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EDUCATION

2007 D.Phil. (Molecular Biophysics), University of Oxford, U.K.

2003 B.Sc. (Molecular Biology) with First Class Honors, University of Portsmouth, U.K.

RESEARCH TRAINING & PROFESSIONAL POSITIONS

2019-present **Stadtman Tenure Track Investigator**

RNA Biology Laboratory, Center for Cancer Research
National Cancer Institute
Messenger RNA Regulation and Decay

2017-2019 **Project Group Leader**

Max Planck Institute for Developmental Biology, Tübingen, Germany
Integrative Structural Biology of RNA Regulation

2014-2017 **Staff Scientist**

Max Planck Institute for Developmental Biology, Tübingen, Germany
Advisor: Elisa Izaurralde, Ph.D.
Post-transcriptional regulation of gene expression

2011-2014 **Postdoctoral Fellow**

MRC Laboratory of Molecular Biology, U.K.
Advisor: Murray Stewart, Ph.D.
Structural studies of nuclear export

2010-2011 **Postdoctoral Fellow**

Department of Biochemistry, University of Cambridge, U.K.
Advisor: Marko Hyvönen, Ph.D.
Fragment-based drug discovery

2008-2010 **Postdoctoral Fellow**

School of Molecular Biosciences, University of Queensland, Australia
Advisor: Bostjan Kobe, Ph.D.
Molecular mechanisms of Toll-like receptor signaling

2007-2008 **Research Assistant**

Division of Medicine, Imperial College London, U.K.
Advisor: Peter Cherepanov, Ph.D.
Structural studies of retroviral integration mechanisms

- 2003-2007 **Graduate Research**
Laboratory of Molecular Biophysics, University of Oxford, U.K.
Advisor: Martin Noble, Ph.D.
Thesis Title: *Design and analysis of self-assembling protein systems*
- 2001-2003 **Undergraduate Research**
School of Life Sciences, University of Portsmouth, U.K.
Advisor: Geoff G. Kneale, Ph.D.
Project Title: *Biochemical studies of type I restriction-modification systems*

AWARDS & HONORS

- 2019 *Leistungszulage* Director's award for outstanding and meritorious service at the Max Planck Society (Nominated by Detlef Weigel).
- 2017 *Leistungsprämie* Director's award for outstanding research service (Nominated by Andrei Lupas).
- 2017 Appointed as Project Group Leader (*Projektleiter*) at Max Planck Institute.
- 2016 *Leistungsprämie* Director's award for outstanding research service (Nominated by Elisa Izaurralde).
- 2011 Medical Research Council Postdoctoral Career Development Fellowship.
- 2003 Society for Chemical Industry Prize for the best undergraduate dissertation in Molecular Biosciences.

(Recognition for group members):

- 2023 Outstanding Graduate Student Award from the National Cancer Institute to Yevgen Levdansky.
- 2023 Walter Benjamin Postdoctoral Fellowship from the German Research Foundation (*Deutsche Forschungsgemeinschaft, DFG*) to Filip Pekovic.
- 2022 Postdoctoral Fellowship from the Japan Society for the Promotion of Science to Wataru Horikawa.

RESEARCH PUBLICATIONS

[Google Scholar profile](#)

denotes equal contribution; * (co)corresponding authorship.

1. #Shah, K., #He, S. #Turner, D.J., Corbo, J., Rebbani, K., Bateman, J.M., Cheloufi, S., Igreja, C., ***Valkov, E.**, and *Murn, J. (2024). A paradigm for regulation at the effector interface with RNA-binding proteins. *Nature Communications*. PMID: 38605040. PMCID: PMC11009413. DOI: 10.1038/s41467-024-47449-4.
2. Bicknell, A.A., Reid, D., Licata, M.C., Jones, A.K., Cheng, Y.M., Li, M., Hsiao, C.J., Pepin, C.S., Metkar, M., Levdansky, Y., Fritz, B.R., Andrianova, E.A., Jain, R., **Valkov, E.**, Köhrer, C., and Moore, M.J. (2024). Attenuating ribosome load improves protein output from therapeutic mRNAs by limiting translation-dependent mRNA decay. *Cell Reports*. PMID: 38625793. DOI: 10.1016/j.celrep.2024.114098.

3. *Lee, Y.-s., #Levdansky, Y., Jung, Y., *Kim, V.N, and *Valkov, E. (2024). Deadenylation kinetics of mixed tailing at single-nucleotide resolution. *Nature Structural & Molecular Biology*. PMID: 38374449. DOI: 10.1038/s41594-023-01187-1.
4. #Levdansky, Y., *#Raisch, T., Deme, J., Pekovic, F., Elmlund, H., Lea, S.M., and *Valkov, E. (2023). Structure and assembly of the NOT10:11 module of the CCR4-NOT complex. *Communications Biology* 6: 739. PMID: 37460791. PMCID: PMC10352241 DOI: 10.1038/s42003-023-05122-4.
5. Weber, R., Kleemann, L., Hirschberg, I., Chung, M.Y., Valkov, E., and Igreja, C. (2022). DAP5 enables ORF translation on mRNAs with structured and uORF-containing 5' leaders. *Nature Communications* 13: 7510. PMID: 36473845. PMCID: PMC9726905 DOI: 10.1038/s41467-022-35019-5.
6. Poetz, F., Corbo, J., Levdansky, Y., Spiegelhalter, A., Lindner, D., Magg, V., Lebedeva, S., Schweiggert, J., Schott, J., *Valkov, E., and *Stoecklin, G. (2021). RNF219 attenuates global mRNA decay through inhibition of CCR4-NOT complex-mediated deadenylation. *Nature Communications* 12: 7175. PMID: 34887419. PMCID: PMC8660800. DOI: 10.1038/s41467-021-27471-6.
7. Zhao, H., Wu, D., Nguyen, A., Li, Y., Adão, R.C., Valkov, E., Patterson, G.H., Piszczek, G., and Schuck P. (2021). Energetic and structural features of SARS-CoV-2 N- protein co-assemblies with nucleic acids. *iScience* 24: 102523. PMID: 33997662. PMCID: PMC8103780. DOI: 10.1016/j.isci.2021.102523.
8. Enwerem, I.I.I., Elrod, N.D., Chang, C.T., Lin, A., Ji, P., Bohn, J.A., Levdansky, Y., Wagner, E.J., Valkov, E., and Goldstrohm, A. (2021). Human Pumilio proteins directly bind the CCR4-NOT deadenylase complex to regulate the transcriptome. *RNA* 27: 445–464. PMID: 33397688. PMCID: PMC7962487. DOI: 10.1261/rna.078436.120.
9. Weber, R., Chung, M.-Y., Keskeny, C., Zinnall, U., Landthaler, M., Valkov, E., Izaurralde, E., and Igreja, C. (2020). 4EHP and GIGYF1/2 Mediate Translation-Coupled Messenger RNA Decay. *Cell Reports* 33: 108262. PMID: 33053355. DOI: 10.1016/j.celrep.2020.108262.
10. Na, Z., Luo, Y., Schofield, J.A., Smelyansky, S., Khitun, A., Muthukumar, S., Valkov, E., Simon, M.D., and Slavoff, S.A. (2020). The NBDY Microprotein Regulates Cellular RNA Decapping. *Biochemistry* 59: 4131–4142. PMID: 33059440. PMCID: PMC7682656. DOI: 10.1021/acs.biochem.0c00672.
11. Arvola, R.M., Chang, C.T., Buytendorp, J.P., Levdansky, Y., Valkov, E., Freddolino, P.L., and Goldstrohm, A.C. (2020). Unique Repression Domains of Pumilio Accelerate Destruction of Target mRNAs Through Deadenylation and Decapping. *Nucleic Acids Research* 48:1843–1871. PMID: 31863588. PMCID: PMC7038932. DOI: 10.1093/nar/gkz1187.
12. Raisch, T., Chang, C.T., Levdansky, Y., Muthukumar, S., Raunser, S., and *Valkov, E. (2019). Reconstitution of Recombinant Human CCR4-NOT Reveals Molecular Insights Into Regulated Deadenylation. *Nature Communications* 10: 3173. PMID: 31320642. PMCID: PMC6639331. DOI: 10.1038/s41467-019-11094-z. Hall T: F1000Prime Recommendation; 10.3410/f.736222457.793568187.

13. Peter, D., Ruscica, V., Bawankar, P., Weber, R., Helms, S., ***Valkov, E.**, *Igreja, C., and Izaurralde, E. (2019). Molecular Basis for GIGYF-Me31B Complex Assembly in 4EHP-Mediated Translational Repression. *Genes & Development* 33: 1355–1360. PMID: 31439631. PMCID: PMC6771390. DOI: 10.1101/gad.329219.119.
14. Chang, C.T., Muthukumar, S., Weber, R., Levdansky, Y., Chen, Y., Bhandari, D., Igreja, C., *Wohlbold, L., ***Valkov, E.**, and Izaurralde, E. (2019). A Low-Complexity Region in Human XRN1 Directly Recruits Deadenylation and Decapping Factors in 5'–3' Messenger RNA Decay. *Nucleic Acids Research* 47: 9282–9295. PMID: 31340047. PMCID: PMC6753473. DOI: 10.1093/nar/gkz63.
15. van Loo, B., Bayer, C.D., Fischer, G., Jonas, S., **Valkov, E.**, Mohamed, M.F., Vorobieva, A., Dutruel, C., Hyvönen, M., and Hollfelder, F. (2019). Balancing Specificity and Promiscuity in Enzyme Evolution: Multidimensional Activity Transitions in the Alkaline Phosphatase Superfamily. *Journal of the American Chemical Society* 141: 370–387. PMID: 30497259. DOI: 10.1021/jacs.8b10290.
16. Raisch, T., Sandmeir, F., Weichenrieder, O., ***Valkov, E.**, and Izaurralde, E. (2018). Structural and Biochemical Analysis of a NOT1 MIF4G-like Domain of the CCR4- NOT Complex. *Journal of Structural Biology* 204: 388–395. PMID: 30367941. DOI: 10.1016/j.jsb.2018.10.009.
17. Grüner, S., Weber, R., Peter, D., Chung, M.Y., *Igreja, C., ***Valkov, E.**, and Izaurralde, E. (2018). Structural Motifs in eIF4G and 4E-BPs Modulate Their Binding to eIF4E to Regulate Translation Initiation in Yeast. *Nucleic Acids Research* 46: 6893–6908. PMID: 30053226. PMCID: PMC6061780. DOI: 10.1093/nar/gky542.
18. van Loo, B., Schober, M., **Valkov, E.**, Heberlein, M., Bornberg-Bauer, E., Faber, K., Hyvönen, M., and Hollfelder, F. (2018). Structural and Mechanistic Analysis of the Choline Sulfatase From *Sinorhizobium melliloti*: A Class I Sulfatase Specific for an Alkyl Sulfate Ester. *Journal of Molecular Biology* 430: 1004–1023. PMID: 29458126. PMCID: PMC5870055. DOI: 10.1016/j.jmb.2018.02.010
19. Peter, D., Weber, R., Sandmeir, F., Wohlbold, L., Helms, S., Bawankar, P., ***Valkov, E.**, *Igreja, C., and *Izaurralde E. (2017). GIGYF1/2 Proteins Use Auxiliary Sequences to Selectively Bind to 4EHP and Repress Target mRNA Expression. *Genes & Development* 31: 1147–1161. PMID: 28698298. PMCID: PMC5538437. DOI: 10.1101/gad.299420.117.
20. Grüner, S., Peter, D., Weber, R., Wohlbold, L., Chung, M.Y., Weichenrieder, O., **Valkov, E.**, Igreja, C., and Izaurralde E. (2016). The Structures of eIF4E-eIF4G Complexes Reveal an Extended Interface to Regulate Translation Initiation. *Molecular Cell* 64: 467–479. PMID: 27773676. DOI: 10.1016/j.molcel.2016.09.020.
21. Raisch, T., Bhandari, D., Sabath, K., Helms, S., **Valkov, E.**, Weichenrieder, O., and Izaurralde, E. (2016). Distinct Modes of Recruitment of the CCR4-NOT Complex by *Drosophila* and Vertebrate Nanos. *EMBO Journal* 35: 974–990. PMID: 26968986. PMCID: PMC5207322. DOI: 10.15252/embj.201593634.

22. #Valkov, E., #Muthukumar, S., #Chang, C.T., Jonas, S., Weichenrieder, O., and Izaurrealde, E. Structure of the Dcp2-Dcp1 mRNA-Decapping Complex in the Activated Conformation. (2016). *Nature Structural & Molecular Biology* 23: 574–579. PMID: 27183195. DOI: 10.1038/nsmb.3232.
23. Aibara, S., Katahira, J., **Valkov, E.**, and Stewart, M. (2015). The Principal mRNA Nuclear Export Factor NXF1:NXT1 Forms a Symmetric Binding Platform that Facilitates Export of Retroviral CTE-RNA. *Nucleic Acids Research* 43: 1883–1893. PMID: 25628361. PMCID: PMC4330390. DOI: 10.1093/nar/gkv032.
24. Aibara, S., **Valkov, E.**, Lamers, M., and Stewart, M. (2015). Domain Organization within the Nuclear Export Factor Mex67: Mtr2 Generates an Extended mRNA Binding Surface. *Nucleic Acids Research* 43: 1927–1936. PMID: 25618852. PMCID: PMC4330389. DOI: 10.1093/nar/gkv030.
25. Aibara, S., **Valkov, E.**, Lamers, M.H., Dimitrova, L., Hurt, E., and Stewart, M. (2015). Structural Characterization of the Principal mRNA-Export Factor Mex67-Mtr2 from *Chaetomium thermophilum*. *Acta Crystallographica Section F: Structural Biology Communications* 71: 876–888. PMID: 26144233. PMCID: PMC4498709. DOI: 10.1107/S2053230X15008766.
26. Cork, A.J., Ericsson, D.J., Law, R.H., Casey, L.W., **Valkov, E.**, Bertozzi, C., Stamp, A., Jovceviski, B., Aquilina, J.A., Whisstock, J.C., Walker, M.J., and Kobe, B. (2015). Stability of the Octameric Structure Affects Plasminogen-Binding Capacity of Streptococcal Enolase. *PLoS One* 10: e0121764. PMID: 25807546. PMCID: PMC4373793. DOI: 10.1371/journal.pone.0121764.
27. #Dimitrova, L., #**Valkov, E.**, #Aibara, S., Flemming, D., McLaughlin, S.H., Hurt, E., and Stewart, M. (2015). Structural Characterization of the *Chaetomium thermophilum* TREX-2 Complex and its Interaction with the mRNA Nuclear Export Factor Mex67:Mtr2. *Structure* 23: 1246–1257. PMID: 26051714. PMCID: PMC4509546. DOI: 10.1016/j.str.2015.05.002.
28. Holvey, R.S., **Valkov, E.**, Neal, D., Stewart, M., and Abell, C. (2015). Selective Targeting of the TPX2 Site of Importin-alpha using Fragment-Based Ligand Design. *ChemMedChem* 10: 1232–1239. PMID: 25899172. PMCID: PMC4515083. DOI: 10.1002/cmdc.201500014.
29. Ullah, M.O., **Valkov, E.**, Ve, T., Williams, S., Mas, C., Mansell, A., and Kobe, B. (2015). Recombinant Production of Functional Full-Length and Truncated Human TRAM/TICAM-2 Adaptor Protein Involved in Toll-like Receptor and Interferon Signaling. *Protein Expression and Purification* 106: 31–40. PMID: 25306876. DOI: 10.1016/j.pep.2014.09.019.
30. **Valkov, E.** and Stewart, M. (2015). 1.25 Å Resolution Structure of an RNA 20-mer That Binds to the TREX2 Complex. *Acta Crystallographica Section F: Structural Biology Communications* 71: 1318–1321. PMID: 26457524. PMCID: PMC4601597. DOI: 10.1107/S2053230X1501643X

31. Alaidarous, M., Ve, T., Casey, L.W., **Valkov, E.**, Ericsson, D.J., Ullah, M.O., Schembri, M.A., Mansell, A., Sweet, M.J., and Kobe, B. (2014). Mechanism of Bacterial Interference with TLR4 Signaling by Brucella Toll/interleukin-1 Receptor Domain-Containing Protein TcpB. *Journal of Biological Chemistry* 289: 654–668. PMID: 24265315. PMCID: PMC3887194. DOI: 10.1074/jbc.M113.523274
32. Jani, D., **Valkov, E.**, and Stewart, M. Structural Basis for Binding the TREX2 Complex to Nuclear Pores, GAL1 Localisation and mRNA Export. (2014). *Nucleic Acids Research* 42: 6686–6697. PMID: 24705649. PMCID: PMC4041426. DOI: 10.1093/nar/gku252.
33. Kuhlmann, S.I., **Valkov, E.**, and Stewart, M. Structural Basis for the Molecular Recognition of Polyadenosine RNA by Nab2 Zn Fingers. (2014). *Nucleic Acids Research* 42: 672–680. PMID: 24071581. PMCID: PMC3874189. DOI: 10.1093/nar/gkt876.
34. #Wolf, J., **#Valkov, E.**, Allen, M.D., Meineke, B., Gordiyenko, Y., McLaughlin, S.H., Olsen, T.M., Robinson, C.V., Bycroft, M., Stewart, M., and Passmore, L.A. (2014). Structural Basis for Pan3 Binding to Pan2 and its Function in mRNA Recruitment and Deadenylation. *EMBO Journal* 33: 1514–1526. PMID: 24872509. PMCID: PMC4158885. DOI: 10.15252/embj.201488373.
35. Alaidarous, M., Ve, T., Ullah, M.O., **Valkov, E.**, Mansell, A., Schembri, M.A., Sweet, M.J., and Kobe, B. (2013). Cloning, Expression, Purification, Crystallization and Preliminary X-ray Crystallographic Analysis of the TIR Domain from the Brucella melitensis TIR- Domain Containing Protein TcpB. *Acta Crystallographica Section F: Structural Biology Communications* 69: 1167–1170. PMID: 24100574. PMCID: PMC3792682. DOI: 10.1107/S1744309113024408.
36. Morrow, C.A., **Valkov, E.**, Stamp, A., Chow, E.W., Lee, I.R., Wronski, A., Williams, S.J., Hill, J.M., Djordjevic, J.T., Kappler, U., Kobe, B., and Fraser, J.A. (2012). De Novo GTP Biosynthesis is Critical for Virulence of the Fungal Pathogen *Cryptococcus neoformans*. *PLoS Pathogens* 8: e1002957. PMID: 23071437. PMCID: PMC3469657. DOI: 10.1371/journal.ppat.1002957.
37. Bernoux, M., Ve, T., Williams, S., Warren, C., Hatters, D., **Valkov, E.**, Zhang, X., Ellis, J.G., Kobe, B., and Dodds, P.N. (2011). Structural and Functional Analysis of a Plant Resistance Protein TIR Domain Reveals Interfaces for Self-association, Signaling, and Autoregulation. *Cell Host & Microbe* 9: 200–211. PMID: 21402359. PMCID: PMC3142617. DOI: 10.1016/j.chom.2011.02.009.
38. DiMaio, F., Terwilliger, T.C., Read, R.J., Wlodawer, A., Oberdorfer, G., Wagner, U., **Valkov, E.**, Alon, A., Fass, D., Axelrod, H.L., Das, D., Vorobiev, S.M., Iwai, H., Pokkuluri, P.R., and Baker, D. (2011). Improved Molecular Replacement by Density and Energy-Guided Protein Structure Optimization. *Nature* 473: 540–543. PMID: 21532589. PMCID: PMC3365536. DOI: 10.1038/nature09964.
39. McDevitt, C.A., Ogunniyi, A.D., **Valkov, E.**, Lawrence, M.C., Kobe, B., McEwan, A.G., and Paton, J.C. (2011). A Molecular Mechanism for Bacterial Susceptibility to Zinc. *PLoS Pathogens* 7: e1002357. PMID: 22072971. PMCID: PMC3207923. DOI: 10.1371/journal.ppat.1002357

40. Swarbrick, J.D., Shaw, D.J., Chhabra, S., Ghai, R., **Valkov, E.**, Norwood, S.J., Seaman, M.N., and Collins, B.M. (2011). VPS29 is Not an Active Metallo-Phosphatase But, is a Rigid Scaffold Required for Retromer Interaction with Accessory Proteins. *PLoS One* 6: e20420. PMID: 21629666. PMCID: PMC3101248. DOI: 10.1371/journal.pone.0020420.
41. ***Valkov, E.**, Stamp, A., DiMaio, F., Baker, D., Verstak, B., Roversi, P., Kellie, S., Sweet, M.J., Mansell, A., ***Gay, N.J.**, Martin, J.L., and ***Kobe, B.** (2011). Crystal Structure of Toll-Like Receptor Adaptor MAL/TIRAP Reveals the Molecular Basis for Signal Transduction and Disease Protection. *Proceedings of the National Academy of Sciences of the United States of America* 108: 14879–14884. PMID: 21873236. PMCID: PMC3169156. DOI: 10.1073/pnas.1104780108.
42. Ve, T., Williams, S., **Valkov, E.**, Ellis, J.G., Dodds, P.N., and Kobe, B. (2011). Crystallization, X-ray Diffraction Analysis and Preliminary Structure Determination of the TIR Domain From the Flax Resistance Protein L6. *Acta Crystallographica Section F: Structural Biology Communications* 67: 237–240. PMID: 21301095. PMCID: PMC3034617. DOI: 10.1107/S1744309110051006
43. Ve, T., Williams, S.J., Stamp, A., **Valkov, E.**, Dodds, P.N., Anderson, P.A., and Kobe, B. (2011). Crystallization and X-ray Diffraction Analysis of the C-terminal Domain of the Flax Rust Effector Protein AvrM. *Acta Crystallographica Section F: Structural Biology Communications* 67: 1603–1607. PMID: 22139177. PMCID: PMC3232150. DOI: 10.1107/S1744309111037675.
44. Hare, S., Gupta, S.S., **Valkov, E.**, Engelman, A., and Cherepanov, P. (2010). Retroviral Intasome Assembly and Inhibition of DNA Strand Transfer. *Nature* 464: 232–236. PMID: 20118915. PMCID: PMC2837123. DOI: 10.1038/nature08784.
45. Morrow, C.A., Stamp, A., **Valkov, E.**, Kobe, B., and Fraser, J.A. (2010). Crystallization and Preliminary X-ray Analysis of Mycophenolic Acid-Resistant and Mycophenolic Acid-Sensitive Forms of IMP Dehydrogenase From the Human Fungal Pathogen *Cryptococcus*. *Acta Crystallographica Section F: Structural Biology Communications* 66: 1104–1107. PMID: 20823538. PMCID: PMC2935239. DOI: 10.1107/S1744309110031659.
46. Hare, S., Shun, M.C., Gupta, S.S., **Valkov, E.**, Engelman, A., and Cherepanov, P. (2009). A Novel Co-crystal Structure Affords the Design of Gain-of-Function Lentiviral Integrase Mutants in the Presence of Modified PSIP1/LEDGF/p75. *PLoS Pathogens* 5: e1000259. PMID: 19132083. PMCID: PMC2606027. DOI: 10.1371/journal.ppat.1000259
47. **Valkov, E.**, Gupta, S.S., Hare, S., Helander, A., Roversi, P., McClure, M., and Cherepanov, P. (2009). Functional and Structural Characterization of the Integrase From the Prototype Foamy Virus. *Nucleic Acids Research* 37: 243–255. PMID: 19036793. PMCID: PMC2615609. DOI: 10.1093/nar/gkn938.

BOOK CHAPTERS & REVIEWS

48. Levdansky, Y., and **Valkov, E.** (2024). Reconstitution of human CCR4-NOT complex from purified proteins and an assay of its deadenylation activity. *Methods in Molecular Biology* 2723: 1-17. PMID: 37824061. DOI: 10.1007/978-1-0716-3481-3_1.

49. He, S., **Valkov, E.**, Cheloufi, S, and Murn, J. (2023). The nexus between RNA-binding proteins and their effectors. *Nature Reviews Genetics* 24: 276-94. PMID: 36418642. DOI: 10.1038/s41576-022-00550-0.
50. *Musselman, C.A., and ***Valkov, E.** (2022) Dynamic views of molecular recognition in protein-protein nucleic acid complexes. *Current Opinion in Structural Biology* 77: 102500. PMID: 36402027. DOI: 10.1016/j.sbi.2022.102500.
51. *Raisch, T., and ***Valkov, E.** (2022). Regulation of the multisubunit CCR4-NOT deadenylase in the initiation of mRNA degradation. *Current Opinion in Structural Biology* 77: 102460. PMID: 36116370. DOI: 10.1016/j.sbi.2022.102460.
52. **Valkov, E.**, Jonas, S., and Weichenrieder, O. (2017) Mille Viae in Eukaryotic mRNA Decapping. *Current Opinion in Structural Biology* 47: 40–51. PMID: 28591671. DOI: 10.1016/j.sbi.2017.05.009.
53. **Valkov, E.**, Sharpe, T., Marsh, M., Greive, S., and Hyvönen, M. (2012). Targeting Protein-Protein Interactions and Fragment-Based Drug Discovery. *Topics in Current Chemistry* 317: 145–179. PMID: 22006238. DOI: 10.1007/128_2011_265.
54. **Valkov, E.**, Dean, J.C., Jani, D., Kuhlmann, S.I., and Stewart, M. (2012). Structural Basis for the Assembly and Disassembly of mRNA Nuclear Export Complexes. *Biochimica et Biophysica Acta* 1819: 578–592. PMID: 22406340. DOI: 10.1016/j.bbagr.2012.02.017.

INTRAMURAL RESEARCH PROGRAM SERVICE & COMMITTEES

2024	NCI/CCR Advisory Committee for Informatics and Computational Resources (member)
2023	NCI/CCR Staff Scientist Promotion and Review Panel (member)
2023	NCI Director's Innovation Awards (reviewer)
2022	NCI iCURE Program (reviewer)
2020-2022	RNA Biology Senior Investigator Search Committee (member)
2021-2022	NIH Stadtman Search Committee for Structural Biology (member)
2020	NCI Graduate Student Recruiting Program (reviewer)
2019-2020	Frederick Electron Microscopy User Committee (member)

NATIONAL AND INTERNATIONAL SERVICE & COMMITTEES

2023	Grant reviewer for the National Science Center, Poland.
2022	Guest editor of <i>Current Opinion in Structural Biology</i> 2022.
2022-present	Editorial board member, <i>Journal of Structural Biology: X</i> .
2022-2024	Co-editor of <i>Methods in Molecular Biology: Deadenylation</i> .
2022	Grant reviewer for the BBSRC U.K.
2021	Reviewer for the institutes of the Czech Academy of Sciences.
2021	Grant reviewer for the French National Research Agency.
2020-present	Affiliate, <i>BioRxiv</i> preprint server for biology.

Ad hoc reviewer for *eLife*, *Molecular Cell*, *Nature Structural & Molecular Biology*, *Nature Communications*, *Cell Reports*, *Nucleic Acids Research*, *RNA*, *Journal of Structural Biology*, *Acta Crystallographica D*, *Scientific Reports*, *Communications Biology*, *RNA Biology*, *The FEBS Journal*, *Current Opinion in Chemical Biology*, *Current Opinion in Structural Biology*, *Genome Biology*, *iScience*.

INVITED/SELECTED TALKS

2024	FASEB Conference: Mechanisms of RNA Decay, Portugal.
2024	McGill University, Montreal, Canada.
2023	The Hospital for Sick Children, Toronto, Canada.
2023	University of California at Riverside, U.S.A.
2022	Ohio State Center for RNA Biology, U.S.A.
2022	Moderna, U.S.A.
2022	Arrakis Therapeutics, U.S.A.
2022	FASEB Conference: Mechanisms of RNA Decay, U.S.A.
2022	Johns Hopkins University, U.S.A.
2021	Laboratory of Biochemistry and Molecular Biology, NCI, U.S.A.
2021	Free University Berlin, Germany.
2021	University of Minnesota, U.S.A.
2021	Ribometrix, U.S.A.
2021	University of California at San Francisco, U.S.A.
2021	Yale University, U.S.A.
2021	Laboratory of Epigenetics & Stem Cell Biology, NIEHS, U.S.A.
2020	Genetics Branch, NCI, U.S.A.
2019	University of Halle, Germany.
2019	Cell Symposia: Regulatory RNAs, Germany.
2018	FASEB Conference: Mechanisms of RNA Decay, U.S.A.
2016	FASEB Conference: Mechanisms of RNA Decay, Portugal.

LAB MEMBERS & MENTEES

Current (date shown is when joined the lab):

2024	Tanner Myers, Ph.D., Postdoctoral Fellow
2023	Claire Piczak, Postbac
2023	Anneli Corbett, Postbac
2023	Jade Witter, Postbac w/ iCURE Program
2022	Filip Pekovic, Ph.D., Postdoctoral Fellow
2021	David Turner, Ph.D., Postdoctoral Fellow
2019	Eric Simko, Ph.D., Postdoctoral Fellow
2017	Yevgen Levdansky, Ph.D., Postdoctoral Fellow

Alumni:

2021-2023	Leah Pitman (Graduate Student, Jan Lowe lab, MRC Laboratory of Molecular Biology).
2023	Keiko Luke, Undergraduate Summer Intern, University of Maryland.
2021-2022	Adrianna Hernandez, (Medical Student, University of Queensland, Australia).
2020-2023	Khadija Rebbani, Ph.D. (Postdoctoral Fellow, Touati Benoukraf lab, Memorial University of Newfoundland, Canada.)

2020-2023 Wataru Horikawa, Ph.D., (Staff Scientist, Daniel Kiss lab, Houston Methodist Research Institute).

2019-2022 Joshua Corbo, (Graduate Student, Jeeyun Chung lab, Harvard University).

2021 Ilayda Sen, Undergraduate Summer Intern, Ohio State University.

(Co-mentored with Elisa Izaurralde at MPI Tübingen):

2015-2019 Sowndarya Muthukumar, Ph.D., (Postdoctoral Fellow, Cristian Bellodi lab, Lund University, Sweden).

2016-2019 Chung-Te Chang, Ph.D., (Assistant Professor, National Yang-Ming Chiao Tung University, Taiwan).

2016-2019 Ramona Weber, Ph.D., (Postdoctoral Fellow, Ataman Sendoeel lab, University of Zürich, Switzerland).

2014-2018 Tobias Raisch, Ph.D., (Project Group Leader, MPI Dortmund, Germany).

2014-2018 Stefan Grüner, Ph.D., (Associate Director, Pieris Pharmaceuticals, Germany).

2014-2017 Daniel Peter, Ph.D., (Associate Principal Scientist, Boehringer Ingelheim, Austria).

2018 Michelle Noble, (Graduate Student, Matthias Hentze lab, EMBL, Germany).

2017 Felix Sandmeir, (Graduate Student, Elena Conti lab, MPI Martinsried, Germany).