Yaser Rayyan, MD, FACP, FASGE

Professor of Medicine Jordan University, SOM E mail: <u>y.rayyan@ju.edu.jo</u>

Tel: (962)797910444

SUMMARY

I'm a board-certified Interventional gastroenterologist with a special interest in hepatobiliary disease and IBD with 21 years of experience in Gastroenterology and Hepatology.

CLINICAL SPECIALTIES & INTERESTS

Advanced Interventional Endoscopy

Clinical Interests:

IBD, Viral Hepatitis, NAFLD, Quality of Health Care; Epidemiology; Public Health; Endoscopic Retrograde Cholangio-pancreaticography; Trans jugular Intrahepatic Porto-Systemic Shunt, Endoscopic Ultrasound.

FACULTY APPOINTMENTS & WORK HISTORY

Chairman, Department of Medicine Jordan University Hospital Amman, Jordan	2018-Present
Program Director GI fellowship Program Jordan University, SOM Amman Jordan	2016-present
Section Chief Cabell Huntington Hospital, Marshall University, School of Medicine, Gastroenterology & Hepatology Huntington, WV	2013- 2016
Professor of Medicine Jordan University, SOM Amman, Jordan	2016-Present
Professor of Medicine Marshall University, Gastroenterology & Hepatology Huntington, WV	2015 - present
Associate Professor of Medicine Educational Director Marshall University, Gastroenterology & Hepatology Huntington, WV	2010 - 2015
Assistant Professor of Medicine	2001- 2010

University of North Dakota Grand Forks, ND

Director of Endoscopy

Cabell Huntington Hospital Huntington, WV

2014-2016

EDUCATION & TRAINING

Marshall University

MPH; 2014-2015



New York Medical College

Fellowship, Gastroenterology, 1999 – 2002 Chief Residency, Internal Medicine, 1998 - 1999



Lincoln Medical and Mental Health Center

Affiliated with NY Medical College Residency, Internal Medicine, 1995 - 1998



Jordan University Hospital

Internal Medicine Residency, 1992 - 1995



University of Jordan Faculty of Medicine

Class of 1992

CERTIFICATION & LICENSURE

WV State Medical License

2010 - 2015



ND State Medical License

2002 - 2014



American Board of Internal Medicine/ Gastroenterology

2001-2011 Certified 2011-2022 Recertified



American Board of Internal Medicine

1998-2008 Certified 2009-2019 Recertified



AWARDS, HONORS & RECOGNITION

FASGE

Fellow of American Society of Gastrointestinal Endoscopy, 2009

FACP

Fellow of the American College of Physicians, 2008

America's Top Gastroenterologist

Consumers' Research Council of America, 2007

Honor certificate for excellence and dedication in education,

Lincoln Medical Center – NY Medical College, 1999

Chief Medical Resident

Lincoln Medical Center-NY Medical College, 1998-1999

CMS Meaningful Use Stage 1 Certification

All scripts Enterprise EHR, All scripts, 2013

Poster Finalist

ACP, 2014

Poster Winner

25th Annual MUSOM Research Day, 2013

Abstract Winner American Thoracic Society, 1996

CLINICAL TRIALS:

(GALAXI) A study of the Efficacy of Guselkumab in Participants with Moderately to Severely Active Crohn's Disease.

Start of enrollment 2019 on

Rayyan, Y.M.

SECURE, the Cimzia ® Crohn's Disease Post-Marketing Registry

Start of enrollment: 2009-01-01

Rayyan, Y.M.

Investigation of the Safety and Efficacy of Renzapride in Constipation Predominant Irritable Bowel

Syndrome (IBS)

Start of enrollment: 2005-12-01

Rayyan, Y.M.

Safety and Efficacy of Asacol 4.8 g/Day Versus Asacol 2.4 g/Day (ASCEND I)

Start of enrollment: 2001-02-01

Rayyan, Y.M.

The Crohn's Therapy, Resource, Evaluation, and Assessment Tool Registry

Start of enrollment: 1999-08-01

Rayyan, Y.M.

PUBLICATIONS & PRESENTATIONS:

PubMed

Nusair M, **Rayyan Y**, Hammoudeh W, et al. Hepatitis B care pathway in Jordan: current situation, gaps and recommended actions. *J Virus Erad.* 2020;6(1):1–6. Published 2020 Feb 20.

Tayyem R, Al-Dayyat Hana, **Rayyan Y**; Relationship between Lifestyle Factors and Nutritional Status and Non-Alcoholic Fatty Liver Disease among a Group of Adult Jordanians, January 2019, Arab Journal of Gastroenterology

Al-Dayyat HM, **Rayyan YM**, Tayyem RF; Non-alcoholic fatty liver disease and associated dietary and lifestyle risk factors. Diabetes Metab Syndr. 2018 Mar 16. pii: S1871-4021(18)30038-9. doi: 10.1016/j.dsx.2018.03.016.

Harrell, LD, Steele KJ, **Rayyan Y**, Nair D."A Unique Case of Accidental Ingestion of Potassium Permanganate" WVMJ of OA,Thursday, February 2nd 2017• DOI: 10.21885/wvmj.2017.4

Kamal M, Santhanam P, **Rayyan YM**. Hypertension and Clinical Outcomes of Patients with Gastrointestinal Submucosal Vascular (Dieulafoy) Lesional Hemorrhage. J Clin Hypertens (Greenwich). 2016 Jan 20. doi: 10.1111/jch.12783. [Epub ahead of print].

Ahmed R, John D., Rayyan Y. Using Capsule Endoscopy to Determine the Diagnostic Yield in patient with Obscure GI Bleeding in an Academic Affiliated Hospital in West Virginia; W V Med J. 2016 Sep-Oct;112(5):54-8.

Ahmed R, Santhanam P, **Rayyan Y**. MELD-Na as a prognostic indicator of 30- and 90-day mortality in patients with end-stage liver disease after creation of transjugular intrahepatic portosystemic shunt. Eur J Gastroenterol Hepatol. 2015 Oct; 27(10):1226-7. doi: 10.1097/MEG.00000000000000012. PubMed PMID: 26111072.

Belay T, Woldegiorgis H, Gress T, **Rayyan Y**. Intrahepatic cholestasis of pregnancy with concomitant hepatitis C virus infection, Joan C. Edwards SOM, Marshall University. Eur J Gastroenterol Hepatol. 2015 Apr; 27(4):372-4. doi: 10.1097/MEG.0000000000000293. PubMed PMID: 25874507.

Wolf DC, Siddiqui S, **Rayyan Y**, Rozenblit G. Emergent stent occlusion for TIPS-induced liver failure. Dig Dis Sci. 2005 Dec; 50(12):2356-8. PubMed PMID: 16416189.

Kashfi K, Rayyan Y, Qiao LL, Williams JL, Chen J, Del Soldato P, Traganos F, Rigas B. Nitric oxide-donating nonsteroidal anti-inflammatory drugs inhibit the growth of various cultured human cancer cells: evidence of a tissue type-independent effect. J Pharmacol Exp Ther. 2002 Dec;303(3):1273-82; PubMed PMID: 12438552.

Rayyan Y, Williams J, Rigas B. The role of NSAIDs in the prevention of colon cancer. Cancer Invest. 2002;20(7-8):1002-11. Review. PubMed PMID: 12449734.

Journal Articles:

Osama Samara, Mira Al Jabi, Sarah Al-Kubaisi, Bashar Abuleil, Saif Aldeen AlRyalat, Nosaiba Al Ryalat, **Yaser Rayyan**; The Frequency of Asymptomatic Sacroiliitis in Jordanian Patients with Crohn's Disease. Assessment by Magnetic Resonance Enterography; Research in Health Science, Vol. 4, No. 4, 2019 www.scholink.org/ojs/index.php/rhs;https://doi.org/10.22158/rhs.v4n4p306.

Rezwan Ahmed, Bashar AbuLeil, **Yaser Rayyan**; Advances in the treatment of esophageal varices: assessing covered tips versus endoscopic band ligation plus propranolol for the prevention of variceal rebleeding in patients with portal vein thrombosis; AME Med J.; March 2018;DOI: 10.21037/amj.2018.01.10

In Submission:

Yaser Rayyan, Rezwan Ahmed, Maen Kamal; Factors Associated with Treatment Outcomes of Dieulafoy's Lesion of the Gastrointestinal Tract: A Single Center Experience in West Virginia; In submission.

Todd W Gress, MD; Kanaan Mansoor, MD; **Yaser M Rayyan**, MD; Rodhan A Khthir, MD; Reema F Tayyem, PhD; Antonios H Tzamaloukas, MD; Nader G Abraham, PhD; Joseph I Shapiro, MD; Zeid J Khitan, MD. Relationship Between Dietary Sodium and Sugar Intake: A Cross-Sectional Study of the National Health and Nutrition Examination Survey 2001-2016. In submission

Abstracts/Posters:

Superior Mesenteric Artery Syndrome in an athletic 22-year-old female. Haresh Visweshwar, **Yaser Rayyan**; 28th Annual MUSOM Research Day; Huntington, WV. March 2016.Pan colitis with ileitis caused by Methicillin_Resistant Staphylococcus Aureus (MRSA). Yousef Abdel_Aziz, **Yaser Rayyan**; 28th Annual MUSOM Research Day; Huntington, WV. March 2016.

Hemobilia with Cholangitis and septic shock, Mounif Rifkah, Ahmed Rezwan, **Yaser Rayyan**, Video/Poster Presentation at ACG, October 2015, Honolulu, HI

Black Esophagus in a 51-year-old male Ashley Zawodniak, Mean Khitan, **Yaser Rayyan**.27th Annual MUSOM Research Day; Huntington, WV. March 2015.

Sarcomatoid Carcinoma: An Obscure Cause for an Obscure Bleed• Aviral Roy, Rezwan Ahmed, **Yaser Rayyan**; 27th Annual MUSOM Research Day; Huntington, WV. March 2015.

Detection of an Extragastric Dieulafoy's Lesion Using ERCP• Indira Bhavsar, Rezwan Ahmed, **Yaser Rayyan**; 27th Annual MUSOM Research Day; Huntington, WV. March 2015.

Single Center Experience Evaluating Variable Prognostic Indicators Of 30 and 90-day Mortality in Patients with End Stage Liver Disease After Creation of Transjugular; Rezwan Ahmed, Kimberly Weaver, Prasanna Santhanam, **Yaser Rayyan**; ACG; Abstract, Philadelphia, PA - 10/21/2014

[P 1256]; Esophageal Hyperkeratosis and Multiple Esophageal Rings in a patient with Recurrent Dysphagia Jason P Mader, Maen Kamal, Rezwan Ahmed, **Yaser Rayyan**, ACG; Philadelphia, PA - 10/21/2014

Intrahepatic Cholestasis of Pregnancy in Hepatitis C Virus Infection Tilahun Belay, Hailegiogiorgis Woldegiorgis, **Yaser Rayyan**; ACG; Abstract; Philadelphia, PA - 10/18/2014

[P 1418]; Generalized Lymphangiectasia in a Patient Presenting With Overt Obscure Gastrointestinal Bleeding Maen Kamal, Jason Mader, Rezwan Ahmed, Muralikrishna Mukkamala, Teresa Limjoco, Yaser Rayyan, ACG; Abstract - 10/21/2014.Primary Intestinal Lymphangiectasia in a Patient with 6q Duplication Syndrome. • Eric Riley, Kimberly Weaver, Rezwan Ahmed, Yaser Rayyan, Poster Finalist, ACP, Orlando, FL April, 2014.

Spontaneous Infected Biloma Managed By Percutaneous Drainage Followed by ERCP due to Persistent Bile Leak; Jai Kumar Khatri, **Yaser Rayyan**, 26th Annual MUSOM Research Day; Huntington, WV. March 2014.A Case Study Illustrating the Rare Development of a Liver Hematoma after Percutaneous CT-Guided Liver Biopsy. Haitem Muafa, Rezwan Ahmed, Stephen Roy, **Yaser Rayyan**, 26th Annual MUSOM Research Day; Huntington, WV. March 2014.

A case of Post Cholecystectomy Gall Bladder Remnant Syndrome Nick Bailey, Osinowo Osiyemi, James Buchanan, **Yaser Rayyan**, 26th Annual MUSOM Research Day; Huntington, WV. March 2014.Intrahepatic Cholestasis of Pregnancy in Hepatitis C Virus Infection; [Oral Presentation] Tilahun

Belay, Hailegiogiorgis Woldegiorgis, **Yaser Rayyan**, 26th Annual MUSOM Research Day Huntington, WV. March 2014.

Using Capsule Endoscopy to Determine the Diagnostic Yield in patient with Obscure GI Bleeding; [Oral Presentation] Rezwan Ahmed, **Yaser Rayyan**; 26th Annual MUSOM Research Day; Huntington, WV. March 2014.

[P1990]Using Capsule Endoscopy to Determine the Diagnostic Yield in patient with Obscure GI Bleeding in an Academic Affiliated Hospital in West Virginia Goyal, Neha, Rezwan Ahmed, John Davitt, and Yaser Rayyan., Am. J. of Gastro, vol. 108, pp. S604-S605.

[P524]: Using Capsule Enteroscopy Imaging to Analyze the Effects of Proton Pump Inhibitor Therapy and Its Association to Iron Deficiency Anemia Rezwan Ahmed, John Davitt, Neha Goyal, Yaser Rayyan, AM. J. Gastro, vol. 108, pp. S598-S599; 10/2013A Pseudoaneurysm of the Gastroduodenal Artery Secondary to Prior Intervention; A Rare Cause of Gastrointestinal Bleeding• Neha Goyal, Omolara Olajidi, Rezwan Ahmed, Yousef Shweihat, Yaser Rayyan, American College of Physicians West Virginia Chapter Scientific Meeting; Roanoke, WV. October 2013.Management of Esophageal perforation post dilation with self-expanding stents: A Case Report Aviral Roy, Hani Alkhankan, Rezwan Ahmed MD, Yaser Rayyan; , 25th Annual MUSOM Research Day Huntington, WV. March 2013.

Urgent Capsule Endoscopy in a Hospitalized Patient with Obscure Overt GI Bleeding Changes Subsequent Management Senait Teklehaimanot, MD, Rezwan Ahmed, MD, **Yaser Rayyan, MD**; 25th Annual MUSOM Research Day Huntington, WV. March 2013.

Extraordinarily elevated serum levels of CA 19-9 and rapid decrease after successful therapy; Majd Kanbour MD, **Yaser Rayyan MD.** 25th Annual MUSOM Research Day Huntington, WV. March 2013.

Isolated "Downhill" Esophageal Varices In SVC Syndrome Caused by Castleman's Disease Neha Goyal, **Yaser Rayyan**.;25th Annual MUSOM Research Day Huntington, WV. March 2013.

[Abstract winner] The use of Polyflex Stents in Refractory Benign Esophageal Strictures Douglas von Allmen, BS; Rezwan Ahmed, MD; Yaser Rayyan, MD; 25th Annual MUSOM Research Day Huntington, WV. March 2013.

Portal Hypertension Treated with Splenectomy Yousof E Elgaried, Lacey M Vence, **Yaser Rayyan**, American College of Physicians West Virginia Chapter Scientific Meeting; Roanoke, WV. October 2012

Haemobilia with massive upper GI bleed Yousof Elgaried, **Yaser Rayyan**.; American College of Physicians West Virginia Chapter Scientific Meeting; Roanoke, WV. October 2012.

TIPS Induced Acute Liver Failure Saima Siddiqui, Yaser Rayyan, Grigory Rozenblit, Kevin Paterson, David C Wolf, DDW; AGA - 1/1/2004. [C84:Poster: 811] Transbronchial Lung Biopsy in Mechanically Ventilated Patients: Safety and Diagnostic Yield. RJ Basir, H Lababidi, Y Rayyan, A. Ibrahimbacha. American Thoracic Society [C84] [Poster: 811], 1999A38 [Poster: J1] Clinical Significance and Characteristics of Pulmonary Septic Emboli in an Inner City Hospital; D. Gagadam, Y. Rayyan, M. Basit, R Basir, T. McGarry, H. Lababidi, American Thoracic Society, Abstract Winner, Page A110, A38 [Poster:J1], 1996., New York Medical College – 1996; [Abstract Winner]

Ongoing Research:

- 1. Dieulafoy's lesion of the gastrointestinal tract, diagnosis and treatment
- 2. Regulation of intestinal nutrient and electrolyte transporters in inflammation and cancer

- 3. Cell phone-based text messaging 1 day prior to colonoscopy and impact on quality of colonic prep.
- 4. Caecal intubation time vs withdrawal time and impact on adenoma detection rate
- 5. Gastric polyps and H pylori
- 6. H pylori in Jordan, treatment options
- 7. Asymptomatic sacroiliits in Crohn's disease

Invited Presentations:

Treat to Target in Crohns Disease

Jordanian Society of Gastroenterology Amman, Jordan, Feb. 2020

Portal Hypertension, Pathophysiology and implications

Ministry of Health

Amman, Jordan, August 2019

Predictors of Severity in Acute Pancreatitis

Jordanian Society of IM Annual Meeting Rotana, Amman, June 2019

Microscopic Colitis

Clinicopathological correlation Amman, Jordan July 2019

GERD Therapy

Amman, Jordan July 2019

NAFLD- Update

Al-Hussein Medical Center national Conference Dead Sea, Jordan 12/1018

Biologics in IBD, Update

Jordanian IBD Conference Holiday Inn, Amman, Jordan 5/2018

NASH/NAFLD Epidemiology and Therapeutics

Egyptian Gastroenterology Conference Egypt, Cairo 3/2018

Trials in Hepatitis C

Jordanian Society of Gastroenterology Amman, Jordan 3/2017

Fulminant Liver Failure

Huntington, WV, 2015

Acute Variceal Bleeding, Management Approach

Huntington, WV 2014

Obscure GI Bleeding; Diagnosis and treatment

Huntington, 2013

ERCP Indications and Complications

Nurses Day, Huntington, WV 2013

Spy Glass Cholangiscopy, How, When and Why?

Boston Scientific Sponsered meeting Huntington, WV 2013

Chronic Hepatitis C, New Treatment and Predictors of Response

Huntington,WV 2012

Acute Liver Failure

Huntington, WV 2011

LPR (Laryngopharyngeal reflux), Pathogenesis and Management

Dickenson, ND 2007

GI Bleeding, Diagnosis and Management

Bismarck, ND 2005

PPI therapy and Peptic Ulcer Disease

Bismarck, ND 2004

Dual placement of biliary and enteric SEMs (Self expandable Metal Stents) in a patient with pancreatic carcinomatosis

NY Society of Gastrointestinal Endoscopy, Manhattan, NY 2000

Committees:

Jordan University, Faculty of Medicine Board

Member, 2018-PRESENT

National Committee of Jordanian Pharmacology and Therapeutics

Member, Ministry of Health, Amman Jordan

Operational Pharmacological and Therapeutic Committee

Chair, Jordan University Hospital, 2018-Present

Clinical Operational Committee

Member, Jordan University Hospital, 2018-Present

IM Examination Committee

Chair, Jordan University SOM, 2018-Present

IM Resident Evaluation Committee

Chair, Jordan University SOM, 2018-Present

IM Clinical Committee

Chair, Jordan University, SOM;2018-Present

Faculty Board Committee

Member, Jordan University, SOM;2018-Present

Committee of Higher Education

Member, Jordan University, SOM;2018-Present

Mortality & Morbidity Committee

Member, Jordan University Hospital, 2020

Corona Hospital Committee

Member, Jordan University Hospital, 2020

Clinical Operational Committee

Member, Marshall University, WV 2013-2016

Curriculum Review Committee

Member, Marshall University, WV 2013-2016

Section Chiefs Committee

Member, CHH, WV 7/2012- 2016

Mortality and Morbidity Committee

Member, MCO Hospital, ND 7/2001- 4/2010

Curriculum Review Committee

Member, LMMHC, NY 7/1998-7/1999

Mortality and Morbidity Committee

Member, LMMHC, NY 19971998

Resident's evaluation and selection committee,

Member, LMMHC 1997-1998

Professional Memberships

American College of Physicians

ACP Fellow

American Society for Gastrointestinal Endoscopy

FASGE- Fellow

American Gastroenterological Association

Member

Rome Foundation

Member

Jordanian Association of Physicians

Member

Jordanian Society of Gastroenterology

Member

HOSPITAL AFFILIATIONS

Jordan University Hospital

Amman, Jordan; 2016-present

Cabell Huntington Hospital

Huntington, WV; 2010-2016

Med center One Hospital

Bismarck, ND; 2001- 2010

St Alexius Medical Center

Bismarck, ND; 2001-2010

Current & Past Teaching Experience

Jordan University Hospital/JU SOM

Director of GI fellowship program at Jordan University Hospital, Jordan University SOM a program of 10-12 Fellows, seven Gastroenterologists. responsibilities include update of teaching curriculum, direct and organize teaching conferences and grand rounds, Journal club, teaching Rounds, Endoscopy training and consultation service.

Director of Endoscopy, responsibilities include standards of care, Training of GI fellows, infection control and training of nursing staff besides scheduling and flow in the unit.

Chairman, Department of internal Medicine, JUSOM, with a large group of Internist and subspecialists, the largest in the country, with 46 Residents, 50 Interns, and around 200 Internist and subspecialist in all divisions of IM. Administrative responsibilities include directing the educational and training activities in the department, training of residents and organizing their rotations and clinical posts, educational and training activities of 4_{th} and 6_{th} Year-Medical students rotating in IM

GI Lectures for 4th MS, Seminars for 6TH year MS

Morning Reports activity for IM residents and Emergency lectures

Research activity and mentorship.

Cabell Huntington Hospital/Marshall University

Director of GI Teaching, Internal Medicine Residency Program, Marshall University (responsibilities include updating the teaching curriculum, directing and presenting teaching conferences, organizing teaching and research activities.

Monthly GI conference for Marshall University Resident, Presenter and Organizer, 2010-2016.

Training and Bedside Teaching Rounds for Marshall University student and Medical Resident 2010-2016.

Annual GI Board Review for Marshall University resident 20112016

GI Lectures for Marshall MS3 every 6 weeks, 2013-2016

Annual Lectures in GI Emergencies 2010-2016.

Annual GI Grand Rounds for Marshall IM Department 2010-2016

Director of Endoscopy, CHH (Teaching responsibilities include standards of care, infection control and training nursing staff).

Med Center One Hospital/ University of North Dakota

Training of Med Center One Hospital Nurses Advanced Endoscopic Skills and Education on Safety and Complications of Endoscopy. Yearly Program 2003-2008

Bedside Teaching Rounds, for UND Medical Students, and Residents 2002-2010

Lecturer, GERD- UND Medical students

Lecturer, GI Bleeding – UND Medical Students

Lincoln Hospital, NY Medical College /Chief Resident 1998-1999

Lecturer, Case Studies in Internal Medicine 1998
Lecturer, Acute Pancreatitis, Management Issues, 1998
Lecturer, Inflammatory Bowel Disease, New Treatments 1998
Lecturer, Osteoporosis and Clinical Approach, 1998
Lecturer, GI Bleeding: The role of the Internist,1998
Lecturer, Rheumatology Board Review 1999
Moderator, Morning Report Activity 1998-1999
Lecturer, Gastroenterology Board Review 1999
Contributor, General Internal Medicine Curriculum 1997-1998
Contributor, Rheumatology Curriculum 1997-1998
Contributor, Rheumatology Curriculum 1997-1998
Teaching Rounds, Cornell Medical Students 1998

Gastroenterology and Hepatology Scope of Practice

Interventional ERCP/Spy Glass Cholangioscopy
Endoscopic Ultrasound, FNA
Single/Double Balloon Enteroscopy
EGD/Colonoscopy with therapeutic Intervention e.g. Halo, stent, PEG
Esophageal Motility with Impedance, PH study