

CURRICULUM VITA

Rev.5/21/16

Sunil Kumar Aggarwal, M.D., Ph.D.

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Education

University of Washington School of Medicine, Seattle, Washington
Medical Scientist Training Program
Global Health Pathway
07/2002 - 06/2010
M.D., 06/2010

Graduate - University of Washington, College of Arts and Sciences, Seattle, Washington
Admitted to Post-Master's Status
Geography (Medical Geography)
Advisor: Jonathan Mayer, PhD
Dissertation: "The medical geography of cannabinoid botanicals in Washington state: access, delivery, and distress"
08/2004 - 08/2008
Ph.D., 12/2008

Undergraduate - University of California, Berkeley, College of Chemistry, Berkeley, CA
Chemistry (with High Honors)
08/1997 - 12/2001
B.S., 12/2001

Undergraduate - University of California, Berkeley, College of Letters and Sciences, Berkeley, CA
Philosophy (with Distinction in General Scholarship), Minor field: Religious Studies
08/1997 - 12/2001
B.A., 12/2001

Undergraduate Study Abroad - University of Edinburgh, College of Humanities and Social Science,
Edinburgh, Scotland, UK
Philosophy, Political Theory
09/2000 - 12/2000

Other - Baylor University, Waco, TX
Beginning Science For Summer Program Students
06/1996 - 08/1996

Graduate Medical Education

07/2014 - 06/2015

M.D. Fellowship, ACGME Accredited
National Institutes of Health Clinical Center, Bethesda, Maryland
Hospice and Palliative Medicine
Ann Berger, M.S.N., M.D.

07/2011 - 06/2014

M.D. Residency, ACGME Accredited
NYU School Of Medicine, New York, New York
Physical Medicine and Rehabilitation
Alex Moroz, MD

06/2010 - 06/2011

M.D. Residency, ACGME Accredited
Virginia Mason Medical Center, Seattle, Washington
Internal Medicine-Preliminary
Alvin Calderon, MD, PhD

Certification/Licensure

- Board Certified, American Board of Physical Medicine and Rehabilitation. 07/1/2015-12/31/2025
- Board Eligible, Subspecialty Certification Board in Hospice and Palliative Medicine (2016, anticipated)
- Completed Credentialing in Inpatient Rehabilitation FIM (functional independence measure) Certification (UDSMR), 12/21/12
- American Heart Association BLS for Healthcare Providers, Exp. Date 11 / 2016
- UWSOM Global Health Pathway Certified, 06/2010

State Licenses

Washington, Residency License, Number: ML60165919, 2010-2011
New York, Full, Number: 261685-1, 2011-2014
Washington, DC, Full, Number: MD041957, Exp. Date: 12/31/2016
Washington, Full, Number: MD60551101, 2015-

Current Areas of Interest:

Pain Medicine, Hospice and Palliative Care Medicine, Rehabilitation Medicine
Grassroots Cannabinoid Integrative Medicine: Geography of Access, Delivery, and Development
Psychoactive Biotic Therapeutic Landscapes, Enclosures, and Seed Sovereignty
Social Medicine, Health and Human Rights

Experience**Clinical**

09/2015 –
MultiCare Auburn Medical Center

Palliative Medicine Physician and Associate Hospice Medical Director

Launched the community hospital's first in-house interdisciplinary inpatient Palliative Care consultation service and outpatient oncologic palliative care consultative clinic. Also serve as an Associate Hospice Medical Director at MultiCare Health System (MHS) and an Affiliated Faculty of the MultiCare Institute for Research and Innovation.

07/2014 – 06/2015

National Institutes of Health Clinical Center
Clinical Fellow, Hospice and Palliative Medicine

Core rotations are a blend of inpatient and outpatient consultation on the Pain and Palliative Care Service at the NIH-Clinical Center, the world's largest research hospital with 240 beds. Inpatient, home, administrative hospice and long-term care clinical rotations (with exposure to sub-acute rehabilitation) are done at The Washington Home/Community Hospices in D.C./Maryland. Additional rotations are done on the Johns Hopkins-affiliated Suburban Hospital inpatient palliative medicine consultative service, and a half-rotation is done with NIMH Psychiatry Consult-Liaison Service at NIH-CC. Administrative experience is accrued with helping to establish an additional outpatient palliative medicine consultation clinic with an underserved population community clinic as part of a Quality Improvement/Quality Assurance Project. This specifically involved leading an effort to start NIH Pain and Palliative Care Satellite consultative clinic affiliated with MobileMed, a free primary care community clinic in Montgomery County, Maryland serving predominantly immigrant and uninsured populations held twice monthly.

07/2011 – 06/2014

NYU School Of Medicine
Resident, Physical Medicine and Rehabilitation

Duties involved evaluation and management of physical medicine and rehabilitation patients in inpatient, outpatient, and long term care. Stroke & Neurorehabilitation, Medically Complex, Cardiopulmonary, Sports, Integrative Medicine Rehabilitation settings (Hospitals: NYU Langone, Bellevue Hospital, Rusk Institute for Rehabilitation Medicine, Hospital for Joint Diseases, Manhattan VA, Brooklyn VA). 4 months training in Electrodiagnostic Medicine. Elective time in Cancer Rehabilitation (inpatient and outpatient) at Memorial-Sloan Kettering Cancer Center, Palliative Medicine (inpatient, outpatient, and home care) at Metropolitan Hospital and Visiting Nurses Service of New York, and Addiction Psychiatry (inpatient and outpatient) at Bellevue Hospital.

06/2010 – 06/2011

Virginia Mason Medical Center
Resident, Preliminary Internal Medicine

Duties involved evaluation and management of internal medicine inpatients (Medicine Wards, Step-Down Unit, ICU) and outpatient settings. Elective time in Sports Medicine, PM&R, Rheumatology, Health Care Systems Improvement

06/2004 - 06/2010

UW Department of Rehabilitation Medicine, Washington
Preceptee, Dr. Gregory Carter

1. Precepted with UW Rehabilitation Medicine Professor Gregory Carter during the monthly Muscular Dystrophy Association clinics in Seattle and Olympia periodically in order to help maintain clinical contact during PhD graduate work years. The clinic treats patients who have muscular dystrophies and ALS. 2. Precepted with Dr. Carter at a sliding scale clinic focused on evaluation and treatment of patients trialing cannabinoid integrative medical therapy at the non-profit organization Dunshee House in Seattle, an HIV/AIDS Respite starting in May 2009. Previously observed such consultations in the medical practices of cannabinoid integrative medicine field leaders such as Drs. Frank Lucido (Family Medicine) and Tod Mikuriya (Psychiatry) in California.

06/2005 - 06/2005 Average Hours/Week: 42

Betty Ford Center, California

Medical Student Intern, Director: Sally Diane

Completed Betty Ford Center Summer Institute for Medical Students Inpatient Program, focusing on treatment of patients with problematic substance use behaviors.

Teaching and Advising

Clinical and Didactic Palliative Medicine Education to Family Medicine Residents, Physician Assistant Fellows, and Medical Students: Voluntary Instructor in Following Program: The Wright Center/HealthPoint Family Medicine Residency, UWSOM School of Medicine Chronic Care Clerkship, MHS PA Hospitalist Fellowship Program, Tacoma Family Medicine Residency, 2015-current

Guest Faculty, Tacoma Family Medicine Residency, 'Cannabinoid Integrative Medicine in Primary Care' and 'Practical Aspects of Cannabinoid Plant Integrative Medicine in Chronic Pain Care' during two 40-min blocks during Chemical Dependency curriculum. Invited by Dr. John VanBuskirk, D.O., program director, 12/3/15 and 5/19/16.

Guest Faculty Speaker, Indian Association of Palliative Care's Certificate Course in Essentials of Palliative Care, All-India Institute of Medical Sciences-Bhubaneswar, 8/7/15

NYC-area Hospitals and Colleges, New York, 2012-2014

Guest Lecturer

1. New York Medical College Hospice and Palliative Medicine Fellowship Program, New York, NY: Invited by Dr. Lauren Shaiova to give one-hour lecture to Hospice and Palliative Medicine Fellows on "Medical Marijuana" during academic didactics session, New York Metropolitan Hospital Department of Pain Management and Palliative Care, 7/27/12.
2. Hackensack Medical Center, Hackensack, NJ Invited to give hospital-wide Grand Rounds at Hackensack University Medical Center, Hackensack, NJ: "Medical Cannabis in New Jersey", hosted by Dr. Jose Contreras, director, Pain and Palliative Medicine Institute, 9/27/12.
3. Haverford College, Haverford, PA Invited by Professor Tapoja Chaudhuri to give a guest lecture in ANTH 322: Ethnographic Methods, 9/28/12.
4. Sarah Lawrence College, Bronxville, NY (held in New York, NY): Invited by Professor Dominic Corva to give guest lecture "Medical Marijuana and the Political Ecology of Cannabis Pharmaceuticalization" for Intermediate Level Sarah Lawrence College Public Policy Seminar, Cannabis and US Policy, 4/15/13.
5. Invited Guest Lecture at Albert Einstein College of Medicine Social Medicine Course. Topic: "Compassionate Care: Medical Cannabis in NY".
6. New York University Langone Medical Center, Physical Medicine and Rehabilitation Grand Rounds Presentation "Medicinal Cannabis in Rehabilitation Medicine and Chronic Pain Management: Outcomes Data in 176 Patients", 2/26/14.
7. New York University School of Social Work, Invited Guest Lecture in Professor Helen Redmond's Advanced Seminar on Drug Policy, 3/11/14.
8. Columbia University Medical Center, Hospice and Palliative Medicine Grand Rounds Presentation "Cannabis for Symptom Control", 3/20/14.

2014-ongoing

Secondary Mentor to Arielle Gerard, MD/MS in Bioethics Candidate (co'17), Albany Medical College, for her Distinction in Advocacy Project in support of the federal reclassification of cannabis.

12/2012-04/2013

Thesis Advisor

Invited External Advisor for Columbia University School of Journalism MA student Sonia Talati's Master's thesis on Colorado's Amendment 64, with Dean William Grueskin.

03/2009 - 09/2010

UW Department of Anesthesiology & Pain Medicine & Department of Rehabilitation Medicine, Seattle, Washington
Guest Lecturer

Invited to give the following educational sessions: 1. Didactic Presentation to UW Pain Medicine Fellows: "Medical Cannabis: Questions and Answers", 9/14/10. 2. Speaker at UW Dept. of Rehabilitation Medicine Research Seminar: "Cannabinoid Botanicals for the Management of Chronic Pain and Illness: Access, Delivery, and Distress in Two

Convenience Samples of Qualifying Patients in Washington State.” 3/23/09. 3. UW Seminars in Pain Medicine: “Cannabis-Based Management of Neuropathic Pain: Evidence, Rationale, and Clinical Reality in Cannabinoid Medicine.” 3/23/10.

03/2006 - 01/2010

UW Departments of Public Health and Global Health, Seattle, Washington

Guest Instructor

Invited to give the following educational presentations: 1. Presenter at UW Global Health Journal Club (faculty moderator: Dr. Paula Brentlinger) on “Health and Human Rights in the US-led Global War on Drugs.”, 1/13/10. 2. Speaker at UW Student Public Health Association Brown Bag Seminar. Topic: Ph.D. dissertation research, 11/19/08. 3. Co-presenter at UW Global Health Departmental Seminar: “War as the continuation of healthcare by other means: the U.S. war on drugs and the perversion of public health”, with Dominic Corva, Ph.C., 3/7/08. 4. Presentation in course Health Services 590K/Law H540: Health and Human Rights on: “Persecution of the Ill and Disabled who use Cannabis as Medicine – Health and Human Rights Cases in the American-led ‘War on Marijuana’”, 3/7/06.

12/2005 - 08/2008

UW Departments of Geography & Law, Societies, & Justice, Washington

Guest Instructor

1. “Medical Geographic Perspectives of the US War on Drugs and Public Health”, Geography (GEOG) 280: Introduction to the Geography of Health and Health Care. Co-presented with Dominic Corva, Ph.D., 8/14/08. 2. “Industrial Hemp” & “Marijuana and Medical Geography”, Law, Societies, and Justice (LSJ) 380: “Reefer Madness”: Cannabis and Criminalization in the U.S., 1/31/08 and 2/19/08. 3. “Drug War Structural Violence”, LSJ 375: Crime, Politics, and Justice, 6/28/07. 4. “Medical Marijuana and Structural Violence”, LSJ 375: Crime, Politics, and Justice, 10/23/07. 5. “War, Health and Human Rights”, GEOG 195: Violence, Resistance & Lessons of Paul Farmer, 11/13/06. 6. “Substance Abuse: A medical/legal problem”, LSJ 375: Introduction to Criminal Justice, 6/26/06. 7. “Resistance to the War on Drugs”, LSJ 380: Contemporary Issues in Law, Societies, and Justice: The War on Drugs and Globalization, 5/31/06. 8. “Social Theory and Narrative in Medical Geography”, GEOG 580: Medical Geography Graduate Seminar, 12/7/05.

11/2004 - 05/2005

Self-Employed, Washington

Private Tutor

Tutored the high-school aged son of a UW Family Medicine Professor in regular home visits in chemistry and math. Prior to this, in 2001, offered private tutoring in organic chemistry to UC Berkeley college students.

11/2002 - 04/2005 Average Hours/Week: 5

Seattle Kaplan Test Prep, Washington

Teacher, Lorriane Vance

Teacher for Seattle Kaplan Test Prep, MCAT, 11/02-07/03, 10/04-04/05. Received top teacher ratings from students during several teaching cycles. Also conducted individual tutoring sessions.

08/2001 - 12/2001

UC Berkeley College of Chemistry, Scholars Program, California

Teaching Assistant, Michelle Douskey, PhD

Teaching assistant for general chemistry intensive section, UC Berkeley, 1 semester, 2001. Gave lectures and held regular office hours.

Service and Volunteer Experience

2015-ongoing: Institutional Palliative Care Education, Training, and Development

Continuing ongoing efforts to improve palliative care integration into patient care activities at AMC through: occasional training sessions with floor RNs (assisted by Lori Olson, RN), set-up of occasional MHS inpatient hospice care beds at AMC, and meeting with leadership for continued improvement of care pathways for advanced dementia patients in GeroPsych Unit with palliative care needs

2015-ongoing: Physician-champion and member of MHS South King County Ethics Committee

In conjunction with MHS Clinical Ethicist, have assisted in the launch and agenda work of the MHS SKC Ethics committee that meets at least quarterly. Have facilitated grand rounds on Advanced Directives to be given by committee chair in March 2016.

12/1/15-ongoing

Affiliated Faculty, MultiCare Institute for Research and Innovation

I am qualified to participate as an investigator in research, consult with other researchers in my area of expertise, and teach/provide lectures or presentations on research topics,

08/2015—ongoing

Honorary Trustee, Medicinal Cannabis Foundation of India

05/04/2015 – ongoing

Editorial Advisory Board Member, National Cancer Institute's PDQ (Physician Data Query) Cancer Complementary and Alternative Medicine. Participated by invitation in 'Cannabis and Cannabinoids' Cancer Information Summary Review.

01/01/2015 – 06/30/2015 Average Hours/Week: 0.5

NIH Hospice and Palliative Medicine Fellowship

NIH Clinical Center

Hospice and Palliative Medicine Fellowship representative to NIH Clinical Fellows' Committee

10/2013 – 02/2015

Medical Cannabis and Chronic Pain: Science-Based Education in Times of Legalization. Invited External Consultant –at-Large for project, conducted at the University of Washington Alcohol & Drug Abuse Institute and funded by the Washington State Office of the Attorney General aiming to address gaps in science-based training and education in the area of chronic pain management and medicinal cannabis use. (adai.uw.edu/mcacp)

12/01/2012 – 12/31/2012 Average Hours/Week: 45

NYU Physical Medicine and Rehabilitation Residency, New York

Hospital for Joint Diseases Local Chief, Dr. Alex Moroz

Leadership position. Managing patient care, administration, and education for 4 junior residents in 14-bed adult inpatient neurorehabilitation unit and 4-bed pediatric inpatient rehabilitation unit. Invited to present on 'Palliative Care' and 'Cancer Rehabilitation' Fellowship Opportunities in NYU PM&R Residency Fellowship Symposium, 12/18/12.

08/2011 - 05/2012 Average Hours/Week: 2

NYU Physical Medicine and Rehabilitation Residency, New York, New York

Anatomy Little Chief, Dr. Alex Moroz

Organized and helped design 8-session cadaver-based anatomy prosection/dissection neuro-musculoskeletal educational curriculum for rehabilitation medicine residents, in collaboration with chief resident, residency program director, and a small group of residents. Booked dissection lab, invited faculty from inside department and from surgical departments to precept, and helped design educational materials to outline dissections. Added 3D virtual dissection station experience to curriculum for the first time.

10/2009 - 04/2010 Average Hours/Week: 3

University of Washington Department of Global Health, Seattle, Washington
Moderator and Organizer, Amy Hagopian, PhD

After volunteering for three prior Annual Western Region International Health Conferences in 2002, 2005, and 2010, was invited to be on the Student Planning Committee of the UW's War and Global Health Conference / 8th Annual Western Regional International Health Conference. Organized and moderated two panels: "UW Global Health Seminar: Expanding the Definition of War" (4/23/10) and "Low-Intensity Conflicts in the Drug War" (4/24/10). Co-organized Human Rights, Social Justice, and Policy Conference Track. Additionally, served as student representative on UW Global Health Department Curriculum Development Committee.

01/2008 - 11/2009

American Medical Association & Washington State Medical Association
Delegate

American Medical Association, Medical Student Section (AMA-MSS), Elected Alternate Delegate representing UWSOM-Seattle as national meeting delegate, 2008-9 • Lead author on adopted resolution calling for reclassification of cannabis from a Schedule I substance to a more appropriate class • Chosen by the AMA's Council on Science and Public Health to serve as a designated external reviewer for their report on "Use of Cannabis for Medicinal Purposes" • Policy effort was reported on by the Psychiatric News, the American Psychiatric Association's newsletter, and was chosen as a meeting highlight by the AMA, Nov. 2008. • Served as a medical student delegate to the Washington State Medical Association and lobbied for a similar resolution, which passed in Sept. 2008. • AMA House of Delegates adopted a resolution in November 2009 urging review of review of cannabis's Schedule I status, their first statement in 72 years recognizing cannabis' medical utility and potential – reported widely: CNN, LA Times, Nature, Scientific American, CBSNews, Newsweek, and many other outlets

10/2007 - 03/2008

Student-Run Community Clinics, Seattle, Washington
Board Member

1. al-Shifa Clinic Assisted in the administrative work required to help establish student-run, free community clinic in South Seattle as part of the University of Washington system. Helped in the paperwork required to allow clinic to transition from screening-and-referral model to diagnosis-and-treatment. Also assisted with grant committee work. Prior to this, in first year of medical school, served with the Dermatology Clinic for the Homeless, DESC, Seattle, Washington doing volunteer Clinical Work at the Community Health Advancement Program Dermatology Clinic for the Homeless at Seattle's Downtown Emergency Service Center, 2002.

09/2007 – to present

Various Policymaking Bodies, USA
Volunteer Consultant and Petitioner

Presented at all 4 statewide public workshops in 2007 held by **Washington State** Department of Health on medical marijuana supply & distribution systems rulemaking: Seattle (9/10), Spokane (9/11), Vancouver (9/17), Yakima (9/19). Invited Delegate to Beyond 2008: An International NGO Forum. Part of worldwide **United Nations consultation** on International Drug Conventions, Vancouver, B.C., Canada. Feb 4-5, 2008. Invited testimony to **Iowa Board of Pharmacy** regarding medical cannabis science & clinical practice, 8/19/09. Chief petitioner to add 'neuropathic pain' to list of qualifying conditions under WA Medical Marijuana Law; presentation to **WA Medical Quality Assurance Commission**; Tumwater, WA, 6/2/10. Invited expert witness for **Oregon Citizen's Initiative** Review of Ballot Measure 74, Regulated Medical Marijuana Supply System Act. Supportive statement appeared in **OR Voter Pamphlet** distributed to all voting households. Salem, OR, 8/17/10. Invited by **New Jersey Department of Health** to participate in state Medical Marijuana Program education of health professionals. Invited by **New York State Deputy Commission of Health** to consult on establishment of Governor's NY State Medical Marijuana Research Program. Lobbying trips, **NY State Legislature and Committee Testimony**, 2012 & 2014. Invited to Interview for **Washington, DC Department of Health's** Medical Marijuana Scientific Subcommittee, 2014. Attended **UN General Assembly Special Session on Drugs & Development** as NGO delegate on behalf of Students for Sensible Drug Policy (SSDP), NY, NY, 6/26/12. Served as staff adviser to NYU SSDP Chapter where I have given several guest lectures. 2013-2015-: Served on **UN-affiliated New York NGO Committee on Drugs**. 2014: Invited

to Speak on Cannabis and Pain at a **US Congressional Black Caucus Health Conference**. Invited to Testify to **Vermont Senate Committee on Health and Welfare** (1/20/16) and **Vermont House Committee on Judiciary** (3/31/16) on Cannabis Taxation and Regulation Bills. Sent several letters to state officials in various states. Small honorarium provided by Marijuana Policy Project for 2015-16 work.

Miscellaneous Volunteer and Advocacy Roles:

Member of King County Bar Association's Drug Policy Project—Legal Frameworks Group and American Civil Liberties Union-WA Drug Policy Coordinating Group. State Delegate, Washington State Democratic Convention, 2004. Trained Volunteer with Chaya, a South Asian American Domestic Violence advocacy and support organization, 2006-ongoing.

08/2007 – present

State and National Cannabis Policy, Science and Grassroots Cannabinoid Integrative Medicine Organizations Board Member

1. 2012-2014: Served as a board member for Americans for Safe Access Foundation (ASAF). Americans for Safe Access is the largest national member-based organization of patients, medical professionals, scientists and concerned citizens promoting safe and legal access to cannabis for therapeutic use and research. Co-organized scientific sessions and presenting at National Medical Cannabis Unity Conference in Washington, DC in Feb 2013. Assisting University of North Florida undergraduate student with survey of endocannabinoid biological science curriculum competency at American colleges and universities.

2. 2012-present: 2012-2014: Served on Board of Directors of Patients Out of Time, 501c3 educational charity giving CME's on cannabis therapeutics; serving as Advisory Board member 2014-present

3. Co-founder and former board member of American Academy of Cannabinoid Medicine (AACM). In 2007, with physicians in Washington State, California, and Illinois, co-founded the American Academy of Cannabinoid Medicine, a clinician-driven professional society for physicians and medical students in the emerging field of integrative cannabinoid medicine. Helped to develop evidence-based, ethical practice standards for medical cannabis clinical consultations that would be universally applicable. AACM intends to credential physicians in this area of medicine and has an ongoing mission of public and professional education.

4. 2013-2014: Co-founder and Executive Science Director of the Center for the Study of Cannabis and Social Policy. Founded in 2013 with Dominic Corva, Ph.D., the Center produces, reviews, and disseminates objective research and opinions about the relationship between Legal Cannabis Policy and other forms of Social Policy including but not limited to Medical Cannabis Policy, Environmental Policy, Agricultural Policy, Public Health Policy, Policing, Foreign Policy, and Economic Policy. This approach prioritizes the assumptions that Cannabis is Food, Fiber, Fuel, Medicine and Culture, rather than a threat to society; and that Cannabis is used both as herbal and modern medicine. 501c3 status as of 2015.

5. 2013-2014: Co-Chair of New York Physicians for Compassionate Care. Group of over 600 MDs and DOs in NY State advocating for medical marijuana program. Public press events and legislator education regarding the need for a medical cannabis program in NY State. Achieved policy change in Medical Society for the State of New York regarding medical cannabis support in April 2014 via education work with the New York County Medical Society Public Health Committee. Achieved enactment of law in July 2014.

6. Invited Advisor to Oklahomans for Health, 501c4 dedicated to the legalization of medical marijuana, 2015-

7. Associate Member, Humboldt Institute for Interdisciplinary Marijuana Research, 2015-

8. Treasurer, Executive Committee, & Board of Directors member of 501c3, Doctors for Cannabis Regulation, 2016-

02/2006 - 05/2007

UW Graduate and Professional Student Senator, representing Geography Dept. Served as liaison to Associated Students of the University of Washington Senate and spearheaded GPSS support for repeal of the HEA (Higher Education Act) Aid Elimination Penalty.

01/2006 – ongoing

Various Journals and Publications

Peer Reviewer

Served as an ad hoc reviewer for the following refereed journals: *Journal of Pain and Symptom Management*, *Psychopharmacology*, *Harm Reduction Journal*, *Geographical Review*, *International Journal of Drug Policy*, *Journal of Psychoactive Drugs*, *Clinical Journal of Pain*, and *Pain Practitioner*. Additionally, provided research work and/or

editorial assistance in the following publications, and was given in-print acknowledgement: 1. Garner C. *Techniques and Experiments for Advanced Organic Laboratory*; Wiley & Sons: New York, 1997. 2. Bickel PJ, Kechris KJ, et al. Finding important sites in protein sequences. *Proc Natl Acad Sci U S A*. 2002 Nov 12;99(23):14764-71. 3. Doyle R. *Darwin's Pharmacy: Sex, Plants, and the Evolution of the Noösphere*. Univ of WA Press: Seattle, 2011. 4. Fitchner C. *Cannabinomics: The Marijuana Policy Tipping Point*. Adams Press: Chicago, 2010. 5. Invited reviewer for New York City Office of the Comptroller report on Medical Marijuana, August 2013.

09/2003 - 06/2011 and again 07/2015 – 05/2016

Physicians for Social Responsibility, Seattle, Washington

Vice President, Past President and Board Member

Washington Physicians for Social Responsibility (WPSR) President, '04-'06, Executive Board, '04-'07, Board Member, '03-'11 and again '15-ongoing (VP and Nuclear Weapons Abolition Task Force co-chair and now member). Became involved in this organization as a 2nd yr medical student chapter leader. WPSR is the state chapter of PSR, the American affiliate of the International Physicians for the Prevention of Nuclear War (IPPNW), the 1985 recipient of the Nobel Peace Prize. WPSR is a 32 year old 501c3 non-profit org with an ~\$100k annual budget with programs geared towards environmental health, peace, and Hanford Nuclear Reserve Clean-up. Highlights: Served as an American Student Delegate to 2006 IPPNW World Congress in Helsinki, Finland, Sept 7-10, 2006 and received travel grant award. Served as a member of WPSR/IPPNW citizen diplomacy delegation that visited government officials and relief, health care, & peaceworkers in Israel/Palestine in Mar. 2005. Presented at a press conference on the costs of the Iraq War with US House Rep Jim McDermott on incendiary weapons & hospital attacks in US siege of Fallujah, 2/14/05.

2003 - 2004

Student Advisory Group member for Introduction to Clinical Medicine course, UWSOM.

08/1999 - 06/2002

Student Learning Center, California

Volunteer Tutor, Richard Gibson

Volunteer chemistry tutor at the Student Learning Center at UC Berkeley for 3 years (1999-2002). Took a semester-long training course on lecturing and communication skills. There Tutored 20-30 students each semester. Have also done volunteer math tutoring as part of an AmeriCorps Program for Junior High School Students during the summer of 1999 in San Jose, CA.

Research Experience

01/2014 – 04/2016

Marijuana Use in Transplant Recipients: Health Professional Attitude Survey

Research Project Team Member, Dr. Arthur Caplan, NYU Division of Medical Ethics

In a project led by Bioethicist Dr. Arthur Caplan, we developed a survey to assess attitudes of major US medical center Transplant Medical Teams towards patient use of marijuana. I have performed a background literature review and helped develop the survey instrument. Other collaborators in include Dr. Judith Benstein, Program Director, Fellowship in Nephrology, and Nephrology Fellow Dr. Deepa Malieckal. Survey and project closed due to insufficient response rate. Some early manuscript development done with Dr. David Casarett, University of Pennsylvania.

01/2012-06/2014

NYU Psilocybin Cancer Project, New York

Research Group Member, Dr. Stephen Ross

“Effects of Psilocybin on Anxiety and Psychosocial Distress in Advanced Cancer Patients.” A phase I, double-blind, controlled pilot study to assess the efficacy of psilocybin (a serotonergic psychoactive agent) administration on psychosocial distress, with the specific primary outcome variable being anxiety associated with advanced and/or recurrent cancer. Assisted with subject recruitment strategies, fundraising, and planning for future projects. Attended

a five week course at NYU Medical Center entitled "Self and Substance" focused on exploring the contributions from Buddhist and psychedelic pathways to psychological growth and transformation co-taught by Dr. Jeffrey Guss, co-PI of Psilocybin Cancer Project, in which subject material from patients in the study collected by investigators was introduced and analyzed. Completed 2 week clinical elective in Addiction Psychiatry under Dr. Ross.

03/2007-08/2008

University of Washington Department of Geography, Washington

Doctoral Candidate, Dr. Jonathan Mayer

Support: Year 1 – Medical Scientist Training Program, Years 2-4: National Science Foundation Graduate Research Fellowship

Title: The medical geography of cannabinoid botanicals in Washington State: Access, delivery, and distress. • Designed & implemented retrospective, prospective, & observational studies involving 176 chronically ill patient-subjects selected in 2 convenience samples--one from a rural pain clinic & one from an urban medical cannabis dispensary. • Secured approvals from Doctoral Supervisory Committee, UW Human Subjects Division. Issued Certificates of Confidentiality by the NIH NCCAM (National Center for Complementary and Alternative Medicine – now NCCIH). • Dissertation successfully defended on 8/22/08. Shelved in the UW Suzzallo library & available by open-access electronically through U of Mich Dissertations Index. • Research has led to 6 peer-reviewed, Medline-indexed, published articles. Ongoing data analysis & revision for these papers was conducted in 2011-12.

06/2003 - 09/2003 Average Hours/Week: 60

UW Department of Genome Sciences, Washington

Research Rotator, Dr. Carol Sibley

Malaria drug-resistance research summer research rotation: Using microsatellite markers to geographically track drug-resistant *dhfr* alleles in *P. Falciparum*. At the molecular and genetic level, Plasmodia transmitted to humans via the mosquito's salivary glands show adaptation and resistance development to common drugs used to treat malaria. This has a geographical basis that can be elucidated by tracking the spatial distribution of resistance-conferring mutations from Plasmodium field sample isolates and can help explain why traditional anti-malarials are effective in some countries and useless in others. Using DNA extraction, PCR, and sequence data analysis, the project used microsatellite markers to geographically track drug-resistant *dhfr* alleles in *P. Falciparum* from field isolates in various parts of Africa. Final results were presented at an end-of-rotation lab meeting on 9/2/03. The work was continued by another MD-PhD graduate student in the lab and became part of her doctoral project.

Publications

*See My Google Scholar Profile (<http://scholar.google.com/citations?user=e31UkWkAAAAJ&hl=en>) for Approximate Number of Citations These Publications Have Received. My NCBI bio:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/49566863/?sort=date&direction=ascending>

Peer Reviewed Articles

Aggarwal SK. Use of cannabinoids in cancer care: palliative care. *Current Oncology*. 2016 Mar; 23(2): S33–S36. Cited in PubMed; PMID: 27022312.

Aggarwal SK, Ghosh A, Cheng MJ, Luton K, Lowet PF, Berger A. Initiating Pain and Palliative Care Outpatient Services for the Suburban Underserved in Montgomery County, Maryland: Lessons Learned at the NIH Clinical Center and MobileMed. *Palliative & Supportive Care*. Sept 2015; 15:15:1478-95. Cited in PubMed; PMID: 26373835.

Reiman A, Aggarwal SK, Reinerman C. Medicalization of Marijuana. Letter to the Editor of Journal of the American Medical Association. Received June 11, 2014. Accepted for publication August 26, 2014. 2014 Nov 12;312(18):1931. Cited in PubMed; PMID: 25387197.

Aggarwal SK and Blinderman CD. Cannabis for Symptom Control: Fast Facts and Concepts #279. *Journal of*

Palliative Medicine 2014 17(5):612-614. Cited in PubMed; PMID: 24749837. Cross-published online concurrently by Fast Facts and Concepts, EPERC (End of Life / Palliative Education Resource Center), maintained by Center to Advance Palliative Care at <https://www.capc.org/fast-facts/279-cannabis-symptom-control/>

Aggarwal SK, Pangarkar S, Carter GT, Tribuzio B, Miedema M. Point/Counterpoint: Medical Marijuana for Failed Back Surgical Syndrome: A Viable Option for Pain Control or an Uncontrolled Narcotic? Ed: D.J. Kennedy. PM&R 2014 6:363-372. Cited in PubMed; PMID: 24766854.

Aggarwal SK, Carter GT, Sullivan MD, Morrill R, Zumbunnen C, Mayer J. Distress, coping, and drug law enforcement in a series of patients using medical cannabis. Journal of Nervous and Mental Disease. 2013 Apr;201(4):292-303. Cited in PubMed; PMID: 23538974.

Aggarwal SK, Carter GT, Zumbunnen C, Morrill R, Sullivan M, and Mayer JD. From 32 ounces to Zero: A medical geographic study of dispensing a cultivated batch of "Plum" cannabis flowers to qualifying medical marijuana patients in Washington State. Journal of Psychoactive Drugs. 2013 Apr-Jun;45(2):141-55; Cited in PubMed; PMID: 23909002.

Aggarwal SK. 'Tis In Our Nature: Taking the Human-Cannabis Relationship Seriously in Health Science and Public Policy. Frontiers in Psychiatry. 2013 4:6. doi: 10.3389/fpsy.2013.00006. Cited in PubMed; PMID: 23447745.

Aggarwal SK, Carter GT, Sullivan MD, Zumbunnen C, Morrill R, Mayer JD. Prospectively surveying health-related quality of life and symptom relief in a lot-based sample of medical cannabis-using patients in urban Washington State reveals managed chronic illness and debility. American Journal of Hospice and Palliative Medicine. 2013 Sep;30(6):523-31; Epub 2012 Aug 10. Cited in PubMed; PMID: 22887696.

Aggarwal SK, Carter GT, Zumbunnen C, Morrill R, Sullivan MD, Mayer JD. Psychoactive substances and the political ecology of mental distress. Harm Reduction Journal. 2012 Jan; (Highly Accessed) 9(4): open-access. Cited in PubMed; PMID: 22257499.

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Carter GT, Abood ME, Aggarwal SK, Weiss MD. Cannabis and amyotrophic lateral sclerosis: Hypothetical and practical applications, and a call for clinical trials. American Journal of Hospice and Palliative Medicine. 2010 May; 27(5): 347-356. Cited in PubMed; PMID: 20439484.

Aggarwal SK. Cannabis: A commonwealth medicinal plant, long suppressed, now at risk of monopolization. Denver University Law Review. 2010 Aug; 88(-): 1-12.

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Aggarwal SK, Carter GT, Steinborn JJ. Clearing the air: What the latest Supreme Court decision regarding medical marijuana really means. *American Journal of Hospice and Palliative Medicine*. 2005 Sep; 22(5): 327-329. Cited in PubMed; PMID: 16225351.

Aggarwal SK, Hemscheidt T. Elicitation of antibioticly active secondary metabolites from co-cultured marine bacteria. *Berkeley Scientific Journal*. 2002 May; 6(1): 39-42.

Books-Electronic

Aggarwal SK. (Site Editor and Contributing Author) [TheAnswerPage.com](http://www.theanswerpage.com). Medical Marijuana-Medical, Legal, Social and Political Issues: The Answer Page, Inc; 2013. AMA PRA Category 1 CME Credits™ provider. Featured by Massachusetts Medical Society, publishers of *The New England Journal of Medicine* at <http://www.massmed.org/Continuing-Education-and-Events/Online-CME/Medical-Marijuana-CME/#.Ud3fhUGsiSp>.

Peer Reviewed Book Chapters

Aggarwal SK and Pettus K. Pain and Controlled Pain Relieving Substances. In: Corns J (ed). *Routledge Handbook of Philosophy of Pain*. (anticipated, 2016)

Carter GT, Aggarwal SK, Weiss MD, Bedlack R. (2014) Complementary and Alternative Medicine. In: Oliver D, Borasio GD, Johnston W (Eds.) *Palliative Care in Amyotrophic Lateral Sclerosis: From Diagnosis to Bereavement* (pp. 245-256). Third edition. New York, NY: Oxford University Press.

Aggarwal SK. Medical Marijuana Potpourri, in Medical Marijuana-Medical, Legal, Social and Political Issues: [The Answer Page](http://www.theanswerpage.com), Inc; 2013 (electronic).

Aggarwal SK. Medicinal Cannabis in the Treatment of Chronic Pain Syndromes, in Medical Marijuana-Medical, Legal, Social and Political Issues: [The Answer Page](http://www.theanswerpage.com), Inc; 2013 (electronic).

Shaiova, L., Farber, L.A., & Aggarwal, S.K. (2012). Difficult pain syndromes: Bone pain, visceral pain, and neuropathic pain. In A.M. Berger, J.L. Shuster, J.H. Von Roenn (Ed.), *Principles and Practice of Palliative Care and Supportive Oncology* (pp. 2-22). New Haven, CT. Lippincott.

Aggarwal, S.K., & Carter, G.T. (2010). Cannabinoids and neuroprotection. In J. Holland (Ed.), *The Pot Book: A Complete Guide to Cannabis* (pp. 295-310). Rochester, VT. Park Street Press.

Peer Reviewed Online Publication

Reiman A and Aggarwal SK. "Cannabis and Memory" in Chapter: "Cannabis as a Substitute for Alcohol and Other Drugs" in Medical Marijuana-Medical, Legal, Social and Political Issues: [The Answer Page](http://www.theanswerpage.com), Inc; 2013 (electronic).

Aggarwal SK, Paige S, Pearson A, Bilodeau M. (2006, December 14). "Kwashiorkor" (SKA), "Malaria" (SKA), "Medical Geography" (SKA, SP, AP), "Political Ecology of Disease" (SKA, MB). In *Meanings Beyond Mountains: A Glossary of Terms from the Work of Paul Farmer*. Edited by M. Sparke.
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Other Articles

Cannabis, Medical Science, and Fundamental Human Rights, With Dr. Ethan Russo. Russo EB and Aggarwal SK. *Huffington Post*, 2015, October 20. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/cannabis-science-and-fund_b_8334384.html

'9 Percent of Those Who Use Cannabis Become Dependent' Is Based on Drug War Diagnostics and Bad Science. Aggarwal SK. *Huffington Post*, 2014, January 29. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/cannabis-depedency-drug-war-bad-science_b_4675961.html.

Pfizer Fine Funds Pot Education Classes for Docs in Washington. Aggarwal SK. *Sfgate.com*, 2013, November 1. (Opinion). <http://blog.sfgate.com/smellthetruth/2013/11/01/pfizer-fine-funds-pot-education-classes-for-docs-in-washington/>

Calling Justice-Loving South Asians to Dismantle the Drug War, Free People and Plants, and Foster Health and Development for Millions. Aggarwal SK. *Huffington Post*, 2013, September 20. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/south-asians-war-on-drugs_b_3948168.html

Cultivating Local Medical Cannabis Systems Is the Way Forward. Aggarwal SK. *Huffington Post*, 2013, August 21. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/local-medical-cannabis_b_3782901.html

5 Biggest Lies from Anti-Pot Propagandist Kevin Sabet. Aggarwal SK. *AlterNet*, 2013, August 8. (Opinion). <http://www.alternet.org/drugs/5-biggest-lies-anti-pot-propagandist-kevin-sabet>

Needless Suffering of Medical Marijuana Patient Embodies Federal-State Conflict: A Prison Extraction. Aggarwal SK. *Huffington Post*, 2013, July 19. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/medical-marijuana-patient_b_3619067.html

The marijuana Rx for sick New Yorkers. Blinderman CD and Aggarwal SK. (Opinion). *New York Daily News*. Published 2013, June 5. (Opinion). <http://www.nydailynews.com/opinion/marijuana-rx-sick-new-yorkers-article-1.1363212#ixzz2VMsYBiVg>

Medical Cannabis in the Empire State: It's Right and It's Respectable. Aggarwal SK. *Huffington Post*, 2013, May 14. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/medical-cannabis-nyc_b_3204825.html

Adequate and Well-Controlled Studies Proving Medical Efficacy of Cannabis Exist but Are Ignored by Marijuana Schedulers. Aggarwal SK and Reiman A. *Huffington Post*, 2013, April 15. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/marijuana-schedule-1_b_3071725.html

If You Are Strongly in Favor of Marijuana Decriminalization, It Is Hypocritical to Oppose Medical Marijuana. Aggarwal SK. *Huffington Post*, 2013, January 24. (Opinion). http://www.huffingtonpost.com/sunil-kumar-aggarwal/new-york-medical-marijuana_b_2542144.html

Aggarwal SK. (2005, June 9). The world within us. *Mantranjali, Souvenir Book on the occasion of Prana Prathishtapana and Maha Kumbhabhishekam, the dedication of sanctum sanctorum, Hindu Temple of Greater Tulsa*.

Non Peer Reviewed Online Publication

Health Scientist Blacklisting and the Meaning of Marijuana in the Oval Office in the Early 1970s. Aggarwal SK.

(graphics and layout by Steve Hyde). July 1, 2015. <https://medium.com/@ReachCASP/health-scientist-blacklisting-and-the-meaning-of-marijuana-in-the-oval-office-in-the-early-1970s-71ea41427b49> (on record with Vermont State Legislature)

Research on Health-Related Quality of Life in Medical Cannabis-Using Patients. Aggarwal SK. Americans for Safe Access blog. Medical Cannabis: Voices from the Frontlines. March 27, 2013. <http://safeaccessnow.org/blog/blog/2013/03/27/research-on-health-related-quality-of-life-in-medical-cannabis-using-patients/#more-3628>

Cannabinopathic Medicine: Lester Grinspoon, M.D.'s New Coinage. Aggarwal SK. Americans for Safe Access blog. Medical Cannabis: Voices from the Frontlines. March 14, 2013. <http://safeaccessnow.org/blog/blog/2013/03/14/cannabinopathic-medicine-lester-grinspoon-m-d-s-new-coinage/>

Medical Prescribers Launch National Letter for Medical Cannabis. Aggarwal SK. Americans for Safe Access blog. Medical Cannabis: Voices from the Frontlines. September 6, 2012. <http://safeaccessnow.org/blog/blog/2012/09/06/medical-prescribers-launch-national-letter-for-medical-cannabis/>

Medical Cannabis Researcher Explains Recent Scientific Review. Aggarwal SK. Americans for Safe Access blog. Medical Cannabis: Voices from the Frontlines. July 9, 2012. <http://safeaccessnow.org/blog/blog/2012/07/09/medical-cannabis-researcher-explains-recent-scientific-review/>

Aggarwal SK. (2009, November 30). Should the federal government reclassify or reschedule marijuana to make it available for use by prescription for pain management? Yes! The government should reclassify marijuana. Point/Counter Point for Pain.com. <http://web.archive.org/web/20091215154404/http://www.pain.com/go/default/practitioner/pointcounter-point/the-government-should-reclassify-marijuana/>.

Presentations

Poster Presentation

Nayak S, Aggarwal SK, Kander J, Nanda P, Tripathy S, Pushplata K, Rao B, Begum BZ, Mohant S. (2014, December). *Cannabinoid Botanicals in Cancer Treatment*. Poster presented at 2014 World Cancer Congress. Abstract published in *Asia-Pacific Journal of Clinical Oncology* 10:204-5.

Aggarwal, S. (2013, March). *Cannabinergic Pain Medicine: Developing A Concise Clinical Primer And Surveying Randomized-controlled Trial Results*. Poster presented at: Annual Assembly of the American Academy of Hospice and Palliative Medicine; New Orleans, LA. *Poster Award Winner

Aggarwal, S. (2013, March). *Health-Related Quality Of Life And Symptom Relief In A Sample Of Chronically Ill And Debilitated Medical Cannabis Patients In Urban Washington State: Comparisons With Normative And Chronically Ill Patient Samples*. Poster presented at: Annual Assembly of the American Academy of Hospice and Palliative Medicine; New Orleans, LA.

Aggarwal, S. (2007, April). *The Political Ecology of Cannabinergic Botanical Medicine Access and Delivery: Cost-Effectiveness and Death Penalty Apportionment for a Germplasm-Linked Group of Qualifying Patients in Washington State*. Poster presented at: 2007 MD/PhD Conference: Rethinking Health, Culture, and Society: Physician-Scholars in the Social Sciences and Medical Humanities; Chicago, IL.

Aggarwal, S. (2007, August). *The Medical Geography of Medical Marijuana*. Poster presented at: University of Washington Medical Scientist Training Program Poster Session; Coupeville, WA.

Aggarwal, S. (2004, August). *Developing a Depression Management System: A Small Follow-up Study*. Poster

presented at: University of Washington Medical Scientist Training Program Poster Session; Leavenworth, WA.

Oral Presentation

Aggarwal S. (2016, April 22). "The Use of Medical Marijuana in Oncology." Invited Panelist at Washington State Medical Oncology Spring 2016 Oncology Conference. Sea-Tac, WA

Aggarwal S. (2016, March 11). "Cannabis and Cannabinoid Science in the 21st Century: Health, Medicine, and the Controversies." Invited Keynote Panelist at 2016 American Psychosomatic Society 74th Annual Scientific Meeting. Denver, CO.

Aggarwal S. (2016, January 23). "Cannabinoid Integrative Health Science 101". Opening Speaker at 2016 Virtual Cannabis Health Summit. Two-day event live streamed to 28,500 people from over 104 countries, with 4000-14000 simultaneously tuning in at various times. Produced by Green Flower Media. Pleasanton, CA.

Aggarwal S. (2016, January 8). "Cannabis Therapy & Use". Invited Panelist at 2016 Washington Cannabis Summit. Sea-Tac, WA.

Aggarwal S. (2015, October 16). "Cannabinoid Integrative Medicine in Oncology & Palliative Care: Benefits and Burdens". Invited Oral Presentation to MultiCare Oncology Group, Medical Oncology Clinic, Katterhagen Resource Center, Tacoma General Hospital, Tacoma, WA.

Aggarwal, S. (2015, August 7). "Cannabinoid Integrative Medicine In Chronic Pain and Cancer Pain". Invited Oral Presentation at Chronic Pain Seminar held by Department of Anaesthesiology, All-India Institute of Medical Sciences-Bhubaneswar, Bhubaneswar, India.

Aggarwal, S. (2015, June 17). "Deconditioning in Cancer Palliative Care Patients: Brief Review and Practical Tips from PM&R". NIH Pain and Palliative Care Conference. CME accredited.

Aggarwal, S. (2014, December 3). "Integrating Spirituality into Palliative Care: Reviewing the Literature for Expert Guidance and Outcomes Evidence". NIH Pain and Palliative Care Conference. CME accredited.

Aggarwal, S. (2014, May 20). "Medical Marijuana". Invited Co-Presenter with Dr. Howard Grossman: 2014 Annual Stated Meeting at Medical Society of the County of Kings; Brooklyn, NY.

Aggarwal, S. (2014, May 19). "Cannabis is Here to Stay: Regulatory Update." Invited Oral Presentation presented at: 2014 National Association of Boards of Pharmacy Annual Meeting; Phoenix, AZ. CPhE accredited.

Aggarwal, S. (2014, May 10). "Cannabis Therapeutics in Hospice and Palliative Medicine." Oral Presentation presented at 8th National Clinical Conference on Cannabis Therapeutics; Portland, OR. CME accredited.

Aggarwal, S. (2014, May 1). "Drug Reform from Different Perspectives: An Overview". Invited Panelist at Marijuana & Drug Policy Reform in New York—The LaGuardia Report at 70. A Symposium Hosted by The New York Academy of Medicine and the Drug Policy Alliance. New York, NY

Aggarwal, S. (2014, April 21). "Cannabinoid Medical Science and Political Ecology: Psychoactive Substances and Mental Distress". Invited to present at Humboldt Institute for Interdisciplinary Marijuana Research Annual Speaker Series. Arcata, CA.

Aggarwal, S. (2014, April 5). Afternoon Hot Topics Session: Medical Marijuana, Legal and Medical Perspectives. Invited Panelist at New York State Pain Society Annual Meeting and Scientific Sessions. West Harrison, NY. CME accredited.

Aggarwal, S. (2014, March 20). "Cannabis for Symptom Control"; Hospice and Palliative Medicine Grand Rounds at Columbia University Medical Center; New York, NY. CME accredited.

Aggarwal, S. (2014, March 4). "Cannabinoid Medical Science and Political Ecology: Psychoactive Substances and Mental Distress". Invited Evening Lecture at New School for Social Research, hosted by Department of Psychology. New York, NY.

Aggarwal, S. (2014, February 26). "Medicinal Cannabis in Rehabilitation Medicine and Chronic Pain Management: Outcomes Data in 176 Patients". Physical Medicine and Rehabilitation Grand Rounds at New York University Langone Medical Center. New York, NY.

Aggarwal, S. (2014, January 15). "Compassionate Care: Medical Cannabis in NY". Invited Guest Lecture at Albert Einstein College of Medicine Social Medicine Course. New York, NY.

Aggarwal, S. (2013, August). "Uses of Medical Cannabis". Invited to present at Rush Medical College Lunch Webinar hosted by PM&R Interest Group; Chicago, IL.

Aggarwal, S. (2013, October). *Invited Panelist for "Cannabis in the Treatment of Pain"*. Oral Presentation presented at: 2013 American Academy of Physical Medicine and Rehabilitation Annual Assembly; Washington, DC. CME Accredited.

Aggarwal, S. (2013, May 30). "The Current Evidence Base". Invited Speaker The New School Forum: Demystifying Medical Marijuana in New York: Implications for Mental Health and Drug Treatment Providers. The New School for Social Research, New York, NY.

Aggarwal, S. (2013, May 28). "Medical Marijuana in New York State: Focus on MS". Presentation at Long Island MS Monthly Social Night, Affiliate of the Multiple Sclerosis Foundation Independent Support Group Network. Melville, NY.

Aggarwal, S. (2013, April). *Career Panel Invited Panelist + "Activism for Innovation in Medicine" Breakout Session Leader*. Oral Presentation presented at: 2013 National Conference for Physician-Scholars in the Social Sciences and Humanities; San Francisco, CA.

Aggarwal, S. (2012, December). *Rehabilitation of patients with brain cancer: a review of the neurologic, medical, and rehabilitative issues*. Co-presented In-Service focusing on role of Palliative Care, with Dr. Heidi Fusco, Brain Injury Fellow, 12/12/12, Rehabilitation Medicine Department, Hospital for Joint Diseases; New York, NY.

Aggarwal, S. (2012, September). *Medical Cannabis in New Jersey*. Oral Presentation presented at: Grand Rounds, Hackensack University Medical Center, Hosted by Department of Pain and Palliative Medicine, Invited by hosted by Dr. Jose Contreras, director, Pain and Palliative Medicine Institute; Hackensack, NJ.

Aggarwal, S. (2012, September). *Medical Marijuana in New York State*. Oral Presentation presented at: Invited Keynote Speaker, Free Educational Program, Multiple Sclerosis Resources of Central New York; Syracuse, NY.

Aggarwal, S. (2011, September). *Alternative and Rehabilitative Approaches to Managing Neuromuscular Disease: Cannabinergic Treatments*. Oral Presentation presented at: Neuromuscular Update Course II: Non-pharmacologic Treatment of Neuromuscular Disease. 58th Annual Meeting of American Academy of Neuromuscular and Electrodiagnostic Medicine. Corresponding manuscript co-authored with Carter GT published in course syllabus; San Francisco, CA. CME Accredited.

Aggarwal, S. (2011, June). *Cannabis and Its Role in the Treatment of Neurologic Diseases or 'Cannabinergic Neurology'*. Oral Presentation presented at: Virginia Mason Medical Center, Neuroscience Institute, Invited Presentation to Neurology Service; Seattle, WA.

Aggarwal, S. (2011, June). *Pharmacies' and Pharmacists' Roles After Marijuana Rescheduling: Facilitating Cannabinergic Medicine Research and Practice*. Oral Presentation presented at: Northwest Pharmacy Convention, organized by Washington State Pharmacy Association; Coeur d'Alene, ID. CPHE Accredited.

Aggarwal, S. (2011, May). *Cannabis: A Commonwealth Medicinal Plant, Long Suppressed, Now at Risk of Monopolization*. Oral Presentation presented at: Symposium on "Cannabinoid Medicine: Discovery, Evolution, and Status in 2011" at 164th Annual Meeting of the American Psychiatric Association; Honolulu, HI. CME Accredited.

Aggarwal, S. (2010, September). Celebrating the Therapeutic Commons: Accepted Medical Uses of Cannabis, Psilocybin, and Other Schedule I Substances. Oral Presentation presented at: 2010 Smoke Farm Symposium: The World That Pretended to Be What it Was; Arlington, WA.

Aggarwal, S. (2010, June). The AMA on marijuana, 73 years ago and today. From psychotherapeutic surfacing of the unconscious to cannabinoid-based relief of neuropathic pain. Oral Presentation presented at: Bastyr University Symposium: Psychedelic medicines and their current researched clinical applications; Kenmore, WA.

Aggarwal, S. (2010, April). Geographic Snapshots of Medical Cannabis Access and Delivery in Washington State. Oral Presentation presented at: 6th National Clinical Conference on Cannabis Therapeutics; Warwick, RI. CME Accredited.

Aggarwal, S. (2010, April). "Medical Marijuana: Medicinal Value, Harms, and Effects." An hour-long debate with Alice P. Mead, JD, GW Pharmaceuticals Legal Representative. Oral Presentation presented at: University of Denver Law School Medical Marijuana Symposium; Denver, CO.

Aggarwal, S. (2009, December). Is the Time Right for Medical Marijuana: Are These Medical Miracles?. Oral Presentation presented at: 2009 National Association of Boards of Pharmacy Annual Symposium; Tuscon, AZ. CPhE Accredited.

Aggarwal, S. (2009, March). The medical geography of cannabinoid botanicals in Washington State: Access, delivery, and distress. Oral Presentation presented at: 2009 National Conference for Physician Scholars in the Social Sciences and Humanities; Philadelphia, PA.

Aggarwal, S. (2007, June). *Learning About Medical Marijuana as a Medical Student in a Medical Marijuana State*. Oral Presentation presented at: Symposium in Exile: Medical Marijuana: Myths, Facts & Current Science. Presented by The Medical Marijuana Policy Advocacy Project with Roosevelt University's Illinois Consortium on Drug Policy, Students for Sensible Drug Policy (RU), and Drug Policy Alliance; Chicago, IL.

Aggarwal, S. (2007, April). *Being Virtually There: Roundtable on Virtual Methodologies*. Oral Presentation presented at: Association of American Geographers Annual Meeting; San Francisco, CA.

Aggarwal, S. (2007, April). *Doctoral Dissertation Proposal*. Oral Presentation presented at: 2007 Association of American Geographers Annual Meeting; San Francisco, CA.

Aggarwal, S. (2007, February). *The Medical Consequences of the Drug War: A Focus on Violence*. Oral Presentation presented at: 2007 National Student Physicians for Social Responsibility Conference, Stanford University; Palo Alto, CA.

Aggarwal, S. (2006, November). *Emergency Cross-Border Prison Extractions in the Americas: Global Health, Structural Violence, and the Enforcement of Evidence-Denying Prohibitions on Botanical Biota*. Oral Presentation presented at: 'Students Moving Mountains': UW Students Speak on the Themes of the UW Common Book. Sponsored by University of Washington Libraries and the Friends of the UW Libraries; Seattle, WA.

Aggarwal, S. (2006, August). *Sociomedical context of cannabis therapeutics*. Oral Presentation presented at: Staff Retreat of Rosehedge: AIDS Housing & Health Care; Seattle, WA

Aggarwal, S. (2001, March). *Before the Blizzard Came: the Rise and Fall of the 1890 Ghost Dance Religion*. Oral Presentation presented at: 2001 American Academy of Religion Western Regional Meeting; Claremont, CA.

Hobbies & Interests

tabla drumming, science fiction, walking, hiking, swimming, yoga and meditation, table tennis, current events and politics, film, music appreciation, theater, museums, literature, astronomy and space exploration
Personal website: www.cannabinologist.org

Media: Interviewed for

History Channel H2 Hooked: Illegal Drugs: Marijuana (2014)

History Channel's The Marijuana Revolution (2016)

Airing on multiple Public TV channels: For the Life of Me: Between Science and the Law (2014)

Profile on November 22, 2009 in *The Chronicle for Higher Education*

Other outlets available upon request.

Language Fluency

Hindi (Fair)

Punjabi (Basic)

Other Awards/Accomplishments

'Resident of the Year' Finalist, 2014, NYU Department of Physical Medicine and Rehabilitation; Associate Member, New York Academy of Medicine since 11/2012; Member of Consulting Team that placed 6th out of 95 overall, 4th in Product & Industry Knowledge category in Initiative 502 Consulting Services competitive bidding process (RFP K430) by State of Washington; UN Grounds Pass Holder, '12-'14; AAHPM Poster Award, 2013; Leading Physicians of the World Inductee, '12; Invited expert, howcast.com video series, '12; Invited guest expert at NYU Rehab Journal Club on my pain medicine review article, 8/10/12; Interviewed for series in Pharmacy Today, 2011; John G. Gianutsos Awardee, NYU Rusk, 10/26/11; Recipient of Global Health Pathway Certificate, UW Global Health Department, June 2010; Honors evaluations in Clinical Epidemiology; Medicine, Health and Society; and Psychopharmacology, High Pass evaluations in Pain Medicine and Neurology, UW School of Medicine; Profiled in Chronicle of Higher Education, 11/22/09; 2009 Oregon NORML Rick Bayer Award (Dr. Bayer was chief petitioner of Oregon Medical Marijuana Act); Freedom Fighter of the Month, *High Times* magazine, March 2008. NSF Graduate Research Fellow, 2005-8; Designated Expert in Medical Marijuana by University of Washington Media Relations, 2007. Mental Diversity Scholar, Center for Cognitive Liberty & Ethics, '06; Dean's Honor List, UC Berkeley College of Letters & Science, 2001; Dean's Honors List, UC Berkeley College of Chemistry, 1999-2001, Goldwater Scholar, '98;

UC Berkeley Kraft Scholarship '98, Howard Memorial Scholarship, UC Berkeley College of Chemistry, '98, Robert C. Byrd Scholar '97, National Merit Scholar '97, US National Chemistry Olympiad Team Member,'97