

## 生物科技管理專題研討

授課教師：台灣經濟研究院生物科技產業研究中心孫智麗主任

預計 100 學年度下學期開課，一學期兩學分選修課程，上課時間為每雙週五下午四個小時

台積 833/18/ F6F7F8F9 選，修課同學要選擇至少一篇 papers 做報告

日期時間	主題	內容
2 月 24 日 14:10~16:00 (2 小時)	Introduction	<ul style="list-style-type: none"> <li>✓ 前瞻生物科技未來發展大趨勢</li> <li>✓ 從廠商調查看台灣生技產業發展現況</li> </ul>
3 月 16 日 14:10~18:10 (4 小時)	Industry Analysis	<ol style="list-style-type: none"> <li>1. Lessons from 60 years of pharmaceutical innovation, <i>Nature Reviews Drug Discovery</i> 8: p959, 2009.</li> <li>2. Value networks identify innovation in 21st century pharmaceutical research, <i>Drug Discovery Today</i> 14: p68, 2009.</li> <li>3. How many patents does a biopharmaceutical company need? <i>Nature Biotechnology</i> 26: p763, 2008.</li> <li>4. The importance of new companies for drug discovery: origins of a decade of new drugs, <i>Nature Reviews Drug Discovery</i> 9: p867, 2010.</li> </ol>
3 月 30 日 14:10~18:10 (4 小時)	Market Analysis	<ol style="list-style-type: none"> <li>5. What's fueling the biotech engine 2010-2011, <i>Nature Biotechnology</i> 29: p1083, 2011.</li> <li>6. Growth of the Asian health-care market: global implications for the pharmaceutical industry, <i>Nature Reviews Drug Discovery</i> 6: p785, 2007.</li> <li>7. Medicare formulary coverage for top – selling biologics, <i>Nature Biotechnology</i> 27: p1082, 2009.</li> </ol>
4 月 13 日 14:10~18:10 (4 小時)	Financing	<ol style="list-style-type: none"> <li>8. Does R&amp;D pay? <i>Drug Discovery Today</i> 15:p230, 2010.</li> <li>9. The Cost of Biopharmaceutical R&amp;D: Is Biotech Different? <i>Managerial and Decision Economics</i> 28: p469, 2007.</li> <li>10. Biotech acquisitions by big pharma: why and what is next, <i>Drug Discovery Today</i> 14: p818, 2009.</li> <li>11. Coming to terms: Before taking other people's money to finance your venture, it pays to fully educate yourself, <i>Nature Biotechnology</i> 28: p120, 2010.</li> </ol>
4 月 27 日 14:10~18:10 (4 小時)	Business Development	<ol style="list-style-type: none"> <li>12. Commercialization strategies of young biotechnology firms, <i>Research Policy</i> 37: p1765, 2008.</li> <li>13. Six secrets to success—how to build a sustainable biotech business, <i>Nature Biotechnology</i> 27: p595, 2009.</li> <li>14. The seven deadly sins of business development, <i>Nature Biotechnology</i> 26: p375, 2008.</li> <li>15. Making the leap into entrepreneurship, <i>Nature Biotechnology</i> 28: p11, 2010.</li> </ol>
5 月 11 日 14:10~18:10 (4 小時)	Management Issue	<ol style="list-style-type: none"> <li>16. The case for entrepreneurship in R&amp;D in the pharmaceutical industry, <i>Nature Reviews Drug Discovery</i> 9:p683, 2010.</li> <li>17. Strategic groups in the biopharmaceutical industry: implications for performance, <i>Drug Discovery Today</i> 14: p726, 2009.</li> <li>18. Drug discovery: are productivity metrics inhibiting motivation and creativity? <i>Drug Discovery Today</i> 13: p997, 2008.</li> <li>19. The 'big pharma' dilemma: develop new drugs or promote existing ones? <i>Nature Reviews Drug Discovery</i> 8: p533, 2009.</li> <li>20. Managing freedom: Managing researchers as if they were warriors, <i>Drug Discovery Today</i> 13: p555, 2008.</li> <li>21. Streamlining your business for success, <i>Nature Biotechnology</i> 29: p2, 2011.</li> <li>22. Project management of life-science research projects: project characteristics, challenges and training needs, <i>Drug Discovery Today</i> 16: p93, 2011.</li> </ol>
5 月 25 日 14:10~18:10 (4 小時)	R&D Strategy, Technology Licensing	<ol style="list-style-type: none"> <li>23. Portfolio analysis and R&amp;D decision making, <i>Nature Reviews Drug Discovery</i> 8: p189, 2009.</li> <li>24. Drug discovery: new models for industry-academic partnership, <i>Drug Discovery Today</i> 14: p95, 2009.</li> <li>25. Leveraging your biotech intellectual property, <i>Nature Biotechnology</i> 26: p607, 2008.</li> <li>26. The economics of licensing contracts, <i>Nature Biotechnology</i> 26: p855, 2008.</li> <li>27. Licensing: pros and cons for biotech, <i>Drug Discovery Today</i> 14: p227, 2009.</li> <li>28. Disclosing discoveries, <i>Nature Biotechnology</i> 28: p9, 2010.</li> </ol>
6 月 8 日 14:10~18:10 (4 小時)	Technology Valuation	<ol style="list-style-type: none"> <li>29. Putting a price on biotechnology, <i>Nature Biotechnology</i> 19: p5, 2001</li> <li>30. Pharmaceutical R&amp;D: the road to positive returns, <i>Nature Reviews Drug Discovery</i> 8: p609, 2009.</li> <li>31. Weighing the outcomes, <i>Nature Biotechnology</i> 26: p173, 2008.</li> <li>32. Assessing the translatability of drug projects: what needs to be scored to predict success? <i>Nature Reviews Drug Discovery</i> 8: p541, 2009.</li> </ol>
6 月 22 日		期末考