Developmental Paediatrics

McMaster University Children’s Hospital
Development is the defining feature of childhood. In any area of medicine, when caring for children, developmental aspects will be important in diagnosis, management and treatment decisions.
Developmental Paediatrics

Development is the defining feature of childhood. In any area of medicine, when caring for children, developmental aspects will be important in diagnosis, management and treatment decisions. In general paediatrics today, more than 20% of patients are referred because of developmental, behavioural and psychosocial issues or so called “new morbidities” (Gunasekera & Buckmaster,
2004). These “new morbidities” are actually becoming the “true morbidities” in many of the patients seen nowadays by paediatricians.

The division of developmental paediatrics cares for patients with a wide variety of developmental disorders including Autism, Acquired Brain Injury, Cerebral Palsy, Cognitive disability, Down Syndrome, Complex Learning and Behavioural Disorders, Language Delay and many more. Many of those patients and their families present with additional psychosocial and behavioural issues that add complexity to those cases.

Besides the general developmental clinics, we run a variety of specialized clinics that are typically multidisciplinary in nature such as the Neuromuscular Clinic, Adolescent Clinic for children with physical disabilities, Spasticity Clinic, Cleft Lip and Palate Clinic, Acquired Brain Injury Clinic, Down Syndrome Clinic, Spina Bifida Clinic and Complex Developmental Care Clinic. The majority of the clinics are located at the Chedoke site, but also at the McMaster site of McMaster Children's Hospital.

The developmental paediatricians work closely with the Developmental Paediatric Rehabilitation and the Autism Spectrum Disorder Services at Chedoke. Physician input to the latter service is shared with colleagues from child psychiatry, including Dr. Peter Szatmari, Dr. Kerry Boyd and Dr. Marc Woodbury-Smith.
The team is involved in several areas of research including Transition to Adulthood, Cerebral palsy, Autism and the International Classification of Functioning, Disability and Health. All of the physicians in the group are dedicated teachers. They participate at the undergraduate, graduate and postgraduate levels of medical education. Dr. Teresa Carter is the associate director of the Paediatric Clerkship program and Dr. Karen Harman is the director of the fellowship program in developmental paediatrics.

**Developmental Paediatrics Contacts**

**Educational Resource Person**
Dr. Olaf Kraus de Camargo  
krausdc@mcmaster.ca  
x74276

**Educational Assistant**
Lisa Kennedy  
lkenne@mcmaster.ca  
x73504

**Resident Education Resource Person**
Abby Siapno  
Lia.siapno@medportal.ca
Developmental Paediatrics & Rehabilitation Services at the Chedoke Site

Developmental Paediatrics and Rehabilitation Services at Chedoke provide outpatient care, teaching and support to children and families with developmental, behavioural, physical or communication needs. There are many types of DPR services offered at the Chedoke Site of McMaster Children’s Hospital. These services may be provided by one or more of the following: Audiologist, Behaviour Therapist, Biomedical Technologist, Communication Disorders Assistant, Developmental Paediatrician, Early Childhood Resource Specialist, Infant Parent Therapist, Occupational Therapist, Psychologist, Psychometrist, Physiotherapist, Registered Nurse, Social Worker, Speech Language Pathologist, and Therapeutic Recreationist. You will have the opportunity to work with our Allied Health Professionals and learn their various roles within Developmental Paediatrics. Seeing children in other settings adds to one’s appreciation of their functioning and needs.
Meet the Faculty
Dr. Ronit Mesterman is an Associate Professor of Paediatrics at McMaster University and the Division Head of Developmental Paediatrics. She is certified in paediatric neurology and developmental paediatrics in Israel. She joined the faculty at McMaster University in 2004. Her dual training reflects her philosophy that developmental paediatrics and child neurology go together and as such she is working clinically in both divisions. Her main clinical and research interests are assessment and treatment of Cerebral Palsy. She has established a very busy multi-disciplinary spasticity clinic. Besides her active clinical and educational contributions, Dr. Mesterman is the Medical Director of Developmental Paediatric Rehabilitation and Autism Spectrum Disorders Services.
Dr. Teresa Carter

completed her general paediatric training in London UK in 1990 and undertook a Fellowship in developmental and community paediatrics there, which included obtaining her MSc at the Institute of Child Health. She worked in the UK as a consultant community paediatrician from 1995 until 2000 specializing in Child Protection, Child Public Health and Developmental Paediatrics. She joined the Division of Developmental Paediatrics in the Department of Paediatrics at McMaster University in 2002, where she is now an Associate Professor.

Her clinical interests include neuromuscular diseases, autism, fetal alcohol spectrum disorders and the genetics of disability. Her academic interests focus on undergraduate medical education, inter-professional education and inter-professional working practices.
Dr. Jan Willem Gorter, MD, PhD, FRCP(C) is an Associate Professor in the Department of Paediatrics and an associate member in the School of Rehabilitation Science at McMaster University. He is an investigator at CanChild Centre for Childhood Disability Research at McMaster University since 2008.

Jan Willem has training in rehabilitation medicine (physiatry) with a special clinical and research interest in transition services for youth with developmental disabilities. He completed his post doctoral training at CanChild in 2002 and was co-founder of NetChild Network for Childhood Disability Research in the Netherlands (January 2003).

Jan Willem's research at CanChild focuses on the themes of family, function and fitness and includes clinical studies and health services research. Jan Willem currently leads the Stay-FIT program which studies the effects of a physical activity and active lifestyle intervention for youth with cerebral palsy (CP). He is also co-leading the transition study (TRACE)
which facilitates youth with chronic health conditions in their transition from paediatrics to the adulthood health care system. He works with a number of undergraduate and graduate students at several universities.
Dr. Karen Harman is a developmental paediatrician specializing in cognitive impairments, neurogenetic syndromes and learning problems associated with seizure disorders. She completed clinical fellowship training in child development and clinical genetics at The Hospital for Sick Children in Toronto. Dr. Harman is an Associate Professor in the Department of Paediatrics at McMaster University. She is the Medical Director on the McMaster Children’s Hospital Regional Cleft Lip and Palate Team and the Clinical Director on the Specialized Developmental and Behavioural Team services at McMaster Children’s Hospital (Chedoke Site). She is the Program Director for the Developmental Paediatric Subspecialty Training Program.
Dr. Kassia Johnson is currently working with Developmental Paediatrics at the Chedoke site of McMaster as well as at Bethesda Children’s centre in the Community Developmental Assessment clinic. Kassia has been actively doing research for the Ontario 18th month Well Baby program.

completed her fellowship at Toronto Sick Kids Hospital in Developmental Paediatrics.

Dr. Kassia Johnson is an Assistant Professor in the Department of Paediatrics at McMaster University. She completed her medical education and residency at McMaster University. Kassia
Dr. Olaf Kraus de Camargo is an Associate Professor in the Department of Paediatrics at McMaster University. He completed his medical education and paediatric training in Brazil, followed by a residency in Germany where he received training in developmental-behavioural paediatrics and child neurology.

Prior to joining the faculty at McMaster, Dr. Kraus de Camargo held positions as a Professor of Social Medicine at the University of Applied Sciences Nordhausen and as CEO and Medical Director of Kinderzentrum Pelzerhaken gGmbH in Germany, an inpatient and outpatient facility for children with developmental-behavioural disabilities and chronic neurologic disorders. The centre is also a teaching institute for professionals in developmental paediatrics.

Dr. Kraus de Camargo’s research interests include the assessment of needs of children with disabilities, and the implementation of the International Classification of Functioning, Disability and Health in Developmental Paediatrics.
As a developmental paediatrician he is also interested in providing care for children with developmental disorders and associated sleep problems, children from bi-/multilingual families and he is part of the interdisciplinary neurofibromatosis clinic and the complex developmental care clinic. Dr. Kraus de Camargo participates in teaching at the undergraduate, graduate and post-graduate levels.
Dr. William Mahoney

received his M.D. from McMaster University in 1976. He then did his core Paediatric training in Ottawa and completed a Fellowship in Developmental Paediatrics at the John F. Kennedy Institute associated with John Hopkins Hospital in Baltimore Maryland. He returned to Ottawa in 1981 and worked as a Developmental Paediatrician in the Child Developmental Clinic at the Children’s Hospital of Eastern Ontario.

Dr. Mahoney came to Hamilton in 1988 and is an Associate Professor of Paediatrics with the Faculty of Health Sciences at McMaster University. Clinically Dr. Mahoney works with children with developmental disabilities, pervasive developmental disorders, language, learning and attentional disorders. Dr. Mahoney served as Medical Director of the Developmental Paediatric and Rehabilitation and Autism Spectrum Disorder Programs at McMaster Children's Hospital until 2008.

P: 905-521-2100 x 77605  
F: 905-521-7953  
mahoneyw@mcmaster.ca
Dr. Peter Rosenbaum

P: 905-521-2100 x 26852
F: 905-524-0069
rosenbau@mcmaster.ca

Dr. Peter Rosenbaum joined the faculty of McMaster University in 1973 and has been a Professor of Paediatrics since 1984. He is the inaugural chair holder of the Scotiabank Chair in Child Health and the director of the McMaster Child Health Research Institute. He served as the Interim Chair of the Department of Paediatrics during 2009. With Dr. Mary Law, Dr. Rosenbaum was the co-founder in 1989 of the award-winning CanChild Centre for Childhood Disability Research, a health system-linked research unit funded 1989 to 2009 by the Ontario Ministry of Health and Long-Term Care. CanChild is now recognized internationally for its research and dissemination activities in the field of childhood disability.

Dr. Rosenbaum holds one of the original Canada Research Chairs, first awarded in January 2001 to leading Canadian researchers. Dr. Rosenbaum has been president of the American Academy for Cerebral Palsy and Developmental Medicine from 1996-1998 (the first Canadian so honoured). He was also the
first Canadian to be invited to Sweden as the Folke Bernadotte Stipendiate, in 1995.
Dr. Rosenbaum has been a principal or co-investigator for more than 80 peer-reviewed research grants and is a contributing author to more than 260 peer-reviewed scientific papers and book chapters on a variety of topics concerning childhood disability. In June, 2000, Dr. Rosenbaum received the Ross Award from the Canadian Paediatric Society, the Society's most prestigious peer recognition. In 2002, he was awarded the United Cerebral Palsy Research and Educational Foundation Weinstein-Goldenson Scientific Award. In 2005 he was awarded an honorary doctorate by Université Laval.
Dr. Ben Klein completed medical school at the University of Western Ontario, paediatrics residency at McMaster University, and developmental paediatrics subspecialty residency at McMaster University. He currently works at Lansdowne Children's Centre in Brantford as developmental paediatrician and Medical Director, and has a part-time assistant clinical professor appointment at McMaster University. His academic interests include child welfare aspects of child development and early childhood education.
The developmental paediatricians work closely with the **Autism Spectrum Disorder Services** at Chedoke. Physician input is shared with colleagues from child psychiatry, including Dr. Peter Szatmari, Dr. Kerry Boyd and Dr. Marc Woodbury Smith.

**Dr. Peter Szatmari**

Dr. Peter Szatmari has worked in the field of autism and pervasive developmental disorders (PDD) for 30 years. Dr Szatmari is Professor and Head, Division of Child Psychiatry in the Department of Psychiatry and Behavioural Neurosciences at McMaster University, where he holds the Chedoke Health Chair in Child Psychiatry. He is Director of the Offord Centre of Child Studies. He is a founding member of the Canadian Autism Intervention Research Network (CAIRN) a national network of parents, clinicians, policy makers and scientists dedicated to launching a research agenda in early intervention in autism. He is currently part of an international collaboration investigating the genetics of autism, a long-term study of autistic pre-schoolers that will try to identify factors that contribute to positive outcomes for these children and a study of infant siblings of children with Autism Spectrum Disorder (ASD). He consults regularly to government agencies in Canada, the U.S. and internationally on research and on treatment services for children with ASD. He was co-editor of
the journal Evidence Based Mental Health, has published more than 200 journal articles and presentations on autism and is the author of the book “A Mind Apart; Understanding Autism and Asperger Syndrome”.
Dr. Kerry Boyd

Dr. Kerry Boyd is a Psychiatrist who has worked for over a decade in the field of intellectual disabilities and autism across the lifespan. She is an Assistant Clinical Professor for the Department of Psychiatry and Behavioural Neurosciences at McMaster University. Dr. Boyd works with the Autism Spectrum Disorder Team at McMaster Children’s Hospital and is Chief Clinical Officer for Bethesda.

P: 905-521-2100 x 74275
F: 905-387-7714
kboyd@bethesdaservices.com
Dr. Marc Woodbury-Smith

P: 905-521-2100 x 73054
F: 905-521-7953
woodbur@mcmaster.ca

Dr. Marc Woodbury-Smith is Assistant Professor in the Department of Psychiatry/Behavioural Neurosciences at McMaster University, and carries out clinical work with children with autism, and adults with developmental disabilities. Before coming to Canada he trained in Medicine in Scotland, and Psychiatry in Cambridge UK, where he also undertook his PhD examining law breaking behaviours among adults with Asperger Syndrome. Following this he was a postdoctoral fellow at Yale University College of Medicine before returning to Cambridge. He has worked with children and adults with ASDs both clinically and in research for the last 10 years.
An individual schedule will be emailed to you prior to the start of your rotation. Please read over this schedule carefully and address any changes, questions, or concerns as soon as possible. We understand changes may be required to these schedules for personal or work related reasons. Please contact the Educational Assistant to address these changes. On-call, post-call, vacation, conferences, and exam dates (that have been pre approved by post grad) will be
requested from you prior to preparation of the schedules and are to be sent as soon as possible. Learners rotating through Developmental Paediatrics should be accessible by pager generally from 8:30 am– 5:00 pm. On your first day, please ensure that our Educational Assistant has your pager number.

Learners are expected to attend the rounds/teaching sessions on the following table:
<table>
<thead>
<tr>
<th>Rounds/Teaching Sessions</th>
<th>Date</th>
<th>Time</th>
<th>Place</th>
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</thead>
<tbody>
<tr>
<td>Chedoke Grand Rounds</td>
<td>Mondays</td>
<td>1200-1300</td>
<td>Chedoke Ewart Auditorium (VC to 3G Conference Rm)</td>
</tr>
<tr>
<td>Developmental Genetics Grand Rounds</td>
<td>Tuesdays</td>
<td>0800-0900</td>
<td>MUMC TBA (1st Tuesday of every even month)</td>
</tr>
<tr>
<td>Paediatric Resident Clinical Teaching Rounds</td>
<td>Tuesdays</td>
<td>0800-0900</td>
<td>MDCL3020 (VC to Chedoke Ewart)</td>
</tr>
<tr>
<td>Inpatient Peds Rehab Teaching Sessions</td>
<td>Tuesdays</td>
<td>1415-1500</td>
<td>MUMC 3A14(room may change check weekly email for update)</td>
</tr>
<tr>
<td>Academic Hour</td>
<td>Tuesdays</td>
<td>1500-1600</td>
<td>MUMC 3A14 (room may change check weekly email for update)</td>
</tr>
</tbody>
</table>
You will be expected to perform ongoing reading according to your individual learning needs throughout the rotation. This should be guided by the Goals and Objectives of the rotation. Literature searches should also be performed when appropriate for patient needs or as directed by the attending developmental
paediatrician. Resource materials are available on the MacPeds website under the topic “Interesting articles” in a shared RefWorks folder ([http://www.macpeds.com/developmental_paediatrics.html](http://www.macpeds.com/developmental_paediatrics.html)). This collection is being updated continuously. The following are selected articles which we find helpful and informative about the broad field of developmental paediatrics. You can access these articles also in the RefShare folder on the link above or directly from the MacPeds website. The list of articles will be revised every two years (last revision Fall 2011).

**Chronic Health Conditions – How to care?**
"Communicating an evolutionary diagnosis of disability to parents." **Child care, health and development** 16(4): 211.


Disability and Developmental Disorders - Overview:

Screening:


tiveness of community screening pro-
grams. *JAMA*; 251(12): 1580-1585
Ross, L. F. (2006). "Screening for condi-
tions that do not meet the Wilson and
Jungner criteria: the case of Duchenne
muscular dystrophy." *American journal of
medical genetics Part A* 140(8): 914.

and ASQ Developmental Screening Tests
May Not Identify the Same Children." *Pe-

**Classification:**
"How should we define health?" *BMJ* 343:
d4163.

"Diagnosis to Function: Classification for
Children and Youths." *Journal of develop-
mental and behavioral pediatrics* 26(4):
323-330.

Maitland, M. E. (2010). "A transdiscipli-
nary definition of diagnosis." *Journal of Al-

Rosenbaum PL, Palisano RJ, Bartlett DJ,
Galuppi BE, Russell DJ. (2008) Develop-
ing the Gross Motor Function Classifica-
tion System for Cerebral Palsy: Lessons
and Implications for Classifying Function
in Childhood Disability. *Developmental

**Etiology:**
"Prenatal drug exposure: infant and tod-
Most common Diagnoses:

ADHD:


revenue and the drug recommendations made in the articles it publishes."

**CMAJ**: Canadian Medical Association journal =


**ASD:**

**CP (read those before Spasticity Clinic):**


Gracies, J.-M., K. Burke, et al. (2010). "Reliability of the Tardieu Scale for assess-


**Intellectual Disability:**  


**Spina bifida (read those before Spina bifida Clinic):**  
young adults with myelomeningocele."

**FASD:**


**Down-Syndrome:**


**Common Functional Problems:**
**Sleep:**


**Eating & Feeding:**


**Communication:**

guage, Speech & Hearing Services in Schools 42(3): 246-264.


Behaviour:


**Participation and Environment:**

**Family:**


Society:
**Leisure and Play:**

**Transition:**


**Systems of Care:**


**Working in a Team:**


Adolfsson, M., M. Granlund, et al. (2010). "Exploring changes over time in habilitation professionals' perceptions and appli-

Links:
Resources for parents (but also helpful for residents and for training):
   Community Education Service: Information for Parents
   http://www.communityed.ca/parent.cfm
   Coordinated Access for Child Care (CCAC) http://www.cafcc.on.ca/
A good resource about common behavioural problems and how to manage them or how to counsel parents about them can be found at this site:

Information about the school system:
   http://www.peopleforeducation.com/
   Special Education Handbook from the Ministry of Education of Ontario:
Clinical links/online teaching:
On the following link you will find lectures regarding child development and early intervention:

A Child & Youth Mental Health Toolkit can be found here:

Spina bifida resources
http://www.sbhao.on.ca/ (Ontario based, great resource for parents and children, has a special corner for teenagers)
http://www.spinabifidaassociation.org/site/c.liKWL7PLLrF/b.2642297/k.5F7C/Spina_Bifida_Association.htm (US based, great resource for families and professionals, has an online educational platform
http://www.spinabifidaassociation.org/site/c.liKWL7PLLrF/b.6281735/k.9041/SB_University.htm

To maintain yourself up-to-date about new resources and events related to Developmental Paediatrics, follow us on Facebook at http://www.facebook.com/DevPeds!
Developmental Paediatrics Teaching Session: Questions and Answers!

Teresa Carter – cartert@mcmaster.ca
Ian Willem Gorter – gorter@mcmaster.ca
Aren Harman – harmank@mcmaster.ca
Benjamin Klein – Benjamin.Klein@medportal.ca
Olaf Kraus de Camargo – krausdc@mcmaster.ca
William Mahoney – mahoneyw@mcmaster.ca
Ronit Mesterman – mesterm@mcmaster.ca
Peter Rosenbaum – rosenbau@mcmaster.ca

touch the screen to move forward!
You have the opportunity to work with our Allied Health Professionals and learn their various roles during your rotation. Seeing children in other settings adds to one’s appreciation of their functioning and needs. We are fortunate to be provided this opportunity. Although these visits are sure to enhance your learning please note these professionals have no formal resident training obligation and are
providing this service on a strictly voluntary basis. Please advise the Educational Resource Assistant of the areas that are of interest to you. Below are the various rehabilitation related clinics/rounds with our physicians and allied health professionals available to attend while on this rotation. If there are specific clinics you would be interested in attending that are not included in your schedule please contact the Education Resource Assistant.
<table>
<thead>
<tr>
<th>Clinic/Allied Health Professional/Location</th>
<th>Contact Name</th>
<th>Ext</th>
<th>Weekday</th>
<th>Email Address</th>
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<tbody>
<tr>
<td><strong>Motor Function and Mobility</strong></td>
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<tr>
<td>Spasticity/Botox Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Wednesday AM</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
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<tr>
<td>Dr. R. Mesterman/Dr. J.W. Gorter MUMC 2G</td>
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<tr>
<td>Spina Bifida Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Friday once a month</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
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<tr>
<td>Dr. J. W. Gorter-MUMC 3F</td>
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<tr>
<td>Neuromuscular Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Every other Monday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
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<tr>
<td>Dr. T. Carter-MUMC 3A</td>
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<tr>
<td>Orthopedic Clinic</td>
<td>Danielle Gilbert</td>
<td>73177</td>
<td>Wednesday/ Thursday</td>
<td><a href="mailto:gilbertda@hhsc.ca">gilbertda@hhsc.ca</a></td>
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<tr>
<td>Dr. S. Burrow/Dr. D. Peterson</td>
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<tr>
<td>MUMC 2G</td>
<td>Lori Connors (chief resident) Pager 6845 Mondays all day Fridays AM</td>
<td><a href="mailto:Loriann.connors@medportal.ca">Loriann.connors@medportal.ca</a></td>
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<tr>
<td>Paediatric Rheumatology Clinic</td>
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<td>Dr. P. Dent/Dr. M. Larche</td>
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<tr>
<td>Human Movement Lab</td>
<td>Janet Mannen</td>
<td>74478</td>
<td>Wednesday</td>
<td><a href="mailto:mannen@hhsc.ca">mannen@hhsc.ca</a></td>
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<tr>
<td>Dr. J. W. Gorter McMaster CRL Bldg next to MUMC</td>
<td>Marlice Simon 26852</td>
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<tr>
<td>Prosthetics &amp; Orthotics</td>
<td>Larry Anweiler</td>
<td>77571</td>
<td>Various</td>
<td><a href="mailto:anweiler@hhsc.ca">anweiler@hhsc.ca</a></td>
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<tr>
<td>Chedoke Holbrook Bldg Basement</td>
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<td></td>
<td>Julie Langdon</td>
<td>74642</td>
<td>Various</td>
<td><a href="mailto:langdon@hhsc.ca">langdon@hhsc.ca</a></td>
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<tr>
<td>Therapists:</td>
<td>Therapists:</td>
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<td></td>
<td>Eric Ferguson</td>
<td>77479</td>
<td>Wed 9am-1030am</td>
<td><a href="mailto:ferguson@hhsc.ca">ferguson@hhsc.ca</a></td>
</tr>
<tr>
<td></td>
<td>Lowana Lee</td>
<td>77474</td>
<td>Wed 1pm-230pm</td>
<td><a href="mailto:llee@hhsc.ca">llee@hhsc.ca</a></td>
</tr>
<tr>
<td>CDRP Children’s Development</td>
<td>Sandy Stewart</td>
<td>77415</td>
<td>Select Mondays</td>
<td><a href="mailto:stewas@hhsc.ca">stewas@hhsc.ca</a></td>
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<tr>
<td>&amp; Rehabilitation Program</td>
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<td>Chedoke Holbrook Building</td>
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<tr>
<td>Seating Clinic</td>
<td>Elyanne Ratcliffe</td>
<td>75614</td>
<td>Friday AM</td>
<td><a href="mailto:ratcli@mcmaster.ca">ratcli@mcmaster.ca</a></td>
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<tr>
<td>Adolescent Transition Clinic</td>
<td>Angela Bladon</td>
<td>73857</td>
<td>Thursday PM</td>
<td><a href="mailto:bladona@hhsc.ca">bladona@hhsc.ca</a></td>
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<tr>
<td>Chedoke Holbrook Bldg B-102A Ground Floor</td>
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<tr>
<td>Swallowing Clinic</td>
<td>Michelle Ritter</td>
<td>77481</td>
<td>3rd Thursday</td>
<td><a href="mailto:ritterm@hhsc.ca">ritterm@hhsc.ca</a></td>
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<tr>
<td>MUMC 3E</td>
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<td>2:30pm-4:00pm</td>
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<tr>
<td>Video Swallowing Assessment</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>1st and 3rd Friday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
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<tr>
<td>MUMC Radiology</td>
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<td>1st and 3rd Friday</td>
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<tr>
<td>Eating and Feeding Consult</td>
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<td>Fridays</td>
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<tr>
<td>Team Rounds-Holbrook A122</td>
<td>Bill Ratz</td>
<td>76339</td>
<td>1100am-1200noon</td>
<td><a href="mailto:ratz@hhsc.ca">ratz@hhsc.ca</a></td>
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<td>Paediatric Head Injury Clinic</td>
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<tr>
<td>Carol DeMatteo - MUMC 2G</td>
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<td>Acquired Brain Injury Rounds</td>
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<tr>
<td>MUMC 3C Conference Room</td>
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</table>
**Communication and Learning Functions Placements:**
On the next table are the various communication & learning clinics/visits with our physicians and allied health professionals available to attend while on this rotation. If there are specific clinics you would be interested in attending that are not included in your schedule please contact the Education Resource Assistant.
<table>
<thead>
<tr>
<th>Clinic/Allied Health Professional/Location</th>
<th>Contact Name</th>
<th>Ext</th>
<th>Weekday</th>
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</thead>
<tbody>
<tr>
<td>Communication/Learning</td>
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</tr>
<tr>
<td>Paediatric Head Injury Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>1st or 3rd Friday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Carol Dematteo-MUMC 2G</td>
<td></td>
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</tr>
<tr>
<td>Down Syndrome Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>1st Tuesday of each month</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. K. Harman-Chedoke</td>
<td></td>
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</tr>
<tr>
<td>Complex Developmental Care Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>3rd Tuesday of each month/ 4th Wednesday of each month</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. K. Harman/Dr. O. Kraus de Camargo</td>
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<tr>
<td>Early Words Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Every other Wednesday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. W. Mahoney</td>
<td></td>
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</tr>
<tr>
<td>General Developmental/Medication Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Every other Thursday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. K. Harman</td>
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<tr>
<td>General Developmental Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Monday, Wednesday and Thursdays</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. O. Kraus de Camargo</td>
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<tr>
<td>General Developmental Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Mondays and Thursdays</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. K. Johnson</td>
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</tr>
<tr>
<td>General Developmental Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Every other Tuesday</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. R. Mesterman</td>
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<tr>
<td>Growth and Development Clinic</td>
<td>Lisa Kennedy</td>
<td>73504</td>
<td>Wednesday afternoons</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Dr. P. Rosenbaum</td>
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<tr>
<td>Clinic/Allied Health Professional/Location</td>
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<td>Ext</td>
<td>Weekday</td>
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<tr>
<td>Communication/Learning</td>
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<tr>
<td>General Developmental Clinic</td>
<td>Ben Klein or Lynda Lacroix</td>
<td>519 753 3153</td>
<td>Various days</td>
<td><a href="mailto:Benjamin.klein@medportal.ca">Benjamin.klein@medportal.ca</a> or <a href="mailto:llacroix@lansdowne.com">llacroix@lansdowne.com</a></td>
</tr>
<tr>
<td>Psychometric Assessment</td>
<td>Lori Alpaugh</td>
<td>x77214</td>
<td>Monday, Tuesdays &amp; Thursdays</td>
<td><a href="mailto:alpaugh@hhsc.ca">alpaugh@hhsc.ca</a></td>
</tr>
<tr>
<td>ASD Psychometric Assessment</td>
<td>Lorraine Hoult</td>
<td>x77424</td>
<td>Various</td>
<td><a href="mailto:hoult@hhsc.ca">hoult@hhsc.ca</a></td>
</tr>
<tr>
<td>Audiological Assessment</td>
<td>Carrie Peddle</td>
<td>x77854</td>
<td>Various</td>
<td><a href="mailto:peddle@hhsc.ca">peddle@hhsc.ca</a></td>
</tr>
<tr>
<td>Speech &amp; Language Assessment</td>
<td>Amber Cauwenbergs</td>
<td>x74259</td>
<td>Various</td>
<td><a href="mailto:Cauwenberg@hhsc.ca">Cauwenberg@hhsc.ca</a></td>
</tr>
<tr>
<td>Cleft Lip &amp; Palate Clinic</td>
<td>Lisa Kennedy</td>
<td>X73504</td>
<td>Wednesdays, one Friday each month</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Cleft Lip &amp; Palate Speech Pathologists</td>
<td>Brenda Murphy-Anderson</td>
<td>x77237</td>
<td>Various</td>
<td><a href="mailto:andmurph@hhsc.ca">andmurph@hhsc.ca</a></td>
</tr>
<tr>
<td>TAC (Technology Access Clinic)</td>
<td>Shelley Deegan</td>
<td>X74423</td>
<td>Various</td>
<td><a href="mailto:Deegan@hhsc.ca">Deegan@hhsc.ca</a></td>
</tr>
<tr>
<td>Paediatric Inpatient School</td>
<td>Laura Dowling</td>
<td>X76130</td>
<td>Tuesday, Wednesday &amp; Friday am</td>
<td><a href="mailto:laura.dowling@hwdsb.on.ca">laura.dowling@hwdsb.on.ca</a></td>
</tr>
</tbody>
</table>
Communication and Behavioural Functions placements:
The following tables show the various social/behavioural functioning clinics/visits with our physicians and allied health professionals available to attend while on this rotation. If there are specific clinics you would be interested in attending that are not included in your schedule please contact the Education Resource Assistant.
<table>
<thead>
<tr>
<th>Clinic/Allied Health Professional/Location</th>
<th>Contact Name</th>
<th>Ext</th>
<th>Weekday</th>
<th>Email Address</th>
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</thead>
<tbody>
<tr>
<td>Social/Behavioural Functioning</td>
<td></td>
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</tr>
<tr>
<td>Infant Parent Program (IPP) Holbrook Bldg 24 Rm H275</td>
<td>Magda Doris</td>
<td>x77092</td>
<td>Mondays, Wednesdays &amp; Thursdays</td>
<td><a href="mailto:dorism@hhsc.ca">dorism@hhsc.ca</a></td>
</tr>
<tr>
<td>Pervasive Developmental Disorder(PDD) Clinic-Dr. W. Mahoney</td>
<td>Lisa Kennedy</td>
<td>X73504</td>
<td>1st Wednesday of each month</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Pervasive Developmental Disorder(PDD) Team Community Visits Moreland Bldg-Rm 303</td>
<td>Sue Robertson</td>
<td>x77758</td>
<td>Various</td>
<td><a href="mailto:robesue@hhsc.ca">robesue@hhsc.ca</a></td>
</tr>
<tr>
<td>Specialized Developmental Behavioural Services (SDBS) Early Childhood Educator Chedoke Evel 313</td>
<td>Linda Drysdale</td>
<td>x74692</td>
<td>Various</td>
<td><a href="mailto:drysdale@hhsc.ca">drysdale@hhsc.ca</a></td>
</tr>
<tr>
<td>Clinic/Allied Health Professional/Location</td>
<td>Contact Name</td>
<td>Ext</td>
<td>Weekday</td>
<td>Email Address</td>
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<tr>
<td>Social/Behavioural Functioning</td>
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</tr>
<tr>
<td>Specialized Developmental Behavioural Service (SDBS) Early Childhood Educator Chedoke Evel 312</td>
<td>Nancy Dingwall</td>
<td>x77885</td>
<td>Various</td>
<td><a href="mailto:dingwall@hhsc.ca">dingwall@hhsc.ca</a></td>
</tr>
<tr>
<td>Intensive Behavioural Intervention (IBI) Program-Chedoke Holbrook Bldg Room 132A</td>
<td>Lorraine Hoult</td>
<td>x77424</td>
<td>Eligibility sessions Tues pm &amp; Fri am</td>
<td><a href="mailto:hoult@hhsc.ca">hoult@hhsc.ca</a></td>
</tr>
<tr>
<td>Psychiatrists in Developmental Paediatrics Autism Spectrum Disorders (ASD) Dr Marc Woodbury Smith Dr. Kerry Boyd</td>
<td>Lisa Kennedy</td>
<td>X73504</td>
<td>Thursdays (WS) Tuesdays (Boyd)</td>
<td><a href="mailto:lkenne@mcmaster.ca">lkenne@mcmaster.ca</a></td>
</tr>
<tr>
<td>Child &amp; Youth Mental Health (CYMH) Referral System</td>
<td>Emily Stein</td>
<td>X74227</td>
<td></td>
<td><a href="mailto:steine@hhsc.ca">steine@hhsc.ca</a></td>
</tr>
<tr>
<td>Specialized Development &amp; Behaviour Service (SDBS) Dr. J. Summers</td>
<td>Jane Summers</td>
<td>74380</td>
<td>Various</td>
<td><a href="mailto:jsummers@hhsc.ca">jsummers@hhsc.ca</a></td>
</tr>
</tbody>
</table>
All learners are expected to attend the clinics assigned in their schedules. You will see a variety of both new consultations and follow-up patients during these clinics. It is recommended that you observe at least one full developmental exam prior to seeing patients independently (depending on your level of comfort and training). You should also have a complete observed history and physical examination at some point during your rotation. If you do not feel comfortable with the assigned consult, based on your level of training, please inform the assigned Developmental Paediatrician.
When seeing patients it is very important to make a note of the assessment start and finish times. This is necessary for billing purposes as much of the billing is time based and the times are a necessary part of the health record.

The follow up instructions, testing to be ordered and recommendations from the assessment are to be clearly written on a Hamilton Health Sciences Doctor’s Order sheet and given to the booking clerk in room 462 for processing (Dr. Mahoney’s charts to his secretary room 455).

You are expected to complete and submit any requisition/referral forms required for the patients that you have seen in clinic. Please drop off all forms at the registration desk in room 462 on the 4th floor of the Evel building. It is your responsibility that these forms are fully and appropriately completed.

Please feel free to advise us at any time of concerns or questions you may have regarding your rotation with Developmental Paediatrics. These questions can be sent to Lisa Kennedy at: lkenne@mcmaster.ca who will direct them to the appropriate party. Your concerns will be addressed as soon as possible to ensure the remainder of your rotation is a comfortable one.

Evaluation and Feedback:
Part way through your rotation we will send you an email asking you if you have any concerns. If you do, a prompt reply to
this notice will ensure the situation will be evaluated as soon as possible and corrected to ensure a comfortable rotation for everyone involved.

Also part way through your rotation, Dr. Kraus de Camargo will provide feedback directly to you if there are concerns by any of the faculty members, or if the rotation objectives have not been met.

It is expected that you complete at least one mini-CEX (Clinical Evaluation Exercise) with one of the faculty members of the division. We recommend doing one at the beginning of your rotation as this might give you the opportunity to receive feedback and work on your clinical skills after that. You can than do a second mini-CEX towards the end of your rotation.

Please approach the faculty of your choice to do the mini-CEX.

A final evaluation meeting will be scheduled with either Dr. Kraus de Camargo or Dr. Mahoney to discuss your rotation and to give and receive feedback. The date of your final evaluation will be posted in the top right hand corner of your schedule. Please advise ASAP if this date is not good for you. Residents are also asked to complete Confidential Faculty Evaluations on our staff paediatricians. All of the staff hope the learning experience during your rotation is a positive one and meets your personal objectives. Please do not hesitate to discuss any questions or concerns along the way.
Chedoke Site

Finding Us at the Chedoke Site

Although some parts of Developmental Paediatrics are located at McMaster, the majority of the clinics are located at the Chedoke Hospital site in the Chedoke Child & Family Centre in the Evel building.

Parking at Chedoke

To park in the Chedoke, Evel parking lot you will have to pay $5.00 in loonies and toonies upon exit. Parking permits are available for $54.12 per month. There is a $2.00/day lot if you don’t mind walking a bit further. There is also limited free street parking available as well. If you have questions or require a parking permit for the Chedoke site, please contact the parking office at 905-521-2100 x77754.

Click on the link below for an interactive map!

http://www.openstreetmap.org/?lat=43.240153&lon=-79.915417&zoom=18&layers=M
Resident Room at Chedoke
The Resident’s room is on the 4th floor of the Evel building, room 448 and contains a work space, computer and telephone for your use. This room will be shared by all of the residents and clinical clerks on rotation at any given time. Coats, back-packs, etc can be left in this room while in clinic but please keep in mind that the door will remain unlocked during the day. Please be also aware, that this is a working space and there might be colleagues trying to read or dictate and this might require silence from the others in the room.

Coffee Shop at Chedoke
There is a coffee shop which makes light lunches at the Chedoke site on the first floor of the Evel Building. If you prefer to bring your own lunch, please let staff know and they will point out the nearest refrigerator and microwave.

Photocopier at Chedoke
If you require photocopying, faxing, printing or scanning please contact the Educational Assistant for an access code.

Personal Time Off
Any personal time off needs to be applied for through Medportal and approved by Postgraduate Medical Education.

Sick Time Off
If you need to take a sick day please contact Lisa Kennedy as well as the physician’s office that you would be scheduled to be joining that day, either by email or phone.
For each consult and follow up you are responsible for a written consultation note as well as a formal dictation. These should both be completed within 24 hours of seeing the patient. When dictating Chedoke reports, it is imperative to verbally add the correct Meditech ID# prior to beginning the body of your report. The ID Number can be found on the Meditech outpatient record or progress
note, which will be clipped to the front of the patient chart. Be sure to include the site number, report type, chart number, and patient type when dictating. If you need to discuss a dictation with one of the doctors please use the priority (#6) report type to speed up the wait time. **Charts MUST remain in the building to ensure security of the personal health information.**

X5000 to enter, (905) 575-2550 externally

Enter Author ID #
Enter Site (13 MUMC, 14 Chedoke)
Enter Report Type (1 Consultation, 5 Clinic Note)
Enter Chart Number (the ID# after the M-MUMC or K-Chedoke)
Enter Patient Type (4-Child & Family)

Press 2 to dictate, *5 to disconnect

1. Hold
2. Pause/Continue
3. Skip-back/Play
4. Fast Forward (44 to move to end)
5. Disconnect
6. Prioritize
7. Rewind (77 rewind to beginning)
8. End Report

**For each report:**

- your name, patient name (spelling if difficult)
- chart number, work type, copies to (parents, FD, paediatrician, consultants, MRP, etc)
Effective Consultation Letters

Role of Letters
Letters may have multiple readers (referring physician, consultant, patient and family, lawyers, educators, therapists, insurance companies) and therefore these different individuals need to be considered.
Assume both parents and lawyers could read a letter at some point.
Avoid comments on the quality of care by other healthcare professionals.
To promote continuity of care the letters need to be received in a timely fashion.
The referring physician needs the letter to contain recommendations regarding investigations, treatment and follow up.
The consultant uses the letter as a record of the assessment during follow-up and during the interpretation of investigation results.

**Important Content Elements**
Primary care physicians and specialists have rated the following elements as essential or important:
Date of assessment
Clinical Findings
Test Results
Diagnosis or Impression

Suggested investigations and who will be arranging
Management options, benefits and risks and recommendations
Medication changes and rationale for these changes
Prognosis
What the patient and family were told.
If a cross referral was made.
Educational “pearl” for the referring physician
When follow-up planned

**Basic Elements for Dictations**
Use a template if available
Identify yourself, speak clearly
Spell long or difficult words or unusual drug names
Indicate punctuation, paragraphs and headings
Indicate who should receive copies
Elements to Increase ‘Readability’

To make relevant information easily identifiable the following visual elements can be utilized:
Headings-1-4 per page, in bold or underlined
Paragraphs- 4-5 sentences long
Sentences- short, one idea per sentence, limit words >3 syllables, remove redundancies
Consider- point form, bullets, lists or tables
INTRODUCTION

A strong foundation in normal child development and behaviour is essential for promoting optimal health in children. At the completion of paediatric residency program, the resident should be able to:
Assess and manage common developmental behavioural problems of childhood and adolescence.
Act as a consultant to family physicians and other agencies with regard to these problems.
Make appropriate referrals to other subspecialties, professional and community agencies.

MEDICAL EXPERT

To develop knowledge of the spectra of normal development: gross motor, fine motor, speech-language, person-social, behavioural, play and temperament, including the timing of various milestones in each of these domains.
To develop appropriate skills in gathering information from history taking, family interview and from other sources (e.g. school personnel) to assess children with developmental problems. Clinical assessment to be consistent with principles of family-centered care, with special attention to the family’s priorities.
To develop skills for age appropriate physical examination and neurodevelopmental assessment with special attention to neurological examination and dysmorphic features.
To recognize and develop an approach to the assessment and diagnosis of children with the following disorders:

- Mental retardation syndromes
- Pervasive developmental disorder / autism
- Attention deficit disorder
- Learning disabilities
Developmental language disorders
Cerebral palsy
Spina bifida
Neuromuscular disorders
Cleft lip and palate
Hearing and visual impairment

Develop an appropriate knowledge of use of psychopharmacological agents (stimulants, anxiolytics, neuroleptics, anti-spasticity).

Have an understanding of the developmental services for children in the community.

To understand the types of developmental and psychoeducational tools available to assess children with developmental disorders (e.g. parent-completed questionnaires for emotional and behavioural symptoms, Canadian Paediatric Society Manual of learning and academic skills, measures of language and cognitive development used by speech and language pathologists and psychologists).

To understand the indications for specific neuroimaging, genetic, and biochemical tests as part of investigation for children with Neurodevelopmental disorders.

To develop knowledge and skills in the management of the above conditions. This should include the ability to formulate an appropriate management plan, which includes counseling, Pharmacotherapy (stimulants, anxiolytics, neuroleptics, anti-spasticity), behavioural therapy, physiotherapy, occupational therapy, speech and language therapy, and educational interventions.
To develop skills in assessing children and counseling parents in regard to the management of common behavioral challenges (e.g. sleep problems, tantrums, aggression, oppositional behaviour and anxiety).

COMMUNICATOR

To develop the skills required to communicate appropriately with children who have special needs and their families. Develops the skills required to communicate feedback to culturally and socially diverse families. Develops the ability to report concisely and efficiently (verbally and in writing), the assessment of children with developmental disorders.

Understands and follows a family centered approach to decision making.

COLLABORATOR

To understand the role of community agencies and programs providing developmental services. To understand the role and expertise of members of an interdisciplinary team who provide support to children with developmental problems (including physiotherapy, occupational therapy, speech pathology, psychology, audiology, early intervention, behavior therapy, public health nurse, etc). To develop the skills to effectively communicate with the members of an interdisciplinary team and collaborate in shared decision-making.
MANAGER

Prioritizes and manages multiple simultaneous clinical demands
Delegates and supervises effectively
Shows an awareness of cost-benefit considerations inpatient care decisions

HEALTH ADVOCATE

Recognizes the advocacy needs of children with developmental disabilities and their families
Assists children and their caregivers in navigating health care and community systems

SCHOLAR

Sets learning objectives based on clinical encounters and identified knowledge gaps, uses various resources (including the scientific literature) to increase knowledge base, critical appraisal or reviewed material
Enhances the learning experience of other trainees (medical students, other residents) by sharing knowledge, providing supervision, and constructive feedback
Presents in a clear, comprehensive and critical synthesis of a developmental topic at a lunchtime seminar
PROFESSIONAL

Prompt and consistent attendance at scheduled clinics, completes reports in a timely fashion, follows up on phone calls and investigations, respects issues of confidentiality, takes initiative in scheduling learning experiences
Develops an understanding of bioethical issues involved in developmental care (e.g. implications of genetic testing, the social implication of labeling, controversy regarding alternative therapies).
Canadian Pediatric Residency Objectives

INTRODUCTION

The goal of establishing Developmental Educational Objectives for Paediatric Residents during their Paediatric Training is to provide the resident learner with an
explicit expression of the expectations in the areas of knowledge, skills and attitudes. The specific objectives are organized according to the Royal College of Physicians and Surgeons of Canada CanMEDs roles framework. Many of the objectives may be met during rotations other than the Developmental/Behavioral/Rehabilitation rotations such as General Paediatrics, Neurology, Psychiatry or Genetics.

**MEDICAL EXPERT**

1. The resident recognizes the spectrum of typical development ranging from the neonatal period through adolescence. The resident demonstrates an understanding of the typical progression of normal speech/language, cognitive, fine and gross motor and social skill acquisition.

2. The resident develops an understanding of individual variations in development and behavior that can result in clinically significant challenges to functioning including:
   - Intrinsic factors (temperament, mood, self-regulation)
   - Aggression/ oppositional behaviors
   - Substance abuse
   - Child abuse and neglect
   - Poverty
   - Chronic illness
   - Feeding problems
   - Elimination problems
   - Sleep problems
   - Atypical behaviors (e.g. self injury)
Diversity within and between families and communities

3. The resident demonstrates an understanding of anticipatory guidance and health promotion particularly those issues related to developmental and behavioral paediatrics.

4. The resident demonstrates knowledge of disorders of development by providing definitions, possible etiology and risk factors, epidemiology, clinical presentations, differential diagnoses, co-morbidities, natural history, assessment and management of the following:
   - Intellectual impairment/ mental retardation/global developmental delay/
   - Developmental Disability
   - Developmental Precocity/Giftedness
   - Autism spectrum disorders
   - Language delay/disorders
   - Learning disabilities
   - Attention-deficit hyperactivity disorder
   - Anxiety and mood disorders (e.g. separation anxiety/ selective mutism)
   - Fetal Alcohol Spectrum Disorders
   - Cerebral Palsies
   - Neuromuscular disorders
   - Neurodegenerative disorders/ Regression
   - Congenital malformations of the nervous system
   - Developmental Coordination Disorder
   - Sleep disorders
   - Genetic Conditions affecting development

5. The resident demonstrates knowledge of the effects to neurobiological development of the following biomedical risk factors:
Infections
Trauma/ Injury
Hypoxia-ischemia
Toxins/Teratogens
Nutritional deficiencies
Prematurity

6. The resident demonstrates an understanding of the classification of seizures and the possible effects and associations with developmental issues.

7. The resident understands the developmental issues in children with hearing or vision impairments.

8. The resident recognizes levels of urgency and appropriate timing and degree of intervention of the individual’s developmental symptoms.

9. The resident is able to obtain a history that is appropriate to the child’s problem(s).

10. The resident performs a physical and developmental examination that is relevant and adapted to the child’s developmental level and behavior.

11. A) The resident selects medically appropriate investigations in a cost-effective manner and accurately interprets the results.
    B) The resident demonstrates knowledge of the possible investigations for developmental difficulties including:
       DNA molecular testing
       Cytogenetic testing
       Biochemical/ metabolic testing
       Neuroimaging
12. The resident is able to evaluate the strengths and weaknesses of developmental screening and surveillance systems.

13. The resident demonstrates understanding of the psychometric properties and proper use of assessment measures in the following categories:
- Common parent questionnaires
- Direct evaluation developmental screening tools
- Cognitive assessments
- Measures of adaptive functioning
- Measures of attention, impulsivity and hyperactivity

14. The resident recognizes the impact of cultural differences on developmental testing.

15. The resident identifies the chemical properties and physiologic activity of various neurotransmitters (e.g. dopamine, norepinephrine, serotonin, gamma-aminobutyric acid, and acetylcholine) and understands the pharmacodynamic and pharmacokinetic properties of:
- Sympathomimetic Amines and CNS Stimulant medications
- Antipsychotic medications
- Antidepressants (Selective serotonin reuptake inhibitors)
- Neuroleptics
- Mood stabilizers and Anticonvulsant medications
- Anti-anxiety medications
- Alpha-Adrenergic Agonists
- Anti-spasticity Medications (Botox®, Baclofen®)
16. The resident demonstrates awareness of rehabilitation techniques including:
- Mobility
- Seating/Positioning
- Feeding and swallowing
- Assistive technology
- Orthotics

**COMMUNICATOR**

1. The resident is able to demonstrate effective patient-physician communication by
   a) Taking a history from different types of historians (parent/caregiver/community resource/child/youth/adolescent)
   b) Eliciting information about the beliefs, concerns and expectations of children or youth and their families in the context of ethnic, cultural and spiritual beliefs and socioeconomic status
   c) Performing a developmental assessment appropriate to developmental level of child or youth and family

2. The resident is familiar with approaches to the delivery of bad news and diagnosis disclosure to children or youth and their families.

3. The resident demonstrates an understanding of the concept of family-centred care.

4. The resident is able to discuss findings and treatment plan with child, youth, family and health care professionals involved in a culturally sensitive and family-centred
manner (i.e., interdisciplinary team, community physician, community resources)

5. The resident is able to prepare a written report and/or verbal of assessment findings and recommendations in an accurate, organized and timely fashion.

**COLLABORATOR**

1. The resident demonstrates an understanding of the role and expertise of the members of an interdisciplinary team.

2. The resident demonstrates the ability to participate in an interdisciplinary team meeting by contributing developmental paediatric findings and developing a treatment care plan in collaboration with other team members.

3. The resident acts as a liaison between primary care providers and the child or youth and his/her family to assist in coordinating care.

**MANAGER**

1. The resident demonstrates an ability to prioritize and manage multiple simultaneous clinical demands.

2. The resident delegates and supervises effectively.

3. The resident uses information technology to optimize patient care.
4. The resident demonstrates an awareness of cost-benefit considerations in patient care decisions.

**HEALTH ADVOCATE**

1. The resident demonstrates an understanding of the role of social, economic and biologic factors have on the developmental functioning of children and youth.

2. The resident recognizes and responds appropriately to the advocacy needs of children with developmental disorders and their families.

3. The resident develops knowledge about community resources available to children with developmental issues.

4. The resident assists the children and their caregivers in navigating health care and community systems.

**SCHOLAR**

1. The resident is able to demonstrate an understanding of and commitment to continuous learning through the development and implementation of a personal learning strategy related to Developmental Paediatrics.

2. The resident is able to demonstrate the ability to access and critically assess the medical literature relevant to Developmental Paediatrics, including the evaluation of the effectiveness of relevant treatments and therapies.
3. The resident is able to demonstrate the ability to access, critically analyze and integrate information relevant to Developmental Paediatrics from a variety of sources (including scholarly information from traditions other than medicine and resources for the non-medical public).

4. The resident demonstrates the ability to synthesize evidence-based information about child development in order to communicate it to children and families in a relevant and supportive manner.

5. The resident enhances the learning experience of other trainees by sharing knowledge, providing guidance and giving constructive feedback.

**PROFESSIONAL**

1. The resident demonstrates honesty, respect and compassion.

2. The resident demonstrates reliability, responsibility and conscientiousness.

3. The resident is able to recognize issues of competence and informed consent/assent for children and youth.

4. The resident has knowledge of the concepts of medical ethics as it pertains to Developmental Paediatrics such as:
   - Best interest
   - Autonomy
   - Beneficence/ Nonmaleficence
   - Confidentiality
   - Conflict of interest
Access to care  
Palliative care  
Quality of life  

5. The resident recognizes and responds to the specific issues of child protection.

6. The resident demonstrates a proficiency at self-assessment in regards to one’s performance and establishes a pattern of ongoing professional development.

7. The resident identifies the limitations of his/her competence and appropriately consults with other professionals.

Feedback to:  
Dr. Olaf Kraus de Camargo, MD, PhD, FRCP, (C)  
Developmental Paediatrics and Rehabilitation Services  
McMaster Children’s Hospital-Chedoke Site  
Hamilton Health Sciences  
Hamilton, ON, L8N 3Z5  
905-521-2100 ext 74275
At the completion of the Developmental Pediatric rotation the Physiatry resident should be able to:

• Assess and manage common rehabilitation problems of childhood and adolescence.
• Act as a consultant to family physicians and other agencies with regard to these problems.
• Make appropriate referrals to other subspecialties, professional and community agencies.

MEDICAL EXPERT
To develop knowledge of the spectra of normal development: gross motor, fine motor, speech-language, person-social, behavioural, play and temperament, including the timing of various milestones in each of these domains.
To develop appropriate skills in gathering information from history taking, family interview and from other sources (e.g. school personnel) to assess children with developmental problems. Clinical assessment to be consistent with principles of family-centered care, with special attention to the family’s priorities.
To develop skills for age appropriate physical examination and Neurodevelopmental assessment with special attention to neurological examination and dysmorphic features.
To recognize and develop an approach to the assessment and diagnosis of children with the following disorders:

• Cerebral Palsy
• Spina Bifida
• Neuromuscular disorders
• Acquired Brain Injury
• Disorders affecting musculoskeletal systems

As well as identify and learn how to deal with questions of rehabilitation in the
context of other developmental disorders such as:

• Mental retardation syndromes
• Pervasive developmental disorder / autism
• Attention deficit disorder
• Learning disabilities
• Developmental language disorders
• Cleft lip and palate
• Hearing and visual impairment

To develop knowledge in the use of gait assessment including formal gait lab assessment.
Develop an appropriate knowledge of use of pharmacological agents relevant to Pediatric rehabilitation.

Have an understanding of the developmental services for children in the community.
To understand the types of developmental and psychoeducational tools available to assess children with developmental disorders (e.g. parent-completed questionnaires for emotional and behavioural symptoms, Canadian Pediatric Society Manual of learning and academic skills, measures of language and cognitive development used by speech and language pathologists and psychologists).
To understand the indications for specific neuroimaging, genetic, and biochemical tests as part of investigation for children with Neurodevelopmental disorders.
To develop knowledge and skills in the management of the above conditions.
This should include the ability to formulate an appropriate management plan, which includes counseling, Pharmacotherapy (stimulants, anxiolytics, neuroleptics, antispasticity), behavioural therapy, physiotherapy, occupational therapy, speech and language therapy, and educational interventions. To develop skills in assessing children and counseling parents in regard to the management of common behavioral challenges (e.g. sleep problems, tantrums, aggression, oppositional behaviour and anxiety).

COMMUNICATOR
To develop the skills required to communicate appropriately with children who have special needs and their families.

Develops the skills required to communicate feedback to culturally and socially diverse families. Develops the ability to report concisely and efficiently (verbally and in writing), the assessment of children with developmental disorders. Understands and follows a family centered approach to decision making.

COLLABORATOR
To understand the role of community agencies and programs providing developmental services. To understand the role and expertise of members of an interdisciplinary team who provide support to children with developmental problems (including physiotherapy, occupational therapy, speech pathology, psychology, audiology,
early intervention, behavior therapy, public health nurse, etc).

To develop the skills to effectively communicate with the members of an interdisciplinary team and collaborate in shared decision-making.

**MANAGER**
Prioritizes and manages multiple simultaneous clinical demands
Delegates and supervises effectively
Shows an awareness of cost-benefit considerations inpatient care decisions

**HEALTH ADVOCATE**
Recognizes the advocacy needs of children with developmental disabilities and their families

Assists children and their caregivers in navigating health care and community systems

**SCHOLAR**
Sets learning objectives based on clinical encounters and identified knowledge gaps, uses various resources (including the scientific literature) to increase knowledge base, critical appraisal or reviewed material
Enhances the learning experience of other trainees (medical students, other residents) by sharing knowledge, providing supervision, and constructive feedback
Presents in a clear, comprehensive and critical synthesis of a developmental topic at a lunchtime seminar
PROFESSIONAL
Prompt and consistent attendance at scheduled clinics, completes reports in a timely fashion, follows up on phone calls and investigations, respects issues of confidentiality, takes initiative in scheduling learning experiences
Develops an understanding of bioethical issues involved in developmental care (e.g. implications of genetic testing, the social implication of labeling, controversy regarding alternative therapies).
In this chapter you find links to templates for documentation as well as some tools used in assessing children in Developmental Paediatrics. You can download and print them for your use.
Templates

Developmental Paediatrics New Client Template

Spasticity Clinic Follow-Up Assessment - Short Version

Spasticity Clinic Follow-Up Assessment - Long Version
Tools

Manual Ability Classification System - MACS

Gross Motor Function Classification System - GMFCS