Compliance, Audit, Risk Management and Legal Affairs Committee
September 28, 2021
10:15 a.m.
AGENDA

Discussion Item

CARL-6   Cyber Security Update

Background Information

Vice Chancellor for Information Technology Services Donna Heath will introduce Dr. Casey Forrest, ITS Chief Information Security Officer, and the Committee will hear an update on UNCG's infrastructure (e.g. staff, process, policy, training) around information security and response to cyber security issues.

Attachment:

      6.1   Dr. Casey Forrest CV (see below)

DR. CASEY J. FORREST
Winston-Salem NC

EDUCATION

PhD Leadership Studies, North Carolina A&T State University, 2012

> Epistemology & Learning Group, Leadership Studies. Doctoral work examined conceptual and practical tools needed to lead, organize, and engage institutions, organizations and communities to greater levels of quality and effectiveness. Key areas of study included human behaviors and relations, decision-making strategies, and organizational structures and dynamics. Dissertation Chair: Forrest D. Toms, Ph.D.

MBA Information Technology, Winston-Salem State University, 2006

> Epistemology & Learning Group, Business Administration. Graduate work centered on business administration with a concentration in Information Technology. Primary focus areas included macroeconomics, marketing, ecommerce, statistical analysis and organizational behavior. Advisor: Suresh Gopalan, Ph.D.

BS Management Information Systems, Winston-Salem State University, 2002

> Epistemology & Learning Group, Management Information Systems. Undergraduate work concentrated on core principals of technological resources within organizational structures. Key aspects of study targeted technological based tools and strategies, coupled with comprehensive management techniques for organizational growth and sustainability. Advisor: Greg Taylor, Ph.D.

PROFESSIONAL DEVELOPMENT

Certificate, Duke University, 2014 – Durham NC, USA

> Duke Continuing Studies. Professional development focused on elevating the clarity, coherence, and accuracy of organizational communication by utilizing an interpretive praxis of advanced written, verbal, and non-verbal delivery.

Certificate, Dartmouth College, 2013 – Hanover NH, USA

> Dartmouth Tuck School of Business. Professional development focused on enhancing the strategic thinking, leadership, and communication skills of senior leaders whose actions and decisions have strategic implications for the organization.

Certificate, Harvard University, 2012 – Cambridge MA, USA

> Harvard Graduate School of Education. Professional development focused on understanding and implementing practical strategies to establish evidence-based assessment and accountability systems within higher education institutions.

EMPLOYMENT

University of North Carolina Greensboro, Greensboro NC, USA
A constituent institution of the University of North Carolina system
>   *Chief Information Security Officer (January 2021 – Present)*

Winston-Salem State University, Winston-Salem NC, USA
A constituent institution of the University of North Carolina system
>   *Information Security Manager (2018 – 2020)*
>   Serve as Information Security and Compliance Manager with the primary responsibility of developing, managing, and monitoring the Information Security Office. In addition, provide evaluation and management of network security, server security, IT access security, and user access in the University infrastructure, along with establishing procedures for enterprise-wide service owners to mitigate security risks, provide audit compliance, and support IT governance. Duties and responsibilities include the following:
>   *Information Security Operations:*
>   - Manage operational security staff and contractual vendors
>   - Manage Security Operations Center Tools and Services – (e.g., DUO MFA, Ellucian Ethos, Ellucian Banner Access Management, FortiSIEM, McAfee ePO, Netwrix Auditor, 0365 Security & Compliance Center, OEM Cloud Control, Spirion Identify Finder, Frontline Digital Defense, Tripwire, OWASP-ZAP, KnowBe4, and ProofPoint)
>   - Identify, detect, and respond to security threats and incidents
>   - Campus vulnerability management and assessment
>   - Campus identify & access management
>   - Security assessments for new projects and service deployments (e.g., MS Teams, OneDrive, Web, Vender Engagements, etc.)
>
>   *Compliance and Risk Management:*
>   - Campus Security Awareness & Training
>   - Internal OIT Risk Assessment
>   - Internal OIT Audits of Privileged Accounts & Access
>   - Electronic Discovery and Litigation Holds
>   - Change Management Process and Procedures -- (Development, Processing, and Oversight)
>   - Monitor compliance with internal standards, University system and statewide standards, external accrediting standards, and legal requirements
>
>   *Enterprise Services:*
>   - OIT Communications -- (Development, Processing, and Oversight)
>   - University Strategic Support (e.g., Co-Chair WSSU Strategic Plan Committees; Various WSSU Student Success Projects -- ALEKS Online Tutoring & Assessment, EAB Academic Solutions, and AdmissionsPros CRP)
>   - Point of contact for security work groups, committees, and projects

- Assist the CIO in developing and maintaining university IT Security policies and standards relating to the acquisition, implementation, and operation of information technology and communication systems

Assistant Director of Administrative Information Systems (2013 – 2018)
(Interim) Director of Administrative Information Systems (July 2018 – September 2018)
Provide leadership, management, and supervision to AIS staff, such as directing operations, support and maintenance of existing infrastructure, applications, and the development of new technical solutions. Assist with budget oversight and planning, along with strategic framing to improve overall AIS service and effective execution. Duties and responsibilities include the following:

- *Planning & Organizing:* Develop plans with business stakeholders for system upgrades or implementation of new projects. Provide well-defined proposals, including procedures, deadlines and accountability structures. Coordinate activities by scheduling assignments, setting priorities, and directing the work of AIS staff. Develop cost estimates, human resource requirements, work plans, time schedules, and assigned tasks to meet objectives.
- *Strategic Leadership:* Oversee AIS resource allocation and funding to efficiently support university technical requests and operation. Provide leadership and direction to the AIS staff for development and implementation of new systems and solutions for the university Enterprise Resource Planning System (Ellucian Banner), along with any ancillary software applications. Provide input to higher-level managers and administration regarding direction of work within the AIS staff, ensuring its alignment with the university strategic plan.
- *Staff Development:* Ensure the professional growth and development of all employees within the AIS staff. Evaluate and verify employee performance through the review of completed work assignments and work techniques. Provide guidance to the systems, programming, and operation staff in the resolution of hardware/software related problems. Identify staff development and training needs.
- *Technical Leadership:* Develop, communicate, and enforce standards, policies, and compliance requirements. Remain up-to-date with emerging technologies, trends, and strategies. Administer industry best practice standards for system development in new and existing administrative information systems. Provide well-defined plans, including procedures, deadlines and accountability for system upgrades or implementation of new projects.

ADDITIONAL SERVICE TO WINSTON-SALEM STATE UNIVERSITY
Co-Chair, University Strategic Plan Committees, February 2020 – Present
Member, UNC-System Information Security Council, June 2018 – Present
Member, Intellectual Properties Committee, February 2016 – 2018
Member, UNC-System Finance Conference Board of Directors, February 2015 – 2018
Co-Chair, CIO's OIT Strategic Plan Committee, October 2015 - 2019

HONORS & RECOGNITION AT WINSTON-SALEM STATE UNIVERSITY
2018 Chancellor's Achievement Team Award - Student - Student Centeredness
2017 Chancellor's Achievement Team Award - Finance - Enhancing Revenue & Stewardship
2016 Chancellor's Achievement Team Award - Human Resources - Sustainability

University of North Carolina School of the Arts, Winston-Salem NC, USA

An internationally recognized arts conservatory of the University of North Carolina system

Business & Technology Applications Analyst (2005 – 2013): Supported business operation and work flow analysis to develop and maintain an efficient, technological platform for the Division of Financial Services, Student, and Human Resources ERP system (Ellucian Banner). Administered UNIX and Windows servers/applications which support University internal & external DNS control (Red Hat Linux), employee & student building security access (Blackboard One Card), and facilities management tracking system (Mainsaver).

Systems Administrator & Help Desk Support Supervisor (2003 – 2005): Oversaw the University employee & student building security access system (Blackboard One Card), supporting 500 faculty/staff and 1100+ students annually. Maintained One Card operational budget and reconciliation, as well as supervised 2 One Card office staff members. Led University Help Desk Support, comprised of 3 help desk technicians and 5 lab technicians, supporting 500+ faculty/staff, 1100+ students, and 3 computer labs. Administered UNIX servers/applications for University internal & external DNS control, as well as Windows Server backup for scheduling and security.

Help Desk Support Supervisor (2001 – 2003): Supervised personnel, including: hiring, determining workload and assignment delegation, training, monitoring, and evaluating performance (3 help desk technicians and 5 lab technicians). Participated in team capacity building meetings, providing input as needed for department/agency users. Interpreted and applied agency policy/procedures, business practices, federal/state laws and regulations, etc. Measured operations, programs, processes and/or practices for quality and effectiveness.

Help Desk Support Technician II (2000 – 2001): Contributed to University computer maintenance, configurations, installations, and logical development in a 1600+ student, faculty/staff network. Directly assisted in the dispersion of Windows2000 upgrade and Microsoft Exchange installations throughout 500 faculty/staff LAN network. Provided first-level problem resolution with users via telephone support by classifying level, priority, and nature of problem. Opened, tracked, and closed tickets within a work order management tool.

ADDITIONAL SERVICE TO UNIVERSITY OF NORTH CAROLINA SCHOOL OF THE ARTS
Member, UNC Financial Systems Conference Board, May 2012 - 2013
Member, NC State Personnel Focus Group on Performance Management, September 2010
Member, Director of Systems and Procedures Search Committee, December 2009
Member, SPA Grievance Committee, October 2009
Member, Staff Council, July 2009-2011
Member, Director of Human Resources Search Committee, October 2009
Member, General Counsel Search Committee, September 2007

ENTREPRENEURSHIP

The CTACK Group, Winston-Salem NC, USA, 2007 – Present
Technology, Integrated Services, and Solutions
> ***Founder, Chief Executive Officer***. Lead projects focused on developing and implementing comprehensive solutions for private and public industries, municipalities, educational institutions, and private non-profits. Professional services specialize in leadership development, technology, research, organizational management, and education.

FIELDS OF STUDY

TECHNOLOGY

Platforms: Windows, UNIX, LINUX, HP-UX, Solaris, Mac OS
Languages: JavaScript/HTML, C++, Visual .NET, Oracle SQL
Tools: Office 365, Toad for Oracle, Evisions MAPS/Form Fusion, Adobe Photoshop, Flash MX, Joomla, SPSS; *Security Tools:* DUO MFA, Ellucian Ethos, Ellucian Banner Access Management, FortiSIEM, McAfee ePO, Netwrix Auditor, 0365 Security & Compliance Center, OEM Cloud Control, Spirion Identify Finder, Frontline Digital Defense, Tripwire, OWASP-ZAP, KnowBe4, and ProofPoint
Training: Managing & Maintaining Windows Server 2003, UNIX Administration, LINUX Administration, UNIX Security & Auditing, Ellucian ERP Banner Finance/Student/HR/Security

RESEARCH

Global Leadership, Political Philosophy, Macroeconomics, Ethics & Social Responsibility, Cultural Diversity, Organizational Structure & Dynamics, Quantitative & Qualitative Research, Human Behavior & Relations, Higher Education Technology

CONSULTING AND ADVISING

PUBLIC SECTOR

North Carolina A&T State University, Greensboro NC, USA, 2013
> Served as a methodology and content integrity consultant for a University grant funded project focused on community engagement and economic development

North Carolina A&T State University, Greensboro NC, USA, 2010 - 2012
> Designed, implemented and maintained School of Education – Leadership Studies Department web presence; also provided research and technical consultation

Winston-Salem State University, Winston-Salem NC, USA, May 2008 – July 2011
> Developed a student centered leadership curriculum for Upward Bound Program participants; also facilitated a focus group targeting educational and cultural development

PRIVATE SECTOR

Davidson County Economic Development Commission, Lexington NC, USA, 2010 - 2012
> Provided technical maintenance, consultation and training for office operations

J. Butler's Bar & Grille, Greensboro NC, USA, 2007 – 2012
> Developed and implemented web presence; also provided technical consultation and training

TEACHING

Salem College, Winston-Salem NC, USA
The oldest continuously operating educational institution for women in the United States
Adjunct Assistant Professor of Business Administration (2013– Present)
BUAD 111 Management Information Systems: Develop course to examine the role of computers, databases, networking and application software in managing the business organization and examine their integration with other functions such as accounting, production, marketing and finance. The ethical, strategic and global aspects of Information Systems are also explored.
BUAD 201 Principles of Management: Develop course to examine the historical concepts and environments that play a major part in the application of management. Attention is focused on topics such as strategy formulation and implementation, motivation, teamwork, decision-making, communications, diversity, information technology and operations management.
BUAD 124 Business Ethics: Develop course to examine some of the various ways in which ethics is relevant to business by analyzing the ethical elements in problems that arise in the business world. Emphasis is placed upon the application of general ethical theories to such problems.

HONORS & RECOGNITION AT SALEM COLLEGE
Outstanding Faculty Award Recipient -- 2013, 2015

PROFESSIONAL WORKSHOPS AND SEMINARS

Growing Your Business with Asian Consumers, *Columbia University*, Web-based Seminar, January 2012
Thailand Trade & Investment Symposium, *Wake Forest University*, Winston-Salem NC, September 2011
Lecture Series, Dr. Marshall Schminke, *Wake Forest University*, Winston-Salem NC, February 2011
Broyhill Executive Lecture Series, *Wake Forest University*, Winston-Salem NC, November 2010
North Carolina Economic Developers Association, *Annual Conference*, Emerald Isle NC, 2010
Eminent Leaders Series, *President of Kate B. Reynolds Foundation*, Greensboro NC, December 2009
Hugh Shelton Leadership Forum, *North Carolina State University*, Raleigh NC, November 2009
Annual Diversity Day, *Elon University*, School of Law, Greensboro NC, February 2009
NC Sustainable Energy Association, *Building a Sustainable Energy Economy*, Raleigh NC, February 2009
Hugh Shelton Leadership Forum, *North Carolina State University*, Raleigh NC, November 2008
Leadership Lecture Series, *Elon University*, School of Law, Greensboro NC, September 2008
Alternative Energy Symposium, *Wake Forest University*, Winston-Salem NC, September 2008

PROFESSIONAL AND COMMUNITY SERVICE AND AFFILIATIONS

Chair (2017; 2018), **North Carolina State Employees' Credit Union Advisory Board**, 2011 - 2018
Member, **Golden Key International Honour Society**, 2011 - Present
Member, **North Carolina Sustainable Energy Association**, 2008 - 2013
Member, **Phi Beta Sigma Fraternity, Inc.**, 1999 - Present

SELECTED TALKS AND PRESENTATIONS

Migrating successfully through professional development and change management. North Carolina
A&T State University, Office of Information Technology Services, Guest Lecturer, 2015

Scholar & Practitioner Actualization: The Post-Doctoral Transition. North Carolina A&T State
University, Leadership Studies Ph.D. Department, Guest Lecturer, 2012

Research Modeling and Proposal Techniques. North Carolina A&T State University,
Leadership Studies Ph.D. Department, Guest Lecturer, 2012

Development Process for Leadership Decision Making. North Carolina A&T State University,
Leadership Studies Ph.D. Department, Guest Lecturer, 2011

Generation Z: Connected, Diverse, and Redefining 21st Century Leadership. Winston-Salem State
University, Trio Upward Bound Program, 2011

Rescuing Leadership from the Point of No Return. North Carolina A&T State University, 2010

Hugh Shelton Leadership Forum, North Carolina State University, 2009

Public Policy and Technological Networks. North Carolina A&T State University, 2009

Organizational Development Seminar. North Carolina A&T State University, 2009

Program versus Process: Integrating the Five Step Elimination Process. Community Empowerment
Network, 2009

Leadership Training Workshop. North Carolina A&T State University, 2009

An Engaged 21st Century Land-Grant Institution: Community & University Engagement. North
Carolina A&T State University, 2009

Change of Power: How Evolutionary Leadership Can Solve the Energy Crisis. North Carolina A&T
State University, 2008

PAPERS AND PUBLICATIONS

Forrest, C., Rashid, A., & Powell, B. (2014). Lead the way: Principles and practices in community and
civic engagement. Chapter 9, Leadership & sustainability: Coexisting disciplines for community
development. Published by Cognella, Inc.

Forrest, C. 2010. Adapting total quality management theory to american renewable energy leadership: A
descriptive analysis and application. *Drafted for journal submission*

Forrest, C. 2009. Distinguishing ethical consequentialism within frameworks of american political
leadership. *Drafted for journal submission*

Forrest, C. 2009. Self-test theory of leadership. *Drafted for journal submission*

Forrest, C. 2009. Surrounding human behavior and relations. *Drafted for journal submission*