

Combined Internal Medicine and Pediatrics Residency Training Program Curriculum

This four year combined training program is designed to provide a comprehensive educational experience in both internal medicine and pediatrics such that graduating residents will have acquired the knowledge, skills, and attitudes essential to the effective practice of these two disciplines. Graduates of the program will be able to function as generalists in practice or in academic settings, but they will also be sufficiently prepared to enter fellowship training areas shared by the two disciplines.

The Med Peds Program has been constructed on the foundation of two very strong programs in internal medicine and pediatrics and provides each med peds resident with the same exceptional core skills and experiences as the categorical internal medicine and pediatrics residents while offering them the opportunity to explore their personal interests. The program structure allows adequate time to meet subspecialty and core requirements while allowing each resident the freedom to formulate their schedule to suit their individual needs and career goals.

The training program is committed to providing a cohesive, planned educational experience, emphasizing where feasible and appropriate, joint pediatric/internal medicine experiences in subspecialties and adolescent medicine. Because the majority of primary care and subspecialty medicine is practiced in ambulatory settings, this training program places special emphasis on ambulatory block experiences throughout the four years of residency, while maintaining an appropriate level of training in inpatient and intensive care settings. Special efforts are made to provide as much opportunity as feasible for continuity of care in the ongoing ambulatory block experiences.

Specific goals, expectations and objectives are provided to the residents and reviewed prior to the start of each rotation on internal medicine and pediatrics. The learning objectives and rotation expectations for each pediatric, medicine and combined rotation are web-based and housed on two servers, Instructure Canvas and e-value.

These syllabi are presented to guide the residents' learning for each required rotation they encounter. The objectives for each rotation include those that they are expected to learn in order to achieve competence in each area. Optional objectives are also included in the curriculum for those residents desiring a more intensive training experience in an area. Contact information,

scheduling and clear expectations of residents and faculty are listed for each required rotation. Reading lists, web links, practice parameters, practice cases, etc., are provided to optimize each resident's learning.

Summary of Basic Structure of the Medicine/Pediatrics Residency Program

The first year of the residency is divided into alternating 3-month blocks on internal medicine and pediatrics. Residents are collectively assigned to pediatric rotations for the first three months and then transition to internal medicine as a group for the subsequent three months. This pattern is repeated throughout the intern year, as well as throughout the following three years of the training program. Internship lasts 12 months, following which, residents proceed to more supervisory roles in internal medicine and pediatrics.

Beginning with the PGY-2, rotations are organized throughout the last three years (PGY-2, 3, and 4) of the residency such that every third month is an ambulatory/subspecialty rotation which combines internal medicine and pediatric experiences of a general and/or subspecialty nature. These rotations are known as Med Peds Months. When feasible and appropriate, related internal medicine and pediatric experiences are scheduled together to facilitate cohesive education. Core inpatient rotations and other requirements are scheduled two months out of every three months throughout the final three years of the residency, either in pediatrics or in internal medicine, depending on the particular 3 month block.

There are two half day continuity clinics per week housed at two University-based combined med peds clinics through all four years of training. Beginning with the first year, all residents are assigned to each of the two combined internal medicine and pediatric clinic sites. Residents are assigned to one clinic at the University of Utah Health Network Clinic at the Redwood Center (UUHN RWC), and one clinic at the University of Utah Health Network Clinic at the Westridge Center (UUHN WRC). Residents maintain these appointments throughout the four years of training. Both clinic sites are supervised by dually certified clinical faculty in internal medicine and pediatrics. Having each resident appointed to both med peds continuity clinic sites allows the residents the opportunity to interface with two different med peds faculty, learn from each and benefit from their respective strengths and interests. In addition to supervising resident clinics, the faculty orchestrates and mediates the weekly ambulatory med peds conference series which takes place at the beginning of each Thursday afternoon clinic prior to the start of patient care.

Year 1

The first year of residency is structured such that interns rotate between and medicine and pediatric services on an every three month basis. In the first year, residents spend a total of 6 months caring for pediatric patients, and a total of 6 months caring for adult patients. Internship lasts 12 months.

The first three months of the intern year are dedicated to pediatric medicine, and the following three months are dedicated to internal medicine. Of the six months of pediatrics in the PGY1, interns dedicate their time to the care of the general and subspecialty pediatric inpatients, pediatric cardiology, pediatric subspecialty care (selective), well baby nursery and also have a month of dedicated experience to the care of preterm neonates in the neonatal intensive care unit. Establishing the knowledge and skills to care for general pediatric and subspecialty pediatric patients is paramount during the PGY 1. Residents spend two months on wards at Primary Children's Medical Center caring for general and subspecialty pediatric inpatients. Neonatal intensive care experience takes place at the University Hospital in a very high volume, very low birth weight center. Residents focus on resuscitation skills, procedural skills, management of the ventilated infant and establishing a sound working knowledge of the care of the preterm infant. Focused experiences in pediatric emergency care, pediatric cardiology and other pediatric subspecialties (resident's choice) are also key components of the intern year.

Of the six months of internal medicine in the PGY 1, interns dedicate their time to adult general medicine inpatient care, ambulatory general medicine and geriatric medicine, critical care and the emergency care of adult patients. The inpatient experience focuses on the care of the general internal medicine patient, and most residents spend one month at the Veterans Hospital and one month on the general medicine service at the University Hospital. Adult Intensive Care exposure is focused at the University Hospital during the PGY 1. The diversity in patient demographics, variety of critical illnesses and rapid turnover offers our residents a broad experience, and is ideal to establish a sound working knowledge and experience in adult critical care. Experience in emergency medicine is focused again at the University Hospital in a high volume unit where residents are directly supervised and educated by a large faculty of emergency medicine trained physicians. It is during this time that residents establish the skills of initial assessment, stabilization and treatment of adult emergency patients. Geriatrics and ambulatory general internal medicine experiences complete and balance the PGY 1s' introduction to internal medicine.

Sample Schedule PGY1:

Ped Cardiology Inpt/Outpt	Ped Ward/ Ped Night Shift	Ped Nursery	IM Amb Gen Med	IM Ward	IM MICU	IM Amb Gen Med// Ped ED	Ped Ward	Ped NICU	Ped subspcl (selective)	IM Ward	IM Amb Geriatrics	Adult ED
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Year 2

The second year marks the transition to supervisory duties in internal medicine as well as pediatrics. Residents continue to transition between internal medicine and pediatrics services on an every three month basis. Combined internal medicine and pediatric subspecialty ambulatory months (“Med Peds Months”) assist with the transition between more traditional services in internal medicine and pediatrics, and take place roughly every third month through the final three years of training. By the completion of the four year training program, residents will have had approximately ten dedicated months to combined ambulatory internal medicine and pediatrics subspecialty care. Dedicated months on core subspecialties as a consult resident are also part of the second through fourth years of the curriculum; each resident spends an entire month on each subspecialty service (Cardiology, Infectious Diseases, Nephrology, Gastroenterology) in internal medicine as well as in pediatrics. Infectious Disease, Nephrology and Gastroenterology rotations are established features of the last three years of the combined training program.

PGY 2 residents are allowed more responsibility in patient care duties as they gain independence and demonstrate maturity in their medical decision making. Second year med peds residents will supervise and play a key role in the education of more junior residents and medical students for two months on internal medicine inpatient ward months, as well as during a month in the medical intensive care unit. Supervisory opportunities in pediatrics also take place during ward experiences at Primary Children’s Medical Center. During one of these supervisory months residents establish team leading and teaching skills as they supervise a unique team comprised of four, third-year medical students (the Glasgow Team). Additional supervisory experience is a part of call months in the Well Baby Nursery where residents continue to build on their resuscitation, stabilization, and assessment skills of term infants and refine the teaching of these skills to more junior residents. Further ward experience in pediatrics occurs during one month on the hematology oncology ward. Other pediatric experiences, which are key components of the

second year, include month long rotations in Pediatric Emergency Medicine and Pediatric Intensive Care.

Sample schedule PGY 2:

IM Ward	IM ID	MP Month	Ped Ward Heme Onc	Ped ED	MP Month	IM Ward	MICU	IM NF// MP Subsp.	PICU	Ped ID	MP Month	Ped Ward Glasgow
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NF= Night Float

Years 3 and 4

In the third and fourth years, residents are determining the ultimate paths for their medical careers. Fellowship pursuits, determinations to focus on hospital based medicine or ambulatory care become evident. During these years residents continue to build on their medical knowledge in internal medicine and pediatrics, as well as continue to refine their skills as educators, team leaders and medical decision makers. Exposure to adult inpatient medicine, pediatric inpatient medicine, neonatal intensive care, adult intensive care, pediatric emergency medicine, subspecialty experiences in nephrology and gastroenterology, adolescent medicine, pediatric behavior and development and a variety of combined ambulatory subspecialty experiences continue through the third and fourth years of the training experience. Ongoing exposure to term infant care is maintained during call months in the Well Baby Nursery. Elective rotations provide the opportunity for residents to focus on areas on interest in internal medicine and pediatrics in years three and four.

Sample schedule PGY 3

IM Ward	IM GI	MP Month	Ped Ward	Ped ED	Ped NF// MP Month	IM Ward	Med Elect	MP Month	NICU	Ped GI	Adolescent	MICU/ IM NF
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Sample schedule PGY 4

IM	IM	MP	NICU	Ped	Ped	IM	MICU/	MP	Ped	Ped	Ped	MP
Renal	Ward	Month// Ped NF		Renal	Behavior Develop	Ward	IM NF		Elect	ED	Ward	

Residents as Teachers

Educational activities dedicated to preparing residents to be effective teachers of students, patients and peers is part of the core curriculum at the University of Utah. Residents are required to complete computer based learning modules that provide housestaff with a foundation of knowledge that prepares them for their role as educators. Modules cover topics such as bedside teaching, teaching procedures, giving feedback, lecturing, etc. Regular educational conferences addressing residents’ skills as teachers are also part of the core internal medicine and pediatrics core conference curricula as well as resident retreats. Regular feedback on these skills are also provided by faculty as part of the day to day activities on inpatient and critical care services where residents regularly interface with students, practice and develop their leadership and educational skills.

Didactic and Simulation Education

Med Peds residents participate in all of the same scheduled educational activities as the categorical pediatric and categorical internal medicine residents. Med Peds residents are required to attend 60% of internal medicine conferences when on internal medicine rotations, and 60% of pediatric conferences when on pediatric rotations. Combined Med Peds conferences occur weekly at the med peds continuity clinic sites, and attendance is expected unless residents are on vacation, post call or otherwise unable to attend due to clinical responsibilities (such as during adult ICU rotations).

Combined Med Peds Conferences

- Med Peds Ambulatory Care Conferences are held weekly on Thursday afternoons for 30 minutes prior to the beginning of patient care duties at the combined med peds continuity clinic. Conferences are prepared and led by the med peds residents and continuity clinic preceptors and are designed to critically review a multitude of topics related to ambulatory internal medicine and pediatrics. Each resident will present 3-4 topics over

the course of each academic year. All presentations will be posted on the combined training program website for local and indefinite access by all residents.

Teleconferencing capabilities at the two sites allow all residents to participate in each Thursday afternoon conference regardless of where the lecture is being delivered.

- Med Peds Journal Club is held monthly and focuses on the critical appraisal of the adult and pediatric literature. Journal clubs are held at resident's homes and are led by the residents in a fun, interactive fashion that incorporates the feedback and insight of the med peds faculty.

Internal Medicine Didactic Conferences

- Morning Report is an outstanding learning opportunity. When on internal medicine services, all ward PGY 1, 2, 3, and 4 residents are expected to attend morning report which is held daily except Thursdays.
- Grand Rounds is held every Thursday and features a variety of local, national and internationally acclaimed speakers.
- Noon Conference is held daily and covers a variety of topics specific to inpatient and outpatient medicine, in addition to bioethical issues which infiltrate daily practice. Lunch is provided.
- Morbidity and Mortality conference is held monthly at all medicine teaching hospitals.
- Journal club meetings are also held regularly throughout the year and engage residents in discussions of current literature and it's applicability to their current practice.

Pediatric Didactic Conferences

- Morning Report is held daily except Tuesdays and Thursdays when attendance is focused on Research in Progress conference and Grand Rounds, respectively.
- Morbidity and Mortality conference is the first Monday of each month throughout the academic year and is presented by the house-staff and chief medical residents with adjunctive participation of the faculty.
- Noon conference is an excellent learning opportunity and is held daily for all pediatrics and med peds residents with lunch provided. This conference features lectures by general pediatric and subspecialty faculty, interesting case conferences presented by fellow residents and senior lectures prepared by pediatric PGY 3 and med peds PGY 4 residents.
- Journal club meetings are also held regularly throughout the year and engage residents in discussions of current literature and it's applicability to their current practice.

- Intern Lecture Series is held weekly on Friday during the academic year for the interns in the pediatrics and med peds programs. The lectures are given by members of the intern class, key faculty and chief pediatric residents and focus on topics of high yield for new pediatric physicians.

Simulation Education

- While on pediatrics, residents have opportunities to participate in simulation education in the PCMC simulation education center. Interprofessional simulation exercises with staff from nursing, pharmacy and medicine are executed with post-exercise debriefing sessions aiming to improve the communication, professionalism, systems based practice, medical knowledge, patient care and practice based learning and improvement of the residents in high stakes pediatric care scenarios. Future simulation exercises are being developed to address residents' preparedness for disclosing medical errors.
- While on internal medicine wards at the University Hospital, residents participate in similar high stakes adult care scenarios in the simulation laboratory aiming to improve residents' competency in the care of critically ill patients.
- Task trainers are also utilized to improve residents' procedural skills when rotating in the University MICU.

Scholarly Activity

- Residents with a strong research interest have the opportunity to use one of their second half days of continuity clinic for longitudinal research work beginning in the second year. A research mentor is identified for the resident and provides them with guidance and assures progress is made on the resident's project. Residents who have utilized this option have been very successful at generating manuscripts, posters and platform presentations for peer reviewed journals and national meetings.
- Senior Talks: At the end of the training period, all senior residents present a one-hour senior talk concerning research projects or special topics of interest to fellow house-staff and faculty during noon conference. Residents present separate talks during the noon conference to their pediatric colleagues as well as to their internal medicine colleagues. Often residents choose to present a topic of interest that engages both adult and pediatric practitioners in keeping with their combined training and interest in issues which are specific to both children and adults. All residents find this opportunity to be a useful learning tool to conclude their training.

- **Interesting Case Conference:** During the PGY 1-4 years, residents are required to present an interesting pediatric case and provide a discussion to fellow pediatric residents and faculty during noon conference
- **Intern Lecture Series:** PGY 1 residents are expected to research and present a topic to fellow interns in pediatrics during this conference
- **Med Peds Ambulatory Care Conference:** All residents are required to select, research, organize and present lectures and promote discussion of topics specific to ambulatory internal medicine and pediatrics. Each resident will present four to five topics during each academic year during the four years of training.
- **Additional formal presentations** are often required during subspecialty rotations and while on wards at Intermountain Hospital.
- All residents are encouraged to engage in formal research projects during their training and are encouraged to present the results of their research at local, regional and national conferences. Ample opportunity to identify mentors and devote time to basic science or clinical research is offered during the four year training program. Formal research projects are otherwise not a requirement for promotion or graduation from the training program.

At the conclusion of this four year combined training program, residents will have gained exposure to nearly every disease specific to internal medicine and pediatric patients. We proudly boast balanced and exceptional experiences in ambulatory, inpatient and critical care disciplines, and offer a robust set of opportunities in combined subspecialty experiences in internal medicine and pediatrics. As a result, at the completion of the program, residents will have mastered the skills that allow them to be exceptional patient educators and general practitioners in ambulatory internal medicine and pediatrics; they will be amply prepared to enter a hospital based practice in internal medicine and pediatrics, or pursue the fellowship of their choice in categorical internal medicine, pediatrics, or both.