UNIT REVIEW FOR CY 2014

Department of Nutritional Sciences

Scott Going, PhD
Professor and Head

March 9, 2015
A. Unit finance and business (10 min presentation + 10 min discussion)

1. Business personnel assessments: Led by Darren Shevchuk, Manager, Finance and Administration (1.0 FTE), the NSC/ABE Business Center is functioning well. Darren is supported by Jennifer Murphy, Accountant, Sr. (1.0 FTE), and Theresa Spicer, Program Coordinator, Sr., “grants specialist” (1.0 FTE), who assists faculty in grant preparation and submission, and Beth Stanley, Accounting Specialist (0.50 FTE). They function well together as a team and overall have a good rapport with faculty and other staff. Efficiency is high.

2. Finance and budget – focus on overview of strengths and weaknesses of the unit financially: We are overleveraged and dependent on winter/summer course revenues for a significant portion of our Professors of Practice and staff salaries. We are financially strong as long as RCM does not cut too deeply into this revenue stream. A significant portion of our current funds are “encumbered” for start-up packages.

3. New resource generation – specific opportunities you are exploring:
   • Individualized Supervised Pathway to Practice - ISPP ($13,440 in 2014/15)
   • Undergraduate program fee ($162,000-$325,000/yr)
   • Graduate Certificate ($~6,200 per person; after n=4)
   • Professional Science Masters ($3,420/student, anticipated launch Fall 2016)
   • Industry partners (Zamzee, Fitninja)
   • Healthy Living Training Center ($20,245 Reeves)

4. How are business functions in your unit helping achieve the goal of being “the most effective, efficient, responsive, flexible, and financially sustainable college on campus”? The new Business Center is operating efficiently. Business Center staff have played an important role in improving the situation in ABE while maintaining efficient functions in NSC. Staff are being cross-trained in both business transactions and pre-award. All grants have been submitted on time, despite greater load. Error rate for transactions is low.
B. Cooperative Extension (10 min presentation + 10 min discussion)

Total Extension FTE annually for the last 3 years (3 numbers): 3.07, 3.05, 2.98

Unit’s Extension outcomes and impact for stakeholders by individual program, in terms of economic impact (e.g. dollars and jobs), by individual program:
*Economic and Social Impact Table (Handout)*

Describe the level of program integration (e.g. with county Extension programs, center programs, and stakeholders) of Extension programs in your unit: SNAP-Ed and EFNEP are highly integrated with County Extension Programs. Kay Hongu’s programs (Walk Across Arizona; Homestyles) and Jennifer Reeves programs (Healthy Promises; FUTP60; CYFAR, etc) are also very well integrated with county extension programs.

Describe the level of integration between the research and Extension components of faculty programs in your unit: Programs/projects run by Kay Hongu and Melanie Hingle (no extension appointment) in the area of child/adolescent obesity and diabetes prevention are research projects that are best integrated with Extension. Some of the work in bone health is also informing extension programs. Other department research initiatives at this time are not well integrated with Extension but have the potential to become better integrated in the future.

Unit’s Extension social outcomes and impact by individual program:
*Economic and Social Impact Table (Handout)*

Unit’s Extension summary in one or two sentences: Most of NSC Extension programs are focused on education and policy initiatives designed to promote healthy eating and regular physical exercise.
<table>
<thead>
<tr>
<th>COOPERATIVE EXTENSION</th>
<th>Economic Impact by Program</th>
<th>Social Impact by Program</th>
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<tbody>
<tr>
<td><strong>HONGU</strong></td>
<td><strong>Walk Across Arizona (WAAZ) Program</strong>: WAAZ is an 8-week walking promotion program targeting individuals at worksite and in the community. WAAZ delivers educational information on nutrition, exercise, and healthy lifestyle through the internet, email, and presentations at community centers. A total of 1,644 teams in 14 of 15 Arizona counties with 14,323 participants have walked 2,900,770 miles since inception.</td>
<td>Social relationships and community engagements. Google analytic shows ~9,800 website visits during the first week of the program. There were 69 participants who were older than 65 years old, including two women 92 years old and one man 101 years old living in La Posada retirement community, Green Valley, Arizona. Health and quality of life benefits.</td>
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<td>Health care savings through health promotion effects of physical activity and nutrition education.</td>
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<td><strong>MISNER</strong></td>
<td><strong>SNAP-Ed</strong> - Provides nutrition education for food stamp-eligible families and individuals in core areas; improve dietary quality and physical activity, improve food security, enhance shopping behaviors and food resource management, food safety, and gardening. $5,933,881 funded 100 employees, 12 students; hosted 2 ISPP students and over 20 volunteers. A total of $33,017,967 has been obtained since 2001 for SNAP-Ed nutrition education. A recent analysis by Ag economists estimated a total value added of $3.2 million to Arizona’s economy due to SNAP-Ed.</td>
<td><strong>SNAP-Ed</strong> had direct contact with 131,444 individuals, distributed 905,337 materials at 32,205 community events in 386 different sites within 9 counties. 903 food demonstrations showed participants and students how to use healthy recipes.</td>
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<td><strong>EFNEP</strong> - Assists low income families and youth to acquire knowledge, skills, attitudes, new behaviors necessary to choose nutritionally sound diets and to contribute to their personal development; improve the total family diet and improve nutritional well-being. The FY14 budget for 5 counties was $715,966 (86% spent on program delivery) funding 18.7 FTEs.</td>
<td><strong>EFNEP</strong> improved the lives, health, and well-being of 2,695 program families; extended EFNEPs reach to 10,986 people in those families. 73% had 6 lessons and 81% of the families graduated. 3,770 Youth were reached and attended 4.7 lessons, 52% were female and 48% male.</td>
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<td><strong>REEEVES</strong></td>
<td><strong>Sunnyside Partners for Healthy Promises promotes youth leadership and wellness; President’s Youth Fitness Program provides a model for fitness education; Let’s Move Active Grants, Dairy Council Nutrition Education Partnership, FUTP60, Mobile UA/YMCA Program, FreeThrows, YMCA Zamzee, CYFAR, School Wellness Centers, 5 Star After School Program and similar other programs engage youth to become physically active daily.</strong></td>
<td>Physical activity and nutrition education improves long term health of Arizona youth and promotes a sense of well-being; provides opportunities for youth development/leadership.</td>
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**HOUTKOOPER / GOING**

**Bone, Estrogen, Strength Training (BEST) Exercise and Nutrition Osteoporosis Prevention Education Program.** Books and print based health care professional continuing education courses and e-courses distributed through partnerships with the private sector: DSW Fitness, Human Kinetics and Amazon website. A total of 1,967 BEST books and 1,482 BEST continuing education courses have been purchased. 858 people have successfully completed the BEST course exam. Revenue from sales are used to support education programs.

Osteoporosis/fracture prevention contributes to reduced health care costs related to treatment of bone fractures.

**Dynamic Energy Balance: Translating Science into Action** - National Working Group Public Policy Development. A national public policy initiative co-sponsored and funded by a collaboration among USDA - Agriculture Research Service and National Institute of Food and Agriculture, American College of Sports Medicine, Academy of Nutrition and Dietetics, International Food & Nutrition Council, International Life Sciences Institute, National Dairy Council/Dairy Research Institute, Quaker/Pepsi, National Cattlemen/Beef Association, American Council on Exercise, Centers for Disease Control and Prevention. This initiative is focused on government agencies, professional organizations and business policies foster integration of community based nutrition and physical activity education with the goal of improved obesity prevention and health promotion. Faculty at UA and Oregon State University are collaborating on a new curriculum to train Allied Health Professionals in concepts and practice of dynamic energy balance.

Integration of nutrition and physical activity in community obesity prevention programs leads to improved obesity prevention education programs which are associated with reduced healthcare costs.

Promotion of bone health and prevention of osteoporosis leads to fracture prevention and improved health in older adults.

Integration of nutrition and physical activity in community obesity prevention programs with policy change leads to improved education programs, hopefully better health, and benefits the community through developing a stronger workforce.
List company, corporation or industry interactions with Cooperative Extension in your unit this past year including advisory boards, individual faculty/industry research projects, and classroom or curricular participation.

**Research Frontiers Conference interactions:**
- Bonnie Plants
- Fairytale Brownies
- Tanimura and Antle Farms
- Marana Farm Coop (Dan Arnold)
- Arizona Wine Growers Association
- Arizona Farm Bureau (Julie Murphree)
- Alfonso’s Olive Oil
- Barrio Breads
- Hayden Flour
- Hickman Family Farms

**Other interactions:**
- Cooper Clinic, Center for Aerobics Research – Fitnessgram (US National Youth Fitness Test, Scientific Advisory Board (Going).
- WGBH Boston – blended media program for health promotion in children. (Hingle, Going)
- YMCA – USA – Youth Diabetes Prevention Project – Project Development with Extension (Hingle); Camp Board (Reeves)
- FitNinja – (Hingle)
- Live Healthier – (Hingle)
- President’s Council on Fitness, Sports & Nutrition, Science Board (Houtkooper); President’s Youth Fitness Program (Reeves)
- Alliance for a Healthier Generation Arizona State Host (Reeves)
- Arizona Action for Healthy Kids, Co-Chair (Reeves)
- Dairy Council of Arizona Advisory Board (Reeves)
- Shape America, Let’s Move Active Schools Program and Physical Activity Leader Learning System (Reeves)
- Arizona Department of Education, School Health Programs Leadership Committee (Reeves)
- AZ SNAP Education Curriculum Committee (Reeves)
- Human Kinetics Physical Best Nutrition Writing Team (Reeves)
- Arizona Department of Health Services, CDC 1305 Empower School Program (Reeves)
- Sunnyside School District Physical Education for Progress Project (Reeves)
- Cornell Smarter Lunchroom Design Project (Reeves, Alleman)
C. Research.

1. Total State-Funded Research FTE annually for the last 5 years (5 numbers):
   T/C (Total): 7.78 (9.96) FY12, 6.33 (9.81) FY13, 6.03 (9.39) FY14, 4.82 (10.19) FY15

2. Unit Research Expenditures CY14: $1,506,941

3. Unit's share of CALS research input (research FTE, start-up and any other investment) for the last 5 years (5 percentages): 3.63, 4.24, 4.05, 3.87, 4.31

4. Number of extramural proposals submitted by the unit divided by faculty FTE annually for the last 5 years (5 numbers): 3.0, 6.30, 8.21, 7.46, 10.79

5. Number of peer-reviewed publications divided by faculty FTE annually for the last 5 years (5 numbers): 5 (CY10), 6 (CY11), 9 (CY12), 5 (CY13), 9 (CY14)

6. List of successful proposals, sponsors, direct funding amount, total amount and match amount on separate Excel spread sheet for CY14. (Handout)
Intellectual property data for FY14

Disclosures: 2

Provisional Patents:
  UA13-105 - “Targeting the PH/DH Domain of Tiam1 for the Treatment and/or Prevention of Bone Metastases”; filed 04/26/2013 – Active. Provisional Patent Application filed on Sept. 4th, 2013. Title: Treatment and/or prevention of bone metastasis.

Patents:
  UA15-036 “Inhibitors of GRB2-Associated binding proteins 1 (GAB1) and methods of treating cancer using the same”

Licenses: None

Companies spun out: None
D. Academic Programs (slides 9-13; 15 min presentation + 15 min discussion)

1. Describe all anticipated changes, deletions or additions in your majors, minors and/or certificates.
   Graduate Certificate in Applied Nutrition (beginning Summer I, 2015); Online undergraduate degree, Nutritional Sciences (possible Fall 2015); Expansion of ISPP

2. List current distance certificate programs, study abroad, executive and continuing education.
   Graduate Certificate in Applied Nutrition (beginning Summer I, 2015); Mediterranean Diet and Health Study Abroad Program (Verona, Italy) with Drs. Romagnolo and Selmin

3. List new courses planned and/or course changes or closures for courses offered in winter or summer sessions. Graduate Certificate in Applied Nutrition

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<tr>
<th>Course</th>
<th>Term Offered</th>
<th>Catalog Description</th>
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<tr>
<td>NSC 501: Statistics for Applied Nutritional Sciences I (1 unit)</td>
<td>Summer Pre-Session</td>
<td>This targeted course provides an introduction to biostatistical methods and applications related to conducting research in nutrition. This course will provide an understanding of the basic descriptive and inferential statistics and how these techniques apply to the research process. Students will also begin using statistical software (SPSS or STATA).</td>
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<td>NSC 509: Advanced Nutrition Metabolism and Disease (3 units)</td>
<td>Summer I</td>
<td>This class will review the multi-facets of macronutrient metabolism and application to the prevention and development of common chronic diseases. The clinical applications of nutrient deficiencies and toxicities will also be reviewed. Metabolic alterations associated with obesity, metabolic syndrome, and other diseases will be discussed. The application of evidence-based guidelines and research for nutritional interventions will be discussed through weekly readings and assignments.</td>
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<tr>
<td>NSC 519: Advanced Applied Nutritional Sciences (3 units)</td>
<td>Summer II</td>
<td>This course will advance understanding of research design, methods, and implementation, interpretation of research findings, and advances in nutrition science research for selected chronic diseases.</td>
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<tr>
<td>NSC 502: Statistics for Applied Nutritional Sciences II (1 unit)</td>
<td>Winter</td>
<td>This targeted course will serve as a continuation of the NSC 501 Statistics course. This course will provide an understanding of inferential statistics for two means, ANOVAs, nonparametric data, and regression in relation to Nutritional Sciences. Students will also use statistical software for data analysis using a variety of inferential statistics.</td>
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4. Describe any anticipated changes in instruction faculty that will either streamline your operation or disrupt your course instruction.

• **No changes that will streamline or disrupt**
  • One retirement; Dr. Mary Marian has assumed directorship of DPD; increased instruction FTE
  • Emily Nardi, MS, is assisting Dr. Sparks (NSC 351L) and could contribute more to instruction
  • Ashlee Linares-Gaffer will decrease advising FTE to assist in Experiential Learning programs; ISPP administration; could undertake more instruction
  • Dr. Amy Drescher has been hired to assist with development/delivery of graduate online courses
  • Dr. Jennifer Teske is team-teaching NSC 308 with Dr. Kirsten Limesand in preparation for teaching NSC 308 online.

5. Describe your most compelling academic program need.

**Undergraduate Program:** Professors of Practice; Instructors for new online offerings; Academic Advising; “Seats”/rooms for expansion of undergraduate instruction

**Graduate Program:** Need faculty who can advise/mentor graduate student research; Instructors for Graduate Certificate in Applied Nutrition
6. Complete the attached course grid: Handout

7. Describe your marketing/recruitment plans to increase the following ABOR metrics:

Number of Bachelor's Degrees Awarded
- The UA Visitor Guide
- The UA Parents and Family Magazine
- USDA/AFRI – Undergraduate Research and Extension Experiential Learning Fellowships (deadline: May 6, 2015)
- Advising Center and related activities

Undergraduate Enrollment (Official 21st Day)
- The UA Visitor Guide
- The UA Parents and Family Magazine
- USDA/AFRI – Undergraduate Research and Extension Experiential Learning Fellowships (deadline: May 6, 2015)
- Advising Center and related activities

Number of Graduate Degrees
- USDA/AFRI – National Needs Fellows Training Grant in Childhood Obesity Prevention
- Graduate Program Retreat – with Adjunct Faculty – new training grant
- Advertising through Association of Nutrition Departments and Programs (national Department Heads meeting)
- Advertising at relevant national conferences (SNEB; FASEB, etc)
8. Number of undergraduate students in the unit involved in

i. Research experiences 20

ii. Extension experiences 9

iii. Internships 9
   Campus Health; Diabetes Prevention Center; Garden Kitchen; Nourishing Results

iv. Experiential learning 239
   Preceptors Mobile Health Grow 2 B Fit
   Boys & Girls Clubs Garden Kitchen Southern Arizona Food Bank
   Tucson Village Farm Campus Health TMC
   Iskashitaa LEAF MycoCats
   Health South Heart & Stroke Association
   Diabetes Prevention Center
9. List the top 5 employers of your graduates:
   1. Hospitals and Long Term Care Facilities
   2. WIC
   3. School Foodservice
   4. Pharma
   5. Wellness Organizations
   6. Extension
   7. Medical/graduate school

10. Describe company, corporation or industry interactions with your unit this past year including advisory boards, individual faculty/industry research projects, and classroom or curricular participation.
   • See slide/page 6
   • Also classroom/curricular participation:
     o Lindsay Aguilar, RD, SNS: Production Technical Coordinator, TUSD Food Service Department
     o Amanda Nino, MS: Health and Nutrition Services Specialist, Child-Parent Centers, Inc
     o Caitlin Griffin, RD: Clinical Dietitian, Tucson Medical Center
     o Walter Jacobson: Project Specialist & Nutrition Educator, Tucson Unified School District
     o Christy Wilson, RD: Consultant Dietitian
     o Hana Feeney, MS, RD: Nourishing Results, LLC
     o Christine Williams, RD: Healthcare Specialist, Abbott Nutrition
     o Heather Danielson, RD & Jessica Bursey, RD: Clinical Dietitians, St. Mary’s
     o Lisa Powell, MS, RD: Nutrition Director, Canyon Ranch Health Resort
     o Camilla Loehrer: Nutrition Education Coordinator, TUSD Food Service Department
     o Zeina Makhoul, PhD, RD: Nutrition Scientist, SPOON Foundation, Portland, OR
<table>
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<tr>
<th>Name</th>
<th>Position</th>
<th>Achievements</th>
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<td>GOING / REEVES</td>
<td>Professor / Associate Research Scientist</td>
<td>Inductees to the YMCA of Southern Arizona’s Hall of Fame for their roles as founders of Activate Tucson</td>
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| HINGLE        | Assistant Professor       | Chair-Elect, The Obesity Society e-Health/m-Health Section Steering Committee  
Officer, The International Society for Behavioral Nutrition & Physical Activity e-Health/m-Health Special Interest Group |
| HONGU         | Professor Emerita         | States’ 4-H International Recognition Award                                                                                                                                 |
| HOWELL        | Assistant Professor of Practice | Recipient of a CALS Special Award of Commendation; Granted Emerita status                                                                 |
| MARIAN        | Assistant Professor of Practice | Recipient of the National Medallion Award from the Academy of Nutrition and Dietetics 
Dietitians in Nutrition Support Practice Group within the Academy: Symposium Co-Chair and Advanced Practice Residency 
Co-Chair; American Society of Parenteral & Enteral Nutrition: Nutrition in Clinical Practice journal Associate Editor and committee member of the Education & Clinical Practice; Academy of Nutrition & Dietetics: Academy Position Papers Committee |
| ROMAGNOLO     | Professor                 | ASN/FASEB poster competition. Poster from lab (Adam Lyon presenting) selected as one of the 12 finalists for scientific excellence.     |
| TESKE         | Assistant Professor       | DeBell Research Enhancement Award from NSC  
Visiting scholar award from UA office of global initiatives  
Award (no name) to attend Grant Writing Workshop for Diverse Researchers from NIH-NINDS  
Award (no name) to attend Training in Grantsmanship for Rehabilitation Research from the Department of Veterans Affairs-Rehabilitation Research and Development |
| HANSEN        | Communications Network Analyst | Recipient of the CALS Outstanding Staff Award                                                                                     |
| KUNIHIRO      | PhD Graduate Student      | Recipient of the University Fellows Award                                                                                           |