

TMSDRDSI: Drug Design MSc

TMSDRDSING01: MSc Drug Design
WIBRG001, WIBRG002, WIBRG003, WIBRG004, 5 + 6

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@article{Alley_Okeley_Senter_2010, title={Antibody-drug conjugates: targeted drug delivery for cancer}, volume={14}, DOI={10.1016/j.cbpa.2010.06.170}, number={4}, journal={Current Opinion in Chemical Biology}, author={Alley, Stephen C and Okeley, Nicole M and Senter, Peter D}, year={2010}, month={Aug}, pages={529-537} }

@article{Baurin_Aboul-Ela_Barril_Davis_Drysdale_Dymock_Finch_Fromont_Richardson_Simmonite_et_al._2004, title={Design and Characterization of Libraries of Molecular Fragments for Use in NMR Screening against Protein Targets}, volume={44}, url={https://contentstore.cla.co.uk/secure/link?id=e3feb169-e40b-f011-90cc-c5989c4ef87d}, DOI={10.1021/ci049806z}, number={6}, journal={Journal of Chemical Information and Modeling}, author={Baurin, N. and Aboul-Ela, F. and Barril, X. and Davis, B. and Drysdale, M. and Dymock, B. and Finch, H. and Fromont, C. and Richardson, C. and Simmonite, H. and Hubbard, R.E.}, year={2004}, month={Nov}, pages={2157-2166} }
@article{Beck_Wurch_Bailly_Corvaia_2010, title={Strategies and challenges for the next generation of therapeutic antibodies}, volume={10}, DOI={10.1038/nri2747}, number={5}, journal={Nature Reviews Immunology}, author={Beck, Alain and Wurch, Thierry and Bailly, Christian and Corvaia, Nathalie}, year={2010}, month={May}, pages={345-352} }

@article{Bissantz_Kuhn_Stahl_2010, title={A Medicinal Chemist's Guide to Molecular Interactions}, volume={53}, url={https://contentstore.cla.co.uk/secure/link?id=fb92e363-cb0b-f011-90cc-c5989c4ef87d}, DOI={10.1021/jm100112j}, number={14}, journal={Journal of Medicinal Chemistry}, author={Bissantz, Caterina and Kuhn, Bernd and Stahl, Martin}, year={2010}, month={Jul}, pages={5061-5084} }

@article{Blake_2005, title={Identification and Evaluation of Molecular Properties Related to Preclinical Optimization and Clinical Fate}, volume={1}, DOI={10.2174/157340605774598081}, number={6}, journal={Medicinal Chemistry}, author={Blake, J. F.}, year={2005}, month={Nov}, pages={649-655} }

@article{Bradbury_Sidhu_Dübel_McCafferty_2011, title={Beyond natural antibodies: the power of in vitro display technologies}, volume={29}, DOI={10.1038/nbt.1791}, number={3}, journal={Nature Biotechnology}, author={Bradbury, Andrew R M and Sidhu, Sachdev and Dübel, Stefan and McCafferty, John}, year={2011}, month={Mar}, pages={245-254} }

@article{Brignier_Gewirtz_2010, title={Embryonic and adult stem cell therapy}, volume={125}, DOI={10.1016/j.jaci.2009.09.032}, number={2}, journal={Journal of Allergy and Clinical Immunology}, author={Brignier, Anne C. and Gewirtz, Alan M.},

year={2010}, month={Feb}, pages={S336-S344} }

@article{Castanotto_Rossi_2009, title={The promises and pitfalls of RNA-interference-based therapeutics}, volume={457}, DOI={10.1038/nature07758}, number={7228}, journal={Nature}, author={Castanotto, Daniela and Rossi, John J.}, year={2009}, month={Jan}, pages={426-433} }

@article{Chandra_2009, title={Computational systems approach for drug target discovery}, volume={4}, DOI={10.1517/17460440903380422}, number={12}, journal={Expert Opinion on Drug Discovery}, author={Chandra, Nagasuma}, year={2009}, month={Dec}, pages={1221-1236} }

@article{Colquhoun_1998, title={Binding, gating, affinity and efficacy: The interpretation of structure-activity relationships for agonists and of the effects of mutating receptors}, volume={125}, DOI={10.1038/sj.bjp.0702164}, number={5}, journal={British Journal of Pharmacology}, author={Colquhoun, David}, year={1998}, month={Nov}, pages={923-947} }

@article{Congreve_Chessari_Tisi_Woodhead_2008, title={Recent Developments in Fragment-Based Drug Discovery}, volume={51}, url={https://contentstore.cla.co.uk/secure/link?id=0bbaf30c-e20b-f011-90cc-c5989c4ef87d}, DOI={10.1021/jm8000373}, number={13}, journal={Journal of Medicinal Chemistry}, author={Congreve, Miles and Chessari, Gianni and Tisi, Dominic and Woodhead, Andrew J.}, year={2008}, month={Jul}, pages={3661-3680} }

@book{Copeland, Robert Allen_2005, address={Hoboken, N.J.}, title={Evaluation of enzyme inhibitors in drug discovery: a guide for medicinal chemists and pharmacologists}, volume={Methods of biochemical analysis}, url={https://onlinelibrary.wiley.com/doi/book/10.1002/9781118540398}, publisher={J. Wiley}, author={Copeland, Robert Allen}, year={2005} }

@book{Cornish-Bowden, Athel_2004, address={London}, edition={3rd ed}, title={Fundamentals of enzyme kinetics}, publisher={Portland}, author={Cornish-Bowden, Athel}, year={2004} }

@article{DiMasi_Hansen_Grabowski_2003, title={The price of innovation: new estimates of drug development costs}, volume={22}, DOI={10.1016/S0167-6296(02)00126-1}, number={2}, journal={Journal of Health Economics}, author={DiMasi, Joseph A and Hansen, Ronald W and Grabowski, Henry G}, year={2003}, month={Mar}, pages={151-185} }

@article{Ducry_Stump_2010, title={Antibody-drug conjugates: Linking cytotoxic payloads to monoclonal antibodies}, volume={21}, DOI={10.1021/bc9002019}, number={1}, journal={Bioconjugate chemistry}, author={Ducry, Laurent and Stump, Bernhard}, year={2010}, month={Jan}, pages={5-13} }

@article{Dunlop_2008, title={High-throughput electrophysiology: an emerging paradigm for ion-channel screening and physiology}, volume={7}, DOI={10.1038/nrd2552}, number={4}, journal={Nature Reviews Drug Discovery}, author={Dunlop, John}, year={2008}, month={Apr}, pages={358-368} }

@book{Engel, Thomas_Gasteiger, J._2003, title={Chemoinformatics: a textbook},

author={Engel, Thomas and Gasteiger, J.}, year={2003} }

@article{Fitt_Nodder_2010, title={Setting the threshold for industrial application: the UK diverges from Europe}, volume={5}, DOI={10.1093/jiplp/jpq061}, number={8}, journal={Journal of Intellectual Property Law & Practice}, author={Fitt, R. and Nodder, E.}, year={2010}, month={Jun}, pages={560-565} }

@book{Gasteiger, J._2003, title={Handbook of chemoinformatics: from data to knowledge}, url={https://onlinelibrary.wiley.com/doi/book/10.1002/9783527618279}, author={Gasteiger, J.}, year={2003} }

@book{Gibb, Alasdair J._Foreman, John C._Johansen, Torben_2011, address={Boca Raton, FL}, edition={3rd ed}, title={Textbook of receptor pharmacology}, publisher={CRC Press}, author={Gibb, Alasdair J. and Foreman, John C. and Johansen, Torben}, year={2011} }

@article{Grimm_2009, title={Small silencing RNAs: State-of-the-art}, volume={61}, DOI={10.1016/j.addr.2009.05.002}, number={9}, journal={Advanced Drug Delivery Reviews}, author={Grimm, Dirk}, year={2009}, month={Jul}, pages={672-703} }

@book{Gu, Jenny_Bourne, Philip E._2008, address={Hoboken, N.J.}, edition={2nd ed}, title={Structural bioinformatics}, volume={Methods of biochemical analysis}, publisher={Wiley}, author={Gu, Jenny and Bourne, Philip E.}, year={2008} }

@article{Holliger_Hudson_2005, title={Engineered antibody fragments and the rise of single domains}, volume={23}, DOI={10.1038/nbt1142}, number={9}, journal={Nature Biotechnology}, author={Holliger, Philipp and Hudson, Peter J.}, year={2005}, month={Sep}, pages={1126-1136} }

@article{Hopkins_Groom_2002, title={Opinion: The druggable genome}, volume={1}, DOI={10.1038/nrd892}, number={9}, journal={Nature Reviews Drug Discovery}, author={Hopkins, Andrew L. and Groom, Colin R.}, year={2002}, month={Sep}, pages={727-730} }

@article{Hopkins_Groom_Alex_2004, title={Ligand efficiency: a useful metric for lead selection}, volume={9}, DOI={10.1016/S1359-6446(04)03069-7}, number={10}, journal={Drug Discovery Today}, author={Hopkins, Andrew L. and Groom, Colin R. and Alex, Alexander}, year={2004}, month={May}, pages={430-431} }

@article{Ikura_Inouye_1998, title={NMR structure of the histidine kinase domain of the E. coli osmosensor EnvZ: Article : Nature}, volume={396}, DOI={10.1038/23968}, number={6706}, journal={Nature}, author={Ikura, Mitsuhiro and Inouye, Masayori}, year={1998}, month={Nov}, pages={88-92} }

@book{Jarnagin_2001, address={Chichester}, title={Receptor Binding in Drug Discovery}, DOI={10.1038/npg.els.0000056}, journal={Encyclopedia of Life Sciences}, publisher={John Wiley & Sons, Ltd}, author={Jarnagin, Kurt}, year={2001}, month={May} }

@inbook{Jarnagin, title={Receptor Binding in Drug Discovery}, booktitle={eLS}, author={Jarnagin, Kurt} }

@article{Jinek_Doudna_2009, title={A three-dimensional view of the molecular machinery of RNA interference}, volume={457}, DOI={10.1038/nature07755}, number={7228}, journal={Nature}, author={Jinek, Martin and Doudna, Jennifer A.}, year={2009}, month={Jan}, pages={405-412} }

@article{Kalluri_Kanasaki_2008, title={RNA interference: Generic block on angiogenesis}, volume={452}, DOI={10.1038/452543a}, number={7187}, journal={Nature}, author={Kalluri, Raghu and Kanasaki, Keizo}, year={2008}, month={Apr}, pages={543-545} }

@article{Kenakin_2009, title={Cellular assays as portals to seven-transmembrane receptor-based drug discovery}, volume={8}, DOI={10.1038/nrd2838}, number={8}, journal={Nature Reviews Drug Discovery}, author={Kenakin, Terry P.}, year={2009}, month={Jul}, pages={617-626} }

@article{Khawaja_Dunlop_Kowal_2008, title={Scintillation proximity assay in lead discovery}, volume={3}, DOI={10.1517/17460441.3.11.1267}, number={11}, journal={Expert Opinion on Drug Discovery}, author={Khawaja, Xavier and Dunlop, John and Kowal, Dianne}, year={2008}, month={Nov}, pages={1267-1280} }

@article{Kola_Landis_2004, title={Opinion: Can the pharmaceutical industry reduce attrition rates?}, volume={3}, DOI={10.1038/nrd1470}, number={8}, journal={Nature Reviews Drug Discovery}, author={Kola, Ismail and Landis, John}, year={2004}, month={Aug}, pages={711-716} }

@article{Krohn_Link_2003, title={Interpreting enzyme and receptor kinetics: keeping it simple, but not too simple}, volume={30}, DOI={10.1016/S0969-8051(03)00132-X}, number={8}, journal={Nuclear Medicine and Biology}, author={Krohn, Kenneth A. and Link, Jeanne M.}, year={2003}, month={Nov}, pages={819-826} }

@book{Leach, Andrew R._Gillet, Valerie J._2003, title={An introduction to chemoinformatics}, author={Leach, Andrew R. and Gillet, Valerie J.}, year={2003} }

@article{Lipinski_Lombardo_Dominy_Feeney_1997, title={Experimental and computational approaches to estimate solubility and permeability in drug discovery and development settings}, volume={23}, DOI={10.1016/S0169-409X(96)00423-1}, number={1-3}, journal={Advanced Drug Delivery Reviews}, author={Lipinski, Christopher A. and Lombardo, Franco and Dominy, Beryl W. and Feeney, Paul J.}, year={1997}, month={Jan}, pages={3-25} }

@article{Lledo_Merkle_Alvarez-Buylla_2008, title={Origin and function of olfactory bulb interneuron diversity}, volume={31}, DOI={10.1016/j.tins.2008.05.006}, number={8}, journal={Trends in Neurosciences}, author={Lledo, Pierre-Marie and Merkle, Florian T. and Alvarez-Buylla, Arturo}, year={2008}, month={Aug}, pages={392-400} }

@article{Macarron_Banks_Bojanic_Burns_Cirovic_Garyantes_Green_Hertzberg_Janzen_Paslay_et al._2011, title={Impact of high-throughput screening in biomedical research}, volume={10}, DOI={10.1038/nrd3368}, number={3}, journal={Nature Reviews Drug Discovery}, author={Macarron, Ricardo and Banks, Martyn N. and Bojanic, Dejan and Burns, David J. and Cirovic, Dragan A. and Garyantes, Tina and Green, Darren V. S. and Hertzberg, Robert P. and Janzen, William P. and Paslay, Jeff W. and Schopfer, Ulrich and

Sittampalam, G. Sitta}, year={2011}, month={Mar}, pages={188-195} }

@article{Matter_1997, title={Selecting Optimally Diverse Compounds from Structure Databases: A Validation Study of Two-Dimensional and Three-Dimensional Molecular Descriptors}, volume={40}, url={https://contentstore.cla.co.uk/secure/link?id=c491b572-220b-f011-90cc-c5989c4ef87d}, DOI={10.1021/jm960352+}, number={8}, journal={Journal of Medicinal Chemistry}, author={Matter, Hans}, year={1997}, month={Apr}, pages={1219-1229} }

@article{Murray_2010, title={Fragment-Based Drug Discovery Applied to Hsp90. Discovery of Two Lead Series with High Ligand Efficiency}, volume={53}, DOI={10.1021/jm100059d}, number={16}, journal={Journal of Medicinal Chemistry}, author={Murray, Christopher W.}, year={2010}, month={Aug}, pages={5942-5955} }
@article{Murray_Rees_2009, title={The rise of fragment-based drug discovery}, volume={1}, DOI={10.1038/nchem.217}, number={3}, journal={Nature Chemistry}, author={Murray, Christopher W. and Rees, David C.}, year={2009}, month={Jun}, pages={187-192} }

@article{Nagorsen_Baeuerle_2011, title={Immunomodulatory therapy of cancer with T cell-engaging BiTE antibody blinatumomab}, volume={317}, DOI={10.1016/j.yexcr.2011.03.010}, number={9}, journal={Experimental Cell Research}, author={Nagorsen, Dirk and Baeuerle, Patrick A.}, year={2011}, month={May}, pages={1255-1260} }

@book{Nelson, David L._Cox, Michael M._Lehninger, Albert L._2008, address={Basingstoke}, edition={5th ed}, title={Lehninger principles of biochemistry}, publisher={W.H. Freeman}, author={Nelson, David L. and Cox, Michael M. and Lehninger, Albert L.}, year={2008} }

@book{Orengo, Christine Ann_Thornton, Janet M._Jones, David Tudor_2003, address={Oxford}, title={Bioinformatics: genes, proteins and computers}, url={http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780203427828}, publisher={BIOS}, author={Orengo, Christine Ann and Thornton, Janet M. and Jones, David Tudor}, year={2003} }

@article{Overington_Al-Lazikani_Hopkins_2006, title={How many drug targets are there?}, volume={5}, DOI={10.1038/nrd2199}, number={12}, journal={Nature Reviews Drug Discovery}, author={Overington, John P. and Al-Lazikani, Bissan and Hopkins, Andrew L.}, year={2006}, month={Dec}, pages={993-996} }

@book{Patrick, Graham L._2017, title={An introduction to medicinal chemistry}, author={Patrick, Graham L.}, year={2017} }

@book{Petsko, Gregory A._Ringe, Dagmar_2004, address={London}, title={Protein structure and function}, volume={Primers in biology}, publisher={New Science}, author={Petsko, Gregory A. and Ringe, Dagmar}, year={2004} }

@article{Pillay_Gan_Scott_2011, title={Antibodies in oncology}, volume={28}, DOI={10.1016/j.nbt.2011.03.021}, number={5}, journal={New Biotechnology}, author={Pillay, Vinochani and Gan, Hui K. and Scott, Andrew M.}, year={2011}, month={Sep}, pages={518-529} }

@book{Rang, H. P._Dale, M. Maureen_2019, address={Edinburgh}, edition={9th ed}, title={Pharmacology}, url={https://elsevierlibrary.co.uk/product/9780702074462}, publisher={Churchill Livingstone}, author={Rang, H. P. and Dale, M. Maureen}, year={2019} }

@article{Richard M. Durbin_2010, title={A map of human genome variation from population-scale sequencing}, volume={467}, DOI={10.1038/nature09534}, number={7319}, journal={Nature}, author={Richard M. Durbin}, year={2010}, month={Oct}, pages={1061-1073} }

@article{Schrama_Reisfeld_Becker_2006, title={Antibody targeted drugs as cancer therapeutics}, volume={5}, DOI={10.1038/nrd1957}, number={2}, journal={Nature Reviews Drug Discovery}, author={Schrama, David and Reisfeld, Ralph A. and Becker, Jürgen C.}, year={2006}, month={Jan}, pages={147-159} }

@book{Selzer, P. M._Rohwer, A._Marhöfer, R. J._2008, address={Berlin}, title={Applied bioinformatics: an introduction}, publisher={Springer}, author={Selzer, P. M. and Rohwer, A. and Marhöfer, R. J.}, year={2008} }

@article{Shen_Samul_Silva_Akiyama_Liu_Saishin_Hackett_Zinnen_Kossen_Fosnaugh_et al._2005, title={Suppression of ocular neovascularization with siRNA targeting VEGF receptor 1}, volume={13}, DOI={10.1038/sj.gt.3302641}, number={3}, journal={Gene Therapy}, author={Shen, J and Samul, R and Silva, R L and Akiyama, H and Liu, H and Saishin, Y and Hackett, S F and Zinnen, S and Kossen, K and Fosnaugh, K and Vargeese, C and Gomez, A and Bouhana, K and Aitchison, R and Pavco, P and Campochiaro, P A}, year={2005}, month={Sep}, pages={225-234} }

@article{Smith_2001, title={Discovery of heterocyclic ureas as a new class of raf kinase inhibitors: identification of a second generation lead by a combinatorial chemistry approach}, volume={11}, DOI={10.1016/S0960-894X(01)00571-6}, number={20}, journal={Bioorganic & Medicinal Chemistry Letters}, author={Smith, Roger A.}, year={2001}, month={Oct}, pages={2775-2778} }

@article{Stadtfeld_Hochedlinger_2010, title={Induced pluripotency: history, mechanisms, and applications}, volume={24}, DOI={10.1101/gad.1963910}, number={20}, journal={Genes & Development}, author={Stadtfeld, M. and Hochedlinger, K.}, year={2010}, month={Oct}, pages={2239-2263} }

@article{Swinney_Anthony_2011, title={How were new medicines discovered?}, volume={10}, DOI={10.1038/nrd3480}, number={7}, journal={Nature Reviews Drug Discovery}, author={Swinney, David C. and Anthony, Jason}, year={2011}, month={Jun}, pages={507-519} }

@book{Thomas, Gareth_2003, title={Fundamentals of medicinal chemistry}, author={Thomas, Gareth}, year={2003} }

@article{Vaishnaw_Gollob_Gamba-Vitalo_Hutabarat_Sah_Meyers_de Fougerolles_Maraganore_2010, title={A status report on RNAi therapeutics}, volume={1}, DOI={10.1186/1758-907X-1-14}, number={1}, journal={Silence}, author={Vaishnaw, Akshay K and Gollob, Jared and Gamba-Vitalo, Christina and Hutabarat, Renta and Sah, Dinah and Meyers, Rachel and de Fougerolles, Tony and Maraganore, John}, year={2010} }

@article{Veber_Johnson_Cheng_Smith_Ward_Kopple_2002, title={Molecular Properties That Influence the Oral Bioavailability of Drug Candidates}, volume={45}, url={https://contentstore.cla.co.uk/secure/link?id=de13eed7-c90b-f011-90cc-c5989c4ef87d}, DOI={10.1021/jm020017n}, number={12}, journal={Journal of Medicinal Chemistry}, author={Veber, Daniel F. and Johnson, Stephen R. and Cheng, Hung-Yuan and Smith, Brian R. and Ward, Keith W. and Kopple, Kenneth D.}, year={2002}, month={Jun}, pages={2615-2623} }

@article{Watt_Driskell_2010, title={The therapeutic potential of stem cells}, volume={365}, DOI={10.1098/rstb.2009.0149}, number={1537}, journal={Philosophical Transactions of the Royal Society B: Biological Sciences}, author={Watt, F. M. and Driskell, R. R.}, year={2010}, month={Jan}, pages={155-163} }

@article{Webb_2011, title={Pharma interest surges in antibody drug conjugates}, volume={29}, DOI={10.1038/nbt0411-297}, number={4}, journal={Nature Biotechnology}, author={Webb, Sarah}, year={2011}, month={Apr}, pages={297-298} }

@article{Weiner_Surana_Wang_2010, title={Monoclonal antibodies: versatile platforms for cancer immunotherapy}, volume={10}, DOI={10.1038/nri2744}, number={5}, journal={Nature Reviews Immunology}, author={Weiner, Louis M. and Surana, Rishi and Wang, Shangzi}, year={2010}, month={May}, pages={317-327} }

@article{Welsch_Snyder_Stockwell_2010, title={Privileged scaffolds for library design and drug discovery}, volume={14}, DOI={10.1016/j.cbpa.2010.02.018}, number={3}, journal={Current Opinion in Chemical Biology}, author={Welsch, Matthew E and Snyder, Scott A and Stockwell, Brent R}, year={2010}, month={Jun}, pages={347-361} }

@article{Wilhelm_2006, title={Discovery and development of sorafenib: a multikinase inhibitor for treating cancer}, volume={5}, DOI={10.1038/nrd2130}, number={10}, journal={Nature Reviews Drug Discovery}, author={Wilhelm, Scott}, year={2006}, month={Oct}, pages={835-844} }

@article{Willett_Barnard_Downs_1998, title={Chemical Similarity Searching}, volume={38}, url={https://contentstore.cla.co.uk/secure/link?id=e44202ff-cd0b-f011-90cc-c5989c4ef87d}, DOI={10.1021/ci9800211}, number={6}, journal={Journal of Chemical Information and Modeling}, author={Willett, P. and Barnard, J.M. and Downs, G.M.}, year={1998}, month={Nov}, pages={983-996} }

@article{Woodhead_2010, title={Discovery of (2,4-Dihydroxy-5-isopropylphenyl)-[5-(4-methylpiperazin-1-ylmethyl)-1,3-dihydroisoindol-2-yl]methanone (AT13387), a Novel Inhibitor of the Molecular Chaperone Hsp90 by Fragment Based Drug Design}, volume={53}, url={https://contentstore.cla.co.uk/secure/link?id=2cf7cd66-e30b-f011-90cc-c5989c4ef87d}, DOI={10.1021/jm100060b}, number={16}, journal={Journal of Medicinal Chemistry}, author={Woodhead, Andrew J.}, year={2010}, month={Aug}, pages={5956-5969} }

@book{Xiong, Jin_2006, address={New York}, title={Essential bioinformatics}, publisher={Cambridge University Press}, author={Xiong, Jin}, year={2006} }

@book{Zvelebil, Marketa J._Baum, Jeremy O._2008, address={London},

title={Understanding bioinformatics},
url={https://bibliu.com/app/#/view/books/9781136976964/pdf2htmlex/index.html#page_C_over}, publisher={Garland Science}, author={Zvelebil, Marketa J. and Baum, Jeremy O.}, year={2008} }

@misc{Human embryonic stem cells: Derivation, culture, and differentiation: A review }