



Supporting the Immune System through Functional and Integrative Medicine

Learning Objectives:

Upon successful completion of this knowledge-based course pharmacists should be able to:

1. Describe functions of the innate and adaptive immune system.
2. Discuss the role of mitochondrial function and supporting the immune system.
3. Recognize the connection between the gastrointestinal (GI) tract and immune function.
4. Define the differences between autoimmune and autoinflammatory conditions.
5. Discover the impact of stress on the immune system.
6. Discuss impaired detoxification and impact on immune function.
7. Review the impact of diet and lifestyle on the immune system.
8. Identify the laboratory evaluation for patients with a stressed immune system and impaired detoxification.
9. Synthesize a systems medicine approach in a case study.
10. Describe the impact of nutrient depletions and medication-related nutrient depletions on immune function.
11. Recommend proper doses to mitigate the risk of side effects related to drug induced nutrient depletions.
12. Discuss micronutrient testing.
13. Discuss dietary and lifestyle modifications for balancing immune response and decreasing inflammation.
14. Review nutraceutical products for immune modulation.
15. Discuss novel therapeutic approaches for modulating immune response.
16. Discuss the data on cannabinoids and immune function.
17. Discuss the 5 R Approach for addressing gastrointestinal imbalances.
18. Apply knowledge of immune interventions to patient cases.

Faculty:

Lindsey Elmore, PharmD, BCPS, CYT-250

CEO

Lindsey Kay Elmore, LLC

Sara Gottfried, MD

Assistant Professor

Thomas Jefferson University

Thomas Guilliams, PhD

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Faculty Disclosure:

Dr. Elmore reports that she is a consultant for Nature's Ultra.
Dr. Gottfried has a financial agreement with the Gottfried Institute.
Dr. Guillams reports that he is a consultant for Ortho Molecular Products Inc.
Dr. Hartzler reports that she is the owner of PharmToTable.
Dr. Swidan reports that she is employed by Pharmacy Solutions.
CEImpact has taken appropriate action for conflict resolution, including external peer review.

Lara Zakaria does not report any actual or potential conflicts of interest in relation to this continuing pharmacy education course.

CPE Credit



CEImpact is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

UAN: 0107-9999-20-338-H04-P | 0.75 CEUs/7.5 Hrs.
0107-9999-20-338-L04-P | 0.75 CEUs/7.5 Hrs.

On Demand Available: November 7th, 2020
On Demand Expiration: November 7th, 2023
Live Demand Available: November 7th, 2020
Live Demand Expiration: December 7th, 2020

ON DEMAND: To obtain 7.5 contact hours of continuing pharmacy education credit (0.75 CEU), participants must participate in the on-demand activity and complete the exam and evaluation. Once successfully completed, click the Submit button. The CPE Statement of Credit can then be accessed on CPE Monitor, www.MyCPEMonitor.net.*



LIVE: To obtain 7.5 contact hours of continuing pharmacy education credit (0.75 CEU), participants must participate in the live activity, and logon to the CEImpact website to complete the exam and evaluation. Once successfully completed, click Submit. The CPE Statement of Credit can then be accessed on CPE Monitor, www.MyCPEMonitor.net.*

Course Format

Live and On Demand.

Financial Support

Financial support was provided for this course through an educational grant from KBMO Diagnostics and Your Financial Pharmacist.

Course Fee

\$299 platinum package and \$199 silver package

*CEI provides you with two (2) opportunities to complete the exam.