The European Neuroendocrine Tumor Society (ENETS)

Executive Committee:
Chairman: Kjell Öberg, Uppsala, Sweden
Vice-Chairman: Philippe Ruszniewski, Clichy, France
Chairman-Elect: Martyn Caplin, London, United Kingdom
Treasurer: Bertram Wiedenmann, Berlin, Germany
Scientific Secretary: Aurel Perren, Bern, Switzerland
Members: Dermot O’Toole, Dublin, Ireland; Massimo Falconi, Verona, Italy; Beata Kos-Kudła, Katowice, Poland; Ramon Salazar, Barcelona, Spain

ENETS Newsletter Editing:
Language Editor/Coordination: Elizabeth Zach
Layout and Publishing: Karger Publishing, Basel, Switzerland

ENETS Coordinating Office:
Charité Universitätsmedizin
Campus Virchow-Klinikum
Department of Gastroenterology and Hepatology
Augustenburger Platz 1
D–13353 Berlin, Germany
Tel. +49 30 450 553 096
Fax +49 30 450 556 996
E-Mail enets.office@charite.de

In this issue:
ENETS 2012, Copenhagen
ENETS 2013: Mark your calendars now
ENETS Young Investigators recognized

Letter from the Chairman

As the newly elected ENETS chairman, I am pleased at this opportunity to introduce myself to all members in this new issue of the ENETS Newsletter, and to welcome new members to our Society. In Copenhagen in March, at the ENETS 2012 Annual Conference, I was happy to hear from many of you and to see so many members in attendance. An overview of the conference and feedback from participants is in this Newsletter. You can also read about our younger members who have been recognized for their work.

I especially encourage young investigators to get involved with ENETS and the exciting field of neuroendocrine tumor research. The Society claims close to 1,000 members, as of May 2012, and many of our newest members are younger than 40. ENETS offers several opportunities for these members in the way of travel grants, abstract awards and a fellowship. The last page of the Newsletter profiles current recipients of these awards. All younger members should also be aware that until 30 June, they can and should consider sending in an abstract for presentation at the ENETS-NANETS Joint Young Investigator Symposium, to be held 11–13 October 2012 in San Diego. Please see the ENETS homepage for details.

The ENETS website has also been updated to show some recent changes to the Society. Elections to the ENETS Executive Committee were held during the Annual Conference in Copenhagen (on the back side of this Newsletter, you can read more about this.) To the left of this page, too, you can see the new members.

The ENETS homepage also contains information on the ENETS Centers of Excellence program and, as noted during the Copenhagen conference, we’re proud to announce the certification of three more Centers — in Amsterdam, Munich and London — this year. This brings the total number of Centers to 21, a remarkable achievement for a program established just a few years ago. Meanwhile, ENETS is preparing to hold its 2012 Advisory Board Conference, which will be held in October. The ENETS Advisory Board consists of 39 members, and the group reflects a balanced mix of disciplines and nationalities. This year’s meeting will focus on bronchial carcinoids. Stay tuned for next year’s Annual Conference, in Barcelona, to learn about the results of this conference.

Again, I thank you for your support and interest in ENETS, and in making it a viable and worthwhile medical society and I look forward to serving the next two years as your chairman. I welcome all members to let us know how we can improve ENETS, and we look forward to your further engagement in the Society and in neuroendocrine tumor research.

Kjell Öberg, Uppsala, Sweden
The **ENETS 2012 Annual Conference** was held in Copenhagen, 7–9 March. A **postgraduate course** took place on the first day and was a resounding success – at 400 participants, attendance was double what it was in 2011 and likely would have been even more if not for limited room capacity. ENETS will continue to offer this popular event at its 2013 Annual Conference in Barcelona.

The conference also included a **nurses symposium**, which also exceeded expectations. ENETS will expand the symposium and revise its registration for the event as this area of membership and interest continues to grow.

Feedback following the Copenhagen conference was overwhelmingly positive and constructive. Participants offered valuable advice on how to develop the next scientific program, such as to include sessions on adjuvant treatments, MANEC, bronchial carcinoids, targeted therapies, clinical trials, the impact of surgical procedures, translational research and cell biology. Clinical cases and debates on diagnosis and treatment continue to be crowd-pleasers, so those will be a large part of next year’s conference program, which is already being developed and will be publicized by early September on the ENETS website.

The Copenhagen conference drew participants from around the globe, and the postgraduate course was exceptionally well-attended, with double the participation from last year’s meeting.

Jean-Yves Scoazec lectures during the postgraduate course on the histopathology of NETs and the new WHO classification.

Industry sponsors continue to exhibit at the ENETS Annual Conferences. The Copenhagen meeting had 10 sponsors, with three new exhibitors: PerkinElmer, IDB Holland and ThermoFisher Scientific.
ENETS Newsletter
A Newsletter for Medical Professionals and ENETS Members

The Society recognized Prof. Steven Lamberts this year as its Life Achievement Award winner. His former student and colleague, Wouter de Herder, presented Prof. Lamberts with the award.

Here, Prof. Lamberts accepts the 2012 ENETS Life Achievement Award.

ENETS received more than 200 abstracts for the conference, setting a record. Here, delegates view posters during a conference break.

2012 Annual Conference Coordination:
Malgorzata Szott-Emus (project manager)
Simon Hirschmann (technical management)
Uli Knell (project assistance and logistics)
Elizabeth Zach (development and communications)
Cheryl Berg (project assistance)
Lenz Leberkern (graphic design and coordination)
Birgit Technik and Lenz Leberkern (conference photography)

The Society recognized three new ENETS Centers of Excellence. Project coordinator Dermot O’Toole, far left, presents awards here to (left to right) Christoph Auernhammer of Klinikum der Ludwig-Maximilians-Universität in Munich; Andrea Frilling of Imperial College London, Hammersmith Hospital, and Babs Taal of Netherlands Cancer Centre in Amsterdam. Further left to right, Profs. Philippe Ruszniewski and Bertram Wiedenmann, members of the ENETS Executive Committee.
Dorian Swarts of Maastricht University Medical Centre accepts his first place award for his basic science abstract.

Valérie Bernard won third place for her clinical research abstract.

Kjell Öberg discussed NET biotherapies during the postgraduate course, and later, as well, was installed as ENETS chairman.

Guido Rindi, left, departed the ENETS Executive Committee after eight years of dedicated service, including the coordination of the ENETS Guidelines and TNM classifications. Here, he receives recognition from fellow ENETS Executive Committee member, Philippe Ruszniewski.
### Participant feedback from ENETS Copenhagen

The following graphic illustrates participant feedback from the 9th Annual ENETS Conference in Copenhagen, 7–9 March 2012. Participants could also comment on the program and suggest topics for next year's conference in Barcelona. Work on the program has already begun and the 2013 conference program will be made public on the ENETS website in September.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Distribution</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenting recommendations in the treatment of neuroendocrine tumors</td>
<td>★★★☆☆☆</td>
<td>82.6%</td>
</tr>
<tr>
<td>Presenting the treatment planning: medical, physical, biological aspects</td>
<td>★★★☆☆☆</td>
<td>81.4%</td>
</tr>
<tr>
<td>Presenting the results of large studies and ongoing activities in research and development</td>
<td>★★★★☆☆☆</td>
<td>78.8%</td>
</tr>
<tr>
<td>Overall rating of the quality of the education offered</td>
<td>★★★★★☆☆☆</td>
<td>81.6%</td>
</tr>
<tr>
<td>Information useful and relevant to your work and practice techniques</td>
<td>★★★★★☆☆☆</td>
<td>80.2%</td>
</tr>
<tr>
<td>Information was well balanced and supported by adequate evidence</td>
<td>★★★★☆☆☆</td>
<td>80.4%</td>
</tr>
<tr>
<td>Effectiveness of conference for CME purposes</td>
<td>★★★★★☆☆☆</td>
<td>80.4%</td>
</tr>
<tr>
<td>Communication prior to the conference</td>
<td>★★★★★☆☆☆</td>
<td>80.6%</td>
</tr>
<tr>
<td>Registration procedure</td>
<td>★★★★★☆☆☆</td>
<td>84.6%</td>
</tr>
<tr>
<td>Communication during the conference</td>
<td>★★★★★☆☆☆</td>
<td>84.6%</td>
</tr>
<tr>
<td>Venue location</td>
<td>★★★★★☆☆☆</td>
<td>83.2%</td>
</tr>
<tr>
<td>Hotel rooms</td>
<td>★★★★★☆☆☆</td>
<td>76.4%</td>
</tr>
<tr>
<td>Catering</td>
<td>★★★★★☆☆☆</td>
<td>84.4%</td>
</tr>
</tbody>
</table>

---

**The 10th Annual ENETS Conference will be held in Barcelona, 6–8 March 2013.**

**Online registration opens 1 September 2012 via the ENETS website, www.neuroendocrine.net, as does the abstract submission period, and the scientific program will also be posted here, too.**
Congratulations to ENETS Young Investigators!

The Society awarded 10 young investigators Travel Grants earlier this year toward assisting each in attending the 9th Annual ENETS Conference held in Copenhagen. The recipients were chosen among 27 applicants, based on their current educational and professional accomplishments, as well as recommendations and an abstract submitted for presentation at the conference. Here is an overview of the grant recipients and their current research:

Dr. Tao Cui, of Sweden, plans for his research to include functional studies of OR51E1 in NET cells, and whether OR51E1 has the potential to be developed as a diagnostic target for imaging and a therapeutic target for novel drugs. He also is researching RNA and encoded proteins of (GRIA2), (GPR112) (SERPINA10) (Leja et al., 2009) as to their potential possibility to be developed as novel tissue and blood NET biomarkers.

Comparisons of DOTA-NOC and DOTA-TATE comprise the research of Dr. Emre Demirci, of Turkey, and his work has shown that the latter may be a better ligand.

Dr. Katja Freitag de Molina, of Germany, when applying for a grant, discussed her thesis ‘The role of the hypoxia-inducible transcription factor HIF-1 for malignant progression of neuroendocrine tumors’ and how it will lead her to evaluate in vivo data. ‘In consideration of these results,’ she added, ‘HIF-1-inhibiting treatment strategies might be an innovative and useful supplement of the current treatment options for GEP-NETs.’

Dr. Theresa Gagliano, of Italy, submitted an abstract on mTOR inhibitors and how they affect BCs cell lines differently, depending on mTOR expression. Her research emphasis is on adrenocortical carcinoma and broncopulmonary NETs.

Dr. Sven-Petter Haugvik, of Norway, in applying for a travel grant, submitted an abstract on the largest to date study on laparoscopic surgery of pNETs.

Dr. Kimberly Kamp of the Netherlands submitted her abstract ‘Thoracic and GastroEnteroPancreatic (GEP) Neuroendocrine Tumors (NETs) and the Ectopic Adrenocorticotropin (ACTH) Syndrome (EAS).’ Dr. Kamp won an abstract award at the ENETS 2011 Annual Conference in Lisbon. Likewise, the abstract of travel grant winner Dr. Stefano Partelli of Italy, ‘Pattern and Clinical Predictors of Lymph Node Involvement in Pancreatic Neuroendocrine Tumors (PanNETs),’ won this young investigator second place in the clinical research division.

Insulinomas in NET were the focus of Dr. Maria Melikian’s abstract and her recent scholarship in this field in Russia earned her a travel grant to Copenhagen.

Dr. Robert Rossi of Italy discussed her two abstracts ‘An esophageal gastrinistestinal stromal tumor (GIST) in a patient with MEN-1 related pancreatic gastrinoma’ and ‘Chromogranin A (CgA) in the diagnosis and monitoring of patients with gastro-entero-pancreatic (GEP) neuroendocrine tumors (NET): a single-institution experience’ in successfully applying for a grant.

And Dr. Giorgio Treglia, also of Italy, was first author of his notable abstract, ‘Diagnostic Accuracy of Gallium-68 Somatostatin Receptor Positron Emission Tomography in Patients with Thoracic and Gastroenteropancreatic Neuroendocrine Tumours: a Meta-analysis.’

The Society awarded Dr. Su-Chen Li, originally of China but currently working in Uppsala, Sweden, its 2012 Excellence in Translational Medicine in GEP-NET Disease. The fellowship, which is funded by both Ipsen and ENETS, is awarded to an ENETS member and younger (than 40 years old) scientist who seeks increased training in NET medicine and who can present and complete a workable project within the year the award is granted.

Dr. Li’s work centers on investigating micro RNAs (miRs) expression in small intestine neuroendocrine tumors (SI-NETs) in an effort to clarify their role in tumor progression and whether they can be developed as novel blood biomarkers for NETs. Here, she describes her ongoing and proposed studies as an ENETS Fellow:

A growing number of potential oncogenic or tumor suppressor miRs have been identified in SI-NETs and lung NETs. Moreover, recent evidence supports the use of specific miR signatures to predict clinical outcome. Indeed scientists recently reported that miR-96 directly targets the KRAS oncogene functioning as tumor-suppressing miR in pancreatic cancer cells (Yu et al., 2010). In addition, miR-183 has been indicated as potential oncogene (Sarver, et al., 2010). Although new steps came recently thanks to an animal model (Gao, et al., 2011), miRs expression is not characterized clearly in human SI-NETs.

We genome-wide profiled miRs expression of microdissected normal enterochromaffin (EC) cells and 15 SI-NET specimens at different stage of disease with Affymetrix GeneChip miR arrays to determine potential involvement in tumor progression. The specimens were collected at the Department of Endocrine Oncology, Uppsala University Hospital with informed consent of patients diagnosed with SI-NETs. We used snap-frozen tumor specimens from five primary SI-NETs, five mesentery metastases and five liver metastases containing minimum 70% of tumor cells. Three normal ilea mucosa specimens and normal immuno laser capture-microdissected (LCM) EC cells, supplied by Prof. R.V. Lloyd are part of this study, have been used as normal controls as previously done (Leja et al., 2009). In addition, we included five human NET cell lines, CNDT2.5 and KRJ-1 cells established from SI-NETs, QGP-1 cells from a pancreatic carcinoma, NCI-H720 and NCI-H727 cells from lung carcinoids, to verify whether the cells can be used for further functional miRs analyses in vitro.

We isolated total RNA by using mirVana miRNA kit. RNA quality and quantity was verified by using the Agilent 2100 Bioanalyzer. The samples have been sent to BEA, Karolinska Institute, Huddinge, Sweden, to run Affymetrix miR Arrays. We used bioinformatics analysis to restrict the number of miRs of interest for further functional analysis. Specifically we used MeV software, which is a java tool to provide an intuitive graphical interface for clustering, classification and statistical analysis.
Prof. Kjell Öberg is the new ENETS chairman

Prof. Kjell Öberg will guide ENETS as its chairman the next two years, replacing Prof. Philippe Ruszniewski who presided over the Society from 2010 until 2012.

He leads the Society at a time of great expansion. ENETS has nearly 1,000 members, and is increasing the number of its Centers of Excellence throughout Europe; it is expected two dozen will be operating by 2013. Work continues on the ENETS Registry, with ENETS members in various countries expressing interest in entering the project. Meanwhile, diagnosis and treatment guidelines for bronchial NETs are planned for the coming year.

Prof. Öberg is a specialist in endocrinology and internal medicine at the Medical Faculty of Uppsala University. He founded the Department of Endocrine Oncology at Uppsala University and, with 30 years experience in the field of neuroendocrine tumor research, is one of the Society’s founders. He pioneered the treatment of carcinoid tumor patients with interferon and somatostatin analogues and developed assays for tumor markers such as Chromogranin A and radiological procedures, including specialized PET scans.

He was the first to describe a genetic deletion in multiple endocrine neoplasia Type 1 (MEN1), has given hundreds of lectures at international meetings, published more than 500 papers within his research field, and is cited in more than 12,000 papers. His work appears in several international textbooks, including William’s Textbook of Endocrinology, Leslie de Groot’s Textbook of Endocrinology, Clinical Endocrinology and Fordtran’s Textbook of Gastroenterology. He is Editor-in-Chief of World Journal of Gastroenterology (WJG).

In 1991, Prof. Öberg received the European Interferon Research award. In 2003, he was recognized as an “Eminent Scientist” by the International Research Promotion Council (IRPC) and World Scientist Forum, and in 2004 he was awarded the European Gold Medal in Endocrinology from the English Endocrine Society. In November 2006 he received the Harry Boström Award Lecture by the Swedish Medical Society.

Prof. Öberg is a member of the Royal Society of Sciences and the Swedish Society of Medical Research; an honorary member of the Finnish Oncology Society, the Finnish Endocrine Society and the Spanish Neuroendocrine NET-work. He is also a member of the NANETS Advisory Board.
Aurel Perren has joined the ENETS Executive Committee as its Scientific Secretary, and will serve in this position for two years. He has been an active ENETS member since 2005, when he participated in the ENETS Guidelines Consensus Conference in Frascati, Italy, and where he contributed to the pathology and genetics section of the Guidelines. The better understanding of pathology, according to Prof. Perren, continues to assist clinicians in determining the best patient treatment. He replaces Prof. Guido Rindi, another pathologist, who served on the ENETS Executive Committee for eight years.

Prof. Perren studied medicine at the University of Basel. During his pathology training in Zürich, he became interested in neuroendocrine tumors and was inspired by Profs. Philippe Heitz and Paul Kominnoth. His thesis ‘Clonal analysis of pancreatic endocrine tumors’ was the first project in which he was involved in molecular pathology techniques. After a research fellowship in 1998 at the Dana Farber Cancer Institute, he returned to Zürich and led the laboratory of molecular endocrine pathology, which is responsible for the genetic testing of familial neuroendocrine tumor patients in Switzerland. The histopathological and genetic analysis of familial pNET as a human model for this disease also became his research focus.

In 2007, Aurel Perren was appointed professor for tumor pathology at the medical faculty of the Technical University of Munich. Since August 2009, he is Director of the Institute of Pathology at the University of Bern.