Vita

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ADMINISTRATIVE LEADERSHIP EXPERIENCE:		
Provost and Executive Vice President, Univers	ity of Central Florida	2014-present
Vice Provost for Undergraduate Academic Aff	•	2010 - 2014
Associate Dean and Director of Academic Pro		
Purdue University	, , , , , , , , , , , , , , , , , , , ,	2002-2010
Associate Head for Research and Graduate Ed	ucation, Dept. of Agricultural E	ngineering.
Texas A&M University	, , ,	1999-2002
Interim Director, Institute of Food Sci. and Eng	gr., Texas A&M University	1997-1999
Director, Center for Food Processing, Texas A		1996-1999
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FACULTY EXPERIENCE:		
Professor, Civil, Environmental and Constructi	on Engineering,	
University of Central Florida		2014-present
Professor, Agricultural and Biological Engineer	ing, Purdue University	2002-2014
Professor, Agricultural Engineering, Texas A&I	И University	1999-2002
Associate Professor, Agricultural Engineering,	Texas A&M University	1993-1999
Assistant Professor, Agricultural Engineering,	Texas A&M University	1987-1993
•		
Education:		
Ph.D. Agricultural Engineering, Purdue Univers	sity	1987
Dissertation: Coupling symbolic and no	americ computing for soil erosi	on modeling
M.S. Agricultural Engineering, Purdue Universi	ty	1984
Thesis: Circular Hough transform for lo	ocating tomatoes	
B.S. Agricultural Engineering, Texas A&M Univ	ersity	1983
Summa Cum Laude, Rudder Outstandi	ng Undergraduate Award	

University of Central Florida

Provost and Executive Vice President (Aug. 2014 - present)

Responsibilities

The University of Central Florida is one of the nation's largest universities, with approximately 66,000 students. UCF works closely with others in government, business and the nonprofit sector to expand opportunities for our students and boost our region's quality of life. The provost provides academic leadership for the university's 13 colleges, including a college of medicine, multiple campuses, research centers and institutes. The provost oversees academic support services and student services and is responsible for curriculum, academic planning, faculty appointments, faculty development, and promotion and tenure decisions. The provost chairs the university's budget committee and, in consultation with the president, is responsible for the university's annual budget. At the president's direction, the provost also serves as the liaison to the Board of Trustees on academic matters.

Accomplishments

The following are summarized in the Office of the Provost 2016-17 annual report describing initiatives and outcomes over the period of UCF employment (Aug 2014 – present). Available upon request.

OPERATIONAL CONTEXT: UCF has more than 66,000 students, 11,000 employees and an operating budget of \$1.67 billion.

DIRECT REPORTS:

- o 2014 Personnel 25;
 - Vice and Associate Provosts, Assistant Vice Presidents, and Deans 24
 - Support Person 1
- o 2016 Personnel: 26
 - Vice and Associate Provosts, Assistant Vice Presidents, and Deans 25
 - Support Person 1
- Gender and Diversity:
 - Gender:
 - 2014 Females: 10 (40%): 2016 Females: 14 (53.8%). Increase 40%
 - 2014 Males: 15 (60%): 2016 Males: 12 (46.2%). Decrease 20%
 - Diversity:
 - Under Represented Minority: 2014: 5 (20%); 2016: 4 (15.4%). Decrease of 23%
 - Other: 2014: 20 (80%); 2016: 22 (84.6%). Increase of 5.8%
- Areas of Responsibility:
 - Colleges: 13
 - Regional Campuses: 11
 - Major Centers and Institutes: 25

BUDGET:

- Operating Budget:
 - **2014-2015**: \$1,500,509,427
 - **2016-2017** is \$1,663,549,686; Increase: \$163,040,259 or 10.87%
 - E&G Main** in **2014-2015**: \$522,764,128; **2016-2017** is \$605,343,715
 - E&G UCF Medical School** in 2014-2015: \$39,188,486; 2016-2017 is \$41,794,806

- Self- Insurance Program-College of Medicine in 2014-2015: \$177,178;
 2016-2017 is \$769,525
- Faculty Practice Plan in 2014-2015: \$3,873,540; 2016-2017: \$8,065,855
- Auxiliary Enterprises in 2014-2015: \$206,596,893; 2016-2017: \$251,990,997
- Sponsored Research in 2014-2015: \$152,584,000; 2016-2017:
- \$160,694,000
- Local Funds in 2014-2015: \$575,325,202; 2016-2017: \$594,890,788
- o Preeminence Funding:
 - **2014:** \$0; **2016:** \$5 million; **2017**: \$8.6 million
- o Tuition Rates and Fee Rates:
 - Undergraduate tuition + fees for 1 credit hour: 2014-2015: Instate \$212.28
 - Out of State \$748.89; 2016-2017: Instate \$212.28; Out of State \$748.89
 - Graduate tuition and fees for 1 credit hour: 2014-2015: Instate \$369.65; Out of State \$1,194.05; 2016-2017: Instate \$369.65; Out of State \$1,194.05

<u>STUDENTS:</u> Our freshman class this Fall 2017 includes 88 National Merit Scholars, a record for the university. The class' average high school GPA is 4.08. Students benefit from a UCF education that ranks among the nation's best values, according to Kiplinger and The Princeton Review. UCF also is among the nation's best colleges for veterans.

UNDERGRADUATE AND GRADUATE ENROLLMENT:

- o Total Fall Enrollment:
 - Fall 2014: 60,821; Fall 2016: 64,335
 Total increase of 3,514 or 5.8%
- o Total UGRD Enrollment:
 - Fall 2014: 52,539; Fall 2016: 55,783 Total increase of 3,244 or 6.2%
- o Total GRD Enrollment:
 - Fall 2014: 7,862; Fall 2016: 8,075
 Total increase of 213 or 2.7%
- o Full-Time/Part-Time Enrollment:
 - Fall 2014: Part-time 21,916 (36%); Full-time 38,905 (64%)
 - Fall 2016: Part-time 21,445 (33.3%); Full-time 42,890 (66.7%)
 Total increase of 3,514 or 5.8%
- o Enrollment by Minority Ethnicity:
 - Fall 2014: Black/African enrollment: 6,408 (10.5% of total enrollment); Hispanic/Latino enrollment 13,127 (21.6% of total enrollment); Asian enrollment: 3350 (5.5% of Total enrollment); American Indian/Alaska Native enrollment: 122 (.20% of total enrollment); Native Hawaiian/Pacific Islander enrollment: 128 (.21% total enrollment); Multi-Racial enrollment: 1,843 (3% of total enrollment)
 - Fall 2016: Black/African American enrollment: 7,131 (11.1% of total enrollment); Hispanic/Latino enrollment: 15,349 (23.9% of total enrollment); Asian enrollment: 3,800 (5.9% of total enrollment); American Indian/Alaska Native: 114 (.18% of total enrollment); Native Hawaiian/Pacific Islander

enrollment: 120 (.19% total Enrollment); Multi-Racial enrollment: 2,316 (3.6% of total enrollment).

- Total African American enrollment increase of 723 or 11.3%
- Total Hispanic enrollment increase of 2,222 or 16.9%
- Enrollment by Gender:
 - Fall 2014: Enrolled men 27,321 (44.9% of total enrollment); Enrolled women 33,500 (55.1% of total enrollment)
 - Fall 2016: Enrolled men 29,038 (45.1% of total enrollment); Enrolled women 35,297 (54.9% of total enrollment)
 - Total increase of enrolled men 1,717 or 6.3%
 - Total increase of enrolled women 1,797 or 5.4%
- o International Students:
 - Fall 2014: 1,494 students from 116 countries; Fall 2016: 2,053 from 130 countries
 - Total increase of 559 students or 37.4%

TEST SCORES – FIRST TIME IN COLLEGE (FTIC):

- o FTIC Average HS GPA Incoming Students
 - **2014-2015:** 3.92; Fall 16: 4.0
 - Total increase score of 0.08 or 2.0%
- FTIC Student Average (Old) SAT Scores:
 - Fall 2014: 1256; Fall 2016: 1262
 - Total increase of 5 points or .4%
- o Student Average SAT Scores New measurement (2016):
 - Fall 2016 1324

RETENTION AND GRADUATION RATES:

- o FTIC 4 and 6 Year Graduation Rates (Undergraduate Summer-Fall Cohort-FT):
 - 4 Year
 - AY 2014-2015: 40.0% graduated; AY 2016-2017***: 43.6% graduated
 - o Total increase of .09%
 - 6 Year
 - AY 2014-2015: 69.8% graduated; AY 2016-2017***: 69.0% graduated
 - o Total decrease of 1.1%
- o FTIC Student Retention:
 - AY 2014-2015: 87.5%; AY 2016-2017***: 88.8%
 - o Total increase of 1.5%

LEARNING ENVIRONMENTS AND SCHOLARSHIP:

- o Study Abroad Student Participation (Fall Summer Semesters):
 - **2014-2015:** 355 students; **2015-2016:** 570 students
 - Total increase of 215 students or 60.6%
- o Distance Learning:

(Requires 80% of learning taught online. Course Modality includes WW – World Wide Web, V – Video Streaming, RV – Video Streaming/Reduced Seat Time)

- AY 2014-2015 WW, V, & RV student credit hours: undergraduate 406,759;
 graduate: 36,934
- AY 2016-2017*** W, V, & RV student credit hours: undergraduate 475,744;
 graduate: 42,555
 - Total undergraduate increase of 68,985 or 17%
 - Total graduate increase of 5,621 or 15.2%
- o Service Learning Enrollments:
 - **2014-2015**: 8,958; **2015-2016**: 7,611;
 - Total decrease of 1,347 or -15.04%
- National Scholarships:
 - Fulbright Students
 - 2014: U.S. students 4; International students 4
 - 2016: U.S. students 5; International students 4
- National Merit Awards:
 - Fall 2014: 79; Fall 2016: 77
 - Total decrease of 2 scholars or -2.5%
 - Note: decreased awards due to shift in allocation of state funding of National Merit Awards
- National Hispanic Scholars (total enrolled for award year):
 - **2014**: 40; **2016**: 51
 - Total increase of 11 scholars or 27.5%
- National Achievement (total enrolled for award year):
 - **2014:** 15; **2016:** 13
 - Total decrease of 2 scholars or -13.3%
- o Graduate National Science Fellow (NSF) Fellowships:
 - **2014:** 7; **2016:** 8
 - Total increase of 1 scholar or 14.3%
- National Science Fellows (NSF) (total enrolled for award year)
 - **2014:** 16; **2016:** 50
 - Total increase of 34 scholars or 212.5%

DEGREES AWARDED:

- AY 2014-2015 degrees awarded: Bachelor's: 12,793; Master's: 2,233; and Doctoral degrees (including research and professional): 423; AY 2016-2017*** degrees awarded: Bachelor's: 13,085; Master's: 2,212; and Doctoral degrees (including research and professional): 429.
 - Total bachelor's degrees awarded increased by 292 or 2.2%
 - Total master's degrees awarded decreased by 21 or -0.9%
 - Total doctoral degrees (including research and professional) awarded increased by 6 or 1.4%

FACULTY: In the last three years, after a period of limited hiring, UCF increased new faculty hires 49.59%—from 123 in 2014 to 184 in 2016. We also launched a Faculty Cluster Initiative, which created 33 new faculty members in six fields to advance the areas of excellence and global impact. The interdisciplinary cluster areas include cyber security, renewable energy, bioinformatics, energy conversion, sustainable coastal systems, and prosthetic interfaces. During this same period, our faculty members produced 194 books, 513 book chapters, and 4566 peer reviewed publications.

- o Total Number of Tenured or Tenure Earning Faculty: (2020 Goal is 1,200 faculty or 65%):
 - ► Fall 2014: 835 (57.2%); Fall 2016: 981 (59.6%); Increase of 146; Increase of 17.5%
- Total Number of Faculty Hired:
 - 2014-2015: 123; 2015-2016: 186; Increase of 63 or 51.2%
- New Faculty Hiring Initiative:
 - 2015-2016: Round one 100 allocated to colleges, 99 filled
 - 2016-2017: Round two 50 allocated colleges, 49 filled
- o Percentage of New Tenured and Tenure Earning Faculty from Underrepresented Groups: (2020 Goal is 25%):
 - Fall 2014: 5 of 42 faculty (11.9%); Fall 2016: 6 of 86 faculty (7.0%)
- o Distinguished Hires:

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- 2015: 2 Eminent Scholars and 4 Endowed Chairs
- 2016: 1 Endowed Chair
- 2017: 7 Distinguished Professors and 1 Eminent Scholar Chair
- o Fulbright Scholars:
 - 2014-2015: U.S. Scholars 4; International Scholars 2
 - 2015-2016: U.S. Scholars 3; International Scholars 1
 - 2016-2017: U.S. Scholars 2; International Scholars 0
- Faculty Cluster Initiative:

In 2014 UCF's Faculty Cluster Initiative (FCI) was launched. FCI leverages UCF's existing strengths and fosters the development of strong, interdisciplinary teams focused on solving today's toughest scientific and societal challenges through teaching and research.

- **2015-2016**
 - Total budget for FCI: \$17,380,000.
 - FCI created 33 faculty positions within 6 clusters:
 - Cyber Security and Privacy 5 faculty lines assigned;
 - Energy Conversion and Propulsion 2 of 5 faculty lines assigned have been filled;
 - Genomics and Bioinformatics 1 of the 5 faculty lines assigned has been filled;
 - o Prosthetic Interfaces 7 faculty lines assigned;
 - o Renewable Energy Systems 1 of 6 faculty lines assigned has been filled;
 - Sustainable Coastal Systems 2 of the 5 faculty lines assigned have been filled.
- Targeted Opportunity Program (TOP):
 - The TOP program replaced the former Targeted Opportunity Funding Program (TOFP) in 2015. TOP was introduced to accomplish three things, enhance diversity, become the desired university of choice for academic partners, and recruit world-class faculty.
 - Number of TOP hires:

- 2015-2016: 18 positions -- 4 inclusive excellence, 14 partner hires.
 - o 11 out 18 positions were filled
- 2016-2017: 21 positions -- 6 inclusive excellence, 15 partner hires.
 - o 8 positions filled, 13 opportunities remain (to date)

RETENTION AND DEVELOPMENT:

- o Faculty Incentive Awards:
 - 2014-2015
 - Teaching Incentive Program (TIP) 55
 - Research Incentive Program (RIA) 30
 - Scholarship of Teaching and Learning (SoTL) -14
 - Pegasus Professor 5
 - Reach for the Stars Award 8
 - 2015-2016
 - Teaching Incentive Program (TIP) 77
 - Research Incentive Program (RIA) 43
 - · Scholarship of Teaching and Learning (SoTL) 19
 - Pegasus Professor 5
 - Reach for the Stars Award 5
 - **2016-2017**
 - Teaching Incentive Program (TIP) 77
 - Research Incentive Program (RIA) 31
 - Scholarship of Teaching and Learning (SoTL) 13
 - Pegasus Professor 5
 - Reach for the Stars Award 5

o COACHE Effort:

Over 600 faculty members participated in the 2015 Collaborative on Academic Careers in Higher Education (COACHE) 3rd party survey, responding to questions about working at UCF. This was aimed at improving the faculty experience at UCF, increasing the satisfaction and retention of top faculty at UCF, as well as to assisting in the recruitment of hiring new faculty.

Outcomes are still ongoing. Information from COACHE identified the following five priority areas for improvement:

- 1. Nature of work, including research, service and teaching loads
- 2. Personal and family policies
- 3. Recognition and appreciation
- 4. Departmental leadership, quality and collegiality
- 5. Promotion policies
- Scheduled implementation and reporting:
 - 2016-2017 The strategies were implemented and tracking began.
 - 2018 Faculty will participate in a second COACHE survey after which the results will be reported

- o 2014-2015 UCF faculty members published more than 80 books, 211 book chapters, 3,086 journal articles, 1,400 conference proceedings, and 1,619 peer reviewed publications; 2015-2016 UCF faculty members published more than 114 books, 302 book chapters, 2,242 journal articles, 1,889 conference proceedings, and 2,947 peer reviewed publications:
 - The total number of faculty members' published books increased by 34 or 42.5%
 - The total number of faculty members' published book chapters increased by 91 or 43.1%
 - The total number of faculty members' peer reviewed publications increased by 1328 or 82%

EXPANDING RESEARCH AND PARTNERSHIPS: UCF experienced a 12% increase in research funding from 2014-2016. In 2016, researchers were awarded \$84 million in funding from federal agencies, \$47.25 million from industry and other entities, and \$14.46 million from state and local governments, for a total of \$145.8 million in funding (2020 goal is \$250 m).

OFFICE OF RESEARCH AND COMMERCIALIZATION ORC:

o Number of startup companies launched: 2014: 8; 2016: 9

o Number of patent applications: 2014: 171; 2016: 166

o Number of patents issued: 2014: 61; 2016: 90

o Number of active licenses issued: 2014: 82; 2016: 113

o Total income from active licenses: 2014: \$1.07 million; 2016: \$1.8 million

UCF DOWNTOWN CAMPUS:

In 2014, UCF, in partnership with Valencia College, announced plans to create a downtown campus that would bring 7,700 students to Orlando's city center, providing the opportunity to partner with industries located in the area. The focus of the campus is on communications, visualization and digital media, community health engagement and public affairs, and a learning environment that is accessible to abilities. \$60M has been contributed to the project from UCF, the state and community support. In addition, the City of Orlando and Creative Village have contributed \$75M in land and infrastructure. Ground breaking on the 146,000 sq. ft. Dr. Phillips Academic Commons building took place May 2017, with an expected fall 2019 move in date.

o Inclusive Education Services launched in 2016 as an initiative that offers people with intellectual disabilities the ability to experience college in a fully integrated manner. Program currently includes 17 students on the main campus, but will also have a presence at the UCF Downtown campus when it opens in 2019.

UCF APPLIED RESEARCH INSTITUTE (ARI):

UCF Applied Research Institute (ARI): created in 2016: The Institute is designed to assist securing large collaborative research projects and enhance the university's interdisciplinary work and growing partnerships by aligning with the needs of Florida's economic development. Additionally, it will help the university coordinate multidisciplinary responses to major projects and strengthen research across campus.

o Secured \$4,552,819 in funding

CCRC DEVELOPMENT CORPORATION:

CCRC Development Corporation and UCF are working to develop a Continuing Care Retirement Community to provide high quality health care for seniors in the Central Florida area. This will also allow UCF to be involved in research, teaching, student internships, and service processes at the facility.

BRIDG:

- o ICAMR launch and partnership with imec (2015), was renamed BRIDG in 2017.
 - Employees BRIDG has 22 people on staff plus 2 joint appointments with UCF faculty from CREOL and the UCF Nano Center. More than half have been brought on since the start of FY 2016/2017.
 - BRIDG Investment:
 - Recurring: UCF provides \$5M/year in recurring funds as approved beginning in FY 2016/2017
 - Non-Recurring:
 - o The State of Florida approved \$10M for tools in FY 2016/2017
 - Approximately \$200M in non-recurring funds have been committed to the broader sensor project by Osceola County, UCF, The Florida High Tech Corridor, USF, FIU, and the University of Florida for pre-opening costs, tools, facilities design/construction, utilities infrastructure, focused faculty hires, matching grants research, and the establishment of a design center
 - Agreements: 2015 Member agreement Harris Corporation Ultra High Density Interposer Program. 2016 – Member agreement with Photon-X; MOU with PhotonDelta / Brainport – partnership with BRIDG, Osceola County, and Netherlands based PhotonDelta to accelerate manufacturing an innovation
 - Collaborative Projects and Partnerships 2016:
 - o Argonne National Laboratory RIS Program
 - imec Partnership / Frame Agreement between imec, UCF,
 Osceola County, and BRIDG
 - o Harris Corporation renewal of UHDI Program
 - o Argonne National Laboratory TCF Program
 - FloridaMakes Collaboration FLMakes Advanced
 Manufacturing Director co-located at BRIDG
- o imec A key decision factor for imec choosing Florida was the state's support for BRIDG. imec is the global leader in complex nano electronics design. While not a consumer-recognized brand, imec works with and enables high value brands / companies such as Samsung, Philips Medical, GE Medical, Sony, and Toshiba to bring high tech solutions with leading-edge electronic product development to market.

- Employees imec anticipates hiring 100+ scientists, engineers, and administrative personnel over the next 5 years at the Florida design center, introducing new high wage/high skilled employment opportunities in Florida. They currently have two full time employees
- Operating Budget \$6M (\$3M from Osceola County and \$3M from UCF)
- Collaborative projects and Partnerships Partnership UCF, Osceola County, and BRIDG signed an agreement in early July 2017 with imec, establishing the imec Florida Nano Electronics Design Center

FLORIDA CONSORTIUM OF METROPOLITAN RESEARCH UNIVERSITIES:

The combination of resources, expertise, and commitment allows the Florida Consortium to launch and complete initiatives at a speed and scale that none of the universities could attain individually. Each university has independently launched student success initiatives that have already improved college completion rates. By integrating their efforts in a meaningful way, the three institutions can accelerate the pace and extent of change. By producing more career ready graduates with lower debt, better training, and adaptable skill sets, the Florida Consortium will drive the economic development of Florida. UCF hosts the executive director and secretariat.

- Student Demographics and Quality:
 - Bachelor Degrees Awarded:
 - 2014-2015: 30,450; 2015-2016: 31,176
- Minority Information:
 - Population 2016: 77,280; (55.6% of total minority SUS population)
 - African American Degrees 2016: 4,312 (40.5% of total SUS degrees)
 - Hispanic Degrees 2016: 13,101 (64.8% of total SUS degrees)
- In 2016 the CSIT-Team secured a \$5 million grant to assist students with financial need, who
 are interested in one of the disciplines deemed by the state as in demand and high tech
 (computer science, information technology, computer engineering and management
 information systems).

UCF GLOBAL:

The UCF Global building began operations in 2016 as the international hub on campus, servicing international students, faculty, and staff as well as the on campus domestic population engaging in high-impact international experiences. The Global UCF building cost \$16 million to build, and encompasses 54,000 GSF.

In 2014-2015, five new Reciprocal Student Exchange programs began between Germany,
 Ireland, Japan, Australia and the United Kingdom

IQ ORLANDO:

IQ Orlando is a partnership between AHG group, Florida Hospital, Tavistock Group, and UCF focused on the power of collaboration. This group has strategically created an environment to produce

collisions of great minds and partnering industries to lead to groundbreaking results, inspired innovations, and power ideas in healthcare.

DIRECTCONNECT:

Strengthening and Expansion of Direct Connect: Originally, an agreement between UCF and four state community colleges, UCF Direct Connect now includes six institutions as partner entities with available access in thirteen locations. New partners, UCF on line, Access points, Nursing Programs to address working with state colleges to address the needs of the community.

- o DirectConnect to UCF was recognized in 2015 by various media outlets and was awarded with "Where dreams come true" by Politico Magazine for its seamless pipeline of social mobility. UCF was also featured by the PBS News Hour, "How Community Colleges can close the graduation gap" for its commitment to access/partnerships transforming lives and livelihoods. Additionally, UCF was a part of "Breaking the Iron Triangle at the University of Central Florida" case study by Ithika Report ("UCF, a public university of nearly 61,000 students in Orlando, has sought to break the "iron triangle" by reducing cost, improving quality, and enhancing access simultaneously)
- o Added College of Central Florida (CCF) and Dayton State College (DSC) as partner institutions
- o Developed the Central Florida Higher Education Consortium (CFHEC) Regional Operational Plan, outlining the consortium degree review and approval process
- Received Gold Standard Award from National Association of Student Personnel Administrators

UCF COLLEGE OF MEDICINE:

UCF College of Medicine selected Hospital Corporation of America as its partner to build a proposed teaching hospital at the College of Medicine in Lake Nona.

POST-DOCTORAL:

o Number of Post-Doctoral Appointees: **2014**: 47; **2015**: 52; **2016**: 66

BUSINESS MODEL IMPROVEMENTS:

ACADEMIC REORGANIZATION:

- The Office of the Provost was reorganized in 2015 to streamline functional and operational areas. Faculty Relations and International Relations were renamed (Faculty Excellence and UCF Global, respectively) and combined under one Vice Provost.
- o The Office of Undergraduate Studies became a College of Undergraduate Studies in 2015, and restructured their unit within three areas: Interdisciplinary Studies, Academic Services, and the Division of Teaching and Learning.
- The offices of Research and Commercialization and Graduate Studies were merged in 2016 to amplify the impact in graduate education and research programs, grow graduate student enrollment, and double research funding by fall 2020.

STRATEGIC PLANNING:

- o In 2016, UCF unveiled their 2020 Collective Impact strategic plan. This plan is focused on the next 20 years and will transform the way we teach, learn and engage, with the focus on "Scale times Excellence equals Impact."
- Included five charges:
 - Lead large Florida metropolitan areas in percentage of bachelor's degree attainment, reaching top quartile by 2035;
 - Double national and international recognition of faculty and student excellence, and quadruple recognition by 2035;
 - Double research awards, becoming a to 50 research university by 2035;
 - Generate \$10 billion in economic, social, and cultural impact, growing to \$25 billion by 2035; and
 - Attract \$100 million in new funding from sources other than students, families, and taxpayers, becoming 20% of total educational funding by 2015
- o Included five related strategies and metrics including:
 - Increasing student access, success, and prominence;
 - Strengthening our faculty and staff;
 - Growing our research and graduate programs;
 - Creating community impacts through partnerships; and
 - Leading innovation in higher education

OPERATIONAL IMPROVEMENTS:

- In 2016, UCF created a new budget model and processes that allowed for more decentralization of funding and decisions, and more transparency in the process. The budget was realigned in a model that supports the goals of the strategic plan.
- o In 2016, the 2020 Dean's goals and dashboards were implemented. This allows colleges a mechanism to see their academic and operational program data and track metrics towards their 2020 goals
- o In 2016, Provost's Half Day Visits to the Colleges began, with the goal of each college showcasing their students, faculty, staff, programs, and facilitates
- o In 2016, Provost's Retreats were established around the main operational functions of Academic Affairs—including research and partnerships, graduate education, undergraduate education, budget, the strategic plan, global education and partnerships, the downtown campus, regional campuses and on-line education, and faculty excellence. These meetings include the Provost's direct reports, and related, invited stakeholders.
- In 2016, Provost's Forums were established to focus on strategic university issues relating to Academic Affairs, such as faculty excellence and prominence, student success, and funding and philanthropy. These events are open to the university community.

<u>UNIVERSITY RANKINGS:</u> The University of Central Florida has increased in several *U.S. News & World Report* rankings released between the years of 2014 and 2017. In the Nation's "Up and Comer" University ranking, UCF increased from number fourteen to number three. UCF increased from 94th to 31st in Best Public Universities and has twenty graduate programs or colleges ranked in the Top 100 for their discipline. UCF was also ranked number thirteen for "Most Innovative Schools" and number one for "Colleges that Attract the Most Transfer Students."

- o Change in University Rankings 2014-2016:
 - U.S. News & World Report national rankings:
 - Best Colleges for Veterans
 - o 2015 UCF ranked 58 nationally
 - Best National Universities
 - 2014 UCF ranked 173 overall; 2016 UCF ranked 168th overall; Increase of 5 spots
 - Best Public Universities
 - 2014 UCF ranked 99 among Public Universities; 2016 UCF ranked 91 among Public Universities; Increase of 8 spots
 - Colleges that Attract the Most Transfer Students
 - 2015 UCF ranked #1 for colleges that attract the most transfer students
 - Most Innovative Schools
 - o **2015- 2016** UCF ranked 13 as one of the nation's "Most Innovative Schools".
 - Nation's "Up and Comer" Universities
 - 2014-2015 UCF ranked 3; 2015-2016 UCF ranked 3
 No change
 - Top 100 Graduate Programs or Colleges
 - 2014-2015 UCF had 23 graduate programs or colleges ranked in the Top 100; 2015 - 2016 UCF had 20 graduate programs or colleges ranked in the Top 100

Total decrease of 3 programs or colleges ranked in the Top 100

- Forbes Magazine
 - Research Universities
 - 2014-2015 ranked UCF as #170; 2015-2016 ranked UCF as #162
 A total increase of 8 spots
 - Top Universities (All)
 - 2015 UCF ranked #427; 2016 UCF ranked #394
 A total increase of 33 spots
 - Top Public Universities
 - 2015 UCF ranked #134; 2016 UCF ranked #124
 A total increase of 10 spots
 - Universities in the South
 - 2014-2015 ranked UCF as #96; 2015-2016 ranked UCF as #82
 A total increase of 14 spots
- Kiplinger
 - Best Values in Public Colleges
 - 2013-2014 named UCF #42; 2015-2016 named UCF #36
 A total increase of 6 spots
- The Princeton Review
 - Best Value Education in Public Universities
 - 2013-2014 named UCF #75; 2014-2015 named UCF #150
 A total decrease of 75 spots
 - Best Video Game Graduate Program in North America

- 2014 & 2015 Florida Interactive Entertainment Academy (FIEA) ranked 2nd; 2016 Florida Interactive Entertainment Academy (FIEA) ranked 1st.
- Best Colleges for Health Services
 - o 2014-2015 named UCF 6th for Health Services
- Hispanic Outlook
 - Most Bachelor's Degrees Awarded to Hispanic Students Nationally among Colleges and Universities
 - 2013-2014 named UCF #11. Specific rankings included: 2nd for psychology, 7th for education, and 7th for engineering; 2014-2015 named UCF in the top 10. Specific rankings included: 10th for education; 9th for biological and biomedical sciences; 6th for business management and marketing; 7th for engineering and engineering technology; 4th for health professions and related programs; and 4th for psychology.
- Best Colleges(.com)
 - The Best Online Colleges
 - o 2017 ranked UCF #1
 - The Most Affordable Online Colleges
 - o 2017 Ranked UCF #17

ACCREDITATION AND PROGRAM REVIEWS:

 In 2016, UCF completed their SACSCOC review and reaccreditation with no suggested changes to their 10 year accreditation. In addition, from 2014-2016, the following programs went through accreditation:

		ACADEMIC	
		YEAR THAT	
	ACCREDITOR or EQUIVALENT	PROCESS	
PROGRAM NAME*	OVERSIGHT BODY	COMPLETED	RESULTS
	National Association of Schools of		
Music (BA)	Music (NASM)	2014-2015	REACCREDITED
	National Association of Schools of		
Music (MA)	Music (NASM)	2014-2015	REACCREDITED
Music Education	National Association of Schools of		
(BME)	Music (NASM)	2014-2015	REACCREDITED
Music Performance	National Association of Schools of		
(BM)	Music (NASM)	2014-2015	REACCREDITED
	National Association of Schools of		INITIAL
Theatre (BFA)	Theatre (NAST)	2014-2016	ACCREDITATION
	National Association of Schools of		INITIAL
Theatre (MA)	Theatre (NAST)	2014-2016	ACCREDITATION
	National Association of Schools of		INITIAL
Theatre (MFA)	Theatre (NAST)	2014-2016	ACCREDITATION
Theatre Studies (BA)	National Association of Schools of	2014-2016	INITIAL

	Theatre (NAST)		ACCREDITATION
School Psychology	National Association of School		CONDITIONAL
(EdS)	Psychologists (NASP)**	2016-2017	RECOGNITION
Civil Engineering	ABET-Engineering Accreditation		
(BSCE)	Commission	2014-2015	REACCREDITED
Computer Engineering	ABET-Engineering Accreditation		
(BSCpE)	Commission	2014-2015	REACCREDITED
	ABET-Computing Accreditation		
Computer Science (BS)	Commission	2016-2017	REACCREDITED
Construction	ABET-Engineering Accreditation		
Engineering (BSConE)	Commission	2014-2015	REACCREDITED
Electrical Engineering	ABET-Engineering Accreditation		
(BSEE)	Commission	2014-2015	REACCREDITED
Environmental	ABET-Engineering Accreditation		
Engineering (BSVE)	Commission	2014-2015	REACCREDITED
Industrial Engineering	ABET-Engineering Accreditation		
(BSIE)	Commission	2014-2015	REACCREDITED
Mechanical	ABET-Engineering Accreditation		
Engineering (BSME)	Commission	2014-2015	REACCREDITED
	Commission on Accreditation of		
Athletic Training (BS)	Athletic Training Education (CAATE)	2016-2017	REACCREDITED
Communication			
Sciences and	American Speech-Language-Hearing		
Disorders (MA)	Association (ASHA)	2015-2016	REACCREDITED
Doctor of Physical	Commission on Accreditation in		
Therapy (DPT)	Physical Therapy Education (CAPTE)	2013-2014	REACCREDITED
Health Informatics	Commission on Accreditation of		
and Information	Health Informatics and Information		
Management (BS)	Management (CAHIIM)	ANNUAL	REACCREDITED
Health Sciences (MS) -	Commission on Accreditation of		
Health Services	Healthcare Management Education		
Administration	(CAHME)	2013-2014	REACCREDITED
Health Services	Association of University Programs		
Administration (BS)	in Health Administration (AUPHA)**	2014-2015	CERTIFIED
	Council on Social Work Education		
Social Work (BSW)	(CSWE)	2015-2016	REACCREDITED
	Council on Social Work Education		
Social Work (MSW)	(CSWE)	2015-2016	REACCREDITED
Chemistry (BS)	American Chemical Society (ACS)**	2016-2017	APPROVED
Psychology (PhD) -	American Psychological Association		
Clinical Track	(APA)	2013-2014	REACCREDITED

FACILITIES EXPANSION AND IMPROVEMENT:

COMPLETED:

- o Mathematical Sciences Renovation, Phase I (HVAC renovation)
 - Budget \$4.9M
- o CFE Arena Plaza Renovation
 - Budget \$3.9M
 - Square Footage roughly 60,000 sf of exterior plaza
- o Libra Drive Widening
 - Budget \$4.8M
- o Parking Garage C Expansion
 - Budget \$9.5M
 - Square Footage 583,010 sf
- o Student Health Center Addition
 - Budget \$3.9M
 - Square Footage 10,409 sf new construction; 2,564 sf interior renovation
- o Recreation and Wellness Intramural Fields (3)
 - Budget \$1.5M
- o Band Practice Facility
 - Budget \$2.5M
 - Square Footage 4,000 sf interior; 7,000 sf exterior covered

UNDER CONSTRUCTION:

- Research I, Phase I
 - Budget \$53M
 - Schedule Phase I construction started December 2015; Phase II construction started September 2016. Build-outs added to scope mid-construction. Completion December 2017
 - Square Footage Phase I 67,475 sf; Phase II 38,300 sf; TOTAL 105,775 sf
- Engineering Building | Renovation, Phase |
 - Budget \$4.2M
- o Trevor Colbourn Hall for Arts and Humanities
 - o Budget \$38M
 - o Square Footage 135,000 sf
- o John C. Hitt Library Expansion (Automated Retrieval System)
 - Scope
 - Phase IA ARC building to hold 750,000 volumes; sprinkler existing library; new ADA compliant restrooms in existing library; new stair handrails (code compliant) in existing library
 - Phase 1B connection of ARC building to main library; new entry, conference rooms, build-out of fourth floor reading room
 - Phase 2 interior renovation of entire library (most likely in phases, a floor at a time)
 - Budget \$19.3M, Phase IA
 - Schedule December 2017, Phase IA; Phase IB is targeted to follow seamlessly
 - Square Footage 18,529 sf Phase IA
- College of Optics and Photonics Lab Build-out

- Budget \$2.1M total project cost
- Schedule Certificate of Occupancy March 16, 2017; final punchlist and closeout ongoing
- Square Footage 2,746 sf
- Business Administration Public Space Renovation
 - Budget \$1.1M
 - Schedule Certificate of Occupancy April 20, 2017
 - Square Footage 61,050 sf
- o Facilities & Safety Building 16F
 - Budget \$2.3M
 - Schedule anticipated completion August 2017
 - Square Footage 9,992 sf
- District Energy Plant IV
 - Budget \$15M
 - Schedule anticipated completion December 2017
 - Square Footage 10,970 sf (does not include exterior cooling tower yard)

IN DESIGN:

- o College of Optics and Photonics Building Expansion
 - Budget \$6.8M
 - Square Footage 13,500 sf
- Research Park Partnership 4
 - Budget \$42M; Partnership 4A already purchased at \$13.9M; Partnership 4B approved by UCF for purchase at \$19.1M; leaves \$9M total project cost for improvements to facilities.
 - Square Footage Partnership 4A 83,000 sf; Partnership 4B TBD
- Student Union Expansion
 - Budget \$18.5M
 - Square Footage 28,315 sf addition, 7,545 sf renovation
- Wayne Densch Sports Center Expansion
 - Budget \$3M shell only
 - Square Footage 36,722 sf
- o John Euliano Baseball Stadium Expansion
 - Budget \$3.25M
 - Square Footage 18,382 sf
- Student Athlete Nutrition Center
 - Budget \$1.9M
 - Square Footage new addition 4,800 sf; renovation 5,700 sf
- UCF Downtown Dr. Phillips Academic Commons
 - Budget \$60M
 - Square Footage 148,000 sf
- o UCF Downtown Multiuse Student Services, Support, and Housing Building
 - Budget Operating Lease
 - Square Footage 45,000 sf of shared student services and student support spaces plus 10 floors of student housing spaceCampus Landscape Plan

CONCEPTUAL STAGE:

- o UCF Downtown Tri-generation Plant
 - Budget \$15M
 - Schedule targeting October 2018 start-up and Fall 2019 completion
 - Square Footage TBD
- o UCF Downtown Parking Garage
 - Budget \$13.5M
 - Schedule targeting Fall 2019 completion
 - Square Footage TBD
- o UCF Downtown CEM Renovation
 - Budget \$5M
 - Schedule targeting Fall 2019 completion
 - Square Footage TBD
- UCF Downtown Police Department, Emergency Management, and Valencia College Safety & Security
 - Budget Lease
 - Schedule targeting Fall 2019 completion
 - Square Footage 3,000 sf
- o UCF Downtown Social Science Research Center
 - Budget Lease
 - Schedule targeting Fall 2019 completion
 - Square Footage 10,000 sf

Purdue University

Acting Vice President for Student Affairs (Dec. 2013 - Feb. 2014)

Responsibilities

General responsibility for health, wellness, and development of Purdue undergraduate students. Responsible for Air Force, Naval, Military Science ROTC; Student Health Center; Clinical and Psychological Counseling; Student Wellness Office; Dean of Students; Student Activities Office; Office of Student Rights and Responsibility; Student Assistance Center; Disability Resource Office; Horizons and SPAN Plan (first generation and adult student support services); University Bands; Purdue Musical Organizations; Convocations; Center for Career Opportunities; Recreational Sports and Intramurals; Development; Greek and Cooperative living; and the Business Office for Student Organizations.

Purdue University

Vice Provost for Undergraduate Academic Affairs (Jul. 2010 – Jul. 2014) Responsibilities

General responsibility for academic affairs of Purdue's undergraduate students. Includes line management and budget supervision for 8 director-level reports (2 Associate Vice-Provosts) who are collectively responsible for 228 FTE and \$56.2 MM in recurring funding. Responsible for Academic Policy Development and Implementation; Program Evaluation and Accreditation; Learning Assessment; Course Transformation; Instructional funding; Office of Admissions; Registrar; Student Financial Aid; Center for Instructional Excellence; Exploratory Studies Program; Academic Advising; Oral English Proficiency Program; Entrepreneurship and Innovation Certificate Program; Student Success Programs (Academic Success Center; Supplemental Instruction; Purdue Promise; Boiler Gold Rush; Summer Transition, Advising and Registration; Learning Communities, Veteran Affairs Office); and have dotted line oversight for University Honors Programs; and the Purdue Extended Campus Distance Learning Division. Serve as academic liaison to Indiana Commission for Higher Education. Represent academic affairs on the Capital Coordinating Committee. Represent Provost in his absence.

Accomplishments

Achieved record level of academic preparation and diversity in the entering class – Collaborated with deans to develop long-term targets of student body profile. Modified the admission process to include holistic admission based on student success factors identified by deans*. Aligned merit-based central scholarships (\$30 MM) with holistic success factors and empowered colleges to make selections*. Annually update progress toward goal and adjust targets with deans. For details, see annual Student Success Governance Report to Board of Trustees by Whittaker on October 12, 2012 https://www2.itap.purdue.edu/bot/viewDocument.cfm?id=5657

Expanding summer enrollment on path to balanced tri-mesters* – Led university-wide team to developed 10-year plan to increase summer enrollment from ca. 10,000 credit hours to 180,000. The goal is to decrease time-to degree, better utilize fixed assets in the summer, and make it easier for students to have experiences away from campus in the fall and spring. 100 new courses are offered for the summer of 2013. Two thirds are courses with over 90% utilization during the fall/spring semesters. Established an incentive-based budget model to insure costs are covered by departments offering courses. Appointed an Associate Vice-Provost for Undergraduate Academic Affairs to lead implementation. http://www.purdue.edu/provost/thinksummer/

Achieved record first-generation and low income student success – Expanded scholarship/support program from 294 students to 894 students while achieving a remarkable first-year retention rate of 2%. This exceeds the university average of 90%. First-generation, low-income students are typically retained at a level 10% below the average. Program will grow to almost 1000 students Fall 2013.

Implemented first core curriculum in Purdue's history* — Students beginning in Fall 2013 will meet foundational outcomes to enhance preparation and mobility in the first year, then meet a series of embedded outcomes within the context of their disciplines to insure both depth and breadth and define a Purdue graduate. Enacted and implemented by University Senate, over 120 courses have been approved for Fall 2013 to meet foundational outcomes. https://www.purdue.edu/senate/curriculum.cfm

Transforming the teaching and learning culture at Purdue – Initiated "Instruction Matters: Purdue Academic Course Transformation" (IMPACT) to change the culture of teaching based on research of how people learn*. As of Spring 2013, 63 courses have been transformed impacting 25,000 students by Fall 2013. 65% of the classes demonstrated increased course GPA with same or higher learning outcomes. 34% used active/collaborative techniques, 44% utilized some form of lecture capture. 33% were flipped. In the first cohort 7 of the 9 classes had the highest course GPA in over 4 years. The program and funding is in place to transform 30 courses per year indefinitely. The focus is to enhance learning gains in foundation courses. http://docs.lib.purdue.edu/impactreps/1/ I brought together experts from Teaching/Learning Technologies (ITaP), Discovery Learning Research Center, Center for Instructional Excellence, Libraries, and Purdue Extended Campus to develop and deliver this program. This is the broadest course transformation of its kind at a major university. http://www.purdue.edu/impact/

Transforming classrooms and learning spaces* – Based on success of IMPACT and the demand for spaces that allow different approaches to learning, we have renovated three library spaces into active learning spaces accommodating 120 students each. Three more are identified for renovation summer 2013. Over the next 5 years, approximately 2 spaces each year have been identified and funded for renovation. Also based on the success of IMPACT, Purdue's top capital priority is a \$90MM Active Learning Center at the center of campus. This project has been recommended for approval by the Board of Trustees and the Indiana Commission for Higher Education.

Insured a strong start for all students - Led Purdue Foundations of Excellence* evidence-based, campus-wide action plan. Executive partners included Vice President for Student Affairs, the Vice President for Housing and Food Services, and the Vice Provost for Diversity and Inclusion. The three year action plan (started Fall 2012) addresses all aspects of a first-year student's experience. The evidence and writing teams included 200 diverse participants (including faculty, staff, students, administrators). The target for one-year retention in 4 years is 93% and 4 year graduation of 50%. Accomplishment include adoption of a statement of educational philosophy to guide all work, increasing credentials and reducing student ratio for advisors, on-line degree audit and planning, use of a math placement system to better prepare students, expanding a college-level academic success center with 65 walk-in's per year to a university level center with over 1500 walk-in students this year, implementation of a course needs group to insure course availability, re-design of the student orientation week to increase academic preparation, more academic integration in housing units, and commencement of the equity scorecard — a project focused on identifying and removing gaps in success metrics experienced by underrepresented minority students. http://docs.lib.purdue.edu/provost_pubs/1/

Dramatically expanded learning communities to achieve the highest participation since their inception. In the Fall of 2012, 82 learning communities had 1853 students participating. 30% of freshmen participated in learning communities. Students who participated were retained at 5% higher level (94% first year retention) than those who did not, and graduated in 4 years at a 5% higher rate than those who did not (45% compared to 40%). This is a 21% expansion in 2 years.

Launch Honors College* Fall 2013 – Transitioning from 5 college-level honors programs to a residential honors college Fall 2013. The goal is to attract students having the highest potential for positive impact by providing a diverse experience based on scholarship, leadership and engagement. Residence space is reserved. Students have been invited. Dean search is underway. Curriculum has been approved. http://www.purdue.edu/honorscollege/index.html

Enhanced participation in undergraduate research and scholarship – Initiated the Journal of Purdue Undergraduate Research* to publish undergraduate first-author papers and abstracts. The journal is student run from the editorial staff to the page layout. I serve as Journal Advisor. Two volumes have been published and the third annual volume will be published this summer. http://docs.lib.purdue.edu/jpur/ Hosting the first University-wide Undergraduate Poster Session March 2013. Coordinating undergraduate research opportunities across campus for first time. http://www.purdue.edu/discoveru/

Increased enrollment in Purdue-taught distance learning courses by 250% and increased quality. Offered a new M.S. degree via distance in Educational Technologies that doubled enrollment expectations in first class of 2012.

Served as key academic partner on fundraising visits to expand need-base scholarships, to obtain the lead gift (\$10 MM) to the Center for Student Excellence and Leadership facility. Obtained a \$5 MM anonymous donation for scholarships to be matched to \$9.25 MM. Developed a new 5-person development team to raise funds for central scholarships, cultural centers, student affairs, and housing.

Purdue University

Associate Dean for Academic Programs in the College of Agriculture (Jul. 2002 – Jul. 2010)

Responsibilities

Responsible for graduate and undergraduate academic program quality and administration for the College of Agriculture. Ten direct reports. Areas of emphasis include quality of undergraduate learning, enhanced access, increased diversity, and growth of the graduate programs. Responsible for providing college-level leadership for academic programs and student services in the College of Agriculture and for the day-to-day operations of the Office of Academic Programs. Responsibilities include faculty development and evaluation; curricular leadership; representation of the academic mission to stakeholders; and student programs including recruiting, scholarships, leadership development, career services, transfers, records and honors programs.

Accomplishments

Increased preparation, access and capacity for agricultural education statewide

Increase Preparation*: Beginning in 2003, partnered with the Indiana Department of Education and other State Supported Universities to develop 3 Advanced Life Science courses to introduce college-bound students to the science of agriculture. These courses are laboratory science,

- require a year of high school chemistry or biology, and count toward the Core 40 AHD. They now have learning standards and a state-wide assessment
- Dual Credit*: The ALS courses are aligned with Purdue introductory courses in Animal Sciences, Food Science and Botany. Approximately 550 students registered in 2012-2013 to take these courses via dual credit. They are assigned a final grade using a college of Agriculture standardized test.
- 2010 Indiana Teacher of the Year: Byron Ernest (Lebanon High School) was the first agricultural science teacher to receive this award. He built his program on the ALS courses and collaboration with our Botany Department.
- Community College*: Collaborated with Ivy Tech, Vincennes University and the Commission for Higher Education to develop agriculture A.S. that articulate to Purdue College of Agriculture and A.A.S. programs that satisfy workforce needs. In 2012-2013, there are 7 Ivy Tech sites, one Vincennes University site and over 800 students enrolled
- Co-enrollment Program*: A prototype program between Ivy Tech Lafayette and Purdue West Lafayette that began in the 2011-12 academic year. Approximately 40 students co-enroll and take general education courses at Ivy Tech and agriculture courses at Purdue while being integrated into student life at both institutions.

Attract and yield better prepared students

- Dean's Scholars* In order to increase the number of top 10% students coming into the college
 and thereby the overall quality, we created an honors program focused on the needs and
 interests of academically talented students. They are provided access to faculty, research
 experiences, a first-year community, and exceptionally interesting classes. This program was
 initiated in the fall of 2005 and now has approximately 240 students.
- Developed departmental yield plans for well-prepared students. Yield for in-state admitted students increased from 65% to 75% between 2009 and 2010 and from 16% to 24% for out-ofstate students. Note that the 2009 cycle included a change in admission process that could have reduced yield.

Raised funds for and developed a facility for College of Agriculture student achievement, activities, and leadership development

Steve and Sandra Hageman Center for Student Achievement and Leadership*: \$612,500 was
raised from private contributions to renovate a wing of Agricultural Administration to house
Academic Programs and a student center. The center now houses tutoring, career
development, interview rooms, student meeting rooms, welcome center, scholarship services,
dean's scholars, agricultural ambassadors, FEELS: NSF program for first-generation and high
need students. The center averages 5 scheduled programs a week during the academic year.

Support and insure transformational learning experiences

- College of Agriculture Washington D.C. Public Policy Intern Program*: raised funds (\$15,000/yr), identified placements, selected and prepared students
- Undergraduate Research: approximately 60 students annually participate in undergraduate research funded by Academic Programs, the Research Office and SURF (in partnership with departments and faculty)
- *Undergraduate Poster Symposium*:* 50-60 students annually show scholarly work and compete for poster awards
- Leadership Development Certificate Program*: In 2005, created a co-curricular leadership development program. Currently has over 200 students and 75 faculty/staff coaches. Results in a transcript entry. Sought by employers.

Strategic Plan Goal (2008-2014) of 100% of students involved in either research, study abroad,
 career internship, leadership development or service learning

Improve programs based on outcome assessment

- Initiated outcome based program improvement in 2005 at the graduate and undergraduate levels*. Each year, the college focuses on one major outcome. We are making cultural change intended to make curricular decisions based on collective decisions informed by evidence
- Developed a college-wide assessment for oral and written communications (2007)
- Developed a faculty learning community (40) to define, develop activities, and assess critical thinking (2008-09)
- Graduate Professional Development (research, engagement, learning) outcome being developed

Develop a community of scholarship around teaching and learning

- Supported heads in identifying and hiring scholars of teaching/learning in 4 departments
- Helped adopt and institutionalize a definition of scholarship
- Orient new faculty, provide matching funds for grant applications
- Encourage and support sponsored program growth from \$600,000 in 2003-04 to over a \$1,000,000 in 2008-09.

Conduct Academic Program Review

- Plant Sciences (2009-10): 20 faculty from 4 departments are consolidating 3 plant science majors into one
- "Can Less Be More"* (2009-10): College-wide review of 44 undergraduate majors and 19 minors for potential consolidation resulting in less confusion for students, greater mobility, teaching efficiency and greater critical mass.

LEADERSHIP DEVELOPMENT:

Food Systems Leadership Institute, Assoc. of Public Land-grant Universities	2008-2010
ESCOP/ACOP Leadership Development Program	1999-2000
W.K. Kellogg National Leadership Development Program	1995-1999
Gallup Leadership Institute	1997

HONORS AND AWARDS:

American Association for Engineering Education, Global Leadership Forum Member, 2012- present Purdue Mortar Board Honorary Advisor, 2011-2012

Ivy Tech Community Lafayette Distinguished Service Award, 2008

Iron Key Honorary Advisor, 2008

FFA Honorary American Degree Awarded at the National FFA Convention October, 2007

Indiana Association of Agricultural Educators - Purdue Honorary Member, 2005

A.W. Farrell Outstanding Young Educator Award, December, 1994 by the American Society of Agricultural Engineers

Texas A&M Former Students Distinguished Teaching Award, College of Engineering, 1991 ASAE Paper Award, 1988

Student Awards

USDA National Needs Graduate Fellowship, 1984-1987
Earl Rudder Award for outstanding graduate of Texas A&M University, 1983
Gamma Sigma Delta outstanding senior in the College of Agriculture, 1983

^{*}Projects created/initiated during Whittaker's tenure

John G. Sutton Award for outstanding agricultural engineering undergraduate in the U.S.A., 1982

HONORARY SOCIETIES:

Iron Key
Golden Key International Honor Society
Tau Beta Pi
Alpha Epsilon
Society of Sigma Xi
Phi Kappa Phi
Alpha Zeta
Alpha Gamma Delta
Gamma Sigma Delta

SCHOLARLY ACTIVITIES:

Book

1. Huang, Y., A.D. Whittaker and R.E. Lacey. Automation for Food Engineering: Food Quality Quantization and Process Control. ISBN: 0-8493-2230-8. CRC Press. May, 2001.

Book Chapters

- 1. Whittaker, A.D. 1993. The role of expert systems in decision support systems. In (eds. Stuth and Lyons), Emerging Issues for Decision Support Systems for Grazingland Management. UNESCO-MAB Book Series Volume 8. Parthenon Publishers. Paris.
- 2. Whittaker, A.D. 1990. Commissioned contributing author. In (Anonymous), Beneath the Bottom Line: Agrichemical Approaches to Reduce Agrichemical Contamination. U.S. Congress Office of Technology Assessment.
- Engel, B., A.D. Whittaker, and R.H. Thieme. 1989. Knowledge representation and reasoning. In (ed. J.R. Barrett), Knowledge Engineering in Agriculture. Monograph of the ASAE. St. Joseph, MI.
- 4. Cross, H.R. and A.D. Whittaker. 1989. The objective measurement of value in meat animals. In (eds. Brownlie, Hall and Fabiansson), The Automated Measurement of Beef. Australian Meat and Livestock Corporation. Sydney, Australia. pp. 1-60.

Publications in Refereed Journals

Asterisk (*) indicates graduate students or employees supervised by Dr. Whittaker.

- Narasimhan*, B., R. Srinivasan, and A. D. Whittaker. 2003. Estimation of potential evapotranspiration from NOAA-AVHRR satellite. Applied Engineering in Agriculture. 19(3): 309-318.
- 2. Classen*, J.J., C. R. Engler, C. M. Kenerley, and A. D. Whittaker. 2000. A logistical model of subsurface fungal growth with application to bioremediation. Journal of Environmental Science and Health. A35(4): 465-488.
- 3. Huang*, Y., A.D. Whittaker and R.E. Lacey. 1998. Internal model control for a continuous snack food frying process using neural networks. Transactions of the ASAE. 41(5): 1519-1525.
- 4. Huang*, Y., A.D. Whittaker and R.E. Lacey. 1998. Neural network prediction modeling for a continuous snack food frying process. Transactions of the ASAE. 41(5): 1511-1517.

- 5. Huang*, Y., A.D. Whittaker, and R.E. Lacey. 1998. Internal model control for a continuous snack food frying process using neural networks. Transactions of the ASAE. 41(5): 1519-1525.
- 6. Huang*, Y., A.D. Whittaker and R.E. Lacey. 1998. Neural network prediction modeling based on elastographic textural features for meat quality evaluation. Transactions of the ASAE. 41(4):1173-1179.
- 7. Huang*, Y., R.E. Lacey, A.D. Whittaker, R.K. Miller, L. Moore and J. Ophir. 1997. Wavelet textural features form ultrasonic elastograms for meat quality prediction. Transactions of the ASAE. 40(6):1741-1748.
- 8. Choi*, Y.S., A.D. Whittaker, and D.C. Bullock*. 1996. Predictive Neuro-fuzzy Controller for Multivariable Process Control. Transactions of the ASAE. 39(4):1535-1541.
- 9. Classen*, J.J., W. Liu, C.M. Kenerley, and A.D. Whittaker. 1996. Fractal Analysis of subsurface growth of a genetically modified and the parental strain of Gliocladium virens. Transactions of the ASAE. 39(6):2217-2276.
- Sayeed*, M.S., A.D. Whittaker, and N.D. Kehtarnavaz. 1995. Snack Quality Evaluation Method Based on Image Features and Neural Network Prediction. Transactions of the ASAE. 38(4):1239-1245.
- 11. Freeman*, S.A. and A.D. Whittaker. 1994. Object-oriented methodology for analyzing and allocating resources for field operations. Transactions of the ASAE. 8(4):525-535.
- 12. McCauley*, J.D., B.R. Thane*, and A.D. Whittaker. 1994. Fat estimation in beef ultrasound images using texture and adaptive logic networks. Transactions of the ASAE. 37(3):997-1002.
- 13. Ophir, J., R.K. Miller, H. Ponnekanti, I. Cespedes and A.D. Whittaker. 1994. Elastography of beef muscle. Meat Science. 36(1994):239-250.
- 14. Park*, B., A.D. Whittaker, R.K. Miler and D.S. Hale. 1994. Ultrasonic spectral analysis for beef sensory attributes. Journal of Food Science. 59(4):697-701, 724.
- 15. Park*, B., Y.R. Chen, A.D. Whittaker, R.K. Miller and D.S. Hale. 1994. Neural network modeling for beef sensory evaluation. The Transactions of the ASAE. 37(5):1547-1553.
- 16. Park*, B. and A.D. Whittaker. 1994. Ultrasonic probe design for beef carcass scan. Transactions of the ASAE. 37(3):965-971.
- 17. Park*, B., A.D. Whittaker, R.K. Miller and D.S. Hale. 1994. Predicting intramuscular fat in beef logissimus muscle from speed of sound. Journal of Animal Science. 72:109-116
- 18. Park*, B., A.D. Whittaker, D.E. Bray and R. K. Miler. 1994. Measuring intramuscular fat in beef with ultrasonic frequency analysis. Journal of Animal Science. 72:117-125.
- Whittaker, A.D. and D.F. Cook. 1994. Counterpropagation Neural Network for Modeling a Continuous Correlated Process. <u>International Journal of production Research</u>. 33(70):1901-1910.
- 20. Cook, D.F. and A.D. Whittaker. 1993. Neural Network Process Modeling of a Continuous Manufacturing Operation. Engineering Applications of Artificial Intelligence. 6(6):559-564.
- 21. McCauley*, J.D. and A.D. Whittaker. 1993. Index for describing spatial variability in prescription farming. Transactions of the ASAE. 36(3):691-693.
- 22. Whittaker, A.D., B. Park*, B.R. Thane*, R.K. Miller and J.W. Savell. 1992. Principles of ultrasound and measurement of intramuscular fat. Journal of Animal Science. 70:942-952.
- 23. Cross, H.R. and A.D. Whittaker. 1990. Instrument grading and a value-based marketing system. Journal of Animal Science. 70(3):984-989.
- 24. Folse, J., H. Mueller and A.D. Whittaker. 1990. Object oriented simulation and geographic information systems. Artificial Intelligence in Natural Resources. 4(2):41-47.
- 25. Whittaker, A.D. and R.H. Thieme. 1990. Integration of problem-solving techniques in agriculture Computers and Electronics in Agriculture. 4(1990):271-273.

- 26. Whittaker, A.D., M.L. Wolfe, G.J. van Alem and R. Godbole. 1990. Object-oriented modeling using geographic information system data. Al Applications 5(4):49-58.
- 27. Whittaker, A.D., M.A. Tomaszewski, J.F. Taylor, R. Fourdraine, C.J. van Overveld and R.G. Schepers. 1989. Dairy herd nutritional analysis using knowledge systems techniques. Agricultural Systems. 31:83-96.
- 28. Cook, J., A.D. Whittaker, R.H. Thieme, O.R. Smith and G. Salvendy. 1988. Human intelligence models and their implications for expert system structure and research. Behavior and Information Technology. 7(4):417-430.
- 29. Cook, D. and A.D. Whittaker. 1988. Legal issues of expert system use. Applied Artificial Intelligence. 3:69-81.
- 30. Whittaker, A.D., E.J. Monke and G.R. Foster. 1988. ADAM: An Adaptive Assembler for Models. Transactions of the ASAE, 32(1):343-347.
- 31. Whittaker, A.D., G.E. Miles, O.R. Mitchell and L.D. Gaultney. 1987. Fruit location in a partially occluded image. Transactions of the ASAE. 30(3):591-596.
- 32. Thieme, R.H., J.W. Uhrig, R.M. Peart, A.D. Whittaker and J.R. Barrett. 1987. Expert system techniques applied to grain marketing analysis. Computers and Electronics in Agriculture. 1:299-308.

TEACHING:

Teaching Awards:

1991 - College-level Teaching Excellence Award in the College of Engineering, sponsored by the Former Students Association. First time an agricultural engineer was presented an award through the College of Engineering. Nomination and voting was by colleagues and students.

1994 - A.W. Farrell Outstanding Young Educator Award sponsored by the American Society of Agricultural Engineers. This award is given by the discipline's professional society to one recipient each year nation-wide to recognize excellent contributions to education in the profession.

Courses Taught

Asterisk (*) indicates course is required of all engineering freshmen. It is taught as a service of the College of Engineering.

2007 Spr, AGR 201, Multicultural Communication in Agriculture – discussion leader 2006-09 Fall, AGR 101H, Introduction to the College of Agriculture and Purdue University – Honors (1 cr.)

2004-05 Fall, AGR 101, (1 semester credit hour), 3 Sections

- 2001 Spring Agricultural Systems Management 489 (501). Information Systems for Agricultural Technology Companies (3 semester credit hours), 2 sections Summer Agricultural Engineering 689/Education Curriculum and Instruction 689. History of Information Technology in Science (2 semester credit hours), 2 sections; Agricultural Systems Management 489. Information Systems for Agricultural Technology Companies (3 semester credit hours), 1 section; College of Agriculture and Life Sciences 489. International Agriculture (3 semester credit hours), 1 section
- 2000 Spring Agricultural Systems Management 489 (501). Information Systems for Agricultural Technology Companies (3 semester credit hours), 2 sections

- 1999 Spring Agricultural Systems Management 489 (501). Information Systems for Agricultural Technology Companies (3 semester credit hours), 2 sections
- 1998 Spring Administrative leave as Interim Director of the Institute of Food Science and Engineering
- 1997 Spring Agricultural Systems Management 489. Information Systems for Technology Companies (3 semester credit hours)
 - Fall Administrative Leave as Interim Director of the Institute of Food Science and Engineering.
- 1996 Spring Semester Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours), 2 sections; Agricultural Engineering 370. Measurement and Control of Agricultural and Food Processes (3 semester credit hours), co-taught with Dr. Ron Lacey; Agricultural Engineering 615. Measurement Techniques in Agricultural Engineering (3 semester credit hours)
 - Fall Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours)
- 1995 Spring and Fall Semesters Industry Experience Leave of Absence
- 1994 Fall Semester Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours), 2 sections
 - Agricultural Engineering 681. Graduate Student Seminar (1 semester credit hour)
- 1993 Spring and Fall Semesters SABBATICAL
- 1992 Spring Semester Agricultural Engineering 689. Machine Vision Applications in Biological Materials (3 semester credit hours); Agricultural Engineering 440. Senior Management Project (3 semester credit hours)
 - Fall Semester -Agricultural Engineering 150. Introduction to Agricultural Engineering (2 semester credit hours)
 - Agricultural Engineering 480. Design Problems in Agricultural Industries (3 semester credit hours), co-taught with Drs. Wayne LePori and Ron Lacey; Agricultural Engineering 681. Graduate Student Seminar (1 semester credit hour)
- Spring Semester Agricultural Engineering 109. Engineering Problem Solving and Computing (3 semester credit hours); Agricultural Engineering 440. Management of Agricultural Systems (3 semester credit hours), faculty consultant; Agricultural Engineering 459. Agricultural Practices and Environmental Quality (3 semester credit hours)
 - Agricultural Engineering 485. Expert Systems for Undergraduate Advising Fall Semester Agricultural Engineering 150. Introduction to Agricultural Engineering (2 semester credit hours)
 - Agricultural Engineering 480. Design Problems in Agricultural Industries (2 semester credit hours), co-taught with Drs. Wayne LePori and Stephen Searcy; Agricultural Engineering 485. Problems: Expert Systems in the Poultry Industry; Agricultural Engineering 681. Graduate Student Seminar (1 semester credit hour)
- 1990 Spring Semester Agricultural Engineering/Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours), 2 sections; Agricultural Engineering 440. Management of Agricultural Systems (3 semester credit hours), faculty consultant; Agricultural Engineering 485. Problems: C++ Programming in GIS
 - Agricultural Engineering 689. Knowledge Systems Applications in Agriculture (3 semester credit hours)
 - Fall Semester Agricultural Engineering 681. Graduate Student Seminar (1 semester credit hour)
- 1989 Spring Semester -Agricultural Engineering/Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours), 2 sections; Agricultural Engineering 689. Knowledge Systems Applications in Agriculture (3 semester credit hours)

Fall Semester -Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours)

Agricultural Engineering 681. Graduate Student Seminar (1 semester credit hour)

1988 Spring Semester - Agricultural Engineering 689. Knowledge Systems Applications in Agriculture (3 semester credit hours)

Summer Semester - Agricultural Engineering 485. Problems: C Language Programming in Agriculture

Fall Semester - Engineering 109*. Engineering Problem Solving and Computing (3 semester credit hours); Agricultural Engineering 480. Design Problems in Agricultural Industries (3 semester credit hours), co-taught with Drs. C.B. Parnell and Wayne LePori

1987 Fall Semester - Agricultural Engineering 102. Design Concepts (2 semester credit hours) cotaught with Dr. Vince Sweat; Agricultural Engineering 480. Design Problems in Agricultural Industries (3 semester credit hours), co-taught with Drs. C.B. Parnell and Stephen Searcy

Graduate Committee Chair

M.Agr. Michael Hamilton, Agricultural Systems Management, 2001

M.Agr. Jason Schickedanz, Agricultural Systems Management, 2000

Ph.D. Balaji Narasimhan, Agricultural Engineering, 2003 (Co-chair with R. Srinivasan)

Ph.D. John Jacob Classen, 1995

Dissertation: A fungal growth model with application for soil bioremediation

Ph.D. Yanbo Huang, 1995

Dissertation: Snack food frying process input-output modeling and control through artificial neural networks

Ph.D. Bo Soon Park, 1991

Dissertation: Non-invasive measurement of intramuscular fat in beef through ultrasonic a-mode and frequency analysis

M.S. David Cole Bullock, 1995

Thesis: Modeling of a continuous food process with neural networks

M.S. Steven Andrew Freeman, 1990

Thesis: Object-oriented methodology for analyzing and allocating resources for field operations

M.S. Kenneth Ray Klanika, 1994

Thesis: Distributed parameter hydrologic modeling using object-oriented simulation

M.S. Narasimhan S. Kumar

Successfully defended 1994

M.S. James Darrell McCauley, 1993

Thesis: Knowledge-based modeling using GIS: nonpoint source pollution application

M.S. Leslie Leitzy Richburg, 1989

Thesis: Modeling and control of a twin-screw extruder

M.S. Brian Ray Thane, 1992

Thesis: Prediction of intramuscular fat in live and slaughtered beef animals through processing of ultrasonic images

SPONSORED PROGRAMS (TEXAS A&M AND PURDUE):

Title	Role	Funding Agency	Amount	Dates
Partnership for Recruiting and Retaining High Need, High Potential Students to Food, Environmental, Engineering, and Life Sciences (FEELS)	Co-PI	NSF	\$59,742 of \$597,423	9/2007 - 08/2012
Electronic Field Trips in Comparative Biology	Co-Pl	Howard Hughes Medical Institute	\$187,439 of \$749,754	7/2007 - 6/ 2012
Strategies to Extend the Integration and Assessment of International Education in the College of Agriculture	Co-PI	USDA-CSREES	\$9,967 of \$99,670	4/2006 — 3/2009
Tri-state Leadership Development program	Co-Pl, Manag ed by Janet Ayres	USDA-HEC	\$34,204 of \$97,476	8/2006 — 8/2008
2000-IRI-12, Advanced Digital Diagnostics and Control Technology for Enhanced Product Quality in the Food Processing Industry	Co-Pl	TAMU/IFSC	\$50,000	2000
Genosensor Based Approaches for Characterizing Microbial Populations and Identifying Horizontal Gene Transfer Events in Natural and Man-Made Environments	Co-Pl	TAMU: TWRI	\$15,000	2000
Center for Applications of Information Technology in Teaching and Learning Science	Co-PI	NSF/Centers for Teaching and Learning	\$10,000,000 \$15,000/yr	2001- 2006
Land Heritage Institute of the Americas Program Planning	Co-PI	San Antonio Water Supply System	\$100,000	1999
Low Energy Food Irradiation Facility	PI	TAMU: TAES/AEES	\$50,000	2000- 2001
MRE Foil Barrier Replacement	Co-Pl	Office of Naval Research	\$499,000	1997 - 1999
Raw Potato Characterization to Identify Micro and/or Macrostructural Components Associated with De-Oiling and Scorching of Potato Chips	Co-Pl	Frito-Lay	\$144,444	1997- 1998
Foods for Health	PI	TAMU: TAES Faculty Research Development Program	\$70,000	1997- 1998

Title	Role	Funding Agency	Amount	Dates
Evaluation of High Barrier Non-Foil Films for MRE Packaging Applications	Co-PI	United States Army Soldier Systems Command	\$255,388 (\$499,109 total)	1997 - 2000
Combat Rations Network	PI	Defense Logistics Agency	\$125,000	1996 - 2001
Combat Rations Network (CORANET) Partnership	PI	Defense Logistics Agency	\$75,000	1996 - 1999
National Leadership Program Fellowship	PI	W.K. Kellogg Foundation	\$65,000	1995 - 1998
Network Distributed Spatial Soil and Water Quality Modeling	PI	USDA/FAS/ MSD	\$3,050	1995 - 1996
Computer Innovation Proposal for Ethernet Connections	PI	TAMU: Associate Provost for Computing and Information Systems	\$4,430	1995
Graduate Assistant Non-Teaching to Develop Electronic Help desk for Engineering 109	PI	TAMU: Associate Dean of the Engineering Program	\$2,500	1995
Nondestructive Evaluation of Biological Materials for Product Quality and Process Enhancement	Co-Pl	Texas Agricultural Experiment Station Research Enhancement Program	\$25,000	1994- 1995
Development of Elastography Method and Apparatus for Meat Quality Assessment	Co-PI	Advanced Technology Program, State of Texas Coordinating Board	\$70,000	1994- 1997
Neural Network Based Process Identification and Control	PI	Frito-Lay, Inc.	\$110,000	1994- 1995
Advanced Extrusion Control Technology	Co-PI	Advanced Research Program, State of Texas Coordinating Board	\$45,000	1994- 1996
Computer Technology Program for Virtual Classroom Support System	PI	TAMU: Associate Provost for Computing and	\$7,180	1994

Title	Role	Funding Agency	Amount	Dates
		Information Systems		
Characterization of Snack Quality Using Machine Vision and Neural Networks	PI	Frito-Lay, Inc.	\$80,000	1993- 1995
Neural Network Control of Snack Food Unit Operations	Co-PI	Frito-Lay, Inc.	\$183,000	1992- 1994
PSE Detection in Pork	Co-PI	Eli Lilly	\$13,435	1992- 1993
Supercomputer Resources for Neural Networks	PI	TAMU: TAES Super Computer Fund	\$15,000	1992
Pesticide Degradation by the Genetically Engineered Fungus	Co-Pl	United States Department of Agriculture	\$34,352	1991- 1993
Automatic Image Analysis – A Technological Solution for High-Speed Characterization of Texas Wool Mohair and Cashmere	Co-PI	State of Texas Coordinating Board Advanced Technology Program	\$28,000	1991- 1992
A New Control Technology for High Quality Food Extrusion	PI	State of Texas Coordinating Board Advanced Technology Program	\$209,000	10/ 1991 - 8/ 1992
Speed of Sound Measurement in Porcine Tissue	Pl	Eli Lilly, Inc.	\$13,272	1991
Implementing Value Based Marketing of Beef	Co-Pl	TAMU: TAES Research Enhancement Program	\$17,500	1991
Management of Agricultural Production Spatially (MAPS)	Co-PI	TAMU: TAES Expanded Research Allocation	\$46,288	1990- 1991
Counterpropagation Modeling of Preformed Product Frying	PI	Frito-Lay, Inc.	\$5,000	1990
Management of Agricultural Production Spatially (MAPS)	Co-PI	State of Texas Coordinating Board Advanced Technology Program	\$46,288	10/ 1989 - 8/1991

Title	Role	Funding Agency	Amount	Dates
Optimization of quality characteristics in extruded products	PI	Frito-Lay, Inc.	\$15,693	1989- 1990
Engineered Instrumentation for Objective Instrument Grading of Beef and Pork	PI	TAMU: TAES Program Development Fund	\$17,300	1989- 1990
International Development	ΡĮ	TAMU: TAMU Office for International Coordination	\$1,500	1989
Modeling Spatially Heterogeneous Processes: Coupling Object-Oriented Simulation with Geographic Information Systems	Co-PI	TAMU: TAES Expanded Research Allocation	\$31,290	1989
Objective Determination of Intramuscular Fat in Beef: Technology Development	ΡÍ	TAMU: TAES Expanded Research Allocation	\$51,330	1989
PC Imaging System	Co-Pl	TAMU: TAES Program Development Funds	\$10,000	1989
Regenerative Concepts Modeling	Co-Pl	Space Research Center (NASA Project)	\$2,328	Sept. 1988 to Aug. 1989
Integration of Expert Systems with Conventional Problem Solving Techniques in Agriculture	PI	American Association for Artificial Intelligence Workshop Series	\$5,000	1988
Process Control Strategy for a Twin- Screw Extruder	PI	Frito-Lay, Inc.	\$17,896	1988
Geographic Information System/Artificial Intelligence System Integration	PI	TAMU: TAES Program Development Funds	\$22,000	1988
Integrated Decision Support Systems to Evaluate Alternative Managerial Practices Based on Profitability	Co-PI	TAMU: TAES Expanded Research Allocation	\$12,000	1988