area for entry level dietitians, there will be both a didactic and clinical enhancement to the program. First of all, an elective course in program management will be added to the MS degree curriculum. Secondly, the Program Coordinator is working more closely with preceptors in developing assignments and activities for the interns to increase their perception of skill in this area.

Furthermore, this subject has been discussed with foodservice preceptors, who are now aware of the need for more emphasis in assignments that will increase the intern-graduates confidence in the management domain.

### **III. Program Management Plans**

As a result of this program assessment, we have established new goals for the program to explore and achieve over the next 5 years. These are as follows:

#### **New Goals:**

**Short term:** 1. Maintain the four Major Goals as stated in the 1999 Self Study.

**Method:** Continue to monitor intern graduates, preceptors, and employers

2. Enlist a new Director. Dr. Kirks will retire as Director in the next year.

Method: Dr. Michelle Neyman is slated to take over this role in 2005. She will be mentored into this role by Dr. Kirks in the meantime.

3. Explore Distance Education options.

Method: CSU, Chico has many Distance Education programs, using WebCT and help is available to establish such a program.

- Long Term:
1. Based on positive early findings, begin the process of adding a Distance Education option to the program.
  2. Prepare for re-accreditation in 2009.

### **Summary Statement**

California State University, Chico has been providing Northern California with Registered Dietitians for over two decades, first through a Master's – plus 6 months route to registration, then through an AP4, and for the past 5 years, an accredited Dietetic Internship. This Program Assessment Report has allowed us to review and assess the Goals of the Program and acquire input from all relevant individuals who have been affiliated with the program in the past 5 years. As a result, we find that the program has met all of its goals, has much strength, and shall continue to show excellence in dietetics education and training. Some minor modifications in the pre-internship MS program and the intern assignments will undoubtedly strengthen the DI in preparation for re-accreditation in 2009.