

PROPOSAL TO ESTABLISH A COCOA STUDY CENTER IN EBOLOWA, CAMEROON

Dr. Tom Neuhaus, President, Project Hope and Fairness, a 501 (c) 3
4104 Vachell Lane
San Luis Obispo, CA 93405
(www.projecthopeandfairness.org; 805-441-6727)

I. Executive Summary

Most of the economic benefits inherent in the cocoa value chain are realized across the Atlantic and not in Africa, where 70% of the world's cocoa is grown. This grant proposal is to fund the establishment of a Cameroonian Cocoa Study Center that will provide a setting where university students both foreign and local can explore ways to enhance economic and ecological sustainability: 1), promoting research and 2), to foster the development of cottage industry in order to enhance economic connections between village and city. The vehicle for research and development is chocolate, traditionally a colonial product appreciated in the West, the beans for which are grown mainly in Africa. This proposal covers some of the details involved in establishing the management and physical organization of the project. This project is proposed by Project Hope and Fairness, a 501(c)3

II. Approach and Methodology

Approach consists of seven steps:

1. Identification of *partners*
2. Formation of *executive committee*
3. Identification of *budgetary line items*
4. Solicitation of funds
5. Acquisition of land
6. Planning and construction of building
7. Hosting first group of foreign and Cameroonian students

Partners should fall into these categories:

- a. Cameroonian universities: commitment by at least one faculty member and one administrator to supplying a certain number of students to the program. At least one member of the faculty or administration should participate
- b. American Universities: in the immediate future, there will be two participating institutions, Cal Poly—SLO, and Ball State (Deanna Pucciarelli). Cal Poly's Architecture Department (represented by Dr. Robert Arens) and Engineering School (represented by the school club, *Engineers without Borders*) would be involved in building the center and wiring and plumbing.
- c. Cocoa trading or chocolate production companies: Armajaro, Cargill, and ADM are examples. Barry-Callebaut and Cadbury are examples of two large chocolate production companies that are especially concerned with sustainability issues.
- d. Cameroon Government Agency: an agency of the national government (e.g., ONCPB) that is positioned to best represent the interests of the cocoa study center to the government
- e. Villages: one member of one of the villages represented by the cocoa study center will be elected by the villages.
- f. Project Hope and Fairness: will be represented by its executive director, Dr. Tom Neuhaus

- g. Other NGO: an organization experienced in building cottage industry or in developing sustainability would be optimal—such as SNV, GTZ, DFID, or the Peace Corps.

Executive committee will be composed of members reflecting the interested parties. Members of the committee will be responsible for meeting in an agreed-upon location once per year in order to deal with important issues that cannot be solved through electronic communications. The initial meeting of the founders will determine:

1. Mission: the cocoa study centers will push one agenda—sustainability of the cocoa farmer. This means that all methods for enhancing sustainability can be considered and researched. There will be no bias toward or against issues such as different methods of certification, organic/non-organic, etc.
2. Discussion of budget

Identification of budgetary line items first year: see Budget

Solicitation of funds: sources include:

1. Fund-raising meals
2. Chocolate companies
3. Cocoa trading companies
4. Other NGOs and donor organizations
5. Governmental agencies and specialized ministries
6. Sales of the cocoa study center chocolate bar

Acquisition of land: this has already been accomplished—near Nkolandou in Ebolowa, South Region.

Methodology

The Center will open for business in Summer, 2012

4 th Quarter 2012	1 st Quarter 2013	2 nd Quarter 2013	Summer 2013
Prep. of land Approval of plans Disb. of funds	Constr of center	Constr. of center Inst. of solar Inst. of equip.	Arrival of first stu & faculty

- Arrangement with U.S. academic programs for students to live in the village and conduct research at the cocoa study center. In 2012, students will be recruited via Ball State's Family and Consumer Sciences and Cal Poly's International Extended Field Trips program.
- Development of ongoing relationships with a university in Cameroon and involvement of Cameroonian students with American/European college students.
- Development of plans and construction supervision will be done by Dr. Robert Arens and a group of Cal Poly students in conjunction with students and faculty at the Ecole National Supérieur Polytechnique (Yaounde).
- Installation of solar system and chocolate-making equipment will be accomplished by *Engineers without Borders*, a club at Cal Poly
- The first students to conduct research at the Cocoa Study Center attend Ball State University in Muncie, Indiana. Dr. Deanna Pucciarelli will travel with them and will supervise the academic outcomes.

Project Hope and Fairness will oversee the budgetary and construction aspects of the project.

III. Project Deliverables

Deliverables can be defined as follows:

1. Educational Deliverables: every summer, a series of university classes will study aspects of bringing cottage industry to a village. Aspects include:
 - a. Economic connections between the village and local population centers. A study of the history of attempts at diversification of the local economy.
 - b. Energy issues
 - c. Appropriate technologies
 - d. Nutrition and diet
2. Economic Deliverables:
 - a. Production of 100 lbs of chocolate per day (3 batches).
 - i. Wrapped in foil at 1/5 oz each, making 8,000 pieces per day.
 - ii. Sold wholesale at 2 cents each, generating \$160 per day wholesale sales.
 - iii. To make 65 lbs of chocolate liquor needed, 100 lbs of dried beans are required, costing \$50.
 - iv. Sugar sells at 25 cents per pound, meaning 35 lbs * .25 = \$8.75.
 - v. Assuming employment of twelve people full-time in the facility and that each earns \$3 per day, daily labor cost would be \$36.
 - vi. Payment to village and to local chiefs: \$5 per day.
 - b. Total daily profit: $\$160 - \$50 - \$8.75 - \$36 = \$85.25$
 - c. Net sales: sold at 3 cents each, netting sales personnel \$80 per day.

IV. Anticipated Impact

ECONOMIC IMPACTS

Impacts in the beginning would be felt by the visitation of approximately 20 students in 2012, and the numbers will increase as more American and European universities become involved in the program—as well as other CEMAC countries.

The center would charge hypothetically a per-person usage fee of \$500 for 3 weeks.

1. Individuals: different people in the local community will benefit—e.g., small store owners and taxi drivers.
2. Village: the village will gain daily from increased salaries and from sales of chocolates.
3. National: increased use of national resources such as the national airline company, money which would make its way to the national treasury and increase GDP.

IMPACTS ON COCOA INDUSTRY

There is increasing recognition that the quality of cocoa depends on the training of the farmer. The quality of cocoa beans is deteriorating, caused by inconsistent harvesting, fermenting and drying (ICCO, 2007)

A number of efforts are currently underway to redress this situation. This includes Farmers' Field Schools (STCP, 2010), developed to bring expertise to the farmers' communities.

Another approach is that of TCHO, Inc., of San Francisco. It developed, in combination with small-scale chocolate production machinery and a solar-powered laptop, a village laboratory

where villagers can make chocolate, taste it, analyze it across four dimensions, and enter their results into a spreadsheet. The result is an increased appreciation for the role of genetics, horticultural methods, fermentation, and drying. (Land O' Lakes, 2011).

This project will take training to a new level by including not just the first three steps of the value chain (growing, harvesting, processing) but taking the farmer all the way to the completed product. This kind of knowledge and experience will add an appreciation of the final product and the subtleties and exigencies associated with quality production.

EDUCATIONAL IMPACTS

The Cameroonian educational system lacks a research focus that can be greatly enhanced by collaboration with international universities.

V. Project Management Approach

Dr. Tom Neuhaus will be visiting Ebolowa, Cameroon this August. Assuming that the funding has been arranged, he will meet with construction personnel.

In October, 2011, Dr. Neuhaus will return to Cameroon along with an individual who will take charge of solar panels installation, installation of the chocolate-making machinery, and plumbing.

In June, 2012, Neuhaus will hire and train 12 chocolate production workers. Mr. Kila Balon will supervise hiring of sales staff, which will focus on sales in Ebolowa and Yaounde. Chocolate will be distributed in ice chests to businesses most likely to experience successful sales—such as gas station snack stores.

Starting in summer, 2012, Neuhaus will supervise groups of university students coming to the center to live (with host families), to learn how to make chocolate, to participate in sales, and to work in villages on issues listed and described in Appendix XII.

The financial aspects of this project will be handled through Project Hope and Fairness (www.projecthopeandfairness.org), which is a 501(c)3.

VI. Budget

1. Office:	
a. salary of international executive director	\$20,000
b. salary of center director	\$20,000
c. Miscellaneous	\$10,000
2. Travel:	
a. October, director	\$5,000
b. October, director, In country	\$1,000
c. March, director,	\$5,000
3. Construction: materials used to build center	
a. Masonry materials	\$15,000
b. Roof	\$5,000
c. Wood	\$5,000
d. Plumbing	\$10,000
e. Paint	\$1,000
f. Water purification	\$5,000
g. Washrooms	\$2,000
h. Air conditioner in choc. Facility	\$2,000
4. Local: land	donated
5. Chocolate production: machines used plus photovoltaics system	
a. Machines	\$60,000
b. Solar PV system	\$40,000
c. Engineer, PV system	\$10,000
d. Molds, ice chests, packaging	\$2,000
TOTAL, First Year Budget	\$224,000

VII. Appendix—References

ICCO, 2007. SUPPLY CHAIN MANAGEMENT FOR TOTAL QUALITY COCOA IN AFRICA, Executive Committee, Bill & Melinda Gates Foundation

Land O Lakes, May 15, 2011, Tasting Success in the Dominican Republic: Improving Cocoa Quality and Links to Fair Trade Chocolate

Nakano, Carisa, 2010. Arch 481 Thesis.

http://www.lulu.com/items/volume_68/9148000/9148432/1/print/Nakano_Lulu_Book_4_Final.pdf

STCP, July/Sept, 2010. Newsletter, The International Institute of Tropical Agriculture.

VIII. Appendix—Organizational Overview

See Appendix XIII for bio's of each member of the organization.

Project Founder/Director: Dr. Tom Neuhaus

- Coordination between cocoa study center and university programs
- Writing of grant proposals for expanding the mission
- President of Project Hope and Fairness: communications & coordination

Construction of Center: Mr. Kila Balon, Dr. Robert Arens

- Negotiations for use of land
- Supervision of construction
- Communication with Director

University Relationships: Dr. Richard Kranzdorf, Dr. Deanna Pucciarelli

- International relations
- International development

Coordination of Research: Dr. Peggy Papathakis

- Publication of a biannual electronic newsletter highlighting student projects.
- Communications with students

Financial Aspects: Ernie Roide

- Documentation of grants and gifts

IX. Appendix: Chocolate-Making Equipment

(see www.cacaocucina.com for more information)

Equipment



**Cocoa Bean
Roaster**



**Cocoa Bean
Winnower**



**Cocoa Nib
Grinder**



**Chocolate
Maker**



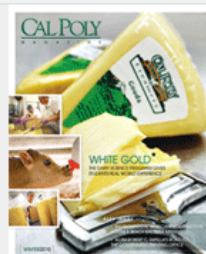
**Tempering
Machines**

Equipment	Voltage	Amperage	Time
Roaster	220/230, 1 or 2 phase	25	Total time: 45-50 minutes. 20-30 minutes full power, then modulation off and on to maintain temperature.
Bean Cooler	220/230, 1 or 2 phase	7	Several minutes
Winnower	220/230, 1 or 2 phase	6	1 hour
Nib Grinder	220/230, 1 or 2 phase	20 spiking; 4-7 carefully fed	2 hours—through the three screens
CM-25	220/230, 3 phase	35 amps inrush; 6-8 otherwise	6-8 hours

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Cal Poly Magazine

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Winter 2010



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Cal Poly Chocolates: A Sweet Educational Experience

By Matt Lazier

If Willy Wonka came to Cal Poly, this is where he would hang his hat.

Against the wall, tempering machine wheels whirl and spin various colors of velvety melted chocolate. Nearby, two student employees in hairnets and gloves tap newly dipped cashew caramels softly against the sides of bowls, coaxing air bubbles out of the chocolate coating.

A cross the room, a third student bends plastic molds to free dozens of recently cooled chocolate hearts and bittersweet bars.

By 6 p.m., the half-dozen employees in the noisy kitchen will have produced hundreds of chocolate treats by hand – no Wonka Bars but plenty of milk chocolate, bittersweet, peanut butter crunch and peppermint crunch bars, butterscotch s'mores, cashew caramels, peanut-butter cups and chocolate covered macadamia nut.

"It's complicated, because everything is done by hand" said Amanda Knudson, a nutrition major who serves as the program's student manager. "But it's an incredible opportunity. I was able to get a scholarship because of my work here."

Both a learning opportunity and a small business, Cal Poly Chocolates teaches students the particulars of chocolate making—from production of the goodies to packaging and distribution.





100% Made in USA
Organic, Fair Trade Confections
for Chocolate Lovers Everywhere
A Delicious Way to Help the Earth
& the People Who Depend On It



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► WELCOME TO OUR WEB SITE!

Wholesale Customers: Create account, then login for wholesale prices - enter through 'Wholesale' on chocolate colored tool bar. If you have questions please call the office at: 805-544-7759

NOTE: We have been forced to change the name of our Turtles! Amazing! They are now called "SLOChews"

► NEW PRODUCTS & PACKAGING

Haiti Relief Bar: go to our Retail, Wholesale or Fundraising Sections

We will donate \$1.00 per bar to Partners in Heath: www.pih.org

New Product

6 varieties of Chocolate Barks available by the pound for your display case!

Corporate & Business Gifts

Custom chocolate bars w/ your LOGO, Client gift baskets, Chocolate business cards

► VISIT OUR NEW STORE

1445 Monterey St.
San Luis Obispo, CA 93401
805-782-9868
Maplink

Hours: Monday - Wednesday 10:00 am - 6:00 pm
Thursday - Saturday 10:00am - 9:00 pm
Sunday 11:00am - 5:00 pm

Web Site: <http://sweetearthchocolateshop.com>

► AWARDS & PRAISE

Our 65% chocolate scored highest in the SF Chronicle Blind Tasting!

[Click here to see what others are saying about us](#)



FOLLOW SWEET EARTH Blog ► Read how we are helping West African cocoa farmers and our sweet earth.





Helping African Cocoa Farmers

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Our Mission

We are a 501(c)(3) charitable organization which

- promotes sustainability of cocoa farmers through direct assistance
- works with cocoa farmers to find systems that work for them
- educates American consumers about injustices endured by cocoa farmers
- encourages producers of cocoa products to adopt Fair Trade policies

Events

May 7, 2011:

[Short talk about the goals of PH&F](#)

May 17, 2011:

[Fundraiser](#)

August 14, 2011:

[Departure on Annual West Africa Trip](#)

Donations

[Purchase the Haiti Bar](#)

[Haiti Fundraising Progress](#)

Help cocoa farmers...

[Donate](#)

Recent Activities

February 10, 2011:

Explore the World of Chocolate. San Francisco event raised \$1,200 for PH&F

Nov. 16, 2010:

Brisbane Chocolate Night. Over \$1,000 raised for PH&F.

February, 2010:

[Fundraiser for PH&F, New York City](#)

January, 2010:

[Creation of Global Cocoa Project](#)



EXAMPLES OF DONATIONS BY PROJECT HOPE & FAIRNESS, 2005-2010



Boots for Gyaware, 2007



Dryness Meter to Depa, 2008



Flashlights to Abekro, 2009



Machetes for Ebekawopa, 2007



Cocoa Storage Bags to Dawayo-Chantier, 2008



Roof on School, Dawayo-Chantier, 2008



Scale for Pezoan, 2010



Solar Lighting for Djahakro, 2010



Toilet for Pezoan, 2008



Well for Broguhe, 2009

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Family and Consumer Sciences

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Deanna Pucciarelli

Assistant Professor and Assistant Chairperson

[View e-mail address](#) | [Log in to view e-mail w/your BSU Username](#)
AT 201I Phone: 765-285-4791 Fax: 765-285-2314

Department of Family and Consumer Sciences
Applied Technology Building, Room 150
Ball State University
Muncie, IN 47306

[Add Contact Info to Outlook](#)

Robert Arens

Navigation
People
Faculty Directory
Emeritus Faculty
Administration & Staff



Position	Professor
Phone	805.756.1444
Fax	805.756.1500
Email	rarens@calpoly.edu
Office	34-220E
Office Hours	Fall and Winter: T/R 1-2pm & W 11-1pm Spring: W 2-4pm
Web Page	www.robertarens.com
Fall Courses 2010	ARCH 241 Architectural Practice 2.1 ARCH 241 Architectural Practice 2.1 ARCH 251 Architectural Design 2.1
Winter Courses 2011	ARCH 242 Architectural Practice 2.2 ARCH 242 Architectural Practice 2.2 ARCH 252-06 Architectural Design 2.2
Spring Courses 2011	UNIV 424

Areas of Expertise

Architectural Design
Architectural Practice (Materials and Methods of Construction)

Profile

Robert Arens has a diverse background that blends architecture with landscape architecture, technology with design, and professional activity with teaching. This mix has resulted in a holistic and collaborative approach to design that balances both theoretical and practical considerations of each project. It has also left him with an interest in new materials and methods of fabrication and their impact on architecture.

Throughout Robert's professional career his work has focused mainly on civic and cultural projects. Robert has worked with Studio Daniel Libeskind on the World Trade Center Redevelopment, the Fiero Milano Redevelopment project, and the Denver Art Museum Expansion and Museum Residences. Earlier in his career, he worked with William Kessler and Associates on the US Air Force Museum Expansion, the State of Michigan Library and Historical Center, and the Orchestra Hall Expansion. He maintains a small architectural practice that is currently seeking opportunities in California while completing

XII. APPENDIX: AREAS OF RESEARCH AT THE VILLAGE LEVEL

1. **Access to clean water.** Wells are often contaminated or villagers obtain their water from streams and rivers. This leads to often fatal waterborne diseases.



Siting and Construction of a Well Are Critical to Village Health

2. **Access to markets:** villages are often located on rutted roads that are impassable to all but the largest trucks. Bicycles help farmers get their product from farm to village and even to market.



Two-Year-Old Cocoa Tree on its Way to Join a Cocoa Grove

3. **Value chain:** because villagers have a hard time traveling to larger population centers, they rely on middlemen (pisteurs) who can afford the trucks to get their products to market. And buying agents (or Licensed Buying Companies in Ghana) purchase from the middlemen. And local companies, usually located at the ports, process beans into semi-finished product (liquor, butter, and powder.)



Karim Bandre, Pisteur in the Village of Batteguedea

4. **Permaculture:** it is possible to blend types of plants and architecture to blend beauty and functionality. How useful is *neem* to health of farmers and plants? What other tropical products might be grown inside the village that might have utility?



Neem Oil Has Great Utility and Can be Grown in Villages

5. **Organic agriculture:** cocoa farmers stand to benefit from selling their beans on the organic market. Avoiding the use of petrochemicals has a positive environmental payback.



Organic Cocoa Beans Fetch \$150 More Per Metric Ton

6. **Diversification:** palm oil, rice, gari, plantains, dried coconut, African yams, cashews, and Robusta coffee are alternate agricultural products that stand to improve the profitability of the cocoa farmer.



Gari, Fermented, Dried, and Ready for Sale

7. **Food Technology:** leveraging current village expertise into profit centers might involve construction of buildings and installation of machinery that will produce marketable product for sale outside the village. Building laboratories in which farmers learn to correlate fermentation methods with quality of end product (e.g., TCHO FlavorLab™).



TCHO FlavorLab™

8. **Appropriate technologies:** incorporation of simple photovoltaic systems for lighting; improvement of sanitary facilities; ensuring a safe water supply; chilling systems for preservation of vegetables and fruits.



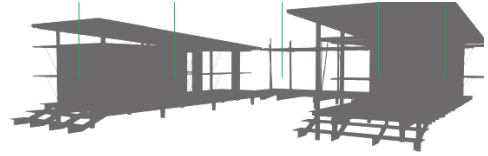
Justin Alvarez Designs a Small Photovoltaic System

9. **Nutrition:** Role of social rank in access to nutrient-dense foods. Role of sauces in providing complex carbohydrates, minerals, and vitamins. Assignment of kitchen duties in the family unit.



Making Palaver Sauce

10. **Architecture:** as a village gains economically, how does it change aesthetically? In Ghana, farmers who are more successful economically tend to build with concrete blocks. Are there more beautiful alternatives? How can a cocoa study center be useful to the community while also housing students and a laboratory?



11. **Cottage Industry:** the Third World has, since the beginning of the Colonialist and post Colonialist periods, tacitly served as furnisher of raw product for First World industries. In these Cocoa Study Centers, we can teach farmers how to manufacture chocolate from the beans and to make all sorts of chocolates that will be sold in nearby urban centers.

Produce Consistent Hand-Crafted Chocolates



The Cacao Cucina **TM-10 - TM-25 Chocolate Tempering Machines** offer custom built Tempering Machines that cycle between cooling and heating chocolate for perfectly tempered results. Artisan chocolate makers, say good-bye to dull, grayish chocolate. Say hello to glossy, smooth chocolate with a clean break. Your chocolate will look as good as it tastes when you use the **TM-10 - TM-25 Chocolate Tempering Machines**. To properly set chocolate for shine and snap, the warm, refined chocolate mass must go through a process of cooling and slow heating to

XIII. APPENDIX: BIOS OF TEAM MEMBERS

Dr. Robert Arens

Robert Arens has a diverse background that blends architecture with landscape architecture, technology with design, and professional activity with teaching. Robert's professional career has focused mainly on civic and cultural projects. Most recently Robert worked as design coordinator and project architect with Studio Daniel Libeskind on the World Trade Center Redevelopment, the Fiero Milano Redevelopment project, and the Denver Art Museum Expansion and Museum Residences. As an educator, Robert has held professorships at the University of Detroit, the University of Colorado and Kansas State University; he is now a Professor of Architecture he joined the California Polytechnic State University faculty in 2005 and was named full professor in 2009. Robert's publications include works on architecture, urban design, technology and teaching; these may be found in numerous US and international publications, among them *Shrinking Cities: Volume 1* and *Stalking Detroit*. He has given invited lectures at numerous universities, symposia and conferences and has received numerous grants and awards. Current research interests include new materials and fabrication methods, designs for global disaster relief, and appropriate architectural technologies for developing countries.

Kila Balon

Mr. Kila Balon attended Sacred Heart College, Mankon, Cameroon from 1990-1995 where he earned his Ordinary Level Certificate. From 1995-1998, he attended Saint Bedes College where he earned an Advanced Level Certificate. From 2004 to 2005, he earned a "Brevet de Technicien Supérieur en Hotellerie" and from 2010-2011 he is at the Institut Supérieur de Management in Douala, where he will earn his BSc. Mr. Balon was a Marketing and Sales Supervisor with the "Avant Guard Group" in 2009, and he is currently Executive Director of the Dynamic Young Professionals of Cameroon.

Dr. Tom Neuhaus

Dr. Tom Neuhaus, PhD, Cornell University, has followed a foodie path that began with food production and morphed into issues of social justice that relate to food. From 1970-1973, he worked in restaurants and bakeries in France and Austria. From 1974-1978, he cofounded and ran *Sweetish Hill Restaurant and Bakery* in Austin, Texas. From 1980-1988, Neuhaus wrote weekly culinary troubleshooting columns for the *Washington Post* and the *Los Angeles Herald Examiner*. From 1982 through 1998, he taught at the School of Hotel Administration at Cornell University. From 1998 to 2011, Dr. Neuhaus was a faculty member in the Department of Food Science and Nutrition at California Polytechnic University, San Luis Obispo, California. He now teaches part-time as *Professor Emeritus* and serves as president and co-founder of Sweet Earth Organic Chocolates, Inc., a leading manufacturer of Fair Trade/Organic chocolates. He is also president/co-founder of Project Hope and Fairness, an NGO established to help West African cocoa farmers become more sustainable economically. He has spoken publicly on issues of social justice, Fair Trade, and child labor. Recently, he was interviewed by CNBC for a show about child trafficking. Currently, Dr. Neuhaus is working on two projects: to purchase tools for West African cocoa farmers and to build cocoa study centers where university students can do research on issues of sustainability.

Dr. Peggy Papathakis

Peggy Callaghan Papathakis received her doctorate degree in Nutritional Biology with a Designated Emphasis in International Nutrition from the University of California, Davis. She is an Associate Professor at Cal Poly, San Luis Obispo, and teaches courses in clinical nutrition,

maternal and child nutrition and international nutrition. Dr. Papathakis is also a registered dietitian with clinical and research experience in the United States and South Africa, measuring the dietary intake, micronutrient and anthropometric status of women and children with acute, infectious and chronic disease. Her research interests include infectious diseases (TB and HIV) and body composition and micronutrient requirements; nutritional status of HIV-infected women and their infants; and diet and behavior practices associated with infant and young child obesity in the California Latino population. She serves on the World Health Organization Nutrition Guidance Expert Advisory Group for Nutrition and HIV / AIDS and Tuberculosis.

Deanna Pucciarelli

Dr. Pucciarelli earned her A.O.S. in culinary arts from the Culinary Institute of American in Hyde Park, NY, her BS in Nutrition (*Magna cum Laude*) from California State Polytechnic University in San Luis Obispo, CA, and her PhD in Food Science from the University of California at Davis. Her dissertation focused on the medicinal uses of chocolate. Currently, she is an Assistant Professor in the Department of Family and Consumer Sciences at Ball State University, Muncie, Indiana. Dr. Pucciarelli teaches courses in food production, food customs and cultures, and food media. Her areas of research include an ongoing longitudinal study concerning Midwestern dietary habits ultimately for the use of healthcare professionals; continued work on use of chocolate for medicinal purposes; and product development and recipe design for consumer websites and packaging. She has published on societal determinants that impact food consumption, the history of the evolution of nutritional science in the United States, and the history of chocolate as a medicine. Please see her attached letter for more information.

Ernie Roide

Ernie Roide is the Chief Financial Officer and Secretary of Project Hope & Fairness, Inc. Ernie is a graduate of Cal Poly (B.A., Graphical Arts) and holds an M.B.A., also from Cal Poly. He is an owner of Promotion Plus, Inc. based in San Luis Obispo and specializes in the use of printed media to promote advertising campaigns. Ernie brings his concern about the unjust distribution of wealth in our world to the Board of Project Hope and Fairness and wants to use his promotional savvy to make people aware of social justice issues. Ernie and his wife, Tawn, have three children.