



Dr. Nicolas Coudevylle

nicolas.coudevylle@univie.ac.at

Nussbaumallee 14/4/13,
1110 Vienna, AUSTRIA
Tel. 0699 17176673

41 years old, Married, Two children
Nationality: French

References:

- Prof. Robert Konrat

Max F. Perutz Laboratories, Vienna
Email: robert.konrat@univie.ac.at
Tel: +43-1-4277-52202

- Prof Christian Griesinger

Max Planck Institute for Biophysical
Chemistry, Goettingen Germany
Email: cigr@nmr.mpibpc.mpg.de
Tel: +49 551 201-2200

- Prof. Sascha Martens

Max Perutz Labs, Vienna
Email: sascha.martens@univie.ac.at
Tel: +43-1-4277-52876

Senior Scientist in Biomolecular NMR

SKILLS AND COMPETENCES

- **Biomolecular NMR, structural biology of protein/ligand complexes:**
Multidimensional heteronuclear solution state NMR. Structural and dynamic characterization of protein/ligand interactions and ligand screening by NMR. Molecular dynamics and X-Ray crystallography.
- **Recombinant technologies and protein biochemistry:**
Cloning, expression, purification and characterization of recombinant soluble and integral membrane proteins. Expression of uniformly and specifically isotope labeled proteins. Biophysics of protein-ligand interactions (ITC, UV, Fluorescence, MST).
- **Project management:**
Project management (IPMA Certification Level D). Quality management. Management of 2 FWF founded research projects since 2012.
- **Scientific writing and publishing, science communication:**
Successfully applied to **4 research grants** since 2007, **30 publications** in international peer reviewed journals ([link to detailed list](#)).
- **Computer and Information technologies:**
Perfectly comfortable with the Office and Adobe suits. Advanced knowledge of Linux and UNIX. Basics of programming and scripting.
- **Languages:**
French (native), English (fluent), German (working proficiency).

CAREER HISTORY

- 2012 to now:** Senior postdoctoral scientist at the Max Perutz Labs, Vienna, Austria
Management of 2 FWF-founded research projects.
- 2008 to 2011:** Lise Meitner Fellow at the Max Perutz Labs, Vienna, Austria
- 2006/2007:** Postdoctoral fellow at the Max Planck Institut für biophysikalische Chemie, Göttingen, Germany

EDUCATION

- Jun-Aug 2017:** **Project management Course** (Project management, risk management, quality management)
- Dec. 2005:** **PhD in Biomolecular NMR** at the National School of Chemical Industries, Nancy, France.
- 2002:** **Master degree in Life Science**, University of Sciences and Technologies, Lille, France.

VOLUNTEER EXPERIENCE

- **Member and Organizer of the PostDoc Forum Austria.** The PostDoc Forum Austria aims at bringing together postdocs from diverse research disciplines across Austria, to discuss their career challenges.
- **Organizer of the 2011 MFPL PhD and PostDoc annual retreat**

PERSONAL INTERESTS

- Jogging, Ballroom dancing, Kung Fu, Dragonboat, Flatwater kayak, Squash

SELECTED PUBLICATIONS

9. *Reconstitution of autophagosome nucleation defines Atg9 vesicles as seeds for membrane formation.* Sawa-Makarska J*, Baumann V*, **Coudevylle N***, von Bülow S, Nogellova V, Abert C, Schuschnig M, Graef M, Hummer G, Martens S. *Science*. **2020** Sep 4;369(6508).
8. *Biochemical and Structural Characterization of the Interaction between the Siderocalin NGAL/LCN2 (Neutrophil Gelatinase-associated Lipocalin/Lipocalin 2) and the N-terminal Domain of Its Endocytic Receptor SLC22A17.* Cabedo Martinez AI, Weinhäupl K, Lee WK, Wolff NA, Storch B, Žerko S, Konrat R, Koźmiński W, Breuker K, Thévenod F, **Coudevylle N**. *J Biol Chem*. **2016** Feb 5;291(6):2917-30.
7. *N-lauroylation during the expression of recombinant N-myristoylated proteins. Implications and solutions.* Flamm A, Le Roux AL, Mateos B, Díaz-Lobo M, Storch B, Breuker K, Konrat R, Pons M, **Coudevylle N**. *Chembiochem*. **2016** Jan 1; 17(1):82-9.
6. *Toward rational fragment-based lead design without 3D structures.* Henen MA, **Coudevylle N**, Geist L, Konrat R. *J Med Chem*. **2012** Sep 13;55(17):7909-19.
5. *Pharmacophore mapping via cross-relaxation during adiabatic fast passage.* Auer R, Kloiber K, Vavrinska A, Geist L, **Coudevylle N**, Konrat R. *J Am Chem Soc*. **2010** Feb 10;132(5):1480-1.
4. *Inferential NMR/X-ray-based structure determination of a dibenzo[a,d]cycloheptenone inhibitor-p38 α MAP kinase complex in solution.* Honndorf VS, **Coudevylle N**, Laufer S, Becker S, Griesinger C, Habeck M. *Angew Chem Int Ed Engl*. **2012** Mar 5;51(10):2359-62.
3. *Lipocalin Q83 reveals a dual ligand binding mode with potential implications for the functions of siderocalins.* **Coudevylle N**, Hoetzing M, Geist L, Kontaxis G, Hartl M, Bister K, Konrat R. *Biochemistry*. **2011** Nov 1;50(43):9192-9.
2. *Dynamics in the p38 α MAP kinase-SB203580 complex observed by liquid-state NMR spectroscopy.* Honndorf VS, **Coudevylle N**, Laufer S, Becker S, Griesinger C. *Angew Chem Int Ed Engl*. **2008**;47(19):3548-51.
1. *Structural Determinants for Ca²⁺ and Phosphatidylinositol 4,5-Bisphosphate Binding by the C2A Domain of Rabphilin-3A.* **Coudevylle N**, Montaville P, Leonov A, Zweckstetter M, Becker S. *J Biol Chem*. **2008** Dec 19;283(51):35918-28.

GRANTS

- 2013:** Austrian Science Fund (FWF) stand alone project P26317 "NMR spectroscopy of Intrinsically Disordered Protein Complexes" (co applicant with Prof. R. Konrat)
- 2012:** Austrian Science Fund (FWF) stand alone project P24761 "Structural and Functional Characterization by NMR of an Endocytic Receptor"
- 2009:** Austrian Science Fund (FWF) stand alone project P22125 "Determination by NMR of Siderocalin's ligand binding properties" (co applicant with Prof. R. Konrat)
- 2007:** Austrian Science Fund (FWF) Lise Meitner project M1049 "NMR study of protein dynamic changes upon ligand binding"