Chronic Pain - Anesthesia Resident Training KHSC

Instructor Information

Instructor Email Office Location & Hours

Dr. Scott Duggan (Medical Director) Scott.duggan@kingstonhsc.ca JM3 HDH, 8-1530, Weekdays

Dr. Christopher Haley

Dr. Tracy Cupido

Dr. Peter Ellis

Dr. Susan Chamberlain

Dr David Ruggles

Rosemary Wilson NP

Jeanette Suurdt NP

Katie Root-Clark NP

General Information

Description

The conceptual basis of pain medicine introduces the major philosophical and conceptual principles that inform the practice of pain medicine.

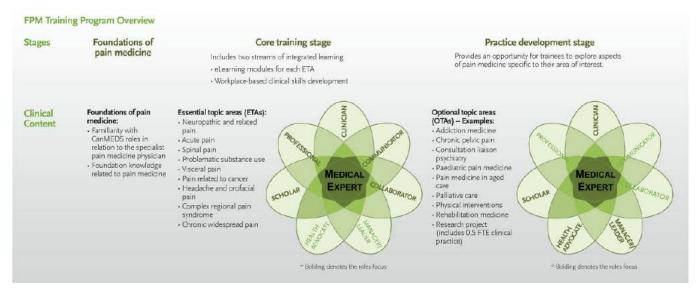
A key principle of the curriculum is an emphasis on trainees' development across all professional roles. Using the CanMEDS framework from the Royal College of Physicians and Surgeons of Canada as a base, the Pain Medicine Roles in Practice have been designed to emphasise a sociopsychobiomedical orientation to practice, rather than a narrow biomedical one. They have the titles of clinician, professional, scholar, communicator, collaborator, leader and manager, and health advocate. The clinician role, which articulates the skills and attitudes required of a specialist pain medicine physician when working with patients and the knowledge to perform these skills, is the focus of outcomes within the various essential topic areas.

Expectations and Goals

The goal of this one-month rotation is to develop an approach to the investigation, management, or referral of patients complaining of chronic non-malignant and cancer pain.

The pain clinic of the Department of Anaesthesiology is "unidisciplinary" in staffing but

multidisciplinary in the investigation and treatment of patients. The initial diagnosis or treatment of a pain complaint will be conducted within the Anaesthesiology Chronic Pain Medicine Clinic. However, this clinic exists within the multidisciplinary environment of the Queen's University Medical Centre ensuring the availability of a wide range of consultations, tests, or treatments. The patient's local medical facilities and personnel are used whenever possible because of the distances of the referral area.



(Curriculum below)

Course Materials

Required Materials

 Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine. ACUTE PAIN MANAGEMENT: SCIENTIFIC EVIDENCE Fourth Edition 2015 http://fpm.anzca.edu.au/documents/apmse4_2015_final

The masked marvel.pdf - How John J Bonica Changed the Face of Pain Medicine https://drive.google.com/file/d/0B98vJRRAn830SkVIMTlvWGxmdDg/view?usp=sharing

Optional Materials

BOOK LIST

- Benzon H, Raja S, Liu S, Fishman S, Cohen S: Essentials of Pain Medicine
 https://drive.google.com/file/d/0898vJRRAn830R3IxWEJ4X2U4MEE/view?usp=sharing
- Bruno Kastler Interventional radiology

https://drive.google.com/open?id=0B98vJRRAn830dIVjSF9HbktRNHM

- Cousins, M.J. & Bridenbaugh, P.O. Neural Blockade. 3rd ed., Lippincott-Raven, 1998
- Fishman C, Ballantyne J, Rathmell: *Bonica's Management of Pain 4th Edition* Published in 2010
- Fitzgibbon D, Loeser JD: Cancer Pain: Assessment, Diagnosis, and Management Published in 2010
- Fields, H.L. (1987). Pain. New York: McGraw-Hill Book Company.
- Loeser J.D. Bonica's Management of Pain. 3rd ed. Lippincot Williams & Wilkins, 2001
- Mailis-Gagnon, A. & Israelson, D. Beyond Pain. Viking Canada, 2003.
- Raj Prithvi P: Pain Medicine: A Comprehensive Review

Published in 2003. Not sure if a new edition is going to be published soon

- International Spine Intervention Society: Spinal Diagnostic and Treatment Procedures Practice Guidelines
- McIntyre P, Schug S: Acute Pain Management: A Practical Guide 3rd Edition Published in 2007
- Wall, P.D., & Melzack, R. (Eds.). (1994). Textbook of Pain. 3rd ed., Edinburgh, UK: Churchill
- Livingstone.

IASP - International Association for the Study of Pain PAIN CLINICAL UPDATES

Online

http://sites.utoronto.ca/pain/
http://www.usra.ca/pain.php

SUBOXONE trainer

http://www.suboxonecme.ca Online course, Developed by: This program is provided by CPC Healthcare Communications, Sponsored by: RB Pharmaceuticals Ltd

Patient resources

| | PAIN RESOURCES | INFORMATION |
|--|---|---|
| Pain Management Books Pain BC | The Pain Survival Guide - F Winter & D Turk Living Beyond Your Pain - J Dahl The Fibromyalgia Help Book - J Fransen & I. Jon Russell Free comic book explains chronic pain (Online) www.painbc.ca https://www.youtube.com/user/PainBC | Pain management books we recommend Comic book: http://www.paininmotion.be/storage/app/media//materials/oct- 18/A%20JOURNEY%20TO%20LEARN%20ABOUT%20PAIN_FINAL.pdf Excellent pain management resources Inspiring gentle movement at home |
| Chronic Pain Web Resources | Fibromyalgia & Chronic Pain Association (USA-great info) The American Chronic Pain Association (USA) Arthritis Society (Canadian resource) Kelty's Key - select "Chronic Pain" (Canadian - BC) TAPMI Pain U online (Canadian - Ontario) Free course on chronic pain Retrain pain (Worldwide) Webinars & workshops on Managing Pain, fatigue, MH | www.fmcpaware.org www.theacpa.org https://www.keltyskey.com/courses/chr onic-pain/ http://tapmipain.ca/patient/managing-my- pain/pain-u-online/#/ www.retrainpain.org Email: danielled@kchc.ca / 613-484-8072 |
| | Living Well Chronic Pain Self-management via ZOOM | |
| Pain Management You Tube Videos | Understanding Pain: What to do about it in less than five minutes Brief. Educational. Enjoyable. A great introduction. | https://www.bing.com/videos/search?q= learn+to+manage+pain+5+minutes+youtu be&view=detail∣=DCDF1E1C4A8B117 70880DCDF1E1C4A8B11770880&FORM=VI RE |

| | Lorimer Moseley - Tame the beast - animated video | www.tamethebeast.org |
|-------------------|--|---|
| | Lorimer Moseley - Why Things Hurt Chronic pain can be daunting. This overview of chronic | https://www.youtube.com/watch?v=nifGFIuVkUk <u>C</u> |
| | pain using everyday language is highly recommended. | |
| | Dr Howard Schubiner: the role of stress in creating learned nerve pathways that cause pain | https://www.youtube.com/watch?v=XM5hdIE OSFM |
| | nerve parriways that cause pain | https://www.youtube.com/watch?v=D36 yy63CHq4 |
| | Breathe2Relax / Insight Timer/ TakeABreak/ | Google these apps and they will pop up |
| Relaxation Skills | Headspace | |
| Mindfulness | Offer guided deep breathing and/or meditation | |
| Meditation | exercises | |
| | CAMH - free mindful pause in nature module | https://moodlemedia.camhx.ca/pe/story.ht ml |
| | Calm - free guided meditations | Www.calm.com |
| | Smiling Mind - free meditations | www.smilingmind/com.au |
| | Mindful Magazine - offering free guided meditations | www.mindful.org |
| Communication | American Chronic Pain Association | These websites all provide helpful |
| Tools | theacpa.org/Communication-Tools | information and interactive tools to help |
| | www.back.com / tools-resources | you talk to your doctors about your |
| | www.nia.nih.gov/health | chronic pain condition. |
| Pain | Manage My Pain | Free pain apps that allow you to track |
| Management | Catch My Pain | pain symptoms, pain triggers, mood, |
| Apps | Chronic Pain Coach | activity levels, treatments etc. |
| | WebMD Pain Coach | |
| Podcasts | UK Podcasts on topics related to chronic pain | http://www.paincd.org.uk/listen |
| | Pain Waves (Pain BC) | https://www.spreaker.com/show/pain-waves |
| Testimonials | Hear from others with chronic pain | www.liveplanbe.ca/real-stories |
| Physiotherapy | OHIP covered physiotherapy clinics | https://www.southeasthealthline.ca/listServi |
| | | <u>ces.aspx?id=11019</u> |

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| KFL&A | COVID-19 reliable information | https://www.kflaph.ca/en/healthy- |
| | | living/novel-coronavirus.aspx |
| ANXIETY CANADA | What to do if you are anxious or worried | https://www.anxietycanada.com/articles/wha |
| | about COVID-19 | t-to-do-if-you-are-anxious-or-worried-about- |
| | | coronavirus-covid-19/ |
| CAMH | Mental health concerns during COVID-19 | https://www.camh.ca/en/health-info/mental- |
| | pandemic | health-and-covid-19 |
| CONNEX ONTARIO | SELF-ASSESSMENT/COVID-19 ASSESSMENT CENTRES | https://www.connexontario.ca/COVID-19 |
| TELEHEALTH | A registered nurse is available 24hrs/day, 7 | 1-866-797-0007 |
| ONTARIO | days/week | |
| Dr Russ Harris | Document (click on link): | Video (click on link) |
| (anxiety linked to | https://services.unimelb.edu.au/data/assets/pdf_file/0005/3327008/FACE_ | https://www.bing.com/videos/search?q=russ+harris+covid&docid=608 |
| COVID-19) | COVID - How to respond effectively to the Corona crisis - by Russ Harris author of The Happiness Trap -1.pdf | 034946339049300∣=5BA64D2784957863196C5BA64D2784957863196 C&view=detail&FORM=VIRE |
| , | MENTAL HEALTH RESOURCES | INFORMATION |
| | WENT TE TETT RESOURCES | THE CHANGE TO TH |
| Depression and | Watch a video to determine if cognitive | https://www.youtube.com/watch?v=9c_Bv_F |
| Anxiety | Behavioural Therapy is right for you | BE-c |
| Anxiety Treatment | | |
| Web Resources | Vancouver anxiety Centre's Dr. Korol, | |
| Web Resources | Clinical Psychologist has free videos | www.vancouveranyiety.com |
| | | www.vancouveranxiety.com |
| | "Coping with Anxiety", "CBT for insomnia", | (Press on 3 lines on right for menu, look |
| | & "Meditation for Busy Minds". Highly | under "online classes") - you will find |
| | recommended. | her free videos |
| Books About | Mind over Mood Dennis Greenberg and | Excellent book outlining strategies for |
| Depression, Anxiety, | Christine Padesky | managing depression, anxiety, guilt and |
| and Stress | | anger. |
| | I | 1 - 3 - |

| The Happiness Trap - Russ Harris | |
|---|--|
| The Happiness Hap Rass Harris | Offers ways to 'unhook' from painful |
| | thoughts & feelings and taking steps |
| | toward valued life |
| Kelty's Key (free self-help) | https://www.keltyskey.com/self-help/ |
| Online CBT therapy and help with chronic pain, | |
| anxiety, depression, sleep, etc. | |
| Bounce Back Ontario | https://bouncebackontario.ca/ |
| | 1-866-345-0224 |
| anxiety and depression- includes workbooks and | |
| telephone coaching - Self-referral or GP | |
| referral | https://omyistysopodo.com/momoging |
| | https://anxietycanada.com/managing- anxiety/ |
| | anxiety/ |
| | |
| PTSD | www.mindrelief.com |
| | www.palousemindfulness.com |
| | |
| | www.neuronovacentre.com |
| | www.moodgym.com.au |
| 3 | |
| Sleep disorders, restless legs, sleep apnea, | https://sleeponitcanada.ca/ |
| insomnia | · |
| Learn about box breathing | www.healthline.com/health/box-breathing |
| _ | |
| KFLA CRISIS Line | www.amhs-kfla.ca / 613-544-4229 |
| | |
| Big White Wall offers free online mental health support | https://otn.ca/patients/bigwhitewall/ |
| | https://turn2me.org/group-supports |
| Turn2me: free online support groups for anxiety, depression, stress management, suicidal thoughts | |
| | anxiety, depression, sleep, etc. Bounce Back Ontario Free guided self-help program for managing anxiety and depression- includes workbooks and telephone coaching - Self-referral or GP referral Anxiety Canada Free online CBT therapy for anxiey Mind relief Fee-based online CBT for depression, anxiety, OCD, PTSD Mindfulness course Free 8-week mindfulness course (MBSR) Mindfulness-based chronic pain management Trauma informed 12-week program MoodGym Interactive self-help app for depression and anxiety Sleep disorders, restless legs, sleep apnea, insomnia Learn about box breathing KFLA CRISIS Line Big White Wall offers free online mental health support Turn2me: free online support groups for anxiety, |

Weekly Schedule

| Weekdays | AM | PM | Notes |
|---|--|--|---|
| Monday Duggan, Haley, Cupido, Ellis | Sim Lab (fluoroscopy Procedures)/Clinic | Sim Lab (fluoroscopy Procedures)/Clinic | |
| Tuesday Duggan | Clinic | Clinic | Lidocaine infusions |
| Wednesday Cupido | Clinic | Clinic | |
| Thursday Haley, Chamberlin | Clinic | Clinic/ Orientation Intake Sessions | Chamberlin (once a month) Pelvic injections |
| Friday Cupido, Ruggles | Clinc, Sim Lab (once a month) | | Ruggles once a month |

Course Schedule

| Week | Topic | Reading | Exercises |
|--------|----------------------------|---|--|
| Week 1 | Experience/Ori entation | The masked marvel.pdf - How John J Bonica Changed the Face of Pain Medicine | Initial orientation meeting Attend Orientation session |
| | | https://drive.google.com/file/d/0B98 vJRRAn830SkVIMTIvWGxmdDg/view?us p=sharing | |
| | | PAINBC leaflet | |
| | | https://drive.google.com/file/d/1_8 H2r_h8hYRIc1HO83Ox-oiGB5DVk p/view?usp=sharing | |
| | | Pg 53-54 Toronto notes | |
| | | https://drive.google.com/file/d/0B98 vJRRAn830U2wzaVVLQXIUcnM/view?u sp=sharing | <u>3</u> |
| Week 2 | Assessment/ | Chronic pain dictionary | Session with physio |
| | diagnosis | https://queensuca- my.sharepoint.com/:b:/r/personal/15cph _queensu_ca/Documents/Core/Core%20P ain/chronic-pain- dictionary.pdf?csf=1&e=lstJTL | |
| | | Transition from acute to chronic pain | |
| | | https://drive.google.com/file/d/0B98vJR RAn830SnpLVjFOaGstMDg/view?usp=sharing | 2 |
| | | BJA 2008 supplements | |
| | | https://drive.google.com/open?id=0B98v JRRAn830NkdtYnJKRjQ3d2c | |
| Week 3 | Treatments | | Session with occupational health |
| Week 4 | Consolidation | | Final meeting |

Additional Information and Resources

| Pathology | Description of pain management resource | Web link |
|---|--|---|
| Ankylosing spondylidis | Canadian Spondylitis Association | https://www.spondylitis.ca/ |
| Arthritis | Canadian arthritis society | https://arthritis.ca/living-well?pillar=/Living-Well/About-flourish |
| Chronic pain | Explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=dXtbjKCL2UA |
| Patient handout: pain mgt | Machealth | https://machealth.ca/programs/opioids_clinical_p rimer/m/patient-oriented_resources/2500 |
| Handout: self- help | Machealth | https://machealth.ca/programs/opioids_clinical_primer/m/patient-oriented_resources/2490 |
| CRPS | Explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=emJco5a- WX4 |
| Fibromyalgia | Explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=ZFHO93uzc4A |
| Headaches | Canadian Headache Society: headache diary and suggested readings | https://headachesociety.ca/for-patients/ |
| Low back pain | Explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=-9pjVcq-mcw |
| Myofascial pain syndrome | Myofascial pain explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=CxaprWwEstc |
| Neck pain | Exercises for myofascial neck pain | https://www.youtube.com/watch?v=ZFHO93uzc4A |
| Neuropathic pain | Explained by Dr Andrea Furlan | https://www.youtube.com/watch?v=oa53SDg3fn0 |
| Osteoarthritis | Mayo Clinic Radio explains OA | https://www.youtube.com/watch?v=zKxKet6zmw w |
| | Physiopedia explains OA | https://www.youtube.com/watch?v=sUOImI- naFs&feature=emb_logo |
| SUDs | Covid-19 and SUDs, coverage of select medications, | https://www.dropbox.com/sh/x622qndzvmydsvm/AABi888G_Ase6T0-N1Pd3uboa?dI=0 |
| Opioid Use Disorder | exemptions, Women's College Hospital | https://machealth.ca/programs/opioids_clinical_primer/m/patient-oriented_resources/2385 |
| Trigger Point & Referred Pain Guide | Offers map, muscles, symptoms and information. By MyoRehab | http://www.triggerpoints.net/ |

| Strategy | Description of pain management resource | Web link |
|--|--|--|
| Buprenorphine | Patient guidebook by Women's College Hospital | https://machealth.ca/progra ms/opioids_clinical_primer/m /patient- oriented_resources/2384 |
| Cannabinoids and cannabis | Role of cannabinoids in our body explained by Dr Andrea Furlan | https://www.youtube.com/wa tch?v=q_0tXsVnr_E |
| | CAMH Risk reduction resource Drug interactions with cannabinoids | https://www.camh.ca/- /media/files/pdfsreports- and-books research/canadas-lower-risk- guidelines-cannabis-pdf.pdf |
| | brug interactions with cannabillorus | https://www.cmaj.ca/content /192/9/E206 |
| Cognitive behavioural therapy (CBT) | What is CBT? Document by healthlink BC | https://www.healthlinkbc.ca /health-topics/tv3092 |
| тнегару (СВТ) | Stop negative thoughts: choose a healthier way of thinking and how to get started on your own? Document by healthlink BC | https://www.healthlinkbc.ca /health-topics/uf9857#uf9858 https://bouncebackontario.ca |
| What is Acceptance and commitment therapy? (ACT)= 3 rd wave of CBT | Sign up for <u>free online CBT</u> | https://www.youtube.com/watch?v=RMWgrGUSIUQ |
| Grounding exercises | Helpful for anxiety/ distressing thoughts What's Up? A free mental health wellness app | Apple devices: https://apps.apple.com/us/app/ whats-up-a-mental-health- app/id968251160 |
| | | Android devices: https://play.google.com/store/a pps/details?id=com.jacksontemp ra.apps.whatsup&hl=en |
| Meditation | Meditation 101: A beginner's guide | https://www.youtube.com/watch?v=o-kMJBWk9E0 |
| Mindfulness | Jon Kabat-Zinn describes how mindfulness can help with chronic pain | https://www.youtube.com/watch?v=KqS9qHEWnaA |
| | Mindfulness is a superpower | https://www.youtube.com/watch?v=w6T02g5hnT4 |
| Movement (gentle) | Series of videos by Pain BC | https://www.youtube.com/us |

| | | er/PainBC |
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| | | er/ andc |
| | Gentle chair yoga (10 min) by Toronto Rehab hospital | https://www.youtube.com/w atch?v=XMps5-PIJHA |
| | Gentle Tai Chi and QI Gong by Toronto Rehab hospital | https://www.youtube.com/watch?v=pa_I5NAOW4k |
| Opioids | Explains to patients when they are appropriate and when they are not. Provided by Choosing Wisely Canada | https://machealth.ca/progra ms/opioids_clinical_primer/m /patient- oriented_resources/2388 |
| Pacing Pacing & goal | Pacing: Your superpower against chronic pain. Great 5 part series by a teenager living with chronic pain. In these videos, it is important to understand that with time, using pacing and other mentioned strategies, patients my experience windows of "low or no" pain rather than being "pain-free" | https://www.youtube.com/watch?v=waTG5noUOek&list=PLavZ0_CzcX0VENtcG4Fn59thJv01Mve7f https://www.youtube.com/watch?v=EPsWYO-kWdU |
| setting | Chronic pain and pacing activities (animation, adult population) Tips on how to start pacing your | https://painhealth.csse.uwa. edu.au/pain-module/pacing- and-goal-setting/ |
| | activities and goal setting | and-goar-setting/ |
| Radical acceptance | Tara Brach explains radical acceptance | https://www.youtube.com/watch?v=_K35O3G82L4 |
| Sleep hygiene | Information and strategies on sleep disorders, restless legs, sleep apnea, insomnia and more | https://sleeponitcanada.ca/ |

NATIONAL CURRICULUM GUIDE FOR ANESTHESIOLOGY 2020: CHRONIC PAIN MEDICINE

The Anesthesiologist shall demonstrate an understanding of the anatomy and physiology and an approach to management of chronic pain

Anatomy and Physiology of Pain

Demonstrate knowledge of the anatomy and physiology of acute pain:

Pain Pathways

Describe the structure of nerve fibers that contribute to pain

Describe the afferent and efferent pathways at the peripheral, spinal, brainstem, thalamic and cortical levels that are involved in nociception

Pain Modulation

List and describe the function of the major neuromodulators involved in the perception of pain at each anatomic level Explain the mechanisms involved in central and peripheral sensitization

Describe the role and mechanism of mediators of inflammation in the pain process

Describe the role and mechanism of gene expression in the pain process

Neuroendocrine Stress Response

Describe the acute and chronic effects of neuroendocrine stress response on different systems Describe the theoretical mechanism by which analgesia affects neuroendocrine response

Assessment of pain

Demonstrate knowledge of the methods used for assessment of chronic pain, including but not limited to:

- Objective vs. Subjective
- Delineate between nociceptive (somatic and visceral) and neuropathic
- Explain the relevance of objective assessment relative to patient self-reports, and create useful assessment plans based on these principles

Assess the relative contributions of somatic, inflammatory, functional and neuropathic processes in a given patient's pain problem

Perform a comprehensive assessment of the patient in pain, including functional and psychosocial impacts

Interpret the results of multidimensional pain indices, and compare the clinical utility of different instruments

Pain Assessment Tools

Describe common examples of pain assessment tools and their relative advantages and disadvantages Analgesia, outcomes, and goals of therapy

Rehabilitative and Functional Outcomes

Describe the affective and functional aspects of the pain experience and incorporate them into an analgesic plan

Generate an appropriate plan in cooperation with the patient setting realistic analgesic and functional goals

Coordinate a multidisciplinary pain management plan, making appropriate use of allied health professionals and resources

Tolerance, Addiction and Substance Abuse

Identify and distinguish between tolerance, dependence and addiction

Identify the special physiological, psychological, pharmacokinetic and pharmacodynamics issues in the tolerant or abusing patient

Recognize addictive behaviour and warning signs of substance abuse

Educate allied health and other medical professionals to the risks and appropriate management of tolerance and addiction in relation to chronic analgesic therapy

Describe the biopsychosocial aspects of substance abuse and its interaction with chronic analgesic therapy

Generate an appropriate comprehensive long-term plan in cooperation with the patient setting realistic analgesic and functional goals

Analgesic Interventions

Demonstrate knowledge of the various approaches to chronic pain management and ability to provide effective management of chronic pain

Multimodal and Regional Analgesia

Describe the multimodal approach to analgesia, including its benefits and limitations

Advocate with other disciplines to create effective policies for multimodal therapies

Describe the relative merits of different co-analgesics

Select an appropriate co-analgesic regimen to improve analgesia and minimize risk or side effects in a spectrum of patients

Identify common impediments to analgesia and modify therapy appropriately

Discuss the advantages, disadvantages, Indications, contraindications and complications of the regional techniques as they apply to chronic pain management

Identify and manage complications and adverse effects of regional analgesic techniques in an ambulatory chronic pain population

Pharmacologic Interventions

General Analgesic Pharmacology

Describe and utilize the pharmacokinetics of analgesic therapies taking into account the characteristics of specific agents and the relative advantages and disadvantages of multiple routes of administration

Predict the differences in effect expected with oral, rectal, transcutaneous, IM, IV, and SC administration of analgesic agents and modify therapy to utilize these routes appropriately

Identify patients with special pharmacokinetic and dynamic characteristics and modify therapy appropriately

Collaborate with hospital pharmacists and allied health professionals to implement policies that take into account the relative advantages and disadvantages of different routes of administration

Analgesic agents

Demonstrate knowledge and an ability to use the various groups of analgesics available for management of acute pain and be able to describe the various analgesics according to the properties of each agent, including but not limited to:

Describe the indications, contraindications, advantages and disadvantages of the agents including issues specific to all routes of administration

List the systemic effects of each agent

Identify and minimize the complications and side effects

Contrast the pharmacokinetic and dynamic characteristics of different agents

Select the appropriate dose, and route of administration for each agent

Topical Analgesics

Identify appropriate situations and agents for topical analgesia

Discuss the relative advantages and disadvantages of this route with specific reference to the agent and the situation

Prescribe topical opioids appropriately

Describe the indications, contraindications and rationale for the use of other topical analgesics

Describe the use of topical agents to a patient

Opioids

Describe the mechanism of action of opioids

Describe the types of opioid receptors with reference to their functions and distribution in the body Develop protocols and policies to govern the administration of opioids in the perioperative setting Intrathecal/epidural route

Mechanisms to avoid/reverse opioid tolerance (opioid rotation; use of antagonists etc.)

Detoxification protocols (slow vs. rapid detox)

Discuss opioid conversions - equipotency; iv:po conversions

Methadone

Titration protocol; mechanism of action; conversion; ways of administration

Suboxone

Protocol: mechanism of action

NSAIDs

Describe the mechanism of action of NSAIDs

Develop protocols and policies to govern the administration of NSAIDs in the chronic pain setting NSAIDs vs. Cox-2

Acetaminophen

Describe the mechanism of action of Acetaminophen

Develop protocols and policies to govern the administration of acetaminophen in the chronic pain setting

NMDA Antagonists

Describe the mechanism of action of NMDA antagonists

Describe the role of excitatory amino acids in pain and sensitization

Develop protocols and policies to govern the administration of NMDA antagonists in the chronic pain setting

Anticonvulsants

Describe the analgesic mechanism of action of anticonvulsants

Develop protocols and policies to govern the administration of anticonvulsants in the chronic pain setting

IV lidocaine therapy

Describe the analgesic mechanism of action of IV lidocaine therapy

Alpha-agonists

Describe the mechanism of action of Alpha agonists

Develop protocols and policies to govern the administration of Alpha-agonists in the chronic pain Setting

Antidepressants

Describe the mechanisms of action antidepressants with respect to analgesia

Develop protocols and policies to govern the administration of antidepressants in the chronic pain setting

Tramadol

Identify and minimize related complications and side effects

Describe the mechanism of action of Tramadol

Cannabinoids

Describe the indications, contraindications, advantages and disadvantages of cannabinoids including issues specific to all relevant routes of administration

List the systemic effects of cannabinoids including variations specific to particular routes of administration Identify and minimize related complications and side effects

Describe the mechanism of action of cannabinoids with respect to analgesia

Develop protocols and policies to govern the administration of cannabinoids in the chronic pain setting

Non-Pharmacologic Interventions

Demonstrate knowledge and ability to use/prescribe nonpharmacologic interventions for the management of chronic pain

Recognize the importance of non-pharmacologic factors in analgesia

Support allied health professional in provision of nonpharmacologic interventions TENS and acupuncture

Explain the theoretical mechanism of TENS in analgesia

Discuss the efficacy of TENS in chronic pain management

Coordinate access to TENS as a non-pharmacologic adjunct in appropriate situations

Other Non-Pharmacologic Interventions

Use of Biofeedback

Chiropractic interventions

Massage

Physiotherapy - ultrasound/interferential/TENS etc.

Spinal Cord and Peripheral Nerve Stimulation

Identify clinical situations in which stimulation may be of benefit

Describe the purported mechanism of action of stimulation

Coordinate access to stimulation for appropriate

Patients Discuss the relative advantages, disadvantages, indications and contraindications of stimulation for chronic pain Identify complications of implanted stimulators

Neuraxial pumps

Identify clinical situation in which neuraxial pumps may be of benefit

Demonstrate an understanding of the use of intrathecal pumps/spinal & epidural catheters

• Demonstrate an understanding of the common drugs use with neuraxial catheteropioids/baclofen/local anesthetics/clonidine/ketamine

| Initial Orientation Meeting | Date | |
|-----------------------------|------|---------|
| Supervisor | | |
| | | Page 14 |
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| Student | PGY 1 2 3 4 5 |
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| Student Goals | |
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| Final Supervisor meeting | DATE |
| Supervisor | |
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| Student | PGY 1 2 3 4 5 |

| Goals Achieved |
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| Supervisor Comments |
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