

RESEARCH UPDATE

VOLUME 2: NUMBER 15

May 6, 2021

CONGRATULATIONS TO THE CLASS OF 2021

It's time to say farewell to another graduating class and celebrate all that you have accomplished. Over the past years, we have supported your goal of becoming an osteopathic physician and looked to the day that we would see you leave the Burrell College nest. As part of your education, some of you completed research projects and made contributions to the medical literature. All of you searched for answers and became consumers of research by perusing the medical literature for key information that would benefit your patient. *You are all researchers!* As you embark on your residency training, you will have many opportunities to contribute to the wealth of medical knowledge and a greater need to know about the contributions that other have made. I encouraged you to continue your quest for knowledge and, when the opportunity arises, contribute to the base of knowledge. Ask questions, seek answers, share your findings with others. . . and remember that the most important research findings involve teamwork. Congratulations DOCTORS!

Dr. Benoit

To those of you who engaged in research during your time at Burrell College, remember the lessons from your experience. Critically analyze new information as it is presented to you because not everything can be trusted at face value, things often don't go the way you expect them to but in this lies opportunity, and you know a lot more than you think you know, so speak up! It has been my honor watching you all grow into the physicians that you have become. My only wish is that you carry with you a healthy thirst for new knowledge and exploration throughout your careers. Congratulations!

Dr. Woods

GENERAL INFORMATION

- Laboratory Standard & Hazard Communication Training (Important Information for Summer Research Participants)
 Laboratory Standard & Hazard Communication Training is a required in person course for all individuals who will conduct research in the Burrell College BioScience Research Laboratory. Access cards to the Laboratory will not be issued to individuals who have not completed the training course. The next Laboratory Standard & Hazard Communication Training is scheduled for:
 - o Friday, May 14, 2021
 - 1:00 3:30 p.m.
 - o Burrell College Room 160

CLICK HERE TO REGISTER

- Finance Office Announces Dates for Year End Ordering
 - The year-end schedule for submission of purchasing requests has been made available by the Controller, Renee Huber-Landrum. Please review the following dates and plan accordingly for your research related purchases.
 - April 1, 2021: Last Day to Place International Orders
 - June 4, 2021: Last Day to Submit Purchase Requisitions for Domestic Orders
 - June 8, 2021: Last Day that Finance will generate Purchase Orders
 June 29, 2021: Last Day for Receiving and Expense Reimbursements
 - July 19, 2021: Purchase requisitions resume in workflow

KUDOS

- Dr. Gabor Szalai was appointed to a National Science Foundation peer review panel that met in April.
- Dr. Harald Stauss has successfully led an effort leading to the formation of the Rio Grande Chapter of the American Physiological Society. Other contributors to the effort include Dr. Del Corral, Dr. Gosselink, and Dr. Benoit.
- Ms. Kalli Martinez has been appointed to the NMSU Institutional Biosafety Committee.
- Dr. Marlene Melendez and Ms. Nina Nuñez have received a Department of Education CARES Act: Higher Education Emergency Relief Fund Grant for \$167,734. The grant period is 04/16/2021 -04/15/2022.

MEDICAL STUDENT RESEARCH

• Student Research Reporting Policy

To ensure that student research is conducted in compliance with institutional policies and applicable regulations, all students are required to inform the Office of Research and Sponsored Programs of their research plans before **beginning a research project**, **submitting an abstract to a conference**, or **submitting a manuscript for publication**. Informing our office involves the completion of an online form that is available through the <u>Medical Student Research – Starting Your Research web page</u>. For more information, please visit the <u>Medical Student Research website</u>, or contact Dr. Ontiveros or the Office of Research.

• 2019 Medical Student Research Day Speaker Confirmed

We are pleased to announce our keynote speaker for the 4th annual medical student research day. Andrea Amalfitano, Ph.D., D.O., Dean of the Michigan State University College of Osteopathic Medicine, is an expert in the field of gene transfer vectors for vaccine applications and has a longstanding commitment to the advancement of osteopathic education. Dr. Amalfitano will be joining us on July 15, 2021 to participate in Medical Student Research Day activities and present a lecture on his research.

Jonathan Kreger, OMS-II SGA Director of Medical Research

RESEARCH LABORATORIES

• Director's Corner

The next pandemic threat is inevitable; the next pandemic is not.

As the COVID-19 pandemic appears to be waning here in the United States we must not lose sight of the fact that SARS-CoV-2 continues to wreak havoc across the globe. India, home to more than 1 billion people, is currently seeing close to 400,000 new confirmed cases and 4,000 deaths per day. International travel and tourism are still at a standstill with most countries only now beginning to open travel bubbles with neighboring countries. Now is the time for America to demonstrate the global public health leadership we are capable of by sharing our excess vaccine supply with the rest of the world and wresting control of the pandemic away from the virus before it has the opportunity to mutate into something subversive to our hard-fought gains.

We must also not lose sight of the fact that this is not the only global health threat we will face in our lifetimes. While nothing of the scale of COVID-19, over the past decade or so we have seen emerging disease threats occur in west Africa (Ebola), central and South America (Zika, Chikungunya), and across the globe (2009 H1N1). We must also consider the threat of "Disease X", or novel pathogens currently unknown to people. If we have learned anything from the past year, it's that the US was too unprepared, arrogant and incompetent to control this pandemic. As a result, more than 500,000 Americans died with countless others still suffering from lingering post-acute sequelae. The scenario scientists have been discussing since before I even began training in this field finally came true and we fumbled the kickoff. It doesn't have to be this way. The 2003 response to SARS-CoV-1 and the 2018 response to Ebola in DRC demonstrated how aggressive containment strategies and public health efforts can limit the spread of highly virulent pathogens. We should reinvigorate the One Health approach to public health, which considers the health of humans, animals and the environment as intertwined. We must address the health inequities that COVID-19 exposed and finally reckon with chronic diseases that weigh down our healthcare systems like a boat anchor dragging through the sand. We must

strengthen our public health policies and finally accept that global health threatens our national security. We must support, and trust, the science of pandemic prediction, which warned about the specter of an Asian-origin, bat-derived coronavirus five years ago.¹

We will never rid the planet of new and evolving pathogens for as long as we are around, for both our fates are forever intertwined. That being said, we have the tools, knowledge, and resources to never let what happened in 2020 ever happen again.

1. Menachery VD, Yount BL Jr, Sims AC, Debbink K, Agnihothram SS, Gralinski LE, Graham RL, Scobey T, Plante JA, Royal SR, Swanstrom J, Sheahan TP, Pickles RJ, Corti D, Randell SH, Lanzavecchia A, Marasco WA, Baric RS. SARS-like WIV1-CoV poised for human emergence. *Proc Natl Acad Sci U S A*. 2016 Mar 15;113(11):3048-53. doi: 10.1073/pnas.1517719113. Epub 2016 Mar 14. PMID: 26976607; PMCID: PMC4801244.

Michael E. Woods, Ph.D, Director, Research Laboratories

• Research Laboratories Services Requests

Laboratory investigators, do you need to run a gel, split/feed cells, or conduct and ELISA and don't have a lot of time to spend at the Research Labs? We can help! The Office of Research can provide Laboratory Services in support of your research endeavors. All you need to do is submit a request for Laboratory Services support, which includes specific information on when and what you need accomplished. All requests must include a detailed technical protocol. Please review the **Research Laboratories Services Request SOP** and contact Kalli Martinez or Dr. Woods with any questions about how we can best support you.

CLICK HERE TO SUBMIT A REQUEST

• Research Laboratory Access

We wish to remind laboratory users to contact <u>Ms. Kalli Martinez</u> 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.

DATES AND DEADLINES

- Don't Forget to Submit Summer IRB and IBC Protocols for Review
 - Summer Research will soon be here. We wish to remind all Principal Investigators to submit your protocols for research involving human subjects to the IRB and/or biohazardous agents to the IBC in order to avoid possible delays in beginning your research. For existing protocols, please remember to inform the respective committee of any additions to your research team.
- Institutional Review Board (IRB) April 26, 2021 12:00 1:30 p.m.
 - o Last day to submit materials for the April meeting: April 13, 2021.
 - o Email: IRB@bcomnm.org
- Institutional Biosafety Committee (IBC) July 14. 2021, 12:00-1:00 p.m.
 - o Last day to submit materials for this meeting: July 1, 2021
 - o Email: Research@bcomnm.org
- Research Advisory Council (RAC) May 21,2021, 1:00 3:00 p.m.

POLICY & REGULATORY UPDATE

- Burrell College New or Updated Policies and Procedures
 - Research Misconduct Proceedings

Burrell College encourages the pursuit of research and creative scholarly activities as part of its mission, strives to create an environment that supports all academic and scholarly endeavors, and promotes integrity in the conduct and dissemination of research. The College recognizes that incidents of misconduct in research and creative scholarship is rare, but also understands that procedures for fair and thorough investigation of allegations of research misconduct must be defined. In accordance with our responsibility to comply with federal regulations 42

CFR Part 93, this SOP defines the process whereby the College investigates and acts on matters involving allegations of misconduct in research and scholarly activity.

• Grant Submission Process

This Standard Operating Procedure (SOP) details the process for submitting extramural grants. All Burrell College faculty, staff, and students applying for and submitting extramural grants must follow the procedures outlined in the SOP. The key steps outlined in the process include:

- 1. Submission of a Notification of Intent to Apply for Extramural Funding
- 2. Preparation of the grant proposal by the Principal Investigator or Program Director in accordance with sponsor application requirements
- 3. Submission of a Proposal Transmittal Form with attached proposal and supporting documents to the Office of Research & Sponsored Programs for internal routing and review. *Note: All proposals must be routed for internal review and to ensure compliance with federa, state, and College regulations and/or policies prior to submission. P.I.s and P.D.s should allow five (5) days for this review.*
- 4. Proposal Submission shall occur only after internal routing and approvals are obtained. Please contact the Office of Research and Sponsored Programs with any questions and remember that advanced planning is the key to a successful grant submission.

• Leave of Absence for Advanced Study

All students requesting a Leave of Absence for extended periods of research, creative scholarly activity, or any other form of advanced study must follow the process outlined in the procedure. Please contact the Registrar for more information. It is recommended that a student initiates the request sixty (60) days in advance of the requested leave date.

- Biological Safety Manual
- Bloodborne Pathogen Exposure Control Plan

Research Laboratories Services Request, <u>RSP.018</u>. This SOP defines the procedure whereby a Burrell College faculty may request Laboratory Services in support of College-sponsored research projects.

• <u>COVID-19 Human Subjects Research Guidance</u>

This SOP provides information to investigators conducting face to face human subjects research.

- **Human Research Protection** o 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) 6th Edition New Edition! Download your Free Copy.
- World Health Organization
- Laboratory Biosafety Manual, 4th Edition (New Edition, December 2020)

FUNDING OPPORTUNITIES, MEETINGS, and NOTICES

• CALL FOR PROPOSALS: AOA Osteopathic Manipulative Medicine Observational & Explorative Research
The AOA Bureau of Osteopathic Research and Public Health (BORPH) is reopening the RFA on Osteopathic
Manipulative Medicine (OMM) Observational & Explorative Research Studies, addressing one of 14 research
hypotheses designed to investigate the successful effects of Osteopathic Manipulative Medicine (OMM) on disease.
These topics include:

• OMT and Pain Management

- OMT will reduce the length of days of headaches in migraine patients.
- OMT will be effective at reducing facial pain and improves patient perceptions of care in facial sinus congestion.
- OMT will be an effective technique to reduce pain and NSAID use in tension headache patients.
- OMT will reduce the use of medications, especially opioids.

OMT and Surgical Outcomes

- OMT will reduce post-operative shoulder surgery edema.
- OMT will reduce chest discomfort after thoracotomy.
- OMT will enhance the quicker return of normal bowel function post-operative.

• OMT and Respiratory Issues

- OMT will reduce the frequency of hospitalizations in patients with COPD and COPD exacerbations.
- OMT will improve pulmonary function in patients with asthma.

OMT will decrease the respiratory symptoms of long-haul COVID patients.

OMT and Pediatric Issues

- OMT will reduce the number of hospital days for pediatric patients suffering from pneumonia.
- $\bigcirc \quad \text{OMT will improve feeding difficulties in newborns.} \\$

Other OMT Research Topics

- OMT will enhance immunological response to vaccines.
 OMT will reduce the incidence of falls in the frail elderly.

Funding Amount, Up to \$20,000 maximum; Project Period, October 1, 2021 – March 31, 2023 (18 Months); Application Due **Date**, Tuesday, June 1, 2021. Awards will be announced in September 2021.

Please review the Request For Applications for more information.

- NIH Weekly Funding Opportunities and Notices April 30, 2021
- American Osteopathic Association
 - o AOA Research Grants for DOs, MDs, and PhDs
 - o Research Opportunities for resident physicians, fellows and osteopathic medical students
- Wells Fargo Philanthropic Services (Search for Opportunities)

CLINICAL TRIALS INFORMATION

• Clinical Trials Information

TrialSite News is a digital media resource dedicated to transparent and open coverage or 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 <u>Case Report</u> 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**
 - o 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).
- 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.)