

### **Characterization of two cyclooxygenase genes in the coral *Gersemia fruticosa***

Järving, Reet; Järving, Ivar; Kurg, Reet; Varvas, Külliki; Valmsen, Karin; Brash, Alan R.; Samel, Nigulas 2nd Joint Symposium on "Plant Oxylipins" : June 12-14, 2003, Göttingen, Germany (invited lecture) 2003 / ? p

### **Cloning, expression and characterization of cyclooxygenase gene from amphipods**

Hansen, K.; Kurg, Reet; Varvas, Külliki; Valmsen, Karin; Järving, Ivar; Järving, Reet; Samel, Nigulas FEBS journal 2008 / Suppl. 1, p. 403

### **Coral dioxygenases : comparison and contrast with other dioxygenases**

Samel, Nigulas; Varvas, Külliki; Koljak, Reet; Valmsen, Karin; Järving, Ivar 23rd Estonian Chemistry Days : abstracts of scientific conference 1997 / p. 138

### **A critical role of non-active site residues on cyclooxygenase helices 5 and 6 in the control of prostaglandin stereochemistry at carbon 15**

Valmsen, Karin; Boeglin, William E.; Järving, Reet; Järving, Ivar; Varvas, Külliki; Brash, Alan R.; Samel, Nigulas The journal of biological chemistry 2007 / 38, p. 28157-28163 <https://www.sciencedirect.com/science/article/pii/S0021925820587127>

### **Dioksügenaasid korallis *Gersemia fruticosa* : hapniku allikas, selektiivsete inhibiitorite toime**

Varvas, Külliki; Järving, Ivar; Koljak, Reet; Valmsen, Karin; Müürisepp, Aleksander-Mati; Liiv, Milana; Samel, Nigulas XXIII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid 1997 / lk. 152

### **Direct evidence of the cyclooxygenase pathway of prostaglandin synthesis in arthropods : genetic and biochemical characterization of two crustacean cyclooxygenases**

Varvas, Külliki; Kurg, Reet; Hansen, Kristella; Järving, Reet; Järving, Ivar; Valmsen, Karin; Löhelaid, Helike; Samel, Nigulas Insect biochemistry and molecular biology 2009 / 12, p. 851-860 <https://www.sciencedirect.com/science/article/pii/S0965174809001490>

### **Effect of selective inhibitors on arachidonic acid metabolism in the soft coral *Gersemia fruticosa***

Varvas, Külliki; Järving, Ivar; Valmsen, Karin; Koljak, Reet; Samel, Nigulas Prostaglandins leukotrienes and essential fatty acids 1996 / p. 82

### **Endoperoxide pathway in prostaglandin biosynthesis in the soft coral *Gersemia fruticosa***

Varvas, Külliki; Koljak, Reet; Järving, Ivar; Pehk, Tõnis; Samel, Nigulas Tetrahedron letters 1994 / 44, p. 8267-8270

### **Enzymatic oxidation of arachidonic acid in the coral *Gersemia fruticosa***

Varvas, Külliki 1999 [http://www.ester.ee/record=b1273068\\*est](http://www.ester.ee/record=b1273068*est)

### **Evidence of a cyclooxygenase-related prostaglandin synthesis in coral**

Varvas, Külliki; Järving, Ivar; Koljak, Reet; Valmsen, Karin; Brash, Alan R.; Samel, Nigulas Journal of biological chemistry 1999 / 15, p. 9923-9929

### **Identification of a functional allene oxide synthase-lipoxygenase fusion protein in the soft coral *Gersemia fruticosa* suggests the generality of this pathway in octocorals**

Löhelaid, Helike; Järving, Reet; Valmsen, Karin; Varvas, Külliki; Kreen, Malle; Järving, Ivar; Samel, Nigulas Biochimica et biophysica acta 2008 / 2, p. 315-321 <https://www.sciencedirect.com/science/article/abs/pii/S030441650700253X>

### **Imetaja ja koralli tsüklooksügenaasi struktuuririnevused**

Valmsen, Karin; Koljak, Reet; Järving, Ivar; Varvas, Külliki; Samel, Nigulas XXV Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 25th Estonian Chemistry Days : abstracts of scientific conference 1999 / lk. 188

### **Isolation and characterization of the cDNA for prostaglandin endoperoxide synthase from the white sea soft coral *Gersemia fruticosa***

Koljak, Reet; Varvas, Külliki; Järving, Ivar; Samel, Nigulas 24th Estonian Chemistry Days : abstracts of scientific conference 1998 / p. 29

### **Korallide dioksügenaasid : võrdlus teiste dioksügenaasidega**

Samel, Nigulas; Varvas, Külliki; Koljak, Reet; Valmsen, Karin; Järving, Ivar XXIII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid 1997 / lk. 127

### **New cytotoxic sterols from the soft coral *Gersemia fruticosa***

Koljak, Reet; Lopp, Annika; Pehk, Tõnis; Varvas, Külliki; Müürisepp, Aleksander-Mati; Järving, Ivar; Samel, Nigulas Tetrahedron 1998 / p. 179-186

### **Novel membrane-associated prostaglandin E synthase-2 from crustacean arthropods**

Hansen, Kristella; Varvas, Külliki; Järving, Ivar; Samel, Nigulas Comparative biochemistry and physiology. Part B, Biochemistry and molecular biology 2014 / p. 45-52 : ill

**Oxidative metabolism of arachidonic acid in coral: definition of different cyclooxygenase and lipoxygenase pathways**  
**Varvas, Külliki; Järving, Ivar; Koljak, Reet; Valmsen, Karin; Samel, Nigulas** 24th Estonian Chemistry Days : abstracts of scientific conference 1998 / p. 79

**PGG2 as a key intermediate in prostaglandin biosynthesis in the coral *Gersemia fruticosa***  
Samel, Nigulas; **Varvas, Külliki; Koljak, Reet; Pehk, Tõnis; Järving, Ivar** 9th International Conference on Prostaglandins and Related Compounds, Florence, Italy, 1994 : abstract book 1994 / p. 135

**Prostaglandiinide biosüntees korallides**  
Samel, Nigulas; **Järving, Ivar; Varvas, Külliki; Koljak, Reet; Pehk, Tõnis** Eesti Teaduste Akadeemia aastaaruanne 1994 1995 / lk. 54-55

**Prostaglandiinide biosüntees korallides**  
Samel, Nigulas; **Varvas, Külliki; Koljak, Reet; Järving, Ivar; Pehk, Tõnis** XVI Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 16th Estonian chemistry days : abstracts of scientific conference 1995 / lk. 125-127

**Prostaglandiinide biosüntees punavetikates**  
**Varvas, Külliki; Hansen, Kristella; Kasvandik, Sergio** XXXII Eesti Keemiapäevad : teaduskonverentsi teesid 2011 / lk. 106

**Prostaglandin synthesis in marine arthropods and red algae = Prostaglandiinide süntees mere lüljalagsetes ja punavetikates**  
**Hansen, Kristella** 2015 [https://www.ester.ee/record=b4442497\\*est](https://www.ester.ee/record=b4442497*est)

**Rekombinantse ACLE (algal cyclooxygenase like enzyme) ekspressioon, puhastamine ja kvaternaarstruktuuri analüüs**  
**Kasvandik, Sergio; Varvas, Külliki; Samel, Nigulas** XXXI Eesti keemiapäevad : [28. aprill 2010, Tallinn] : teaduskonverentsi teesid = 31st Estonian Chemistry Days : abstracts of scientific conference 2010 / lk. 39

**Structural and catalytic insights into the algal prostaglandin H synthase reveal atypical features of the first non-animal cyclooxygenase**  
**Varvas, Külliki; Kasvandik, Sergio; Hansen, Kristella; Järving, Ivar; Morell, Indrek; Samel, Nigulas** Biochimica et biophysica acta : molecular and cell biology of lipids 2013 / p. 863-871 : ill

**Structural and functional comparison of 15S- and 15R-specific cyclooxygenases from the coral *Plexaura homomalla***  
**Valmsen, Karin; Boeglin, William E.; Järving, Ivar; Schneider, Claus; Varvas, Külliki; Brash, Alan R.; Samel, Nigulas** Eur. J. Biochem. 2004 / p. 3533-3538 : ill <https://febs.onlinelibrary.wiley.com/doi/full/10.1111/j.0014-2956.2004.04289.x>

**The basis of prostaglandin synthesis in coral : molecular cloning and expression of a cyclooxygenase from the arctic soft coral *Gersemia fruticosa***  
**Koljak, Reet; Järving, Ivar; Kurg, Reet; Boeglin, William E.; Varvas, Külliki; Valmsen, Karin; Ustav, Mart; Brash, Alan R.; Samel, Nigulas** Journal of biological chemistry 2001 / 10, p. 7033-7040 : ill

**The dioxygenases in the soft coral *Gersemia fruticosa* : origin of the oxygen, the eff[e]ct of selective inhibitors**  
**Varvas, Külliki; Järving, Ivar; Koljak, Reet; Valmsen, Karin; Müürisepp, Aleksander-Mati; Liiv, Milana; Samel, Nigulas** 23rd Estonian Chemistry Days : abstracts of scientific conference 1997 / p. 160

**The origin of 15R-prostaglandins in the Caribbean coral *Plexaura homomalla* : molecular cloning and expression of a novel cyclooxygenase**  
**Valmsen, Karin; Järving, Ivar; Boeglin, William E.; Varvas, Külliki; Koljak, Reet; Pehk, Tõnis; Brash, Alan R.; Samel, Nigulas** Proceedings of the National Academy of Sciences of the United States of America 2001 / 14, p. 7700-7705  
<https://www.pnas.org/doi/full/10.1073/pnas.131022398>

**Tsüklooksügenaas kirpvähilistest : kloneerimine, ekspresseerimine ja iseloomustamine**  
Hansen, K.; Kurg, Reet; **Varvas, Külliki; Järving, Ivar; Järving, Reet; Valmsen, Karin; Samel, Nigulas** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 30-31

**Uued tsütotoksilised steroidid korallist *Gersemia fruticosa* = New cytotoxic sterols from the soft coral *Gersemia fruticosa***  
**Koljak, Reet; Lopp, Annika; Pehk, Tõnis; Varvas, Külliki; Järving, Ivar; Samel, Nigulas** XVII Eesti keemiapäevad : teaduskonverentsi ettekannete referaadid = 17th Estonian Chemistry Days : abstracts of scientific conference 1996 / lk. 81-82  
[https://www.ester.ee/record=b1070511\\*est](https://www.ester.ee/record=b1070511*est)

**Uus 8-lipoksügenaas korallist *Gersemia fruticosa***  
**Löhelaid, Helike; Mortimer, Monika; Järving, Reet; Varvas, Külliki; Samel, Nigulas; Järving, Ivar** XXVIII Eesti keemiapäevad : teaduskonverentsi ettekannete teesid = 28th Estonian Chemistry Days : abstracts of scientific conference 2002 / lk. 81-82