Sunday 13 August 2017

17:00 - 20:00  **Inaugurating Plenary Session, Aula Medica**  
   *Chair: Elias Arnér*

17:00 – 17:10  Welcome address  
   *Elias Arnér and Gary Banuelos*

17:10 – 17:30  Berzelius and his discovery of Selenium  
   *Jan Trofast*

17:30 - 18:00  O1 - The global cycle of selenium  
   *Lenny Winkel*

18:00 - 18:30  O2 - Selenium Metabolism in Plants  
   *Philip John White*

18:30 - 19:00  O3 - Selenium Utilization in Diverse Animals  
   *Vadim N. Gladyshev*

19:00 - 19:30  O4 - Phenotypes and molecular pathogenesis of disorders of human selenoprotein synthesis  
   *Krishna Chatterjee*

19:30 – 20:00  Performance – “Probing the mind of Berzelius”  
   *1+1=3 (Stephen Whitmarsh and Jean-Louis Huhta)*

Monday 14 August 2017

09:00 - 09:20  **1.1. Inorganic selenium chemistry, Berzelius**  
   *Chair: Ingrid Pickering*

09:00 - 09:20  O5 - INORGANIC SELENIUM SPECIES SEPARATION AND PRECONCENTRATION WITH A NEW NANOSILICA-IONIC LIQUID HYBRID  
   *Mauricio Llaver*

09:00 - 10:30  **2.1. Metabolism of selenium in living cells, Vesalius**  
   *Chair: Aristi Fernandes*

09:00 - 09:30  O6 - A novel operon involved in selenite reduction in Geobacter sulfurreducens  
   *Hisaaki Mihara*

09:30 - 10:00  O7 - Regulation of selenium metabolism in Archaea  
   *Michael Rother*

10:00 - 10:30  O8 - Anaerobic reduction of Se(IV) by bacterial strain isolated from Spanish bentonites: multidisciplinary approach characterization  
   *Mohamed Larbi Merroun*
### Monday 14 August 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| **09:00 - 10:30** | **3.1. Selenium supplementation for animal and livestock health, Retzius**  
Chair: Andre Rodrigues dos Reis |
| 09:00 - 09:15 | O9 - Selenium Requirements and Upper Limits in Mammals and Avians From Enzyme and Molecular Biomarkers  
Roger A Sunde |
| 09:15 - 09:30 | O10 - Effects of feeding cows Se-yeast or Se-enriched alfalfa hay on baby calves Se status and IgG titers  
Jean Hall |
| 09:30 - 09:45 | O11 - Thirty years of selenium fertilization: A Finnish solution to ensure an adequate selenium intake  
Merja Eurola |
| 09:45 - 10:00 | O12 - Selenium bioaccessibility in biofortified crops and food supplements: a factor to take into account?  
Gijs Du Laing |
| 10:00 - 10:15 | O13 - Selenium Requirements of the Turkey Based on Enzymatic Biomarkers and Next-generation Sequencing  
Rachel M Taylor |
| 10:15 - 10:30 | O14 - Selenium supplementation of feed for Atlantic salmon  
Heidi Amlund |
| **09:20 - 10:30** | **1.2. Imaging of selenium and analytical methodologies, Berzelius**  
Chair: Ingrid Pickering |
| 09:20 - 09:50 | O15 - New opportunities for selenium speciation from advanced X-ray spectroscopy  
Graham George |
| 09:50 - 10:10 | O16 - Development of Fluorescent ROS Probe Based on Redox Reaction of Selenol group  
Noriyuki Suzuki |
| 10:10 - 10:30 | O17 - Advances in large scale speciation of selenium by plasma and molecular mass spectrometry  
Joanna Szpunar |
| **11:00 - 11:30** | **1.3. Local geological selenium sources and global cycling, Berzelius**  
Chair: Lenny Winkel |
| 11:00 - 11:15 | O18 - Selenium speciation in rainwater from high altitude locations  
Elke Suess |
| 11:15 - 11:30 | O19 - Effect of conservation agriculture on solubility and fractionation of soil selenium  
Ivy Sichinga - Ligowe |
Monday 14 August 2017

11:00 - 12:10  2.2. Molecular mechanisms of selenium toxicity, *Vesalius*
   Chair: Hugh H Harris
11:00 - 11:30  O20 - Selenocysteine in mammalian thioredoxin reductase and application of
ebselen as a therapeutic
   *Arne Holmgren*
11:30 - 11:50  O21 - Characterization of novel selenium compounds as a therapeutic approach
   for improved cancer treatment
   *Arisit Fernandes*
11:50 - 12:10  O22 - Impairment of protein homeostasis accounts for selenomethionine toxicity
   in *Saccharomyces cerevisiae*
   *Myriam Lazard*

11:00 - 12:30  3.2. Epidemiology of selenium related health and disease, *Retzius*
   Chair: Roger Sunde
11:00 - 11:30  O23 - Selenium status of Russian population: interactions with demography
   *Anatoly Skalny*
11:30 - 12:00  O24 - Selenium status of School Children for Kaschin–Beck Disease Endemic
   Areas in Tibet, China
   *Linsheng Yang*
12:00 - 12:30  O25 - Impact of early-life selenium status on children’s cognitive abilities
   *Helena Skröder*

11:30 - 12:30  1.4. Relationships of selenium between soils, water, and vegetation
   (Session I), *Berzelius*
   Chair: Zhi-Qing (ZQ) Lin
   *M.R. Broadley*
11:45 - 12:00  O27 - Key role of Selenium (0) nanoparticles in soil and as therapeutic agent
   *Laurent Charlet*
12:00 - 12:15  O28 - Adsorption of selenate and selenite in cultivated and native soils of the
   Brazilian Cerrado
   *Guilherme Lopes*
12:15 - 12:30  O29 - SELENIUM AND BARIUM IN BRAZIL NUTS: UNRAVELLING THE
   SPATIAL DISTRIBUTION
   *Ediu Carlos Silva Junior*
Monday 14 August 2017

12:10 - 12:30   2.3. Molecular consequences of selenium deficiency, *Vesalius*
Chair: Björn Åkesson

12:10 - 12:30   O30 - Role of the selenium in articular cartilage metabolism, growth, and maturation
Caroline Bissardon

14:00 - 16:00   1.4. Relationships of selenium between soils, water, and vegetation (Session II), *Berzelius*
Chair: Zhi-Qing (ZQ) Lin

14:00 - 14:20   O31 - Functional Analysis of Plant Hyperaccumulator Genes SpSultr1;2 and SpATPS2 via Microbial Expression
Marinus Pilon

14:20 - 14:40   O32 - Influence of Sulfate on Selenium Uptake in Hyperaccumulator Stanelya pinnata and Non-Accumulators
Michela Schiavon

14:40 - 15:00   O33 - Selenolanthionine is the main selenium species of the hyperaccumulator plant Cardamine violifolia
Eszter Borbála Both

15:00 - 15:20   O34 - Two selenium hyperaccumulators and their influence on their plant communities
Ray Reynolds

15:20 - 15:40   O35 - The effect of different Selenium fertilizers on garlic
Hongyu Zhang

15:40 - 16:00   O36 - Biofortification of maize and beans with selenium in central Kenya highlands
Peter Biu Ngigi
Monday 14 August 2017

14:00 - 16:00  2.4. Selenoprotein synthesis pathways (Session I), Vesalius
Chair: Michael Rother

14:00 - 14:20  O37 - Selenophosphate synthetase 1 regulates cellular redox state and cell defense system
Byeong Jae Lee

14:20 - 14:40  O38 - Translation regulation of human selenoproteins
Laurent Chavatte

14:40 - 15:00  O39 - Structural and mechanistic insights into the mechanism of decoding of the Sec UGA codon in humans
Miljan Simonovic

15:00 - 15:20  O40 - Identification of determinants regulating processive Sec incorporation in Selenoprotein P (SELENOP)
Paul Copeland

15:20 - 15:40  O41 - Codon-specific roles for cis-acting elements during translation of selenoprotein P
Michael Howard

15:40 - 16:00  O42 - Coding region determinants regulate Selenoprotein P (SELENOP) expression in cells
Sumangala Shetty

14:00 - 15:00  3.3. Nutritional selenium intervention studies in human, Retzius
Chair: Helmut Sies

14:00 - 14:30  O43 - Effect of long-term selenium supplementation on mortality: results from a multiple-dose, RCT
Margaret Rayman

14:30 - 14:45  O44 - Selenium supplementation blocked the crosstalk among pathogenic pathways in Alzheimer's disease mice
Qiong Liu

14:45 - 15:00  O45 - Selenium, coenzyme Q10 and cardiovascular health – results from a 4-year-intervention in elderly
Urban Alehagen
Monday 14 August 2017

15:00 - 16:00  3.4. Selenium based medical therapeutics (Session I), Retzius
   Chair: Josef Köhrle
15:00 - 15:20  O46 - Antibacterial redox selenium coatings, covalent small molecules and antibody drug conjugates (ADCs)
   julian spallholz
   Mikael Björnstedt
15:40 - 15:50  O48 - Selective targeting of redox dysregulation of cancer cells by redox-active selenium compounds
   Sougat Misra
15:50 - 16:00  O49 - Selenium: A potentially powerful tool to design potent anticancer molecules-Discovery of Se-Aspirins
   Arun Sharma

16:30 - 17:50  1.4. Relationships of selenium between soils, water, and vegetation (Session III), Berzelius
   Chair: Gary Banuelos
16:30 - 16:50  O50 - Selenium Distribution and its Correlation to Geochemical Factors in East China Intertidal Zone
   Zhengyu BAO
16:50 - 17:10  O51 - Distribution and translocation of selenium from soil to highland barley in Kashin-Beck disease area
   Jing Wang
17:10 - 17:30  O52 - The status of selenium in Iraqi Kurdistan and feasibility of Se bio fortification using 77-Se
   Abdolbaset Karim
17:30 - 17:50  O53 - Geochemistry of selenium in Gilgit-Baltistan (North East Pakistan)
   Saeed Ahmad
### Monday 14 August 2017

#### 16:30 - 17:50  2.4. Selenoprotein synthesis pathways (Session II), *Vesalius*

Chair: Michael Rother

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>16:30</td>
<td>O54 - Selenocysteine Chemistry and Total Chemical Synthesis Applied for Accessing Human Selenoproteins</td>
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<td>Norman Metanis</td>
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<td>16:50</td>
<td>O55 - Redefining UAG for selenocysteine widens the scope of recombinant selenoprotein production in E.coli</td>
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<td>Qing Cheng</td>
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<td>17:10</td>
<td>O56 - Delivery of selenide to selenophosphate synthetase for selenoprotein biosynthesis in bacteria</td>
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<td>Ryuta Tobe</td>
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<td>17:30</td>
<td>O57 - Reconstitution of processive selenoprotein P synthesis in the wheat germ lysate system</td>
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<td>Mark Pinkerton</td>
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#### 16:30 - 18:00  3.4. Selenium based medical therapeutics (Session II), *Retzius*

Chair: Aristi Fernandes

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<tr>
<td>16:30</td>
<td>O58 - Selenium in Radiation Oncology – 10 years of Experiences in Germany</td>
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<td>Ralph Muecke</td>
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<td>Oliver Micke</td>
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<td>17:10</td>
<td>O60 - Selective targeting of leukemia stem cells by selenium</td>
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<td>K. Sandeep Prabhu</td>
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<td>17:20</td>
<td>O61 - Methylselenol suppressed the metastatic potential of B16F10 melanoma by reducing integrin expression</td>
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<td>An-Sik Chung</td>
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<td>17:30</td>
<td>O62 - Selenium Enhances Auranofin-mediated Nrf2 Induction in Lung Epithelial Cells</td>
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<td>Trent Tipple</td>
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<td>17:40</td>
<td>O63 - Preclinical chemopreventive efficacy of a novel hybrid p-XSC-aspirin compound in a lung cancer model</td>
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<td>Daniel Plano</td>
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<td>17:50</td>
<td>O64 - Selenofolate is a Promising Novel Agent in Targeted Chemotherapy</td>
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<td>Antje Zickler</td>
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Monday 14 August 2017

18:00 - 19:00  1.5. Excessive selenium accumulation from natural or anthropogenic sources and remediation technologies, *Berzelius*
*Chair: Gary Banuelos*
18:00 - 18:15 O65 - Environmental Remediation of Selenium Contamination in Water and Soil
*Zhi-Qing Lin*
18:15 - 18:30 O66 - Integrated Passive Biological Selenium Treatment System: Results of a 1-year Pilot Study
*JAMES BAYS*
18:30 - 18:45 O67 - Industrial selenium pollution: challenges to treat Flue Gas Desulfurization effluents
*Lucian Staicu*
18:45 - 19:00 O68 - Role of antioxidant defense system and mitochondrial activity in selenium toxicity tolerance in whea
*Sucheta Sharma*

18:10 - 19:00  3.4. Selenium based medical therapeutics (Session III), *Retzius*
*Chair: Carmen Sanmartín*
18:10 - 18:30 O69 - Insufficient documentation for clinical efficacy of selenium supplementation in chronic autoimmune thyroiditis
*Kristian Hillert Winther*
18:30 - 18:40 O70 - Dihydroxy-1-selenolane protects cells from radiation-induced mitotic death: role of GPx
*Amit Kunwar*
18:40 - 18:50 O71 - Inhibition of metalloenzymes, i.e., angiotensin-converting enzyme and tyrosinase, by selenol-metal ion interaction of selenoneine
*Takuya Seko*
18:50 - 19:00 O72 - Selenium reduces macrophage and B-cell responses in vitro and suppresses germinal center B-cell responses in vivo: A potential for therapy in lupus
*Raghu Sinha*

18:15 - 19:00  2.5. Selenoprotein genetics, *Vesalius*
*Chair: Ulrich Schweizer*
18:15 - 18:30 O73 - The significance of selenoproteins for human health revealed by inborn errors of metabolism
*Ulrich Schweizer*
18:30 - 18:45 O74 - Mouse models lacking the selenoprotein thioredoxin reductase-1
*Edward E Schmidt*
18:45 - 19:00 O75 - Mutated selenocysteine synthase creates a Sedaghian-type spondylometaphyseal dysplasia mouse model
*N Fradejas-Villar*
Tuesday 15 August 2017

09:00 - 10:30  1.6. Strategies to improve selenium accumulation and biofortification (Session I), Berzelius
  Chair: Luiz Roberto Guimarães Guilherme

09:00 - 09:20  O76 - Agronomic strategies affect the efficacy and quality of selenium biofortification
  Gary Banuelos

09:20 - 09:40  O77 - Improving selenium supply in food systems
  Graham Lyons

09:40 - 10:00  O78 - Agronomic Biofortification with Selenium in Intercropping Systems would address Low Selenium Intake
  ALLAN CHILIMBA

10:00 - 10:15  O79 - To bio or not to bio? Strategies for agronomic biofortification with Se in tropical agroecosystems
  Luiz Roberto Guimarães Guilherme

10:15 - 10:30  O80 - Soil and foliar application of selenium in upland rice aiming agronomic biofortification
  Andre Rodrigues Dos Reis

09:00 - 11:00  2.6. Selenoprotein function (Session I), Vesalius
  Chair: Leopold Flohé

09:00 - 09:20  O81 - A model for Glutathione peroxidase 4-catalyzed reduction of lipid hydroperoxides in membranes
  Matilde Maiorino

09:20 - 09:40  O82 - Selenium versus sulfur: reversibility of chemical reactions and resistance to permanent oxidation in proteins and nucleic acid
  Robert J. Hondal

09:40 - 10:00  O83 - The key ferroptosis regulator GPX4: cellular mechanisms and in vivo relevance
  Marcus Conrad

10:00 - 10:20  O84 - GPx4 depleted cell death involves different cell death pathway from ferroptosis
  Hirotaka Imai

10:20 - 10:40  O85 - Selenoproteins expressed in intestinal stem cells and cancer stem cells
  Anna Kipp

10:40 - 11:00  O86 - Roles of the thioredoxin and glutathione systems in reduction of inorganic- and Cys-polysulfide spec
  Péter Nagy
Tuesday 15 August 2017

09:00 - 10:30  3.5. Selenium metabolism or selenoprotein function in health and disease
    (Session I), Retzius
    Chair: Bernhard Michalke
09:00 - 10:30  O87 - NUTRITIONAL ASPECTS OF SELENIUM IN HUMAN BEINGS
    Raymond F Burk
09:00 - 10:30  O88 - Health Benefit Values (HBV) Reliably Indicate Effects of Seafood
    Consumption
    Nicholas Ralston
09:00 - 10:30  O89 - Molecular and Metabolic Mechanisms for Steatosis and Obesity Induced
    by Overexpression of Glutathione Peroxidase-1 in Mice
    Xingen Lei

11:00 - 12:30  1.6. Strategies to improve selenium accumulation and biofortification
    (Session II), Berzelius
    Chair: Milton Ferreira Moraes
11:00 - 11:20  O90 - SELENIUM USE EFFICIENCY BY WHEAT CULTIVARS
    Milton Ferreira Moraes
11:20 - 11:40  O91 - Effects of selenium biofortification on mineral nutrients in grains of wheat
    and oat
    Tao Li
11:40 - 12:00  O92 - Characterization on rhizosphere bacteria from a selenium-
    hyperaccumulator Cardamine hupingshanesis
    Linxi Yuan
12:00 - 12:15  O93 - Assessment and biofortification of wheat grain selenium in staple food
    production regions of China
    Sen Wang
12:15 - 12:30  O94 - Selenium supplemented kale and kohlrabi sprouts as possible ingredients
    for potent functional food.
    Pawel Zagrodzki
## Tuesday 15 August 2017

### 11:00 - 12:30  2.6. Selenoprotein function (Session II), *Vesalius*

*Chair: Arne Holmgren*

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<tr>
<td>11:00</td>
<td>O95 - Selenoproteins in hypothalamic energy homeostasis</td>
<td>Matthew Pitts</td>
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<td>11:20</td>
<td>O96 - Role of hypothalamic selenoprotein M in leptin signaling and calcium</td>
<td>Ting Gong</td>
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<td>11:40</td>
<td>O97 - Exploring Selenoprotein N structure and function</td>
<td>Alain Lescure</td>
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<td>12:00</td>
<td>O98 - Disruption of cancer cell redox homeostasis promoted by S-nitrosylation</td>
<td>Moran Benhar</td>
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<td>of thioredoxin reductase</td>
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<td>12:15</td>
<td>O99 - Influence of small intestinal thioredoxin and thioredoxin reductase</td>
<td>Liangwei Zhong</td>
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### 11:00 - 12:30  3.5. Selenium metabolism or selenoprotein function in health and disease (Session II), *Retzius*

*Chair: Anna Kipp*

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<tr>
<td>11:00</td>
<td>O100 - The intricate role of selenoproteins in stress erythropoiesis</td>
<td>Chang Liao</td>
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<td>11:30</td>
<td>O101 - Selenoproteins restrict the replication of Francisella tularensis in</td>
<td>Girish Kirimanjeswara</td>
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<td>12:00</td>
<td>O102 - Se-dietary matrices can upregulate the anti-inflammatory responses in</td>
<td>Tejo Prakash Nagaraja</td>
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Tuesday 15 August 2017

14:00 - 16:00  2.7. The systems biology of selenium and selenoproteins, Vesalius
   Chair: Vadim Gladyshev
14:00 - 14:20  O103 - Selenium in human and vertebrate evolution
   Sergi Castellano
14:20 - 14:40  O104 - Evolution of selenoproteins across the tree of life
   Marco Mariotti
14:40 - 14:50  O105 - The human selenomicobiome
   Didac Santesmasses
14:50 - 15:00  O106 - Selenoprotein extinction in Drosophila occurred concomitantly to genome catastrophes
   Didac Santesmasses
15:00 - 15:20  O107 - Metabolomics of selenium
   Sun Hee Yim
15:20 - 15:40  O108 - Selenium-encoded chemical proteomics
   Chu Wang
15:40 - 16:00  O109 - Characterization of Atlantic salmon (Salmo salar) selenoproteins using bioinformatics and hyphenated
   Veronika Sele

14:00 - 16:00  3.5. Selenium metabolism or selenoprotein function in health and disease
   (Session III), Retzius
   Chair: Lutz Schomburg
14:00 - 14:20  O110 - The cellular location of selenoproteins in human prostatic tissue and their role in prostate cancer.
   Alan Diamond
14:20 - 14:40  O111 - Dietary Selenium Deprivation Oppositely Impacts Longevity and Healthspan in Telomere Dysfunctional Mice
   Wen-Hsing Cheng
14:40 - 15:00  O112 - Selenium and Cataract*
   Kaixun Huang
15:00 - 15:20  O113 - Role of selenoprotein P in Alzheimer's disease
   Xiubo Du
15:20 - 15:40  O114 - Role of selenoprotein P in function of pancreatic β cell: Improving effects of neutralizing antibody
   Yoshiro Saito
15:40 - 15:50  O115 - Tissue-specific pools of Selenoprotein P differentially modify colitis-associated carcinogenesis
   Sarah Short
15:50 - 16:00  O116 - Selenoprotein P in cord serum: wide disparity between ELISA and HPLC
   Margaret Rayman
Tuesday 15 August 2017

14:00 - 16:00  3.5. Selenium metabolism or selenoprotein function in health and disease (Session IV), Berzelius

Chair: Ed Schmidt

14:00 - 14:20  O117 - Expression and activity of enzymes of selenium metabolism in the selenoprotein P knockout mouse
Marla J. Berry

14:20 - 14:40  O118 - The Role of Selenoprotein K in Progression and Metastasis of Melanoma
Peter Hoffmann

14:40 - 15:00  O119 - Targeting thioredoxin reductase 1 as a basis for anticancer therapy
Elias Arnér

15:00 - 15:15  O120 - Redox regulation of protein kinase C by selenium and selenoprotein thioredoxin reductase influences the cancer-preventive efficacy of selenium
Rayudu Gopalakrishna

15:15 - 15:30  O121 - Thioredoxin reductase 2 inhibition by tamoxifen-like metallocifens drives Jurkat cells to apoptosis
Valeria Scalcon

15:30 - 15:45  O122 - Dietary selenium and the 15 kDa selenoprotein influence initiation/promotion of colon carcinogenesis
Petra Tsuji

15:45 - 16:00  O123 - Selenoprotein T is a novel neuroprotective antioxidant enzyme in Parkinson’s disease
Youssef Anouar
Wednesday 16 August 2017

09:00 - 09:15  2.8. Selenium based biotechnological applications, *Retzius*
               Chair: Elias Arnér
09:00 - 09:15  O124 - Selenium Atom-specific Functionalization of Nucleic Acids for Structure and Function Studies
               Zhen Huang

09:00 - 09:20  3.6. Clinical genetics of selenium or selenoprotein-encoding genes, *Berzelius*
               Chair: Ulrich Schweizer
09:00 - 09:20  O125 - Interrelationships among SELENOF genotype, cellular localization, serum selenium and race in prostate cancer
               Dede Ekoue

09:15 - 10:30  2.9. Additional and emerging topics of selenium in molecular life sciences, *Retzius*
               Chair: Elias Arnér
09:15 - 09:35  O126 - Selenocysteine and the Genetic Code
               Dieter Söll
09:35 - 09:55  O127 - Cysteine polysulfidation governed by cysteinyl-tRNA synthetases (CARSs
               Takaaki Akaike
09:55 - 10:15  O128 - Direct observation of methylmercury and auranofin binding to selenocysteine in thioredoxin reductase
               Ingrid Pickering
10:15 - 10:30  O129 - X-ray fluorescence imaging and X-ray absorption spectroscopy combined yield insight on mammalian selenium biochemistry
               Hugh Harris

09:20 - 10:30  3.7. Additional and emerging topics of selenium in health or disease (Session I), *Berzelius*
               Chair: Ulrich Schweizer
09:20 - 09:40  O130 - Se-speciation investigations at neural barrier (NB)
               Bernhard Michalke
09:40 - 10:00  O131 - Selenium-Binding Protein 1 in serum may signify a heart at risk
               Eike Kuehn
10:00 - 10:15  O132 - Of dogs and men: Review of translational impact of dog studies on selenium and prostate cancer risk
               David Waters
10:15 - 10:30  O133 - High selenium induces endothelial dysfunction via endoplasmic reticulum stress
               Matshediso Zachariah
Wednesday 16 August 2017

11:00 - 12:30  3.7. Additional and emerging topics of selenium in health or disease (Session II), Berzelius
Chair: Regina Brigelius-Flohé

11:00 - 11:30 O134 - Selenium and sex: competition between brain and testes for selenium results in male-specific consequences in mice and men
Marla Berry

11:30 - 12:00 O135 - Ceramide analog S14 causes a coordinate downregulation of selenoproteins in a murine psoriasis model
Jack L. Arbiser

12:00 - 12:30 O136 - Maternal nutrition and transcript abundance of selenium related genes in fetal bovine hepatic tissues at d 50 of gestation
J. S. Caton

14:00 - 16:00 Planning session for The 12th International Symposium on Selenium in Biology and Medicine and The 6th International Conference on Selenium in the Environment and Human Health, Berzelius
Chairs: Elias Arnér and Gary Banuelos

Session for decision of venues and dates of forthcoming meetings.

16:30 - 18:00 Natural Biofortification Program (NBP) satellite meeting, Berzelius
Chairs: Gary Bañuelos and Zhi-qing Lin

16:30 - 16:50 O137 - A ten-year study and practice of functional agriculture in China
Xuebin Yin

16:50-17:00 Linxi Yuan, Introduction of NBP and open proposal call to participate

17:00-17:10 Serun Group (Gold Sponsor) Selenium products produced from natural Se-rich areas

17:10-17:20 Zedong Long, Does selenium intake relate to human longevity: A case study in Shitai, Anhui, China

17:20-17:30 Setek Co. Ltd. (Gold Sponsor) Leading functional agriculture practices in China

17:30-18:00 Closing words, Zhi-qing Lin
Thursday 17 August 2017

09:00 - 10:30  **Plenary Session I, Aula Medica**  
*Chair: Arne Holmgren*

09:00 - 09:30  **O138** - From Atom to Field: How and Why Plants Hyperaccumulate Selenium, and How this Affects Ecosystems  
*Elizabeth Pilon-Smits*

09:30 - 10:00  **O139** - Selenium from ocean fish provides protection against mercury toxicity  
*Nicholas Ralston*

10:00 - 10:30  **O140** - Selenium at the redox interface of the genome and exposome  
*Dean Jones*

11:00 - 12:30  **Plenary Session II, Aula Medica**  
*Chair: Raymond Burk*

11:00 - 11:30  **O141** - Enzymology and biological functions of glutathione peroxidases  
*Regina Brigelius-Flohé*

11:30 - 12:00  **O142** - Selenium versus Sulfur in GSH Peroxidases  
*Fulvio Ursini*

12:00 - 12:30  **O143** - Nrf2 Improves Leptin and Insulin Resistance Provoked by Selenocysteine-tRNA Knockout in Hypothalamus  
*Masayuki Yamamoto*

12:30 - 13:00  **Closing Session and Awards, Aula Medica**  
*Chair: Elias Arnér and Gary Banuelos*
Monday 14 August (Afternoon posters)

Presenting authors of posters listed below are kindly asked to be present at the respective poster during the first 30 min of the session.

12:30 - 14:00 Poster Session with lunch and exhibition, Poster and Exhibition Room

P1 - In vitro Generation of Superoxide by Selenofolate in MDA-MB-468 Breast Cancer Cells
SONI KHANDELWAL

P2 - A preliminary study of selenium species in natural selenium-enriched garlic
Shaozhan Chen

P3 - Catalytic redox activity of selenium compounds generating superoxide assessed by chemiluminescence a
SONI KHANDELWAL

P4 - Quantification of selenoprotein p in human serum using isotope dilution analysis
Christian Deitrich

P5 - Relevancy of using Se speciation for geographical authentication purpose: example of red wines
VERONIQUE VACCHINA

P6 - Selenium Bicentennial: Two Hundred Years of Selenium Discovery
Mikael Bjornstedt

P7 - Simultaneous determination of selenium and sulfur species in biological samples
Nina Kroepfl

P8 - The fractions and distribution of soil selenium in Heilongjiang province and its' impacting factors
Fengqin Chi

P9 - Zoning pollution-free and selenium-rich land resources with geochemistry
Tao Yu

P10 - Selenium, Nitrogen and Carbon remobilization study following litter decomposition during 10 months
Maryse Castrec-ROUELLE

P11 - The Precipitation Impact on the Selenium Speciation in Surface Soil
Dacheng Wang

P12 - Effect of pH, iron plaque and phosphorus on selenium uptake by rice seedling
Ju Min

P13 - Analysis of Se (IV) and Se(VI) absorption kinetics of different genotypes of Nicotiana tabacum L.
Dan Han

P14 - AGRONOMIC BIOFORTIFICATION OF CARROTS WITH SELENIUM IN OXIDIC SOIL
Ediu Carlos Silva Junior

P15 - Effects of different selenium application on selenium accumulation in Lentinula edode
Dongli Liang
P16 - Apples: a suitable target for selenium biofortification? 
   Diemo Daum

P17 - Optimising fertiliser formulations for selenium biofortification of wheat grain
   Chandnee Ramkissoon

P18 - Effects of foliar spraying selenite or selenate at different stage on the selenium uptake and distri
   Xinwei Liu

P19 - Se and its antagonists Hg, As, Cd in hair of Taiwanese and Russian residents
   Margarita Skalnaya

P20 - Selenium and mercury interactions in the apex predators from the Gulf of Trieste (northern
   Adriatic)
   Jadran Faganeli

P21 - Environmental Selenium Influences Fish Methylmercury Bioaccumulation and Risks
   Nicholas Ralston

P22 - Study of geochemical characteristics and influencing factors of soil selenium in the typical soil
   Zhongfang Yang

P23 - Interaction of selenium and cadmium in soil-corn system in natural selenium and cadmium rich
   area
   Zezhou Zhang
Monday 14 August (Evening posters)

Presenting authors of posters listed below are kindly asked to be present at the respective poster during the first 30 min of the session.

19:00 - 21:00  Poster Session with dinner and exhibition, Poster and Exhibition Room

P24 - Impact of Initial Se Status and Gpx1 Genotype on Selenoenzyme and Transcript Expression in Mice
Roger A Sunde

P25 - INSIGHT INTO THE MICROBIAL RESPIRATION OF SELENIUM. A METAGENOMICS STUDY
Simon Mills

P26 - Selenium subcellular distribution, speciation and antioxidant response in rice booting stages
Shuxin Tu

P27 - Explore the subcellular distribution and speciation of Se in pakchoi (Brassica chinensis L.)
Dongli Liang

P28 - Comparison in bioavailability of nine bioselenocompounds
Kazuaki Takahashi

P29 - Characterization of rhodanese-like protein from Geobacter sulfurreducens
Olajumoke Kadiri

P30 - A novel Geobacteraeae-specific outer membrane protein required for selenite and tellurite reduction
Mst. Ishrat Jahan

P31 - Effect of inorganic and organic selenium compounds on tumor infiltrating lymphocytes
Deepika Nair

P32 - Small Selenium Species: Toxicity, Bioavailability and Modes of Action in Caenorhabditis elegans
Isabelle Rohn

P33 - Diabetic fish on selenium supplements
Lynn Weber

P34 - BIOCHEMICAL CHARACTERIZATION OF NOVEL METHYLEASELENO DERIVATIVES
Prajakta Khalkar

P35 - Metabolomics Profiling of the Liver of the Selenocysteine Lyase Knockout Mouse
Lucia Seale

P36 - Cardiac muscle necroptosis induced by selenium deficiency implicates miR-200a activating
Yang Tianshu

P37 - Selenophosphate synthetase 1 is an essential protein with roles in regulation of redox homoeostasis
Byeong Jae Lee
P38 - Influences of TRIT1 catalysed tRNA-modification i6A37 on translation efficiency of selenoproteins  
Simon Bohleber

P39 - Genetic screening for unknown factors in selenium metabolism in Archaea  
Vivien Quitzke

P40 - A role of bacterial thioredoxin in selenide delivery to selenophosphate synthetase in vitro  
Atsuki Shimizu

P41 - Selenoprotein S is involved in degradation of C99 through ERAD.  
Jun Ki Jang

P42 - Computational identification of the selenocysteine tRNA (tRNA-Sec)  
Didac Santesmasses

P43 - The use of dimedone to study redox states of selenoproteins  
Robert J. Hondal

P44 - Site specific acetylation of thioredoxin reductase 1  
David Wright

P45 - Thioredoxin reductase 1 and NADPH directly protect protein tyrosine phosphatase 1B from inactivation  
Markus Dagnell

P46 - Details in the catalytic mechanism of mammalian selenoprotein thioredoxin reductase 1 revealed using point mutations and juglone reducing activities  
Jianqiang Xu

P47 - Probing the role of TRP14 (TXNDC17) in cellular signaling pathways  
Belén Espinosa Fernández

P48 - Apatone inhibited GPx activity and triggered AIF-mediated cell death pathway in cancer cells  
Xiaoyuan Ren

P49 - The significance of selenoprotein P expression in pancreatic beta-cell line MIN6  
Shohei Nakao

P50 - Interaction between selenoprotein W and 14-3-3 is regulated by oxidative stress.  
Kwan Young Ko

P51 - Immortalized human prostate cell line RWPE-1 as a model to study selenoprotein regulation and function in normal prostatic tissue  
Lenny Hong

P52 - Glutathione depletion in HEK293T adresses cytosolic GPx4 to the membrane  
Ana-Marija Vuckovic

P53 - Synthesis and efficacy of conjugated selenium ADC monoclonal antibodies in vitro  
SONI KHANDELWAL

P54 - Antifungal Activity of Selenium Nanoparticles Synthesized by B. subtilis Against P. syringae  
Miao Li

P55 - Exosome-mediated methylmercury detoxification accelerated by selenium compound, selenoneine in aquatic organism  
Shintaro Imamura

P56 - Studying selenoproteome regulation using selenium stable isotope labeling  
Laurent Chavatte
Tuesday 15 August (Afternoon posters)

Presenting authors of posters listed below are kindly asked to be present at the respective poster during the first 30 min of the session.

12:30 - 14:00  Poster Session with lunch and exhibition, Poster and Exhibition Room

- P57 - Progress in selenium nutrition in China during the last thirty years  
  Weiming Shi

- P58 - Protective effect of organic selenium-enriched extract from cardamine violifolia on carbon tetrachloride–induced hepatic damage in mice  
  Xin Cong

- P59 - Comparison of Trace Elements and Oxidant Status in Dairy Cows at Different Physiological Stages  
  Zongping Liu

- P60 - Relative bioavailability of selenium sources for beef cattle using glutathione peroxidase activity in liver  
  Marcus Zanetti

- P61 - Organic Se has better protective effects than inorganic Se against AFB1/OTA-induced immunotoxicity  
  Fang Gan

- P62 - Dietary selenium forms influence selenogenome expression in broiler chickens  
  Mickael Briens

- P63 - Eisenia fetida - a novel organic selenium-biofortified soil animal  
  Shizhong Yue

- P64 - Dietary selenium supplies in Malawi  
  Edward Joy

- P65 - Selenium status in healthy elderly from the Northwest of Algeria  
  Nouria Dennouni

- P66 - Association between Selenium Levels and Antioxidant Capacity in An Elderly Chinese Population  
  Liqin Su

- P67 - Selenium and Alzheimer’s disease: facts and effects  
  Barbara R Cardoso

- P68 - Selenomethionine improves synaptic deficit in an Alzheimer’s disease mouse model  
  Zhonghao Zhang

- P69 - Effect of selenium supplementation in Hungarian patients with autoimmune thyroiditis and endocrine orbitopathy  
  Jeannette Molnar

- P70 - Selenium supplementation as a defense method against posttraumatic stress disorder development in combats  
  Vladimirs V. Voicehovskis
P71 - Selenium as a mercury antidote  
  
  Xin Fu

P72 - Gender specific differences in urinary level of 8-oxodG in selenium supplemented subjects  
  
  Ewa Jablonska

P73 - Cystine-glutamate antiporter expression as a potential target for cancer therapy using redox active  
  
  Arun Kumar Selvam

P74 - Finding What’s Important In Selenium Drug Development  
  
  G. Michael Wall

P75 - Seleno heterocyclic compounds as antitumoral and radical scavenging agents  
  
  Daniel Plano

P76 - Selenocyanate and diselenide amides: A new class of potent antichagasic agents  
  
  Carmen Sanmartin

P77 - Cytotoxicity, oxidative stress and antioxidant enzyme activity in pancreatic cancer cells treated with organic selenium compounds  
  
  Jeremy Braude

P78 - Altered Chemoresistance in an Ex Vivo Pancreatic Cancer Model Compared to In Vitro Cell Culture  
  
  Rim Jawad

P79 - Novel selenocyanate and diselenide phosphoramides as potent anticarcinogenic agents  
  
  Carmen Sanmartin

P80 - Inducing Change in Selenium Drug Development  
  
  Eric Lynch

P81 - Metabolic syndrome induced oxidative stress and skin premature ageing beyond topical use of seleno-L-methionine.  
  
  Julija Voicehovska

P82 - Whole Blood Selenium Levels and Selenium Supplementation in Patients treated in a Family Practice  
  
  Ralph Muecke

P83 - selenium, thyroid metabolism, children, iodine deficiency  
  
  Dawd Gashu

P84 - Thiol-dependent redox systems as antimicrobial drug targets  
  
  Jun Lu

P85 - Novel acylselenoureas as antiproliferative agents: design, synthesis and biological evaluation  
  
  Daniel Plano

P86 - Role of selenium nanoparticles to dampen the metastatic potential of aggressive cancers  
  
  Caroline Bissardon

P87 - Redox-active Selenium as an Anticancer Agent: A Critical Review  
  
  Boguslaw Lipinski

P88 - New insights into the development and biological evaluation of novel methylselenol precursors  
  
  Nuria Diaz Argelich
P89 - Genetic interactions in human methylation of selenium and arsenic
   Helena Skröder

P90 - Organic selenium supplementation increases mercury excretion and decreases oxidative
damage in long-term mercury-exposed residents from Wanshan, China
   Xin Fu

P91 - Positive association of apolipoprotein E allele ε4 with plasma selenium in Croatian pregnant
   females
   Ingrid Falnoga

P92 - Preliminary toxicology evaluation of selenite cataract model
   Hongjie Chen

P93 - The powerful ameliorating effect of selenium against deltamethrin-induced oxidative stress
   in lactating rats and their suckling pups
   SAMEEH MANSOUR

P94 - Nutritional availability of selenium derived from raw or roast beef
   Munehiro Yoshida

P95 - The inhibitory effect of selenium nanoparticles on atherosclerosis and the underlying
   mechanism
   Hongmei Liu

P96 - Effects of Selenium on Protein related-High Density Lipoprotein and Apolipoprotein B-100
   Expression in Human Primary Hepatocytes.
   Mirasari Putri

P97 - Thoracic aortic degeneration and dilatation: a newly-recognised complication of human
   selenoprotein
   Erik Schoenmakers

P98 - THE COMBINED USE OF SELEN ORGANIC COMPOUNDS WITH BIOSLASTELIN
   AT TOXIC HEPATITIS
   Daulet Sharipov

P99 - In vivo effects of repeated thyronamine (T0AM) administration in male C57BL/6J mice
   Carolin S. Hoefig

P100 - Dynamic regulation of glutathione peroxidase 4 (GPX4) upon renal ischemia/reperfusion
   injury (IRI)
   Tobias Seibt

P101 - Assessment of Trace Elements and Systemic Oxidant Status in Dairy Cows during the
   Perinatal Period
   Hongyan Zhao

P102 - MsrA Protects Hepatocytes against Acetaminophen-Induced Toxicity via TXNRD1
   Regulation
   Hwa-Young Kim

P103 - Knockdown of Sep15 modulates the expression of Pax6 induced by glucose in HLE cells
   Xiaohuan Li

P104 - Roles of the 15kD selenoprotein in lens epithelial differentiation
   Xiaoxiang Zheng
P105 - Role of the 15kDa selenoprotein in colorectal inflammation  
Kristin Peters

P106 - Low selenoprotein P status in patients with traumatic spinal cord injury  
Julian Seelig

P107 - Redox regulated transcription factors in 3D spheroids enriched for cancer stem cells  
Katarina Johansson

P108 - Differential Impact of Two Secisbp2 Mutations on Selenoprotein Expression in Liver and Brain  
Wenchao Zhao

P109 - A suppressive effect of selenium on amyloid-β plaque deposition in Tg2576 transgenic mouse brain  
Sakura Yoshida

P110 - Homozygous mutation p.P190L in TXNRD1 is associated with genetic generalized epilepsy  
Noelia Fradejas-Villar

P111 - Comparative analysis of selenium status in common neuropsychiatric disorders in children  
Anastasiya Skalnaya

P112 - Does selenium intake relate to longevity: Case study in Shitai, Anhui, China  
ZeDong Long

P113 - Influence of statins in selenium status and inflammatory profile considering creatine kinase levels  
Lígia Moriguchi Watanabe

P114 - The role of selenium in an in vitro invasive model of pancreatic cancer  
Ali Coyle

P115 - The role of environmental metal ions in human health and diseases  
Young-Mi Go

P116 - Selenoproteins regulate B cell functions by targeting B cell receptor (BCR)-mediated antigen present  
Girish Kirimanjeswara

P117 - Effect of anti-rheumatic treatment on selenium levels in rheumatoid arthritis, psoriatic arthritis  
Jan Olav Aaseth

P118 - Selenium, prostate cancer, and U-shaped thinking: A paradigm shift in public health research  
David Waters

P119 - Development of a point-of-care test for selenoprotein P  
Waldemar Minich

P120 - Age-dependent protective effect of Selenium against UVA irradiation in primary human keratinocytes a  
Walid Rachidi

P121 - Research and practice on the standard “Selenium-enriched agricultural products”  
Zhangmin Wang