
BIOGRAPHICAL SKETCH

NAME: Graziano Lolli

POSITION TITLE: Associate Professor

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Naples – Naples, Italy	M.Sc. Chemistry	06/2000	Chemistry
LMB - University of Oxford – Oxford, UK	PhD	09/2005	Biochemistry

A. Personal Statement

My scientific career started in the field of Protein Chemistry and Proteomics to move then to Biophysical Chemistry and X-ray crystallography, working both in academia and in pharmaceutical companies. Activities in my research group encompass target identification and validation, syntheses of new chemical entities, structure-based drug development, implementation of cellular models and HTS assays, definition of drugs mechanisms of action, pharmacokinetics and lead optimization.

B. Positions, Scientific Appointments, and Honors

From	To	Position	Institution
Oct 2021	Present	Associate Professor	Università degli Studi di Trento
Oct 2021	Present	Director's delegate for research	Università degli Studi di Trento
Oct 2017	Present	Founder	Sibylla Biotech
Sep 2018	Sep 2021	RTDb - Assistant Professor	Università degli Studi di Trento
Sep 2016	Aug 2018	RTDa - Assistant Professor	Università degli Studi di Trento
Aug 2015	Aug 2016	Oberassistent - Lecturer	University of Zurich
Jan 2015	Jul 2015	Wissenschaftlicher Mitarbeiter - Postdoctoral Fellow	University of Zurich
Nov 2009	Feb 2015	Postdoctoral Fellow - FEBS Distinguished Young Investigator Award	Università degli Studi di Padova
Oct 2006	Oct 2009	FEBS Long-Term Fellowship - Postdoctoral Fellow	IRBM - Merck & Co.
Oct 2005	Sep 2006	Postdoctoral Fellow	University of Oxford
Jul 2000	Sep 2002	Research Fellow	Pharmacia Corporation

Current Funding: PRIN, Ministry of University and Research (202500/2.5 years), 2023-2025

Previous Funding and Awards: Alzheimer's Association NTF (\$ 125000/3 years) 2023-25; CARITRO (€ 40000/1 year), 2023-24; AIRC (Italian Association for Cancer Research) MFAG (€ 443000/6 years), 2018-23; UniTrento Starting Grant, FEBS (Federation of the European Biochemical Societies) Long-Term Fellowship, FEBS Distinguished Young Investigator Award, various intramural funding.

Current Teaching activities: Chemistry & Biochemistry – School of Medicine; Biochemistry II – Bachelor Degree in Biotechnology

Invited reviewer for Nucl. Ac. Res., J. Med. Chem., Journal of Neurochemistry among others and for various funding agencies; Invited speaker at international conferences and for academic seminars.

C. Contributions to Science

44 publications in international peer-reviewed journals, >1700 citations and h-index = 23. More than 150 protein structures determined by X-ray crystallography have been deposited in the PDB.

Patent: PCT/IT2023/050287 (New therapeutic opportunities for the treatment of neuroblastoma and other survivin and CK2 dependent tumors).

D. Relevant publications

1. Cazzanelli G, Dalle Vedove A, Sbardellati N, Valer L, Caflisch A, Lolli G. (2024) Enhanced cellular death in liver and breast cancer cells by dual BET/BRPF1 inhibitors. *Protein Sci.* 33, e5191.
2. Cazzanelli G, Dalle Vedove A, Spagnolli G, Terruzzi L, Colasurdo E, Boldrini A, Patsilnakos A, Sturlese M, Grottesi A, Biasini E, Provenzani A, Quattrone A, Lolli G. (2024) Pliability in the m6A-Binding Region Extends Druggability of YTH Domains. *J Chem Inf Model.* 64, 1682-90.
3. Burigotto M, Vigorito V, Gliech C, Mattivi A, Ghetti S, Bisio A, Lolli G, Holland AJ, Fava LL. (2023) PLK1 promotes the mitotic surveillance pathway by controlling cytosolic 53BP1 availability. *EMBO Rep.* 24, e57234.
4. Cazzanelli G, Vedove AD, Parolin E, D'Agostino VG, Unzue A, Nevado C, Caflisch A, Lolli G. (2023) Reevaluation of bromodomain ligands targeting BAZ2A. *Protein Sci.* 32, e4752.
5. Semrau MS, Giachin G, Covaceuszach S, Cassetta A, Demitri N, Storici P, Lolli G. (2022) Molecular architecture of the glycogen-committed PP1/PTG holoenzyme. *Nat. Commun.* 13, 6199.
6. Micaelli M, Dalle Vedove A, Cerofolini L, Vigna J, Sighel D, Zaccara S, Bonomo I, Poulentzas G, Rosatti EF, Cazzanelli G, Alunno L, Belli R, Peroni D, Dassi E, Murakami S, Jaffrey SR, Fragai M, Mancini I, Lolli G, Quattrone A, Provenzani A. (2022) Small-Molecule Ebselen Binds to YTHDF Proteins Interfering with the Recognition of N 6-Methyladenosine-Modified RNAs. *ACS Pharmacol. Transl. Sci.* 5, 872-91.
7. Dalle Vedove A, Cazzanelli G, Batiste L, Marchand J-R, Spiliotopoulos D, Corsi J, D'Agostino VG, Caflisch A & Lolli G. (2022) Identification of a BAZ2A-bromodomain hit compound by fragment growing. *ACS Med Chem Lett*, 13, 1434-43, co-corresponding author.
8. Dalle Vedove A, Cazzanelli G, Corsi J, Sedykh M, D'Agostino VG, Caflisch A & Lolli G. (2021) Identification of a BAZ2A-bromodomain hit compound by fragment-joining. *ACS Bio & Med Chem Au* 1, 5-10, co-corresponding author.
9. Spagnolli G, Massignan T, Astolfi A, Biggi S, Rigoli M, Brunelli P, Libergoli M, Ianeselli A, Orioli S, Boldrini A, Terruzzi L, Bonaldo V, Maietta G, Lorenzo NL, Fernandez LC, Codeseira YB, Tosatto L, Linsenmeier L, Vignoli B, Petris G, Gasparotto D, Pennuto M, Guella G, Canossa M, Altmeyen HC, Lolli G, Biressi S, Pastor MM, Requena JR, Mancini I, Barreca ML, Faccioli P, & Biasini E. (2021) Pharmacological inactivation of the prion protein by targeting a folding intermediate. *Commun. Biol.* 4, 62.
10. Dalle Vedove A, Zonta F, Zanforlin E, Demitri N, Ribaud G, Cazzanelli G, Ongaro A, Sarno S, Zagotto G, Battistutta R, Ruzzene M & Lolli G. (2020) A novel class of selective CK2 inhibitors targeting its open hinge conformation. *Eur. J. Med. Chem.* 195, 112267. Co-corresponding author.

11. Cozza G, Zonta F, Dalle Vedove A, Venerando A, Dall'Acqua S, Battistutta R, Ruzzene M & Lolli G. (2020) Biochemical and cellular mechanism of protein kinase CK2 inhibition by deceptive curcumin. *FEBS J.* 287, 1850-64. Co-corresponding author.
12. Biggi S, Pancher M, Stincardini C, Luotti S, Massignan T, Dalle Vedove A, Astolfi A, Gatto P, Lolli G, Barreca ML, Bonetto V, Adami V & Biasini E. (2020) Identification of compounds inhibiting prion replication and toxicity by removing PrPC from the cell surface. *J. Neurochem.* 152, 136-50.
13. Dalle Vedove A, Spiliotopoulos D, D'Agostino VG, Marchand JR, Unzue A, Nevado C, Lolli G & Caflisch A. (2018) Structural Analysis of Small-Molecule Binding to the BAZ2A and BAZ2B Bromodomains. *ChemMedChem* 13, 1479-87. Co-corresponding author.
14. Marchand JR, Dalle Vedove A, Lolli G & Caflisch A. (2017) Discovery of Inhibitors of Four Bromodomains by Fragment-Anchored Ligand Docking. *J. Chem. Inf. Model.* 57, 2584-97.
15. Spiliotopoulos D, Wamhoff EC, Lolli G, Rademacher C & Caflisch A. (2017) Discovery of BAZ2A bromodomain ligands. *Eur. J. Med. Chem.* 139, 564-72. Co-corresponding author.
16. Lolli G, Naressi D, Sarno S & Battistutta R. (2017) Characterization of the oligomeric states of the CK2 $\alpha 2\beta 2$ holoenzyme in solution. *Biochem. J.* 474, 2405-16. Co-corresponding author.
17. Marchand JR, Lolli G & Caflisch A. (2016) Derivatives of 3-amino-2-methylpyridine as BAZ2B Bromodomain Ligands: in silico Discovery and in crystallo Validation. *J. Med. Chem.* 59, 9919-27. Co-corresponding author.
18. Unzue A, Zhao H, Lolli G, Dong J, Zhu J, Zechner M, Dolbois A, Caflisch A & Nevado C. (2016) The "gatekeeper" residue modulates the binding mode of acetyl indoles to bromodomains. *J. Med. Chem.* 59, 3087-97.
19. Lolli G & Caflisch A. (2016) High-throughput fragment docking into the BAZ2B bromodomain: Efficient in silico screening for X-ray crystallography. *ACS Chem. Biol.* 11, 800-7. Co-corresponding author.
20. Lolli G, Pasqualetto E, Costanzi E, Bonetto G & Battistutta R. (2016) The STAS domain of mammalian SLC26A5 prestin harbors an anion-binding site. *Biochem. J.* 473, 365-70. Shared first authorship and co-corresponding author.
21. Echaliier A, Hole AJ, Lolli G, Endicott JA & Noble MEM. (2014) An inhibitor's-eye view of the ATP-binding site of CDKs in different regulatory states. *ACS Chem. Biol.* 9, 1251-6.
22. Cozza G, Girardi C, Ranchio A, Lolli G, Sarno S, Orzeszko A, Kazimierczuk Z, Battistutta R, Ruzzene M & Pinna LA (2014) Cell-permeable dual inhibitors of protein kinases CK2 and PIM-1: structural features and pharmacological potential. *Cell. Mol. Life Sci.* 71(16), 3173-85.

23. Lolli G, Ranchio A & Battistutta R. (2014) Active Form of the Protein Kinase CK2 $\alpha\beta 2$ Holoenzyme Is a Strong Complex with Symmetric Architecture. *ACS Chem. Biol.* 9, 366-71. Co-corresponding author.
24. Lolli G & Battistutta R. (2013) Different orientations of low-molecular-weight fragments in the binding pocket of a BRD4 bromodomain. *Acta Cryst.* D69, 2161-64. Corresponding author.
25. Lolli G, Cozza G, Mazzorana M, Tibaldi E, Cesaro L, Donella-Deana A, Meggio F, Venerando A, Franchin C, Sarno S, Battistutta R & Pinna LA. (2012) Inhibition of Protein Kinase CK2 by flavonoids and Tyrphostins. A structural insight. *Biochemistry* 51, 6097-107. Shared first authorship.
26. Lolli G, Pinna LA, Battistutta R (2012) Structural determinants of protein kinase CK2 regulation by auto-inhibitory polymerization. *ACS Chem. Biol.* 7, 1158-63. Co-corresponding author.
27. Papinutto E, Ranchio A, Lolli G, Pinna LA, Battistutta R. (2012) Structural and functional analysis of the flexible regions of the catalytic α -subunit of protein kinase CK2. *J. Struct. Biol.* 177, 382-91.
28. Battistutta R, Cozza G, Pierre F, Papinutto E, Lolli G, Sarno S, O'Brien SE, Siddiqui-Jain A, Haddach M, Anderes K, Ryckman DM, Meggio F & Pinna L.A. (2011) Unprecedented selectivity and structural determinants of a new class of protein kinase CK2 inhibitors in clinical trials for the treatment of cancer. *Biochemistry* 50, 8478-88.
29. Battistutta R & Lolli G. (2011) Structural and functional determinants of protein kinase CK2 α : facts and open questions. *Mol. Cell. Biochem.* 356, 67-73.
30. Lolli G. (2010) Structural dissection of Cyclin-Dependent Kinases regulation and protein recognition properties. *Cell Cycle* 9, 1551-61.
31. Lolli G. (2009) Binding to DNA of the RNA-polymerase II C-Terminal Domain allows discrimination between Cdk7 and Cdk9 phosphorylation. *Nucleic Acids Res.* 37, 1260-68.
32. Baumli S, Lolli G, Lowe ED, Troiani S, Rusconi L, Bullock AN, Debreczeni JE, Knapp S & Johnson LN. (2008) The structure of P-TEFb (CDK9/cyclin T1), its complex with flavopiridol and regulation by phosphorylation. *EMBO J.* 27, 1907-18. Shared first authorship.
33. Lolli G & Johnson LN. (2007) The recognition of Cdk2 by Cdk7. *Proteins* 67, 1048-59.
34. Lolli G & Johnson LN. (2005) CAK – Cyclin-dependent Activating Kinase – a key kinase in cell cycle control and a target for drugs? *Cell Cycle* 4, 572-7. Co-corresponding author.
35. Lolli G, Lowe ED, Brown NR & Johnson LN. (2004) The crystal structure of human CDK7 and its protein recognition properties. *Structure* 12, 2067-79.
36. Lolli G, Thaler F, Valsasina B, Roletto F, Knapp S, Uggeri M, Bachi A, Matafora V, Storici P, Stewart A, Kalisz HM & Isacchi A. (2003) Inhibitor Affinity Chromatography: profiling the specific reactivity of the proteome with immobilized molecules. *Proteomics* 3, 1287-98.