FACULTY NEWSLETTER

Welcome from the Executive Director:

As we head into the Fall semester stretch, it seems that courses, students, and our research have settled into a pattern that is slowly drifting back towards pre-pandemic ways. We are not there yet nor do I expect that it will ever be the same, but I expect that by the end of the Spring semester, we'll be in what people will call the new normal, but will really just be some modification of the past. I have started meeting individually with some faculty and students. A couple of comments from these meetings.

First from faculty, I'm pleased to see that some of you are finding new collaborators, writing interdisciplinary grant proposals and really living the vision of the School; however, this is not everywhere. A few faculty are wishing to be more engaged, especially in collaborations, but haven't found a way yet to really jump in. Dongsong Zhang (SDS Director of Research) and I have been brainstorming ways from seminars, to awards, to other ideas to provide more opportunities. We'll keep putting opportunities out there, but I think the best thing will still be when we are all more comfortable with and agreeing to be face to face. There is nothing like a random conversation with someone within SDS, but from a very different specialty. More on this later.

As for my student conversations, I'm amazed by our students' resiliency. They continue to be eager for our classes and for the most part very happy with what we

are doing. We are even expecting our first BS graduates in May. Hard to believe we've brought this degree from concept to having students graduating. It seems like a long time, but just yesterday I started working on the Request to Establish the BS.

Events coming up: Informal gatherings on Thursdays continue, SDS Tailgate for Homecoming on Nov 6th, and late breaking news, a reception with our Industry Advisory Board on Dec 9th (Reading Day). I hope that you will be willing to attend some of these events.

Important!

TO READ THE ENTIRE NEWSLETTER CLICK "VIEW ENTIRE MESSAGE" AT THE BOTTOM OF THIS EMAIL FOR JOB OPPORTUNITIES!

SCHOOL OF DATA SCIENCE

IMPORTANT UPDATES

Undergraduate Sports Analytics Certificate

The School of Data Science is launching an undergraduate
Certificate in Sports Analytics!
The certificate is a partnership between SDS and the college of health and human services to prepare students for a career in Sports Analytics. Students will have the opportunity to learn from John Tobias, a senior analytical statistician with ESPN, and one of the first in the country to apply analytics in sports television. The new certificate will help students get a competitive edge in this booming industry. Read all about it below!

Full Article

Grant Updates

Congratulations Shan Yan for being awarded two NIH Grants! See the

details below.

- NIH/NIEHS - 1R21ES032966-01

Title: ATM activation by DNA single-strand breaks
The objective of this R21 project is to determine the molecular mechanism of SSB-induced ATM activation by the MRN complex and APE1.
Total award amount: $415,250
Award period: 09/17/21-08/31/23
Role: Principal Investigator

- NIH/NCI - 1R01CA251141-01A1 (Subaward from Cleveland Clinic)

Title: New mouse model of cisplatin-induced AKI and development of prevention therapy
The goal of this R01 project is to test the major hypothesis that that cisplatin induces APE2 overexpression and binding with MYH9, provoking mitochondria fission and further prompting cell death pathways to drive kidney injury. The R01 subaward to UNCC is to support experiments characterizing the binding and interaction between APE2 and MYH9 and testing the role of an identified small molecule inhibitor in APE2 endo and exo activities.
Total award amount: $384,341 (subaward portion to UNC Charlotte)
Award period: 08/01/21-07/31/26
Role: Subaward PI and Co-I of overall R01 (PI: Jianjun Zhao)

How to Request Updates to Your SDS Faculty Directory Listing

If you have any changes that you would like the School of Data Science to make to your Faculty Directory listing, please submit this **Google Form** with the updated information. This can include your job title, education, courses taught, biography, external organization & title (for adjunct faculty), headshot, etc. You can view your current listing on the SDS Faculty Directory below.

Faculty Directory

Summer School Survey

The SDS is in the process of building out the summer course schedule for the SDS graduate programs: Health Informatics and Analytics and Data Science and Business Analytics. Many of you already have commitments, but we wanted to get a sense of *who among the faculty might be interested and available to teach a DSBA or HCIP course this summer.* This could be one of our existing course offerings or a new special topics course that you may have been considering. If you have not already responded, please take a moment to respond to the survey link below.

SDS Summer Teaching Survey

Dare in Reality Hackathon 2021: Envision Virgin

Racing and Genpact Hackathon

Looking for an opportunity to engage your students in competition with best-in-class Analytics students and young professionals from across the world? Registration has just opened for this hackathon, a collaboration between **EVR Analytics team** and **Genpact**, to attract and engage with best-in-class Analytics students and young professionals from across the world. The challenge is simple yet powerful: the participating teams have to build a machine learning model that can predict the EVR racing drivers' lap times for the all-important qualifying sessions that determine what position they start the race in.

- First Prize: $7000
- Second Price: $5000
- Third Prize: $3000

The deadline to register for this competition is **November 8th, 2021.**

Learn More Here

RESEARCH UPDATES

AI for Good Foundation Curriculum and Datasets

The AI for Good Foundation has **just released its initial Launchpad curriculum that is available for faculty use.** They are focused on the 17 UN Sustainable Development Goals and are building datasets for curriculum use at universities. They have **provided documents here and here. Feel free to review and use**. Please let Doug Hague know if you have feedback or further requests about the materials.

CDC Announces a New Center for Forecasting and Outbreak Analytics

The Center will bring together next-generation public health data, expert disease modelers, public health emergency responders, and high-quality communications, to meet the needs of decision-makers.

ADA (Americans with Disabilities Act) Compliance Research

SDS is in discussion with the Office of Disability Services, OneIT, Campus Facilities and others to explore/design possible data-driven efforts to, for example, identify physical areas of campus which may not be ADA compliant/accessible.

If you would like to participate in this dialog, please reach out to Rick Hudson (**rhudson@uncc.edu**), SDS Project Manager.

Army - HBCU/MI Faculty Immersion Program

The U.S. Army has launched a new initiative titled: Army - HBCU/MI Faculty Immersion Program. **The purpose** of this program, to be executed under the authority 10 U.S.C. 2362, is to **foster collaboration, enhance research capabilities, and encourage participation in the programs and activities of the Department of Defense by covered educational institutions.** The concept is a **two-year program executed in three phases**. **Phase One** places an HBCU/MI junior faculty in an Army laboratory for a minimum of ten consecutive weeks for training and collaboration with Army in-house researchers. Phase Two places the HBCU/MI junior faculty member at an R-1 Institute of Higher Education (IHE) for a semester of training and experience working with Army and the R-1 IHE researchers. **Phase Two** also includes the further development of an Army-relevant research proposal for continuing research into phase three of the program. **Phase Three** entails eighteen months conducting the proposed research at the junior faculty member's home institution (i.e., the HBCU/MI) with continued collaboration with Army and R-1 IHE teammates. The Army is seeking applicants with junior faculty members who are currently performing research in the field of artificial intelligence and machine learning (AI/ML).

The opportunity has been announced via Special Notice in www.grants.gov under FOA: W911NF-19-S-0013. The Special Notice includes a list of past and current Army-sponsored R-1 IHEs for HBCU/MI participants to consider as long-term teammates.

Intelligence Community Center of Academic Excellence (IC-CAE)

Charlotte's Intelligence Community Center of Academic Excellence (IC-CAE) is planning an exercise for students slated for the end of the fall semester. As currently envisioned, the event will consist of a role-playing exercise during which students filling the roles of intelligence analysts will be presented with a

dynamic scenario over the course of several hours. At various points during the exercise, students will brief their findings and assessments to participants playing the roles of intelligence consumers and policymakers.

SDS Collaboration with the Coral Restoration Foundation

The Computer Vision class is facilitating a student team project supported by data provided by the Coral Restoration Foundation (CRF) of Key Largo, FL. Using photomosaic data provided by CRF, students are exploring the application of machine learning approaches towards automating the extraction of data from imagery. The objective is to extract information describing the growth of corals in areas where the foundation is working to seed reefs.

The Knowledge Discovery in Databases class is also exploring other CRF data holdings.

Data Science Virtual Career Expo Panel

The **Data Science Academy** invites students, employers, alumni, and staff to the first all-campus Data Science Virtual Career Expo. The Industry Career Panel is co-sponsored by the Data Science Academy and the National Consortium for Data Science.

SDS Thursday Social at The Golden Owl
Thursday 4:30-6:00 pm

Every Thursday, the SDS hosts an informal gathering for faculty and staff to talk and share ideas and insights. The Golden Owl is located in the UNC Charlotte Marriott Hotel & Conference Center. Please join us!

ADSA Annual Meeting
November 10-12 | Savannah, GA

Registration is now open for the ADSA Annual Meeting, taking place **November 10-12 in Savannah, GA** with a virtual option. We understand there is still some uncertainty surrounding Covid and possible travel restrictions. Please know the health and safety of our community is our top priority. We will be following Savannah's local mandates as well as the CDC guidelines, which may require masks at all times while inside. If in the unfortunate event we are forced to cancel part or all of the meeting, we will be offering refunds.

Doug Hague is on the planning committee for the conference and is**helping organize a session called "Data science for social impact in university-based programs."** We are members of ADSA and get a**discount** off the registration fee, **so reach out to Doug before you register.**

Register Here

Scientific Data Analysis at Scale (SciDAS) Cloud Computing Workshop

Registration for SciDAS, being held virtually and in-person in Chapel Hill, NC

on December 6-7, is now open!
Please note that the first 40 people who register will be eligible for in-person attendance.

The event intends to facilitate a discussion among researchers, developers, funders, and research computing professional communities on:

- Perspectives on Cloud Computing
- Workflow Development in Democratized Clouds for Porting to Commercial Clouds
- Applied Kubernetes for Genomics
- Managing Cloud costs
- Campus Change Management for Cloud Activities
- FAIR principles
- Data Security
- Data Lifecycle in the cloud

Register Here

Tentative Dates Set for 2021-2022 SDS Faculty Meetings

We are currently working on the 2021-2022 SDS calendar. We have **identified three tentative dates** for next year's SDS Faculty and Staff meetings. We are planning for only three formal/in-person faculty meetings for the coming academic year.

- **Tuesday, January 11th, 2022, 3:30-5:00 pm**
- **Monday, April 11th, 2022, 3:30-5:00 pm**

We plan to **offer all three on-campus at Alumni House, along with a virtual option**. We will host a reception for faculty after each meeting (5:00-6:00 pm) for those in attendance.

Women in Data Science and Analytics Frontiers - Tentative Dates Announced

SDS is starting the planning process for WiDS 2022 and AFC 2022. Both events will be held in-person and on campus in the new UNC Charlotte Marriott Hotel & Conference Center. Tentative dates:

- Women in Data Science (WiDS) Charlotte Conference: **Monday, February 28, 2022**
- Analytics Frontier Conference: **Thursday, March 31, 2022**

We are **looking for faculty and staff to join the planning committees** for each of these events. If you are interested please reach out to either Doug Hague (dhague@uncc.edu) or Joshua Hertel (jhertel@uncc.edu).