



**Pediatric Rehabilitation Medicine Rotation Overview, Physical Medicine & Rehabilitation**

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This document summarizes the Pediatric Rehabilitation Medicine rotation for all residents, with specific sections regarding the 3-month core rotation for Calgary Physiatry residents.

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## Resident Weekly Schedule

Note: actual weekly schedule may be subject to change.

A schedule for each block will be created by the Pad PM&R Administrative Assistant, and made available at least 2 weeks prior to the rotation start date. The following schedule contains a list of clinic options available.

	AM	PM
<b>Monday</b>	<ul style="list-style-type: none"> <li>• Myelo clinic (1<sup>st</sup> Monday of the month)</li> <li>• Neuromuscular clinic (3<sup>rd</sup> Monday of the month)</li> <li>• Inpatient consults/ rounds</li> <li>• 12-1 Pediatric Onset Neuromotor Impairment Rounds (~monthly)</li> </ul>	<ul style="list-style-type: none"> <li>• Myelo clinic (1<sup>st</sup> Monday of the month)</li> <li>• Neuromuscular clinic (3<sup>rd</sup> Monday of the month)</li> <li>• Inpatient consults/ rounds</li> </ul>
<b>Tuesday</b>	<ul style="list-style-type: none"> <li>• 9 am-10 am: Inpatient brain injury team rounds</li> <li>• General rehabilitation clinic</li> <li>• Neuromotor clinic</li> <li>• 2-4 pm, Movement Assessment Centre (gait) rounds (monthly, usually 3<sup>rd</sup> Tuesday of the month)</li> </ul>	<ul style="list-style-type: none"> <li>• General rehabilitation clinic</li> <li>• Neuromotor clinic</li> <li>• Inpatient consults/ rounds</li> </ul>
<b>Wednesday</b>	<ul style="list-style-type: none"> <li>• 8-9 am 2<sup>nd</sup> Wed of the month, Provincial PM&amp;R rounds</li> <li>• Multidisciplinary Pediatric amputation and congenital limb difference clinic (Once every 1-2 months)</li> <li>• Multidisciplinary pediatric arthrogryposis clinic (Once every 1-2 months)</li> <li>• Adult Neurorehabilitation Clinic- Pediatric Onset Conditions (at Sheldon Chumir w/ Dr. Tapper if interested in further exposure to this clinic)</li> </ul>	<ul style="list-style-type: none"> <li>• Adult Neurorehabilitation Clinic- Pediatric Onset Conditions (at Sheldon Chumir)</li> <li>• Multidisciplinary Pediatric amputation and congenital limb difference clinic (Once every 1-2 months)</li> <li>• Multidisciplinary pediatric arthrogryposis clinic (Once every 1-2 months)</li> </ul>
<b>Thursday</b>	<ul style="list-style-type: none"> <li>• Neuromotor clinic</li> </ul>	<ul style="list-style-type: none"> <li>• Academic half day</li> </ul>
<b>Friday</b>	<ul style="list-style-type: none"> <li>• DCNS grand rounds 8- 10 am</li> <li>• Youth Functional Independence Clinic (2 Friday's/months with physiatry, can join team if interested on other days)</li> <li>• Neuro-Physiatry clinic (once every 2 months)</li> <li>• Ortho-Physiatry clinic (once every 2 months)</li> <li>• Inpatient consults /rounding</li> </ul>	<ul style="list-style-type: none"> <li>• Neuro-Physiatry clinic (once every 2 months)</li> <li>• Youth Functional Independence Clinic 2 Friday's/months with physiatry, can join team if interested on other days)</li> <li>• Ortho-Physiatry clinic (once every 2 months)</li> <li>• Inpatient consults /rounding</li> </ul>



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**The following opportunities will take place during the rotation:**

- Weekly teaching session, 1 hour - including both Bedside Teaching & Formal Scheduled Teaching
- Seating clinic, Alberta Children's Hospital
- Orthotics clinic, Alberta Children's Hospital
- Pediatric ACETS (Augmentative Communication clinic) appointment



### Timeline of Expectations (PM&R Residents)

	Weeks 1 - 3	Weeks 4 - 6	Weeks 7 - 9	Weeks 10 - 12
Inpatients (new consults, follow ups)	<p>Learn the components of a pediatric rehab consultation.</p> <p>Complete consults with supervision/feedback. For novel presentations or infant patients, complete consults with <u>direct</u> supervision.</p>	<p>Complete inpatient consults with increasing independence.</p> <p>Develop basic management plans.</p>	<p>Increase interactions with members of the inpatient care team (pediatricians, therapists).</p> <p>Engage in a broader range of consultations (Palliative- at Rotary Flames House, Day treatment- at Dr. Gordon Townsend Rehabilitation and Education Program)</p>	<p>Increase independence with inpatient consultations. Continue to review all consultations with attending staff.</p>
Outpatients (new consults, follow ups)	<p>Read around follow-up patients, to learn how to complete initial consultations.</p> <p>Learn about outpatient resources.</p> <p>Perform outpatient visits with direct supervision.</p> <p>Learn and practice physical examination skills specific to the various patient populations.</p>	<p>Have developed distinct approaches to various patient populations and age groups.</p> <p>Have developed distinct clinic templates, for various patient populations.</p> <p>Be comfortable with community and funding resources, for various patient populations.</p>	<p>Develop comprehensive problem lists, and management plans (referrals, investigations, treatment, etc.) for all follow-up and new patients.</p>	<p>Increase independence with follow- up and new consults. Continue to review all visits with attending staff.</p> <p>The attending staff will continue to meet with all patients, for at least a portion of the outpatient visit.</p> <p>Improve efficiency</p>



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<p><b>Clinical Documentation (CC=Connect Care)</b></p>	<p>Set up CC Smartphrases, share these from the pediatric physiatrists.</p> <p>Develop your own CC Smartphrases.</p> <p>Edit all notes on the SAME day the patient was seen, not the next day.</p> <p>Inquire with each staff about process for signing off dictation, and using CC.</p>	<p>Optimize Smartphrase use.</p> <p>Prepare for patients prior to clinic, by populating relevant sections of Connect Care.</p>	<p>Provide patients with appropriate referrals, instructions, handouts, After Visit Summary (AVS) documentation.</p> <p>Work as part of a multidisciplinary team, re: documentation.</p>	<p>Fully independent with all documentation.</p> <p>All outpatient clinic notes will be reviewed by staff, before they are sent to referring physicians/ family physicians/ other members of the care team.</p>
<p><b>Team Rounds (Tuesday 9-10 am &amp; Youth Functional Independence Clinic)</b></p>	<p>Understand team dynamics, flow, processes</p>	<p>Run team rounds with staff guidance</p>	<p>Run team rounds with staff supervision</p>	<p>Run team rounds independently</p>
<p><b>Family Meetings</b></p>	<p>Understand team dynamics, flow, processes</p>	<p>Run family meetings with guidance</p>	<p>Run family meetings with staff supervision</p>	<p>Run family meetings independently</p>
<p><b>Procedures</b></p>	<p>Observe, learn indications, technique, landmarking, supplies</p>	<p>Perform procedures with hands-on guidance</p>	<p>Perform procedures with supervision</p>	<p>Perform procedures with supervision</p>
<p><b>Teaching others</b></p>	<p>No expectations</p>	<p>Teach junior learners</p>	<p>Formal patient education</p>	<p>Formal therapist education (Eg 15 in presentations during Neuromotor Impairment Rounds, or Movement Assessment Centre Rounds)</p>
<p><b>Admin (meetings, emails, paperwork)</b></p>	<p>Cc'ed on clinical emails / in-basket messages / secure chats</p>	<p>Awareness of various "brain injury" / in-patient admin meetings</p>	<p>Take lead with clinical emails with allied health</p>	<p>Follow up on arranging patient treatment plans via communication with allied health and administration</p>



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Written exams	N/A	Mid-rotation written exam, Mid-rotation STACER	Informal formative discussion re: teaching topics, during teaching sessions	End-rotation STACER
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## Pediatric PM&R Trainee Formal Teaching and Recommended Reading

There will be a formal teaching session each week facilitated by a staff (listed on your schedule). It is your responsibility to work with the staff each week to find a time for the teaching topic and discuss the desired format that week (e.g. didactic talk by resident &/or staff, structured discussion, journal article(s)). For topics regarding a medical condition in general, please review epidemiology, pathophysiology, risk factors, clinical presentation (including associated conditions and impairments), investigations, and management. Other topics are certainly an option and some trainees prefer to focus on a particular article and or a specific impairment. Physiatry resident want to be comfortable with each of these topics before the end of their core pediatric rehabilitation rotation. Please let us know if you have difficulty accessing any of these resources.

### Useful Textbooks:

Alexander, M. A., D. J. Matthews and K. P. Murphy (2015). Pediatric rehabilitation : principles and practice. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?pq-origsite=primo&docID=2050524>

Cifu, D. X. (2020). Braddom's physical medicine and rehabilitation. 6<sup>th</sup> edition. <https://www-clinicalkey-com.ezproxy.lib.ucalgary.ca/#!/browse/book/3-s2.0-C20170035863>

America Academy of Cerebral Palsy and Developmental Medicine (AACPDM) Care Pathways  
<https://www.aacpdm.org/publications/care-pathways>

Gage, J. R., M. H. Schwartz and S. E. Koop (2009). The Identification and Treatment of Gait Problems in Cerebral Palsy , 2nd Edition. Clinics in Developmental Medicine. London, Mac Keith Press. 2<sup>nd</sup> edition. <https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?pq-origsite=primo&docID=3329153>

For certain genetic or syndromic conditions, “NCBI gene reviews, by the National Library of Medicine” has updated articles. These contain information on screening (in addition to clinical findings, etc.)

Eg: For myotonic dystrophy type I: [Myotonic Dystrophy Type I - GeneReviews® - NCBI Bookshelf \(nih.gov\)](#) Eg: For Rett syndrome: [MECP2 Disorders - GeneReviews® - NCBI Bookshelf \(nih.gov\)](#)



### Teaching Topics for single block (4 week) Resident rotations

Week	Topic & Potential Subtopics	Topics & Potentially Useful Reading (* = recommended)	Staff
1	Peds Physiatry Physical exam <ul style="list-style-type: none"> <li>● Approach to Physical Exam</li> <li>● Maneuvers &amp; Special tests</li> </ul>	* <a href="#">Braddom's Peds Hx &amp; PE</a> Trost, J.P., "Clinical Assessment" (chapter 3.1) in Gage, J. R., M. H. Schwartz and S. E. Koop (2009). The Identification and Treatment of Gait Problems in Cerebral Palsy, 2nd Edition. Clinics in Developmental Medicine. London, Mac Keith Press.	Condliffe
2	Cerebral Palsy <ul style="list-style-type: none"> <li>●</li> </ul>	* <a href="#">Off-Service Trainees</a> : Sewell, M. D., D. M. Eastwood and N. Wimalasundera (2014). "Managing common symptoms of cerebral palsy in children." <i>BMJ</i> <b>349</b> : 5474. * <a href="#">PM&amp;R Residents</a> : Graham, H. K., P. Rosenbaum, N. Paneth, B. Dan, J. P. Lin, D. L. Damiano, J. G. Becher, D. Gaebler-Spira, A. Colver, D. S. Reddihough, K. E. Crompton and R. L. Lieber (2016). "Cerebral palsy." <i>Nat Rev Dis Primers</i> <b>2</b> : 15082. *Novak, I., C. et al (2020). "State of the Evidence Traffic Lights 2019: Systematic Review of Interventions for Preventing and Treating Children with Cerebral Palsy." <i>Curr Neurol Neurosci Rep</i> <b>20</b> (2): 3. Novak, I. (2014). "Evidence-based diagnosis, health care, and rehabilitation for children with cerebral palsy." <i>J Child Neurol</i> <b>29</b> (8): 1141-1156. (figure 3 is a great representation of common statistics in CP) <a href="https://cerebralpalsy.org.au/our-research/about-cerebral-palsy/what-is-cerebral-palsy/">https://cerebralpalsy.org.au/our-research/about-cerebral-palsy/what-is-cerebral-palsy/</a> The "Facts about cerebral palsy" and other related pages may also be useful <a href="https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf">https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf</a> <a href="https://www.macs.nu/index.php">https://www.macs.nu/index.php</a> <a href="http://cfcs.us">http://cfcs.us</a>	Burkholder
3	Pediatric Medical Equipment & Orthoses <ul style="list-style-type: none"> <li>● Walkers &amp; Seating</li> <li>● Other Peds specific equipment</li> </ul>		Burkholder
4	Myelomeningocele  Pediatric SCI <ul style="list-style-type: none"> <li>● Epidemiology</li> <li>● SCIWORA</li> <li>● Acute SCI Considerations</li> <li>● Chronic SCI Considerations</li> </ul>	Webb TS. (2010). "Optimizing health care for adults with spina bifida." <i>Developmental Disabilities Research Reviews</i> . <b>16</b> (1):76-81. UpToDate has a good review on spina bifida  <a href="#">Braddom's chapter on SCI</a> cover some pediatric specific issues (searching for "children" makes them pop up conveniently)	Gnanakumar



## Teaching Topics for 3 block (12 week) Resident Rotations

Week	Topic & Potential Subtopics	Potentially Useful Reading (* = recommended)	Staff
1	<p>Peds Physiatriy Physical exam, Resources &amp; Transition to Adult Care</p> <ul style="list-style-type: none"> <li>● Approach to Physical Exam</li> <li>● Maneuvers &amp; Special tests</li> </ul>	<p>*<a href="#">Braddom's Peds Hx &amp; PE</a></p> <p>Trost, J.P., "Clinical Assessment" (chapter 3.1) in Gage, J. R., M. H. Schwartz and S. E. Koop (2009). The Identification and Treatment of Gait Problems in Cerebral Palsy, 2nd Edition. Clinics in Developmental Medicine. London, Mac Keith Press.</p> <p>CPS Statement – Recommendations to improve transition to adult care for youth with complex health care needs. <a href="https://cps.ca/en/documents/position/transition-to-adult-care-for-youth">https://cps.ca/en/documents/position/transition-to-adult-care-for-youth</a></p> <p>Well On Your Way program and Decision Making Options <a href="https://www.albertahealthservices.ca/y2a/Page16530.aspx">https://www.albertahealthservices.ca/y2a/Page16530.aspx</a></p> <p>"Aging with Pediatric Onset Disability and Diseases" in Alexander, M. A., D. J. Matthews and K. P. Murphy Pediatric rehabilitation : principles and practice. Chapter 21</p> <p>Additional Topics: Federal Resources, Transition to Adult Medical Care, Decision Making Capacity, Working and Inability to Work with a Disability</p>	Condliffe
2	<p>Cerebral Palsy – Part 1</p> <ul style="list-style-type: none"> <li>● Epidemiology</li> <li>● Pathophysiology</li> <li>● Risk Factors</li> <li>● Clinical Presentation</li> <li>● Investigations</li> </ul>	<p>*Easy Introduction: Sewell, M. D., D. M. Eastwood and N. Wimalasundera (2014). "Managing common symptoms of cerebral palsy in children." <u>BMJ</u> <b>349</b>: 5474.</p> <p>*More Detail: Graham, H. K., P. Rosenbaum, N. Paneth, B. Dan, J. P. Lin, D. L. Damiano, J. G. Becher, D. Gaebler-Spira, A. Colver, D. S. Reddihough, K. E. Crompton and R. L. Lieber (2016). "Cerebral palsy." <u>Nat Rev Dis Primers</u> <b>2</b>: 15082.</p> <p>*Rosenbaum, P., N. Paneth, A. Leviton, M. Goldstein and M. Bax (2007). "A report: the definition and classification of cerebral palsy - April 2006." <u>Developmental Medicine &amp; Child Neurology</u> <b>49</b>: 8-14.</p> <p>Novak, I. (2014). "Evidence-based diagnosis, health care, and rehabilitation for children with cerebral palsy." <u>J Child Neurol</u> <b>29</b>(8): 1141-1156. (figure 3 is a great representation of common statistics in CP) <a href="https://cerebralpalsy.org.au/our-research/about-cerebral-palsy/what-is-cerebral-palsy/">https://cerebralpalsy.org.au/our-research/about-cerebral-palsy/what-is-cerebral-palsy/</a></p> <p>The "Facts about cerebral palsy" and other related pages may also be useful <a href="https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf">https://www.canchild.ca/system/tenon/assets/attachments/000/000/058/original/GMFCS-ER_English.pdf</a> <a href="https://www.macsnu.com/index.php">https://www.macsnu.com/index.php</a> <a href="http://cfcs.us">http://cfcs.us</a></p>	Burkholder



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3	<p>Myelomeningocele &amp; Pediatric SCI</p> <ul style="list-style-type: none"> <li>• Epidemiology &amp; Pathophysiology</li> <li>• Risk Factors &amp; Prevention</li> <li>• Associated Impairments</li> </ul>	<p>UpToDate has a few excellent articles on myelomeningocele and related topics</p> <p>Canadian PMR review course presentation on this topic (Gnanakumar)</p> <ul style="list-style-type: none"> <li>• After doing reading, During the teaching session, you will present these slides to Dr. Gnanakumar (No need to make your own slides)</li> <li>• Review the new functional classification system (MMFC1 (most severe motor impairment), MMFC2, MMFC3, MMFC4):</li> </ul> <p>Dias, L. S., Swaroop, V. T., de Angeli, L. R. A., Larson, J. E., Rojas, A. M., &amp; Karakostas, T. (2021). Myelomeningocele: a new functional classification. <i>Journal of children's orthopaedics</i>, 15(1), 1–5. <a href="https://doi.org/10.1302/1863-2548.15.200248">https://doi.org/10.1302/1863-2548.15.200248</a></p> <p>Webb TS. (2010). "Optimizing health care for adults with spina bifida." <i>Developmental Disabilities Research Reviews</i>. 16(1):76-81.</p> <ul style="list-style-type: none"> <li>• Optional: For more details on naming/ nomenclature:</li> </ul> <p>Dhombres, F., de Saint-Denis, T., Thompson, D., Tahraoui-Bories, J., Lucano, C., Rath, A., Mosiello, G., Jouannic, J. M., Rennes Workshop #1 attendees, Roma Workshop #2 attendees, Barcelona Workshop #3 attendees, &amp; ERN network managers (2025). Revised orphanet nomenclature and classification for spina bifida and other spinal dysraphisms (SBoD). <i>Orphanet journal of rare diseases</i>, 20(1), 348. <a href="https://doi.org/10.1186/s13023-025-03856-4">https://doi.org/10.1186/s13023-025-03856-4</a></p>	Gnanakumar
4	<p>Motor Development</p> <ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Resident will complete the "Take home midterm exam", and correct it on their own (look up answers). The resident will then meet Dr. Gnanakumar x 1 hour to discuss/ review the midterm exam.</li> <li>• If a resident puts forth good effort on the midterm exam, there will be no end of peds rotation exam</li> </ul>	Gnanakumar
5	<p>Spasticity and dystonia management</p> <ul style="list-style-type: none"> <li>• Pathophysiology</li> <li>• Tone assessment scales and tools</li> <li>• Use of goniometer</li> <li>• Management</li> </ul>	<p>Baude, M., J. B. Nielsen and J. M. Gracies (2019). "The neurophysiology of deforming spastic paresis: A revised taxonomy." <i>Ann Phys Rehabil Med</i> 62(6): 426-430. <a href="https://www.sralab.org/rehabilitation-measures/database?contains=spasticity">https://www.sralab.org/rehabilitation-measures/database?contains=spasticity</a></p> <p>Modified Tardieu Angles, Modified Ashworth Scale, Hypertonia Assessment Scale</p>	Condliffe



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6	Cerebral Palsy – Part 2	<p>See part 1 reading. AACPDMD Care Pathways.</p> <ul style="list-style-type: none"> <li>• Additional Topics: Associated Impairments, Hip Subluxation, Other MSK Impairments, Dysphagia &amp; Sialorrhea</li> </ul>	Burkholder
7	<p>Pediatric neuromuscular disease</p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p>This teaching session focuses on DMD (rather than all of neuromuscular disease).</p> <p>3 articles about DMD:</p> <ul style="list-style-type: none"> <li>*Birnkrant, et al., (2018). "Diagnosis and management of Duchenne muscular dystrophy, part 1: diagnosis, and neuromuscular, rehabilitation, endocrine, and gastrointestinal and nutritional management." <u>Lancet Neurol</u> <b>17</b>(3): 251-267.</li> <li>*Birnkrant et al., (2018). "Diagnosis and management of Duchenne muscular dystrophy, part 2: respiratory, cardiac, bone health, and orthopaedic management." <u>Lancet Neurol</u> <b>17</b>(4): 347-361.</li> <li>*Birnkrant, et al., (2018). "Diagnosis and management of Duchenne muscular dystrophy, part 3: primary care, emergency management, psychosocial care, and transitions of care across the lifespan." <u>Lancet Neurol</u> <b>17</b>(5): 445-455.</li> </ul> <p>Read about DMD and SMA: Drakou E, Wright S, Delfiner LD, Cancel D. Treatment Guidelines and Rehabilitation in Spinal Muscular Atrophy and Duchenne's Muscular Dystrophy. <i>Phys Med Rehabil Clin N Am.</i> 2025 Aug;36(3):531-554. doi: 10.1016/j.pmr.2025.03.001. Epub 2025 May 24. PMID: 40581438.</p> <p>To make sure your info is up to date, Ask ChatGPT: "What pharmacologic treatments are available for Duchenne muscular dystrophy?" Chat GPT may summarize:</p> <ul style="list-style-type: none"> <li>-Corticosteroids (Differentiate between deflazacort, prednisone, and Vamorolone, regarding side effects)</li> <li>-Mutation specific genetic therapies (exon skipping, treatments for premature stop codons, etc). Read about the unfortunately low percentage of patients eligible for these treatments</li> <li>-Gene therapy via viral vectors (read about indications and contraindications. Read about exclusions, and how many patients aren't eligible for this treatment)</li> <li>-Downstream (non dystrophin target) pharmacologic treatments (These are more novel treatments, and Chat GPT may tell you about new treatments)</li> <li>-Cardiac/ resp/ and supportive treatments</li> </ul> <p>During the teaching session, the resident will summarize these articles, plus the AI search, verbally to Dr. Gnanakumar. Approx 45 min. Dr. Gnanakumar will show a few slides about DMD physical exam (15 min). You can use the articles/ your notes. No ppt slides are necessary. It will be a verbal presentation.</p>	Gnanakumar



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8	Gait • Approach to clinical assessment	Rodda, J. and H. K. Graham (2001). "Classification of gait patterns in spastic hemiplegia and spastic diplegia: a basis for a management algorithm." <i>Eur J Neurol</i> 8 Suppl 5: 98-108.	Condliffe
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	<ul style="list-style-type: none"> <li>● Approach to gait analysis</li> <li>● Gait in Cerebral Palsy</li> <li>● Approach to Pediatric Limp, Idiopathic Toe Walking, In-toeing, Out-toeing</li> </ul>	<p>Ounpuu, S., Thomason, P., Harvey A., and Graham, H.K., "Classification of Cerebral Palsy and Patterns of Gait Pathology" (chapter 2.6) in Gage, J. R., M. H. Schwartz and S. E. Koop (2009). The Identification and Treatment of Gait Problems in Cerebral Palsy , 2nd Edition. Clinics in Developmental Medicine. London, Mac Keith Press; 1 online resource (1240 p.).</p> <p>Potentially useful videos</p> <p>Gait Terminology - <a href="https://www.youtube.com/watch?v=YOOenISUE7g">https://www.youtube.com/watch?v=YOOenISUE7g</a> (introductory, 8 minutes)</p> <p>Anatomy of Kinematic &amp; Kinetic Graphs - <a href="https://www.youtube.com/watch?v=hj8KiQ_BW44">https://www.youtube.com/watch?v=hj8KiQ_BW44</a> (great basics, 17 minutes)</p> <p>Understanding Kinematic Relationships within &amp; Across Planes of Motion - <a href="https://www.youtube.com/watch?v=OtlwCLEbMGY">https://www.youtube.com/watch?v=OtlwCLEbMGY</a> (tutorial on clinical approaches to gait with bias toward applications related to CP, 1hr)</p> <p>Joint Kinetics 101 - Understanding Gait Pathology, Treatment Decision making &amp; Outcomes Evaluation - <a href="https://www.youtube.com/watch?v=9wkfpAoztv4">https://www.youtube.com/watch?v=9wkfpAoztv4</a> (tutorial adding kinetics with bias toward applications related to CP, 1 hr)</p>	
9	<p>Pediatric MSK conditions associated with typical development</p>	<p>Topics:</p> <ul style="list-style-type: none"> <li>● Scoliosis</li> <li>● SCFE, apophysitis, bowing. Pediatric fractures. DDH.</li> </ul>	Burkholder
10	<p>Pediatric Limb Deficiency</p> <ul style="list-style-type: none"> <li>● Classification</li> <li>● Arthrogryposis</li> <li>● MSK Conditions in developmental disorders</li> </ul>	<p>*Le, J. T. and P. R. Scott-Wyrd (2015). "Pediatric limb differences and amputations." <u>Phys Med Rehabil Clin N Am</u> <b>26</b>(1): 95-108.</p> <p>Setoguchi, Y. (2009). "Factors to be considered in prosthetic prescription for the pediatric limb deficient or amputee patient." <u>J Pediatr Rehabil Med</u> <b>2</b>(3): 153-158.</p> <p>Canadian PMR review course presentation on this topic (Gnanakumar)</p> <ul style="list-style-type: none"> <li>● After doing reading, During the teaching session, the resident will present these slides to Dr. Gnanakumar (No need to make your own slides)</li> </ul>	Gnanakumar
11	<p>Pediatric neurorehab</p> <ul style="list-style-type: none"> <li>● Peds SCI</li> <li>● Peds BI</li> <li>● Peds Stroke</li> </ul>	<p><a href="#">Braddom's chapter on SCI</a> &amp; <a href="#">Braddom's chapter on TBI</a></p> <p>cover some pediatric specific issues (searching for "children" makes them pop up conveniently)</p> <p><a href="https://www.strokebestpractices.ca/recommendations/pediatric-stroke">https://www.strokebestpractices.ca/recommendations/pediatric-stroke</a></p>	Condliffe



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12	Pediatric Medical Equipment & Orthoses <ul style="list-style-type: none"><li>• Walkers &amp; Seating</li><li>• Other Peds specific equipment</li></ul>		Burkholder
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## Evaluation and Examinations

1. [EPAs](#) (log via [MedSIS](#)) - Aim for 2-3 EPAs per week and discuss with your staff at the beginning of the day if you have an EPA you would like observed.
  - a. Providing consultation and developing comprehensive management plans for patients with complex presentations
  - b. Providing ongoing assessment and management for patients with complex presentations
  - c. Identifying, assessing and managing patients with emergent and urgent medical issues
  - d. Performing common physiatric procedures
  - e. Selecting and interpreting investigations relevant to Physiatry
  - f. Leading interprofessional meetings
  - g. Facilitating the learning of others
2. Mid-rotation informal feedback- Please meet with each staff mid-way through your rotation for feedback.
3. Mid-rotation written exam - This is a take-home written paper exam consisting of short answer questions and will be 90 min in duration. Dr. Gnanakumar will email you a copy of this exam. Please set aside 90 minutes of time during your 6th or 7th week of rotation to complete it on your own, and review the answers verbally with Dr. Gnanakumar over 60 minutes, sometime that week.
4. [Mid-rotation STACER](#) - This is an observed clinical encounter in an outpatient clinic. One of the staff physiatrists will schedule a new patient for you to see, and they will observe the entire interaction including your history, physical examination and management plan. The observation will be reviewed with you by the evaluating staff.
5. [End of rotation STACER](#) - Similar to the mid-rotation STACER, this is an observed clinical encounter in an outpatient clinic. One of the staff physiatrists will schedule a new patient for you to see, and they will observe the entire interaction including your history, physical examination and management plan. The observation will be reviewed with you by the evaluating staff.



## Resident Responsibilities

1. Inpatient clinical care:
  - a. The resident's primary responsibility is to inpatient consultations and follow-up. This includes the Alberta Children's Hospital, Rotary Flames House, and Dr. Gordon Townsend School (day program). The resident will follow 0-8 patients at a time.
  - b. The volume of inpatient consultations will vary, depending on demand. The resident should expect to see 15 new pediatric consultations over 3 months. Please keep track in your resident log.
2. Inpatient family meetings:
  - a. The resident is expected to observe and gain experience with team/family meetings during the first block, with the expectation that s/he will begin running the meetings at the beginning of the second block. They will likely participate in 3 family meetings over a 3 month block.
3. Teaching and Education:
  - a. Weekly teaching sessions on the 12 primary teaching topics (or 4 primary teaching topics for 1 block residents) with staff physiatrists
  - b. Additional secondary teaching as able with staff physiatrists
  - c. Lead medical student/ junior resident/ patient/ family/ inpatient therapist teaching sessions as appropriate

## Other Opportunities

Residents are encouraged to seek out other learning opportunities during their Ped rehab medicine rotation. Below are some suggested options. However, certain options are not currently available (as of Jan 2023) due to COVID related staff deployment/ reduced capacity for learners:

Inpatient Therapy sessions	OT, PT, SLP, Rec therapy
Outpatient therapy programs	<ul style="list-style-type: none"> <li>● Pre-driving assessment (Sheldon M. Chumir Health Centre)</li> <li>● OT, PT, SLP, Rec therapy</li> </ul>
Orthoses and Bracing	<ul style="list-style-type: none"> <li>● Orthotists at ACH (Currently on hold due to staffing)</li> <li>● Orthotists and prosthetists in the community, doing pediatric work</li> </ul>
Pediatric Rehabilitation Medicine Research	Coordinate with Dr. Elizabeth Condliffe if interested



## Learning Log

During the course of the 3 blocks in pediatric rehabilitation medicine, the goal would be for you to have observed the following via allied health if possible.

	Date Completed
AFO casting and fitting appointment (orthotics)	
Pediatric seating clinic appointment	
Pediatric ACETS (Augmentative Communication clinic) appointment	
Pediatric inpatient or outpatient PT assessment/ treatment	
Pediatric inpatient or outpatient OT assessment/ treatment	
Pediatric inpatient or outpatient SLP assessment/ treatment	
ICU bedside rounds, regarding a patient you are consulting on	

## Key Individuals

### Pediatric rehabilitation medicine Physiatrists

Individual	Pager	Phone numbers	Office Location
Dr. Lee Burkholder (Program Lead)	10818	office: 403-955-2773 mobile: 403-968-8248	Within the neurosciences clinic, Main floor ACH
Dr. Vithya Gnanakumar	12736	office: 403-955-7451 mobile: 587-215-8689	C0-411, Lower level ACH, Dr. Gordon Townsend School area



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Dr. Elizabeth Condliffe	6430	office: 403-955-2549 mobile: 780-708-5141	C4-317, 4 <sup>th</sup> Floor, ACH PONI-lab: CI-405, Main floor ACH, Neurosciences Clinic
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### Administrative Staff

Individual	Phone	Email
Ms. Nisha Chackochan	403-955-7251	Nisha.chackochan@ahs.ca

### Documentation & Templates

All outpatient appointments, and inpatient consultations and f/u.

See Connect Care for Smartphrases of templates. The following is not exhaustive.

	Smartphrases Search and copy each physician's Smartphrases in Personalization, in Connect Care
Multidisciplinary inpatient rounds (Tues at 9 am) (Formerly called the "Brain Injury Rounds")	.vbbiroundstemplate
Dr. Vithya Gnanakumar	.vgoutptnote, .vginptconsultationach .vgphonenote, .vgbotox, .vgbotoxconsent  .vgoutptnotesheldon, vgphonenotesheldon  .vgletternew  Several patient handouts are saved as Smartphrases, and will be discussed as they come up



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Dr. Elizabeth Condliffe	The most commonly used ones are: <u>Notes Templates:</u> .egcclinicnote, .egcclinicfu, .egcsocialhx, .egcspasticityinjection, .yficteammetting  <u>Physical Exam:</u> .pedriving, .pegaitfunction  <u>Problem Lists:</u> .plcpdescription .plmobilityamp & .plmobilityimpairednotambulatory .pladlsoverview & .pladlsassessment .plpdd
Dr. Lee Burkholder	*** (in development)