

Martha L. Lepow, M.D., Irwin H. Lepow, M.D., PhD. Medical Student Research Day

April 21, 2022

Case Western Reserve University School of Medicine & The Cleveland Clinic Lerner College of Medicine

2022

Dr. Martha Lipson Lepow was born in Cleveland, Ohio, graduated from Heights High School and then enrolled at Oberlin College, majoring in chemistry. She entered Western Reserve Medical School in the class of 1952 and was one of the 7 women in a class of 84. During her fourth year, she served as Acting Intern at Babies and Children's hospital in Cleveland, where she cared for children with Leukemia, Cystic Fibrosis and Nephrosis. She also saw how penicillin, recently licensed, could cure pneumonia and then decided on a Pediatric residency. In 1953, she was



transferred to Cleveland's City Hospital (now MetroHealth Medical Center) Infectious Disease's Service and Pediatrics where Dr. Frederick Robbins was Chair and Dr. Robert Eiben supervised the poliomyelitis unit. Dr. Robbins invited her to work in the virus laboratory, where studies on sera from vaccines were being tested. In 1957, a fourth-year medical student, Irwin H. Lepow, Ph.D. came to this virus laboratory to learn to grow cells in culture. He and Martha were married 2 months later. Martha later became a faculty member, teaching, caring for patients and working on testing the Sabin, Rubeola and the Rubella vaccines.

In 1967, Irwin and Martha were recruited to the new university of Connecticut Medical School. She started the Department of Pediatrics and the division of Pediatric Infectious Diseases. She and her husband then moved to Albany, New York in 1978, where she was Professor of Pediatrics at Albany Medical College. She was Vice-Chair and Head of the Division Pediatric Infectious Disease and became Chair from 1993-1997. She is currently an Emeritus professor.

Martha has served on the board membership in a large community health center in Albany and has been a medical adviser to several other community non-profit agencies and the Capital District Physicians Health Plan. Nationally, she has served as an editor of the Red Book, a manual of infectious diseases and vaccines for pediatricians, which is also a publication of the Pediatric Infectious Diseases of the American Academy of Pediatrics. In addition, Dr. Lepow was a grant reviewer for the NIH and March of Dimes. Finally, she has won numerous teaching awards and national awards for Pediatric Education from the AAP and an Honorary Degree from Oberlin College. She has over published over 100 research articles and book chapters. Dr. Martha L. Lepow died in October of 2021.

Irwin H. Lepow, M.D., Ph.D.

Irwin H. Lepow received his Ph.D. from Western Reserve University in 1951, for complement research done in Louis Pillemer's laboratory in the Institute of Pathology. He later received his M.D. from Western Reserve in 1958. Between 1951 and 1967, he served on the School of Medicine's faculty, and during that time he extended the medical school's reputation for complement research that was established by his predecessors. In 1967, he accepted the Chair of Pathology at the



then new medical school of the University of Connecticut and subsequently became Chair of Medicine. Before his death in 1984, he was Vice President for Research at the Sterling Drug Company, Rensselaer, New York, and President of its Sterling-Winthrop Research Institute.

Dr. Lepow's major research contributions included the purification and characterization of the Clqrs complex of complement and the demonstration of its enzymatic nature. He also discovered, purified and characterized the natural serum inhibitor of Cl esterase, whose deficiency underlies the disease, hereditary angioedema. Another major research contribution was showing that complement components play a significant role as mediators of the inflammatory reaction through their ability to enhance vascular permeability. Dr. Lepow was a prominent figure in the field of immunology throughout his career, based not only on his fundamental contributions to complement research but also on his personal character and leadership abilities. His stature is exemplified by his election as President of the American Association of Immunologists in 1979.

Dear Students, Faculty, Staff and Guests:

Welcome to the Martha L. Lepow, M.D. and Irwin H. Lepow, M.D., Ph.D., Research Day, 2022! Due to issues occurring in these trying times, this year's Lepow Day will be a virtual (Zoom) half day meeting, beginning with our plenary lecture by Pamela B. Davis, M.D., our former Dean and the Arline and Curtis Garvin Research Professor at CWRU. Her talk is entitled, "One for the Record Books: The Conquest of Cystic Fibrosis". Following the Lepow lecture, there will be student Oral presentations from 2:15-4:30pm. The winners of the poster presentations will close the event.

The Case Western Reserve School of Medicine and the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University are grateful to the family, friends and colleagues of Drs. Martha L. and Irwin H. Lepow, who, by contributing so generously to the Lepow Endowment Fund, have made this Medical Student Research Day and its distinguished Lepow Lecture possible.

In order for this day to become possible, a number of faculty and staff members have played significant roles. The Lepow Day Committee consists of Drs. Jill Azok, Colleen Croniger, Marjorie Greenfield, Neil Greenspan, Robert Haynie, Charles Joiner, Thomas Kelley, Jason Lambrese, James Lieberman, Donald Mann, Neil Mehta, Todd Otteson, Angelique Redus-McCoy, Steven Ricanati, Arlene Rosenberg and Charles Smith. They have worked on the program over the past year, formulated the current program and judged all the abstracts for the selection of the fourteen oral presentations, the highest honor for students submitting an abstract.

The following faculty members have generously donated their time to serve as Poster judges: Drs. Sarah Augustine, Jill Azok, William Bemish, Tracey Bonfield, Robert Bonomo, Jacob Calcei, Christina Cheng, Colleen Croniger, Douglas Einstadter, Fetnat Fouad-Terazi, David Friel, Kimberly McBennett, Jonatha Gott, Douglas Gunzler, Rosa Hand, Charles Joiner, James Lieberman, Agnes Loeffler, Thomas Love, Tawna Mangosh, Jason Mears, Vincent Monnier, Adam Perzynski, John Pink, Ronald Posner, James Quilty, Arne Rietsch, Rita Ryan, Anastasia Rowland-Seymour, Kingman Strohl and Daniel Weidenthal. We thank these faculty members for their time and help in selecting the best poster/recorded presentations for awards. Finally, staff member, Ms. Sharon Callahan, has been enormously helpful with regard to all administrative aspects of the Lepow Day program and her assistance is sincerely appreciated.

It is important to recognize that both Drs. Martha and Irwin Lepow have been committed to the education of medical students and developing a cadre of physician scientists. For this reason, we have this important day at Case Western Reserve University for presentations and discussions of science/medicine by distinguished faculty and importantly, our student scholars and future physician scientists. Hopefully, we can do this meeting in person, in the future.

Sincerely, Nicholas P. Ziats, Ph.D. Chair, Lepow Day 2022

Colleen Croniger, Ph.D. Assistant Dean for Medical Student Research

MARTHA L. LEPOW, M.D., & IRWIN H. LEPOW, M.D., PhD. MEDICAL STUDENT RESEARCH DAY April 21, 2022

1:00 pm, Welcome, Nicholas P. Ziats, Ph.D., Lepow Day Chair

1:00 pm – 1:10 pm, Introductory Remarks, Stanton L. Gerson, M.D. Dean, CWRU School of Medicine

- 1:00 pm-1:15 pm, Introduction of Speaker, Nicholas P. Ziats, Ph.D.
- 1:15 pm 2:00 pm, Keynote Speaker: Pamela B. Davis, M.D. Former Dean of CWRU School of Medicine, The Arline H. and Curtis F. Garvin Research Professor and Professor, Center for Community Health Integration, CWRU
- 2:00 pm 2:15 pm, Break
- 2:15 pm 3:15 pm, Oral Presentations Part 1
- 3:15 pm 3:25 pm, Break
- 3:25 pm 4:25 pm, Oral Presentations Part 2
- 4:30 pm, Poster Winner Winners Announced and Closing



Pamela B. Davis, MD, PhD

Arline H. and Curtis F. Garvin Research Professor and Professor, Center for Community Health Integration, Case Western Reserve University School of Medicine

A renowned physician and medical researcher, Pamela B. Davis, MD, PhD, became dean of the School of Medicine and senior vice president for medical affairs at Case Western Reserve University

in 2007 after serving as interim dean during the previous year. She served in this position until stepping down in 2020 to serve as a Professor in the Center for Community Health Integration. She holds the Arline H. and Curtis F. Garvin Research Professorship. She previously served as a professor of pediatrics, physiology and biophysics and a professor of molecular biology and microbiology at the university, and as chief of the pediatric pulmonary division at Rainbow Babies and Children's Hospital and as director of the Willard A. Bernbaum Cystic Fibrosis Research Center at Case Western Reserve University.

In 2014, Dean Davis, a prolific researcher whose prior work focuses largely on cystic fibrosis, was inducted into the Institute of Medicine, now known as the National Academy of Medicine. She was also elected as the 2015 Chair of the Medical Sciences Section of the American Association for the Advancement of Science, where she was elected a fellow`. In 2020 she was inducted into the National Academy of Inventors. She has received the Smith College Medal, the Paul Di Sant'Agnese award from the Cystic Fibrosis Foundation (their top prize for research), and the Frank and Dorothy Humel Hovorka Prize, the highest award for faculty at the University, among other honors. For more than 30 years, Dean Davis has been continuously funded by the NIH, including serving as the founding principal investigator of the school's \$64.6 million Clinical and Translational Science Award (CTSA) program from 2007 until 2015, when she began serving as the program's associate principal investigator. In 2021 her research focus shifted to using informatics approaches in large databases to gain insight into important clinical problems, most recently the reciprocal interaction of COVID and several chronic conditions, and she is supported by the NIH for this work in the Multiple Principal Investigator mode.

Dean Davis holds seven U.S. patents and is a founding scientist of Copernicus Therapeutics Inc., a biotechnology company that creates novel pharmaceutical targeting and delivery systems. She has published more than 150 articles in peer-reviewed journals. She has served in prominent roles such as the Advisory Council to the National Institute of Diabetes and Digestive and Kidney Diseases, the Board of Scientific Counselors for the National Heart, Lung and Blood Institute and the Advisory Council for National Center for Advancing Translational Sciences. She received her BS in chemistry, *summa cum laude*, from Smith College in 1968, and the doctorate in physiology and pharmacology in 1973 and her medical degree in 1974, both from Duke University.

MARTHA L. LEPOW, M.D., & IRWIN H. LEPOW, M.D., PhD.

MEDICAL STUDENT RESEARCH DAY April 21, 2022 Full (10 min.) & Rapid Talk (3 min.) Presentations

Introductory Remarks - Dr. Nicholas P. Ziats, Chair, Lepow Day Committee

Part 1

2:15 pm	Trichka, Josephine: The ESCRT protein CHMP5 controls skeletal muscle-macrophage crosstalk and tissue homeostasis.
2:25 pm	Lopez, Diana : Triphasic Response After Endoscopic Craniopharyngioma Resection is Dependent on Preservation or Sacrifice of the Infundibulum.
2:35 pm	Berg, Diamond : Lessons Learned from a Patient- Centered, Team-Based Intervention for Patients with Type 2 Diabetes at High.
2:45 pm	Estates, Ashley : Age Disparities in Triple Negative Breast Cancer Treatment and Outcomes: An NCDB Analysis.
2:55 pm	Sun, Alec: Neonatal Outcomes After Intervention for Renal Colic in Pregnancy.
3:05 pm	Blaga, Victoria: Opioid Utilization in Ophthalmology and the Impact of a Decision Support Tool in Reducing Excess Dosing.
3:08 pm	Maigrot, Jean-Luc: Failure to Rescue, Mortality and Case Volume Among Left Ventricular Assist Device Programs.

Break to 3:25pm

MARTHA L. LEPOW, M.D., & IRWIN H. LEPOW, M.D., Ph.D.

MEDICAL STUDENT RESEARCH DAY April 21, 2022 Full (10 min.) & Rapid Talk (3 min.) Presentations

Part 2

3:25 pm	Huang, Lauren: Estimating Skeletal Maturity Using Wrist Radiographs During Pre-adolescence: The Epiphyseal:Metaphyseal Ratio.
3:35 pm	Chen, Yi Fan: XPO1 is a Novel Drug Target for Autoimmune Diseases
3:45 pm	Wang, Yiran: Vaginal Microbiome Profiles in Young Women at Risk for HIV Infection.
3:55 pm	Daugirdas, Sarunas: New Possible Biomarker for Age- Related Macular Degeneration: Increased Retinal Mitochondrial Flavoprotein Fluorescence.
4:05 pm	Beckman, Madeline: Incidence of pneumonitis in consolidative Durvalumab era and its correlation with lung dose-volumes histograms in stage III nonresectable non-small cell lung cancer (NCSLC).
4:15 pm	De Souza, Larissa : Revisiting CVD Risk in Psoriatic Patients.
4:18 pm	Banerjee, Aditya: Alcohol Use Increases Risk of Adverse Events in Emergency Department Procedural

Poster Presentations

#	Last Name	First Name	Project Title
1	Adhvaryu	Varun	Smoking Increases the Risk of Adverse Events in Adults during Emergency
2	Augustine	Ashley E.	Department Procedural Sedation Sensory Processing Subgroups as Predictors of Autism Spectrum Disorder Diagnosis, Language, and Adaptive Behavior in a
3	Avila	Amanda	Referred Population Chronic ACL Injury Patients have Lower Levels of Pro-Inflammatory Biomarkers in their Synovial Fluid at the Time of Surgery
4	Ayad	Mina M.	Than Those with Acute ACL Injury Comparing Operative Treatment Strategies of Intra-articular Distal Humerus Fractures in the Elderly
5	Bank	Nicholas	The incidence of complications following intradural tumor resection in patients with
6	Bank	Rachel L.	Duragen implants A Fetal Care Center Perspective on Polyhydramnios: What Can We Predict from Excess Amniotic Fluid Levels?
7	Barzallo	Devin K.	G9a Inhibition: Epigenetic Targeted Therapy for ARID1A and ARID2 Mutant Melanomas
8	Berk	Alexander N.	Predicting Hospital Admission in Patients Presenting to the Emergency Department with Nonfatal Opioid Overdose
9	Bheemidi	Abhinav R.	Baseline Factors and Reason for Cancellation of Elective Ophthalmic Surgery
10	Bhutada	Isha	Role of fixational instability, nystagmus and visual deficit severity in amblyopic reading performance
11	Blazel	Madeleine	Assessment of Adverse Event Risk in Combined Plastic Surgery Procedures Utilizing the Tracking Operations and Outcomes for Plastic Surgeons (TOPS) Database
12	Boehm	Blake	Effect of Bimatoprost Treatment on Lymphangiogenesis in Human Ciliary Body Smooth Muscle Cells
13	Brennan	Donald J.	Scoping Review of the First-Generation and Low-Income Medical Student Experience
14	Burkhart	Robert J. (Bobby)	A Cross-Sectional Analysis of Price Transparency for Total Joint Arthroplasty: Non-Compliance in a National Sample
15	Bushweller	Leila S.	Non-Health Professional Interventions for Hypertension: Systematic Review Comparing Interventions Leveraged in Developed and Developing Economies
16	Cao	Caroline R.	Advancing Technologies and the Eradication of Populations: How Providers should

			Approach Prenatal Testing and Selective Termination
17	Chavan	Monica	Transjugular Intrahepatic Portosystemic Shunt (TIPS) Creation for Treatment of Refractory Ascites in Liver Transplantation Patients, a Retrospective Cohort Study
18	Chen	Daniel B.	The systematic isolation of key parameters for estimating skeletal maturity on lateral elbow radiographs
19	Chen	Lin (Jerry)	Sutureless vs Sutured Aortic Valve Replacement: A Propensity Analysis on Risk of Postoperative Arrhythmias and Permanent Pacemakers
20	Chen	Mingda	Emergency Department Utilization After Outpatient Surgery for Sports Injuries
21	Chong	David	Operative Time Predictors of Tonsillectomy and Adenoidectomy in Pediatric Otolaryngology
22	Chong	Mary	Viral suppression during COVID-19 among people with HIV experiencing homelessness in a low-barrier clinic-based program
23	Costantini	Julia G.	Gone Viral: A Cross-Sectional Analysis of Contact Lens-Related Videos on TikTok
25	Davis	Nathaniel E.	Prodromal depression and anxiety are associated with treatment compliance and survival among patients with pancreatic cancer
26	Desai	Ansh D.	The Impact of Venous Thromboembolism Incidence Among Glioblastoma Patients
27	DiCenso	Stefano M.	Pediatric Pelvic Fractures: An Epidemiological Analysis of a Population- Based Database
28	Do	Michael T.	An Anatomical study Defining the Safe Range of Angles in Percutaneous Iliosacral and Transsacral Screw Fixation
29	Donthi	Sriya K.	Evaluating Factors Associated with Continuous Glucose Monitoring Utilization
30	Dorney	Ian	with the Type 1 Diabetes Exchange Registry Preoperative CT scans do not affect complication rate following operative treatment of tibial shaft fractures: results of a 10-year cohort
31	Dukes	Megan E.	The Role of Estrogen and Progesterone in the Modulation of the Immune System at the Maternal-Fetal Interface
32	Edwards	Matthew K.	An Integrated Approach to COVID-19 and Tuberculosis Diagnosis in Karnataka, India
33	El-Abtah	Mohamed E.	Multimodal MR Spectroscopy and Perfusion Can Detect Changes in Tumor Metabolism to Distinguish Between Pseudoprogression and Disease Progression in Patients with

Glioblastoma

34	Erickson	Kayley	The Paradoxical Promotion of UV Tanning through Sunless Tanning
35	Fan	Liyan	KLF15 and PPARd cooperativity in the orchestration of lipid metabolism
36	Fane	Lauren S.	Nationally representative association between postpartum hemorrhage outcomes and sociodemographic characteristics
37	Feng	Bezhou (Bez)	An integrated computational and experimental framework for studying the effects of microenvironmental heterogeneity on evolutionary dynamics and therapy response.
38	Foster	Michael J.	Long-term Outcomes in Neovascular Age- Related Macular Degeneration Eyes with Baseline Macular Atrophy on Anti-VEGF Treatment
39	Francis	John J.	Predictors of Withdrawal of Life-Sustaining Therapies in Geriatric Patients with Severe Traumatic Brain Injury
40	Gaal	Benjamin T.	Patient Reported Outcome Measures Following Surgical Intervention for Pediatric Sports-Related Injuries to the Knee: A Systematic Review
41	Gallop	Joshua P.	Changes in suture preference and post- operative complications amidst the COVID-19 pandemic: a retrospective review at the Cleveland Clinic
42	Garb	Madeline W.	Using Team-Based Learning (TBL) to Improve Learner Engagement and Satisfaction in the Internal Medicine Clerkship
43	Gau	Isabella	10-year Retrospective Review of Child Homicide Fatalities (ages 0-19 years) in Cuyahoga County between 2010-2019
44	Gendi	Steve W.	Characterization of COVID-19 Pre-Surgical Screening Amongst Ophthalmic Patients
45	Gong	Jenny D.	Key Self-reported Determinants of COVID-19 Vaccine Acceptance: Does Having an Autoimmune Disease Matter?
46	Greene	Brady D.	Evaluation of thrombotic outcomes in patients in a large clinical enterprise following COVID-19 vaccination
47	Gupta	Neha	Poorly Differentiated Eccrine Carcinomas have an Increased Risk for Poor Outcomes
48	Gutierrez	Jorge A.	A Case of Basaloid Squamous Cell Carcinoma of the Supraglottic Larynx in a Patient with Previously Treated Squamous Cell Carcinomas of the Glottic Larynx & Esophagus
49	На	Megan V.	Skin and Gut Microbial Associations with Squamous Cell Carcinoma in Solid Organ Transplant Recipients

50	Hamza	Omar	Determining the Prevalence of Somatic Mutations in Metastatic Breast Cancer to the
51	Harris	Daniel P.	Spine: A Retrospective Cohort Study Current strategies for imaging urethral stricture disease: How should magnetic resonance urethrography be applied in
52	Hecht	Christian J.	evaluation? Concomitant Hip Arthroscopy and Periacetabular Osteotomy: Systematic Review and Meta-Analysis of Contemporary Outcomes, Survivorship, and Complications
53	Hendrickson	Isabella V.	Through Estrogen Receptor Activation, - Estradiol Contributes to the Age- and Genetic Sex-Based Differences in HIV Infection Dynamics Between Men and Women
54	Hill	Alexander J.	Incidence of Kidney Stones in the United States: The Continuous National Health and Nutrition Examination Survey
55	Но	Dedi	Getting them Back in the Game: When Can Athletes With Adolescent Idiopathic Scoliosis Safely Return to Sports? A Mixed-effects Study of the Pediatric Orthopaedic Association of North America
56	Но	Emily C.	Genomic Adjusted Radiation Dose (GARD) Predicts Local Recurrence and Overall Survival in Triple-Negative Breast Cancer
57	Hom	Grant L.	Construction of an Electronic Medical Record-Based Monitoring, Screening, and Referral System for Pentosan Polysulfate Sodium Drug-Induced Maculopathy
58	Hoying	David R.	Impact and Predictors of Sarcopenia in Total Laryngectomy Patients
59	Hu	Lucille R.	Long-term Weaning of Mechanical Ventilation after Lung Transplantation: Patient Characteristics and Impact on Survival
60	Hua	Vivian	Internet Availability of Vasectomy Reversal Providers in the United States
61	Hurtado	Alexander M.	Bariatric surgery protects against Barrett's Esophagus and Esophageal Adenocarcinoma: A National Database Study
62	Iyer	Meghana	Characterizing Heart Failure with Preserved Ejection Fraction (HFpEF) Phenotypes with Strain-Based Echocardiography
63	Iyer	Sharanya R.	Characteristics Impacting Overall Survival in Stage IV Non-small cell Lung Cancer Patients
64	Jackson	Elizabeth M.	A Century to Close the Gender Gap in the United States Urology Workforce: A Projection Analysis of the National Plan and Provider Enumeration System Registry
65	Julian	William T.	Molecular Dynamics and Simulation Modeling for Elucidation of non-PSMA Targets during Targeted Radioligand Therapy

66	Kanagasegar	Nithya	Contemporary outcomes of salvage esophagectomy in the National Cancer Database
67	Karimi	Amir H.	The impact of socioeconomic factors on Total joint arthroscopy utilization rates and outcomes: A systematic review.
68	Karthik	Naveen K.	Impact of curricular and non-curricular factors on specialty interests and choice during medical school
69	Kelly	Hannah M.	Clinical characteristics, disease-specific outcomes, and medication utilization among patients with Chron's disease and multiple sclerosis in the USA: a multicenter network study
70	Kendall	Ellen K.	Increased risk of new onset type 1 diabetes mellitus following SARS-CoV-2 infection in pediatric patients
71	Kim	Andrew G.	Pain and Opioid Use Following Total Knee Arthroplasty: A Systematic Review and Meta- Analysis Comparing Manual and Technology- Assisted Procedures
72	King	Eshan	Modeling the emergence of therapy resistance with fitness seascapes
73	Kloos	Jacqueline E.	The Relationship Between Anti-Müllerian Hormone, Body Mass Index and Weight Loss: A Review of the Literature
74	Knepprath	Jill K.	Vertebral Body Height Changes During Treatment of Scheuermann's Kyphosis
75	Krebs	Jillian	Outcome-Guided Management of Composite Scalp and Skull Defects in Neurosurgical Patients
76	Kroneberger	Elisabeth A.	Perception of Diversity and Preferences Among Patients in Orthopaedics
77	Kumar	Sailakshmi Senthil	Institutional Resident Salary Variations Do Not Adequately Adjust for Regional Cost of Living
78	Kumar	Yash	Characterizing the Tissue Mechanics of Transposition Flaps using Digital Image Correlation
79	Kuo	Andy	Clinical Features and Surgical Outcomes of Thoracic Spinal Stenosis: A retrospective analysis in a Western Population
80	Lapinski	Mariah F.	Evaluating the Effect of a New Case-Based Curriculum on Critical Thinking Skills
81	Larson	Monica	Use of Needs Assessments to Assess Programmatic Efforts in a Novel Hospital- Based Violence Intervention Program
82	Laseter	Joseph R.	Access to Care for Children with Autism Spectrum Disorder at an Urban Primary Care Pediatric Practice
83	Latif	Marina T.	Implementing a NICU literacy program as a quality improvement initiative

84	Le	Hao-Tinh M. (Tinh)	Patient Compliance Rates with a Novel, Online Platform for Tracking Amblyopia Treatment
85	Leapo	Lizbeth A.	25-Year Post-Implant Review of IRS and IST Devices Used for the Lower Extremity
86	Lee	Nora	Psychosocial Support in the Pandemic: Effects of a preventive depression intervention on maternal and infant outcomes in the first nine months
87	Liu	Jessica C.	Higher Emergency Department Utilization among Homeless Pediatric Population with Psychiatric Chief Complaints
88	Lodha	Roshan	Tumors that respond poorly to bevacizumab therapy show upregulation of angiogenesis genes in glioblastoma.
89	Mahadevan	Anita D.	Evaluating the Efficacy of a Virtual Medical School Cancer Care Elective
90	Mahajan	Arushi	Association between Hypertension and Back and Neck Pain
91	Manyak	Grigory A.	Differences in Alpha Angle and Anterior Femoral Neck Offset as Markers of Cam Morphology: An Osteologic Study
92	Mazahery	Claire	Aged human keratinocytes have protein coding and noncoding RNA signatures indicative of inflammation, defective proliferation, and barrier deficiency
93	Mazmudar	Rishabh S.	Trends in brand and generic drug utilization for dermatology providers from 2013-2019
94	McKenna	Madeline P.	The Risk of Venous Thromboembolism in Patients With and Without Leiomyomas Undergoing Hysterectomy
95	McNassor	Ryan S.	Association of Cerebrospinal Fluid on Pre- Operative Imaging with Cervical Myelopathy Diagnosis and Outcomes
96	Meade	Seth M.	Investigating Divergent RCT Results in Patients with Spondylolisthesis using Simulation
97	Megerian	Mark F.	A Posterior Starting Point Increases the Risk of Distal Anterior Cortical Perforation During Antegrade Femoral Nailing
98	Mehrotra	Vidushri	Evaluation of Outcomes between Top-Down versus Bottom-Up Approaches for Mid- Urethral Sling
99	Meluban	Lee	Lower Rates of Colorectal Cancer in Patients Without Known Colitis Receiving Anti-TNF Therapy for Indications other than IBD: A Retrospective Large Database Study
100	Meyers	Abigail	Developing a Protocol for Ex Vivo Subnormothermic Preservation of Porcine Superior Epigastric Artery Perforator Flaps

101	Mohan	Nitesh	Impact of Hypothyroidism on Retinal Angiogenesis in an Oxygen Induced
102	Mulligan	Kathleen	Retinopathy Mouse Model Mucosal melanoma and organ-specific metastasis: Differences in survival outcomes between tumor primary sites
103	Mulvihill	Lianne	The Prognostic Value of Neutrophil-to- Lymphocyte Ratio for Overall Survival and Pathological Complete Response in Breast Cancer Patients Receiving Neoadjuvant Chemotherapy
104	Naik	Ilora S. (Lily)	Predictors of Palliative-Intent Surgery in Anal SCC
105	Nam	Kireem	Development of a Support Vector Machine- Based Tool for Survival Prediction after Stereotactic Body Radiotherapy for Liver Metastases Using Multi-Institutional Data
106	Narang	Jatin	Estimating Carbon Emission and Cost Savings from Virtual Residency Interviews
107	Narendrula	Aparna	Back to the Bedside: An Assessment of Performing an In-depth Patient Interview on OB/GYN Trainees
108	Newhall	Kevin	Macrophages display differential clearance phenotypes of Debaryomyces hansenii, a fungal member of the gut microbiome
109	Oh	David	Modeling the Impact of Driver Mutations on Local Tumor Heterogeneity
110	Oladeji	Temiloluwa O. (Temi)	Differential CFLAR expression modulates the demyelination in white matter lesions and remyelination in gray matter lesions of MS.
111	Olaker	Veronica R. (Vern)	Incidence rate and risks of Substance Use Disorders before and during COVID-19 Pandemic: 2010-2021
112	O'Neill	Steven J.	GARLAQs vs. Multiple Choice Questions: Do First-Year Medical Students Perform Similarly on their Anatomy Examinations?
113	Oyem	Precious C.	Natural history and predictors of meningioma growth in Neurofibromatosis Type II (NF2)
114	Pan	Xuankang (Kong)	What is The Safest Intersurgical Interval Between Staged Bilateral Knee Arthroplasty? A Nationwide Analysis of 20,279 patients
115	Patterson	William M. (Will)	Vaccine-induced immune thrombotic thrombocytopenia is exquisitely rare: a retrospective cohort study of 779, 000 patients following administration of mRNA COVID- 19 vaccines
116	Payne	Carter J.	Real World Anti-Vascular Endothelial Growth Factor (Anti-VEGF) Treatment Patterns and Outcomes in Diabetic Macular Edema
117	Peace	Orji	Benign prostatic hyperplasia knowledge deficits among american men: a preliminary analysis

118	Pei	Evonne	Evaluating the Readability of Online
119	Perez	Ashley M.	Testosterone Resources Dr. YouTube: A cross-sectional analysis of tinea versicolor treatments on YouTube
120	Petitt	Jordan	Stereotactic Radiosurgery vs Intensity- Modulated Radiation Therapy for Adjuvant Radiation Treatment in Subtotally Resected World Health Organization Grade II Meningiomas: A Retrospective Cohort Study
121	Pickney	Cole	Outcomes of Gore® Iliac Branch Endoprosthesis with Internal Iliac Component versus Gore® Viabahn® VBX
122	Qu	Dan C.	Epigenetic Effects of High-Fat Diet on Intestinal Tumorigenesis
123	Qureshi	Hira A.	Systematic review of surgical management in post-paretic facial synkinesis
124	Ramanathan	Diya	Hearing Outcomes in Patients with Congenital Microtia-Atresia: A Retrospective Study of Index Cases and Early Outcomes
125	Ramos	Michael S.	Factors associated with intravitreal injection- related endophthalmitis
126	Rao	Elizabeth M.	Serious adverse events associated with hormonal contraceptive use for acne treatment, based on reporting to the FDA Adverse Events Reporting Database
127	Reddy	Haarika	Identifying barriers to participating in digitally guided wound care research after Mohs micrographic surgery
128	Rivero	Marco-Jose (Marco)	Reflux Nephropathy after Radical Cystectomy
129	Roan	Vivian D.	Intravitreal steroid decreases macular thickness fluctuations in patients with diabetic macular edema
130	Sachdev	Rishi	Nationwide Disparities in Transportation Related Delays to Care Experienced by Children with Frequent Ear Infections
131	Saieed	George M.	Chronic Rhinosinusitis Is Associated with Increased Risk of COVID-19 Hospitalization
132	Salazar	Vanessa	Immune mechanism and the role of the microbiome in immune checkpoint inhibitor- induced toxicity
133	Sanrame	Juliana	Use of Emotion Processing Skills in Parents of Preterm Infants Hospitalized in the NICU: A Qualitative Study
134	Scariano	Gabrielle N.	Patterns of Surgical Management for Colorectal Cancer in Octogenarians
135	Schindler	Joseph	S-nitrosylation alters RNA-binding domain structure
136	Serpen	Jasmine Y.	A novel microdeletion associated with familial syndromic corneal dystrophy

137	Sharew	Betemariam	Cardiovascular Disease Associated Metabolites TMA and TMAO Bind to Cystathionine γ -Lyase and Repress its
138	Sharma	Neha	Enzymatic Production of Hydrogen Sulfide A Comparison of Faculty and Resident Perceptions of Outstanding Surgical Educator Qualities
139	Shen	Alan S.	Enhancing Chimeric Antigen Receptor (CAR) T cell signaling efficiency utilizing the viral tyrosine kinase interacting protein (Tip)
140	Shi	Yuming	Outcomes of a Pilot Acupuncture Program at a Comprehensive Cancer Center
141	Shu	Timothy	Acute inpatient complications associated with neoadjuvant chemotherapy after radical cystectomy: A population-based analysis in the United States
142	Simmons	Elanee (Lanee)	The influence of germline RAS pathway mutations on molecular and histopathologic profiles of melanocytic nevi
143	Sinopoli	Jacob T.	Long term results of Cervical Transforaminal Epidural Steroid Injections for cervical radiculopathy
144	Somasundar am	Eashwar V.	Efficacy of Nelfinavir and ISRIB Against Hepatocellular Carcinoma In Vitro
145	Stamper	Kenneth	Assessment of Online Hospital-provided Information for Cardiac Surgery Procedures
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146	Stickland	Aubrey R.	Reproductive health education in adult patients born with congenital heart disease
140	Stitzel	Aubrey K. Henry J.	patients born with congenital heart disease Assessing the use of extended venous thromboembolism prophylaxis on the rates of venous thromboembolism and post- pancreatectomy hemorrhage following
			patients born with congenital heart disease Assessing the use of extended venous thromboembolism prophylaxis on the rates of venous thromboembolism and post- pancreatectomy hemorrhage following pancreatectomy for malignancy Promoting a Culture of Safety in IR: Radiology Interventions Safety, Quality, and
147	Stitzel	Henry J.	patients born with congenital heart disease Assessing the use of extended venous thromboembolism prophylaxis on the rates of venous thromboembolism and post- pancreatectomy hemorrhage following pancreatectomy for malignancy Promoting a Culture of Safety in IR:
147 148	Stitzel Sun	Henry J. Clara	patients born with congenital heart disease Assessing the use of extended venous thromboembolism prophylaxis on the rates of venous thromboembolism and post- pancreatectomy hemorrhage following pancreatectomy for malignancy Promoting a Culture of Safety in IR: Radiology Interventions Safety, Quality, and Complications Symposium Effectiveness of Electroconvulsive Therapy in Patients with Bipolar or Unipolar Depression Myeloid Cell Activation Through Loss of KLF2 Engenders Systemic Aging Pathologies
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147 148 149 150	Stitzel Sun Sweet	Henry J. Clara Rongyi David R.	patients born with congenital heart disease Assessing the use of extended venous thromboembolism prophylaxis on the rates of venous thromboembolism and post- pancreatectomy hemorrhage following pancreatectomy for malignancy Promoting a Culture of Safety in IR: Radiology Interventions Safety, Quality, and Complications Symposium Effectiveness of Electroconvulsive Therapy in Patients with Bipolar or Unipolar Depression Myeloid Cell Activation Through Loss of KLF2 Engenders Systemic Aging Pathologies and Epigenetic Drift Injury induced nerve macrophages are critical for enhancing regeneration after a peripheral nerve injury Early Onset Colorectal Cancer Risk Prediction
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160	Vaughan	Tiffany	and Visual Acuity Outcomes of Conversion of Sleeve Gastrectomy to Single Anastomosis Duodenoileal Bypass (SADI-S) To Enhance Weight Loss
161	Wang	Naomi C.	Opioid Use Following Pelvic Reconstructive Surgery: A Prospective Cohort Study
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166	Xu	Kevin L.	Diagnostic workup differences between early and later-onset colorectal cancer patients
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