



Curriculum Vitae

Professor Marja Makarow

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1. POSITIONS

Current position: Director of Biocenter Finland, 1 July 2016 – 30 June 2021

Biocenter Finland (BF) is a nation-wide network of Life Science and Biomedicine research infrastructures operating in six universities, the Presidents of which govern BF. BF supports frontier research and renewal of science through fifteen state-of-the-art technology platforms headed by frontier researchers, openly accessible for the Finnish Life Scientists' community some 17,000 researchers.

Up-coming position of trust: President of *Academia Europaea* – The Academy of Europe, as of 19 October 2021, till then President-elect.

Earlier positions

- Vice-President for Research of the Finnish Research Council - Academy of Finland 1.8.2012-30.6.2016
- Chief Executive, European Science Foundation (ESF), Strasbourg, France, 2008 – 2011
- Vice-President (Research, Doctoral Training, Innovation), University of Helsinki, 1.8.2003-31.12.2007
- Professor of Biochemistry and Molecular Biology, University of Helsinki, 2003-2012
- Research Director, Cellular Biotechnology, Institute of Biotechnology, Univ Helsinki 2000-2002
- Professor of Medical Biochemistry, University of Eastern Finland, 1998-2000
- Principal Investigator, University of Helsinki
 - Institute of Biotechnology 1990-1997
 - Recombinant DNA Laboratory 1984-1989
- Post-doctoral researcher
 - European Molecular Biology Laboratory (EMBL), Heidelberg, 1981-1983
 - Department of Virology, University of Helsinki, 1980-1981
- Clinical chemist, University Hospital Helsinki, 1979
- PhD candidate, Laboratory of Lipid Chemistry, University of Helsinki, 1975-1978

2. **ACADEMIC DEGREES** (University of Helsinki)
 Master of Science, biochemistry, 6.3.1975
 Doctor of Philosophy, biochemistry, 15.11.1979
 Docent (Adjunct Professor), biochemistry, 14.6.1984

3. ESTABLISHMENT, GOVERNANCE, STRATEGY AND EVALUATION OF UNIVERSITIES AND RESEARCH INSTITUTES

3.1. Establishment and governance of two universities and a research institute

Tampere University (Finland), **Chair of Founding Board**, July 2017 – October 2018. University launched on 1 January 2019. Mission: multi-disciplinary research, education and innovation combining Health, Technology and Society. Currently Finland's 2nd largest university (21,000 students) after University of Helsinki (32,000 students).

Aalto University (Finland), **Vice-Chair of Founding Board**, 2008-2012. University, launched on 1 January 2010. Mission: education, research and innovation combining technology, business and applied arts & design. Currently Finland's 3rd largest university (17,000 students).

Institute for Molecular Medicine Finland FIMM, established in 2006-2007 as M. Makarow's *solo* work, mandated by the University of Helsinki. Chair of Founding Board, 2008-2010.

3.2. Board and Advisory Council memberships

University of Geneva, Member of Strategic Board, since 2009

University of Heidelberg, Member of Academic Advisory Council, since 2008

University of the Arts Finland, Member of Board, since 2018

Tampere University, Chair of Board, 2017-2018, see 3.1.

Aalto University, Vice-Chair of Board, 2008-2012, see 3.1.

University of Strasbourg, Member of International Advisory Board, 2011-2012

Max Planck Institute for Biochemistry, Germany, Vice-Chair of Scientific Advisory Board, 2010-2012

League of European Research Universities LERU, Member of Rector's Assembly, 2003-2007

3.3. Assessment of quality and impact of frontier research

University of the Arts Finland, Chair of RAE Steering Committee, 2020 ongoing

ETH Zurich, EPFL and their 4 research institutes, for the Swiss Federal Government, Panel Member, 2019

Swedish University of Agricultural Sciences, for the University's Board, Panel Chair, 2018

Novo Nordisk Foundation Protein Research Center hosted by University of Copenhagen, for the Board of Novo Nordisk, Panel Chair, 2018

Novo Nordisk Foundation Center for Basic Metabolic Research hosted by University of Copenhagen, for the Board of Novo Nordisk, Panel Chair 2015

Trinity College Dublin, for the University's leadership, Panel Chair, 2015

Catholic University of Leuven Centers of Excellence, for the University's leadership and Flemish Research Council, Panel Member 2009 and Chair 2014

Biocenter of the University of Oslo, for the University's leadership, Panel Member, 2012

Aalto University, for the University's Board, Chair of RAE steering committee, 2009

Royal Technology University Sweden, for the University's Board, RAE steering committee member, 2008

University of Helsinki, for the University's Senate, Chair of RAE steering committee, 2005

4. SERVICES TO NATIONAL RESEARCH FUNDING ORGANISATIONS, MINISTRIES AND GOVERNMENTS Peer review, impact and performance assessment, strategy and advice

- Final evaluation of the **Linnaeus Center of Excellence Programme** covering majority of the Swedish universities, for the Swedish Government and Research Council, 2020
- Assessment of the **R & D & I system of Estonia** for the Estonian Government, Panel Chair, 2019
- Systemic evaluation of **ETH Zurich, EPFL and their 4 research institutes** for the Swiss Federal Government, 2019
- Excellence programme, **Flemish and French Research Councils of Belgium**, Review Panel Member, 2018
- Assessment of **impact of membership of Denmark in CERN, EMBL/EMBC, ESO and ESA**, for relevant Ministries, Panel Member, 2017
- **Georgian research system**, evaluation assignment in the frame of the EU-Georgia Association Agreement, for the Research Council and Ministries of Georgia, M. Makarow's *solo* work, 2017
- **Nordforsk** joint platform for cross-border research funding of the 5 Nordic countries' Research Councils, governed by the Nordic Council of Ministers, Member (2013) and Chair of Board (2014-June 2016)
- **Science Europe**, Member of Assembly 2012-June 2016
- **Research Council Norway**, for the 7 Ministries governing the Council, Member of Performance Assessment Panel, 2012
- **Canadian Research Council Natural Science and Engineering** Panel Member for development of indicators for research funding, 2011
- **Research Council Norway** Panel Member for evaluation of Centers of Excellence Programme, 2011
- **Science Foundation Ireland SFI**, Member of Board, 2006-2007
- **Research Foundation Flanders FWO, Belgium** Member of International Jury of the Excellence Programme "Odysseus", 2007
- **Academy of Finland** Member of Research Council for Health, 1998-2003

5. SCIENCE AND INNOVATION POLICY, advisory, governance and assessment functions

5.1. European Union

Support for the Research and innovation Dimension of European Universities (H2020-IBA SwafS-Support programme), Pilot 1 and Pilot 2 Calls, Panel Member, 2020

European Innovation Council EIC, Member of Advisory Board, September 2019-February 2021

Member of EIC-ERC Working group, Chair of EIC-EIT Working group

European Institute for Innovation and Technology EIT, Member of Governing Board, September 2012-June 2020

Future and Emerging Technologies FET program, Vice-Chair of Advisory Board, 2014-2017

Joint Research Center JRC, Evaluation Panel Member, for the European Commission, 2015 and 2017

Eurostars programme (internalization and innovation programme for SMEs), for the European Commission, Expert Group Chair, 2014

European Research Area Board ERAB, advising the EU Commissioner of Research and Innovation, Vice-Chair, 2008-February 2012

European Research Council ERC, Member (2007-2010) and Chair (2011-2013) of Starting Grants Panel LS2 (genetics, genomics, bioinformatics and systems biology)

5.2. Government of Finland

Prime Minister's Research and Innovation Council of Finland, Member, advising the Government and Parliament on level and targets of research funding and institutional modernisation of the universities consolidated in renewed University Act, 2007-2012

Ministries of Education & Research, Employment & Economy and Health & Social Affairs, co-author of the National Growth Strategy and Implementation Plan for Health Research and Innovation (2014-June 2016), which resulted in establishment of Cancer Center Finland FICAN, Neurocenter Finland, Finnish Biobank Cooperative FinBB, Genome Center and National Drug Development Centre,.

6. GOVERNANCE OF INTER-GOVERNMENTAL RESEARCH INSTITUTES

- **European Molecular Biology Laboratory EMBL, Delegate of Finland to EMBL Council**, 1999-2007
- **European Molecular Biology Conference EMBC, Delegate 1999-2007 and President of EMBC/EMBO**, 2004-2007
- **CERN, Chair of Board** of Helsinki Institute for Physics governing the Finnish CERN membership and coordination of the Finnish scientists' activities in CERN, 2003-2007

7. RESEARCH INFRASTRUCTURE

Governance, strategy, funding decisions

Research Infrastructure Committee of Finland, Chair, 2013- June 2016

European Strategic Forum for Research Infrastructure, Delegate of Finland, 2014-June 2016

Evaluation of applications

Swedish Strategic Foundation (SSF), Panel Member 2015

Universities, research hospitals and colleges of Canada, Committee Member for research infrastructure call of Canada Foundation for Innovation 2006, 2009 and 2014

8. PERSONAL RESEARCH AND RESEARCHER TRAINING ACTIVITIES

8.1. Research activities

Fundamental research in the fields of molecular cell biology and biotechnology on mechanisms of intracellular traffic of proteins. Discovery of novel mechanisms of subcellular phenomena: 1) Translocation of C-tail-anchored proteins into the yeast endoplasmic reticulum (ER); 2) Chaperone function unfolding prefolded polypeptides for translocation from the cytosol into the ER; 3) Chaperone function repairing misfolded proteins in the ER; and 3) COPI-independent vesicular traffic from the ER to the Golgi. Translation of research findings into patented technologies to produce mammalian proteins in yeast. Member of the Center of Excellence Biocentrum Helsinki (Annex 1).

8.2. Supervision of Ph.D. candidates

Supervision of 19 PhD theses to completion

Examiner, opponent and mentor for tens of other PhD candidates

Viikki Graduate School in Molecular Biosciences, Founding Director and Chair of Board of the largest Life Science doctoral programme of Finland, University of Helsinki, 1999-2007

9. INNOVATION PRIZES, governance and evaluation functions

9.1. Millennium Technology Prize (one of the world's most significant international prizes for radical innovations (one M €), governed by Technology Academy Finland, financed by the Government of Finland and patroned by the President of the Republic of Finland.

Member (2006) and Chair (2007-2008) of **International Award Selection Committee**
Chair of Board of Technology Academy Finland, May 2015 – May 2021

9.2. Innovation Prize for Women established by the Parliament of Finland, Evaluation Panel Chair, 2017-2019

10. SCIENCE ADVICE AND COMMUNICATION

Member of Advisory Group of **SOFI (Science Advice Initiative of Finland)**, commissioned by the Finnish Government to develop a science advice mechanism to support political decision-making, since 2019-2020

Member of **SAPEA (Science Advice for Policy by European Academies) working group "Making Sense of Science"** supporting the methodology of science advice to decision-makers, commissioned by the EU's Group of Chief Scientific Advisors, 2019

Joint Research Center JRC, Evaluation Panel Member, recommendations for the renewal of the science service mechanism of the European Commission, 2015 and 2017

As **Chief Executive of the ESF**, responsibility of **provision of science advice** in the form of Forward Looks and Science Policy Briefings targeted to the European Commission and Parliament and to 30 countries' policy-makers, research funding and performing organizations, legislators and researchers (Annex 3).

In **European media** since 2008 annual interviews, quotes and presentations on frontier research, innovation, science policy, assessment and funding of research, researchers' careers and training, women in science, university reforms and national R&I systems; in 2019-2020 in The Independent, The Guardian, Der Standaard, La Vanguardia, Sky News, The Times and Financial Times.

11. MEMBERSHIPS OF SCIENTIFIC SOCIETIES, AWARDS, DECORATIONS, HONOURS, selected

- *Academia Europaea*, President as of 19 October 2021, President-elect till then, Member since 2009
- EuroScience, Member of Governing Board, since 2018
- Finnish Academy of Science and Letters, Member since 2003
- Federation of European Biochemical Societies FEBS, Council Member 2001-2004
- American Society for Cell Biology, Member since 1984

- The City of Helsinki golden medal for international collaborative activities 2011
- Culminatum Invention Award 1996
- Federation of European Biochemical Societies, Young Scientist's Award, 1984

- Doctor of Technology *Honoris Causa* of Tampere University (2017) and Aalto University (2019)

- Chevalier de l'Ordre de Légion d'Honneur, France, 2018
- Commander of the Order of the White Lion, Finland, 2015
- Chevalier de l'Ordre des Palmes Académiques, France 2002
- Order of the White Rose, Finland, 2001

12. LANGUAGE SKILLS AND INTERNATIONAL RESIDENCE

- Finnish: *mother tongue*
- English: comprehension speaking, reading, writing - *excellent*
- French: comprehension, speaking, reading - *fair to good*
- German: comprehension, speaking, reading - *fair to good*
- Swedish: comprehension, speaking, reading – *fair to good*

Residence outside of Finland: Five years in the Netherlands in childhood, two years in Germany for post-doc and four years in France as ESF's Chief Executive.

ANNEX 1 Selected scientific publications

ANNEX 2 Selected policy, strategy and assessment documents

ANNEX 3 Output of ESF under M. Makarow's leadership

ANNEX 1: Scientific publications, original, peer reviewed, selected (*before 1984 Marja Pesonen*)

Makarow M: Endocytosis in *Saccharomyces cerevisiae*: Internalization of enveloped viruses into spheroplasts. EMBO J. 4, 1855-1860, 1985

Makarow M: Endocytosis in *Saccharomyces cerevisiae*: Internalization of α -amylase and fluorescent dextran into cells. EMBO J. 4, 1861-1866, 1985

Makarow M, Nevalainen LT and Kääriäinen L: Expression of the RNA genome of an animal virus in *Saccharomyces cerevisiae*. Proc. Natl. Acad. Sci. USA 83, 8117-8121, 1986

Makarow M and Nevalainen LT: Transport of a fluorescent macromolecule via endosomes to the vacuole in *Saccharomyces cerevisiae*. J. Cell Biol. 104, 67-75, 1987

Makarow M: Secretion of invertase in mitotic yeast cells. EMBO J. 7, 1475-1482, 1988

Russo P, Kalkkinen N, Sareneva H, Paakkola J and **Makarow M:** A heat shock gene from *Saccharomyces cerevisiae* encoding a secretory glycoprotein. Proc. Natl. Acad. Sci. USA 89, 3671-3675, 1992

Simonen M, Jämsä E and **Makarow M:** The role of the carrier protein and disulfide formation in the folding of β -lactamase fusion proteins in the endoplasmic reticulum of yeast. J. Biol. Chem. 269, 13887-13892, 1994

Jämsä E, Vakula N, Arffman A, Kilpeläinen I and **Makarow M:** In vivo reactivation of heat-denatured protein in the endoplasmic reticulum of yeast. EMBO J. 14, 6028-6033, 1995

Saris N, Holkeri H, Craven R, Stirling C and **Makarow M:** The Hsp70 homolog Lhs1p is involved in a novel function of the yeast endoplasmic reticulum, refolding and stability of heat-denatured protein aggregates. J. Cell Biol. 137, 813-824, 1997

Paunola E, Suntio T, Jämsä E and **Makarow M:** Folding of active beta-lactamase in the yeast cytoplasm prior to translocation into the endoplasmic reticulum. Mol. Biol. Cell 9, 817-827, 1998

Hänninen, A.-L., Simola, M., Saris, N. and **Makarow, M.:** The cytoplasmic chaperone Hsp104 is required for conformational repair of heat-denatured proteins in the yeast endoplasmic reticulum. Mol. Biol. Cell 10, 3623-3632, 1999

Simola, M., Hänninen, A.-L., Stranius, S.-M. and **Makarow, M.:** Trehalose is required for conformational repair of heat-denatured proteins in the yeast endoplasmic reticulum but not for maintenance of membrane traffic functions after severe heat stress. Mol. Microbiol. 37, 42-53, 2000

Paunola E, Qiao M, Shmelev A and **Makarow M:** Inhibition of beta-lactamase into the yeast endoplasmic reticulum by covalently bound benzylpenicillin, J Biol Chem. 276, 34553-34559, 2001

Sievi E, Suntio T and **Makarow M:** Proteolytic function of GPI-anchored plasma membrane protease Yps1p in the yeast vacuole and Golgi. Traffic 2, 896-907, 2001

Visapää I, Fellman V, Vesa J, Dasvarma A, Hutton JL, Kumar V, Payne G, **Makarow M**, van Coster R, Taylor RW, Turnbull DM, Suomalainen A and Peltonen L. GRACILE syndrome, a lethal metabolic disorder with iron overload, is caused by a point mutation in *BCS1L*. *Am. J. Hum. Genet* 71, 863-876, 2002

Fatal N, Suntio T and **Makarow M**: Selective protein exit from the yeast endoplasmic reticulum in the absence of functional COPII coat component Sec 13p. *Mol Biol Cell* 13, 1430-1440, 2002

Yabal M, Brambillasca S, Soffientini P, Pedrazzini E, Borgese N and **Makarow M**: Translocation of the C-terminus of a tail-anchored protein across the endoplasmic reticulum membrane in yeast mutants defective in signal peptide-driven translocation. *J Biol Chem* 278, 3489-3496, 2003

Seppä L, Hänninen M-L and **Makarow M**: Hog1p MAP kinase-dependent up-regulation of the Hsp104 chaperone during recovery at physiological temperature after thermal insult, *Mol Microbiol.* 52, 217-225, 2004

Karhinen L, Nunes Bastos, R, Jokitalo, E and **Makarow M**: ER exit of a secretory glycoprotein in the absence of Sec24p family members in yeast. *Traffic* 6, 562-574, 2005

Brambillasca S, Yabal M, Soffientini P, Stefanovic S, **Makarow M**, Hedge RS and Borgese, N. Transmembrane topogenesis of a tail-anchored protein is modulated by membrane lipid composition. *EMBO J* 24, 2533-2542, 2005

Brambillasca S, Yabal M, **Makarow M** and Borgese, N. Unassisted translocation of large polypeptide domains across phospholipid bilayers. *J Cell Biol* 175, 767-777, 2006

Suntio T, Shiryayev SA and Makarow M: ATPase activity of yeast secretory glycoprotein allows ER exit during inactivation of COPII components Sec24p and Sec13p. *YEAST* 28, 453-465, 2011

ANNEX 2: Policy, strategy and assessment documents, selected

European Research Area Board ERAB

- Preparing Europe for a New Renaissance: A Strategic View of the European Research Area (2009)
- Realising the New Renaissance: Policy Proposal for Developing a World-class Research and Innovation Space in Europe 2030, including the 2030 ERAB Milestones (2010)
- Towards a Common Strategic Framework for the EU Research and Innovation (2011)
- ERAB 10 Key Recommendations (2010)
- ERAB Views on the Contribution of FP7 Instruments to the Establishment of a Genuine European Research Area (2009)
- ERAB Views on the Communication “Simplifying the implementation of the Research Framework Programmes” (2010)
- ERAB’s Views on the Role of Public Procurement for the R&I Strategy (2010)
- ERAB Views on the Role of Venture Capital for the R&I Strategy (2010)
- ERAB Views on Achieving Cohesion in European Research and Innovation (2010)
- ERAB’s Recommendation to Maximize High Risk – High Gain Research in the Next Framework Programme (2010)
- ERAB Views on Social Innovation (2011)
- ERAB Views on the Role of International Collaborations (2011)

League of European research universities LERU

- Research Intensive Universities as Engines for the Europe of Knowledge (2003)
- Unlocking Europe’s Intellectual Potential – Universities and European Common Market for Research (2004)
- Growth, Research-Intensive Universities and the European Research Council (2005)
- Competitiveness, Research and a Concept of a European Institute of Technology (2005)
- Commentary on the Purpose, Structure and Functions of a European Institute of Technology (2006)
- Universities and Innovation: The Challenge of Europe (2006)
- Doctoral Studies in Europe: Excellence in Researcher Training (2007)
- The Future of the European Research Area (2007)

Other selected publications

- Nordic research collaboration, commissioned by the Nordic Council of Ministers, 2012
- Recommendations by the Finnish Research and Innovation Council for 2011-2015 (ISBN 978-952-485-996-7, Helsinki 2011)
- Informing Research Choices: Indicators and Judgement, The Expert Panel on Science Performance and Research Funding, Council of Canadian Academies, 2012

- “The will for research”, report on output and future of Nordic research collaboration, commissioned by the Nordic Council of Ministers, 2012
- Finland’s Strategy and Roadmap for Research Infrastructures 2014–2020 ISBN: 978-951-715-868-8, Press: Kopio Niini Oy, Helsinki 2014
- Growth strategy for health sector’s research and innovation activities. Report 12/14 of the Ministry of Economy and Employment, 2014
- Ex-post evaluation of the direct actions of the joint research centre under the seventh Framework programmes 2007-2013, European Commission, 2015
- Final evaluation of Eurostars Joint programme, European Commission, 2015
- Strategy Report on Research Infrastructures Roadmap 2016, ESFRI, ISBN 978-0-9574402-4-1; www.ec.europa.eu/research/esdfri
- Evaluation of Quality and Impact at SLU 2018. RAE of the Swedish University of Agricultural Sciences. ISBN 978-91-576-9631-1
- Peer review of the Estonian R&I system – Final Report, ISBN 978-92-76-09711-2, European Union, 2019
- Science Advice for Policy by European Academies (2019) “Making sense of science for policy under conditions of complexity and uncertainty” ISBN 978-3-9820301-3-5. <https://doi.org/10.26356/MASOS>
- The Final Evaluation of the Linnaeus Grant , ISBN 978-91-88943-29-3, Swedish Research Council, 2020

ANNEX 3: FORWARD LOOKS AND POLICY BRIEFINGS OF THE EUROPEAN SCIENCE FOUNDATION

Publications available at: www.esf.org/publications

Colour code:

SCH: Standing Committee for Humanities

SCSS: Standing Committee for Social Sciences

EMRC: European Medical Research Councils

LESC: Standing Committee for Life and Environmental Sciences

PESC: Standing Committee for Physical and Engineering Sciences

ESSC: European Space Sciences Committee

MB: Marine Board

EPB: European Polar Board

CRAF: Radio Frequences Committee

NuPECC: Nuclear physics

MatSEEC: Material Science and Engineering Expert Committee

FORWARD LOOK PUBLICATIONS

- Higher Education Looking Forward: An Agenda for Future Research SCSS • 2008
- Ageing, Health and Pensions in Europe: an economic perspective SCSS/EMRC • 2010
- Gene-Environment Interaction in Chronic Disease EMRC • 2011
- Implementation of Medical Research in Clinical Practice EMRC • 2011
- RNA World: a new frontier in biomedical research EMRC/LESC • 2010
- Investigator-Driven Clinical Trials EMRC • 2009
- European Food Systems in a Changing World ESF-COST Report LESG/ PESC/ EMRC/ SCSS • 2009
- Mathematics and Industry PESC • 2010
- Perspectives of Nuclear Physics in Europe - Long Range Plan NuPECC • 2011

SCIENCE POLICY BRIEFINGS

- Research Infrastructures in the Digital Humanities SCH • 2011
- Landscape in a Changing World – Bridging Divides, Integrating Disciplines, Serving Society - ESF-COST report SCH/LESC • 2010
- Humans in Outer Space – Interdisciplinary Odysseys SCH/ESSC • 2008
- Promoting Internationalisation of the Social Sciences in Central and Eastern Europe SCSS • 2010
- Status and Developments of Social Science Research in Central and Eastern Europe SCSS • 2008
- Ageing, Health and Pensions in Europe: An Economic Perspective SCSS/EMRC • 2010
- Vital Questions – The Contribution of European Social Science SCSS • 2009
- A Stronger Biomedical Research for a Better European Future EMRC • 2011

- ESF-EMRC Position on the Directive on the Protection of Animals used for Scientific Purposes (2010/63/EU), 3rd Edition **EMRC** • 2011
- European Biobanks and Sample Repositories – relevance to Personalised Medicine **EMRC/LESC/PESC/SCSS** • 2011
- ESF-EMRC Position on the Implications of the Electromagnetic Fields Directive 2004/40/EC for European Biomedical Magnetic Resonance Research **EMRC** • 2010
- Male Reproductive Health – Its Impacts in Relation to General Wellbeing and Low European Fertility Rates **EMRC** • 2010
- Human Stem Cell Research and Regenerative Medicine – A European Perspective on Scientific, Ethical and Legal Issues **EMRC** • 2010
- ESF-EMRC Position on the Proposal for a Directive on the Protection of Animals used for Scientific Purposes, 2nd edition **EMRC** • 2009
- ESF-EMRC Position on the Proposed Revision of the Directive on the Protection of Animals used for Experimental and Other Scientific Purposes (86/609/EEC), 1st edition **EMRC** • 2008
- Advancing Systems Biology for Medical Applications **EMRC** • 2008
- Structural Medicine II: The Importance of Lipidomics for Health and Disease **EMRC** • 2008
- Impacts of Ocean Acidification **LESC/MB** • 2009
- European Food Systems in a Changing World ESF-COST Report **LESC/ PESC/ EMRC/ SCSS** • 2009
- LESG Strategic Science Position: The View Ahead **LESC** • 2009
- FACEing the Future: Planning the Next Generation of Elevated CO₂ Experiments on Crops and Ecosystems **LESC/PESC** • 2009
- Harnessing Solar Energy for the Production of Clean Fuel **LESC/PESC/SCSS** • 2008
- Scientific Evaluation and Future Priorities of the European Space Agency's ELIPS Programme **ESSC** • 2008
- Science-Driven Scenario for Space Exploration **ESSC** • 2008
- Marine Renewable Energy – Research Challenges and Opportunities for a new Energy Era in Europe - ESF Vision Document 2 **MB** • 2010
- Marine Biotechnology: A New Vision and Strategy for Europe **MB** • 2010
- Science dimensions of an Ecosystem Approach to Management of Biotic Ocean Resources **MB** • 2010
- EMODNET – The European Marine and Observation Data Network **MB** • 2008
- The Effects of Anthropogenic Sound on Marine Mammals **MB** • 2008
- Remote Sensing of Shelf Sea Ecosystems **MB** • 2008
- European Research in the Polar Regions: relevance, strategic context and setting future directions in the European Research Area **EPB** • 2010
- Computational Techniques, Methods and Materials Design **MatSEEC** • 2011
- Materials for Key Enabling Technologies **MatSEEC** • 2011

SCIENCE POLICY PAPERS

- EUROHORCs - ESF Response to the EC Green Paper “ From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation Funding” • 2011
- Discipline-specific Responses from ESF Committees to the EC Green Paper Paper “ From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation Funding” • 2011
 - European Space Sciences Committee
 - Marine Board-ESF
 - Materials Science and Engineering Expert Committee **MatSEEC**
 - European Medical Research Councils
- Contribution to the Framework Conditions for Joint Programming: Foresight Activities and Peer Review Procedures • 2011
- ESF-EUROHORCs Simulation for Joint Programming, invited by EU Commissioner for Research, “Effective Health Services for European Citizens – Improved Management of Cardiovascular Diseases and their Socio-Economic Costs based on Medical Research” • 2009

REPORTS

- European Peer Review Guide • 2011
- Research Careers in Europe - Landscape and Horizons • 2010
- Evaluation in National Research Funding Agencies: Approaches, Experiences and Case Studies • 2009
- Cross-border Research Cooperation in Europe • 2011
- EUROHORCs and ESF Vision on a Globally Competitive ERA and their Road Map for Actions • 2009
- Strengthening the Role of Academies in ESF - ESF-ALLEA Report • 2009
- Shared Responsibilities in Sharing Research Data: Policies and Partnerships - ESF-DFG Report • 2008
- Window to Science – Information Systems of European Research Organisations - EUROHORCs-ESF Report on a Joint Research Information System • 2008

RESEARCH INTEGRITY CODES

- European Code of Conduct for Research Integrity • 2011
- Fostering Research Integrity in Europe – Member Organisation Forum Report • 2010
- Stewards of Integrity – Institutional Approaches to Promote and Safeguard Good Research Practice, 2008
- ESF Conflict of Interest Policy ESF • 2011
- Research Integrity: Global Responsibility to Foster Common Standards - ORI-ESF • 2008