

Conference Report:

Austrian Mini-Symposium on Peptide Science: „Peptides and Wine“ Vienna, 7th December 2011

From the late '40s until the mid-'60s, peptide science “Made in Austria” was amongst the world's best and one of its figures at the time was Hans Tuppy. During the early years of his career he joined Frederick Sanger's laboratory at Cambridge (UK) where he worked on the amino acid sequence of bovine insulin (Sanger was awarded the Nobel Prize for Chemistry in 1958 for sequencing insulin). Later on he became the first Professor for Biochemistry in Austria and continued to work on neuropeptides, including oxytocin. Despite this former glory, the Austrian peptide community was hibernating for some time and lacked regular meetings for scientific exchange. However, there has been recent development and returning interest in peptides, both in Austrian academic research as well as in the pharmaceutical industry. Therefore we have decided to rejuvenate the Austrian peptide community by organising a peptide science meeting on the basis of a one-day symposium.

The “Austrian Peptide Mini-Symposium” was held at the Institute of Pharmacology (Medical University) in Vienna on December 7, 2011. The meeting was organized by Christian Gruber (Austrian representative to the European Peptide Society) and hosted by Michael Freissmuth (head of the Center for Physiology and Pharmacology at the Medical University of Vienna). The meeting was attended by about 60 participants from Austria, Germany, Hungary, Switzerland and Serbia and the scientific program included two sessions and six invited lectures. Speakers of the session “Peptide Discovery, Analysis and Chemistry” were David Craik (keynote lecture) from the Institute of Molecular Bioscience at the University of Queensland in Brisbane (Australia), Robert van Ling from Thermo Fisher Scientific (Switzerland) and Christian Becker from the Department of Biological Chemistry at the University of Vienna (Austria). The second session “Peptide Biology and Cellular Signalling” included presentations by Herbert Waldmann (keynote lecture) from the Max-Planck Institute for Molecular Physiology in Dortmund (Germany), Bice Chini from the Institute of Neuroscience in Milan (Italy) and Florian Raible from the Max F. Perutz Laboratory in Vienna (Austria).

The first keynote lecture of the meeting was given by David Craik, who recently received the Ralph F. Hirschmann Award from the American Chemical Society for his invaluable contribution to the field of Peptide Chemistry, on ‘endless’ possibilities of circular cysteine-knotted plant peptides, so-called cyclotides. Robert van Ling, an application specialist on nanoflow liquid chromatography, provided insights into the latest technology of LC workflows for peptidomics and proteomic analysis. The first session ended with a lecture from Christian Becker on the generation of tailor-made transmembrane proteins using peptide chemistry tools. Christian Becker is probably the latest member of the Austrian peptide community since he recently moved from the Technical University of Munich and received a Professorship for Biological Chemistry at the University of Vienna. Session two of the symposium was headed by Herbert Waldmann. He presented a keynote lecture entitled “The dynamic Ras cycle”, in which the audience was taken onto a journey discovering the cell biology of Ras proteins, the “beating heart of signal transduction (i.e. H. Bos, Utrecht)”, using peptide tools and chemical biology. The second lecture in this session was given by Bice Chini, an internationally known neuropharmacologist for her work on oxytocin/vasopressin signalling and medicinal chemistry. She presented her latest research project on oxytocin receptor knock-out mice as a model to study autism and social behaviour. The last lecture of the symposium was given by Florian Raible, a young investigator who recently received one of the highly competitive ERC grants by the European Union. His current research focuses on peptide hormones from the invertebrate model annelid *Platynereis dumerilii* and their role in reproduction and behaviour. In summary, all six presentations in both sessions were of outstanding scientific quality, very entertaining and covered a diverse range of topics, including discovery, analysis, chemistry, signalling and biology of peptides.

The scientific part of the symposium was followed by a social get-together and wine-tasting guided by Michaela Jöbstl, a winemaker from Langenlois, one of Austria's biggest wine producing

town, situated near the Danube river and the famous Wachau valley. Overall, the meeting received very good feedback from its participants, not only due to the wine session, but in particular because of its high-quality lectures. It has been a successful start into a new era of peptide science in Austria and we are looking forward to announce further annual or bi-annual meetings with participations and contributions from Austrian and international members of the European Peptide Society or other interested persons in Peptide Science. Last but not least, we would like to thank the sponsors for this event, namely Dionex (part of Thermo Fisher Scientific), peptides&elephants, the Austrian Pharmacological Society and the European Peptide Society. The symposium would have not been possible without the financial support of our sponsors.

Contributed by Christian Gruber



Pictures: Austrian Peptide Symposium in the great lecture hall of the Institute of Pharmacology (left) and winemaker Michaela Jöbstl during social hour (right).

Conference Report: 2nd Austrian Peptide Symposium, Vienna, 29th November 2012

Following the successful re-launch of Peptide Symposia in Austria in 2011 (see Meeting report, EPS Newsletter 45: January 2012) it took less than one year to continue this conference series. The 2nd Austrian Peptide Symposium was held at the Institute of Pharmacology (Medical University) in Vienna on the 29th of November, 2012. This symposium was co-organized by Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). Compared to the 'kick-off' meeting in 2011 that comprised 6 invited lectures, in 2012 we were able to host 8 invited national and international speakers and to include a "hot topics" forum for selected short oral presentations within four scientific sessions as well as a multifaceted poster session. The meeting was attended by over 80 registered presenters and participants from Austria, Denmark, France, Germany, Italy, The Netherlands, Serbia, Spain, Switzerland and the UK.

The first lecture of the 2012 meeting was given by Wolfgang Knoll (scientific director of the Austrian Institute of Technology in Vienna) on tethered membrane bilayers as platforms for studying antimicrobial peptides. Anna-Maria Papini, head of the laboratory of Peptide and Protein Chemistry and Biology (PeptLab, University of Florence) and treasurer of the EPS, delivered the second lecture about the importance of uncommon post-translational modifications as markers in autoimmune diseases. The first session was completed by Meritxell Teixido, who is an independent research associate in the laboratory of Ernest Giraldo (IRB Barcelona) and Spanish representative to the EPS, with a lecture about peptides as blood-brain barrier shuttles.

The second session started with Maria Waldhoer presenting her latest results about real time trafficking and signalling of class B incretin receptors. Her academic career started in Austria (Medical Universities in Vienna and Graz) and she is now affiliated with NovoNordisk in Copenhagen, Denmark. . Afterwards Robert van Ling, an application specialist on nanoflow liquid chromatography from Dionex/Thermo-Fisher, provided insights into the latest technology of LC workflows for peptidomics and proteomic analysis.

During the lunch break a poster session on different aspects of peptide science, including 16 presentations from students and early-career researchers, who participated in the poster prize competition, was held. The third session "Hot topics in Peptide Science" included 6 short oral presentations that were selected from submitted abstracts and the speakers were Holger Bohlmann (University of Natural Resources and Life Sciences, Tulln), Carolin Lechner (University of Vienna), Maud Larregola (University of Cergy-Pontoise, France), Johannes Koehbach (Medical University of Vienna), Bernhard Schuster (University of Natural Resources and Life Sciences, Vienna) and Guntram Christiansen (University of Innsbruck).

The fourth and last session included 4 invited lectures. Derek Macmillan from the University College London presented his work on protein semi-synthesis using controlled cleavage of X-Cys peptide bonds. Rolf Breinbauer, head of the institute of organic chemistry at the TU Graz, presented his work about transition metal catalysis for the synthesis and modification of lipidated peptides. The next lecture was given by Dietrich Merkel, an application specialist associated with ABSciex. He provided insights into applications of the latest Eksigent ekspert™ technology for peptidomics and proteomics research. The final lecture of the symposium by Chiara Carbele, from the department of molecular biology at the University of Salzburg, provided insights into peptide-based modulators of protein-protein and receptor-ligand interactions. Prior to the conclusion of the scientific part of the symposium two best poster prizes were awarded to Carolin Lechner for her poster entitled "Silica precipitating silaffin peptides: Versatile tools for biotechnological applications (University of Vienna) and Johannes Koehbach for his poster entitled "Pharmacological characterization of circular plant peptides with oxytocin-like activity" (Medical University of Vienna).

The scientific part of the symposium was followed by a social get-together and wine-tasting guided by Michaela Jöbstl, a winemaker from Langenlois, one of Austria's hot spots for excellent wine, situated near the Danube river and the famous Wachau valley. Overall, the meeting received very good feedback from its participants, not only due to the wine session, but in particular because of its high-quality lectures and up-to-date topics.

The recent meetings of the Austrian Peptide Community in Vienna were a successful start into a new era of peptide symposia held in Austria that will bring the expanding Austrian peptide community and international guest together once a year. Along this line, we are happy to announce that the 2013 meeting of the Austrian Peptide Society will be held in Graz and be organized by Rolf Breinbauer.

We are grateful to everyone who helped in the organisation and realization of the 2012 Austrian Peptide Symposium and in particular to our host, Michael Freissmuth (Head of the Center for Physiology and Pharmacology at the Medical University of Vienna) and all involved staff members from the Institutes of Biological Chemistry (University of Vienna) and Pharmacology (Medical University of Vienna). Last but not least, we would like to thank the sponsors for this event that would have not been possible without the financial support from our sponsors: Dionex (part of Thermo Fisher Scientific), peptides&elephants, AB Sciex/Eksigent, the Austrian Pharmacological Society, the Special Research Program SFB35 and the European Peptide Society.

Contributed by Christian W. Gruber & Christian F.W. Becker



Photograph 1: Group photo of all participants of the 2nd Austrian Peptide Symposium at the Institute of Pharmacology, Medical University of Vienna.



Photograph 2: Christian Becker (left) and Rolf Breinbauer (right) present the poster awards to Johannes Koehbach (middle-left) and Carolin Lechner (middle-right).

Conference Report:

3rd Austrian Peptide Symposium, Graz, 5th December 2013

Following the successful re-launch of Peptide Symposia in Austria in 2011 and 2012 in Vienna, we moved to Graz for the 3rd Austrian Peptide Symposium. The Symposium was held at the Institute of Organic Chemistry, Graz University of Technology on the 5th of December, 2013. This symposium was co-organized by Rolf Breinbauer (Institute of Organic Chemistry, Graz University of Technology) Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). Again we were able to host 8 invited national and international speakers and to include a “hot topics” forum for selected short oral presentations within four scientific sessions as well as a multifaceted poster session. The meeting was attended by over 70 registered presenters and participants from Austria, Belgium, Brazil, Germany, The Netherlands and Spain.

The first session dealt with peptide chemistry and applications and the opening lecture of the 2013 meeting was given by Horst Kessler (Technical University of Munich, Germany) on selective inhibitors for integrins and their use in medicine. Valentin Wittmann, from the University of Konstanz, Germany, delivered the second lecture about the synthesis of microcystin derivatives. The first session was completed by Markus Muttenthaler, who is a research associate in the laboratory of Fernando Albericio (Institute for Research in Biomedicine Barcelona, Spain) with an interesting lecture about venom peptide drug development. The second session on peptides and molecular signalling started with Liliane Schoofs from the Katholieke Universiteit in Leuven (Belgium) and a presentation of her latest results about neuropeptidergic control of behaviour in the model worm *C. elegans*. Afterwards Maja Köhn from the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany, contributed a lecture on peptide probes for the investigation on phosphatase signalling.

During the lunch break a poster session on different aspects of peptide science, including 14 presentations from students and early-career researchers, who participated in the poster prize competition, was held. The third session “Hot topics in Peptide Science” included 6 short oral presentations that were selected from submitted abstracts and the speakers were Holger Bohlmann (University of Natural Resources and Life Sciences, Tulln), Karine Farbiarz (University of Vienna), Roland Hellinger (Medical University of Vienna), Simone Sartori (University of Innsbruck), Chiara Cabrele (Paris-Lodron University Salzburg) and Bart Landuyt (KU Leuven, Belgium). The fourth and last session included 3 invited lectures. Bernhard Auer from the University of Innsbruck presented his work on efficient expression of peptides in *E. coli*. Peter Macheroux, head of the Institute of Biochemistry at the TU Graz, presented his work about enzyme mechanism of human dipeptidyl-peptidases. The final lecture of the symposium by Robert van Ling, an application specialist on nanoflow liquid chromatography from Dionex/Thermo-Fisher, provided insights into the latest technology of LC workflows for peptidomics and proteomic analysis.

Prior to the conclusion of the scientific part of the symposium three best poster prizes were awarded to Melanie Trobe (Graz University of Technology) for her poster entitled “A modular synthesis of teraryl-based α -helix mimetics for the inhibition of protein-protein interaction”, Johannes Koehbach (Medical University of Vienna) for his poster entitled “Oxytocic plant cyclotides as templates for peptide G Protein-coupled receptor ligand design” and Claudia Bello (University of Vienna) for her poster entitled “Chemoenzymatic synthesis of site-specifically O-glycosylated MUC1 peptides”. The scientific part of the symposium was followed by a social get-together sponsored by the city of Graz. Overall, the meeting received very good feedback from its participants, not only due to the social evening session, but in particular because of its high-quality lectures and up-to-date topics in peptide science.

The recent meetings of the Austrian Peptide Community in Vienna were a successful start into a new era of peptide symposia held in Austria that will bring the expanding Austrian peptide community and international guest together once a year. Along this line, we are happy to announce that the 2014 meeting of the Austrian Peptide Society will be held in Salzburg and be co-organized by Chiara Cabrele.

We are grateful to everyone who helped in the organisation and realization of the 2013 Austrian Peptide Symposium and in particular to our host, the Graz University of Technology and the city of Graz, and all involved staff members from the Institutes of Organic Chemistry (Graz University of Technology), Biological Chemistry (University of Vienna) and Pharmacology (Medical University of Vienna). Last but not least, we would like to thank the sponsors for this event that would have not been possible without the financial support from our sponsors: Bruker, Thermo Scientific, Bachem, peptides&elephants, Austrian Centre of Industrial Biotechnology, TU Graz, Stadt Graz, Land Steiermark, and the European Peptide Society.

Contributed by Christian W. Gruber



Photograph 1: Group photo of all participants of the 3rd Austrian Peptide Symposium at the Institute of Organic Chemistry, Graz University of Technology.



Photograph 2: Poster award ceremony. From left to right: Rolf Breinbauer, Chiara Cabrele, Johannes Koehbach, Christian Gruber, Claudia Bello, Christian Becker and Melanie Trobe.

Conference Report:

4th Austrian Peptide Symposium, Salzburg, 4th of December 2014

The 4th Austrian Peptide Symposium was held at the University of Salzburg on the 4th of December 2014 and was co-organized by Chiara Cabrele (Department of Molecular Biology, University of Salzburg), Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). The event was based on the one-day-symposium format that was successfully used for the former Austrian Peptide Symposia (2011 and 2012 in Vienna, 2013 in Graz): this included invited lectures given by renowned national and international speakers, short oral presentations on hot topics in peptide science, which were selected from the submitted abstracts, and one poster session covering manifold aspects of peptide and protein research. Overall, more than 80 participants from different European countries (Austria, Belgium, England, Germany, Hungary, Portugal, Spain and The Netherlands) attended the symposium.

The first morning session was focused on bioactive peptides and their interaction with receptors or lipids: Annette G. Beck-Sickinger (University of Leipzig, Germany) held the opening lecture on the mode of binding of rationally designed neuropeptide Y analogs to the Y-receptor subtypes. Jozef Vanden Broeck (University of Leuven, Belgium) followed with a lecture on selected neuropeptides that regulate food intake and secretion of digestive enzymes in locusts. The first session closed with the lecture of Miguel Castanho (University of Lisbon, Portugal) on biophysical aspects of the interaction of peptides and proteins with membrane models and their implication in the design of novel therapeutics.

The second morning session was dedicated to peptide chemistry and mimicry, and included the lecture of Rob Liskamp (University of Glasgow, Scotland) on protein mimicry using cyclic peptides as scaffolds, followed by the lecture of Tamás Martinek (University of Szeged, Hungary) on functional helical and β -sheet-mimicking foldamers.

The poster session, which was held during the lunch break, featured 19 posters that were presented and discussed by PhD students and early-stage researchers. There was also a poster award competition for the three best poster presentations.

The first afternoon session, "Hot Topics in Peptide Science", included six excellent short oral contributions selected from the submitted abstracts, which were given by Marina Rubini (University of Konstanz, Germany), Reza Omidvar (University of Natural Resources and Life Sciences, Tulln, Austria), Anne Conibear (University of Vienna), Kathrin Thell (Medical University of Vienna), Claudia Bello (University of Vienna) and Hannelore Breitenbach-Koller (University of Salzburg).

The second and last afternoon session covered structural and bioanalytical aspects of peptide and protein research with three lectures. The first speaker, Christian Huber (University of Salzburg), reviewed recent progresses in the analytical separation and identification of complex peptide mixtures. Then, Robert van Ling (Thermo Fisher Scientific, The Netherlands) presented innovative techniques and tools for ultrafast-HPLC workflows in peptidomics and proteomics. Finally, Heidi Pertl-Obermeyer (University Hohenheim, Stuttgart, Germany) gave a lecture on the design of new peptidic standards for the absolute quantification of vacuolar transport proteins from plants by mass spectrometry.

The scientific part of the symposium ended with the announcement of the three winners of the poster award competition: Giulia Di Giglio (Medical University of Vienna) for her poster entitled "Pharmacology of novel oxytocin-like neuropeptides from ants", Roland Hellinger (Medical University of Vienna) for his poster entitled "Target deconvolution of immunosuppressive circular plant peptides", and Tom Podewin (Ludwig-Maximilian-University, Munich) for his poster entitled "Photo-controlled chignolin-derived β -hairpin model peptides". A social get-together followed the closing remarks. Overall, the meeting was successful and received a very positive feedback thanks to the comprehensive and high-level scientific program, the nice and friendly atmosphere among the participants and the stimulating place, the Auditorium of the University Library from the 17th century, in the hearth of the historic center of Salzburg.

The four Austrian Peptide Symposia hosted so far in Vienna, Graz and Salzburg have obtained good resonance within the national and international scientific community, which strongly motivates the Austrian organizers to make of this event a consolidate tradition. Along this line, we are happy to announce that the 2015 meeting of the Austrian Peptide Society will be held in Vienna and co-organized by Christian Gruber (Medical University of Vienna) and Christian Becker (University of Vienna).

We are grateful to everyone who helped in the organization and realization of the 2014 Austrian Peptide Symposium, in particular our host, the University of Salzburg, and all involved staff members from the Department of Molecular Biology and the University Library. Finally, we very much thank the exhibitors, who nicely interacted with the participants during the coffee and lunch breaks, and all sponsors of the symposium: Bruker, Thermo Fisher Scientific, CEM, Bachem, Peptides&Elephants, Rieger-Industrievertretungen GmbH, VWR, University of Salzburg, and the European Peptide Society. Without their generous financial support, all this would not have been possible!

Contributed by Christian W. Gruber and Chiara Cabrele



Photograph 1: Group photo of all participants of the 4th Austrian Peptide Symposium at the University of Salzburg (Auditorium of the University Library).



Photograph 2: Poster award ceremony. From left to right: Christian Becker, Chiara Cabrele, Tom Podewin, Giulia Di Giglio, Roland Hellinger and Christian Gruber

Conference Report:

5th Austrian Peptide Symposium, Vienna, 2nd-3rd of December 2015

The 5th Austrian Peptide Symposium was held at the Van-Swieten Auditorium in Vienna on the 2nd and 3rd of December 2015 and was co-organized by Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). The event was held as a two day symposium including a Satellite Meeting on “Invertebrate Neuropeptides”. It included invited lectures given by renowned national and international speakers, short oral presentations on hot topics in peptide science, which were selected from the submitted abstracts, and a poster session covering manifold aspects of peptide and protein research. Overall, more than 80 participants from different European and overseas countries (Australia, Austria, Belgium, Denmark, France, Germany, New Zealand, Serbia, Sweden, Switzerland, UK, USA) attended the symposium. This mixture resulted in a truly international spirit of the meeting.

The Satellite Meeting on “Invertebrate Neuropeptides” was held in conjunction with the mid-term progress seminar of the life science project “Individual function and social role of oxytocin-like neuropeptides in ants” (LS13-017) funded by the Vienna Science and Technology Fund (WWTF) and included invited lectures by Christian Wegener (University of Würzburg, Germany) on peptidergic signaling related to feeding activity in fruit flies and by Yoonseong Park (Kansas State University, USA) on the role of neuropeptide signaling in insects as possible target for arthropod pest control. In addition there were two lectures selected from abstracts held by Sven Zels (KU Leuven, Belgium) who reported on the *C. elegans* peptide GPCR project and by Giulia Di Giglio (Medical University of Vienna, Austria) who presented her latest results on ligand design of human oxytocin and vasopressin receptors. Day one of the Symposium was concluded with a speaker’s dinner.

On day two, of the Symposium the first morning session was focused on bioactive peptides, their physiology and interaction with receptors or lipids: Maurice Elphick (Queen Mary University of London, UK) held the opening lecture on the evolution and comparative physiology of neuropeptide signaling. Ulf Göransson (Uppsala University, Sweden) followed with a lecture on bioactive properties and applications of circular peptides. The first session closed with the lecture of Burkhard Bechinger (University of Strasbourg, France) on biophysical aspects of the interaction of peptides and proteins with membrane models and their implication in the design of novel antibiotics.

The second morning session was dedicated to peptide chemistry and therapeutics, and included the lecture of Kristian Strømgaard (University of Copenhagen, Denmark) on targeting protein-protein interactions with peptide-based inhibitors, followed by the lecture of Rosa Lemmens-Gruber (University of Vienna, Austria) on the therapeutic potential of synthetic TNF mimicking peptides, and Paul Alewood (University of Queensland, Australia) on the discovery, synthesis and application of venom-derived peptides. The poster session, which was held during the lunch break, featured 21 posters that were presented and discussed by PhD students and early-stage researchers. There was also a poster award competition for the two best poster presentations.

The first afternoon session, “Hot Topics in Peptide Science”, included five excellent short oral contributions selected from the submitted abstracts, which were given by Mario Schubert (University of Salzburg, Austria; ETH Zürich, Switzerland), Tom Podewin (Ludwig-Maximilians-University of Munich, Germany), Meder Kamalov (University of Vienna, Austria; University of Auckland, New Zealand), Nermina Malanovic (University of Graz, Austria) and Maria Matveencko (University of Vienna, Austria). The second and last afternoon session covered structural and bioanalytical aspects of peptide and protein research with four lectures. The first speaker, Joel Schneider (National Cancer Institute, USA), reported on the state-of-the-art of racemic hydrogels formed by enantiomeric mixtures of peptides. Then, Lars Kristensen (Thermo Fisher Scientific, Denmark) presented innovative techniques and tools for bottom-up proteomics utilizing UHPLC and Orbitrap mass spectrometry. Giorgio Marini (CEM, Germany) presented an improved coupling method for peptide synthesis at elevated temperatures. Finally, Robert Konrat (Max F. Perutz Laboratories, Vienna, Austria) gave a lecture on the structural characterization of intrinsically disordered proteins.

The scientific part of the symposium ended with the announcement of the two winners of the poster award competition: Kathrin Thell (Medical University of Vienna) for her poster entitled “Oral activity of a nature derived cyclic peptide for the treatment of multiple sclerosis”, and Anne Conibear (University of

Vienna, Austria) for her poster entitled “Sequential chemoselective ligations for the synthesis of bispecific synthetic antibodies”. A social get-together including a wine-tasting guided by Michaela Jöbstl (Langenlois, Austria) followed the closing remarks. Overall, the meeting was successful and received a very positive feedback thanks to the comprehensive and high-level scientific program, the nice and friendly atmosphere among the participants and the stimulating place, the Van Swieten Auditorium of the Medical University of Vienna.

The five Austrian Peptide Symposia hosted so far in Vienna, Graz and Salzburg have obtained very good resonance within the national and international scientific community, which strongly motivates the Austrian organizers to make of this event a consolidate tradition. Along this line, we are happy to announce that the 2016 meeting of the Austrian Peptide Society will be held again in Vienna and co-organized by Christian Gruber (Medical University of Vienna) and Christian Becker (University of Vienna).

We are grateful to everyone who helped in the organization and realization of the 2015 Austrian Peptide Symposium, in particular all involved staff members from the organizing institutions, the Institute of Biological Chemistry and the Center for Physiology and Pharmacology. Finally, we very much thank the exhibitors, who nicely interacted with the participants during the coffee and lunch breaks, and all sponsors of the symposium: Bruker, Thermo Fisher Scientific, CEM, Bachem, peptides&elephants, Rieger-Industrievertretungen GmbH, VWR, Iris Biotech GmbH, the Vienna Science and Technology Fund and the European Peptide Society. Without their generous financial support, all this would not have been possible!

Contributed by Christian W. Gruber and Christian Becker



Photograph 1: Group photo of all participants of the 5th Austrian Peptide Symposium at the Van-Swieten Auditorium of the Medical University of Vienna.



Photograph 2: Poster award ceremony. From left to right: Anne Conibear, Chiara Cabrele and Kathrin Thell.

Conference Report:

6th Austrian Peptide Symposium, Vienna, 1st of December 2016

The 6th Austrian Peptide Symposium was held at the Van-Swieten Auditorium in Vienna on the 1st of December 2016 and was co-organized by Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). The event was held as a one day symposium. It included invited lectures given by renowned national and international speakers, short oral presentations on hot topics in peptide science, which were selected from the submitted abstracts, and a poster session covering manifold aspects of peptide and protein research. Overall, more than 70 participants from different European and overseas countries (Australia, Austria, Belgium, Brasil, France, Germany, The Netherlands, New Zealand, Serbia, Sweden, Switzerland, UK) attended the symposium. This mixture resulted in a truly international spirit of the meeting, which started-off with a speaker's dinner on the eve of the symposium.

The morning session focused on synthetic peptides in drug discovery: Peter Timmerman (University of Amsterdam and Pepscan, The Netherlands) held the opening lecture on the generation of multicyclic peptides and their use as mimics of protein surfaces. Christian Heinis (EPFL, Switzerland) continued on topic and described the phage-display based generation of bicyclic peptides as therapeutics. The first session closed with a presentation of James Cain (Gyros Protein Technologies, USA) on how modern automated peptide synthesizers can help with access to complex peptides for research and drug development.

The second morning session concentrated on bioactive peptides in diagnosis and treatment and included the lectures of Michael Groll (Technische Universität München, Germany) on targeting the proteasome with peptides, followed by the lecture of Manfred Ogris (University of Vienna, Austria) on peptide targeted nucleic acid carriers for the treatment of disseminated cancers. The session concluded with a presentation by Annemieke Madders (University of Gent, Belgium) on furan-based click and photo-click reactions for peptide and protein labeling and crosslinking under physiological conditions.

The poster session, which was held during the lunch break, featured 12 posters that were presented and discussed by PhD students and early-stage researchers. There was also a poster award competition for the two best poster presentations.

The first afternoon session on "Hot Topics in Peptide Science" included six excellent short oral contributions selected from the submitted abstracts. Talks were given by Tobias Postma (University of Glasgow, UK), Matthias De Vleeschouwer (Ghent University, Belgium), Roland Hellinger (Medical University of Vienna, Austria), Andreas Friedrich (University of Salzburg, Austria), Zita Liutkevičiūtė (Medical University of Vienna, Austria) and Claudia Bello (University of Vienna, Austria).

The second and last afternoon session covered peptide-protein interactions and bioanalytics with three lectures. The first speaker, Oliver Zerbe (University of Zurich, Switzerland) reported on generating peptide binders by combining fragments of Armadillo repeat protein. Then Robert van Ling (Thermo Fisher Scientific, The Netherlands) presented innovative techniques and tools for quantitation and characterization of bio-similars. Finally, Dek Woolfson (University of Bristol, UK) gave a talk on his approach to design functional water-soluble and membrane-spanning peptide barrels.

The scientific part of the symposium ended with the announcement of the two winners of the poster award competition: Esther Gil-Mansilla (Medical University of Vienna) for her poster entitled "Combining MALDI imaging and μ CT to localize neuropeptides in ant brains", and Maria Matveencko (University of Vienna, Austria) for her poster entitled "Semisynthesis of a human heat shock protein bearing a site-specific non-enzymatic posttranslational modification".

A social get-together including a winetasting provided by Michaela Jöbstl (Langenlois, Austria) followed the closing remarks. Overall, the meeting was successful and received a very positive feedback thanks to the comprehensive and high-level scientific program, the nice and friendly atmosphere among the participants and the stimulating place, the Van Swieten Auditorium of the Medical University of Vienna.

The six Austrian Peptide Symposia hosted so far in Vienna, Graz and Salzburg have obtained very good resonance within the national and international scientific community, which strongly motivates the Austrian organizers to make of this event a consolidate tradition. Along this line, we are happy to announce that the 2017 meeting of the Austrian Peptide Society will be held again in Vienna and co-organized by Christian Gruber (Medical University of Vienna) and Christian Becker (University of Vienna).

We are grateful to everyone who helped in the organization and realization of the 2016 Austrian Peptide Symposium, in particular all involved staff members from the organizing institution, the Institute of Biological Chemistry. Finally, we very much thank the exhibitors and all sponsors of the symposium: Bachem, Bruker, CEM, Gyros Protein Technologies, Pepscan, Thermo Fisher Scientific, Intavis, Iris Biotech GmbH, peptides&elephants, Rieger-Industrievertretungen GmbH, Almac and the European Peptide Society. Without their generous financial support, all this would not have been possible!

Contributed by Christian W. Gruber and Christian Becker

Figures:

Photograph 1: Group photo of all participants of the 6th Austrian Peptide Symposium at the Van-Swieten Auditorium of the Medical University of Vienna.



Photograph 2: Poster award ceremony. From left to right: Chiara Cabrele, Christian Becker and Esther Gil-Mansilla (the second awardee, Maria Matveenکو had to leave early)



Conference Report:

7th Austrian Peptide Symposium, Vienna, 7th of December 2017

The 7th Austrian Peptide Symposium was held at the Van-Swieten Auditorium in Vienna on the 7th of December 2017 and was co-organized by Christian Gruber (Austrian representative to the EPS, Medical University of Vienna) and Christian Becker (University of Vienna). The event was held as a one-day symposium. It included invited lectures given by renowned national and international speakers, short oral presentations, which were selected from the submitted abstracts, and a poster session covering manifold aspects of peptide research. Overall, more than 70 participants from different European and overseas countries (Australia, Austria, Belgium, France, Germany, India, Israel and Serbia) attended the symposium. This mixture resulted in a truly international spirit of the meeting, which started-off with a speaker's dinner on the eve of the symposium.

The morning session focused on bioactive peptides: Roderich Süßmuth (Technical University of Berlin, Germany) held the opening lecture on ribosomal and non-ribosomal peptides from bacteria and fungi. JanTytgat (KU Leuven, Belgium) continued on topic and described the pharmacology and bioactivity of novel peptides from marine worm. The first session closed with a presentation of Lachlan Rash (University of Queensland, Australia) on spider toxin peptides, their pharmacology and development as research tools and drugs.

The second morning session concentrated on chemical protein synthesis and included the lectures of Norman Metanis (Hebrew University of Jerusalem, Israel) on selenium chemistry for peptide research, followed by the lecture of Oleg Melnyk (CNRS Lille, France) on novel sulfur and selenium based chemistries for the total synthesis of proteins.

The poster session, which was held during the lunch break, featured 15 posters that were presented by PhD students and early-career researchers. There was also a poster award competition for the two best poster presentations.

The first afternoon session included six excellent short oral contributions selected from the submitted abstracts. Talks were given by Meder Kamalov (University of Vienna, Austria), Peter Keov (University of Queensland, Australia), Thomas Schlatzer (Graz University of Technology, Austria), Somnath Mukherjee (Indian Institute of Science), Vesna Stanojlovic (University of Salzburg, Austria) and Daniela Heilos (Medical University of Vienna, Austria).

The second and last afternoon session covered emerging technologies in peptide science with three lectures. The first speaker, Martina Marchetti-Deschmann (Technical University of Vienna, Austria) reported on the usefulness of MALDI mass spectrometry imaging. Then Monika Świąntek (European Life Science Technical Specialist, CEM GmbH) presented innovative techniques and tools for solid-phase peptide synthesis.

The scientific part of the symposium ended with the announcement of the two winners of the poster award competition: Peter Keov (University of Queensland, Australia) for his poster entitled "Identification of a cyclotide antagonist at the corticotropin-releasing factor type 1 receptor", and Philipp Schilling (University of Vienna, Austria) for her poster entitled "'CuAAC-supported synthesis of mannosylated peptides for binding studies with cyanovirin-N".

A social get-together including a winetasting provided by Michaela Jöbstl (Langenlois, Austria) followed the closing remarks. Overall, the meeting was successful and received a very positive feedback thanks to the comprehensive and high-level scientific program, the nice and friendly atmosphere among the participants and the stimulating place, the Van Swieten Auditorium of the Medical University of Vienna.

The seven Austrian Peptide Symposia hosted so far in Vienna, Graz and Salzburg have obtained very good resonance within the national and international scientific community, which strongly motivates the Austrian organizers to make of this event a consolidate tradition. Along this line, we are happy to announce that the 2018 meeting of the Austrian Peptide Society will be held in the beautiful city of Salzburg and co-organized by Chiara Cabrele (University of Salzburg), Christian Gruber (Medical University of Vienna) and Christian Becker (University of Vienna).

We are grateful to everyone who helped in the organization and realization of the 2017 Austrian Peptide Symposium, in particular all involved staff members from the organizing institutions. Finally, we very much thank the exhibitors and all sponsors of the symposium: Bachem, Bruker, CEM, Thermo Fisher Scientific, Intavis, peptides&elephants, Rieger-Industrievertretungen GmbH, and the European Peptide Society. Without their generous financial support, all this would not have been possible!

Contributed by Christian W. Gruber and Christian Becker

Figures:

Photograph 1: Group photo of all participants of the 7th Austrian Peptide Symposium at the Van-Swieten Auditorium of the Medical University of Vienna.



Photograph 2: Poster award ceremony. From left to right: Anne Conibear, Christian Gruber, Peter Keov, Philipp Schilling and Christian Becker.

