



# RESEARCH UPDATE

A WEEKLY COMMUNICATION FROM THE OFFICE OF RESEARCH & SPONSORED PROGRAMS

VOLUME 2: NUMBER 1  
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## GENERAL INFORMATION

- **Happy New Year!**

- I hope that you had a peaceful and restful break and took a little time to recharge. One of my favorite things to do during vacation breaks is to read. Over the past couple of weeks I have enjoyed a few books that I highly recommend. Here are a few things to put on your reading list:
  - [The Book of Eels: Our Enduring Fascination with the Most Mysterious Creature in the Natural World](#), by Patrik Svenson
  - [Some Assembly Required: Decoding Four Billion Years of Life, from Ancient Fossils to DNA](#), by Neil Shubin
  - [Cold Storage](#), by David Koeppe
  - [The Strange Case of Dr. Couney: How a Mysterious European Showman Saved Thousands of American Babies](#), by Dawn Raffel
  - [The Invention of Surgery. A History of Modern Medicine: From the Renaissance to the Implant Revolution](#), by David Schneider, MD

Put one on your nightstand and chip away at a few pages each day. My current read, [Apollo's Arrow: The Profound and Enduring Impact of Coronavirus on the Way We Live](#), by Nicholas A. Christakis, sits on my nightstand alongside the new 14<sup>th</sup> edition of [Guyton's Textbook of Medical Physiology](#).

*All the Best for 2021,  
Joey*

- **Laboratory Internet Upgrades**

- Network maintenance and upgrades will occur at the Research Laboratories on Friday (1/8) from 5:00pm to 7:00pm and Monday (1/11) morning until noon. There will be no internet connection during these times.

- **Research Laboratory Access**

- The Research Laboratories continue to operate at reduced capacity and will remain accessible throughout the break to authorized faculty. Please contact [Dr. Woods](#), [Ms. Kalli Martinez](#), or the [Research Office](#) in advance of any visits to the facilities.

- **Suggestions for Student Research Day Keynote Speaker**

- In preparation for our 4<sup>th</sup> Annual Medical Student Research Day (MSRD) that will occur on July 16<sup>th</sup>, 2021, the Office of Research is seeking input for the keynote speaker. MSRD is our annual event that celebrates student research accomplishments; therefore, we are seeking suggestions for a nationally or internationally respected researcher or physician scientist that can capture the purpose and theme of MSRD. Suggestions for keynote speakers should be sent to [Dr. Ontiveros](#) and will be brought to the Research Advisory Council for further discussion and final selection. We look forward to an exciting event in July!

- **ClinicalTrials.gov Registration**

- [ClinicalTrials.gov](#) is a resource provided by the U.S. National Library of Medicine. [42 CFR Part 11](#) calls for registration of applicable studies in ClinicalTrials.gov. Such studies are typically those that involve an intervention. Please contact the Office of Research or the IRB if you have questions regarding ClinicalTrials.gov. We will be posting additional information in an upcoming issue of Research Update

Contact: [Research@bcommn.org](mailto:Research@bcommn.org) or [IRB@bcommn.org](mailto:IRB@bcommn.org)

## MEDICAL STUDENT RESEARCH

- **Responsible Conduct of Research Required Training**
  - All students are required to complete a Responsible Conduct of Research (RCR) training course, entitled “**Student & Trainees RCR**,” which is offered through the Collaborative Institutional Training Initiative (CITI) Program (link: [www.citiprogram.org](http://www.citiprogram.org)). **Students must complete this training course no later than January 19<sup>th</sup>, at 8:00 AM.** Contact [Dr. Ontiveros](#) or the [Research Office](#) for more information.
- **Summer Research Experience**
  - The Office of Research and Sponsored Programs (ORSP) is pleased to announce the 2021 Medical Student Summer Research Experience and invite you to submit applications for the program. The summer experience will be offered during the summer of 2021 and consists of a 6-week research experience that will commence with Orientation Day on June 2nd and culminate on July 17th with Medical Student Research Day. Participants are expected to attend Orientation Day, devote full commitment to the mentored research, and present their work during Medical Student Research Day. A list of available projects and applications are available on the [Summer Research Experience webpage](#). Completed applications must be received by the **deadline date: February 2nd, 2021 at 11:59 PM.**
- **Louisa Burns Osteopathic Research Poster Presentations Call for Abstracts**
  - The Louisa Burns Osteopathic Research Committee (LBORC) is calling for submissions to the [2021 LBORC-NUFA Research Poster Presentation](#). The presentation will be held in March during the 2021 AAO Convocation. The deadline for submission is February 1, 2021.  
*Contact: [Adrienne Kania, DO, FAAO NMM/OMM](#)*
- **AOA Research Training Grants**
  - The [AOA Research Training Grants](#) for medical students program will begin receiving applications this month. The application cycle will open on December 15, 2020 and close on February 15, 2021. These training grants provide up to \$5,000 in funding for medical students and aim to promote the osteopathic approach to care through AOA-funded research. All individuals planning to submit a grant must contact the Office of Research & Sponsored Programs and submit a [Proposal Transmittal Form](#) along with other requisite information at least five (5) business days in advance of the submission deadline. *Please contact [Dr. Benoit](#) for more information regarding the grant submission process.*
- **Student Research Support Fund**
  - In support of Burrell College medical student research and creative scholarship endeavors, the Office of Research and Sponsored Programs (ORSP) is pleased to announce the new 2020-2021 Student Research Support Fund and invites student researchers to submit an application. This funding opportunity provides Burrell College medical students with limited funds to support their research and creative scholarship. Applications are available on the [program website](#).
- **Distinction in Research**
  - The Office of Research and Sponsored Programs (ORSP) is pleased to announce the [Distinction in Research](#) that will begin accepting applications on **January 15, 2021**. The Distinction is a highly intensive and optional path that provides opportunities for medical students who seek higher levels of mentored research experiences.

S.J. Ontiveros, Ph.D.

Contact: [sjontiveros@bcomNM.org](mailto:sjontiveros@bcomNM.org) or [research@bcomNM.org](mailto:research@bcomNM.org)

## RESEARCH LABORATORIES

- **Director’s Corner**

### Office of Research Participates in Research Summit

On December 1<sup>st</sup>, 2020 the Office of Research & Sponsored Programs (ORSP) participated in a joint Research Summit with New Mexico States University and Albuquerque-based TriCore Reference Laboratories with the goal of identifying collaborative opportunities between the three institutions. TriCore Reference Laboratories is an independent, not-for-profit, clinical reference laboratory co-sponsored by Presbyterian Healthcare Services and University of New Mexico Health Sciences Center. Also in attendance were representatives of Rhodes Groups—a wholly-owned subsidiary of TriCore that provides laboratory software solutions, consulting and professional services related to data analytics for population health research—and the TriCore Research Institute, the R&D arm of TriCore that focuses on assay development in clinical and diagnostic laboratory medicine. Each institution was afforded the opportunity to present on their capabilities and ongoing research interests in areas likely to lead to collaboration and potential future funding. In the interest of keeping the Burrell College research community apprised of these opportunities, we provide the

following bulleted summary of ongoing research by NMSU and TriCore that may be of interest to Burrell researchers for the purposes of identifying areas for collaboration. Burrell College faculty members with an interest in exploring possible partnerships should contact [research@burrell.edu](mailto:research@burrell.edu). Burrell students should not attempt to contact individual NMSU faculty members or TriCore scientists in response to this summary; contact ORSP instead.

### **New Mexico State University**

- Computer Science Department: Enrico Pontelli, PhD
  - Machine Learning and predictive models of cardiovascular disease
  - Biomarker discovery and validation
  - Deep Learning tools to predict asthma attacks and severity
- Biology Department: Kathryn Hanley, PhD; Brook Milligan, PhD
  - Possible unintended consequences of a successful Dengue vaccine
  - Mosquito immunity
  - Molecular vector physiology
  - Improving diagnostics through predictive modeling
- College of Health and Social Services: Jill McDonald, PhD
  - Maternal and child health disparities in border communities
  - US-Mexico border region health disparities
  - Adverse effects of environmental metal exposures
  - Differentiating between “good” and “bad” stress
  - Cancer disparities
- College of Engineering: Antonio Garcia, PhD
  - Detection and Inactivation of waterborne pathogens
  - Signal/Image processing and machine learning
  - Artificial neural networks
  - Flow Cytometry and optofluidics
  - Universal rapid testing with plasmon resonance multiplexing

### **TriCore Reference Laboratories**

TriCore employs multiple PhDs, PharmDs, MDs/DOs, and MPHs involved in collaborative translational and population-based research in the fields of microbiology, immunology, molecular biology and epidemiology.

- Infectious Disease: Karissa Culbreath, PhD D(ABMM)
  - Automation of routine microbiological assays
  - Digital culture analysis and algorithm-based colony counting
  - Phenotypic colony recognition
  - Culture-negative diagnostics
- TriCore Research Institute: David Grenache, PhD, MT(ASCP), D(ABCC)
  - Pre-clinical and clinical trials of novel in vitro diagnostic instruments (Roche, Abbott, Siemens, etc.).
  - Digital Pathology and Machine learning/AI-enabled augmentation of pathologist interpretation
  - Access to extensive remnant clinical sample repository, culture collection, and UNM Human Tissue Repository
- Rhodes Group
  - Data analytics and diagnostic intervention
  - Machine learning to distinguish between COVID-19 and the flu
  - New Mexico Health Information Collaborative (NMHIC)
  -

*Contact the [Research Office](#) for More Information  
Michael Woods, Ph.D.  
Director of Research Laboratories*

### • **Laboratory Services for Faculty Investigators**

- Laboratory PIs, could you use some assistance running a gel or ELISA? We can help! The Research Laboratories is pleased to announce a new effort to advance faculty-driven research by offering Laboratory Services in support of college-sponsored research. All you need to do is submit a request using a form available at this link: [https://bcommm.co1.qualtrics.com/jfe/form/SV\\_8esL69vynTRTLA9](https://bcommm.co1.qualtrics.com/jfe/form/SV_8esL69vynTRTLA9)

- **FY\_22 Budget Planning**
  - Budget planning for the next fiscal year is current in progress. Faculty with specific research equipment needs should submit proposals to the Office of Research by the end of the business day on Friday, January 15, 2021. Minor equipment is that which is <\$5,000 and major equipment is >\$5,000. Proposals should include a price quote, statement of how the proposed equipment will be used to enhance the College research capabilities, and for major equipment items, a list of potential users from within the College. Request will be prioritized by the Office of Research & Sponsored Programs in consultation with the Research Advisory Council. Please send all proposals electronically to [research@bcomnm.org](mailto:research@bcomnm.org)
- **Research Laboratory Access**
  - We wish to remind laboratory users to contact Ms. Kalli Martinez before visiting the Research Laboratories. We continue to operate at a reduced capacity and it is important that we maintain awareness of laboratory user access.

Email: [M.Woods, Ph.D. and K. Martinez](mailto:M.Woods, Ph.D. and K. Martinez)

- **Human Physiology Laboratory**
  - The IRB and Office of Research are working with Principal Investigators towards a plan for resuming face to face human subjects research in the Human Physiology Laboratory. Each project is being considered on a project-by-project basis from a risk/benefit perspective by the IRB based on information provided by the principal investigators. Assessment of risks and benefits includes those imposed to both subjects and investigators during the current COVID-19 pandemic. Contact the [IRB](#) or [Research Office](#) for more information.

## DATES AND DEADLINES

- Institutional Review Board (IRB) – January 29, 2021; 12:00 – 1:30 p.m.
  - Last day to submit materials for this meeting: January 18, 2021
  - Email: [IRB@bcomnm.org](mailto:IRB@bcomnm.org)
- Institutional Biosafety Committee (IBC) – February 3, 2021, 12:00-1:00 p.m.
  - Last day to submit materials for this meeting: January 21, 2021
  - Email: [Research@bcomnm.org](mailto:Research@bcomnm.org)
- Research Advisory Council (RAC) – January 15, 2021, 1:00 - 3:00 p.m.
- [Distinguished Researcher Seminar Series](#)
  - The Distinguished Researcher Seminar Series will continue as an online series through the Spring Semester. Dates will be announced as speakers are confirmed. Hosts for the Spring Seminars are as follows:
    - January: Department of Clinical Medicine
    - February: Department of Physiology & Pathology
    - March: Department of Biomedical Sciences
    - April: Medical Student Body

## POLICY & REGULATORY UPDATE

- **Burrell College New or Updated Policies and Procedures**
  - The Biosafety Manual has been updated after undergoing IBC review and is available on the Burrell College website. A minor modification has been made to the Blood-borne Pathogen Exposure Control Plan and we are still finalizing an SOP to inform the process by which Burrell Investigators can document Hepatitis B vaccination.
    - [Biological Safety Manual](#)
    - [Bloodborne Pathogen Exposure Control Plan](#)
  - Research Laboratories Services Request, [RSP.018](#)
    - This policy defines the procedure whereby a Burrell College faculty may request Laboratory Services in support of College-sponsored research projects.

- **Human Research Protection**
  - [AHRQ Guide Notice on Exception to the Use of the Single IRB Review Requirements During the Coronavirus Disease 2019 \(COVID-19\) Public Health Emergency](#)
- **CDC**
  - [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\) 6<sup>th</sup> Edition](#) **New Edition!** *Download your Free Copy.*

## FUNDING OPPORTUNITIES, MEETINGS, and NOTICES

- Guidance on new proposal submission and related information is available in MS Teams and on the Research Office Website. Please submit a completed [Proposal Transmittal Routing Request](#) in advance of the deadline. Allow five (5) business days for institutional review and signatures.
- [NIH Weekly Funding Opportunities and Notices](#) – January 8, 2021
- American Osteopathic Association
  - [AOA Research Grants](#) for DOs, MDs, and PhDs
  - [Research Opportunities](#) for resident physicians, fellows and osteopathic medical students
- [Wells Fargo Philanthropic Services](#) (Search for Opportunities)
- [Experimental Biology 2021](#) will be held April 27-30, 2021 as a virtual meeting.
- [AACOM Educating Leaders 2021](#) will be held April 20-22 as a virtual event.
- [American Academy of Osteopathy Convocation](#) will be held March 17-21, 2021 (*Currently being planned as a hybrid event*)

## CLINICAL TRIALS INFORMATION

- **Clinical Trials Information**
  - [TrialSite News](#) is a digital media resource dedicated to transparent and open coverage of clinical research trial sites around the globe.

## INFORMATION FOR AUTHORS

- **Case Report Guidance**
  - Many of you have informed us of your intent to publish a case report. Please consult our [Case Report Publication Guidance](#) for additional information as you prepare your manuscripts for submission. While IRB approval is generally not required for Case Reports, the College expects that authors have secured permission for medical record access and follow all applicable regulations, policies and procedures. Please feel free to contact the [Office of Research](#) if you need additional guidance.
- **Information on Publishing Venues**
  - The Office of Research and the Burrell College Health Sciences Library are available to assist with any questions that you may have regarding appropriate places to publish your research.
- **Cureus Journal of Medical Sciences**
  - Cureus is an open access peer reviewed medical journal based in San Francisco, CA that offers free publication for articles that follow their author instructions.
- **Journal of Osteopathic Medicine**
  - The Journal of the American Osteopathic Association (JAOA) is now the Journal of Osteopathic Medicine (JOM). The first issue of the new Journal will be out in January.
- **Call for COVID-19 Research Papers:** The JAOA editors invite researchers to share information and data about their experiences with COVID-19 with the osteopathic community.
- Are you interested in publishing a literature review? The Journal of the American Osteopathic Association has created a video that provides tips for putting together a quality [Systematic Literature Review](#)

## RECENT AND FORTHCOMING SCHOLARLY WORK BY BURRELL COLLEGE RESEARCHERS

(Please email us with your news and we will add it to future Updates.)