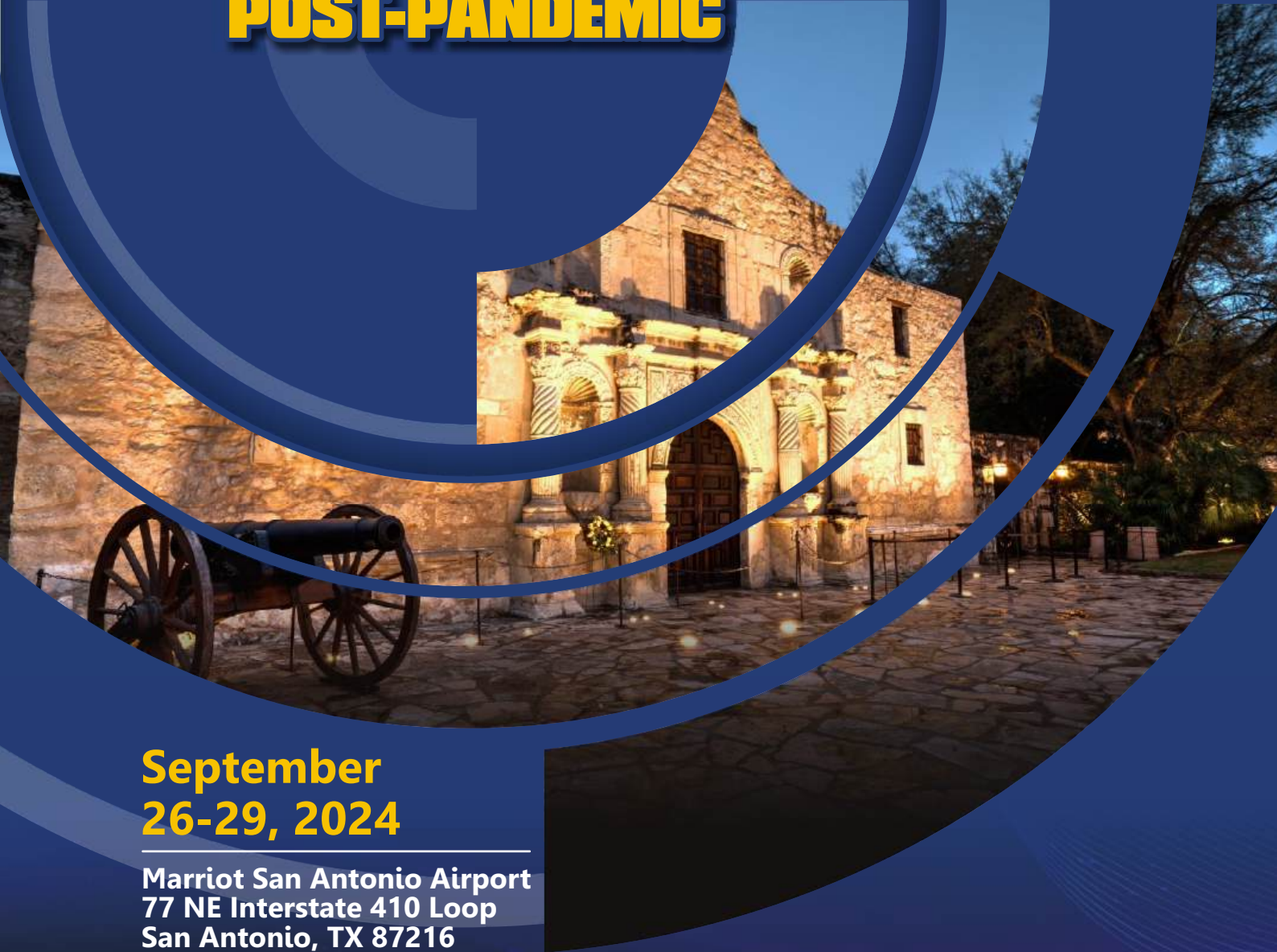




18th Annual NAPPSA

Scientific Conference & Exposition

MILESTONE MOMENTUM POST-PANDEMIC



**September
26-29, 2024**

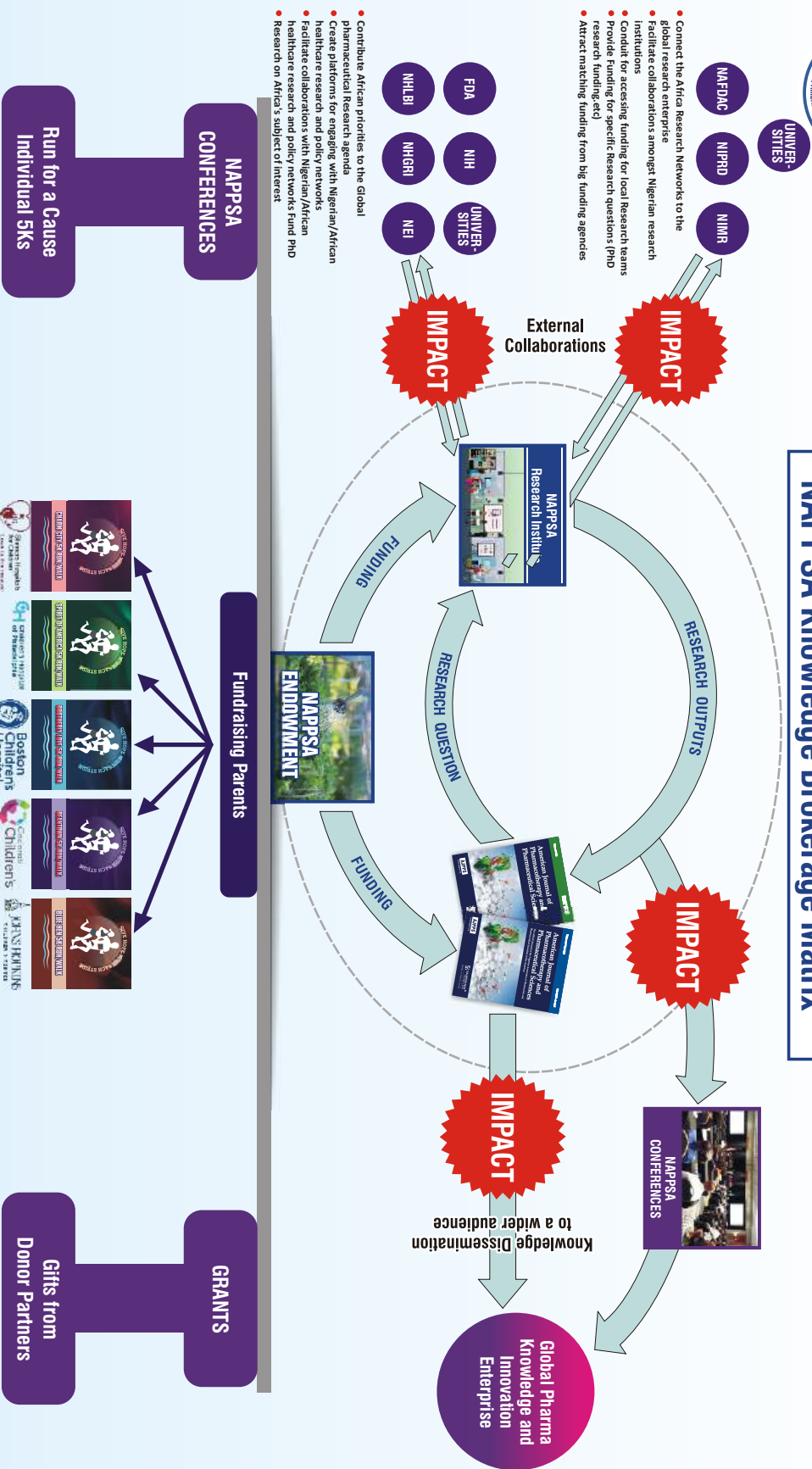
Marriot San Antonio Airport
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EDUCATION | RESEARCH | PRACTICE | COLLABORATION | ADVOCACY



SUSTAINING THE MOMENTUM: THE NEXT LEVEL IN NAPSSA'S STRATEGIC GROWTH

NAPSSA Knowledge Brokerage Matrix



FROM VISION TO REALITY

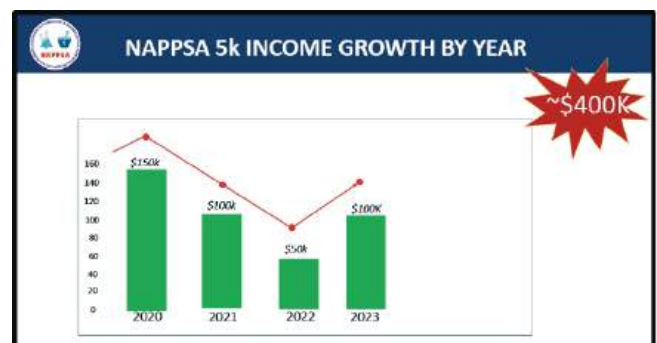
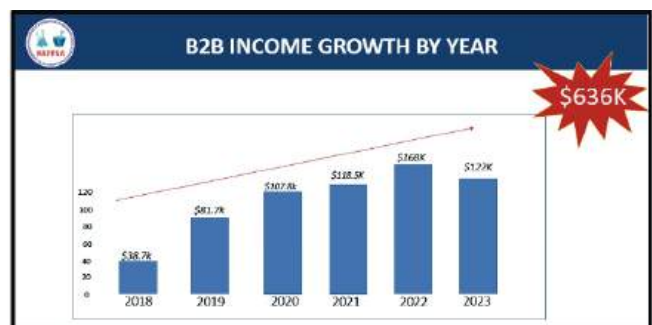
President's Welcome Message
Emmanuel Ezirim, Rph, FNAPPSA
NAPPSA President



On behalf of the executive, the entire Board of Directors, and the membership of the Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA), it is my distinct pleasure to welcome you to our 2024 Annual Conference taking place at the Marriot San Antonio Airport, September 26-29, 2024.

Promises made:

It was at this time last year 2023 that we left Columbus, Ohio full of promise and hope for the future. With that enthusiasm, we had hoped to complete our One Million Dollar Endowment milestone in one year. This hope and enthusiasm fueled the theme of this year's annual scientific conference, "Milestone Momentum Post-Pandemic". It was time to seize the moment and capitalize on our gains through the rapidly growing business-to-Business (B-2-B) system and the momentum we have generated in all aspects of the NAPPSA operations. The B-2-B system has had a checkered history as the backbone of NAPPSA's financial sustainability. It started small, and grew incrementally over the years, until 2018 when it was considered to be in decline by many. But not only did we revive the system, we made it even more formidable to the point where it was generating over forty thousand dollars in quarterly income for NAPPSA. We had great support from NAPPSA leaders and Independent Business Owners (IBOs) from across the nation, especially California, Ohio, Texas, Maryland, Pennsylvania, Florida, Georgia, and many other states, leading the effort to mobilize their local community IBOs to join the network and lend their support to the NAPPSA B2B system.



But we did not stop there. We doubled down on our efforts and created a new income channel, the NAPPSA Annual 5k Fundraise system which has generated over \$400, 000 (four hundred thousand dollars) till date. Combined with the B-2-B system, these 2 channels have generated over \$1 Million (One Million dollars) for NAPPSA during the four year period of NAPPSA's great financial success: 2019 to 2023. These channels provided the resources for the set-up of our NAPPSA Endowment Fund which today stands at over \$700, 000



(Seven hundred thousand dollars). As you can see, we did, indeed, generate enough resources to meet our \$1 Million objective, but we could not transfer all the Endowment designated income we generated to our Endowment Account, because while the B-2-B and 5K fundraising platforms were strong, we faced challenges generating income from other sources (namely, membership dues, conference registrations, sponsorship, etc), and so had to reserve some of Endowment Funds for running NAPPSSA.

But the biggest challenge we face today is that the B-2-B system has run its course. NAPPSSA must now come together to create new income generating channels to replace it. There are great ideas on the table, but it requires the collective will of all members of the organization and our collective resolve to support the vision that has been laid. To thrive and grow, NAPPSSA must build on its core areas of strength and not weaken them. We must support, nurture and encourage those with the vision and capacity to make NAPPSSA stronger, not undermine them. The question for us as a family remains; Will NAPPSSA adopt and work the clear vision that has been laid for the Future?

Promises to keep:

Only we the people can answer that question. In the meantime, we still have the 5K Fund Race full of potentials. Ask not for others to fund the race while you watch. Be sure to participate while we continue to brainstorm for other ways to build the NAPPSSA portfolio. This is only a temporary delay in our efforts to make our NAPPSSA a long-term financially fully solvent organization. Our march to One Million dollars will be complete none the less ...just delayed. We made a promise. Forward ever, backward never! No retreat, no surrender!

Time to choose:

There once lived a very wise old man in a faraway village. His wisdom was so legendary that it annoyed some of the youth. One day, three of the most rambunctious youth thought they had figured a way to fool the old man and therefore disgrace him and reduce him to nothing. They caught a live bird, and one held it gently in his palms behind his back. These youth went up the mountain where the old man took residence. They were on a quest to fool the man and show to everyone that he was not as wise as the people claimed. Their plan, to get the old man to commit as to the state of the bird they had

captured. And so, the three rambunctious youth in their youthful exuberance addressed the old man; old man, we heard you were very wise, and we are here to have you prove it. See we have a certain bird in our hands; tell us now then, is the bird dead or alive? They figured they had the old man. If he would say the bird was alive, they'd squeeze the life out of it and present it to the old man. On the other hand, if he should answer that the bird is dead, they'd present the bird forward with the palms open and free the bird. Either way, they'd win. So were their thoughts. The wise old man took a moment to contemplate his answer. Well kids, the bird, it is in your hands! And so NAPPSSA Family, today I believe that the challenges we face are not insurmountable. But the question is for all of us to answer: What future do we want for this great organization? Our fate is in our own hands.

This Conference:

As it has been for many years, the NAPPSSA conference remains one of the most powerful annual gatherings of Nigerian healthcare professionals in diaspora. Like in the past, this year's conference affords us the opportunity to exchange knowledge and skills on a wide range of topics in pharmaceutical science, pharmacy practice and the broader healthcare discipline. We, particularly, welcome our colleagues and participants from Nigeria for the perspectives they bring and for giving us the opportunity to participate in forging new paths for the Nigerian pharmaceutical and healthcare sectors. Great thanks to all our speakers, guests, and partner organizations, both those here in the USA and from Nigeria.

I hope you take advantage of this conference to network with fellow professionals, exchange innovative ideas, build new ties and nurture existing relationships. Great thanks to the program committee led by the Chair, Dr Chinyere Onyebuchi and the Co-Chair, Dr Anthony Ikeme, the Local Organizing Committee, under the leadership of Dr Peter Oraekwe, and the Co-Chair, Dr Eucharia Igwe, and many others, too numerous to mention, for the tireless efforts that went into putting together such a great conference.

I wish everyone a very successful conference and safe travels back to your respective locations at the end of the conference, while we look forward to seeing you again at the 2025 NAPPSSA Scientific Conference in Chicago, Illinois.

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Rph, FNAPPSA

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Teresa Pounds, PharmD

IMMEDIATE PAST PRESIDENT



Kunle Tometi, PharmD

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Adeleye Ogunkanmi, PharmD

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Aloysius Ibe, RPh, DrPH

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- Nonye Onyewuenyi, PhD
- Peter Oraekwe, PharmD, RPh
- Teresa Pounds, PharmD
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**LOCAL
ORGANIZING
COMMITTEE**



**Peter Oraekwe, PharmD,
RPh**

CHAIR

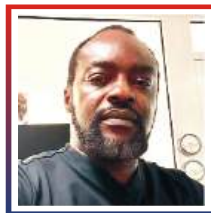


**Eucharia Igwe, PharmD,
Rph**

CO-CHAIR



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Doris Ebo, Rph

Implementation Logistics in the LOC

Gerald Muforo, PharmD
Okezie Aruoma, MBA, PhD, DSc



Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas, Inc. (NAPPSA), Inc.

18th Annual Scientific Conference and Exposition

September 26 - 29, 2024

Conference Theme:

MILESTONE MOMENTUM POST-PANDEMIC



Nova Southeastern University Barry and Judy Silverman College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of Continuing Pharmacy Education (CPE). This program has been assigned the following Universal Activity Numbers, 0092-0000-24-400-L01-P to 0092-0000-24-410-L01-P and has been accredited for a total of 18.0 contact hours (1.80 CEUs). Individuals may earn up to 17.0 contact hours. Attendees must register for the Conference, sign-in when required, actively participate throughout each activity, and complete and sign the Attendance Form (with an NABP eProfile Number and birth date) to receive credit. Participant's earned credits will be posted to the CPE Monitor Website 4 to 6 weeks after receipt of all Convention paperwork. All requests for Continuing Pharmacy Education Credits must be turned in by November 10, 2024.

Marriot San Antonio Airport
77 NE Interstate 410 Loop
San Antonio, TX 78216
Phone: (210) 600-0777

Visit www.napssa.org for more information

09



18th Annual NAPPSA Scientific Conference & Exposition

THURSDAY SEPTEMBER 26, 2024

10:00 am – 5:00 pm	Registration - Venue: La Cantera Foyer
12:30 pm – 5:00 pm	Session #100: Focused Milestones in the Sciences and Practice of Pharmacy Venue: La Cantera ABC
12:30 pm – 12:40 pm	Welcome Address: Emmanuel Ezirim, <i>RPh, FNAPPSA, President, Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) Inc., USA</i>
12:40 pm – 2:40 pm	Session #100: Universal Activity Number: 0092-0000-24-400-L01-P (0.20 CEUs) Application-Based Activity. Moderators: Adeleye Ogunkanmi, PharmD, <i>Director, Clinical Research, Genmab Inc, Princeton, NJ, USA</i> , and Theresa Ofili, RN, PharmD, MPH, <i>Instructional Assistant Professor of Pharmacy Practice, Texas A&M School of Pharmacy, College Station, TX, USA</i>
12:40 pm – 1:20 pm	#101: Innovation under pressure: Leveraging the non-obvious. Janet Akande-Dokun, PhD, <i>Cofounder, Moremme, Birmingham, AL, USA</i>
1:20 pm – 2:00 pm	#102: Advances in Antidiabetic Pharmacotherapy: Focus on SGLT2-Inhibitors. Raghu Yendapally, BPharm, PhD, MBA, <i>Professor, University of the Incarnate Word, Fei k School of Pharmacy, San Antonio, Texas, USA</i>
2:00 pm – 2:40 pm	#103: Prospects in Vaccine Development for Prevention of Infectious Diseases and Treatment of Cancers. Simon Agwale, PhD, <i>Chief Executive Officer, Innovative Biotech Inc., Aberdeen, MD, USA</i>
2:40 pm – 2:55 pm	Break
2:55 pm – 5:00 pm	Session #100 (continued): Universal Activity Number: 0092-0000-24-401-L01-P (0.20 CEUs) Application-Based Activity.
2:55 pm – 3:35 pm	#104: Vaccine Process Development: Challenges and Opportunities from Project Management Perspective. Nonye Onyewuenyi, PhD, <i>Director, Project Management, IAVI, New York, NY, USA</i>
3:35 pm – 4:15 pm	#105: Newer Pharmacological Treatments in Adults with Epilepsy: Cost-Effectiveness and Comorbidity Considerations. Josie Jacobs, PharmD, BCPS, <i>Clinical Pharmacist, Department of Pharmacotherapy and Pharmacy Services, University Health System, San Antonio, TX, USA.</i>
4:15 pm – 5:00 pm	Q&A – All Session Presenters and Moderators
6:00 pm	Welcome Reception & Networking (Venue: Hospitality Room)

FRIDAY SEPTEMBER 27, 2024

7:00 am – 5:00 pm	Registration - Venue: La Cantera Foyer
7:00 am – 8:30 am	Breakfast - Venue: La Cantera Foyer
8:30 am – 9:00 am	Opening Ceremonies - Venue: La Cantera ABC Emmanuel Ezirim, RPh, FNAPPSA, President, Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) Inc., Columbus, OH, USA.
9:00 am – 12:00 pm	Session #200: Global Pharmaceutical Momentum Post -Pandemic: Milestones, Challenges and Opportunities Universal Activity Number: 0092-0000-24-403-L04-P (0.30 CEUs) Application-Based Activity Venue: La Cantera ABC
9:00 am – 9:35 am	#201: Artificial Intelligence: Strategic Applications in Pharmaceutical Industry and supply chain. Patrick Lukulay, PhD, <i>President, Technology Solutions for Global Health, Washington, DC, USA</i>
9:35 am – 10:10 am	#202: Building from the Ashes of the Pandemic: Sustaining Momentum towards Pharmaceutical Innovation in Africa. Mazi Sam Oluabunwa, Managing Consultant/CEO, Star Team Consult, Lagos, Nigeria
10:10 am – 10:50 am	#203: Non -Profits and the Global Pharmaceutical Agenda: The Next Frontier in NAPPSA's Milestone Momentum. Anthony C Ikeme, PhD, <i>Managing Partner, PharmaMedics Inc., West Chester, PA, USA.</i>
10:50 am – 11:20 am	#204: Driving Pharmaceutical Innovation post-COVID: The Position of Research Institutions as Key Players. Charles Esimone, PhD, <i>Former Vice Chancellor, Nnamdi Azikiwe, University, Awka, Anambra State, Nigeria and Vice Chancellor, Transatlantic University of Medicine and Health Sciences, Umuchukwu, Anambra State, Nigeria.</i>
11:20 am – 12:00 pm	Moderated Roundtable Discussion: Sustaining Global Pharmaceutical Momentum Post-Pandemic: Integrating Local efforts with the global vision All Speakers Simon Agwale, PhD, <i>CEO, Innovative Biotech USA Inc., Aberdeen, MD, USA.</i> Barry Bleidt, PhD, PharmD, RPh, <i>Florida A&M University, Tallahassee, FL, USA.</i> Godwin Maduka, MD, <i>Proprietor, Transatlantic University of Medicine and Health Sciences, Umuchukwu, Anambra State, Nigeria.</i> Mazi Sam Oluabunwa, <i>Managing Consultant/CEO, StarTeam Consult, Lagos, Nigeria</i> Moderator: Anthony C Ikeme, PhD, <i>Managing Partner, PharmaMedics Inc., West Chester, PA, USA</i> and Emmanuel Ezirim, RPh, FNAPPSA, <i>President, Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) Inc., Columbus, OH, USA.</i>

12:00 pm – 12:30 pm **Poster Flashtalks** (see Page 12 for Posters and all Authors) - Venue: La Cantera Ballroom

Posters:

Abstract J1. Formulation, physical and in vivo evaluation of sweet orange oil-based anti-inflammatory creams (*Citrus sinensis* L.). Ogbonna JDN et al, *Department of Pharmaceutics, University of Nigeria, Nsukka, Enugu State, Nigeria*

Abstract J2. Noninvasive delivery of influenza Nanovaccine using Dissolving Microneedles, Emmanuel Adediran et al, *Vaccine Nanotechnology Laboratory, Center for Drug Delivery and Research, College of Pharmacy, Mercer University, Atlanta, GA 30341, USA*

Abstract J3. Development and Evaluation of Vaginal Suppository Containing *Lactiplantibacillus pentosus* KCA1 for Treatment of Bacterial Vaginosis: Can Fourier Transform -Infrared (FT -IR) Spectroscopy be Used for Identification of *Lactiplantibacillus pentosus* KCA1? Ijeoma N. Ebenebe et al, *Department of Pharmaceutical Microbiology and Biotechnology, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria*

Abstract J4. Assessment of vaginal health before and after treatment with a vaginal suppository containing *Lactiplantibacillus pentosus* KCA1. Ijeoma N. Ebenebe et al, *Department of Pharmaceutical microbiology and Biotechnology, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria*

Abstract J5. A Comparative Study Assessing the Barriers and Facilitators of Adverse Drug Reaction Reporting Among Hospital Pharmacists in Nigeria and USA. Temedie -Asogwa et al., *University of Houston College of Pharmacy, Houston, TX, USA.*

Abstract J6. Implementation of a pharmacist-delivered comprehensive medication management service for patients with uncontrolled hypertension at the UMMC Health Center. Egbunike Chukwuma I et al., *University of Maryland Medical Center, Baltimore, MD, USA .*

Abstract J7. Characterization of keratin from chicken feathers and formulation of keratin-alginate microspheres of dexamethasone for colon-targeted delivery. Meko AO et al, *Department of Pharmaceutics and Pharmaceutical Technology, Faculty of Pharmacy, University of Benin, Benin City, Nigeria.*

Abstract J8. Association between Buprenorphine Adherence Trajectories and Health Outcomes Among Commercially Insured Patients with Opioid Use Disorder . Olateju and Thornton (2024). *Pharmaceutical Health Outcomes and Policy, College of Pharmacy, University of Houston, Houston, TX, USA.*

Moderator: Okezie Aruoma, MBA, PhD, DSc, FRSC , *Professor, California State University, Los Angeles, CA, USA*

12:30 pm – 3:00 pm **Exhibition - Venue:** Alamo Heights DEFG
Lunch - Venue: Alamo Heights DEFG
Poster Viewing - Venue: Alamo Heights DEFG
(see Page 12 and 28 for List of Exhibitors and Posters)

- 3:00 pm – 4:30 pm **Session #300 : From Bench to Bedside: Current Trends, Advances and Challenges in Gene Therapy**
Universal Activity Number: 0092-0000-24-404-L01-P (0.15 CEUs) Application-Based Activity.
Venue: La Cantera ABC
- Moderators:**
Olu Aloba, PhD, *Vice President, CMC Services, Premier Consulting, Morrisville, NC, USA*, and
Juliet Obi, PhD Candidate, *University of Maryland, Baltimore School of Pharmacy, Baltimore, MD, USA*
-
- 3:00 pm – 3:40 pm #301: Gene Therapy Journey in Sickle Cell Disease. Ike Ogbaa, MD, *Vice President & Global Head of Medical Affairs, bluebird bio, Somerville, MA, USA*
-
- 3:40 pm – 4:10 pm #302 The Pharmacist’s Role in Gene Therapy Management. Ifeanyi Egbuni ke-Chukwuma, PharmD, BCPS, BCACP, *Director of Pharmacy Services, University of Maryland Medical Center, Baltimore, MD, USA*
-
- 4:10 pm – 4:30 pm **Q&A** Session Presenters and Moderators
-
- 4:30 pm – 5:30 pm **Session #350: Realizing Tangible Growth in Nigeria’s Industrial Pharma Sector**
Universal Activity Number: 0092-0000-24-409-L04-P (0.10 CEUs) Application-Based Activity.
Venue: La Cantera ABC
-
- 4:30 pm – 5:15 pm #351: The Nigeria Industrial Pharma Sector - Achieving Growth Through Strategic Alliances.
Ken Onuegbu, *Chairman, National Association of Industrial Pharmacists of Nigeria (NAIP), Lagos, Nigeria*
- Moderator:**
Kunle Tometi, PharmD, *Total Pharmacy, Dallas, TX*
-
- 5:15 pm – 5:30 pm **Q&A** - Session Presenter and Moderator
-
- 7:00 pm **Welcome Reception & Networking** (**Venue:** San Antonio Firefighters Banquet Hall , San Antonio IH 10 W, San Antonio, TX)

SATURDAY SEPTEMBER 28, 2024

6:00 am – 9:00 am	NAPPSA 5K Run/Walk – Details and Assembly point and time to be announced at Conference
7:00 am – 5:00 pm	Registration - Venue: La Cantera Foyer
9:00 am – 10:00 am	Breakfast - Venue: La Cantera Foyer
10:00 am – 12:00 pm	PARALLEL SESSION A Session #400: Pharmacy Business Universal Activity Number: 0092-0000-24-405-L04-P (0.20 CEUs) Application -Based Activity. Venue: La Cantera ABC
10:00 am – 10:45 am	#401: DSCSA Compliance for Pharmacies. Zach Brown, <i>Director of IT, Quest Pharmaceuticals Inc., Murray, KY, USA.</i>
10:45 am – 11:30 am	#402: Clinical Services in Your Pharmacy: Income Opportunities for Pharmacies. Gerald Muforo, PharmD, MBA, <i>Pharmacy Manager, Walmart Pharmacy, Tampa, FL, USA</i>
11:30 am – 12:00 pm	#403: B2B Moderated Discussion: GPOs: Benefits and Reasons to Join All Speakers Nnodum Iheme, RPh, <i>President, Ziks Pharmacy, Dayton, OH, USA</i> Doug Towle, <i>Vice President of Sales & Business Development, The Pharmacy Hub, Miami FL, USA</i> Emeka Chinaka, PharmD, <i>President, Chinakas Pharmacy, Moreno Valley, CA, USA</i> Emmanuel Ayanjoke, PharmD, <i>Owner, Altev Community Pharmacy, Cincinnati, OH, USA</i> Moderator: Emmanuel Ezirim, RPh, FNAPPSA, <i>President, Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) Inc., USA.</i>
10:00 am – 11:30 am	PARALLEL SESSION B Session #500: Young Professionals Transferable Skills Workshop Universal Activity Number: 0092-0000-24-406-L04-P (0.15 CEUs) Application -Based Activity. Venue: Alamo Heights Ballroom
10:00 am – 10:45 am	#501: Transferable Skills: Motivational Interviewing and how it translates to better Communication and Teamwork. Barry Bleidt, PhD, PharmD, RPh, <i>Adjunct Professor, Economic, Social & Administrative Pharmacy Division, FAMU, Tallahassee, FL, USA</i>
10:45 am – 11:30 am	#502: Transferable Skills: Learning how to Use AI: A Beginners 101. Sheriff Benson, PharmD, <i>Staff Pharmacist, CVS Health, Columbus, OH, USA</i>

PROGRAMME OF EVENTS

12.00 pm - 2:00 pm	Exhibition - Venue: La Cantera DEFG Lunch - Venue: La Cantera DEFG Poster Viewing - Venue: La Cantera DEFG (see Page 12 and 28 for List of Exhibitors and Posters)
2:00 pm – 4:00 pm	Session #600: Pharmacy Practice Updates and Trends Universal Activity Number: 0092-0000-24-410-L01-P (0.20 CEUs) Application-Based Activity. Venue: La Cantera ABC Moderator: Kunle Tometi, PharmD, <i>Total Pharmacy, Dallas, TX</i>
2:00 pm – 2:30 pm	#601: Access to New Medicines and Biologics in Africa – Workforce and Regulatory Challenges. Jude Nwokike, PhD, <i>Vice President, United States Pharmacopeia, North Bethesda, MD, USA.</i>
2:30 pm – 3:00 pm	#602: Continuous Glucose Monitoring Landscape and Integration with Insulin Systems. Jessica Njoku, PharmD, BCPS, <i>System Manager, Clinical Pharmacy Services - Harris Health System, Houston, TX, USA</i>
3:00 pm – 3:30 pm	#603: Pathways to Board Certifications for Pharmacists. Nonye Iwuchukwu, PharmD, BCOP, <i>Oncology Clinical Pharmacist, Lester and Sue Smith Clinic, Houston, TX, USA</i>
3:30 pm – 4:00 pm	#604: Semaglutide Opportunities. Doug Towle, <i>Senior VP of Sales & Business Development, The Pharmacy Hub, Miami, FL, USA</i>
4:00 pm – 4:15 pm	Q&A All Session Presenters and Moderator
4:15 pm – 6:45 pm	NAPPSA 2024 Annual General Membership Meeting Venue: Alamo Heights Ballroom
8:00 pm	Conference Banquet - Venue: La Cantera ABC

SUNDAY SEPTEMBER 29, 2024

7:00 am – 11:00 am	Registration - Venue: La Cantera Foyer
7:00 am – 8:30 am	Breakfast - Venue: La Cantera Foyer
8:30 am – 12:00 pm	Session #700: Cardiovascular-Kidney-Metabolic (CKM) Syndrome, Part 1 Universal Activity Number: 0092-0000-24-407-L01-P (0.15 CEUs) Application-Based Activity Venue: La Cantera Ballroom Moderators: Patrick Nwakama, PharmD, BCPS, <i>Food and Drug Administration, Silver Springs, MD, USA,</i> and Chidera Nwanna, PharmD, MBA, <i>Walgreens, Midland, TX, USA.</i>

PROGRAMME OF EVENTS

8:30 am – 9:30 am	#701: Scientific Overview and Pharmacotherapeutic Options for CKM Syndrome. Kathleen Lusk, Pharm.D., BCPS, BCCP, <i>Professor, School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA.</i>
9:30 am – 10:00 am	#702: Management of CKM Syndrome: Integrated Multidisciplinary Approach, Amanda Kitten, PharmD, BCPS, <i>School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA</i>
10:00 am – 10:15 am	Break and Conference Pictures
10:15 am – 12:00 pm	Session #700 (continued): Cardiovascular-Kidney-Metabolic (CKM) Syndrome, Part 2 Universal Activity Number: 0092-0000-24-408-L01-P (0.15 CEUs) Application-Based Activity Venue: La Cantera ABC Moderators: Patrick Nwakama, PharmD, BCPS, <i>Food and Drug Administration, Silver Springs, MD, USA,</i> and Nedra Chijioke, Pharm.D., <i>Sanofi Pharmaceuticals, NJ, USA.</i>
10:15 am – 11:00 am	#703: Metabolic Disease in CKM Syndrome: Clinical Case Studies. Briana Williams, PharmD, BCPS, BCACP, <i>School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA</i>
11:00 am – 11:30 am	##704: SGLT2 Inhibitors: Expanding therapeutic niche in clinical practice. Kathleen Lusk, Pharm.D., BCPS, BCCP, <i>Professor, School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA</i>
11:30 am – 12:00 pm	Moderated Discussion: All Session Presenters and Moderators
12:00 pm	Conference Conclusion and End

Who Should Attend? Pharmacists, Pharmaceutical Scientists, Clinicians, Clinical Scientists, and all individuals interested in learning about the relationship between the USA and Nigeria in the pharmaceutical industry and pharmacy practice.

Disclaimer: Information in this brochure is correct at the time of printing. Should any alterations to the program or schedule be necessary, corrections will be made in the materials distributed on site.

Registration Fees

Registration includes admission to all pharmacy continuing education programs, exhibition, and meals.

Conference Registration Categories	Advance Registration By September 1 st , 2024	Late Registration September 1 st to On-Site
NAPPSA Member	\$325	\$375
NAPPSA Non-Member	\$500	\$575
One Day Meeting Registration – Member	\$275	\$275
One Day Meeting Registration – Non-Member	\$400	\$400
Student Member	\$150	\$175
Student Non-Member	\$225	\$250
Banquet Gala (Spouses and Non-registered)	\$75	\$75

Refund Policy: NAPPSA will refund all registration fees minus a \$75 processing fee if cancelled in writing 15 days prior to the conference commencement (September 11, 2024). There will be NO refunds after this date.

THURSDAY SEPTEMBER 26, 2024

Session # 100: Focused Milestones in the Sciences and Practice of Pharmacy

- Describe advances in antidiabetic pharmacotherapy particularly with SGLT2-Inhibitors
- Explore vaccine development for prevention of infectious diseases and cancer treatment
- Summarize the updated ILAE 2017 classification of Epilepsies and its impact on diagnosis and treatment
- Describe vaccine process development including associated challenges and opportunities

FRIDAY SEPTEMBER 27, 2024

Session # 200: Global Pharmaceutical Momentum Post-Pandemic: Milestones, Challenges and Opportunities

- List the key momentous milestones in global pharmaceuticals post pandemic
- Describe the financing, collaboration and coordination patterns required to sustain the momentum in the global pharmaceutical R&D
- Discuss the potential role Non-Profits can play in shaping and driving the Global Pharmaceutical Agenda
- Explain the Strategic Applications of Artificial Intelligence in Pharmaceutical Industry and supply chain.

Session # 300: From Bench to Bedside: Current Trends, Advances and Challenges in Gene Therapy

- Describe the therapeutic goal of gene therapy and its application to treatment of Sickle Cell Disease (SCD)
- Summarize the recent FDA approval milestones that uses innovative cell-based gene therapies to target SCD
- Describe the existing US Pharmacopeia standards for cell and gene therapy
- Summarize issues relating to the complexity, cost of goods, process robustness, capacity, and/or scalability of gene therapy manufacturing
- Summarize the current role of pharmacists in gene therapy management

Session # 350: Realizing Tangible Growth in Nigeria's Industrial Pharma Sector

- Summarize how growth of the Nigeria Industrial Pharma sector can be achieved from strategic alliances
- Describe existing strategic alliances that can propel growth of the Nigerian Industrial Pharma sector

SATURDAY SEPTEMBER 28, 2024

Session # 400: Pharmacy Business

- Explore DSCSA requirements and compliance for pharmacies
- Describe DIR fees and clawbacks as it affects pharmacy profitability
- Discuss entry level clinical growth opportunities for a community pharmacy
- Discuss the importance of maximizing current pharmacy dispensing and clinical application efficiency

Session # 500: Young Professionals Transferable Skills Workshop

- Summarize the skills of Motivational Interviewing (MI) including its attributes and uses
- Discuss how to use MI skills to communicate with other colleagues and team members
- Explore Artificial Intelligence (AI) and large language models
- Discuss common uses of AI including for email communication and drafting with AI chat platforms

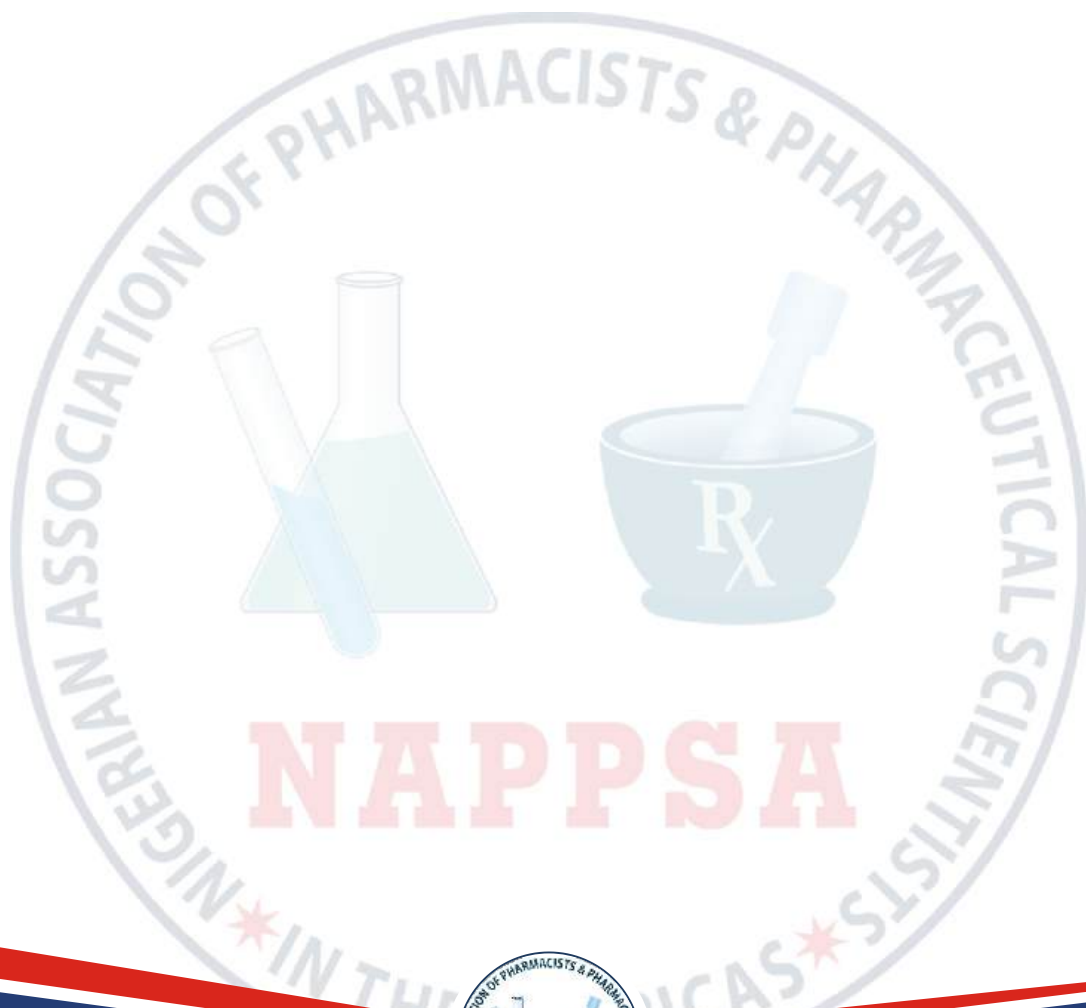
Session # 600: Pharmacy Practice Updates and Trends

- Describe Continuous Blood Glucose monitors and how to use them
- Discuss the future of CGMS with insulin pump integration and AI prediction models
- Explain the value and benefits of obtaining board certification
- Describe requirements for pursuing and maintaining board certification
- Describe the competency and regulatory landscape of vaccine manufacturing in Africa

SUNDAY SEPTEMBER 29, 2024

Session # 700: Cardiovascular-Kidney-Metabolic (CKM) Syndrome

- Discuss the science and clinical approach for prevention, screening, and management of individuals with cardiovascular-kidney-metabolic (CKM) syndrome.
- Explain the pathophysiology of CKM syndrome and the underlying interplay of cardiovascular disease, chronic kidney disease and metabolic disease.
- Describe the 4 stages of CKM and the recommended interventions at each stage.
- Assess the optimal management strategies for CKM syndrome including lifestyle modifications, weight loss, emerging pharmacotherapies, and integrated multidisciplinary care approach.



FACULTY: SPEAKERS

1. **Simon Agwale**, PhD, Chief Executive Officer, Innovative Biotech Inc., MD, USA
2. **Janet Akande-Dokun**, PhD, Cofounder, Moremme, Birmingham, AL, USA
3. **Sheriff Benson**, PharmD, Staff Pharmacist, CVS Health, Columbus, OH, USA
4. **Barry Bleidt**, PhD, PharmD, RPh, Adjunct Professor, Economic, Social & Administrative Pharmacy Division, FAMU, Tallahassee, FL, USA
5. **Zach Brown**, Director of IT, Quest Pharmaceuticals Inc., Murray, KY, USA.
6. **Ifeanyi Egbunike-Chukwuma**, PharmD, BCPS, BCACP, Director of Pharmacy Services, University of Maryland Medical Center, Baltimore, MD, USA
7. **Charles O Esimone**, PhD, Former Vice Chancellor, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria and Vice Chancellor, Transatlantic University of Medicine and Health Sciences, Umuchukwu, Anambra State, Nigeria.
8. **Anthony C Ikeme**, PhD, Managing Partner, PharmaMedics Inc., West Chester, PA, USA
9. **Nonye Iwuchukwu**, PharmD, BCOP, Oncology Clinical Pharmacist, Lester and Sue Smith Clinic, Houston, TX, USA
10. **Josie Jacobs**, PharmD, BCPS, Clinical Pharmacist, Department of Pharmacotherapy and Pharmacy Services, University Health System, San Antonio, TX, USA.
11. **Amanda Kitten**, PharmD, BCPS, School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA
12. **Patrick Lukulay**, PhD, President, Technology Solutions for Global Health, Washington, DC, USA
13. **Kathleen Lusk**, Pharm.D., BCPS, BCCP, School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA
14. **Gerald Muforo**, PharmD, MBA, Pharmacy Manager, Walmart Pharmacy, Tampa, FL, USA
15. **Jessica Njoku**, PharmD, BCPS, System Manager, Clinical Pharmacy Services - Harris Health System, Houston, TX, USA
16. **Solomon Nwaka**, PhD, Centre for Innovation Development and Entrepreneurship Africa (IDEA Centre), Godfrey Okoye University, Enugu, Nigeria.
17. **Jude Nwokike**, PhD, Vice President, United States Pharmacopeia, North Bethesda, MD, USA.
18. **Ike Ogbaa**, MD, Vice President & Global Head of Medical Affairs, bluebird bio, Somerville, MA, USA
19. **Ken Onuegbu**, National Association of Industrial Pharmacists of Nigeria (NAIP), Lagos, Nigeria
20. **Nonye Onyewuenyi**, PhD, Director, Project Management, IAVI, New York, NY, USA
21. **Doug Towle**, Senior VP of Sales & Business Development, The Pharmacy Hub, Miami, FL, USA
22. **Briana Williams**, PharmD, BCPS, BCACP, School of Pharmacy, University of the Incarnate Word, San Antonio, Texas, USA
23. **Raghu Yendapally**, BPharm, PhD, MBA, Professor, University of the Incarnate Word, Feik School of Pharmacy, San Antonio, Texas, USA

FACULTY: MODERATOR AND PANELISTS

FACULTY: MODERATORS AND PANELISTS

1. **Simon Agwale**, PhD, Chief Executive Officer, Innovative Biotech Inc., MD, USA
2. **Olu Aloba**, PhD, Vice President, CMC Services, Premier Consulting, Morrisville, NC, USA
3. **Okezie Aruoma**, MBA, PhD, DSc, FRSC, Professor, California State University, Los Angeles, CA, USA
4. **Barry Bleidt**, PhD, PharmD, RPh, Adjunct Professor, Economic, Social & Administrative Pharmacy Division, FAMU, Tallahassee, FL, USA
5. **Nedra Chijioke**, Pharm.D., Sanofi Pharmaceuticals, NJ, USA
6. **Charles O Esimone**, PhD, Former Vice Chancellor, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria and Vice Chancellor, Transatlantic University of Medicine and Health Sciences, Umuchukwu, Anambra State, Nigeria.
7. **Emmanuel Ezirim**, RPh, FNAPPSA, President, Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas (NAPPSA) Inc., USA
8. **Anthony C Ikeme**, PhD, Managing Partner, PharmaMedics Inc., West Chester, PA, USA
9. **Patrick Lukulay**, PhD, President, Technology Solutions for Global Health, Washington, DC, USA
10. **Godwin Maduka**, MD, Proprietor, Transatlantic University of Medicine and Health Sciences, Umuchukwu, Anambra State, Nigeria.
11. **Gerald Muforo**, PharmD, MBA, Pharmacy Manager, Walmart Pharmacy, Tampa, FL, USA
12. **Solomon Nwaka**, PhD, Centre for Innovation Development and Entrepreneurship Africa (IDEA Centre), Godfrey Okoye University, Enugu, Nigeria
13. **Patrick Nwakama**, PharmD, Food and Drug Administration, Silver Springs, MD, USA
14. **Chidera Nwanna**, PharmD, MBA, Walgreens, Midland, TX, USA
15. **Juliet Obi**, PhD Candidate, University of Maryland, Baltimore School of Pharmacy, Baltimore, MD, USA
16. **Theresa Ofili**, RN, PharmD, MPH, Instructional Assistant Professor of Pharmacy Practice, Texas A&M School of Pharmacy, College Station, TX, USA
17. **Adeleye Ogunkanmi**, PharmD, Director, Clinical Research, Genmab Inc, Princeton, NJ, USA
18. **Mazi Sam Ohabunwa**, Managing Consultant/CEO, StarTeam Consult, Lagos, Nigeria
19. **Kunle Tometi**, PharmD, Total Pharmacy, Dallas, TX

Moderator:

Okezie Aruoma, MBA, PhD, DSc, FRSC, Professor, California State University, Los Angeles, CA, USA

Abstract J1. Formulation, physical and *in vivo* evaluation of sweet orange of oil-based anti-inflammatory creams (*Citrus sinensis* L.)

Ogbonna John D N^{1,2}, Nwajuo CO² and Attama A¹

¹Department of Pharmaceutics, University of Nigeria, Nsukka, Enugu State, ²Department Pharmaceutics and Pharmaceutical Technology, Madonna University, Elele, Rivers State, Nigeria

Objectives: Inflammation is a defence response of our body to hazardous stimuli and there are various medications for controlling and suppressing inflammatory crisis. This study was aimed at formulating and evaluating the physico-chemical and pharmacological properties of sweet orange *Citrus sinensis* L anti-inflammatory cream. **Methods:** The essential oil of sweet oranges were extracted by steam distillation and thereafter used to formulate an oil-in-water anti-inflammatory creams using excipients at various compositions. Various physicochemical tests, *ex vivo* and *in vivo* pharmacological studies of each of the formulated creams in reference to standard diclofenac cream were carried out. **Results:** Stable well-formulated o/w emulsion creams with pH, 6.56-7.65 over 3 weeks stability period with uniform homogeneity was obtained. *Ex vivo* and *in vivo* pharmacological studies showed that the *Citrus sinensis* anti-inflammatory creams showed no significant difference in activity from standard diclofenac cream. **Conclusion:** Formulation of anti-inflammatory dermatological preparation with *Citrus sinensis* would be of great clinical usefulness in the reduction of toxicity and adverse effects associated with conventional medicines. Its low cost, satisfactory potency and ease of availability, compared to the synthetic counterparts, also places consideration on development of potent anti-inflammatory drugs from natural products.

Abstract J2. Noninvasive delivery of influenza Nanovaccine using Dissolving Microneedles

Adediran E, Singh R, Vijayanand S, Tanisha MA and D'Souza MJ

Vaccine Nanotechnology Laboratory, Center for Drug Delivery and Research, College of Pharmacy, Mercer University, Atlanta, GA 30341, USA

Objectives: Influenza virus is one of the major respiratory virus infections that is of global health concern. Although a couple of vaccines have been approved, most of these vaccines are administered via invasive route. Here, we formulated and investigated the noninvasive delivery of Influenza Nanovaccine. **Method:** Inactivated Influenza A H1N1 virus (i-Influenza A H1N1) and Inactivated Influenza A H3N2 virus (i-Influenza A H3N2) were encapsulated in a biodegradable Poly (Lactic-co-glycolic acid) (PLGA) polymeric matrix, which enhances antigen presentation. The antigens PLGA MPs were prepared using a double emulsion (w/o/w) method, lyophilized, and characterized. Dissolving microneedle-containing microparticulate-based vaccine was fabricated by spin-casting method. The adjuvanted vaccine Microneedles were administered to mice as one prime (w0) and one boost (w3) via the transdermal route to test the *in vivo* vaccine efficacy. The virus-specific serum antibody (IgG, IgG1, IgG2a, IgA) levels and virus-specific lung antibody (IgG, IgA) were assessed. **Results:** The size and charge of microparticles were less than 2 μ m, -23.8mV to -26.4mV respectively. The % Encapsulation efficiency was 80% to 90%. More importantly, following *in vivo* immunization, we found that the Influenza A H1N1 specific serum IgG and IgA levels and Influenza A H3N2 specific serum IgG and IgA increased significantly ($p \geq 0.0001$) compared to the No treatment group. The IgG subtype analyses showed both significantly high levels of serum IgG1 (Th-2/antibody mediated response) and IgG2a (Th-1/cytotoxic mediated response) antibodies specific to both strains ($p \geq 0.01$). Additionally, there were significant antibody levels (IgG and IgA) in the lungs which show mucosal immunity ($p \geq 0.0001$). **Conclusion:** Dissolving microneedles-assisted delivery of the Influenza nano vaccine elicits a robust humoral immune response in a murine model.

Abstract J3. Development and Evaluation of Vaginal Suppository Containing *Lactiplantibacillus pentosus* KCA1 for Treatment of Bacterial Vaginosis: Can Fourier Transform-Infrared Spectroscopy be Used for Identification of *Lactiplantibacillus pentosus* KCA1?

Ebenebe IN^a, Osonwa UE^b, Anukam KC^c and Esimone CO^a

^aDepartment of Pharmaceutical Microbiology and Biotechnology, Faculty of Pharmaceutical Sciences,

^bDepartment of Pharmaceutics and Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, ^cDepartment of Medical Laboratory Science, Faculty of Health Sciences and Technology, Nnamdi Azikiwe University, Nigeria

Objectives: Bacterial Vaginosis (BV) is a polymicrobial syndrome characterized by a shift in the vaginal flora from a predominant population of *Lactobacilli* to a replacement with anaerobes. Bacterial vaginosis is a major urogenital health problem for premenopausal women and the condition is misdiagnosed, mistreated, and under-reported. Developing a user-friendly natural active product is more than ever needed. The objectives of this study were to develop and evaluate vaginal suppositories containing *Lactiplantibacillus pentosus* KCA1 (Formally *Lactobacillus pentosus* KCA1) and to use FT-IR spectroscopy to identify the presence of *L. pentosus* KCA1. **Methods:** After the development of vaginal suppository using a glycerol-gelatin base. The prepared suppositories containing KCA1 were evaluated for viability and stability, and other physical properties. The *in vitro* release was done to determine the dissolution and the disintegration time of the suppositories. **Results:** The result of the release study demonstrated that suppositories with glycerol-gelatin base release *Lactiplantibacillus pentosus* KCA1 faster and it was also found to be microbiologically stable and viable after storage at 2-8°C over 3 months. The result of the FT-IR spectroscopy revealed that *Lactiplantibacillus pentosus* KCA1 was present in the formulation. **Conclusion:** The FT-IR result showed that *L. pentosus* KCA1 is most likely to be identified between 1318.953-713.2706 cm⁻¹ of the spectral regions. The Fourier Transform-Infrared (FT-IR) result in this study will support the development of the Bacteria-Fourier Transform-Infrared (FT-IR) database, which will continuously be updated to offer a practical tool for identifying microorganisms.

Abstract J4. Assessment of vaginal health before and after treatment with vaginal suppository containing *Lactiplantibacillus pentosus* KCA1

Ebenebe IN^a, Osonwa UE^b, Chukwunwejim CR^a, Morikwe UC^a, Igwe JO^c, Anukam KC^c, Esimone CO^a

^aDepartment of Pharmaceutical Microbiology and Biotechnology, Faculty of Pharmaceutical Sciences, ^bDepartment of Pharmaceutics and Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, ^cDepartment of Medical Laboratory Science, Faculty of Health Sciences and Technology, Nnamdi Azikiwe University, Nigeria

Objectives: Bacterial Vaginosis (BV) is a polymicrobial syndrome characterized by a shift in the vaginal flora from a predominant population of *Lactobacilli* to a replacement with anaerobes. The objective of this study was to assess the vaginal health of selected participants before and after treatment with a vaginal suppository containing *Lactiplantibacillus pentosus* KCA1. **Methods:** Vaginal suppositories containing *L. pentosus* KCA1 were formulated using glycerol-gelatin base. A prospective and follow-up community-based study was done. Vaginal samples were collected from women of reproductive age (non-pregnant) between 18-45 years. A total of 360 women both symptomatic and asymptomatic provided High Vaginal Swabs (HVS) for BV screening using the Nugent scoring method. **Result:** A total of 65 (18.1 %) participants were identified as having BV by microscopy with 45 (12.5 %) of them being consistent with BV (Nugent score of 7-10) and twenty (5.56 %) being intermediate with BV (Nugent score of 4-6). A baseline and intervention questionnaire were administered to the participants. The majority (81.5 %) of the participants affirmed that they had not heard about BV. Social burden reveals that 90.8 % affirmed that they feel frustrated, having BV symptoms recur after treatment and 83.1 % admitted that BV symptoms make them feel embarrassed, ashamed, and dirty. The majority (58.8 %) claimed that the state of their reproductive health is perfect (very good) four weeks after treatment, while 88.2 % of the participants rated their reproductive health after four

weeks of treatment to be 'somewhat better than now than a year ago'. **Conclusion:** It was revealed that BV had an impact on the sexual and physical health of the participants except on their mental and economic status. Knowledge of the awareness of BV among women of reproductive age is essential.

Abstract J5. A Comparative Study Assessing the Barriers and Facilitators of Adverse Drug Reaction Reporting Among Hospital Pharmacists in Nigeria and USA

Temedie-Asogwa T, Khalid J, Zakeri M, Sansgiry S

University of Houston College of Pharmacy, Houston, Texas, USA

Objectives: Good pharmacovigilance practice requires complete and consistent reporting of adverse drug reactions (ADR). Although pharmacovigilance awareness has increased over the years, ADR under-reporting remains a huge concern globally. Improving ADR reporting requires understanding of influences on reporting practice. This study aims to assess differences in barriers and facilitators of ADR reporting among hospital pharmacists in two countries, Nigeria and USA. **Methods:** A fifty-six item pre-validated questionnaire was distributed among hospital pharmacists in Nigeria and USA using a convenience sampling method. The questionnaire consists of 4 components; Knowledge (16-items), Attitude (14-items), Barriers (16-items) and Demographics (16-items) was created in Qualtrics and distributed to participants through email and social media (WhatsApp and Facebook). Participants' demographic characteristics were explored using descriptive statistics. Barriers and facilitators of ADR reporting was assessed by comparing responses of pharmacists from Nigeria and USA using Wilcoxon-Man-Whitney test with a priori significant value set at 0.05. **Results:** The respondents consisted of 78 (60.5%) of pharmacists from Nigeria and 51 (39.5%) from USA. Eighty-eight (68.2%) respondents were females and 54 (41.9%) between 31-40 years of age. Pharmacists in the US (UP) had a higher overall mean knowledge score (6.4 ± 0.52 versus 5.1 ± 0.89), whereas more pharmacists in Nigeria (NP) (56.4 %) reported positive attitude as compared to those in the US (47.1%). Factors such as lack of knowledge/confidence, motivation/incentives, systems/ structures that promote ADR reporting and overall, inadvertently poor ADR reporting culture represent very significant restraining forces against ADR reporting for NPs (RII range of 0.885 to 0.908), whereas busy schedule and complex procedure of ADR reporting constitute very significant barriers of ADR reporting for UPs (RII range 0.899 to 0.901). Pharmacists from both countries (100%) believed that receiving more training on pharmacovigilance and availability of ADR reporting mobile-app might facilitate better ADR reporting. **Conclusion:** Individual/system-level barriers of ADR reporting were more evident in NPs compared to UPs. Designing and implementing country-specific interventions may help to mitigate barriers and development of a phone app might improve ADR reporting rates among hospital pharmacists in both Nigeria and USA.

Abstract J6. Implementation of a pharmacist-delivered comprehensive medication management service for patients with uncontrolled hypertension at the UMMC Health Center.

Egbunike-Chukwuma I¹, Gerbino J²; Bonnie Enwezor B¹ and Glenn A²

¹UMMC Midtown Department of Pharmacy, Baltimore, Maryland; ²UMMC Midtown Health Center, 250 W. Pratt Street, Baltimore, MD 21201, USA

Objectives: Patients with uncontrolled hypertension are at risk for utilizing more health care services resulting in a higher total cost compared to those with controlled hypertension. At UMMC Health Center only 54.6% of patients with hypertension are controlled. The Health Center participates in the Maryland Primary Care Program (MDPCP) Merit-based incentive payment system and has set a target of improvement for blood pressure control to 60% to maintain the minimum score to avoid a penalty. Pharmacist-delivered Comprehensive Medication Management (CMM) service is an evidence-based strategy recommended by the CDC to improve cardiovascular health outcomes

for patients with hypertension. The primary objectives of this program were to determine whether pharmacist-led CMM will result in improvement in blood pressure control and support the attainment of MDPCP performance improvement goals for the clinic for uncontrolled patients with hypertension. **Methods:** Patients identified to have uncontrolled hypertension, newly diagnosed, and those who may benefit from medication management are referred to the CMM program. Upon referral by a primary care provider, a pharmacist completes medication reconciliation, conducts a brown bag medicine review, assesses the appropriateness of drug therapy to achieve intended blood pressure control based on hypertension treatment guidelines, and assesses the patient's medication adherence through a questionnaire and utilizing the proportion of days covered (PDC) methodology. Adequate adherence is defined as having a PDC $\geq 80\%$ for this performance measure. Any drug-related problems identified are documented, communicated to the primary care provider, and addressed with an action plan. Patients enrolled in the program receive comprehensive self-care maintenance, monitoring, and management education. They are offered a hypertension care kit with a blood pressure cuff, pill organizers, education materials, and other helpful tools. Pharmacists utilize both telehealth and face-to-face care delivery models. **Results:** A total of 45 patients were referred to the CMM program from May 1, 2023, to August 30, 2023, and 41 patients had at least 1 follow-up visit with the pharmacist. The mean age \pm STD 70 (± 8) years. The average Baseline Systolic Blood Pressure (SBP) was 152 mmHg and Diastolic Blood Pressure (DBP) of 82 mmHg. Following pharmacist intervention, SBP and DBP averaged 142 mmHg and 79 mmHg respectively. With a change of -10 mmHg and -3 mmHg for SBP and DBP respectively. The average number of antihypertensive medications prescribed decreased from an average of 3.2 to 2.4 medications. Additionally, 37% of the non-adherent patients achieved adherence with PDC $> 80\%$ and the pharmacist recommended optimization of therapy in 30% of the patients. The Midtown Maryland Primary Care Program (MDPCP) Quality performance for high blood pressure control improved from 52.6% in May 2023 to 60.4% in August 2023. **Conclusion:** The implementation of a pharmacist-led CMM as part of collaborative practice in a health center improves blood pressure control and supports the attainment of performance improvement targets.

Abstract J7. Characterization of keratin from chicken feathers and formulation of keratin-alginate microspheres of dexamethasone for colon-targeted delivery

Meko AO, Eraga SO and Arhewoh MI

Department of Pharmaceutics and Pharmaceutical Technology, Faculty of Pharmacy, University of Benin, Benin City, 300001, Nigeria

Objectives: The need for locally sourced pharmaceutical excipients for drug production in Nigeria is critical due to high cost of importation. Keratin sourced from chicken feather waste as an excipient in pharmaceutical formulations might be a viable economic alternative to imported products. This study aimed to extract keratin from chicken feather waste, investigating the effect of extraction parameters on the physicochemical properties of the obtained keratin powder and the application of the extracted keratin and/or alginate admixtures in the formulation of dexamethasone microsphere for colon-targeted delivery. **Methods:** Keratin extraction from chicken feathers was carried out using alkaline hydrolysis under different experimental conditions. Extracted keratin powder was subjected to physicochemical, powder and microbiological evaluations. The powder was also subjected to scanning electron microscopy (SEM), Fourier transform infrared (FTIR) spectroscopy and differential scanning calorimetry (DSC). Dexamethasone microspheres were prepared using ionotropic gelation method. Dried microspheres were evaluated for particle size, entrapment efficiency, SEM, FTIR spectroscopy, DSC and *in-vitro* dissolution analysis. **Results:** Maximum keratin yield of 62% was obtained from a 3.0 M sodium hydroxide solution as a solubilizing agent at an extraction temperature of 37°C and a retention time of 24 hours. The extracted keratin was light brown in appearance, odorless, smooth in texture and had a pH of 8.80. Extracted keratin was insoluble in neutral, and acidic pH media and soluble in alkaline medium. It exhibited a moisture sorption capacity of 98% with fair to good flowability. SEM revealed a rough surface powder particle with a mean diameter of 100 μm . FTIR spectroscopy

showed the presence of amide groups while DSC displayed a melting point of 110°C. The microsphere had a percentage entrapment between 86 to 98% and size ranged from 720 - 840 µm. The SEM revealed discrete particles with rough surfaces while FTIR and DSC showed no interaction among components in the microspheres. Drug release was less than 30% after 2 hours in acidic medium and 72 - 94% after 12 hours in alkaline medium. **Conclusion:** A high yield of keratin has been obtained from chicken feathers and extraction conditions impacted yield, physicochemical and powder properties of the extracted. The keratin-alginate microsphere retained drug in acidic conditions and released it in alkaline pH, thus the extracted keratin may be useful as an excipient in colon-targeted drug delivery due to its pH-dependent solubility.

Abstract J8. Association between Buprenorphine Adherence Trajectories and Health Outcomes Among Commercially Insured Patients with Opioid Use Disorder

Olateju OA and Thornton JD

University of Houston College of Pharmacy, Houston, Texas 77204-5000

Objectives: Despite the proven clinical benefits, evidence for buprenorphine adherence over time for opioid use disorder (OUD) is fragmented, with a majority focusing on publicly insured patients. The study objective was to estimate longitudinal adherence and persistence to buprenorphine, identify their predictors and associated cost consequences. **Methods:** A retrospective longitudinal cohort study of the Merative Market Scan Commercial database. Patients diagnosed with OUD from 2017-2019 and who initiated buprenorphine treatment were identified. Group-based trajectory models were used to identify distinct adherence patterns over 180 days. Predictors of adherence trajectories were identified using a multinomial logistic regression model. Time to buprenorphine discontinuation and associated predictors were assessed using Kaplan-Meier and multivariable Cox regression models. Generalized linear models were employed to estimate marginal healthcare expenditures associated with adherence trajectories. **Results:** Three distinct buprenorphine adherence trends were identified among 5,263 patients aged ≥12 years: Declining adherence (29.8%), Steadily increasing adherence (13.1%), and adherent (57.1%). Predictors of declining adherence included having cancer, respiratory diseases, mental health disorders, and being female. Decreasing buprenorphine average daily dose and increasing comorbidity burden were associated with steadily increasing adherence. Patients in non-adherence trajectories had increased risk of opioid overdose and hospitalization. The non-adherent groups had higher total expenditures (mean, 95%CI) [(declining adherence vs. adherent: \$21,037(\$8,463–\$33,611), steadily increasing adherence vs. adherent: \$37,800(\$16,421–\$59,179)]. **Conclusion:** Buprenorphine non-adherence is associated with adverse clinical outcomes and increased costs. The identified predictors of non-adherence should guide the development of tailored interventions to improve buprenorphine utilization.

NAPPSA BANQUET PROGRAM

Venue: Marriot San Antonio Airport
Date: Saturday, September 28, 2024
Time: 8:00pm

Programme of Events

8.00pm **Master of Ceremony opens the event**

Opening Prayer and National Anthems

Welcome to San Antonio by the LOC

Welcome by the President

Dinner! Dinner!! Dinner!!!

Recognition & Awards

Closing Remarks and Vote of Thanks

Dance! Dance!! Dance!!!

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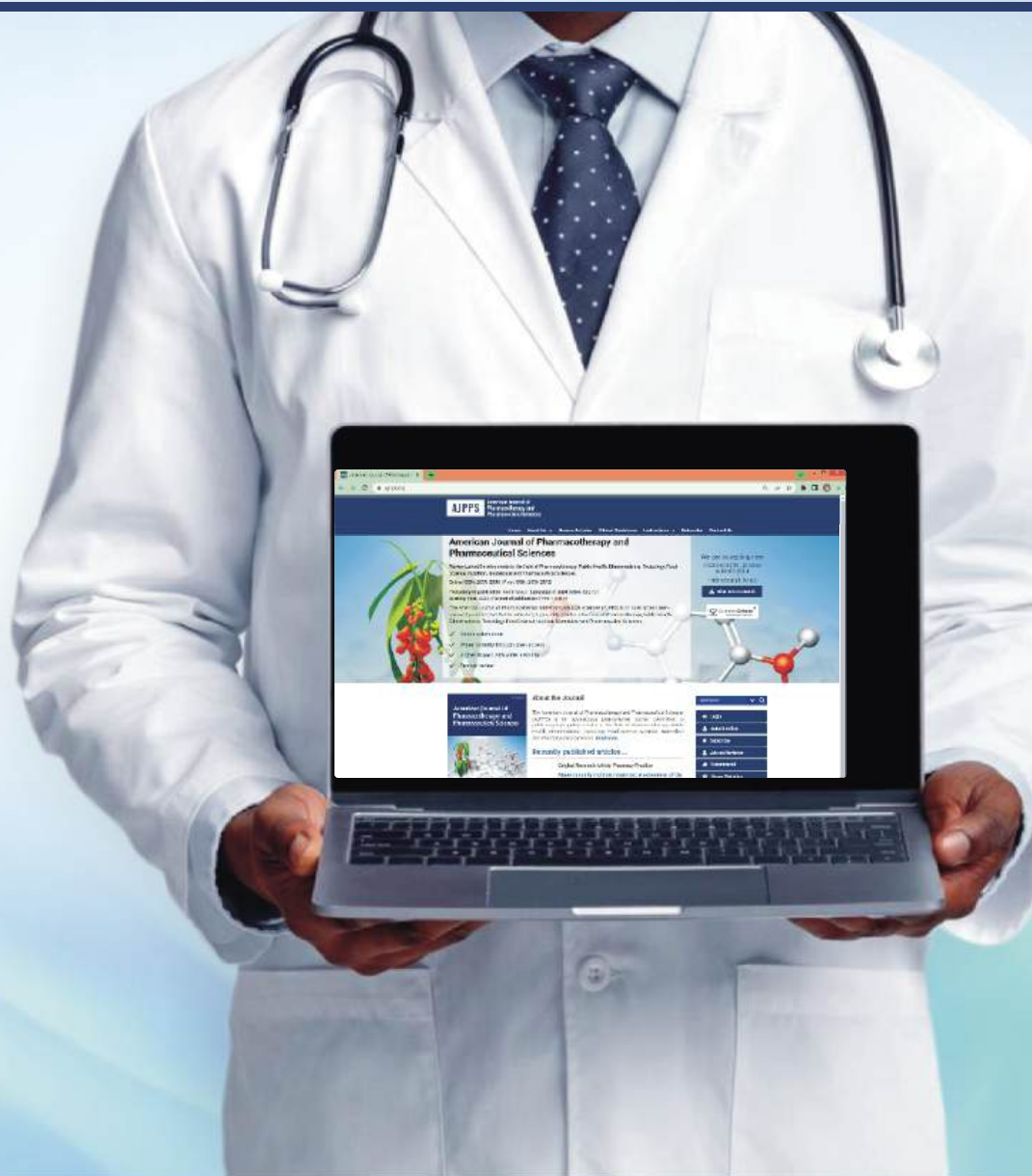


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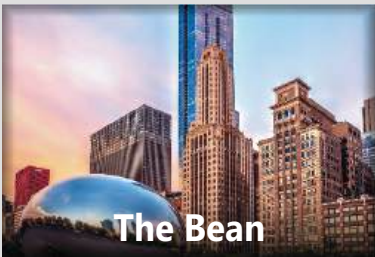
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