Curriculum Vitae and Bibliography Swarup Kumar, MD

PERSONAL INFORMATION

Work Address: Dept. of Hematology and Medical Oncology,

UCONN school of Medicine 263 Farmington Avenue, Farmington CT 06030

The Palucka Lab

The Jackson Laboratory

10 Discovery Dr,

Farmington, CT 06032

Email Address: swkumar@uchc.edu (work)

swarup.kumar@jax.org (work) swarup1989@gmail.com (personal)

PRESENT POSITION

Clinical Fellow – PGY 5, 07/2018 - present

Department of Hematology and Medical Oncology, UCONN school of medicine,

Farmington, CT 06030

Research Fellow 01/2020 - present

The Palcuka Lab 10 Discovery Dr, Farmington, CT 06032

EDUCATION

Jawaharlal Institute of Post – Graduate Medical Education and 07/2007 - 04/2013

Research

(JIPMER) MBBS

CERTIFICATION(S)

Educational Commission for Foreign Medical Graduates (ECFMG) 10/2013

Standard ECFMG certificate

LICENSURE

MA Limited License	07/2015 - 06/2018
CT Limited License	07/2018 - present

HONORS/AWARDS

Outstanding Journal Club award, Saint Vincent Hospital	2017
Winning abstract at ACP Nationals (May 2015) for the topic "Should we revisit our guidelines for antibiotic prophylaxis before endoscopic procedures in patients with prosthetic valve?	2015
RAPID course certificate (Research applications in Clinical Practice Improvement Decisions), CCATS, Mayo Clinic	2015
Sixth Mayo Clinic Angiogenesis Symposium travel award	2014
Indian Council of Medical Research (ICMR) student research scholarship	2010

PREVIOUS POSITIONS

Resident, Dept. of Internal Medicine, Saint Vincent Hospital, Worcester MA	07/2015 – 06/2018
Research collaborator, Mayo Clinic Rochester – Dept. of Gastroenterology and Hepatology	04/2016 – 05/2017
Research Trainee, Mayo Clinic Rochester – Dept. of Gastroenterology And Hepatology	04/2014 — 04/2015
Asst. Chief Medical Officer - Dept. of Emergency Medical Services, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India.	01/2013
Visiting Senior Medical School Student, Harvard Medical School	02/2013 - 04/2013

PROFESSIONAL & COMMUNITY MEMBERSHIPS, SOCIETIES AND SERVICES

American Society of Hematology	07/2018- present
American Medical Association (AMA)	04/2014 - present

American College of Gastroenterology (ACG)	07/2016 - present
Massachusetts Medical Society (MMS)	07/2015 - present
Mayo Research Fellows Association	04/2014 - 07/2015
Jawaharlal Institute of Post Graduate Medicine and Research Alumni Association of North America (JAANA)	04/2014 - Present

CLII

INICAL EXPERIENCE & EDUCATIONAL ACTIVITIES	
Compulsory Rotatory Resident Internship (CRRI)	12/2011 – 12/2012
Location: JIPMER, India Outcome: Successful completion of all rotations with special commendation in Internal Medicine and Psychiatry	
M4 Senior Elective, Harvard Medical School (HMS) Clinical Elective in Medical Genetics	03/2013
Location: Brigham and Women's Hospital, Boston, MA Mentor: Frederick R. Bieber, PhD Outcome: Honors (H) grade	
M4 Senior Elective, Harvard Medical School (HMS) Clinical Elective in Adult and Pediatric Sleep Medicine	04/2013
Location: Beth Israel Deaconess Medical Center, Boston, MA Mentor: Robert Joseph Thomas, MD Outcome: Honors with Distinction (HH) grade	
Resident Elective, Boston Medical Center (BMC) Clinical Elective in Gastroenterology and Hepatology	09/2016

Location: Boston Medical Center, Boston, MA Outcome: Successful completion of rotation with outpatient and inpatient experiences

Participation in Scientific courses and Workshops

National Conference of the Indian Association of Preventive and Social Medicine Physicians, JIPMER, Pondicherry, India	03/2008
International Student Congress in (Bio)Medical Sciences (ISCOMS) Groningen, Netherlands	06/2012
Cytogenetics CME, Brigham and Women's Hospital Boston, Massachusetts	03/2013
Human Teratogens CME, Massachusetts General Hospital Boston, Massachusetts	04/2013
The European Cancer Congress 2013 Amsterdam, Netherlands	11/2013

6 th Mayo Clinic Angiogenesis Symposium, Mayo Clinic Rochester, Minnesota	08/2014
Metabolomics Workshop, Mayo Clinic Rochester, Minnesota	09/2014
American College of Gastroenterology Annual Scientific Meeting, Philadelphia, Pennsylvania	10/2014
Fundamentals of Clinical and Translational Research, CCaTS online courses, Mayo Clinic, Rochester, Minnesota	08/2014
American College of Physicians Annual Meet, Boston, MA	05/2015
Digestive Diseases Week, Washington D.C	05/2015
American College of Gastroenterology Annual Scientific Meeting, Las Vegas, Nevada	10/2016
American Society of Hematology Annual Meeting, Orlando, Florida	12/2019

PRESENTATIONS

International

Role of tumor cellularity in the assessment of response to Neoadjuvant Chemotherapy treated locally advanced breast cancer. Poster	07/2012
International Student Congress in (Bio)Medical Sciences (ISCOMS) Groningen, Netherlands	
Angiogenesis in Chronic Myeloid Leukemia (CML). Poster The European Cancer Congress 2013 Amsterdam, Netherlands	11/2013

National

Quantifying bone marrow angiogenesis in Chronic Myeloid Leukemia: a case control study assessing mean vascular densities Poster 6 th Mayo Clinic Angiogenesis Symposium, Rochester, Minnesota	08/2014
Outcomes of Combined Endoscopic Cyanoacrylate Injection with Balloon Retrograde Transvenous Occlusion of Gastro/Spleno-Renal Shunts for Gastric Variceal Hemorrhage.	10/2014
Poster American College of Gastroenterology Annual Scientific Meeting, Philadelphia, Pennsylvania	

Safety and Utility of Combined Radiofrequency ablation (RFA) and Endoscopic Mucosal Resection (EMR) in a Single Endoscopic Therapy Session. Poster American College of Gastroenterology Annual Scientific Meeting,	10/2014
Philadelphia, Pennsylvania Does Intensive Acid Suppression Reduce Esophageal Inflammation and Recurrence of Barrett's Esophagus following Ablation?: A Pilot Randomized Controlled Trial Poster	10/2014
American College of Gastroenterology Annual Scientific Meeting, Philadelphia, Pennsylvania	
Assessment of Osteoporosis and Fracture Risk with Proton Pump Inhibitor (PPI) therapy in patients with Barrett's Esophagus in Olmsted County, Minnesota. Poster	05/2015
Digestive Diseases Week, Washington DC	
Utility and applications of metabolomics in assessment of patients with Reflux Esophagitis, Barrett's Esophagus and Esophageal Adenocarcinoma. Poster Digestive Diseases Week, Washington DC	05/2015
Should we revisit our guidelines for antibiotic prophylaxis before endoscopic procedures in patients with prosthetic valve? Podium presentation ACP Nationals 2015, Boston MA	05/2015
Prevalence of Dysplasia and Carcinoma at Initial Barrett's Esophagus Diagnosis in a Population Based BE Cohort. Poster American College of Gastroenterology Annual Scientific Meeting, Las Vegas, Nevada	10/2016
GI interesting case review series, Grand rounds Podium presentation, Dept. of Medicine, Saint Vincent Hospital, The Richard Bishop Conference and Educational Center, Worcester MA	04/2017
Genetic Risk, Adherence to a Healthy Lifestyle, and Coronary Disease Best Journal Club Award Presentation Dept. of Medicine, Saint Vincent Hospital, The Richard Bishop Conference and Educational Center, Worcester MA	06/2017

RESEARCH EXPERIENCE

Medical Student Research

05/2010 - 12/2012

Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India.

Research Activity:

Histologic Assessment of the response to neoadjuvant

therapy in locally advanced breast cancer

Mentor: Bhawana Ashok Badhe, MD

CD34 staining and Mean Vascular Density calculation

in Chronic Myeloid Leukemia (CML) bone marrow biopsies.

Mentor: Debdatta Basu, MD

Research Fellow 04/2014 – 04/2015

Division of Gastroenterology, Dept. of Internal Medicine,

Mayo Clinic, Rochester

Mentor: Prasad G. Iyer, MD, MS

Research Activity:

Clinical and Translational Research in Barrett's Esophagus (BE): Clinical Research Projects include Retrospective chart review for treatment effectiveness and safety; Expanding and Maintaining the BE registry to the Rochester Epidemiology Project (REP); Translational Research projects include randomized controlled trial for investigation of intensive acid suppression to prevent recurrence of metaplasia in BE; Modulation of Inflammation in BE using Ω 3 Fatty acid Supplementation: A pilot Randomized Study.

Basic science Research: Epigenetics & Chromatin Dynamics Lab; Basic Science in Digestive Disease Lab

Research Fellow 01/2020- present

Jackson Laboratory, Farmington CT

Mentor: Karolina Palucka MD PhD

Research activity:

Learn and participate in research projects aimed at understanding the transcriptome in cancer; skill set incudes computational science, R programming, visualization of data, RNA sequencing and scientific reasoning.

BASIC RESEARCH SKILLS/ TECHNIQUES:

- 1. Western Blot (WB)
- 2. qRT PCR (RT-PCR)
- 4. Immunohistochemistry (IHC)
- 5. RNA sequencing (analysis)
- 6. R programming

VOLUNTEER EXPERIENCE

United Nations Volunteer (UN Online Volunteering) For Professional, Educational Organization International (PEOI), USA	02/2014 - 06/2015
Outcome: Development of online courses for teaching students who can't afford medical education; Completed courses include Human Anatomy Basics and General Internal Medicine	
Child Malnutrition Assessment program in the service areas of Urban and Rural Health Centers, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India	04/2012 – 06/2012
Family Health Advisory Program (FHAP) in the service areas of Urban	07/ 2009 – 02/2011

HOBBIES/ PERSONAL INTERESTS

Education and Research, Pondicherry, India

1. Motorcycle riding 2. Trance Music (electronic genre)

and Rural Health Centers, Jawaharlal Institute of Postgraduate Medical

3. Badminton 4. Volleyball

LANGUAGE SKILLS

English (native/functionally native); Tamil (native/functionally native); French (basic)

BIBLIOGRAPHY

Peer-reviewed Articles

- 1. **Kumar S**, Sagili H. Etiopathogenesis and Neurobiology of Narcolepsy: A Review. J Clin Diagn Res. 2014;8(2):190-195. PMID: 24701532, PMCID: PMC3972560, doi: 10.7860/JCDR/2014/7295.4057.
- 2. **Kumar S**, Badhe BA, Krishnan KM, Sagili H. Study of tumour cellularity in locally advanced breast carcinoma on neo-adjuvant chemotherapy. J Clin Diagn Res. 2014;8(4):FC09-13. PMID: 24959451, PMCID: PMC4064915, doi: 10.7860/JCDR/2014/7594.4283.
- 3. **Kumar S**, Drake MT, Schleck CD, Johnson ML, Alexander JA, Katzka DA, Iyer PG. Incidence and predictors of osteoporotic fractures in patients with Barrett's oesophagus: a population-based nested case-control study. *Aliment Pharmacol Ther*. 2017;46:1094-1102. PMID:28980336 PMCID: PMC5683094
- Kumar S, Iyer PG. Endoscopic eradication therapy for Barrett's esophagus: Adverse outcomes, patient values, and cost-effectiveness. *Techniques in Gastrointestinal Endoscopy*. 2018 Feb. DOI: 10.1016/j.tgie.2018.02.002
- Mahadevan KK, Basu D, Kumar S. Does CD34 Staining Reflect the Angiogenic Process in the Bone Marrow? An Analysis of a Series of Chronic Myeloid Leukemia Patients. J Clin Diagn Res. 2014;8(5): FC04-7. PMID: 24995188, PMCID: PMC4080009, doi:10.7860/JCDR/2014/7994.4405.
- Sagili H, Kumar S, Lakshminarayanan S, Papa D, Abi C. Knowledge of HIV/AIDS and attitude towards voluntary counselling and testing among antenatal clinic attendees at a tertiary care hospital in India. J Obstet Gynaecol India. 2015 Apr;65(2):104-10. PMID: 25883441, PMCID: PMC439558.
- 7. Miyamoto Y, Mauer A, **Kumar S**, Mott JL, Malhi H. Mmu-miR-615-3p regulates lipoapoptosis by inhibiting C/EBP homologous protein. *PLOS One*. 2014:14;9(10):e109637. PMID: 25314137, PMCID: PMC4196923, doi: 10.1371/journal.pone.0109637.
- 8. Haritha S, **Kumar S**, Lakshminarayanan S, Dasari P. Human Papilloma Virus vaccine –awareness and acceptability amongst medical students in a tertiary teaching hospital in South India. *J Gynecol Res Obstet.* 2017, 3(2): 025-028.
- 9. Bandla H, Dasgupta D, Mauer AS, Nozickova B, **Kumar S**, Hirsova P, Graham RP, Malhi H. Deletion of endoplasmic reticulum stress-responsive co-chaperone p58^{IPK} protects mice from diet-induced steatohepatitis. *Hepatology research: the official journal of the Japan Society of Hepatology*. 2018;48(6):479-494. doi:10.1111/hepr.13052.

Abstracts

- Kumar S, Badhe BA, Krishnan KM, Kadambari D. Role of tumor cellularity in the assessment of response to neoadjuvant chemotherapy treated locally advanced breast cancer. In: Eur J Cancer. 2013:49(S2): 2001.
- 2. Mahadevan KK, Basu D, **Kumar S.** Angiogenesis in Chronic Myeloid Leukemia. In: *Eur J Cancer*. 2013:49(S2): 3615.
- 3. **Kumar S**, Al-Bawardy B, Gorospe EC, Buttar NS, Wong Kee Song LM. Outcomes of Combined Endoscopy and Balloon-Retrograde Transvenous Occlusion (BRTO) for Patients with Bleeding Gastric Varices and Concomitant Gastro/Spleno-Renal Shunts. In:

 Am J Gastroenterol. Oct 2014 Supplement.

- 4. **Kumar S**, Devanna S, Gorospe EC, Johnson MH, Lutzke LS, Clemens M, Maixner K, Wang KK, Iyer PG. Safety and Utility of Combined Radiofrequency ablation (RFA) and Endoscopic Mucosal Resection (EMR) in a Single Endoscopic Therapy Session. In:

 Am J Gastroenterol. Oct 2014 Supplement.
- 5. **Kumar S**, Sharma AN, Gorospe EC, Devanna S, Johnson M, Maixner K, Wang KK, Buttar NS, Iyer PG. Does Intensive Acid Suppression Reduce Esophageal Inflammation and Recurrence of Barrett's Esophagus following Ablation?: A Pilot Randomized Controlled Trial. In: *Am J Gastroenterol. Oct 2014 Supplement*.
- 6. **Kumar S**, Schleck C, Krishnamoorthi R, Johnson M, Zinsmeister AR, Drake MT, Iyer PG. Incidence and Predictors of Fractures and Osteoporosis in Barrett's Esophagus Subjects: a Population Based Nested Case Control Study. In: *Gastroenterology. May 2015 Supplement*.
- 7. **Kumar S**, Sakrikar D, Johnson M, Ford C, Nair S, Katzka D, Iyer PG. Utility of Plasma Metabolomic Profiles in Differentiating Barrett's esophagus and Esophageal Adenocarcinoma from Control Subjects: A Pilot Study. In: *Gastroenterology. May 2015 Supplement*.
- 8. Codipilly D, **Kumar S**, Pophali P, Johnson M, Schleck C, Enders F, Iyer PG. Prevalence and Predictors of NAFLD in a Population Based BE Cohort. In: *Am J Gastroenterol*. *Oct 2016 Supplement*.
- 9. **Kumar S**, Visrodia K, Pophali P, Johnson M, Katzka D, Iyer PG. Prevalence of Dysplasia and Carcinoma at Initial Barrett's Esophagus Diagnosis in a Population Based BE Cohort. In: *Am J Gastroenterol. Oct 2016 Supplement.*
- Bazebachi F, Dobashi A, Kumar S, Misra S, Buttar N, Wong Kee Song LM. Safety and Efficacy of Combined Endoscopic Cyanoacrylate Injection and Angiographic Balloon Catheter Occlusion of Gastrorenal Shunts in Patients with Bleeding Gastric Varices. In: Gastroenterology. April 2019 Supplement.