CURRICULUM VITAE

PERSONAL INFORMATION

Name	**Guglielmo Verona**

WORK EXPERIENCE

• Dates (from – to)	May 2022 – to date
• Name and address of employer	**University College London, Centre for Amyloidosis**
• Type of business or sector	Research/Teaching
• Occupation or position held	**Lecturer**
• Main activities and responsibilities	Teaching activity for the BsC (Molecular Mechanism of the Disease) and MsC (Drug Discovery) in Applied Medical Sciences.
• Dates (from – to)	October 2020 – to date
• Name and address of employer	**University of Pavia**
• Type of business or sector	Teaching
• Occupation or position held	**Adjunct Professor of Biochemistry**
• Main activities and responsibilities	Teaching activity for the module of Biochemistry for the Master Degree in Medicine and Surgery, University of Pavia, Italy.
• Dates (from – to)	February 2019 – to date
• Name and address of employer	**University College London, Centre for Amyloidosis and Acute Phase Proteins**
• Type of business or sector	Biochemistry, Molecular Biology, NMR, Drug Discovery
• Occupation or position held	**Research Associate (MRC funded)**
• Main activities and responsibilities	Research activity on the mechanism of transthyretin amyloidogenesis and investigation of the stability of *in vitro* and *ex vivo* transthyretin amyloid fibrils. Development and evaluation of innovative drugs for the treatment of ATTR amyloidosis developed following funding from the UCL Technology Fund. Collaboration with national and international groups researching on α-synuclein.
• Dates (from – to)	March 2016 – December 2021
• Name and address of employer	**Polymerix s.r.l. (Academic spin-off)**
• Type of business or sector	Biotech/Pharmaceutical company
• Occupation or position held	**Co-founder and director**
• Main activities and responsibilities	Polymerix is an entrepreneurial project born from the scientific research expertises in the biochemistry, biology, biotechnology and pharmaceutical areas developed within research groups of the University of Pavia with the goal of developing new health products. Polymerix activities have been focused towards the structural and functional characterization of complex polymers of natural and synthetic origin and towards the design and development of innovative drug delivery systems and medical devices.
• Dates (from – to)	September 2014 - February 2019
• Name and address of employer	**University College London, Centre for Amyloidosis and Acute Phase Proteins**
• Type of business or sector	Biochemistry, Molecular Biology, NMR, Drug Discovery
• Occupation or position held	**PhD student (Rosetrees Trust/Royal Free Charity funded)**
• Main activities and responsibilities	Research activity on the characterization of the molecular mechanism of transthyretin amyloidosis and identification of the putative proteolytic enzyme involved in the priming of the disease. Evaluation of the efficacy of drugs for the treatment of ATTR amyloidosis. NMR investigation of transthyretin dynamics and protein – drugs interactions (Prof. John Christodoulou's UCL NMR facility)
• Dates (from – to)	20 September 2015 - 24 September 2015
• Name and address of employer	**Department of Medical Biosciences, University of Umea, Sweden**
• Type of business or sector	Biochemistry
• Occupation or position held	**Visiting PhD student**
• Main activities and responsibilities	Biochemistry. Investigation of lipoprotein lipase inhibition by apolipoprotein C3.

• Dates (from – to)	April 2014 – June 2014
• Name and address of employer	**Department of Molecular Medicine, University of Pavia, Italy**
• Type of business or sector	Laboratory classes assistance
• Occupation or position held	**Tutor for Pharmacy undergraduates**
• Main activities and responsibilities	Tutoring students during their practical biochemistry classes.

• Dates (from – to)	October 2012 –March 2014
• Name and address of employer	**Department of Molecular Medicine, University of Pavia, Italy (**seconded to **UCL Centre for Amyloidosis and Acute Phase Proteins)**
• Type of business or sector	Biochemistry, Molecular Biology, NMR
• Occupation or position held	**Visiting Researcher**
• Main activities and responsibilities	Research activity on the structural characterization of recombinant wild-type and Asp25Val apolipoprotein C3, including NMR characterization. Investigation of *in vitro* aggregation of different transthyretin variants. Screening of potential drugs for the treatment of ATTR amyloidosis. *In vitro* studies of potential inhibitors of β2-microglobulin fibrillogenesis.

• Dates (from – to)	September 2012
• Name and address of employer	**Department of Molecular Medicine, University of Pavia, Italy (**seconded to **UCL Centre for Cardiovascular Genetics)**
• Type of business or sector	Biochemistry, Molecular Biology
• Occupation or position held	**Visiting Researcher**
Main activities and responsibilities	Purification and expression of recombinant apolipoprotein C3.

• Dates (from – to)	May 2012 – September 2012
• Name and address of employer	**Department of Molecular Medicine, University of Pavia, Italy**
• Type of business or sector	Biochemistry, Molecular Biology
• Occupation or position held	**Research Fellow**
• Main activities and responsabilities	Research activity on the mechanism of fibrillogenesis of the first natural amyloidogenic variant of β2-microglobulin

• Dates (from – to)	January 2011 – May 2012
• Name and address of employer	**Department of Molecular Medicine, University of Pavia, Italy**
• Type of business or sector	Biochemistry, Molecular Biology
• Occupation or position held	**Undergraduate student**
• Main activities and responsabilities	Characterization of the first natural amyloidogenic variant of β2-microglobulin

EDUCATION

• Date	February 2019
• Name and type of organization providing education and training	**University College London (UCL)**
• Principal subjects/occupational skills covered	Biochemistry, Molecular Biology, NMR, Drug Discovery
• Title of qualification	PhD in Amyloidosis. Title of the project: "Towards the elucidation of pathophysiology of amyloid conversion of globular proteins"

• Date	February 2016
• Name and type of organization providing education and training	**University of Pavia**

• Principal subjects/occupational skills covered	Biochemistry, Molecular Biology, NMR, Drug Discovery
• Title of qualification	PhD in Biomedical Sciences XXVIII cycle. Title of the project: "Ruolo di forze biomeccaniche nella fisiopatologia dell'amiloidosi"
• Date	May 2012
• Name and type of organization providing education and training	**University of Pavia**
• Principal subjects/occupational skills covered	Biochemistry, Molecular Biology
• Title of qualification awarded	Master's Degree in Pharmacy. Thesis title: *"β2-microglobulin amyloidosis: a discovery which determines a shift of a scientific paradigm"*
• Level in national classification	110/110 *cum laude* and *encomium*
• Dates	July 2007
• Name and type of organisation providing education and training	**High School "Torquato Taramelli"**
• Title of qualification awarded	High School Diploma
• Level in national classification	100/100

PUBLICATIONS

1. Lavatelli F, Natalello A, Marchese L, Ami D, Corazza A, Raimondi S, Mimmi MC, Malinverni S, Mangione PP, Palmer MT, Lampis A, Concardi M, Verona G, Canetti D, Arbustini E, Bellotti V, Giorgetti S. Truncation of the constant domain drives amyloid formation by immunoglobulin light chains (2024). J Biol Chem. 300(4):107174. doi: 10.1016/j.jbc.2024.107174.

2. Verona G, Raimondi S, Canetti D, Mangione PP, Marchese L, Corazza A, Lavatelli F, Gillmore JD, Taylor GW, Bellotti V, Giorgetti S. Degradation versus fibrillogenesis, two alternative pathways modulated by seeds and glycosaminoglycans (2024). Protein Sci. 33(3):e4931. doi: 10.1002/pro.4931

3. Raimondi S, Faravelli G, Nocerino P, Mondani V, Baruffaldi A, Marchese L, Mimmi MC, Canetti D, Verona G, Caterino M, Ruoppolo M, Mangione PP, Bellotti V, Lavatelli F, Giorgetti S. Human wild-type and D76N β2-microglobulin variants are significant proteotoxic and metabolic stressors for transgenic C. elegans (2023). FASEB Bioadv. 5(11):484-505. doi: 10.1096/fba.2023-00073.

4. Fontana M, Gilbertson J, Verona G, Riefolo M, Slamova I, Leone O, Rowczenio D, Botcher N, Ioannou A, Patel RK, Razvi Y, Martinez-Naharro A, Whelan CJ, Venneri L, Duhlin A, Canetti D, Ellmerich S, Moon JC, Kellman P, Al-Shawi R, McCoy L, Simons JP, Hawkins PN, Gillmore JD. Antibody-Associated Reversal of ATTR Amyloidosis-Related Cardiomyopathy (2023). N Engl J Med. 388(23):2199-2201. doi: 10.1056/NEJMc2304584.

5. Izco M, Schleef M, Schmeer M, Carlos E, Verona G, Alvarez-Erviti L. Targeted Extracellular Vesicle Gene Therapy for Modulating Alpha-Synuclein Expression in Gut and Spinal Cord (2023). Pharmaceutics 15(4):1230. doi: 10.3390/pharmaceutics15041230.

6. Cantarutti C, Mimmi MC, Verona G, Mandaliti W, Taylor GW, Mangione PP, Giorgetti S, Bellotti V, Corazza A. Calcium Binds to Transthyretin with Low Affinity. Biomolecules. (2022) 12(8):1066. doi: 10.3390/biom12081066.

7. Faravelli G, Mondani V, Mangione PP, Raimondi S, Marchese L, Lavatelli F, Stoppini M, Corazza A, Canetti D, Verona G, Obici L, Taylor GW, Gillmore JD, Giorgetti S, Bellotti V. Amyloid Formation by Globular Proteins: The Need to Narrow the Gap Between in Vitro and in Vivo Mechanisms. Front Mol Biosci. (2022) 9:830006. doi: 10.3389/fmolb.2022.830006.

8. Slamova I, Adib R, Ellmerich S, Golos MR, Gilbertson JA, Botcher N, Canetti D, Taylor GW, Rendell N, Tennent GA, Verona G, Porcari R, Mangione PP, Gillmore JD, Pepys MB, Bellotti V, Hawkins PN, Al-Shawi R, Simons JP. Plasmin activity promotes amyloid deposition in a transgenic model of human transthyretin amyloidosis. Nat Commun. (2021) 12(1):7112,. doi: 10.1038/s41467-021-27416-z.

9. Canetti D., Nocerino P., Rendell N.B., Botcher N., Gilbertson J.A., Blanco A., Rowczenio D., Morelli A., Mangione P.P., Corazza A., Verona G., Giorgetti S., Marchese .L, Westermark P., Hawkins P.N., Gillmore J.D., Bellotti V., Taylor G.W. Clinical ApoA-IV amyloid is associated with fibrillogenic signal sequence. J Pathol. (2021); 255(3):311-318

10. Izco M., Blesa J., Verona G., Cooper J.M., Alvarez-Erviti L. Glial activation precedes alpha-synuclein pathology in a mouse model of Parkinson's disease. Neurosci Res. (2020); 11:S0168-0102(20)30484-3.

11. Migdalska-Richards A., Wegrzynowicz M., Harrison I.F., Verona G., Bellotti V., Spillantini M.G., Schapira A.H.V. L444P Gba1 mutation increases formation and spread of α-synuclein deposits in mice injected with mouse α-synuclein pre-formed fibrils. PLoS One. (2020); 15:e0238075.

12. Raimondi S., Mangione P.P., Verona G., Canetti D., Nocerino P., Marchese L., Piccarducci R., Mondani V., Faravelli G., Taylor G.W., Gillmore J.D., Corazza A., Pepys M.B., Giorgetti S., Bellotti V. Comparative study of the stabilities of synthetic in vitro and natural ex vivo transthyretin amyloid fibrils. J Biol Chem. (2020); 295:11379-11387.

13. Gegg M.E., Verona G., Schapira A.H.V. Glucocerebrosidase deficiency promotes release of α-synuclein fibrils from cultured neurons. Hum Mol Genet. (2020); 29:1716-1728.

14. Canetti D, Rendell NB, Gilbertson JA, Botcher N, Nocerino P, Blanco A, Di Vagno L, Rowczenio D, Verona G, Mangione PP, Bellotti V, Hawkins PN, Gillmore JD, Taylor GW. Diagnostic amyloid proteomics: experience of the UK National Amyloidosis Centre. Clin Chem Lab Med. (2020); 58(6):948-957.

15. Moura A, Nocerino P, Gilbertson JA, Rendell NB, Mangione PP, Verona G, Rowczenio D, Gillmore JD, Taylor GW, Bellotti V, Canetti D. Lysozyme amyloid: evidence for the W64R variant by proteomics in the absence of the wild type protein. Amyloid. (2020); 1-2

16. Corazza A, Verona G, Waudby CA, Mangione PP, Bingham R, Uings I, Canetti D, Nocerino P, Taylor GW, Pepys MB, Christodoulou J, Bellotti V. Binding of Monovalent and Bivalent Ligands by Transthyretin Causes Different Short- and Long-Distance Conformational Changes. J Med Chem. (2019); 62:8274-8283

17. Mangione PP, Verona G, Corazza A, Marcoux J, Canetti D, Giorgetti S, Raimondi S, Stoppini M, Esposito M, Relini A, Canale C, Valli M, Marchese L, Faravelli G, Obici L, Hawkins PN, Taylor GW, Gillmore JD, Pepys MB, Bellotti V. Plasminogen activation triggers transthyretin amyloidogenesis in vitro. J Biol Chem. (2018); 293:14192-14199

18. Canetti D, Rendell NB, Di Vagno L, Gilbertson JA, Rowczenio D, Rezk T, Gillmore JD, Hawkins PN, Verona G, Mangione PP, Giorgetti S, Mauri P, Motta S, De Palma A, Bellotti V, Taylor GW. Misidentification of transthyretin and immunoglobulin variants by proteomics due to methyl lysine formation in formalin-fixed paraffin-embedded amyloid tissue. Amyloid. (2017); 4:233-241

19. Raimondi S, Porcari R, Mangione PP, Verona G, Marcoux J, Giorgetti S, Taylor GW, Ellmerich S, Ballico M, Zanini S, Pardon E, Al-Shawi R, Simons JP, Corazza A, Fogolari F, Leri M, Stefani M, Bucciantini M, Gillmore JD, Hawkins PN, Valli M, Stoppini M, Robinson CV, Steyaert J, Esposito G, Bellotti V.(2017) A specific nanobody prevents amyloidogenesis of D76N β2-microglobulin in vitro and modifies its tissue distribution in vivo. *Sci. Rep.*, 7:46711

20. Verona G, Mangione PP, Raimondi S, Giorgetti S, Faravelli G, Porcari R, Corazza A, Gillmore JD, Hawkins PN, Pepys MB, Taylor GW, Bellotti V. (2017) Inhibition of the mechano-enzymatic amyloidogenesis of transthyretin: role of ligand affinity, binding cooperativity and occupancy of the inner channel. *Sci. Rep*., 7:182.

21. Valleix S, Verona G, Jourde-Chiche N, Nédelec B, Mangione PP, Bridoux F, Mangé A, Dogan A, Goujon JM, Lhomme M, Dauteuille C, Chabert M, Porcari R, Waudby CA, Relini A, Talmud PJ, Kovrov O, Olivecrona G, Stoppini M, Christodoulou J, Hawkins PN, Grateau G, Delpech M, Kontush A, Gillmore JD, Kalopissis AD, Bellotti V. (2016) D25V apolipoprotein C-III variant causes dominant hereditary systemic amyloidosis and confers cardiovascular protective lipoprotein profile. *Nat. Commun*., 7:10353.

22. Marcoux J, Mangione PP, Porcari R, Degiacomi MT, Verona G, Taylor GW, Giorgetti S, Raimondi S, Sanglier-Cianférani S, Benesch JL, Cecconi C, Naqvi MM, Gillmore JD, Hawkins PN, Stoppini M, Robinson CV, Pepys MB, Bellotti V. (2015) A novel mechano-enzymatic cleavage mechanism underlies transthyretin amyloidogenesis. *EMBO Mol. Med*., 7:1337-49.

23. Porcari R, Proukakis C, Waudby CA, Bolognesi B, Mangione PP, Paton JF, Mullin S, Cabrita LD, Penco A, Relini A, Verona G, Vendruscolo M, Stoppini M, Tartaglia GG, Camilloni C, Christodoulou J, Schapira AH, Bellotti V. (2015) The H50Q mutation induces a 10-fold decrease in the solubility of α-synuclein. *J. Biol. Chem*., 290:2395-404.