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Α. Π.: 38309

Ημ.: 25/04/2023

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ΕΘΝΙΚΟ ΚΑΙ ΚΑΠΟΔΙΣΤΡΙΑΚΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ

ΕΠΩΝΥΜΟ:..... Περράκης.....
ΟΝΟΜΑ:..... Αναστάσιος.....
ΠΑΤΡΩΝΥΜΟ:..... Γεώργιος.....
ΗΜΕΡ.ΓΕΝΝΗΣΗΣ:..... 6 / 1 / 1970.....
ΙΔΙΟΤΗΤΑ:..... Καθηγητής Αλλοδαπής.....
Α.Δ.Τ./Αρ. Διαβατηρίου:..... ΑΚ095993.....
E-mail:..... anastassis.perrakis@gmail.com.....

Θέμα: Υποψηφιότητα για τη θέση εξωτερικού μέλους του Συμβουλίου Διοίκησης του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών

Τόπος/Ημερομηνία:
Amsterdam, 28/3/2023

Συνημμένα:

- α) Αντίγραφο Δελτίου Αστυνομικής Ταυτότητας ή Αντίγραφο Διαβατηρίου.
- β) Πλήρες βιογραφικό σημείωμα.
- γ) Οποιαδήποτε έγγραφα ή στοιχεία κρίνει ο/η υποψήφιος/α ότι θα υποστηρίξει την υποψηφιότητά του/ης (προαιρετικό).
- δ) Επιστολή εκδήλωσης ενδιαφέροντος για τη θέση του εξωτερικού μέλους .

Με την παρούσα αίτηση:

α) υποβάλλω υποψηφιότητα για τη θέση εξωτερικού μέλους του Συμβουλίου Διοίκησης του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών σύμφωνα με την ισχύουσα νομοθεσία στο πλαίσιο της με αριθμ. πρωτ. 17890/28-2-2023. διεθνούς πρόσκλησης για την ανάδειξη των εξωτερικών μελών του Συμβουλίου Διοίκησης του Ιδρύματος,

β) αποδέχομαι τους όρους συμμετοχής στην παρούσα και δηλώνω ότι γνωρίζω τις υποχρεώσεις που απορρέουν από την ιδιότητα του εξωτερικού μέλους σε περίπτωση εκλογής μου, καθώς και τις αρμοδιότητες που ασκεί το Συμβούλιο Διοίκησης του Ε.Κ.Π.Α. σύμφωνα με το άρθρο 14 του ν. 4957/2022,

γ) δηλώνω ότι συναινώ στη συλλογή και επεξεργασία των προσωπικών δεδομένων μου, όπως αυτά αναφέρονται στην παρούσα πρόταση και στα συνυποβαλλόμενα με αυτήν δικαιολογητικά αποκλειστικά για την αξιολόγηση της αίτησής μου στο πλαίσιο της διαδικασίας της παρούσας.

Αναστάσιος Περράκης

Ο Αιτών / Η Αιτούσα

(ονοματεπώνυμο και ψηφιακή υπογραφή)

Επιστολή εκδήλωσης ενδιαφέροντος

Είναι χαρά και τιμή μου η υποβολή αυτής της αίτησης ενδιαφέροντος για την συμμετοχή μου στο συμβούλιο διοίκησης του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών, από το οποίο αποφοίτησα το 1992.

Πιστεύω πως η επιστημονική μου πορεία, αλλά και το ενδιαφέρον μου για τα κοινά της ακαδημαϊκής κοινότητας αλλά και της Ελλάδας, τεκμηριώνονται από την πορεία μου ως ερευνητή και πανεπιστημιακού, αλλά και ως ενεργού πολίτη.

Αυτή την στιγμή, έχω την ιδιότητα του καθηγητή του τμήματος Χημείας του Πανεπιστημίου της Ουτρέχτης, του διευθυντή του τομέα Βιοχημείας του Ολλανδικού Ινστιτούτου για τον Καρκίνο, και του ερευνητή στο Ινστιτούτο Oncode για την σύνδεση της βασικής και της κλινικής έρευνας προς όφελος των καρκινοπαθών. Παράλληλα, διευθύνω το Ευρωπαϊκό πρόγραμμα ερευνητικών υποδομών iNEXT-Discovery, και συμμετέχω στην πρωτοβουλία Oncode-PACT για την συνεργασία επιχειρήσεων και ακαδημαϊκών ιδρυμάτων με σκοπό την ανάπτυξη φαρμάκων για τον καρκίνο. Τα ερευνητικά μου ενδιαφέροντα στον τομέα της βασικής έρευνας βρίσκονται στην κατανόηση μηχανισμών κυτταρικής σηματοδότησης και της δυναμικής του κυτταρικού σκελετού (π.χ. Science, 2022), αλλά και στην εφαρμογή τεχνικών μηχανικής μάθησης και τεχνητής νοημοσύνης για την κατανόηση της δομής και λειτουργίας των πρωτεϊνών (AlphaFill, Nature Methods 2022) και την δημιουργία νέων οδηγών φαρμακευτικώνσκευασμάτων.

Το ενδιαφέρον μου για την Ελλάδα είναι έκδηλο από την συμμετοχή στα πολιτικά τεκταινόμενα της χώρας από το 2014 μέχρι και το 2020 μέσα από το «Ποτάμι». Μετά το τέλος αυτής της περιπέτειας, βρίσκομαι και πάλι ενεργά στην Ελλάδα μέσω της επιτυχούς χρηματοδότησης του Προγράμματος ERA Chair ESPERANCE με δυόμισι εκατομμύρια ευρώ (που θα επενδυθούν κατά 80% απευθείας στην Ελλάδα), το οποίο θα μου επιτρέψει να συνεργαστώ ενεργά με την Ιατρική Σχολή του Πανεπιστημίου Πατρών. Θεωρώ αυτή την ιδιότητα μου ως μια εξαιρετική ευκαιρία να εκμεταλλευτώ της συχνή μου παρουσία στην Ελλάδα (το 20% του χρόνου μου το 2023-2027) ώστε να προσφέρω την εμπειρία και τις γνώσεις μου και στο ΕΚΠΑ.

Είμαι βέβαιος πως θα μπορούσα να συμβάλλω στην διαμόρφωση του στρατηγικού σχεδιασμού του ΕΚΠΑ, υποστηρίζοντας τον/την πρύτανη και το συμβούλιο διοίκησης ιδιαίτερα σε αποφάσεις σχετιζόμενες με θέματα ανάπτυξης στρατηγικής για την σύνδεση της βασικής έρευνας με την ευρωπαϊκή χρηματοδότηση, την ανάπτυξη της μεταφραστικής έρευνας στον τομέα των βιοϊατρικών επιστημών, την στρατηγική δημιουργίας και διατήρησης ανταγωνιστικών ευρωπαϊκών ερευνητικών υποδομών, αλλά και για την ανάπτυξη διαδικασιών που να διασφαλίζουν την καλλιέργεια συνεργειών με σκοπό την μεγιστοποίηση της αποτελεσματικότητας του ανθρώπινου κεφαλαίου. Η εμπειρία μου στην προσέλκυση Ευρωπαϊκής χρηματοδότησης, στην μετάφραση των αποτελεσμάτων της ομάδας μου για χρήση από την βιομηχανία, στον σχεδιασμό και την κρίση Ευρωπαϊκών ερευνητικών υποδομών, αλλά και στην διαχείριση τόσο της ερευνητικής μου ομάδας, όσο και του τμήματος Βιοχημείας, αλλά και ευρύτατων Ευρωπαϊκών συνεργασιών (π.χ. 26 ομάδων από 19 χώρες στο πρόγραμμα iNEXT-Discovery), συνηγορούν προς την δυνατότητα μου να προσφέρω σημαντικά στοιχεία στο ελεγκτικό αλλά και στο συμβουλευτικό έργο του συμβουλίου διοίκησης του ΕΚΠΑ. Παραμένω στην διάθεση σας για οποιαδήποτε πληροφορία.

Curriculum Vitae

Date and place of birth: 6 January 1970, Athens, Greece

Education

Doctor of Philosophy (DPhil) in Chemistry, University of York, UK (1996)
Πτυχίον Βιολογίας (Bachelor in Biology), University of Athens, Greece (1992)
Απολυτήριον (High School degree), Athens College, Greece (1987)

Pre- and postdoctoral training

1996-1997 EMBO long-term post-doctoral fellow, with Titia Sixma at the NKI
1992-1995 Pre-doctoral fellow, with Keith Wilson at the EMBL-Hamburg Unit

Positions held

2019-present Oncode Institute Investigator
2018-present Professor, University of Utrecht
2005-present Principal Investigator NKI
2001-2005 AvL fellow, NKI (Principal Investigator - assistant professor)
1998-2000 Staff Scientist and Team Leader, EMBL-Grenoble Unit

Major current activities

Head of Department of Biochemistry (NKI)
Principal investigator of the Structural Biology research group at NKI and Oncode
Coordinator of the iNEXT-Discovery Horizon2020 grant (24 labs, 10MEuro)
Scientific supervisor of the "NKI Protein Facility"
Scientific supervisor of the "NKI Research High performance Computing Facility"
Board member of the National Chemistry Council
Advisory committee member for EMBO/EMBC contact to OCW ministry

Funding - Current Research Grants

- Understanding Tubulin Detyrosination: Mechanism, Structure and Function (PRINCIPAL INVESTIGATOR, 713 k€)
- ESPERANCE ERA Chair (ERA chair, 2,498 k€)
- Oncode-PACT Groeifonds program (Partner, total grant 325,000 k€)
- PDB-REDO-cloud EOSC-Life: A flexible and scalable engine for computational structural biology (PRINCIPAL INVESTIGATOR, 85 k€)
- PDB-REDO-cloud EOSC-Life: FAIR protein structures with deep versioning (PRINCIPAL INVESTIGATOR, 85 k€)
- iNEXT-DISCOVERY, INFRASTRUCTURE FOR NMR, EM AND X-RAY CRYSTALLOGRAPHY FOR TRANSLATIONAL RESEARCH (PRINCIPAL INVESTIGATOR, CO-ORDINATOR, TOTAL GRANT 10,000 k€)
- ONCODE, National program on cancer research (PRINCIPAL INVESTIGATOR, 1,800 k€)
- ONCODE GPU infrastructure (PRINCIPAL INVESTIGATOR, 540 k€)
- PROTEINS4ONCODE (PRINCIPAL INVESTIGATOR, 270 k€)
- CCP4 "INCORPORATING PDB-REDO TO CCP4" (PRINCIPAL INVESTIGATOR, 190 k€)

Teaching activities (since 2018)

Promotor of PhD students

Dr. Bart van Beusekom (2015-2018, Utrecht University)
Dr. Athanasios Adamopoulos (2016-2020, Utrecht University)
Dr. Fernando Salgado Polo (2018-2022, cum laude, Utrecht University)
Mrs. Ida de Vries (started April 2020, registered in Utrecht University)
Mrs. Jiske Bak (started May 2020, registered in Utrecht University)
Mr. Razvan Borza (started October 2020, registered in Utrecht University)
Mr. Ren Xie (started July 2022, registration pending)
Mrs. Maria Konijnenberg (starting February 2023, registration pending)

Co-Promotor of PhD students

Dr. Aleksandra Chikunova (2022, Leiden University)
Dr. Shreya Dharadhar (2021, Erasmus University Rotterdam)

"Beordeling Committee" member

Dr. Ulric Le Paige (2019, Utrecht University)
Dr. Panagiotis Koukos (2020, Utrecht University)
Dr. Roel Touris (2021, Utrecht University)
Dr. Wout Oosterheert (2021, Utrecht University)
Dr. Matthieu Zeronian (2021, Utrecht University)
Dr. Lucas Chataigner (2022, Utrecht University)
Dr. Robertus Bosman (2022, Leiden University)

Organisation of courses and workshops

Translating Structural Biology into Biomedical Applications, Grenoble, FR, 2018
Macromolecular Crystallography, Cold Spring Harbor, US, 2018
Macromolecular Crystallography, Cold Spring Harbor, US, 2019
Oncode Masterclass in Macromolecular Structures in Cancer Research, NL, 2019
CCP4 Study Weekend, 5-8 January 2020, (virtual event, UK-based)
Macromolecular Crystallography, Cold Spring Harbor, US, 2022

Lecturing in courses and workshops

Joint Instruct-iNEXT Course, 25-30 September 2022, Oeiras, PT
Molecular mechanisms in signal transduction & cancer, 17-23 August 2022, Spetses, GR
X-ray crystallography basics (6 lectures), April 2020, NKI

Other activities

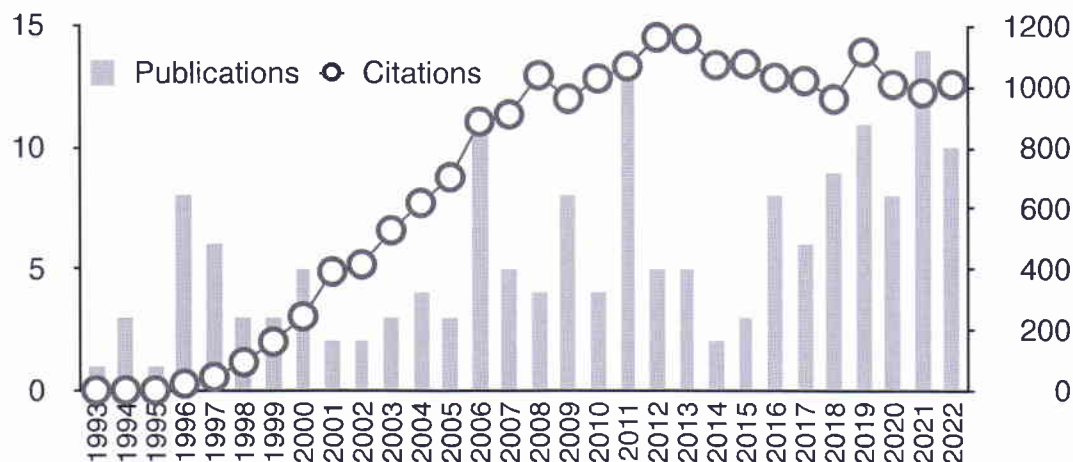
100-Mentors member, helping high-school students make career choices in biomedical sciences.

Key Output

Peer reviewed original research papers: **131** ; Reviews, books, commentaries, etc: **40**

Nr. of citations: **21.528** (Google Scholar); Nr. of citations: **14,862** (Scopus)

48 publications with >100 citations



Key Publications (since 2018)

- Salgado-Polo F, Borza R., et al, and Perrakis A* Autotaxin facilitates selective LPA receptor signaling. **Cell Chemical Biology**. 2023 Jan 19;30(1):69-84.e14.
- Hekkelman ML, de Vries I, Joosten RP, Perrakis A*. AlphaFill: enriching AlphaFold models with ligands and cofactors. **Nature Methods**. 2022 Nov 24.
- Landskron, L, Bak J, Adamopoulos A, Perrakis A*, Brummelkamp TR*, Posttranslational modification of microtubules by the MATCAP de tyrosinase, **Science** 376 (6595)
- Adamopoulos A, Landskron L, (...) Brummelkamp TR, Perrakis A*. Crystal structure of the tubulin tyrosine carboxypeptidase complex VASH1-SVBP. **Nature Structural Molecular Biology**. 2019 Jul;26(7):567-570.
- Sacristan C, (...) A, Perrakis A, Kops GJ. Dynamic kinetochore size regulation promotes microtubule capture and chromosome biorientation in mitosis. **Nature Cell Biology**. 2018 Jul;20(7):800-810.
- Salgado-Polo F, Fish A (...) Perrakis A*. Lysophosphatidic acid produced by autotaxin acts as an allosteric modulator of its catalytic efficiency. **Journal Biological Chemistry**. 2018 Sep 14;293(37):14312-14327.

Development and provision of computational resources

- Continuing to develop and maintain the PDB-REDO (www.pdb-redo.eu) web server and databank, for crystallographic structure refinement and validation
- Develop and release the LAHMA (lahma.pdb-redo.eu) web server for comparing homologue protein structures.
- Extend and re-implement the CCD² (ccd.rhpc.nki.nl) web server for protein structure analysis and designing expression constructs.
- Implemented and validated the Ramachandran Z-score for protein structure assessment, and released the Tortoise server (<https://pdb-redo.eu/tortoise>).
- Develop and release the AlphaFill databank (alpha-fill.eu) databank and web service for providing ligand structures of predicted protein structures.

Funding

Previous research grants

- KWF Membrane glycerophosphodiesterases: novel players in cell differentiation and cancer biology (PRINCIPAL INVESTIGATOR, 498 k€)
- INSTRUCT-Ultra, EU H2020 Infradev 731005, Releasing the full potential of Instruct for integrated structural life science research (PRINCIPAL INVESTIGATOR, 250 k€)
- iNEXT, EU 653706 INFRASTRUCTURE FOR NMR, EM AND X-RAY CRYSTALLOGRAPHY FOR TRANSLATIONAL RESEARCH (PRINCIPAL INVESTIGATOR, DEPUTY CO-ORDINATOR, 660 k€)
- WEST-life, EU H2020 675858, World-wide E-infrastructure for structural biology (PRINCIPAL INVESTIGATOR, 250 k€)
- NWO-TOP 714.014.002. Structural and chemical basis for the biosynthesis and propagation of base J (PRINCIPAL INVESTIGATOR, 695 k€)
- KWF Mechanisms of activation of MPS1, a guardian of genomic stability (Co-Investigator, 640 k€)
- NWO TOP-GO L.10.062. Autotaxin, a secreted phosphodiesterase with diverse roles in disease: structural and functional studies (PRINCIPAL INVESTIGATOR, 746 k€)
- KWF NKI-2010-4781 Validation of autotaxin, a metastasis-enhancing exo-phosphodiesterase, as theyrapeutic target (Co-Investigator, 640 k€)
- NWO-Groot The NKI Protein Facility (Equipment only, 1.4 M€)
- SPINE-2, EU FW6 031220, 2006-2010, FROM RECEPTOR TO GENE: STRUCTURES OF MACROMOLECULAR COMPLEXES (Partner, 620 k€).
- TEACH-SG, EU FW6, 2006-2010, TRAINING FOR HIGH VOLUME, HIGH VALUE STRUCTURAL GENOMICS METHODOLOGIES (Partner, 50 k€).
- NIH RO1 DEVELOPMENT OF THE ARP/WARP SOFTWARE PACKAGE, 2006-2010 (900 k\$)
- 3D-Repertoire, EU FW6 512028, 2005-2009, A MULTIDISCIPLINARY APPROACH FOR STRUCTURES OF PROTEIN COMPLEXES IN A MODEL ORGANISM (Partner, 650 k€).
- MAX-INF-II EU Macromolecular Crystallography Infrastructure Network, 2004-2008
- BIOXHIT, EU FW6 503420, 2004-2008, BIOCRYSTALLOGRAPHY ON HIGHLY INTEGRATED TECHNOLOGY PLATFORM (Section Coordinator, Partner, 753 k€).
- KWF grant NKI 2004-3063, 2004-2008, POLO-LIKE KINASES (CO-INVESTIGATOR, 600 k€)
- SPINE, EU FW6 Pilot 00988, 2002-2005, STRUCTURAL PROTEOMICS IN EUROPE (620 k€)
- NIH RO1 DEVELOPMENT OF ARP/WARP SOFTWARE PACKAGE, 2002 - 2006 (700 k\$)
- NWO-OC.01.077 STRUCTURAL AND FUNCTIONAL ANALYSIS OF HUMAN L1/ALU RETROPOSITION, 1/9/2002-30/8/2006 (PRINCIPAL CO-INVESTIGATOR1 PhD student)
- NWO-OC.01.078 FUNCTION AND STRUCTURE CHARACTERISATION OF THE RLP/RAB7 COMPLEX 1/9/2002-30/8/2006 (PRINCIPAL CO-INVESTIGATOR, 1 PhD student)
- NWO-OC.01.M.013 PURCHASE OF X-RAY DIFFRACTION EQUIPMENT(with T. Sixma, 250 k€)
- AUTOSTRUCT QLRT-1999-30398 (2000-2003, Partner, 105 k€)
- MAX-INF-II EU Macromolecular Crystallography Infrastructure Network, 2004-2008

Previous fellowships to lab members

- NWO VIDI fellowship to Dr. R. Joosten (career development grant)
- NWO VENI fellowship to Dr. Y. Hiruma (personal fellowship)
- Senior SFN fellowship to Dr. E. von Castelmur
- NWO Veni fellowship to Dr. R. Joosten
- EMBO fellowship to Dr. E. von Castelmur
- EMBO fellowship to Dr. C. Caillat
- SNF Swiss Science Foundation post-doctoral fellowship to Dr. E. von Castelmur
- NWO Veni fellowship to Dr. S. Cohen
- NWO Vidi fellowship to O. Weichenrieder
- EMBO fellowship to Dr. V. De Marco
- Marie Curie fellowship to Dr. O. Weichenrieder
- EMBO fellowship to Dr. O. Weichenrieder

Honours and awards

EMBO Young Investigator, 2001

Professional societies

Founding and Board member of the Netherlands Biomolecular Modelling Society

"Proteins" NWO study group (Board member 2013-2015)

"Nucleic Acids" and "Crystallography" NWO study groups

International Union of Crystallography (through both the Dutch and Greek societies)

Management

Activities within the Host organisation

- Scientific responsible for the NKI High Performance Computing Cluster (2016 -)
- NKI international Seminar Committee member (2012 - 2020)
- Scientific responsible for the NKI Protein Facility (2010 -)
- Deputy member of the NKI Research Council (2008 -)
- EMBL - ESRF JCSG management committee (1997-1999)

Participation in European Project coordination

- Coordinator of iNEXT-Discovery H2020 project.
- Member of the 3D-Bioinfo Elixir community Steering Committee.
- Executive Board member for the Instruct-ERIC project (2017-2021).
- Member of Data Management committee for the Instruct ESFRI project (2018-)
- Member of Access committee for the Instruct ESFRI project (2016-).
- Deputy Coordinator of the iNEXT H2020 project (2015-2019).
- Council member for the Instruct ESFRI project (2011-2017)
- *Ex officio* management board member of the Biostruct-X EC-CSA Project.
- Working Group Coordinator for the INSTRUMENT ESFRI project (2006-2010).
- Project Steering Committee member for the 3D-Repertoire project (2005-2009).
- Project Steering Committee and Section Manager for BIOXHIT EU project(2004-2008).

Advisory groups

- Member of the "Macromolecular and Cell Structure" scientific advisory board of the EBI.
- Board member of the "Advanced Methods, Data and Analyses to understand Living systems" research community of NWO (2018-2021)
- Board member of the "Chemistry of Life" research community of NWO (2018-2021)
- Board member of the Dutch "Chemistry Council" representing the NKI (2018 - today)
- Member of "site visit" evaluation committee for the Department of Biology, University of Athens, Greece (November 2018)
- Member of "site visit" evaluation committee for the Technical University of Athens, Greece (December 2016)
- Member of the Advisory Board for the EC-REGPOT project InnovCrete (2015-2018)
- Co-chair of the Shanghai Synchrotron Radiation Facility Biology Beamlines (2015)
- Member of the Netherlands "contact committee" to EMBC/EMBL (2014-present)
- Elected European Users representative to the Biostruct-X EC-CSA (2012-2014)
- Member of the Advisory Board for the EC-REGPOT project SEE-DRUG (2012-2015)
- Member of the Review Panel for Diamond beamline BL23 (2011)
- Member of "site visit" evaluation committee for the Department of Biochemistry , University of Larissa, Greece (February 2011)

- Member of the ESRF synchrotron (France) external consultant panel for Macromolecular Crystallography in the strategic upgrade (2009)
- Member of the DIAMOND synchrotron (UK) working group for macromolecular crystallography beamlines (2001-2005)
- Member of the ALBA synchrotron (Spain) international advisory panel for the macromolecular crystallography beamline (2004)

Editorial

- Guest Scientific Editor for Acta D, Biol. Crystallography (special issue 2021)
- Guest Scientific Editor for JoVE (special issue 2020)
- Editorial Board member in Journal of Structural Biology (2011-present)
- Editorial Board member in PROTEINS:Structure, function&Bioinformatics (2008-2020)
- Review Editor for Frontiers (Structural Biology)
- F1000 member (Structural Biology)
- Guest Scientific Editor for Emerging Topics In Life Sciences (special issue 2018)
- Guest Scientific Editor for Current Opinion in Structural Biology (special issue 2016)
- Guest Scientific Editor for J. Structural Biology (special issue 2011)
- Guest Scientific Editor for Acta D, Biol. Crystallography (special issue December 2004)
- Referee for research papers in various scientific journals, including Nature, Nature Methods, Nature Protocols, Nature Structural & Molecular Biology, Structure, Acta Cryst.

Activities with industry and commercialisation of research results

- Research Collaboration with Galapagos
A research collaboration on the mode of action of Autotaxin inhibitors and the relation of mechanism to clinical trial outcome.
- Research Collaboration with Janssen Pharmaceuticals
A research collaboration to improve and customise our software PDB_REDO, for JnJ at Philadelphia, for biologics and small molecule drug discovery. The research agreement is for two years, starting 2016, and involved an amount of 236,000 US\$.
- ARP/wARP
The ARP/wARP software has been free for academic users, but licensed for a fee to over 50 companies, with a to-day revenue reaching 2,000,000 Euro.
- X-ray Micro-diffractometer
I co-designed and commissioned the first X-ray micro-diffractometer, between 1998-2000; it revolutionised design of many beamlines, having introduced concepts like the on-axis viewing for sample centring. It is commercialised through the companies MATEL and ARINAX and several units are installed in world synchrotrons.
- Crystallisation Screening
The PACT screen for macromolecular crystallisation has been developed in my laboratory, licensed to Molecular Dimensions Ltd and Qiagen.
- Autotaxin
The Autotaxin structure determination project has been a close collaboration with Pfizer, and involved a research grant of 200,000 Euro to fund a PhD position in my lab for this project.
- Human PLA2G16 lipase
A human lipase that is a drug target for preventing viral entry, has been a focus for structural studies in my lab; the IP on a new human lipase has been licensed to Haplogen GmbH.

Academic Examination Boards

PHD and other higher degree examination boards

- Doctoral Thesis examination board of twenty-one PhD candidates in the Netherlands
- Doctoral Thesis examination board in the UK (three students)
- Doctoral Thesis examination board in Denmark (two student)
- "Habilitation" (license to supervise PhD students) for Dr. Carlo Petosa (France)
- "Habilitation" (license to supervise PhD students) for Dr. Montserrat Soler Lozez

Grant Review

Grant panels, committees and review - International

- Nordforsk Foundation, Nordic Research Infrastructures (2019)
- Belgian National Research Foundation, FWO (2013-2019)
- Vice-chair of the Biostruct-X EC-CSA Project Evaluation Committee (2012-2016)
- Review Board member for NIH grants (2010, 2011)
- Referee for EMBO short and long term fellowships (regularly since 2002)
- Referee and Committee member for grants of the Wellcome Trust (UK, 2006, 2009)
- Referee for research grants of the BBSRC (UK, 2005, 2006, 2008)
- Referee and Committee member for EC FP7 grants
- Referee for beamtime applications at the EMBL/UK-BBSRC BM14 (2001 - 2010)
- Panel member and referee for the National Portuguese Research Foundation; area of Molecular and Structural Biology: 2002, 2004, 2007
- Referee for research grants of the Belgian National Research Foundation

Grant panels, committees and review - National (NWO Netherlands)

- Committee member of the VIDI fellowships panel of NWO-CW (2005, 2006, 2011)
- Committee member of the 'MiddelGroot' grants panel of NWO-CW (2010)
- Committee member of the BAZIS grants panel of NWO-CW (2010)
- Referee for several research grants of the Dutch National Research Organisation (NWO)

Scientific Collaborations

International Collaborations

- Dr. Craig Jamieson, small molecule inhibitors
- Dr. Huan (Steven) Liang, Harvard University, ATX compounds for PET screenings
- Prof. Andrew Morris, Autotaxin in cardiovascular disease
- Dr. Garib Murshudov, macromolecular refinement
- Prof. Peter Myler, J-base biology

National Collaborations

- Prof. Wouter Moolenaar, ATX
- Prof. Geert Kops, mitotic kinases
- Dr. Thijn Brummelkamp, host factors for viral entry
- Prof. Piet Borst, J-base biology
- Dr. Ruchi Bansla, ATX in liver
- Dr. Leila Akkari, ATX in liver

Teaching activities

Organisation of conferences and workshops

- CCP4 Study Weekend, 5-8 January 2020 (Virtual event)
- Translating Structural Biology into Biomedical Applications, Grenoble, 2018
- Instruct Biennial Structural Biology meeting, Brno, 2016
- Gordon Conference on "Diffraction Methods in Molecular Biology" 2014 Chair
- Gordon Conference on "Diffraction Methods in Molecular Biology" 2012 Co-chair
- "What is a Macromolecular Complex?", NKI, 1-2 October 2009, NKI, Amsterdam
- Como School on X-ray Crystallography, 21-25 May 2006, Como, Italy
- CCP4 Study Weekend, 4-5 January 2004, Leeds, UK
- Methods for high-throughput structure determination, 1 June 2004, NKI, Amsterdam
- Methods for high-throughput structure determination, 17 May 2002, NKI, Amsterdam

Organisation of Practical courses

- Macromolecular Crystallography, Cold Spring Harbor, US, 2016 - present (annually)
- Master Your Proteins, Amsterdam, 20-23 November 2017, NKI Amsterdam
- HTP crystallisation and information management, 18-20 June 2008, NKI Amsterdam
- Biophysical Characterisation of Macromolecules, 21-23 May 2008, NKI, Amsterdam
- High Throughput Protein crystallisation, 28 February - 3 March 2007, EMBL Hamburg
- High Throughput Protein crystallisation, 13-15 December 2005, NKI, Amsterdam
- EMBO Practical course on "Automated high-throughput macromolecular structure determination", 24-30 May 2004, NKI, Amsterdam
- 1st EMBO YIP PhD course, 29 August - 4 September 2002, EMBL-Heidelberg
- EMBO Practical course on "Automated high-throughput macromolecular structure determination", 8-16 May 2002, EMBL-Heidelberg
- EMBO Practical course on "Automated high-throughput macromolecular structure determination", 20-29 March 2000, EMBL-Grenoble

Invited Tutor in regular Practical Courses

From 1998 – annual	Macromolecular Crystallography, Cold Spring Harbor, US
From 2002 – 2014	Modern Methods in Biocrystallography, IQTB Lisboa, PO
From 2002 – 2005	EMBO YIP PhD course, EMBL-Heidelberg, DE
From 1999 – 2011	Methods for macromolecular crystallography, EMBL-HH, DE

Invited Tutor in Courses and Workshops

25-30 September 2022, Joint Instruct-iNEXT Course, Oeiras, PT
17-23 August 2022, Molecular mechanisms in signal transduction & cancer, Spetses, GR
19-23 November 2018, Macromolecular complexes, Strasburg, FR
27-29 September 2018, Structural Biology Approaches for drug development, HU
17-21 December 2014, From Genes to Atomic Structures at Trieste, IT
23-29 April 2012, From Genes to Atomic Structures at Trieste, IT
10-16 July 2011, EMBO course on Macromolecular Complexes, Marseille, FR
15-19 September 2008, EMBO Crystallography Course at Soleil, Paris, FR
5-7 June 2008, Biochemistry and Biotechnology course, Heraklion, GR
24-27 May 2008, CCP4 Workshop, APS Chicago, US
2-12 May 2008, Macromolecular Crystallography, CN
9-22 Sept. 2006, Shelx Workshop, Gottingen, DE
6-17 Sept. 2003, Shelx Workshop, Gottingen, DE
22-23 Nov. 2002, High-throughput methods for structural genomics, Argonne N.L., US
8-9 Oct. 2002, X-ray Structure Determination for Structural Genomics, PSF Berlin, DE
13-17 March 2000, New trends in Protein Crystallography, University of Ulu, FI
7-8 Nov. 2000, Crystallographic methods for Structural Genomics, Harima, JP
25 May-4 June 2000, Structural Molecular Biology School, Stanford University, US
15-19 Nov.1999, High-throughput methods for structural genomics, Argonne, US
14-20 August 1999, IUCr Workshop on Crystallographic Computing, Cambridge, UK
21-22 June, 1999, Automated high-throughput structure determination, Brookhaven, US
11-17 Dec., 1998, Protein structure refinement, University of York, UK

Scientific Meetings and Seminars

Chair in International meetings

- EMBO conference "Towards Novel Therapies", 6-8 March 2017, Groningen, NL
- "New Computational Approaches to Structure Solution and Refinement", International Union of Crystallography (IUCr), 22-30 August 2011, Madrid, ES
- Gordon Conference "Diffraction methods in molecular biology", 11-15 July 2010, Session Chair, USA
- "Experimental Phasing in Structural Biology, Phase Improvement and Refinement.", European Crystallography Meeting (ECM), 29 August - 2 Sept 2010, Darmstadt, DE
- "Computational Methods", American Crystallographic Association (ACA) Annual Meeting, 26-31 July 2004, Chicago, USA
- "Chemistry meets Biology symposium", 5-6 June 2004, Heidelberg, DE
- "Model building and refinement", American Crystallographic Association (ACA) Annual Meeting, 26-31 July 2003, Cincinnati, USA
- "Conference on Structural Genomics", 1-5 November 2000, Yokohama, Co-chairman

Invited Lectures (selected)

- 2020 Integrating evolutionary information to PDB-REDO, Nottingham, UK
- 2019 New tools in PDB-REDO, Vienna, Austria
- 2019 The PDB-REDO for macromolecular structure refinement, Boston, USA
- 2018 Protein-protein interactions versus ligand-receptor interactions, Ghent, BE
- 2018 Bioactive Lipids, Athens, GR
- 2017 Protein-Protein Interactions Meeting, Elat, IL
- 2017 Lysophospholipid and Related Mediators - From Bench to Clinic, New Orleans, USA
- 2017 BioTrans17 Meeting, Barcelona, ES
- 2016 Bioactive Lipids, Budapest, HU
- 2016 Greek Crystallographic society meeting, Athens, GR
- 2016 IMBB Seminar Series, Heraklion, GR
- 2016 Max Perutz Institute Seminar Series, Vienna, AU
- 2015 Instruct Biennial meeting, Florence, IT
- 2014 Greek Crystallographic society meeting, Greece
- 2014 Greek Pharmacological society annual meeting, Greece
- 2013 LMB-MRC Cambridge, Seminar Series, J-base binding protein
- 2014 Invited Lecturer, Greek Crystallographic Society, Heraklion, GR
- 2014 Invited Lecturer, Greek Pharmacological Society, Athens, GR
- 2013 Invited lecturer, "The J-base binding protein", LMB-MRC Cambridge,
- 2012 Invited Lecturer, Methods in Macromolecular Crystallography, rice, IT,
- 2011 Invited Lecturer CIMP, "Structure and function of Autotaxin", Vienna, AU,
- 2010 Gent, BE, Guest lecture at University of Gent, BE
- 2010 Invited Lecturer "Medicinal Chemistry of Tropical Diseases", London, UK
- 2010 Invited Lecturer Swedish Structural Biology meeting, Tallberg, SE
- 2010 Invited Lecturer in "Macromolecular Complexes" meeting, Erice, IT
- 2009 Invited Lecturer, University of Dundee, Dundee UK,
- 2008 3rd meeting of the Greek Crystallography Association, Athens, GR
- 2008 Third International Structural Genomics Meeting Oxford UK,
- 2008 Gordon Conference Diffraction methods in molecular biology, UA,
- 2008 Algorithms in crystallography and electron microscopy, NL
- 2007 BCA Spring meeting, Canterbury UK,
- 2006 Greek Biochemistry Association annual meeting, Patra GR,
- 2006 BCA Spring meeting, Lancaster UK,
- 2006 USA, Gordon Conference Diffraction methods in molecular biology
- 2004 London, UK, The SPINE conference
- 2004 USA, Gordon Conference Diffraction Methods in Molecular Biology
- 2004 Meeting on high resolution structures for drug design, Bischenberg, FR
- 2003 American Crystallographic Association Annual Meeting, Cincinnati, USA
- 2003 International Symposium on Diffraction Structural Biology, Tsukuba, JA
- 2003 7th European Workshop on Crystallography, Como, IT
- 2002 2nd Conference on Structural Genomics, Berlin, DE

Anastassis Perrakis Curriculum Vitae

- 2002 Structural Biology applications at PETRA III, Hamburg, DE
- 2002 9th Int.Conference Crystallisation Biological Macromolecules, Jena
- 2001 American Crystallographic Association Meeting, Los Angeles, USA,
- 2001 ESRF user meeting, Grenoble, FR
- 2000 Conference on Structural Genomics, Co-chairman, Yokohama, JA
- 2000 ECM-19: 19th European Crystallographic Meeting, Nancy, FR
- 2000 Methods in Macromolecular Crystallography, Erice, IT
- 1999 American Crystallographic Association Meeting, Buffalo, USA
- 1999 5th European Workshop on Crystallography, Como, IT
- 1999 CCP4 study weekend, 'Data collection and processing', Sheffield, UK
- 1998 American Crystallographic Association Meeting, Washington, USA
- 1998 Gordon Conference Diffraction Methods in Molecular Biology, USA
- 1997 Symposium on the refinement of macromolecules, Porto, PO
- 1997 ECM-17: 17th European Crystallographic Meeting, Lisboa, PO
- 1997 CCP4 study weekend, 'Recent advances in phasing', York, UK
- 1996 Methods and Structures in macromolecular crystallography, Hamburg
- 1996 2nd International Symposium on Chitin Enzymology, Senigalia, IT

Current team members

Dr. Hans Wienk - Project Manager, iNEXT and related activities
Dr. Krista Joosten - Post Doc, Methods in macromolecular crystallography
Dr. Robbie Joosten - Post Doc, Methods in macromolecular crystallography
Mr. Razvan Borsa - PhD Candidate, Biochemistry and Structural Biology
Mrs. Jitske Bak - PhD Candidate, Biochemistry and Structural Biology
Mrs. Ida van Vries - PhD Candidate, Methods in macromolecular crystallography
Mr. Fernando Salgado-Polo - PhD Candidate, Biochemistry and Structural Biology
Mr. Maarten Hekkelman - Software Developer, Methods in macromolecular crystallography

Previous team members - NKI

Dr. Misbha Ud Din Ahmad - Post Doc, (Scientist, ZoBio)
Mr. Nassos Adamopoulos - PhD Student (post-doc, Brno)
Mrs. Tatjana Heidebrecht - Research Assistant (research assistant, Scenic Biotech)
Mr. George Damaskos - Software developer (PhD candidate)
Dr. Yoshitaka Hiruma - Post Doc (Scientist, Sanquin)
Dr. Bart van Beusekom - PhD Student (Data Scientist at VIQTOR DAVIS NL)
Ms. Foteini Tsakou - Technician (Master student, Denmark)
Ms. Yvetter Stuif-Buitsma - Technician (Laboratory Manager, NKI)
Dr. Foteini Tsakou - Post Doc (R&D Scientist, DSM)
Dr. Willem Jan Keune - Post Doc (Consultant, FFUND)
Dr. Eleonora von Castelmur - Post Doc, (Assistant Professor, University of Linköping)
Dr. Christophe Caillat - Post Doc, (Post Doc, IBS Grenoble)
Dr. Jens Hausmann - PhD Student, (EMBO fellow, University of Munster)
Dr. Leonie van Zijl - Post Doc (Docent Life Sciences at Hogeschool Utrecht)
Dr. Serge Cohen - Post Doc, (Chargé de recherche, "Ipanema", France)
Dr. Valeria De Marco - Post Doc, (Head of Student Administration, MRC London)
Dr. Eirini Mitisiki - Post- doc, (Application Scientist, Pfizer, Athens)
Dr. Dene Littler - Post Doc, (Post-doc, Melbourne, Australia)
Mr. Evangelos Christodoulou - Technician (Protein expression Facility Manager, MRC London)
Dr. Patrick Celie - Post Doc, (NKI Protein Facility Manager)
Dr. Wijnand Mooij - Post Doc, (Scientific programmer, Dotmatics)
Mr. Diederick de Vries - Database developer, (Software developer, Sogyo)
Mrs. Suzan van Gerwen - Technician, (Research Assistant, MPI Dortmund)
Mrs. Angelina Huseinovic - Technician, (PhD student at Vrije Universiteit Amsterdam)
Mr. Mobien Kassiem - Technician, (Technician, NKI Amsterdam)
Dr. Oliver Weichenrieder - Senior Post Doc, (Group Leader MPG Tübingen, DE)
Mr. Kostas Repanas - PhD Student, (Scientific writer, Singapore)
Dr. Mark Hilge - Post Doc, Biochemistry, (Staff Scientist, Switzerland)
Mr. Marouane Ben Jelloul - Software Engineer (Project Manager, Paris)
Mr. Mattheos Kakaris - Software Engineer (Senior Project Manager, Digitalis, Greece)
Mrs. Cristiane Toaldo - Technician NKI H4 (technician)

Publications

-Original research publications

131. Salgado-Polo F, Borza R, Matsoukas MT, Marsais F, Jagerschmidt C, Waeckel L, Moolenaar WH, Ford P, Heckmann B, Perrakis A. Autotaxin facilitates selective LPA receptor signaling. *Cell Chem Biol.* 2023 Jan 19;30(1):69-84.e14.
130. Hekkelman ML, de Vries I, Joosten RP, Perrakis A. AlphaFill: enriching AlphaFold models with ligands and cofactors. *Nat Methods.* 2022 Nov 24. doi: 10.1038/s41592-022-01685-y.
129. d'Amico EA, Ud Din Ahmad M, Cmentowski V, Girbig M, Müller F, Wohlgemuth S, Brockmeyer A, Maffini S, Janning P, Vetter IR, Carter AP, Perrakis A, Musacchio A. Conformational transitions of the Spindly adaptor underlie its interaction with Dynein and Dynactin. *J Cell Biol.* 2022 Nov 7;221(11):e202206131.
128. Wehlin A, Cornaciu I, Marquez JA, Perrakis A, von Castelmur E. Crystal structure of the phospholipase A and acyltransferase 4 (PLAAT4) catalytic domain. *J Struct Biol.* 2022 Dec;214(4):107903. doi: 10.1016/j.jsb.2022.107903.
127. Booiijink R, Salgado-Polo F, Jamieson C, Perrakis A, Bansal R. A type IV Autotaxin inhibitor ameliorates acute liver injury and nonalcoholic steatohepatitis. *EMBO Mol Med.* 2022 Sep 7;14(9):e16333.
126. Karantzelis N, Petropoulos M, De Marco V, Egan DA, Fish A, Christodoulou E, Will DW, Lewis JD, Perrakis A, Lygerou Z, Taraviras S. Small Molecule Inhibitor Targeting CDT1/Geminin Protein Complex Promotes DNA Damage and Cell Death in Cancer Cells. *Front Pharmacol.* 2022 Apr 25;13:860682.
125. Landskron L, Bak J, Adamopoulos A, Kaplani K, Moraiti M, van den Hengel LG, Song JY, Bleijerveld OB, Nieuwenhuis J, Heidebrecht T, Henneman L, Moutin MJ, Barisic M, Taraviras S, Perrakis A, Brummelkamp TR. Posttranslational modification of microtubules by the MATCAP de tyrosinase. *Science.* 2022 May 20;376(6595)
124. Clark JM, Salgado-Polo F, Macdonald SJF, Barrett TN, Perrakis A, Jamieson C. Structure-Based Design of a Novel Class of Autotaxin Inhibitors Based on Endogenous Allosteric Modulators. *J Med Chem.* 2022 Apr 28;65(8):6338-6351.
123. Pataskar A, Champagne J, Nagel R, Kenski J, Laos M, Michaux J, Pak HS, Bleijerveld OB, Mordente K, Navarro JM, Blommaert N, Nielsen MM, Lovecchio D, Stone E, Georgiou G, de Gooijer MC, van Tellingen O, Altelaar M, Joosten RP, Perrakis A, Olweus J, Bassani-Sternberg M, Peeper DS, Agami R. Tryptophan depletion results in tryptophan-to-phenylalanine substituents. *Nature.* 2022 Mar;603(7902):721-727.
122. Matas-Rico E, Frijlink E, van der Haar Àvila I, Menegakis A, van Zon M, Morris AJ, Koster J, Salgado-Polo F, de Kivit S, Lança T, Mazzocca A, Johnson Z, Haanen J, Schumacher TN, Perrakis A, Verbrugge I, van den Berg JH, Borst J, Moolenaar WH. Autotaxin impedes anti-tumor immunity by suppressing chemotaxis and tumor infiltration of CD8+ T cells. *Cell Rep.* 2021 Nov 16;37(7):110013.
121. Deng X, Salgado-Polo F, Shao T, Xiao Z, Van R, Chen J, Rong J, Haider A, Shao Y, Josephson L, Perrakis A, Liang SH. Imaging Autotaxin In Vivo with 18F-Labeled Positron Emission Tomography Ligands. *J Med Chem.* 2021 Oct 28;64(20):15053-15068.
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119. de Vries I, Kwakman T, Lu XJ, Hekkelman ML, Deshpande M, Velankar S, Perrakis A, Joosten RP. New restraints and validation approaches for nucleic acid structures in PDB-REDO. **Acta Crystallogr D Struct Biol.** 2021 Sep 1;77(Pt 9):1127-1141.
118. Murachelli AG, Damaskos G, Perrakis A. CCD2: design constructs for protein expression, the easy way. **Acta Crystallogr D Struct Biol.** 2021 Aug 1;77(Pt 8):992-1000.

117. van Alen I, Chikunova A, Safeer AA, Ahmad MUD, Perrakis A, Ubbink M. The G132S Mutation Enhances the Resistance of Mycobacterium tuberculosis β -Lactamase against Sulbactam. **Biochemistry**. 2021 Jul 20;60(28):2236-2245.
116. Ahmad MUD, Fish A, Molenaar J, Sreeramulu S, Richter C, Altincekic N, Schwalbe H, Wienk H, Perrakis A. Nano-Differential Scanning Fluorimetry for Screening in Fragment-based Lead Discovery. **J Vis Exp**. 2021 May 16;(171).
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114. Chikunova A, Manley MP, Ud Din Ahmad M, Bilman T, Perrakis A, Ubbink M. Conserved residues Glu37 and Trp229 play an essential role in protein folding of β -lactamase. **FEBS J**. 2021 Mar 31.
113. van Beusekom B, Damaskos G, Hekkelman ML, Salgado-Polo F, Hiruma Y, Perrakis A*, Joosten RP . LAHMA: structure analysis through local annotation of homology-matched amino acids. **Acta Crystallographica Section D: Structural Biology**. 77 (1) 2021.
112. Roosendaal J, Heidebrecht T, Rosing H, Perrakis A, Beijnen JH. Quantitative LC-MS/MS analysis of 5-hydroxymethyl-2'-deoxyuridine to monitor the biological activity of J-binding protein. **Anal Biochem**. 2020 Aug 29;610:113930.
111. Sobolev OV, Afonine PV, Moriarty NW, Hekkelman ML, Joosten RP, Perrakis A, Adams PD. A Global Ramachandran Score Identifies Protein Structures with Unlikely Stereochemistry. **Structure**. 2020 Aug 21:S0969-2126(20)30287-2.
110. Salgado-Polo F, van Veen M, van den Broek B, Jalink K, Leyton-Puig D, Perrakis A, Moolenaar WH, Matas-Rico E. (2020) Sequence-dependent trafficking and activity of GDE2, a GPI-specific phospholipase promoting neuronal differentiation. **J Cell Sci**. 2020 Jan 13. pii: jcs.235044. doi: 10.1242/jcs.235044.
109. Adamopoulos A, Heidebrecht T, Roosendaal J, Touw WG, Phan IQ, Beijnen J, Perrakis A*. The domain architecture of the protozoan protein J-DNA-binding protein 1 suggests synergy between base J DNA binding and thymidine hydroxylase activity. **J Biol Chem**. 2019 Aug 23;294(34):12815-12825. doi: 10.1074/jbc.RA119.007393. Epub 2019 Jul 10.
108. Adamopoulos A, Landskron L, Heidebrecht T, Tsakou F, Bleijerveld OB, Altelaar M, Nieuwenhuis J, Celie PHN, Brummelkamp TR, Perrakis A*. Crystal structure of the tubulin tyrosine carboxypeptidase complex VASH1-SVBP. **Nat Struct Mol Biol**. 2019 Jul;26(7):567-570. doi: 10.1038/s41594-019-0254-6. Epub 2019 Jul 1.
107. van Beusekom B, Wezel N, Hekkelman ML, Perrakis A, Emsley P, Joosten RP. Building and rebuilding N-glycans in protein structure models. **Acta Crystallogr D Struct Biol**. 2019 Apr 1;75(Pt 4):416-425. doi: 10.1107/S2059798319003875. Epub 2019 Apr 4.
106. Pachis ST, Hiruma Y, Tromer EC, Perrakis A, Kops GJPL. Interactions between N-terminal Modules in MPS1 Enable Spindle Checkpoint Silencing. **Cell Rep**. 2019 Feb 19;26(8):2101-2112.e6. doi: 10.1016/j.celrep.2019.01.017.
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104. Roorda JC, Joosten RP, Perrakis A*, Hiruma Y. A crystal structure of the human protein kinase Mps1 reveals an ordered conformation of the activation loop. **Proteins**. 2018 Dec 23. doi: 10.1002/prot.25651. [Epub ahead of print]
102. van Beusekom B, Heidebrecht T, Adamopoulos A, Fish A, Pardon E, Steyaert J, Joosten RP, Perrakis A. Characterization and structure determination of a llama-derived nanobody targeting the J-base binding protein 1 **Acta Crystallogr F Struct Biol Commun**. 2018 Nov 1;74(Pt 11):690-695. doi: 10.1107/S2053230X18010282. Epub 2018 Oct 16.
101. Argenzio E, Klarenbeek J, Kedziora KM, Nahidiazar L, Isogai T, Perrakis A, Jalink K, Moolenaar WH, Innocenti M. Profilin binding couples chloride intracellular channel protein CLIC4 to RhoA-mDia2 signaling and filopodium formation. **J Biol Chem**. 2018 Dec 14;293(50):19161-19176. doi: 10.1074/jbc.RA118.002779. Epub 2018 Oct 31.
100. Sacristan C, Ahmad MUD, Keller J, Fermie J, Groenewold V, Tromer E, Fish A, Melero R, Carazo JM, Klumperman J, Musacchio A, Perrakis A, Kops GJ. Dynamic kinetochore size regulation promotes microtubule capture and chromosome biorientation in mitosis. **Nat Cell Biol**. 2018 Jun 18. doi: 10.1038/s41556-018-0130-3.

99. van Beusekom B, Joosten K, Hekkelman ML, Joosten RP, Perrakis A. Homology-based loop modeling yields more complete crystallographic protein structures. **IUCrJ** 2018 Aug 8;5(Pt 5):585-594
98. Salgado-Polo F, Fish A, Matsoukas MT, Heidebrecht T, Keune WJ, Perrakis A. Lysophosphatidic acid produced by autotaxin acts as an allosteric modulator of its catalytic efficiency. **J Biol Chem.** 2018 Sep 14;293(37):14312-14327.
97. van Veen M, Mans LA, Matas-Rico E, van Pelt J, Perrakis A, Moolenaar WH, Haramis AG. Glycerophosphodiesterase GDE2/GDPD5 affects pancreas differentiation in zebrafish. **Int J Biochem Cell Biol.** 2018 Jan;94:71-78. doi: 10.1016/j.biocel.2017.11.015. Epub 2017 Dec 22.
96. van Beusekom B, Touw WG, Tatineni M, Somani S, Rajagopal G, Luo J, Gilliland GL, Perrakis A*, Joosten RP. Homology-based hydrogen bond information improves crystallographic structures in the PDB. **Protein Sci.** 2018 Mar;27(3):798-808. doi: 10.1002/pro.3353
95. Nieuwenhuis J, Adamopoulos A, Bleijerveld OB, Mazouzi A, Stickel E, Celie P, Altelaar M, Knipscheer P, Perrakis A, Blomen VA, Brummelkamp TR. Vasohibins encode tubulin detyrosinating activity. **Science.** 2017 Nov 16. pii: eaao5676. doi: 10.1126/science.aao5676.
94. van Veen M, Matas-Rico E, van de Wetering K, Leyton-Puig D, Kedziora KM, De Lorenzi V, Stijf-Bultsma Y, van den Broek B, Jalink K, Sidenius N, Perrakis A, Moolenaar WH. Negative regulation of urokinase receptor activity by a GPI-specific phospholipase C in breast cancer cells. **Elife.** 2017 Aug 29;6. pii: e23649. doi: 10.7554/eLife.23649.
93. Hiruma Y, Koch A, Hazraty N, Tsakou F, Medema RH, Joosten RP, Perrakis A*. Understanding inhibitor resistance in Mps1 kinase through novel biophysical assays and structures. **J Biol Chem.** 2017 Sep 1;292(35):14496-14504. doi: 10.1074/jbc.M117.783555. Epub 2017 Jul 18.
92. Keune W-J, Potjewyd, F., Heidebrecht T, Salgado-Polo E, Macdonald, S.J.F., Chelvarajan, L., Abdel Latif, A., Soman, S., Morris, A.J., Watson, A.J.B., Jamieson, C., Perrakis A* Rational Design of Autotaxin Inhibitors by Structural Evolution of Endogenous Modulators (2017) **Journal of Medicinal Chemistry**, 60 (5), pp. 2006-2017.
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88. Matas-Rico, E., van Veen, M., Leyton-Puig, D., van den Berg, J., Koster, J., Kedziora, K.M., Moolenaar, B., Weerts, M.J.A., de Rink, I., Medema, R.H., Giepmans, B.N.G., Perrakis A, Jalink, K., Versteeg, R., Moolenaar, W.H. Glycerophosphodiesterase GDE2 Promotes Neuroblastoma Differentiation through Glypican Release and Is a Marker of Clinical Outcome (2016) **Cancer Cell**, 30 (4), pp. 548-562.
87. Hausmann J, Keune W-J, Hipgrave Ederveen A.L, van Zeijl L, Joosten R.P, Perrakis A*. Structural snapshots of the catalytic cycle of the phosphodiesterase Autotaxin (2016) **Journal of Structural Biology**, 195 (2), pp. 199-206.
86. Keune WJ, Hausmann J, Bolier R, Tolenaars D, Kremer A, Heidebrecht T, Joosten RP, Sunkara M, Morris AJ, Matas-Rico E, Moolenaar WH, Oude Elferink RP, Perrakis A*. (2016) Steroid binding to Autotaxin links bile salts and lysophosphatidic acid signalling. **Nature Commun.** Apr 14;7:11248. doi: 10.1038/ncomms11248.
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