Activity Outline
FDA Grand Rounds: Research and Development of Radioanalytical Capabilities for Detection of Radionuclides in Food
February 11, 2021
Adobe Webcast

Activity Coordinator:
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Series Description

The FDA Grand Rounds is webcast every other month to highlight cutting-edge research underway across the agency and its impact on protecting and advancing public health. Each session features an FDA scientist presenting on a key public health challenge and how FDA is applying science to its regulatory activities.

Lecture Description
This presentation will detail research studies on developing various radioanalytical methods essential to radiological food emergency response. Techniques for preparation and verification of food-based radioactive reference materials will also be discussed. The presented research efforts have closed the gaps in the current radioanalytical capability and strengthened federal-state partnerships in overcoming known radioanalytical challenges, which significantly enhanced the nation's preparedness and readiness in safeguarding the nation's food supply and public health in the event of a large-scale nuclear or radiological emergency.

References

- Kathryn Emanuele, Zhichao Lin, Stephanie Healey, Abdur-Rafay Shareef, Patrick Regan, Isotopic Analysis of Plutonium in Foods by Inductively-coupled Plasma Mass Spectrometry, Applied Radiation and Isotopes, Vol. 126, Pages 40-43, 2017.
- Clarence Rolle, Zhichao Lin, Stephanie Healey, Computational Approaches on Photon-Attenuation and Coincidence Summing Corrections for the Detection of Gamma-emitting Radionuclides in foods, Applied Radiation and Isotopes, Vol. 126, Pages 134-137, 2017.
- Jingjing Pan, Kathryn Emanuele, Eileen Maher, Zhichao Lin, Stephanie Healey, Patrick Regan, Analysis of Radioactive 90Sr in Food by Cerenkov Liquid Scintillation Counting, Applied Radiation and Isotopes, Vol. 126, Pages 214-218, 2017.
- Abdur-Rafay Shareef, Zhichao Lin, Kathryn Emanuele, Stephanie Healey, Patrick Regan, Brian Baker, Rapid Detection of Enriched Uranium in Food, Applied Radiation and Isotopes, Vol. 126, Pages 76-78, 2017.
- Kimi Nishikawa, Abdul Bari, Abdul Jabbar Khan, Xin Li, Traci Menia, Thomas M. Semkow, Zhichao Lin, Stephanie Healey, Homogenization of Food Samples for Gamma Spectrometry using Tetramethylammonium Hydroxide and Enzymatic Digestion, Journal of Radioanalytical and Nuclear Chemistry, Vol. 314, Issue 2, Pages 859-870, 2017.
- Zhichao Lin, Stephanie Healey, Zhongyu Wu, Rapid and Simultaneous Detection of Alpha/Beta Radioactivity in Food by Solid phase Extraction Liquid Scintillation Counting, Journal of Radioanalytical and Nuclear Chemistry, Vol. 307, Pages 1987-1994, 2016.

Series Objectives

- Discuss the research conducted at the FDA
- Explain how FDA science impacts public health

Learning Objectives After completion of this activity, the participant will be able to:

- List types of radiation exposure and related health effects;
- Identify sources of radioactive contaminants concerning food safety;
- Describe various techniques used for analysis of radionuclides in food;
- Explain methodological problems and technical solutions pertaining to radionuclide analysis;
- Discuss significance of leveraging nationwide radioanalytical laboratory resources to increase testing capacity;
- Summarize key considerations in developing fit-for-purpose reference materials;
- Elaborate the importance of data quality and comparability and how to achieve them.

Target Audience
This activity is intended for physicians, pharmacists, nurses, and other scientists within the agency external scientific communities.

Agenda

Lecture 1 February 11, 2021

Time	Topic	Speaker
12:00 - 1:00 PM	Research and Development of Radioanalytical Capabilities for Detection of Radionuclides in Food	Zhichao Lin, PhD

Continuing Education Accreditation

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INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, FDA Center for Drug Evaluation and Research is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

IPCE CREDIT™

This activity was planned by and for the healthcare team, and learners will receive 1 Interprofessional Continuing Education (IPCE) credit(s) for learning and change.

CME

FDA Center for Drug Evaluation and Research designates this live activity for a maximum of 1.00 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CPE

This knowledge-based activity has been assigned ACPE Universal Activity Number JA0002895-0000-21-016-L04-P for 1.00 contact hour(s).

CNE

FDA Center for Drug Evaluation and Research designates this activity for 1.00 contact hour(s).

Requirements for Receiving CE Credit

Physicians, pharmacists, nurses, and those claiming non-physician CME: participants must attest to their attendance and complete the final activity evaluation via the CE Portal (ceportal.fda.gov). For multi-day activities, participants must attest to their attendance and complete the faculty evaluation each day. Final activity evaluations must be completed within two weeks after the activity - no exceptions.

Attention Pharmacists and Pharmacy Techs: Failure to provide your correct NABP AND Date of Birth information, in the required format, may result in the loss of credit for this activity. NABP profile number should be the 6-7 digit profile number assigned by the CPE Monitor and your birth date should be in the MMDD format (e.g. 0721) Do not provide your pharmacy license number. Please click the "My Account" tab and then navigate to "Edit Contact Information" to verify that your information is correct.

Important Note regarding completion of evaluations and receiving credit
Attendees have 14 days from the last day of the activity to log in, complete the required evaluation(s) and attest to your attendance to claim credit.Physicians and nurses may then view/print statement of credit. Pharmacists should log into the CPE monitor 8 weeks after the last session of the activity to obtain their CE credit.

Disclosure

Faculty

- Lin, Zhichao, PhD, Research Chemist, FDA/ORS/WEAC - nothing to disclose

Planning Committee

- Dinatale, Miriam, Team Leader, Food and Drug Administration - nothing to disclose

- Pfundt, Tiffany, PharmD, Pharmacist, FDA - nothing to disclose
- Wheelock, Leslie, RN, MS, RN, Director, OSPD, FDA, OC, OCS, OSPD - nothing to disclose

CE Consultation and Accreditation Team

- Bryant, Traci, M.A.T., CE Consultant, FDA/CDER/OEP/DLOD - nothing to disclose
- Zawalick, Karen, CE Team Leader, FDA/CDER/OEP/DLOD - nothing to disclose

Registration Fee and Refunds
Registration is complimentary, therefore refunds are not applicable.