

**Curriculum Content Report – Immunizations**

**Search Terms: Immunization, vaccine, IS 5a, IS B4c, SK B8a, PC B1a2, PC B1b7, PC B2s, SS B4a,**

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<b>Year 1</b>	
<b>Course</b>	<b>Content</b>
Cellular and Molecular Medicine	<ul style="list-style-type: none"> <li>•Recombinant DNA technology in vaccine production</li> <li>•Antibodies as a plasma protein</li> </ul>
Clinical Epidemiology and Biostatistics	<ul style="list-style-type: none"> <li>•Role of immunizations in changing common causes of mortality</li> <li>•Role of immunization in control of influenza</li> <li>•Role of immunizations in maintaining herd immunity – measles outbreak as an example</li> </ul>
Doctoring I	<ul style="list-style-type: none"> <li>•Childhood immunizations</li> </ul>
Physiology	<ul style="list-style-type: none"> <li>•Antigens and antibodies</li> <li>•Regulation of immune responses</li> <li>•Passive immunization for envenomation</li> <li>•Immunization for encapsulated microbes (like S. pneumo)</li> <li>•Mechanisms of antibody feedback and Rh Isoimmunization</li> </ul>
<b>Year 2</b>	
Immunology/Micro	<ul style="list-style-type: none"> <li>•Antigens and antibodies</li> <li>•Regulation of immune responses</li> <li>•Vaccines</li> <li>•Passive immunization</li> <li>•Herd immunity</li> <li>•Immunization workshop</li> <li>•Factors influencing vaccine refusal</li> <li>•Use and contra-indications for vaccines/passive immune therapies against commonly encountered pathogens, e.g HPV, MMR, rotavirus, polio, influenza, Hepatitis A &amp; B, rabies, yellow fever, smallpox, RSV.</li> <li>•Serum sickness presentation and pathophysiology</li> </ul>
Doctoring 2	<ul style="list-style-type: none"> <li>•Immunizations as routine part of history</li> <li>•Immunization workshop (RPCT only)</li> </ul>
Pathology	<ul style="list-style-type: none"> <li>• acute disseminated encephalomyelitis (ADEM) from measles as a vaccine preventable disease.</li> <li>•Rabies vaccine as a very low risk vaccine based on contemporary production methods (molecular construction).</li> <li>•Examples of vaccines that unleash an autoimmune response against either peripheral (Guillian Barre Syndrome) or central (ADEM)</li> </ul>

	myelin via a mechanism usually characterized as molecular mimicry.
<b>Year 3</b>	
Community Medicine Clerkship	<ul style="list-style-type: none"> <li>•Develop evidence-based health promotion/disease prevention plans for patients of any age or gender.</li> <li>•CDC Vaccine Schedule app introduced during health fair didactics</li> <li>•Immunization status as part of expected health fair history</li> <li>•Required patient types: <ul style="list-style-type: none"> <li>-Preventive exam in adult</li> <li>-Preventive exam in child</li> </ul> </li> </ul>
Family Medicine Clerkship	<ul style="list-style-type: none"> <li>•Develop evidence-based health promotion/disease prevention plans for patients of any age or gender, including those with multiple health issues.</li> <li>•Aquifer cases for family medicine– Immunization learning objectives addressed in five cases</li> <li>•Required procedure: <ul style="list-style-type: none"> <li>-Perform intramuscular injection</li> </ul> </li> </ul>
Internal Medicine Clerkship	<ul style="list-style-type: none"> <li>•Immunization status expected as part of complete history and physical</li> </ul>
Ob/Gyn Clerkship	<ul style="list-style-type: none"> <li>•Apply recommended prevention strategies to women throughout the life-span.</li> <li>•Immunizations as part of women’s preventive care</li> <li>•Rh isoimmunization</li> </ul>
Pediatric Clerkship	<ul style="list-style-type: none"> <li>•Prevention – List and describe the key components of anticipatory guidance in children of all ages along with immunizations and injury prevention and the developmental rationale behind each.</li> <li>•Vaccine adverse effects</li> <li>•Aquifer cases for pediatrics – Immunization learning objectives addressed in six cases</li> </ul>