HELPFUL RESOURCES

WARD TIPS
Seattle: Ward team - attending, 2 senior residents, 4 interns, 1 sub-I, 1-2 MS3’s 3 weeks inpatient, 3 weeks outpatient clinic w/2 days in nursery & some shifts in the ER. Call q4 until 11pm, off weekends when not on call.

WWAMI sites: ± Residents, spend more of your time with attendings. Time is typically divided equally between wards and clinic.

• Pay attention to diet, prenatal hx, immunization hx, development, social hx
• Pediatrics is not just about the child; you must interact and build trust with the parents and extended family members as well.
• Introduce yourself to the patient and parents, take the time to say what you are doing and why, at a level appropriate for your patient.
• White coats are allegedly scary to children; consider leaving your coat in the hall.
• For infants, toddlers, and small children who appear frightened or nervous, try to keep the child on the parent’s lap during the PE. Do cardiac and pulmonary exams first, while the patient is still quiet. Look into ears and throat last.
• Smile and speak softly. Turn the exam into a game (“You listen to my heart, then I’ll listen to yours!”) or demonstrate on parents first.
• When possible, speak to the patient’s primary care physician.
• Tarascon Pharmacopoeia has pediatric drug dosing schedules.
• Read about your patients as soon as you have a chance.
• Practice your presentation. Ask your senior resident for feedback as soon as possible.
• Have fun! Even as an MS, you can make a difference in your patients’ care.

SAMPLE NOTES
Pediatrics MS3 Admission Note
ID/CC: The usual - include age, primary complaint, duration
HPI: Include pertinent positives and negatives ROS, exposure hx, and sick contacts.
Birth History: (for infants) _____ week EGA (M/F) born by (vag/C-section) to a ___ year old G_P_A_. If C-section, indication? Prenatal infections? Was mom given antibiotics?

G_P_A_. If C-section, indication? Prenatal infections? Was mom given antibiotics?

Development: Milestones - gross and fine motor, social, and language. For older children: school performance, attendance, favorite subjects.
Immunizations: UTD (up-to-date). Ask to see the immunization record.
Diet/Nutrition: Formula vs. breast; amount per day. Type of formula. Any special diet?
Frequency, solids, appetite.
Allergies: NKDA
Medications: Include vitamins and any herbal supplements.
Past Medical & Surgical History:
Social History: Patient lives with _______ in _______. Recent stressors (moves, parents divorcing), home environment (smoking, pets, environmental hazards), the primary caregiver, attendance in day care or school, performance in school, friends, sexual activity, and alcohol, tobacco, and other drug use.
Sexual history (older children): Menarche, problems with menstruation, sexual activity, contraception, STDs. Use discretion here (would you have enjoyed having this conversation in front of your parents when you were 15?)
Family History: Inherited diseases, miscarriages, sudden deaths, congenital anomalies, developmental delay, mental retardation, consanguinity, asthma, epilepsy, atopy, and cardiovascular disorders.
Review of Systems:
Physical Exam:
General: Note alertness, playfulness, consolability, hydration status, social interaction, responsiveness, nutritional status.
Vital Signs: Temperature (and method by which it was obtained: axillary, rectal, oral). Weight (kg and percentile) Height (cm and percentile) OFC - occipito-frontal circumference (head circumference (cm and percentile). Plot these values on a graph with old values if available. BP, HR, RR, O₂ saturation (if available) Input (cc/kg/hr) and Output (stool + urine in cc/kg/hr), when available.
Skin: Note jaundice, cyanosis, mottling, birthmarks (location, color, size, number), rashes, capillary refill.
Hair: Lanugo and Tanner stages
Head: Circumference, shape, sutures, fontanelles
Eyes: Red reflex (newborn), strabismus, scleral icterus, EOMI, PERRLA, fundoscopic
Ears: In infants, gently pull the auricle posteriorly and inferiorly, insert speculum. In an older child, pull the external ear posteriorly and superiorly
Nose: Nares patent. Watch for nasal flaring (respiratory distress).
Throat: Teeth, palate (cleft?), thrush. Oropharynx (injection/exudate), adenoids
Neck: Range of motion. Supple vs. rigid. Thyroid exam.
Chest: Longer period of expiration than in adults. Comment on regularity of respirations, presence of skin retractions between ribs, grunting, stridor (inspiration), wheezing (expiration).
Cardiac: Rate, rhythm, murmurs. Check radial and femoral pulses. Note cyanosis.
Abdomen: Inspect, auscultate, then palpate. Note hepatosplenomegaly, masses. Check umbilicus in newborns
Back: Check for defects along spine, abnormal curvature (scoliosis)
MSK: Barlow/Ortolani maneuvers in newborns. Check ROM, effusions
Genitalia: Males: Circumcision, testes (undescended/descended), Tanner stage Females: Tanner stage, labia (adhesion)
Neuro: Mental status (alertness, orientation, language); CN II-XII; Motor: Tone, strength, atrophy, fasciculations; Sensory: temperature, light touch, vibration; DTRs; primitive reflexes (root, grasp, Moro, etc); Cerebellar function; Gait
Assessment/Plan: Include summary statement that incorporates relevant history, physical, and studies. Break down assessment by system or by problem, and address all issues, no matter how small.
In pediatrics, always address FEN (fluids, electrolytes, and nutrition).

**Daily Progress Note**
MS3 PN, Pediatrics

**ID:** 2mo girl w/ fever without localizing signs.

**S:** Include overnight events, parents’ and nurses’ observations.

**O:** Report vital signs as a range of values over the past 18-24 hours.

**PE:** Gen, HEENT, resp, CV, abd, ext

**Labs / Imaging**

**A/P:** Summarize, and address issues by system (FEN, Pulm, CV, GI, GU, MSK, Neuro, Skin, Endo, ID/Heme).

### SELECTED TOPICS IN PEDIATRICS

#### VITAL SIGNS BY AGE GROUP

<table>
<thead>
<tr>
<th>Age</th>
<th>Wt (kg)</th>
<th>HR</th>
<th>RR</th>
<th>SBP</th>
<th>DBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-30w</td>
<td>1</td>
<td>100-160</td>
<td>30-60</td>
<td>32-52</td>
<td>13-29</td>
</tr>
<tr>
<td>30-34w</td>
<td>2</td>
<td>100-160</td>
<td>30-60</td>
<td>40-60</td>
<td>20-36</td>
</tr>
<tr>
<td>Newborn</td>
<td>3</td>
<td>100-160</td>
<td>30-60</td>
<td>50-70</td>
<td>29-45</td>
</tr>
<tr>
<td>1 month</td>
<td>4</td>
<td>120-180</td>
<td>30-60</td>
<td>70-95</td>
<td>30-62</td>
</tr>
<tr>
<td>6 mo</td>
<td>7</td>
<td>110-170</td>
<td>25-40</td>
<td>80-100</td>
<td>50-70</td>
</tr>
<tr>
<td>1-2 y</td>
<td>12</td>
<td>90-150</td>
<td>20-30</td>
<td>80-100</td>
<td>51-90</td>
</tr>
<tr>
<td>3-4 y</td>
<td>16</td>
<td>70-140</td>
<td>20-30</td>
<td>80-110</td>
<td>39-89</td>
</tr>
<tr>
<td>5-6 y</td>
<td>20</td>
<td>65-130</td>
<td>20-30</td>
<td>85-115</td>
<td>45-85</td>
</tr>
<tr>
<td>7-8 y</td>
<td>26</td>
<td>60-130</td>
<td>18-25</td>
<td>85-115</td>
<td>50-70</td>
</tr>
<tr>
<td>9 y</td>
<td>30</td>
<td>60-130</td>
<td>15-20</td>
<td>90-120</td>
<td>50-70</td>
</tr>
<tr>
<td>10-12 y</td>
<td>36</td>
<td>60-130</td>
<td>15-20</td>
<td>90-120</td>
<td>50-70</td>
</tr>
<tr>
<td>Adolescent</td>
<td>50</td>
<td>60-120</td>
<td>15-20</td>
<td>90-120</td>
<td>50-70</td>
</tr>
</tbody>
</table>


**Immunizations** (See also www.cdc.gov)

- Birth: HBV #1
- 2 months: HBV #2 DtaP #1 Hib #1 IPV #1 PCV #1
- 4 months: DtaP #2 Hib #2 IPV #2 PCV #2
- 6 months: DtaP #3 Hib #3 PCV #3
- 6-18 months: HBV #3 IPV #3
- 12-15 months: Hib #4 PCV #4 MMR #1
- 12-18 months: Varicella
- 15-18 months: DtaP #4
- 4-6 years: Varicella DtaP #5 IPV #4 MMR #2
- 11-18 years: MCV4 Td/Tdap HPV
## DEVELOPMENTAL MILESTONES

<table>
<thead>
<tr>
<th>Age</th>
<th>Gross motor</th>
<th>Visual/fine motor</th>
<th>Language</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mo</td>
<td>Raises head</td>
<td>Tight grasp, follows to midline</td>
<td>Alerts to sound</td>
<td>Looks at faces</td>
</tr>
<tr>
<td>2 mo</td>
<td>Lifts chest</td>
<td>Fists no longer clenched, follows past midline</td>
<td>Social smile</td>
<td>Recognizes parent</td>
</tr>
<tr>
<td>3 mo</td>
<td>Supports on forearms</td>
<td>Responds to visual threat</td>
<td>Coos</td>
<td>Reaches for familiar people</td>
</tr>
<tr>
<td>4 mo</td>
<td>Rolls over</td>
<td>Reaches with both arms in unison</td>
<td>Laughs, orients to voice</td>
<td>Enjoys looking around</td>
</tr>
<tr>
<td>6 mo</td>
<td>Sits unsupported</td>
<td>Unilateral reach, transfers objects</td>
<td>Babbles, razzes</td>
<td>Recognizes that a person is a stranger</td>
</tr>
<tr>
<td>9 mo</td>
<td>Crawls, pulls to stand, cruises</td>
<td>Immature pincer grasp, throws objects</td>
<td>“mama” and “dada” indiscriminately</td>
<td>Pat-a-cake, explores</td>
</tr>
<tr>
<td>12 mo</td>
<td>Walks</td>
<td>Mature pincer grasp</td>
<td>2 words besides “mama/dada”</td>
<td>Imitates, comes when called</td>
</tr>
<tr>
<td>15 mo</td>
<td>Creeps up stairs, walks backward</td>
<td>2-block tower, scribbles</td>
<td>4-6 words</td>
<td>15-18 mo: uses spoon and cup</td>
</tr>
<tr>
<td>18 mo</td>
<td>Runs, throws objects from stand</td>
<td>3-block tower</td>
<td>7-10 words, knows 5 body parts</td>
<td>Plays in group</td>
</tr>
<tr>
<td>24 mo</td>
<td>Up and down stairs</td>
<td>7-block tower, undresses</td>
<td>50 words, 2-word sentences</td>
<td>Parallel play</td>
</tr>
<tr>
<td>3 yrs</td>
<td>Alternates feet going up stairs, rides tricycle</td>
<td>Draws circle, partial dressing</td>
<td>250 words, 3-word sentences</td>
<td>Shares toys</td>
</tr>
<tr>
<td>4 yrs</td>
<td>Hops, skips</td>
<td>Draws square, dresses self, catches</td>
<td>Knows colors, asks questions</td>
<td>Plays cooperatively</td>
</tr>
<tr>
<td>5 yrs</td>
<td>Jumps over low obstacles</td>
<td>Draws triangle, ties shoes</td>
<td>Prints 1st name, asks what words mean</td>
<td>Competitive games</td>
</tr>
</tbody>
</table>

(Adapted from Harriet Lane Handbook, 16th ed, 2002)
Fluids and Electrolytes

Daily water needs are estimated based on energy expenditure:
1 kcal expended/day = 1 mL H₂O required

“4-2-1” method for pediatric IV fluids:
- First 10kg: 4mL/kg/hr H₂O*
- Second 10kg: 2mL/kg/hr H₂O
- Weight over 20kg: 1mL/kg/hr H₂O

So, for a 25kg child, IV fluids based on this method would be:
- 40mL/hr for the 1st 10kg
- 20mL/hr for the 2nd 10kg
- 5mL/hr for the 5kg over 20kg

**TOTAL: 65mL/hr for a 25kg child, or 1560ml/day**

Daily electrolyte requirements:
- Sodium: 2-3mEq/100mL fluid/day
  If weight <12kg, D5 1/4NS+10mEq KCl
- Potassium: 1-2mEq/100mL fluid/day
  If weight >12kg, D5 1/4NS+20mEq KCl
- Chloride: 2-3mEq/100mL fluid/day

Nutrition

Formulas: often confusing with many brand names; talk to the nutritionists

Breast Milk, Standard Infant Formula: 20 kcal/oz
Regular infant formulas (eg Enfamil, from cow’s milk) and breast milk contain lactose
Pediasure: 30 kcal/oz. Not for children under one year of age.
Standard soy-based formulas: ProSobee, Isomil
Hydrolysate formulas: Nutramigen, Pregestimil, Alimentum. The protein is enzymatically hydrolyzed and less allergenic.
Renal formulas: (for fluid restriction) Nepro, Novasource (60kcal/oz)
Elemental formulas: Contain proteins broken down completely to amino acids; used in children with gastroschisis/short gut syndrome – Tolorex (low fat, for children with pancreatitis), Vivonex pediatric, Neocate.
Premature formulas: Enfamil Premature, SMA Premie, Neocare 24kcal/oz

Mixing formulas:
- 20kcal/oz (regular): 1 scoop powdered formula with 2 oz water
- 24kcal/oz: 3 scoops powdered formula with 5 oz water
- Thickened feeds: 1 tsp rice cereal per 4 oz formula

**Volume conversion:** 1 fl oz = 30 cc. So, 20 kcal/oz = 0.67 kcal/cc.

Normal weight gain:
- Week 1: May lose up to 10% of birth weight
- Week 2: Regain up to birth weight and establish weight gain pattern

Small premies: 15 g/day
- 0-3 months: 25-35 g/day
- 3-6 months: 15-21 g/day
- 6-12 months: 10-13 g/day
- 1-6 years: 5-8 g/day
- 7-10 years: 5-11 g/day
Calorie Requirements by age

<table>
<thead>
<tr>
<th>Age</th>
<th>Kcal/kg/day</th>
<th>Grams protein/kg/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6 months</td>
<td>108</td>
<td>2.2</td>
</tr>
<tr>
<td>6-12 months</td>
<td>98</td>
<td>2.0</td>
</tr>
<tr>
<td>1-3 years</td>
<td>102</td>
<td>1.2</td>
</tr>
<tr>
<td>4-6 years</td>
<td>90</td>
<td>1.1</td>
</tr>
<tr>
<td>7-10 years</td>
<td>70</td>
<td>1.0</td>
</tr>
</tbody>
</table>

BMI = weight (kg) / height$^2$(m$^2$)


In healthy infants, children, and adolescents, a vitamin D intake of at least 400 IU/day is recommended.

1. Breastfed and partially breastfed infants should be supplemented with 400 IU/day of vitamin D beginning in the first few days of life. Supplementation should be continued unless the infant is weaned to at least 1 L/day or 1 qt/day of vitamin D–fortified formula or whole milk. Whole milk should not be used until after 12 months of age.

2. All nonbreastfed infants, as well as older children who are ingesting 1000 mL/day of vitamin D–fortified formula or milk, should receive a vitamin D supplement of 400 IU/day.

3. Adolescents who do not obtain 400 IU of vitamin D per day through vitamin D–fortified milk (100 IU per 8-oz serving) and vitamin D–fortified foods (such as fortified cereals and eggs [yolks]) should receive a vitamin D supplement of 400 IU/day.

4. On the basis of the available evidence, serum 25-OH-D concentrations in infants and children should be 50 nmol/L (20 ng/mL).

5. Children with increased risk of vitamin D deficiency, such as those with chronic fat malabsorption and those chronically taking antiseizure medications, may continue to be vitamin D deficient despite an intake of 400 IU/day. If a vitamin D supplement is prescribed, 25-OH-D levels should be repeated at 3-month intervals until normal levels have been achieved. PTH and bone-mineral status should be monitored every 6 months until normal.

Causes of abdominal pain in children

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intussusception</td>
<td>Telescoping of a portion of gut into an adjacent segment; peak 5-9 mo</td>
</tr>
<tr>
<td>Lead points: HSP, meckel’s, neurofibroma, hemangioma, lymph node (post viral, NHL)</td>
<td></td>
</tr>
<tr>
<td>Sx: Sudden onset of severe, paroxysmal pain (child may cry, draw knees to chest) interspersed with near-normal periods; BRBPR Dx/Tx: air/barium enema, surgery</td>
<td></td>
</tr>
<tr>
<td>Malrotation w/volvulus</td>
<td>1st year of life. Bilious vomiting, distension, fever</td>
</tr>
<tr>
<td>Meckel’s diverticulitis</td>
<td>Rule of 2’s: 2% of population, 2” long, 1st 2 years of life, 2’ from ileocecal valve, 2 types of epithelium (gastric, pancreatic)</td>
</tr>
<tr>
<td>HSP</td>
<td>Triad of abdominal pain, LE palpable purpura and GI bleeding. Usually 2-5 yo, h/o preceding URI</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>Rotavirus most common in &lt;2 yo. Antibiotics for Shigella, invasive E. coli (not EHEC -&gt; HUS), amebiasis. Anticholinergics contraindicated</td>
</tr>
<tr>
<td>Other causes</td>
<td>Appendicitis, DKA, testicular/ovarian torsion, UTI, IBD, Juvenile</td>
</tr>
<tr>
<td>RA</td>
<td>Congenital abdominal pathology</td>
</tr>
<tr>
<td>Duodenal atresia</td>
<td>Bilious vomiting following feeding in 1st days of life; associated w/</td>
</tr>
</tbody>
</table>
Pyloric stenosis
prematurity, polyhydramnios, down syndrome
idiopathic hypertrophy of pylorus, onset 2-3rd week of life.
Nonbilious vomiting, progresses to projectile. Surgical treatment.

Hirschsprung’s
Absence of parasympathetic myenteric ganglion cells in
rectum/sigmoid. Abd distension, constipation, pass stools after
digital exam

Abdominal neoplasms
Neuroblastoma
most common abd neoplasm in children, <5 yo. From neural crest
cells. GI obstruction, diarrhea, opsoclonus-myoclonus, raccoon
eyes
Wilm’s
derived from embryonal renal cells; 4 mo – 6 yrs, median 3 yrs,
10% bilateral. Presents w/flank mass, hematuria.
WAGR: Wilm’s, aniridia, ambiguous genitalia, mental retardation

Work-up of a fever in a neonate (<3 mo)
Admit to hospital, complete PE (look in ears to r/o OM)
CBC with diff, BCx
UA with Cx
LP
CXR if any pulmonary Sx

Febrile seizures
2-4% of all kids; 6 mo – 6 yrs old. 1/3 recur
Associated w/rapid rise in temp, T>38; commonly see w/HHV-6
Simple: <15 min, no focal features
Complex: >15 min, +focal features/post ictal paralysis, or series of sz >30 min
Tx if last > 5 min – lorazepam, APAP to lower fever, dilantin if persists
Does increase risk of developing epilepsy, especially w/complex

Kawasaki’s disease
acute febrile vasculitis, likely immune-mediated. <8 yo.
Sx: high fever 5+ days, bilateral conjunctivitis, red lips/mouth, red palms/soles,
maculopapular rash
15-25% develop coronary artery aneurysms
Tx: IVIG, high dose ASA until defervesces (80-100 mg/kg/d ÷ qid)

Ddx limp
Infectious septic arthritis, osteomyelitis
Legg-Calve-Perthes - idiopathic avascular necrosis of femoral head, 3-12 yo. Pain may refer
to inner thigh
SCFE typically, overweight teen boys; proximal metaphysis displaces anteriorly. Pain
may refer to medial knee
Osgood-Schlatter teens, due to overuse; pain over tibial tuberosities
Neoplasms Osteosarcoma, Ewing’s sarcoma – primarily distal femur, proximal tib/fib.
Leukemia - ALL
Stress fracture
Juvenile rheumatoid arthritis

Pulmonary disease
Croup infection of upper airway – larynx, trachea, bronchi
Parainfluenza accounts for 75%; also, influenza A/B, RSV, Mycoplasma
Barking cough ± hoarseness, stridor. “Steeple sign” on neck XR

Epiglottitis  formerly due to H. flu; since vaccine, S. pyogenes, S. pneumo, S. aureus
Cherry red epiglottis. “Thumbprint sign” on lateral neck XR
Airway emergency – intubate/cricothyrotomy, antibiotics

Bronchiolitis  infection of lower airways w/obstruction of bronchioles by mucus, edema
RSV accounts for >50%; also parainfluenza, adenovirus, Mycoplasma
Starts w/mild URI Sx (sneezing, coryza), fever (38.5-39); then increasing resp distress, wheezing, tachypnea, irritability. Usually no GI Sx.
Tx: O2, epinephrine/albuterol SVN

Cystic fibrosis
Auto recessive mutation in CFTR (∆F508 most common); impaired Cl excretion
May present with meconium ileus in 15-20%; bronchiolitis, bronchiectasis;
exocrine pancreatic insufficiency; nasal polyposis, sinusitis; cholecystitis; failure
to thrive.
Pulmonary disease accounts for most morbidity/mortality. Eventually become
colonized w/Pseudomonas, Burkholderia spp., aspergillus. MRSA also an
important pathogen
Dx: sweat chloride, molecular testing
Tx: replace pancreatic enzymes. Treat acute pulmonary exacerbations – Zosyn
a good choice. In colonized pts: inhaled tobramycin, TMP-SMX,itraconazole.
Bronchodilators & inhaled steroids. Lung transplant.

Neonatology
Neonatal screening labs
State of Washington newborn screening tests for the following 9 disorders:
1) PKU
2) Congenital hypothyroidism (T4; the lowest 10% also get a TSH)
3) MSUD
4) CAH (17-OH progesterone)
5) Homocystinuria
6) Galactosemia
7) Biotinidase deficiency
8) Medium Chain Acyl co-A Dehydrogenase Deficiency
9) Hemoglobinopathies

Neonatal Cyanosis
Systemic:  respiratory depression due to maternal opiates, magnesium sulfate, sepsis, hypoglycemia
Heart:  TOF, transposition of great arteries, total anomalous venous return, Ebstein’s anomaly, pulmonic stenosis
Respiratory:  choanal atresia, pulmonary hypoplasia, pneumonia, IRDS, meconium aspiration
Misc:  diaphragmatic hernia, intraventricular hemorrhage

Neonatal Jaundice (usually an unconjugated hyperbilirubinemia)
1st 24 hours of life:  erythroblastosis fetalis – Rh+ fetus, Rh- sensitized mother
hemorrhage – cephalohematoma
sepsis
intrauterine infection – congenital toxoplasmosis, syphilis, CMV
>24 hours: physiologic jaundice – peaks 3-5th day, normalizes in 2 weeks, Tbili ≤ 12 (higher peak levels, takes longer to resolve in premies) early onset breast feeding jaundice Crigler-Najjar – auto recessive, absence of glucuronyl transferase; severe jaundice, kernicterus -> seizures -> brain injury Gilbert’s syndrome – auto dominant, mild deficiency of gluc transferase; Mild, episodic jaundice precipitated by stress

>1 week: breast milk jaundice – peaks 2-3rd week, Tbili 10-30 atresia of bile ducts cystic fibrosis Hereditary spherocytosis – auto dominant Hypothyroidism

Complications of prematurity
IRDS due to decreased levels of surfactant. ↑ risk w/diabetic mother, C section w/o labor, multiple gestation. Sx: Resp distress that worsens in 1st few hours, peaks in 48-72 hours, then gradually improves. Dx: reticulogranular pattern on CXR Tx: steroids pre-delivery to accelerate lung maturity; surfactant post delivery secondary to O2 toxicity, ventilator injury; follows IRDS. Mostly see in <1,000 g babies. Decreased alveolarization. Clinical worsening after 3rd/4th day of life, unlike IRDS.

BPD typically see after start feeding infant, onset in 1st 2 weeks of life. Can be rapidly progressive. Sx: abdominal distension, hematochezia Dx: KUB shows pneumatosis intestinalis, free air, pneumatobilia Tx: d/c oral feeds, antibiotics; surgery if perforated or doesn’t respond

NEC abnormal retinal vascularization. Spontaneous regression in 90%. 10% progress – vessels proliferate, extend into vitreous humor; retinal detachment, blindness can occur