

Curriculum Vitae

André Hoelz, Ph.D.

Investigator, Howard Hughes Medical Institute &
Mary and Charles Ferkel Professor of Chemistry and Biochemistry
California Institute of Technology, Division of Chemistry and Chemical Engineering, Mail Code 147-75,
1200 East California Boulevard, Pasadena, CA 91125, USA
<http://ahweb.caltech.edu>; E-mail: hoelz@caltech.edu; Tel: +1-626-395-8480; Fax: +1-626-568-9430

EDUCATION

<i>Ph.D.</i> 2004	Structural Biology and Biochemistry The Rockefeller University, New York, NY, USA
<i>Diplom (M.Sc.)</i> 1997	Chemistry and Biochemistry Albert Ludwig University of Freiburg, Freiburg im Breisgau, Germany
<i>Vordiplom (B.Sc.)</i> 1993	Chemistry Albert Ludwig University of Freiburg, Freiburg im Breisgau, Germany

RESEARCH AND PROFESSIONAL EXPERIENCE

<i>November 2024</i> – <i>present</i>	Investigator, Howard Hughes Medical Institute
<i>March 2023</i> – <i>present</i>	Mary and Charles Ferkel Professor of Chemistry and Biochemistry California Institute of Technology Division of Chemistry and Chemical Engineering, Pasadena, CA, USA
<i>October 2021</i> – <i>February 2023</i>	Professor of Chemistry and Biochemistry , California Institute of Technology Division of Chemistry and Chemical Engineering, Pasadena, CA, USA
<i>November 2016</i> – <i>October 2022</i>	Faculty Scholar, Howard Hughes Medical Institute (not renewable)
<i>August 2015</i> – <i>September 2021</i>	Investigator, Heritage Medical Research Institute (renewed 2018, not renewable)
<i>April 2016</i> – <i>September 2021</i>	Professor of Chemistry , California Institute of Technology Division of Chemistry and Chemical Engineering, Pasadena, CA, USA
<i>November 2010</i> – <i>April 2016</i>	Assistant Professor of Chemistry , California Institute of Technology Division of Chemistry and Chemical Engineering, Pasadena, CA, USA
<i>September 2009</i> – <i>November 2010</i>	Research Assistant Professor, Group Leader Laboratory of Cell Biology, The Rockefeller University, New York, NY, USA
<i>August 2007</i> – <i>August 2009</i>	Research Associate, Group Leader Laboratory of Cell Biology, The Rockefeller University, New York, NY, USA
<i>August 2004</i> – <i>July 2007</i>	Postdoctoral Fellow, Group Leader Sponsor: Günter Blobel, M.D., Ph.D. Laboratory of Cell Biology, Howard Hughes Medical Institute The Rockefeller University, New York, NY, USA
<i>August 2003</i> – <i>July 2004</i>	Postdoctoral Fellow Sponsor: Thomas P. Sakmar, M.D. Laboratory of Molecular Biology and Biochemistry, Howard Hughes Medical Institute The Rockefeller University, New York, NY, USA

August 1997
– July 2003

Graduate Fellow

Advisor: John Kuriyan, Ph.D.
Laboratories of Molecular Biophysics, Howard Hughes Medical Institute
The Rockefeller University, New York, NY, USA

February 1997
– August 1997

Research Associate

Sponsor: Prof. Dr. Karl Decker
Institute of Molecular Biology and Biochemistry, Department of Medicine
Albert Ludwig University of Freiburg, Freiburg im Breisgau, Germany

January 1993
– January 1997

Undergraduate Researcher

Sponsor: Prof. Dr. Karl Decker
Institute of Molecular Biology and Biochemistry, Department of Medicine
Albert Ludwig University of Freiburg, Freiburg im Breisgau, Germany

AWARDS & HONORS

2024 – present

Investigator, Howard Hughes Medical Institute

2023 – present

Mary and Charles Ferkel Professor of Chemistry and Biochemistry
California Institute of Technology

2017 – present

Faculty Member, Structural Biology, Macromolecular Assemblies & Machines
F1000 Prime

2016 – 2022
2021

Faculty Scholar, Howard Hughes Medical Institute (not renewable)
Picchione Visiting Scholar, Dalhousie Medical Research Foundation
Dalhousie University, Halifax, Nova Scotia, Canada

2015 – 2021

Investigator, Heritage Medical Research Institute (renewed 2018, not renewable)

2015

Camille Dreyfus Teacher-Scholar Award, Camille & Henry Dreyfus Foundation

2009, 2015, 2016,
2019, 2022

Science Highlight
Advanced Photon Source, Argonne National Laboratory

2016, 2022

Science Highlight, Stanford Synchrotron Radiation Lightsource

2012

Kimmel Scholar Award, Sidney Kimmel Foundation for Cancer Research

2011

54th Mallinckrodt Scholar Award, Edward Mallinckrodt, Jr. Foundation

2010

Albert Wyrick V Scholar Award, The V Foundation for Cancer Research

2008

Science Highlight, Advanced Light Source, Lawrence Berkeley National Laboratory

2007

Science Highlight
National Synchrotron Light Source, Brookhaven National Laboratory

2005 – 2010

Leukemia & Lymphoma Society Specialized Center of Research Grant
Specialized Center for the Study of Myeloid Malignancies (with Günter Blobel)

2003 – 2004

Murray Foundation Postdoctoral Fellowship, The Murray Foundation

1999 – 2003

Burroughs Wellcome Fund Pre-Doctoral Fellowship
Burroughs Wellcome Fund, Interfaces in Science Program

1997 – 2003

David Rockefeller Graduate Program Fellowship

1991

Prize of the “Fonds der Chemischen Industrie”
Academic proficiency; best chemistry student of the year

INVITED LECTURES (selected)

- July 2025* **International Meeting of the German Society for Cell Biology (DGZ): "Life at the edge: The nuclear envelope in nucleocytoplasmic transport and genome organization", July 23-27, 2022, Potsdam, Germany**
- June 2025* **Keynote Lecture, Inaugural Integrative Structural Biology Symposium, University of Alabama, Birmingham, AL**
- October 2024* **2024 Nucleocytoplasmic Transport Meeting, Presqu'île de Giens, France**
- October 2024* **New Horizons in Membrane Biology Meeting
Goethe University Frankfurt, Frankfurt, Germany**
- July 2023* **The Protein Society, 38th Annual Symposium, Boston, MA**
- May 2023* **Frontiers in Science Lecture, Pierce College, Los Angeles, CA**
- February 2023* **Lecture Series on Cellular Homeostasis
University of Southern California, Los Angeles, CA**
- February 2023* **Seminar Series, Department of Biochemistry
University of Washington, Seattle, WA**
- December 2022* **Seminar Series, Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnique University & State Key Laboratory of Chemical Biology and Drug Discovery (PolyU), Hong Kong**
- October 2022* **Seminar Series, Biochemistry and Molecular Biophysics Department
University of Chicago, Chicago, IL, USA**
- September 2022* **2022 Nucleocytoplasmic Transport Meeting, Estérel, Quebec, Canada**
- July 2022* **International Meeting of the German Society for Cell Biology (DGZ): "Life at the edge: the nuclear envelope in nucleocytoplasmic transport and genome organization", July 22-24, 2022, Potsdam, Germany**
- June 2022* **Picchione Visiting Scholar, Dalhousie Medical Research Foundation
Department of Biochemistry and Molecular Biology
Dalhousie University, Halifax, Nova Scotia, Canada**
- October 2021* **Seminar Series, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), Division of Molecular & Cellular Biology (DMCB), National Institutes of Health, Bethesda, MD, USA**
- September 2019* **Seminar Series, "Transport Across and into Membranes" Graduate School, Department of Chemistry, University of Freiburg, Freiburg, Germany**
- September 2019* **Seminar Series, Biozentrum, University of Basel, Basel, Switzerland**
- September 2019* **Seminar Series, Friedrich Miescher Institute for Biomedical Research (FMI), Basel, Switzerland**
- August 2019* **2019 Nucleocytoplasmic Transport Meeting, Edinburgh, UK**
- April 2019* **The Manitoba Group in Protein Structure and Function Seminar Series, University of Manitoba, Winnipeg, Canada**
- November 2018* **Seminar Series, Department of Molecular Biophysics and Biochemistry
Yale University, New Haven, CT**
- October 2018* **Biophysics Seminar, Northwestern University, Evanston, IL**

October 2018 **Biomedical Symposium, Chicago, Biomedical Consortium (CBC)
Northwestern University Medical School, Chicago, IL**

September 2018 **Seminar Series, Department of Physiology, Columbia University Medical
Center, New York, NY**

July 2018 **International Meeting of the German Society for Cell Biology (DGZ): "Life at the
edge: the nuclear envelope in nucleocytoplasmic transport and genome
organization", July 25-28, 2018, Potsdam, Germany**

May 2018 **Kuriyan Laboratory Symposium, UC Berkeley, Berkeley, CA**

April 2018 **Howard Hughes Medical Institute, Janelia Research Campus, Ashburn, VA**

November 2017 **International Symposium on Atomic Force Microscopy at Solid-Liquid
Interface, Kanazawa University, Kanazawa, Japan**

October 2017 **Seminar, Department of Physiology, DUKE-NUS Medical School, Singapore**

October 2017 **Seminar, Frontiers in Biology Seminar Series, Institute of Molecular Biology,
Academia Sinica, Taipei, Taiwan**

October 2017 **Dean's Lecture Series, Faculty of Medicine, University of Alberta, Edmonton,
Canada**

September 2017 **2017 Nucleocytoplasmic Transport Meeting, Barcelona, Spain**

July 2017 **19th IUPAB congress and 11th EBSA congress, Edinburgh, UK**

June 2017 **Opening Keynote Speaker, Proteins Gordon Research Conference
Holderness School, Holderness, NH, USA**

June 2017 **Seminar, European Molecular Biology Laboratory (EMBL), Heidelberg,
Germany**

June 2017 **Structural Biology Symposium "Integrative Structural Biology of Large
Macromolecular Complexes", University of Göttingen, Göttingen, Germany**

March 2017 **Seminar Series, University of California, San Diego, San Diego, CA, USA**

February 2017 **Seminar, Molecular Biophysics Discussion Group (MBDG)
University of Texas Southwestern Medical Center, Dallas, TX, USA**

February 2017 **Seminar, Institute of Medical Biology (IMB), A*STAR, Singapore**

November 2016 **Seminar, Howard Hughes Medical Institute, Chevy Chase, MD, USA**

December 2016 **Seminar, Molecular and Cellular Biology of Cancer (MCBC) Program
City of Hope, Duarte, CA, USA**

November 2016 **Seminar, Howard Hughes Medical Institute, Chevy Chase, MD, USA**

October 2016 **Biochemistry Lecture Series, McGill University, Montreal, Quebec, Canada**

September 2016 **Seminar Series
Departments of Biochemistry & Molecular Biology and Cancer Biology
Thomas Jefferson University, Philadelphia, PA, USA**

September 2016 **Seminar Series
Department of Biochemistry, McGill University, Montreal, Quebec, Canada**

May 2016 **GM/CA CAT Review
Advanced Photon Source, Argonne National Laboratory, Lemont, IL, USA**

May 2016 **Life Sciences Institute Annual Symposium
University of Michigan, Ann Arbor, MI, USA**

May 2016 **Nuclear Organization & Function Meeting
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA**

March 2016 **Seminar Series, Molecular Cellular Biology Department
University of California, Berkeley, CA, USA**

February 2016 **Biophysics Colloquium, Cornell University, Ithaca, NY**

September 2015 **2015 Nucleocytoplasmic Transport Meeting, Sant Feliu de Guixols, Spain**

June 2015 **Seminar Series, Department of Structural Biology, Stanford University
Palo Alto, CA, USA**

March 2015 **Keystone Symposia, Hybrid Methods in Structural Biology
Tahoe City, CA, USA**

November 2014 **Seminar Series, Department of Biochemistry, University of Toronto
Toronto, Canada**

September 2014 **GM/CA CAT Review
Advanced Photon Source, Argonne National Laboratory, Lemont, IL, USA**

January 2014 **Institute Seminar Series
Biochemistry Center, University of Heidelberg, Heidelberg, Germany**

January 2014 **Seminar Series, MRC Laboratory of Molecular Biology, Cambridge, UK**

December 2013 **Seminar Series, Biochemistry and Molecular Biophysics Department
University of Chicago, Chicago, IL, USA**

November 2013 **Seminar Series, Department of Chemistry and Biochemistry
California State University, Los Angeles, Los Angeles, CA, USA**

October 2013 **Mechanisms of Nuclear Transport Meeting, Woods Hole, MA, USA**

October 2013 **Keynote Speaker, Annual Buffalo-Hamilton-Toronto (BHT) Symposium
Toronto, ON, Canada**

October 2013 **Plenary Seminar Series, Queen's University, Kingston, ON, Canada**

February 2013 **Seminar Series, Chemistry Department, University of California, Los Angeles
Los Angeles, CA, USA**

November 2012 **Seminar, Oncology Drug Discovery, Janssen
Pharmaceutical Companies of Johnson and Johnson, Antwerp, Belgium**

October 2012 **Seminar Series, Molecular Cellular Biology Department
University of California, Berkeley, CA, USA**

November 2010 **Institute Seminar Series, Biochemistry Center
University of Heidelberg, Heidelberg, Germany**

April 2010 **Special Seminar Series, Chromocell Corporation, North Brunswick, NJ, USA**

September 2009 **"Lectio Magistralis", EMBO Molecular Medicine Workshop
"Invasive Growth: a Genetic Program for Stems Cells and Cancer", Turin, Italy**

August 2009 **International Meeting on Nuclear Trafficking, Banff, AB, Canada**

May 2009 **Special Seminar Series, The Rockefeller University, New York, NY, USA**

February 2009 **Seminar Series, Biochemistry Department, Oxford University, Oxford, UK**

September 2008 **International Conference on Structural Genomics (ISGO 2008), Oxford, UK**

- September 2008 **Instructor, Summer School “Chromatin & Transcription”, Spetses, Greece**
- April 2008 **ACS National Meeting & Exposition, “Lysine-specific demethylase 1 (LSD1) as a target for antitumor therapy symposium”, New Orleans, LA, USA**
- March 2008 **Max Planck Institute of Biochemistry, Munich, Germany**
- March 2008 **European Molecular Biology Laboratory (EMBL), Heidelberg, Germany**
- March 2008 **Meeting “Conformational Transitions in Macromolecular Interactions”, Graduiertenkolleg, University of Halle, Germany**

PROFESSIONAL ORGANIZATIONS

- 2008 – present **The American Society for Cell Biology**
- 2008 – present **American Chemical Society**
- 2003 – present **New York Academy of Sciences**
- 1993 – present **German Chemical Society (Gesellschaft Deutscher Chemiker, GDCh)**

PUBLICATIONS (#co-first authors, *corresponding author)

56. Chien, C.Y.,# Mobbs, G.W.,# Ehrenkranz, J. **Hoelz, A.*** (2025). Viral Interference of Nucleocytoplasmic Transport. **J. Biol. Chem.**, *in revision*.
55. Mobbs, G.W.,# Petrovic, S.,# **Hoelz, A.*** (2025). Nucleocytoplasmic Transport. **Annu. Rev. Biochem.**, *in revision*.
54. Petrovic, S.,# Mobbs, G.W.,# **Hoelz, A.*** (2025). Assembly, structure and function of nuclear pore complexes. **Nat. Rev. Mol. Cell Biol.**, *in press*.
53. El Hilali, S., Dru, P., Le Moan, A., Li, Y.I., Huynen, M.A., **Hoelz, A.**, Robinson, R.C., Martín-Durán, J.M., Jollivet, D., Claridge-Chang, A., Copley, R.R. (2025). Chromosome-scale genome assembly and gene annotation of the hydrothermal vent annelid *Alvinella pompejana* yield insight into animal evolution in extreme environments. **BMC Biol.**, *in press*. (**BioRxiv** 06/27/2024)
52. Yang, W., Mei, F., Lin, W., Lee, J.E., Nie, S., Bley, C.J., **Hoelz, A.**, Cheng, X.* (2025). A SUMO-interacting motif in the guanine nucleotide exchange factor EPAC1 is required for subcellular targeting and function. **J. Biol. Chem.** 301, 110279. (**BioRxiv** 05/03/2025)
51. Petrovic, S.,# Mobbs, G.W.,# Bley, C.J.,# Nie, S.,# **Hoelz, A.*** (2022). Structure and function of the nuclear pore complex. **Cold Spring Harb. Perspect. Biol.**, a041264 (online ahead of print).
50. Petrovic, S., **Hoelz, A.*** (2022). Forced entry into the nucleus. **Nat. Cell Biol.** 24, 810-812.
49. Bley, C.J.,# Nie, S.,# Mobbs, G.W.,# Petrovic, S.,# Gres, A.T.,# Liu, X.,# Mukherjee, S., Harvey, S., Huber, F.M., Lin, D.H., Brown, Tang, A.W., Rundlet, E.J., Correia, A.R., Chen, S., Regmi, S.G., Dasso, M., Patke, A., Palazzo, A.F., Kossiakoff, A.A., **Hoelz, A.*** (2022). Architecture of the cytoplasmic face of the nuclear pore. **Science** 376, eabm9129. (**BioRxiv** 10/26/2021)
- ** featured on the **COVER** in a special issue on the nuclear pore structure with introduction by Di Jiang and highlighted by a **PERSPECTIVE** by Thomas U. Schwartz
48. Petrovic, S., Samanta, D., Perriches, T., Bley, C.J., Thierbach, K., Brown, B., Nie, S., Mobbs, G.W., Stevens, T.A., Liu, X., **Hoelz, A.*** (2022). Architecture of the linker-scaffold in the nuclear pore. **Science** 376, eabm9798. (**BioRxiv** 10/26/2021)
- ** featured on the **COVER** in a special issue on the nuclear pore structure with introduction by Di Jiang and highlighted by a **PERSPECTIVE** by Thomas U. Schwartz
47. Mobbs, G.W., **Hoelz, A.*** (2020). Nucleoporin Condensates Drive Nuclear Pore Complex Assembly

in Oocytes. **Trends Biochem. Sci.** 45, 278-280.

46. Lin, D. H., **Hoelz, A.*** (2019). The structure of the nuclear pore complex (an update). **Annu. Rev. Biochem.** 88, 725-783.
45. Lin, D. H., Correia, A.C., Cai, S.W., Huber, F.M. Jette, C.A., **Hoelz, A.*** (2018). Structural and functional analysis of mRNA export regulation by the nuclear pore complex. **Nat. Commun.**, 2319.
44. Skubák, P., Araç, D., Bowler, M.W., Correia, A.R., **Hoelz, A.**, Larsen, S., Leonard, G.A., McCarthy, A.A., McSweeney, S., Mueller-Dieckmann, C., Otten, H., Salzman, G., Pannu, N.S.* (2018). A new MR-SAD algorithm for the automatic building of protein models from low-resolution X-ray data and a poor starting model. **IUCrJ** 5, 166-171.
43. **Hoelz, A.*** (2018), Günter Blobel (1936-2018). **Nat. Cell Biol.** 20, 364.
42. Blobel Laboratory Trainees (2018). Günter Blobel: Pioneer of molecular cell biology (1936-2018). **J. Cell Biol.** 217, 1163-1167.
41. Huber, F.M.,# Greenblatt, S.M.,# Davenport, A.M.,# Martinez, C., Xu, Y., Vu, L.P., Nimer S.D.,* **Hoelz A.*** (2017). Histone-Binding of DPF2 Mediates Its Repressive Role in Myeloid Differentiation, **Proc. Natl. Acad. Sci. USA** 114, 6016-6021.
40. Huber, F., **Hoelz, A.,*** (2017). Molecular basis for protection of ribosomal protein L4 from cellular degradation, **Nat. Commun.** 8, 14354.
39. Lin, D.H., **Hoelz, A.*** (2016). Nuclear Comings and Goings, **The Scientist** 12.2016, 24-29.
** featured on the **COVER**
38. Sung, M.K., Porras-Yakushi, T.P., Reitsma, J.M., Huber, F.M., Sweredoski, M.J., Hoelz, A., Hess, S., Deshaies, R.* (2016). A conserved quality-control pathway that mediates degradation of unassembled ribosomal proteins, **eLife** 5, e19105.
37. **Hoelz, A.,*** Glavy, J.,* Beck, M.* (2016). Towards the atomic structure of the Nuclear Pore Complex: When top down meets rock bottom up, **Nat. Struct. Mol. Biol.** 23, 624-630.
36. Lin, D.,# Stuwe, T.,# Schilbach, S., Rundlet, E.J., Perriches, T., Mobbs, G., Fan, Y., Thierbach, K., Huber, F.M., Collins, L.N., Davenport, A.M., Jeon, Y.E., **Hoelz, A.*** (2016). Architecture of the symmetric core of the nuclear pore, **Science** 352, aaf1015.
** featured on the **COVER** and highlighted in **CELL**
35. Stuwe, T.,# Bley, C.J.,# Thierbach, K.,# Petrovic, S.,# Schilbach, S., Mayo, D.J., Perriches, T., Rundlet, E.J., Jeon, Y.J., Collins, L.N., Huber, F.M., Lin, D.H., Paduch, M., Koide, A., Lu, V., Fischer, J., Hurt, E., Koide, S., Kossiakoff, A., **Hoelz, A.*** (2015). Architecture of the fungal nuclear pore inner ring complex, **Science** 350, 56-64.
** featured with a **PERSPECTIVE** by Katharine S. Ullman and Maureen A. Powers
34. Stelter, P.,# Huber, F.,# Kunze, R., Flemming, D., **Hoelz, A.,*** Hurt, E.* (2015). Coordinated ribosomal protein assembly into the pre-ribosome is regulated by eukaryote-specific extension sequences. **Mol. Cell** 58, 854-862.
** featured on the **COVER**
33. Stuwe, T.,# Correia, A.,# Lin, D. H., Paduch, M., Lu, V. T., Kossiakoff, A. A., **Hoelz, A.*** (2015). Architecture of the nuclear pore complex coat. **Science** 347, 1148-1152.
32. Davenport, A.M., Collins, L., Chiu, H., Minor, P., Sternberg, P.,* **Hoelz, A.*** (2014). Structural and functional analysis of the human tubulin acetyltransferase MEC-17. **J. Mol. Biol.** 426, 2605-2616.
31. Stuwe, T.,# Lin, D. H.,# Collins, L. N., Hurt, E., **Hoelz, A.*** (2014). Evidence for an evolutionary connection between the large adaptor nucleoporin Nup192 and karyopherins. **Proc. Natl. Acad. Sci. USA** 111, 2530-2535.

30. Davenport, A.M., Huber, F.M., **Hoelz, A.*** (2014). Structural and functional analysis of human SIRT1. **J. Mol. Biol.** 426, 526-541.
** featured on the **COVER** and with a **COMMENTARY** by Gino Cingolani
29. Lin, D.H., Zimmermann, S., Stuwe, T., Stuwe, E., **Hoelz, A.*** (2013). Crystal structure of the C-terminal domain of Nup358/RanBP2. **J. Mol. Biol.** 425, 1318-1329.
** featured on the **COVER**
28. Kassube, S.A., Stuwe, T.S., Lin, D.H., Antonuk, C.D., Napetschnig, J., Blobel, G.,* **Hoelz, A.*** (2012). Crystal structure of the N-terminal domain of Nup358/RanBP2. **J. Mol. Biol.** 423, 752-765.
27. Stuwe, T., Schada von Borzyskowski, L., Davenport, A.M., **Hoelz, A.*** (2012). Molecular Basis for the Anchoring of Proto-Oncoprotein Nup98 to the Cytoplasmic Face of the Nuclear Pore Complex. **J. Mol. Biol.** 419, 330-346.
** featured on the **COVER**
26. Yoshida, K., Seo, H.S., Debler, E.W., Blobel, G.,* **Hoelz, A.*** (2011). Structural and functional analysis of an essential nucleoporin heterotrimer on the cytoplasmic face of the nuclear pore complex. **Proc. Natl. Acad. Sci. USA** 108, 16571-16576.
25. King, H.A., **Hoelz, A.**, Crane, B.R.,* Young, M.W.* (2011). Structure of an enclosed dimer Formed by the drosophila period protein. **J. Mol. Biol.** 413, 561-572.
24. Stuwe, T., **Hoelz, A.*** (2011). Rae1: A new clue for nucleoporin leukemias, **Cell Cycle** 10, 2056.
23. **Hoelz, A.,***** Debler, E.W., Blobel, G. (2011). Structure of the Nuclear Pore Complex, **Annu. Rev. Biochem.** 80, 613-643. (** denotes invited author)
22. Hsia, K.C., **Hoelz, A.*** (2010). Crystal structure of α -COP in complex with ε -COP provides insight into the architecture of the COPI vesicular coat. **Proc. Natl. Acad. Sci. USA** 107, 11271-11276.
21. Ren, Y., Seo, H.S., Blobel, G.,* **Hoelz, A.*** (2010). Structural and functional analysis of the interaction between the nucleoporin Nup98 and the mRNA export factor Rae1. **Proc. Natl. Acad. Sci. USA** 107, 10406-10411.
20. Debler, E.W., Hsia, K.C., Nagy, V., Seo, H.S., **Hoelz, A.*** (2010). Characterization of the membrane-coating Nup84 complex: Paradigm for the nuclear pore complex structure. **Nucleus** 1, 150-156.
19. Nagy, V., Hsia, K.C., Debler, E.W., Kampmann, M., Davenport, A.M., Blobel, G.,* **Hoelz, A.*** (2009). Structure of a trimeric nucleoporin complex reveals alternate oligomerization states. **Proc. Natl. Acad. Sci. USA** 106, 17693-17698.
18. Seo, H.S., Ma, Y., Debler, E.W., Wacker, D., Kutik, S., Blobel, G.,* **Hoelz, A.*** (2009). Structural and functional analysis of Nup120 suggests ring formation of the Nup84 complex. **Proc. Natl. Acad. Sci. USA** 106, 14281-14286.
17. Debler, E.W.,* Blobel, G.,* **Hoelz, A.*** (2009). Nuclear transport comes full circle. **Nat. Struct. Mol. Biol.** 16, 457-459.
16. Napetschnig, J., Kassube, S.A., Debler, E.W., Wong, R.W., Blobel, G.,* **Hoelz, A.*** (2009). Structural and functional analysis of the interaction between the nucleoporin Nup214 and the DEAD-box helicase Ddx19. **Proc. Natl. Acad. Sci. USA** 106, 3089-3094.
15. Debler, E.W.,# Ma, Y.,# Seo, H.S., Hsia, K.C., Noriega, T.R., Blobel, G.,* **Hoelz, A.*** (2008). A fence-like coat for the nuclear pore membrane. **Mol. Cell** 32, 815-826.
** featured on the **COVER**
14. Stavropoulos, P., Nagy, V., Blobel G.,* **Hoelz A.*** (2008). Molecular basis for the autoregulation of

the protein acetyl transferase Rtt109. **Proc. Natl. Acad. Sci. USA** 105, 12236-12241.

13. Hsia, K.C., Stavropoulos, P., Blobel, G.,* **Hoelz, A.*** (2007) Architecture of a coat for the nuclear pore membrane. **Cell** 131, 1313-1326.
12. Stavropoulos, P. and **Hoelz, A.*** (2007) Lysine-specific demethylase 1 as a potential therapeutic target. **Expert Opin. Ther. Targets** 11, 809-920.
11. Melcak, I., **Hoelz, A.***, Blobel, G.* (2007). Structure of Nup58/45 suggests flexible nuclear pore diameter by intermolecular sliding. **Science** 315, 1729-1732.

** highlighted in **Cell** and the **Journal of Cell Biology**

10. Napetschnig, J., Blobel, G.,* **Hoelz, A.*** (2007). Crystal structure of the N-terminal domain of the human protooncogene Nup214/CAN. **Proc. Natl. Acad. Sci. USA** 104, 1783-1788.
9. Pirruccello, M., Sondermann, H., Pelton, J.G., Pellicena, P., **Hoelz, A.**, Chernoff, J., Wemmer, D.E., Kuriyan, J.* (2006). A dimeric kinase assembly underlying autophosphorylation in the p21 activated kinases. **J. Mol. Biol.** 361, 312-326.
8. Stavropoulos, P., Blobel, G., **Hoelz, A.*** (2006). Crystal structure and mechanism of human lysine-specific demethylase-1. **Nat. Struct. Mol. Biol.** 13, 626-632.

** **Faculty of 1000, must read** and highlighted in **Molecular Cell** by Andreas Ladurner

7. **Hoelz, A.***, Janz, J.M., Lawrie, S.D., Corwin, B., Lee, A., Sakmar, T.P.* (2006). Crystal structure of the SH3 domain of β PIX in complex with a high affinity peptide from PAK2. **J. Mol. Biol.** 358, 509-522.
6. Rosenberg, O.S., Deindl, S., Comolli, L.R., **Hoelz, A.**, Downing, K.H., Nairn, A.C., Kuriyan, J.* (2006). Oligomerization states of the association domain and the holoenzyme of Ca^{2+} /CaM kinase II. **FEBS J.** 273, 682-694.

** featured on the **COVER**

5. **Hoelz, A.***, Blobel, G.* (2004). Cell biology: popping out of the nucleus. **Nature** 432, 815-816.
4. **Hoelz, A.**, Nairn, A. C., Kuriyan, J.* (2003). Crystal structure of a tetradecameric assembly of the association domain of Ca^{2+} /calmodulin-dependent kinase II. **Mol. Cell** 11, 1241-1251.

** featured on the **COVER** and highlighted in **Nature Reviews Molecular Cell Biology**

3. Margarit, S. M., Sondermann, H., Hall, B. E., Nagar, B., **Hoelz, A.**, Pirruccello, M., Bar-Sagi, D., Kuriyan, J.* (2003). Structural evidence for feedback activation by Ras•GTP of the Ras-specific nucleotide exchange factor SOS. **Cell** 112, 685-695.

** **Faculty of 1000, must read**

2. Schenk, S., **Hoelz, A.**, Decker, K.* (1999) A novel heterotrimeric flavoprotein involved in bacterial nicotine degradation. In *Flavins and Flavoproteins*, Ghisla, S., Kroneck, P., Macheroux, P., Sund, H., eds., (Rudolf Weber, Berlin. Agency for Scientific Publications), pp. 427-430.
1. Schenk, S., **Hoelz, A.**, Krauß, B., Decker, K.* (1998). Gene structures and properties of enzymes of the plasmid-encoded nicotine catabolism of *Arthrobacter nicotinovorans*. **J. Mol. Biol.** 284, 1323-1339.