

# 099100LS 110302 Introduction to Life Science

## 生命科學導論

**Instructors :** HUANG, HAIMEI 黃海美、YEH, SHIH-RUNG 葉世榮、

PAN, RONG-LONG 潘榮隆、WAGNER OLIVER 王歐力

**Teaching Assistants :**

蔡儒瑩 ( 42689 )、劉幸怡 ( 33197 )、林育賢 ( 42685 )、張妍 ( 33479 )

**Time :** R7、R8、R9 ( 15:20-18:10 )

**Room :** LSII R109 , 生科二館 109 教室

Week	Date	Topic	Instructor	Reference
1	09/16	Engineering Aspects of the Cell	WAGNER OLIVER	Kasza K.E. et al. "The cell as a material" <i>Curr Opin Cell Biol.</i> 2007. 19:101-7
2	09/23	Class suspended 停課		
3	09/30	Biological Machines, Cell Mechanics and Nanotechnology	WAGNER OLIVER	van den Heuvel MG, Dekker C. "Motor proteins at work for nanotechnology" <i>Science.</i> 2007. 317:333-6
4	10/07	Non-biological Machines and Bio-Nanotechnology	WAGNER OLIVER	van den Heuvel MG, Dekker C. "Motor proteins at work for nanotechnology" <i>Science.</i> 2007. 317:333-6
5	10/14	<b>Examination I</b>		<b>Lecture week: 1-4</b>
6	10/21	<b>Secrets within Cells (I)</b> 1. Why are all organisms made of Cells? 2. How do Cells turn back the clock? 3. Different stem cells	Huang, Haimei	1. Text in internet <a href="http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookCELL2.html">www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookCELL2.html</a> 2. 細胞時光的逆轉者 <i>科學人</i> 73: 114-115 (2009-Jan.) 3. 取代胚胎幹細胞的方案 (Potent Alternative) <i>Scientific American</i> 2008-Dec. p112-4 <i>科學人</i> 73: 12-13 (2008-Mar.)
7	10/28	<b>Secrets within Cells (II)</b> 1. Yours cells are my cells 2. Limbs Regeneration 3. Fibroblasts: Navigator for Regeneration	Huang, Haimei	1. 你的細胞就是我的細胞 <i>科學人</i> 73: 53-59, 2008-March) 2. 人類斷肢也能再生? <i>科學人</i> 75: 42-49 (2008-May) 3. 纖維母細胞: 再生反應的領航員 <i>科學人</i> 75: 50-52 (2008-May)
8	11/04	<b>All about Cancer</b> 1. Statistics on Cancer 2. Untangling the Roots of cancer 3. Chromosomal Chaos and cancer 4. Mapping the cancer genome	Huang, Haimei	1. 癌症的統計數字 2. 追尋癌症的根源 3. 染色體錯亂: 致癌新觀點 4. 癌症基因大解碼 Internet data from public health reports <i>科學人</i> (特刊) 5 : 88-98 (2007-Oct.) <i>科學人</i> 64: 100-107 (2007-June) <i>科學人</i> 62 : 50-65 (2007-April)
9	11/11	<b>Anti-Cancer strategies</b> 1. Liver Cancer Studies in Taiwan 2. A Malignant Flame 3. Taming vessels to treat	Huang, Haimei	1. 肝癌基因全記錄 <i>科學人</i> 62: 66-69 (2007-April) 2. 發炎: 助長癌症的惡火 <i>科學人</i> 67 : 96-103 (2007-Sept.) 3. 馴服血管治腫瘤 <i>科學人</i> 76 : 70-77 (2008-June) 4. 標靶藥物, 戰勝乳癌 <i>科學人</i> 80: 122-129 (2008-Oct.)

		cancer 4. Gaining Ground on Breast Cancer				
10	11/18	Class suspended 停課				
11	11/25	<b>Examination II</b>			<b>Lecture week: 6-10</b>	
12	12/02	清華的故事 DNA 的故事	PAN, RONG-LONG			
13	12/09	植物的故事	PAN, RONG-LONG			
14	12/16	醫學典範	PAN, RONG-LONG			
15	12/23		YEH, SHIH-RUNG			
16	12/30		YEH, SHIH-RUNG			
17	01/06		YEH, SHIH-RUNG			
18	01/13	<b>Examination III</b>			<b>Lecture week: 12-17</b>	