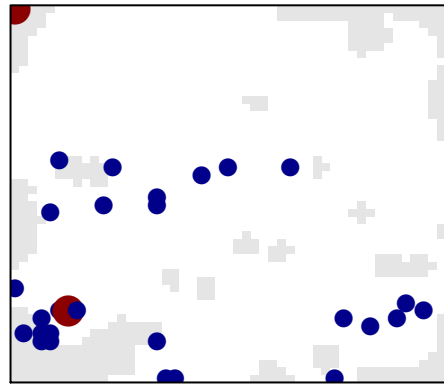
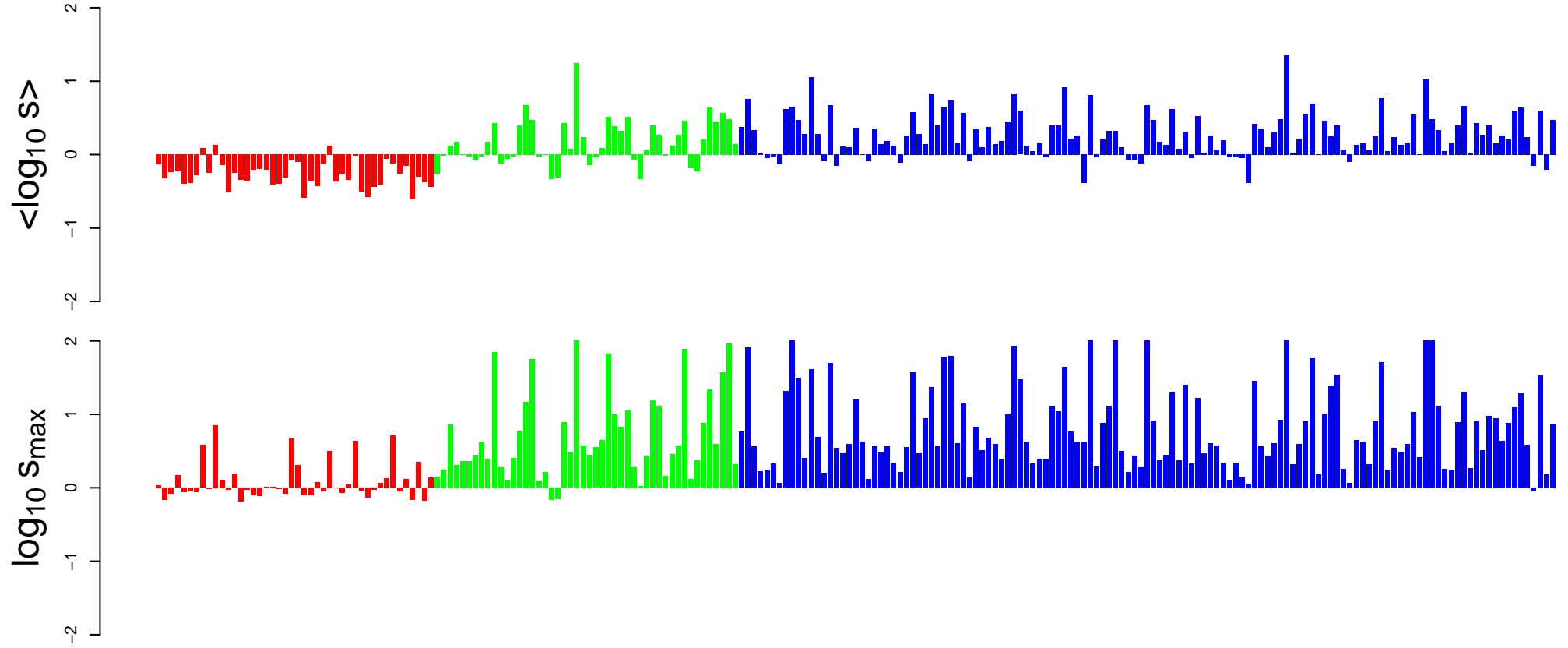


# Glycosaminoglycan degradation

all genes

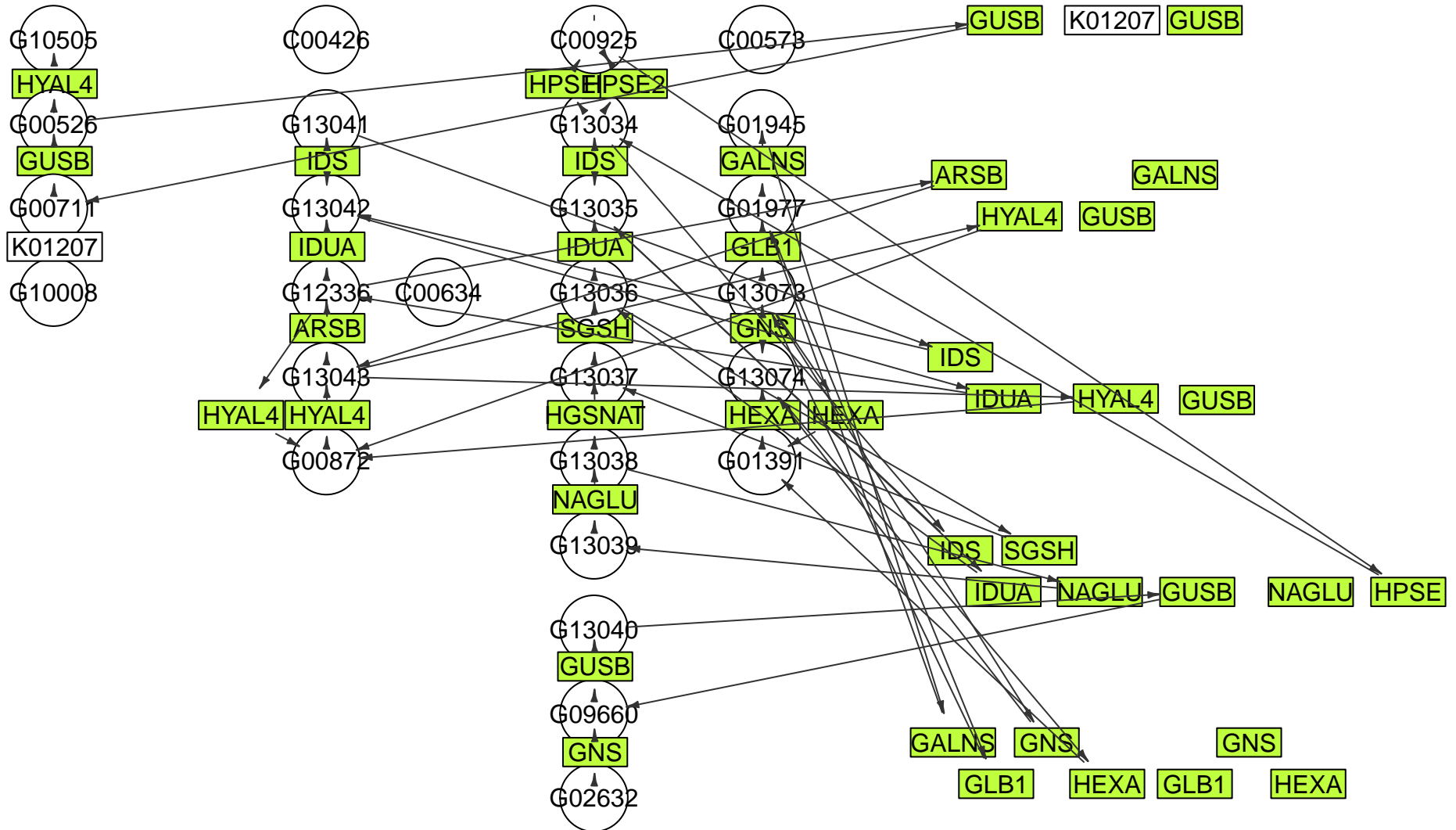


maximum = 2



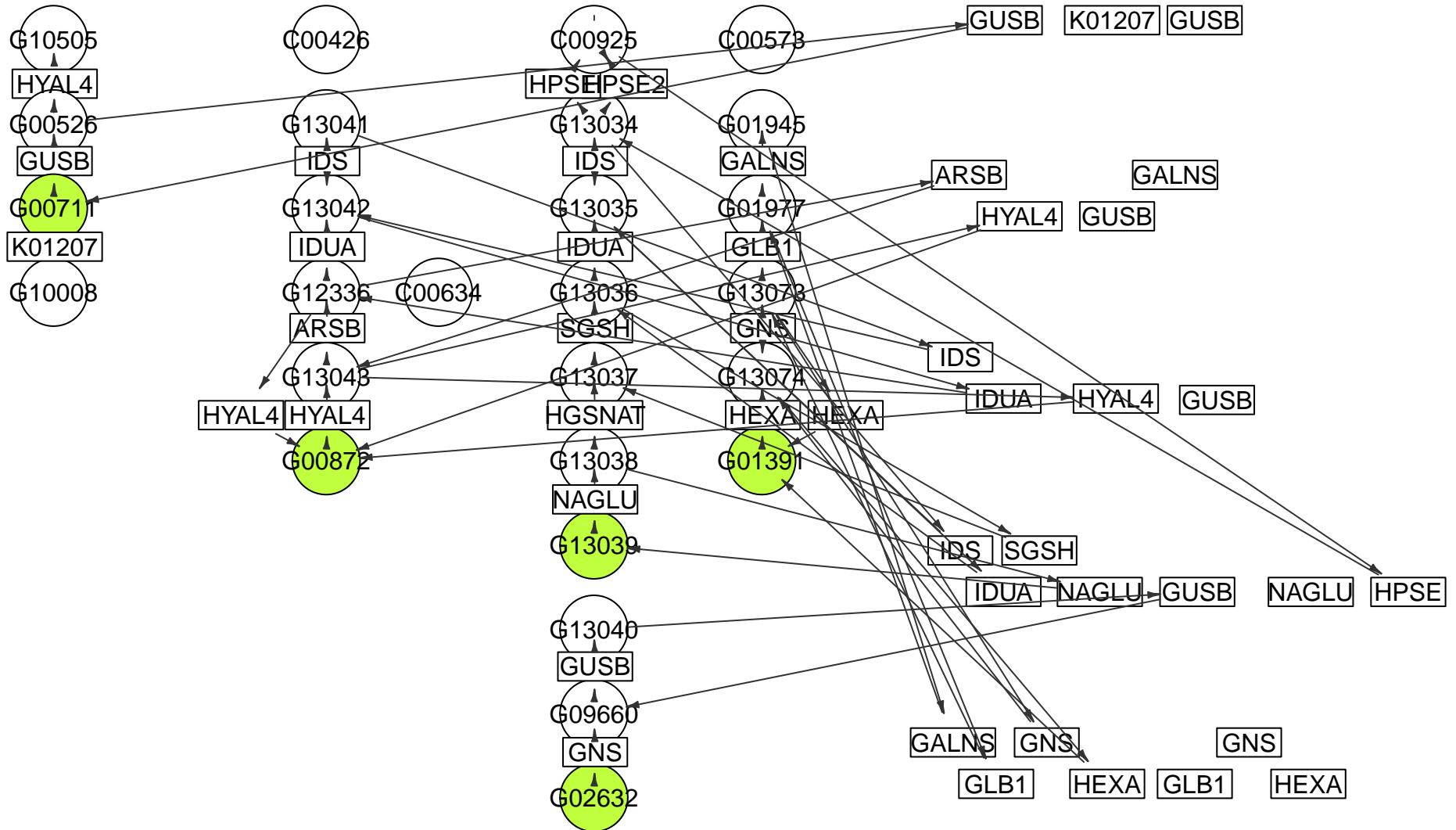
Glycosaminoglycan  
degradation  
(genes with data)

Glycosaminoglycan synthesis -  
sulfate / dermatan sulfate / heparin  
Glycosaminoglycan synthesis -  
sulfate / heparin / keratan sulfate



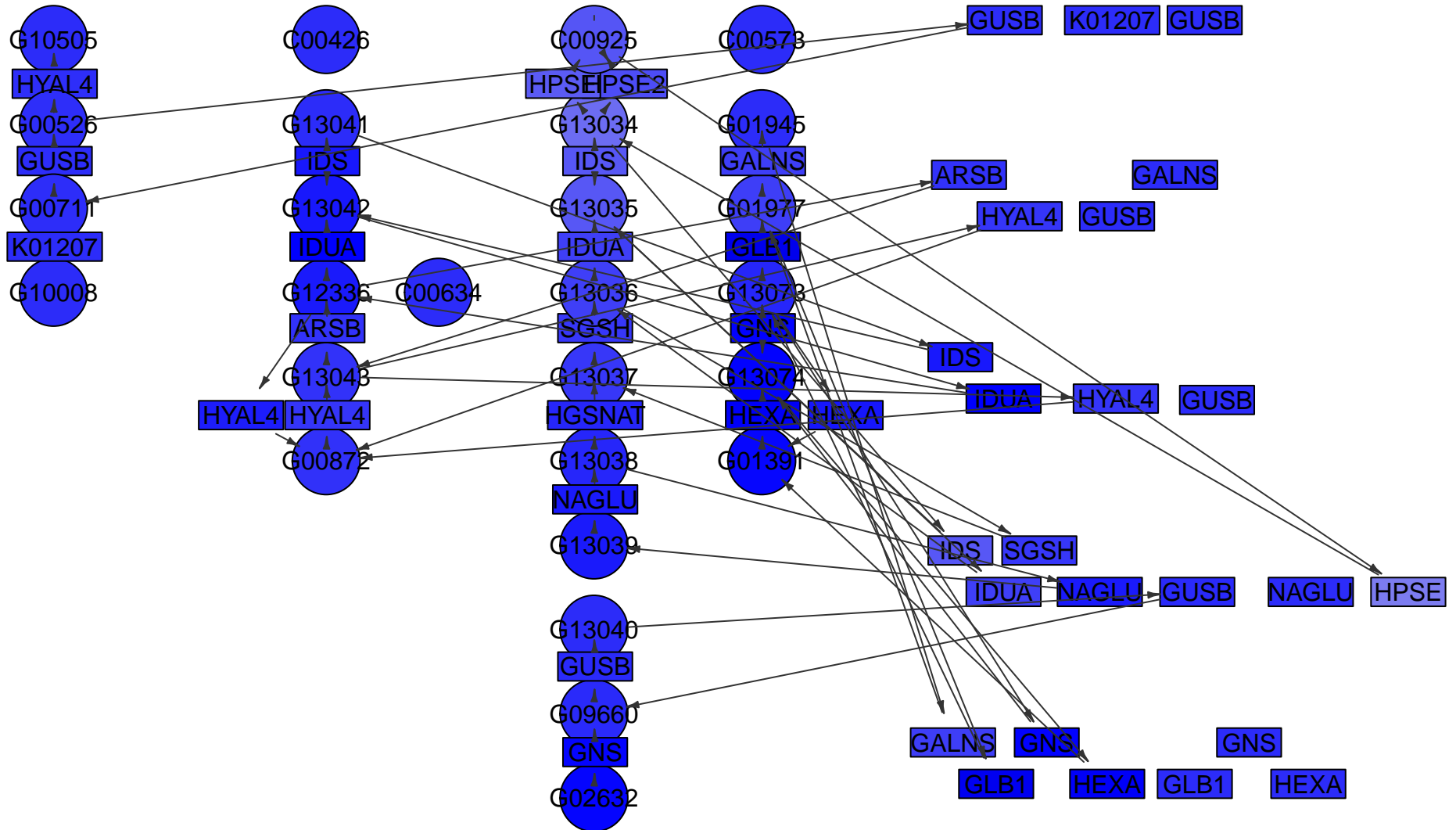
Glycosaminoglycan  
degradation  
(sink nodes)

Glycosaminoglycan synthesis -  
sulfate / dermatan sulfate / heparin  
Glycosaminoglycan synthesis -  
sulfate / heparin  
Glycosaminoglycan synthesis -  
sulfate / heparin



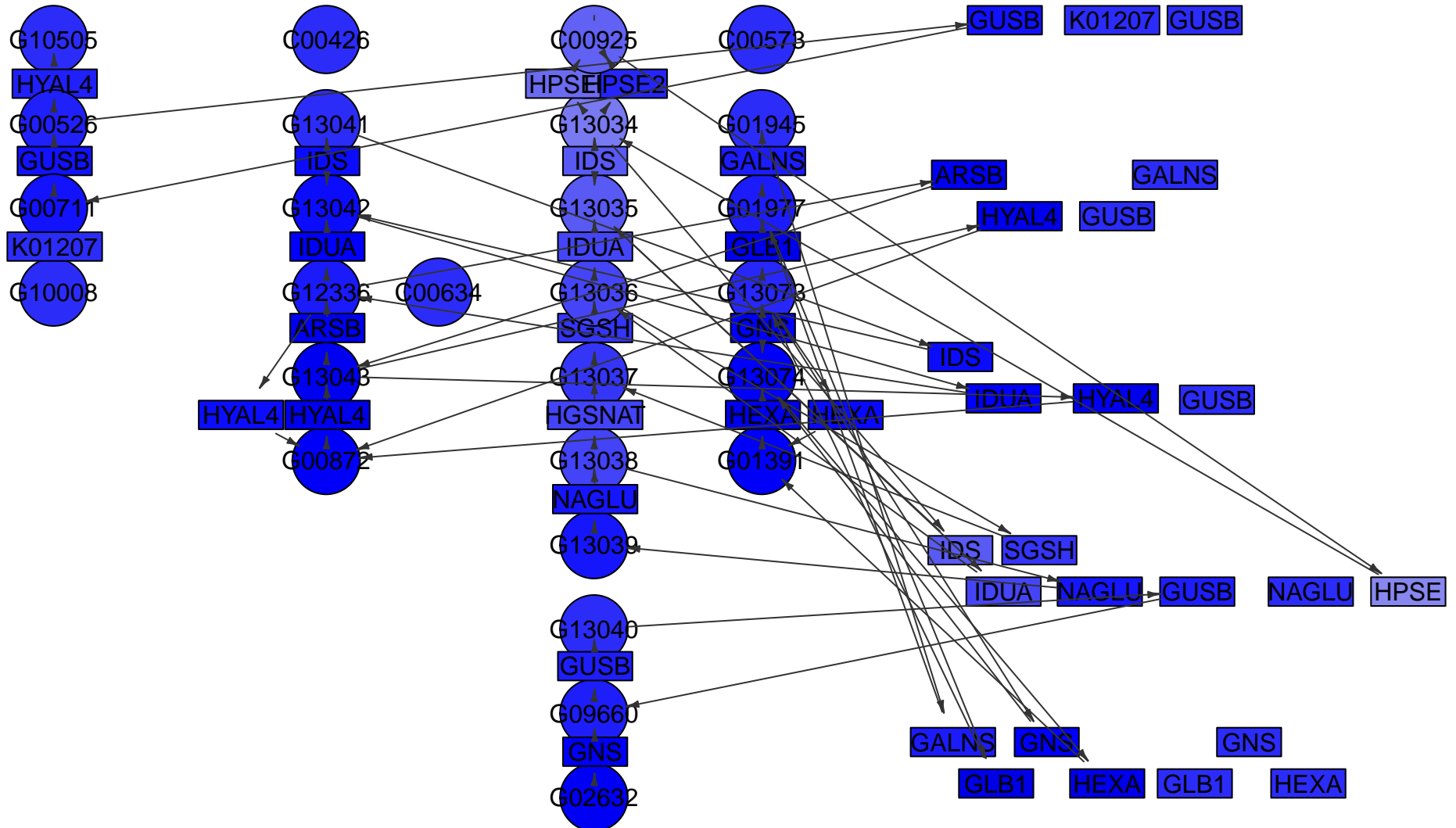
Glycosaminoglycan  
degradation  
MPI-001

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-002

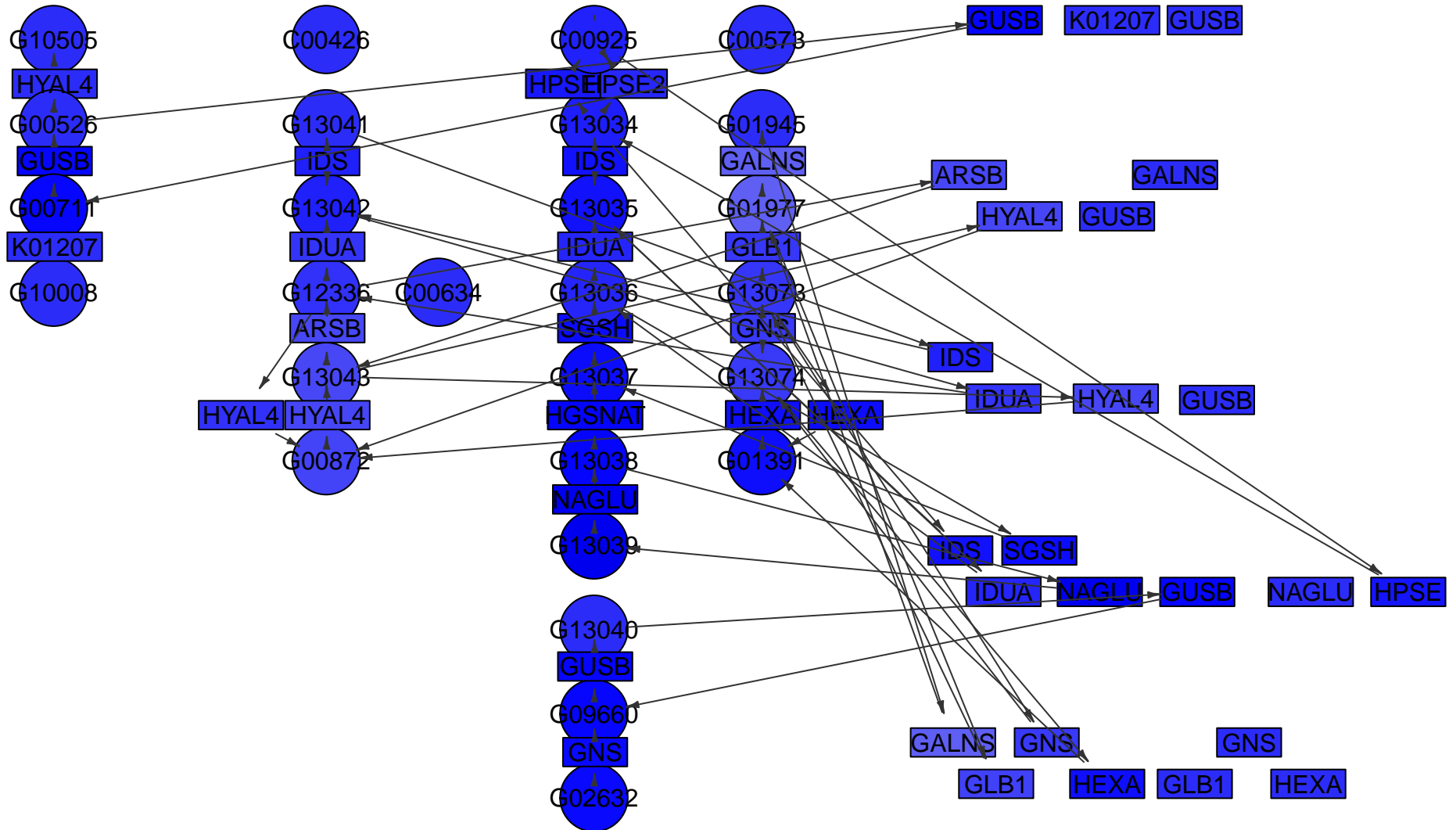
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





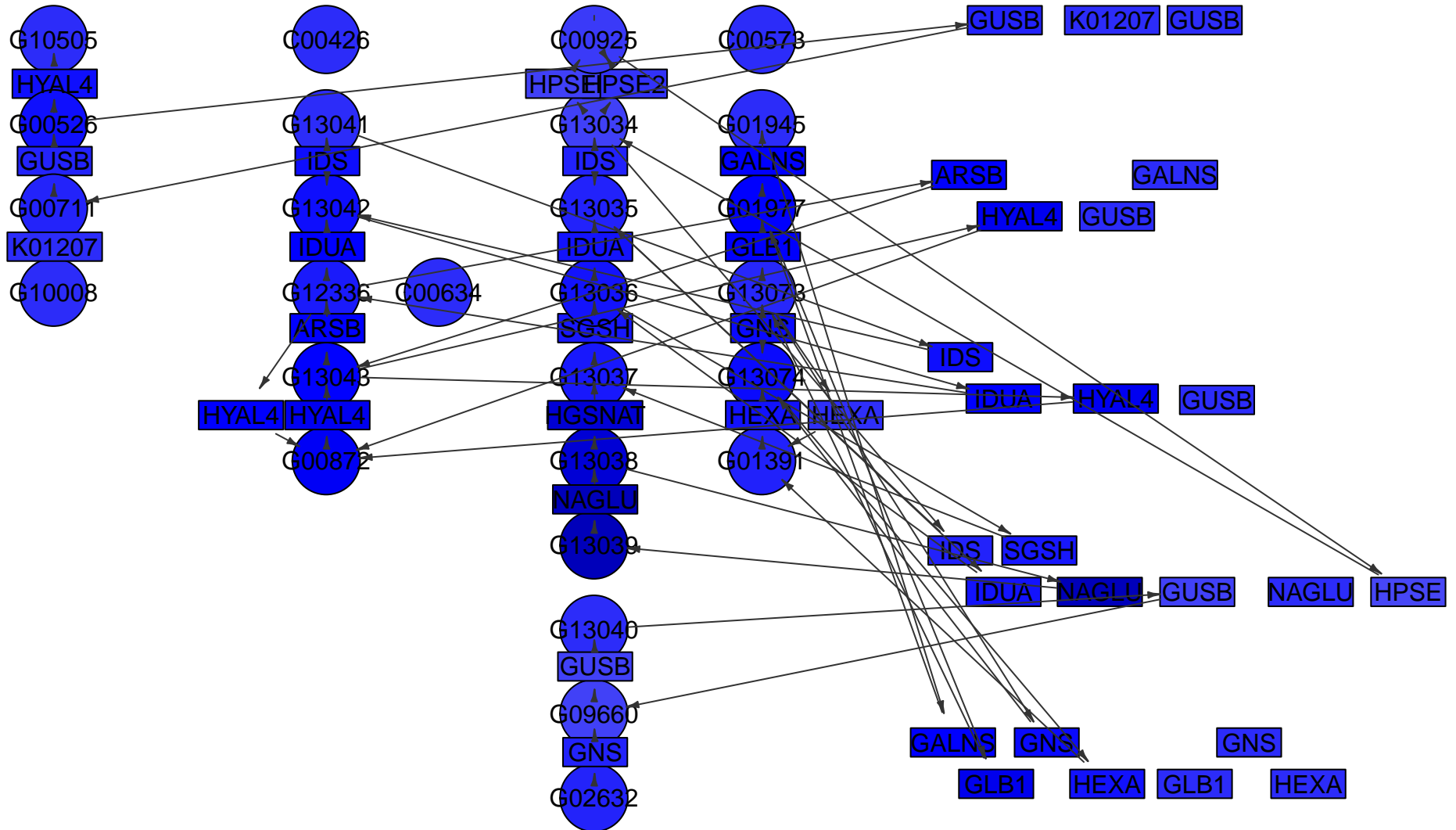
Glycosaminoglycan  
degradation  
MPI-005

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-006

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

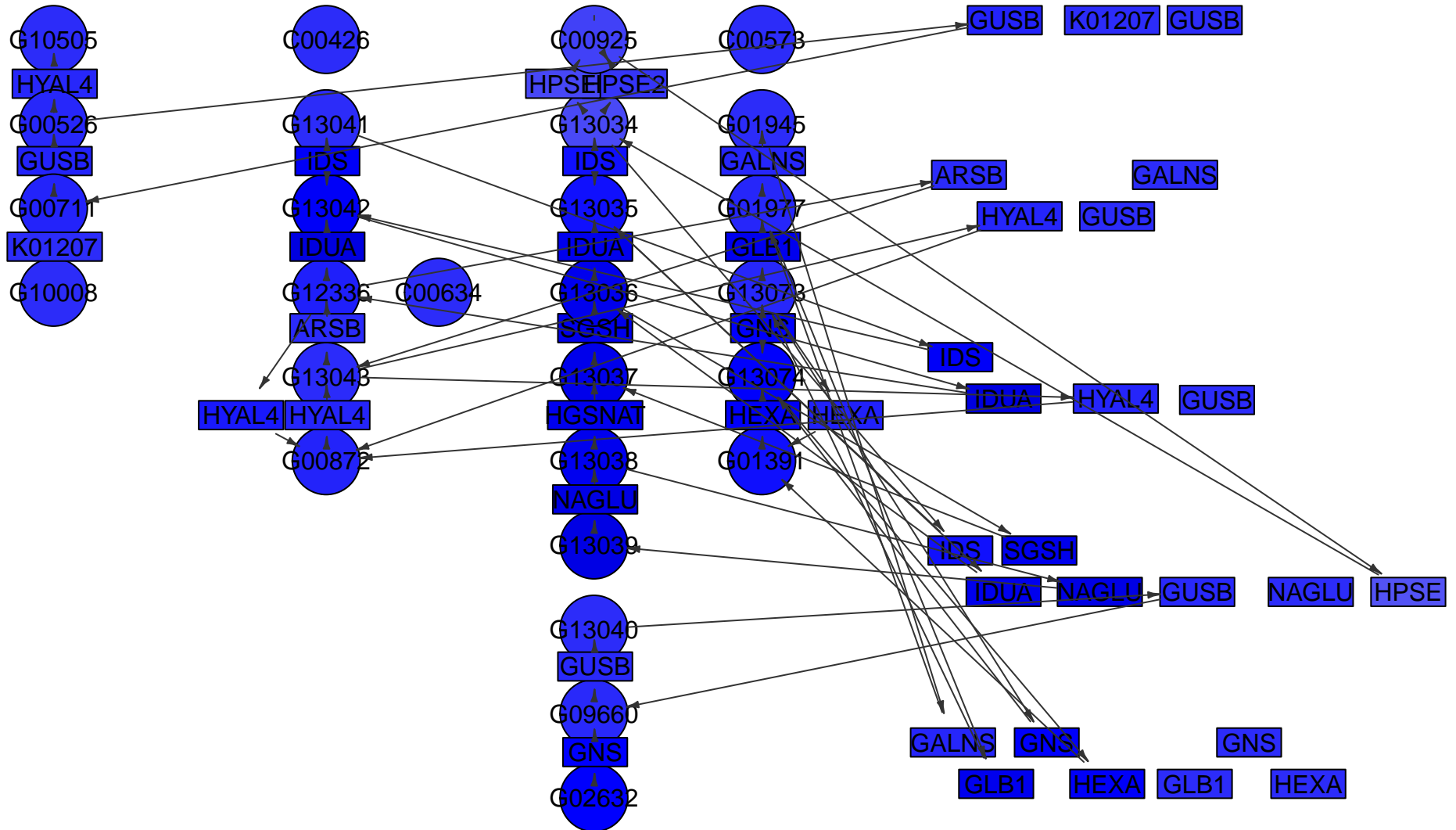






Glycosaminoglycan  
degradation  
MPI-017

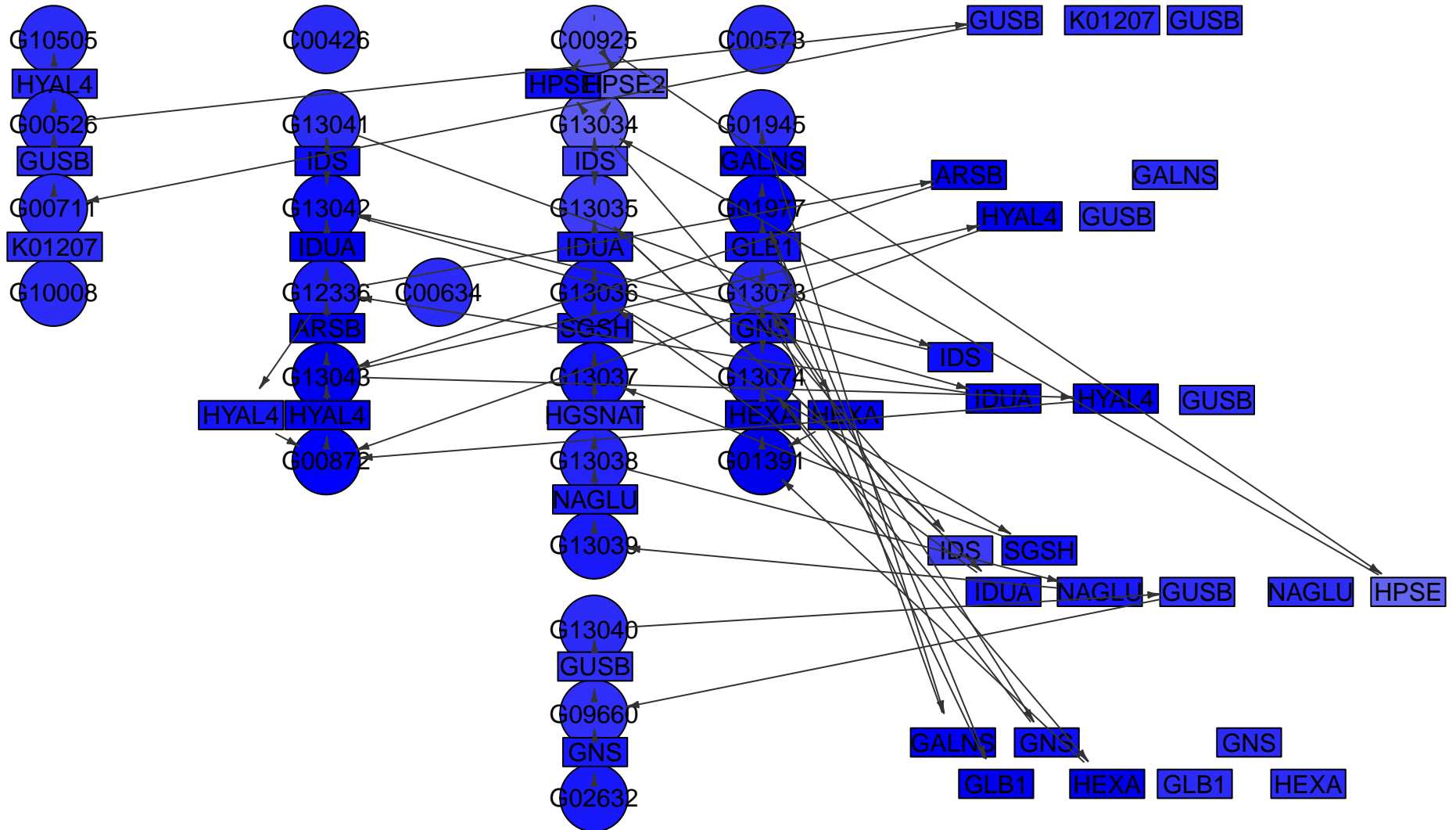
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





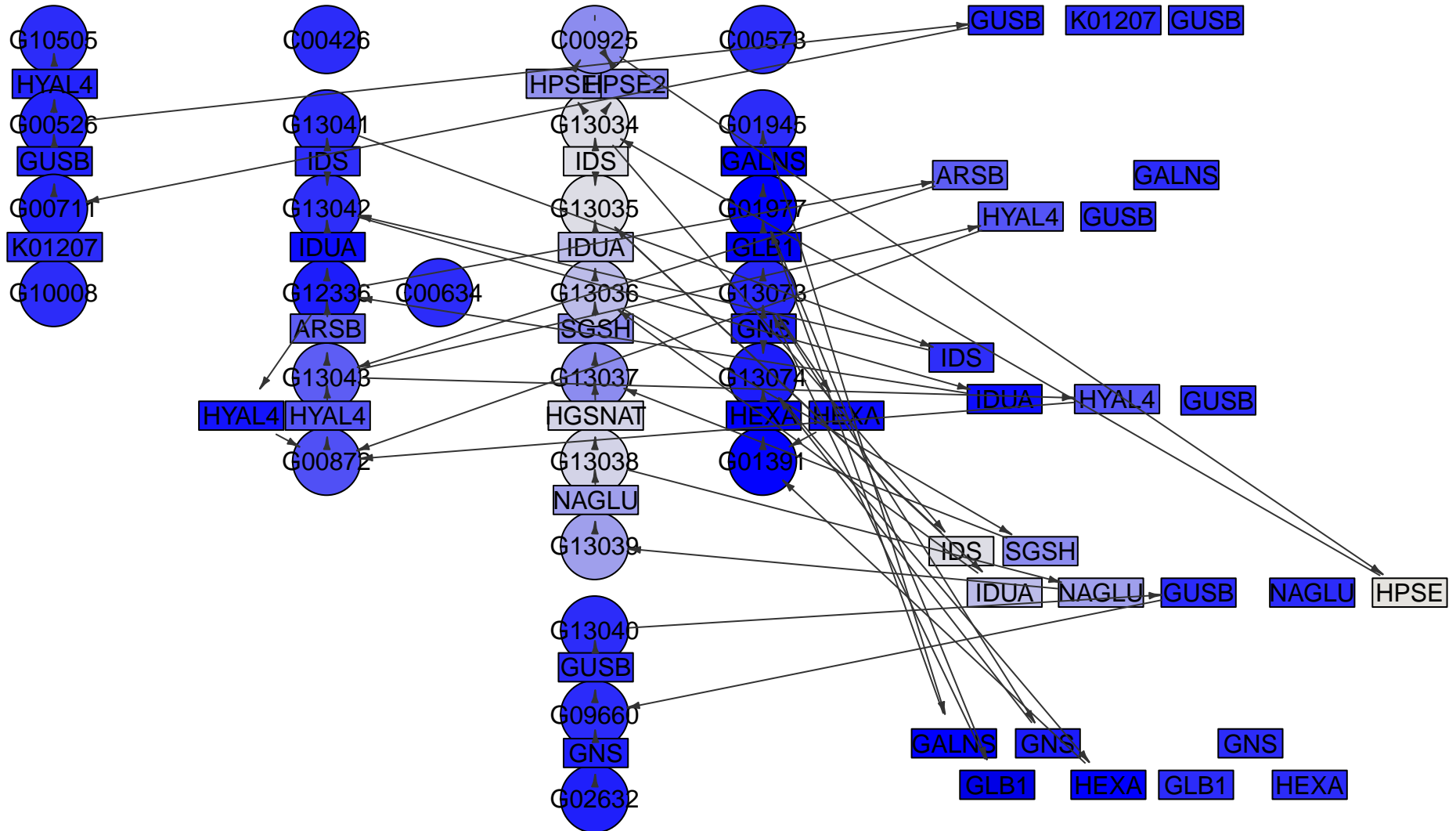
Glycosaminoglycan  
degradation  
MPI-027

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



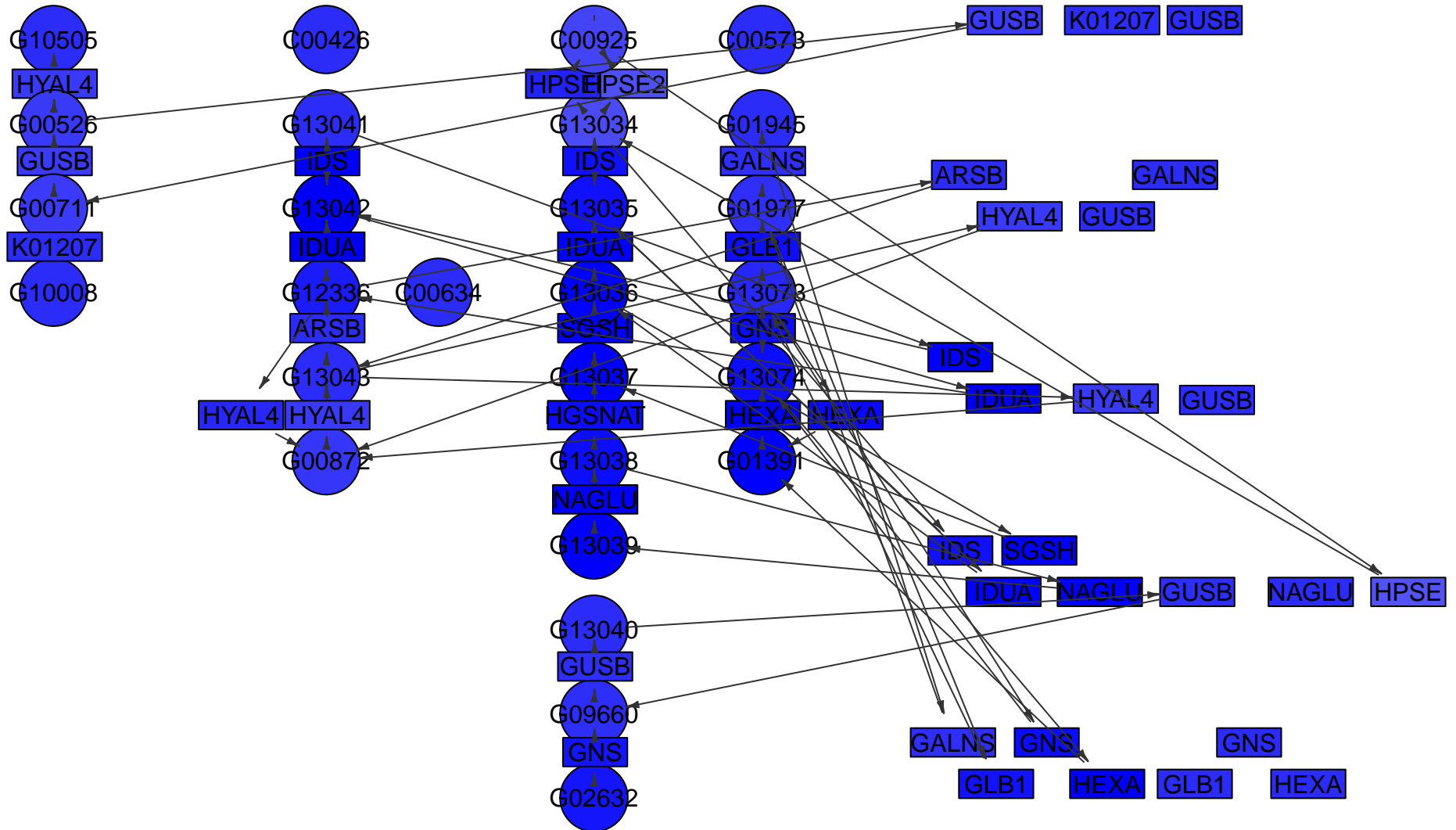
Glycosaminoglycan  
degradation  
MPI-028

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - keratan sulfate



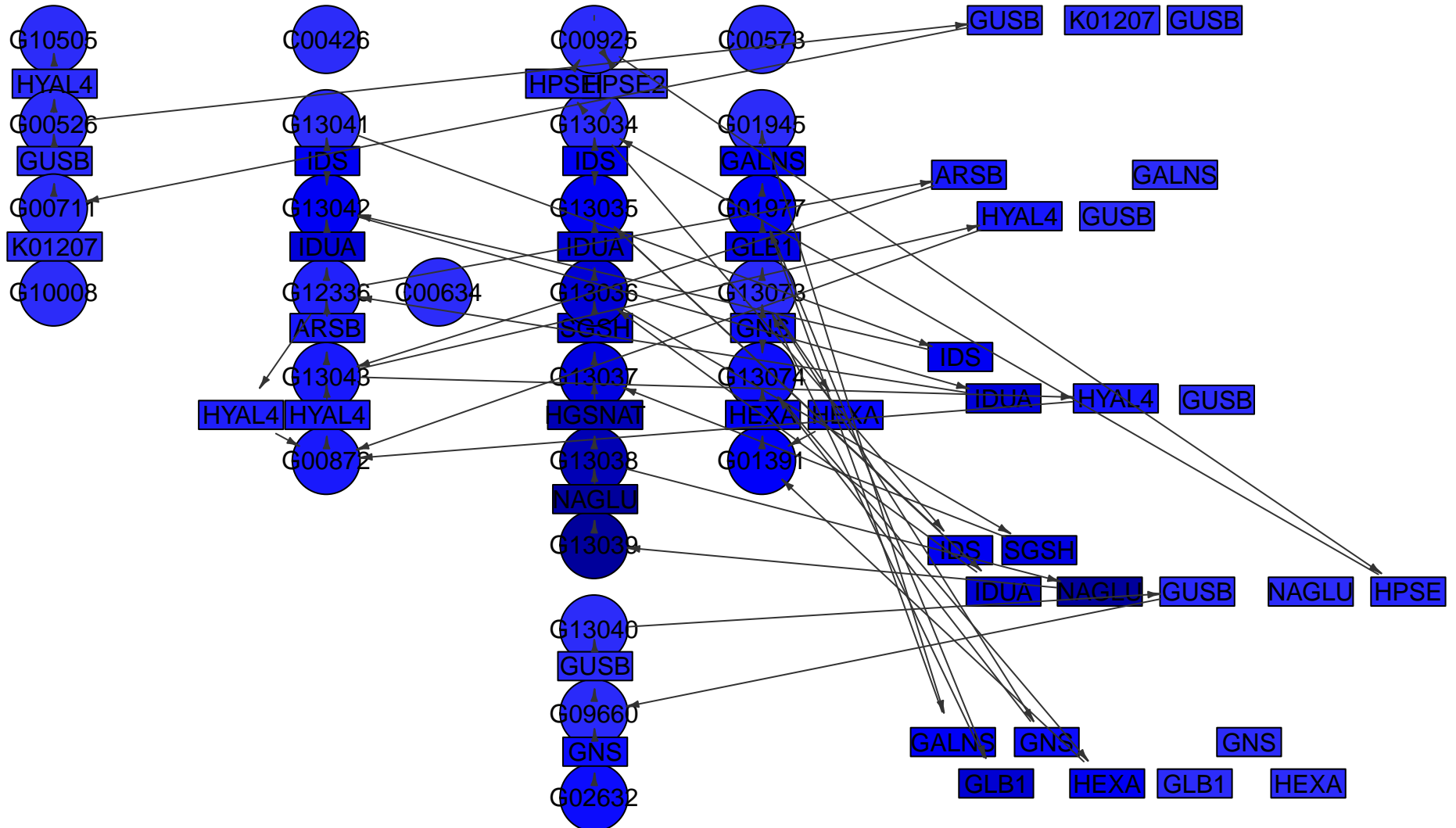
Glycosaminoglycan  
degradation  
MPI-032

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-033

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparinkeratan sulfate



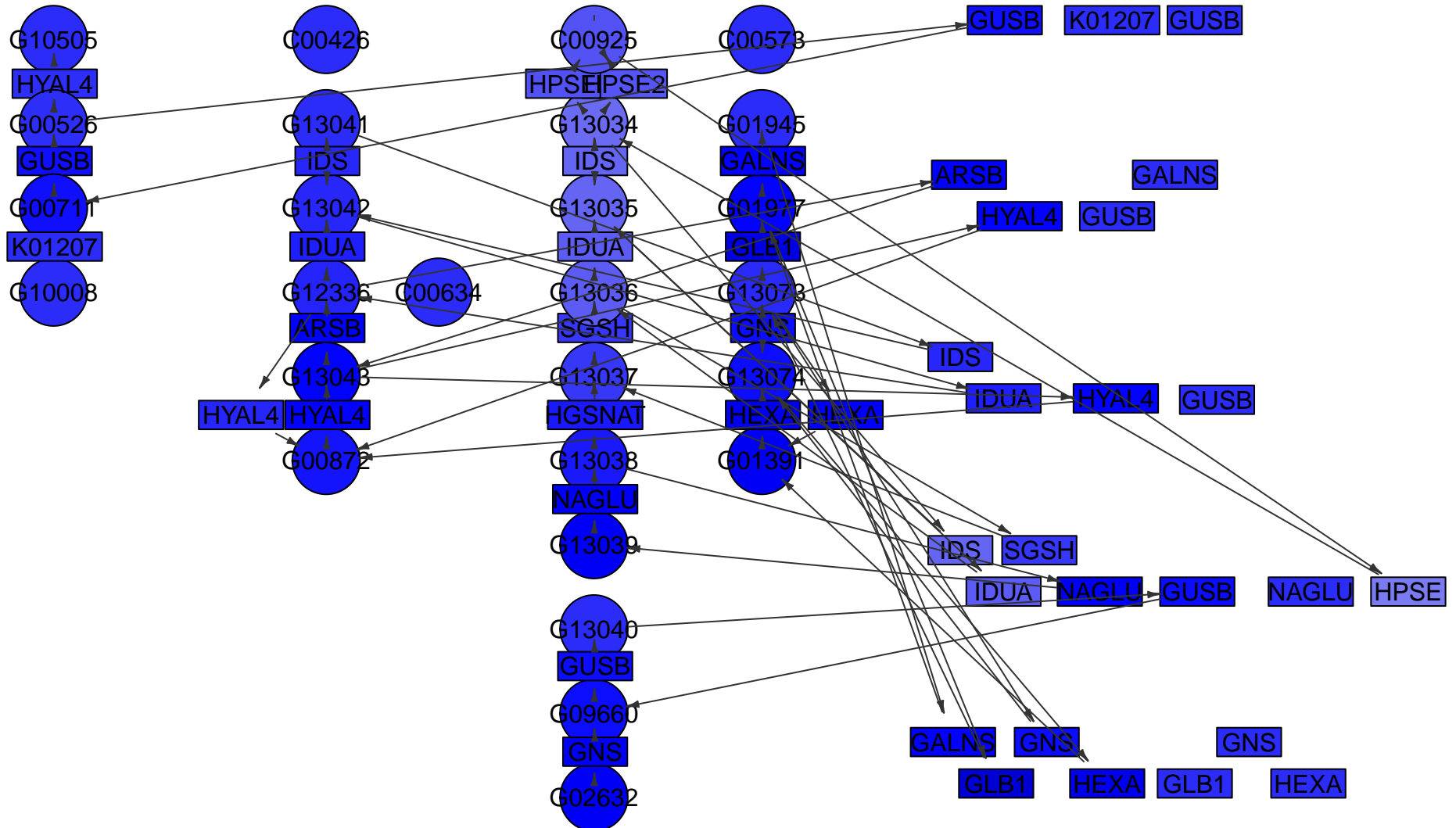






Glycosaminoglycan  
degradation  
MPI-043

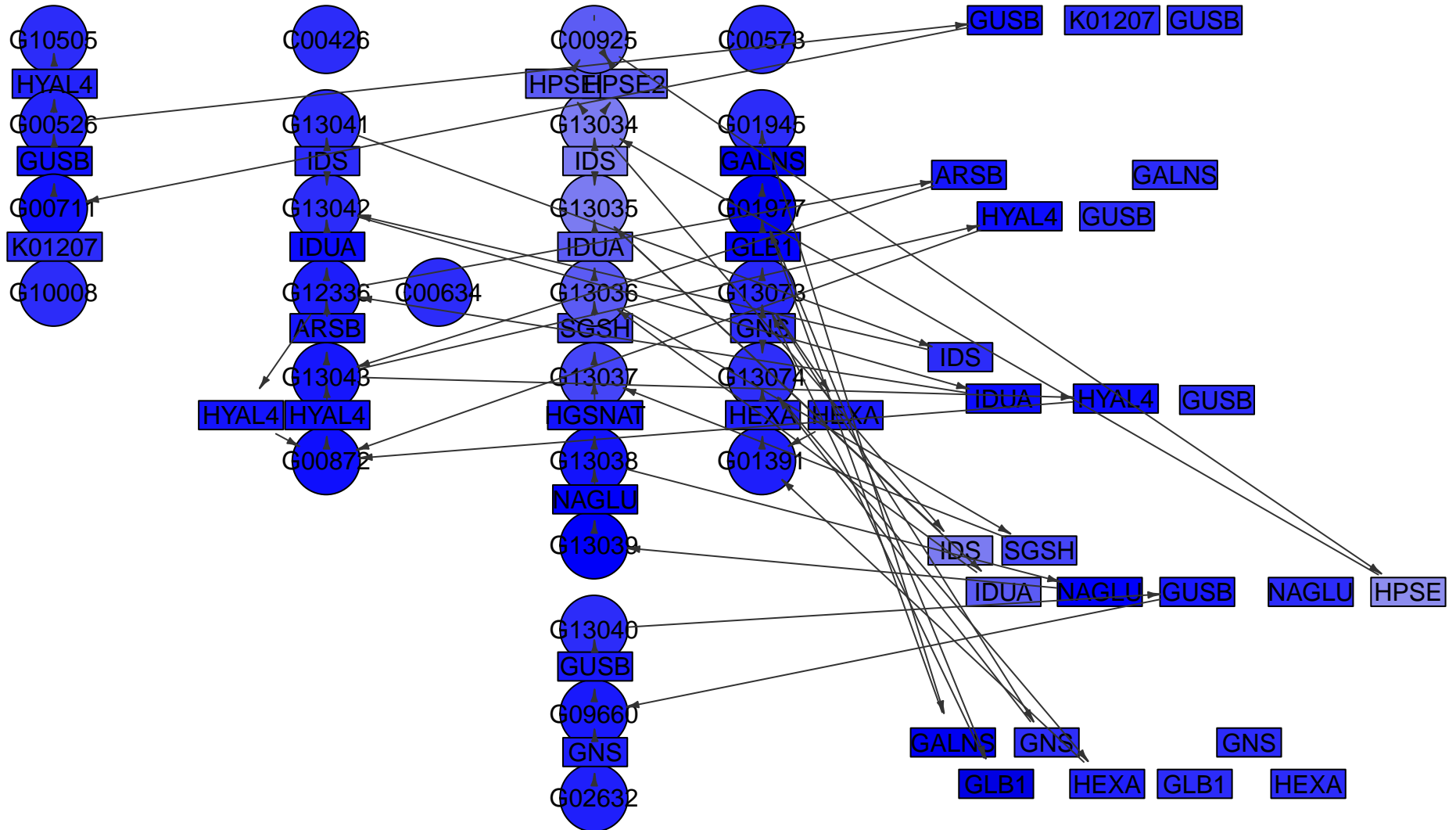
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





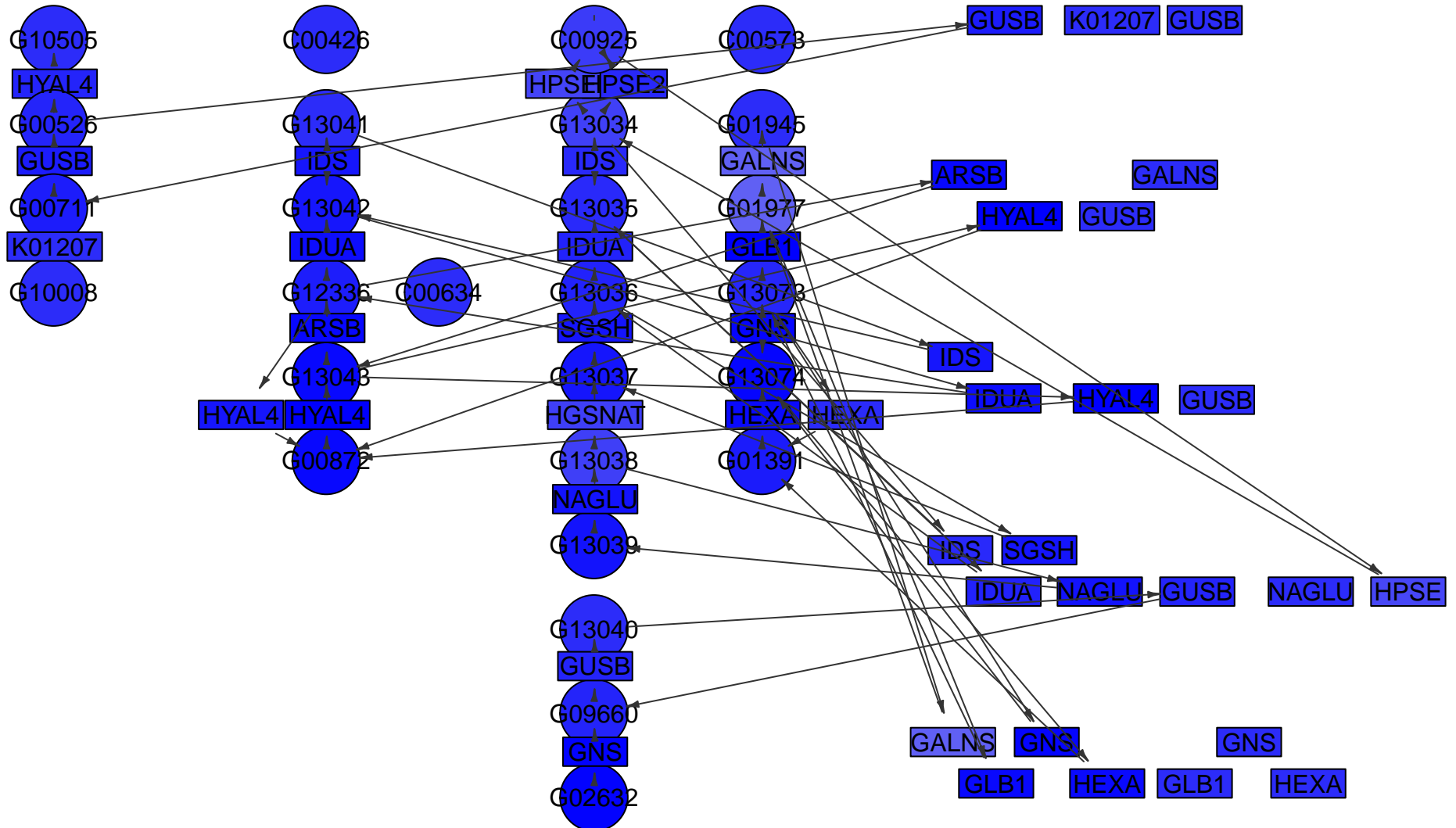
Glycosaminoglycan  
degradation  
MPI-048

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



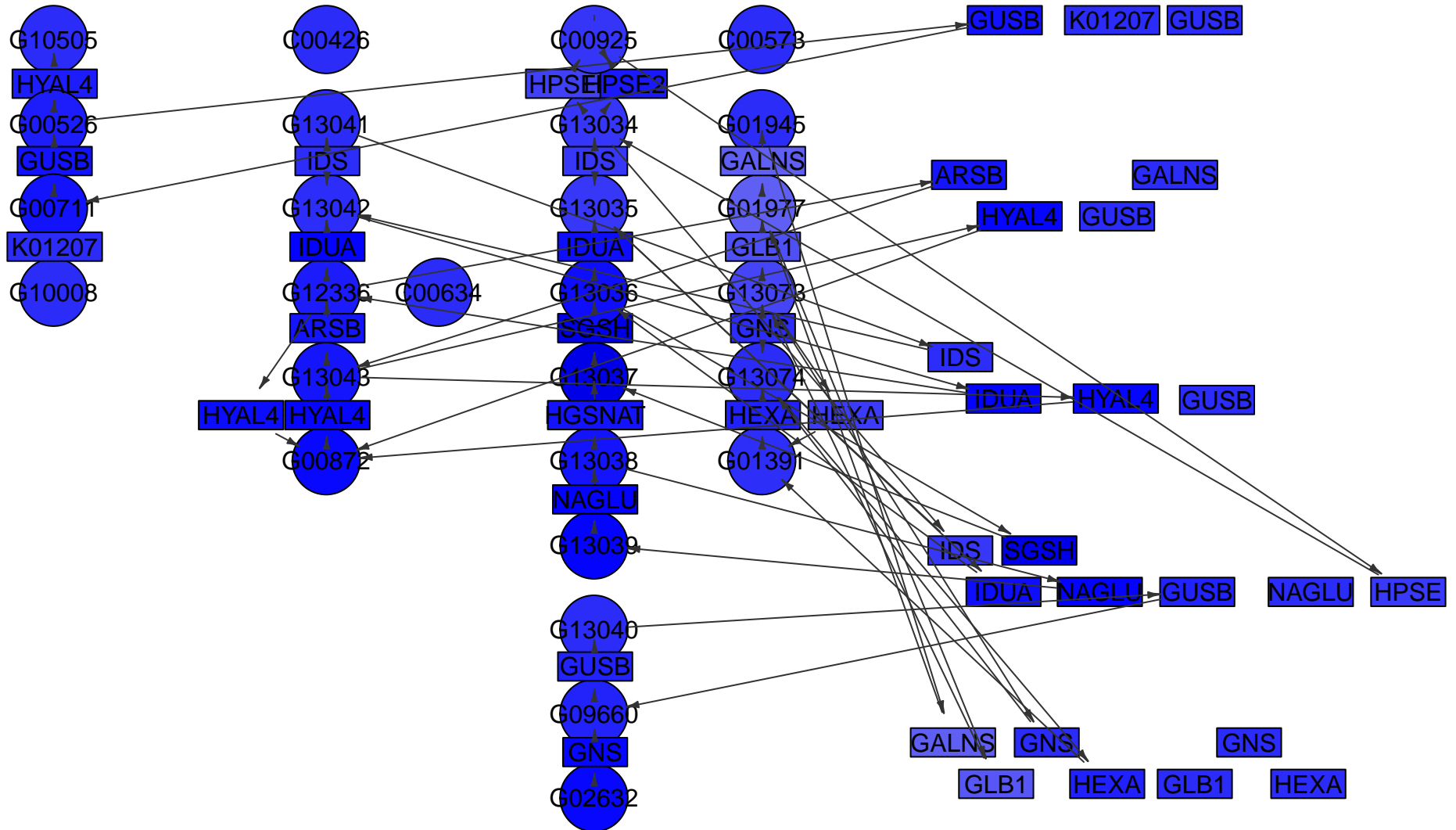
Glycosaminoglycan  
degradation  
MPI-055

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



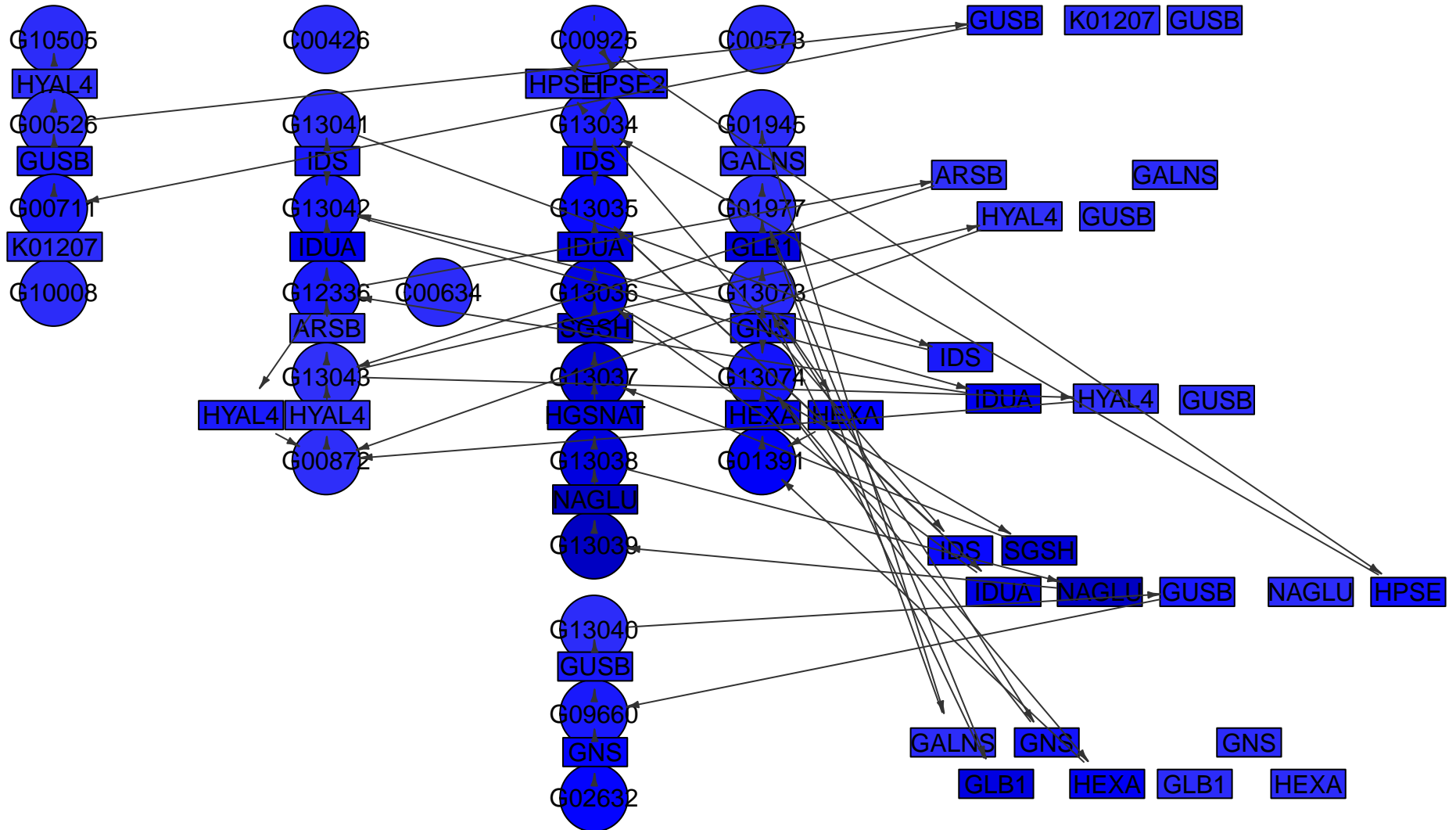
Glycosaminoglycan  
degradation  
MPI-065

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



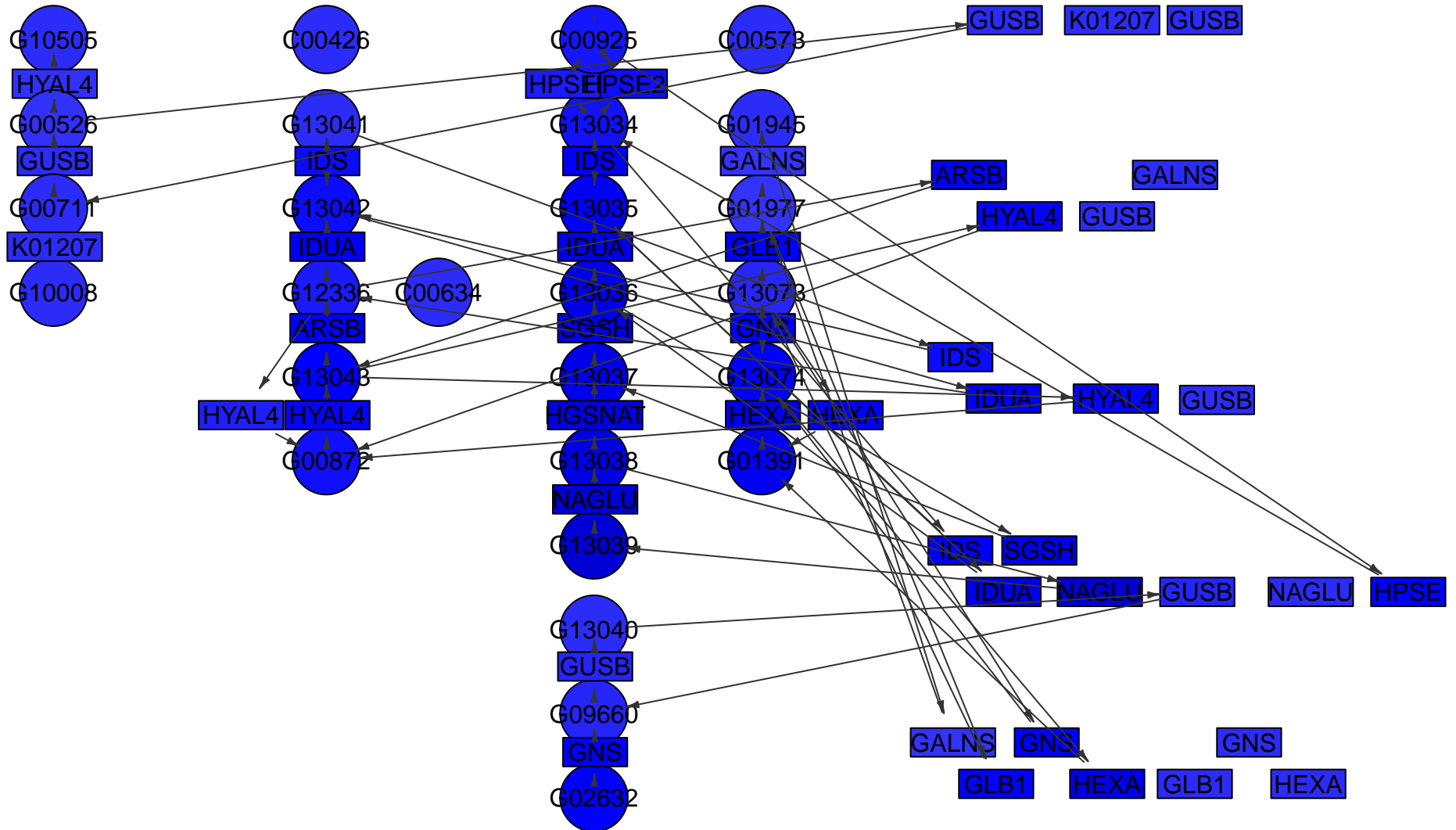
Glycosaminoglycan  
degradation  
MPI-071

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-075

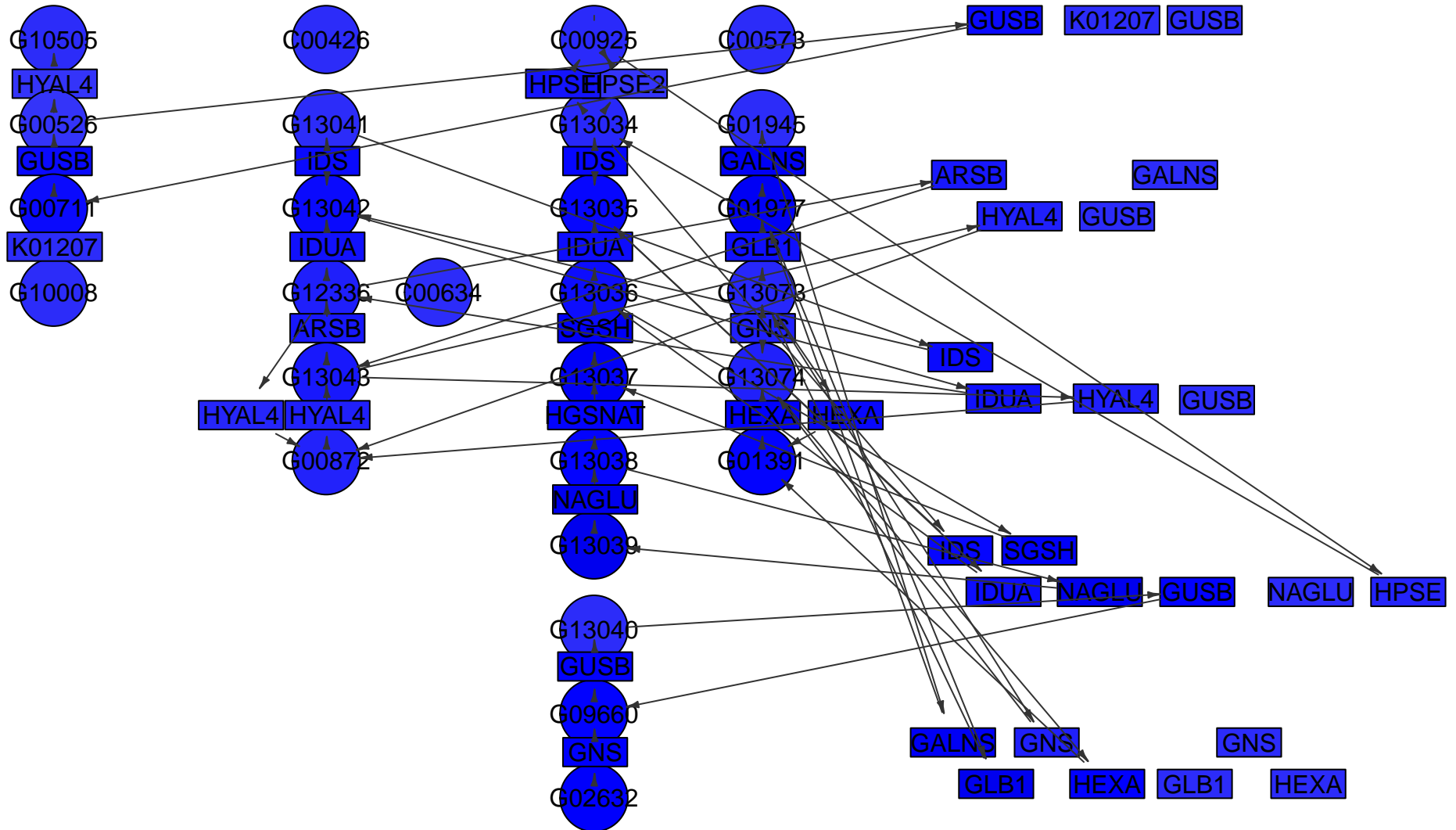
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





Glycosaminoglycan  
degradation  
MPI-077

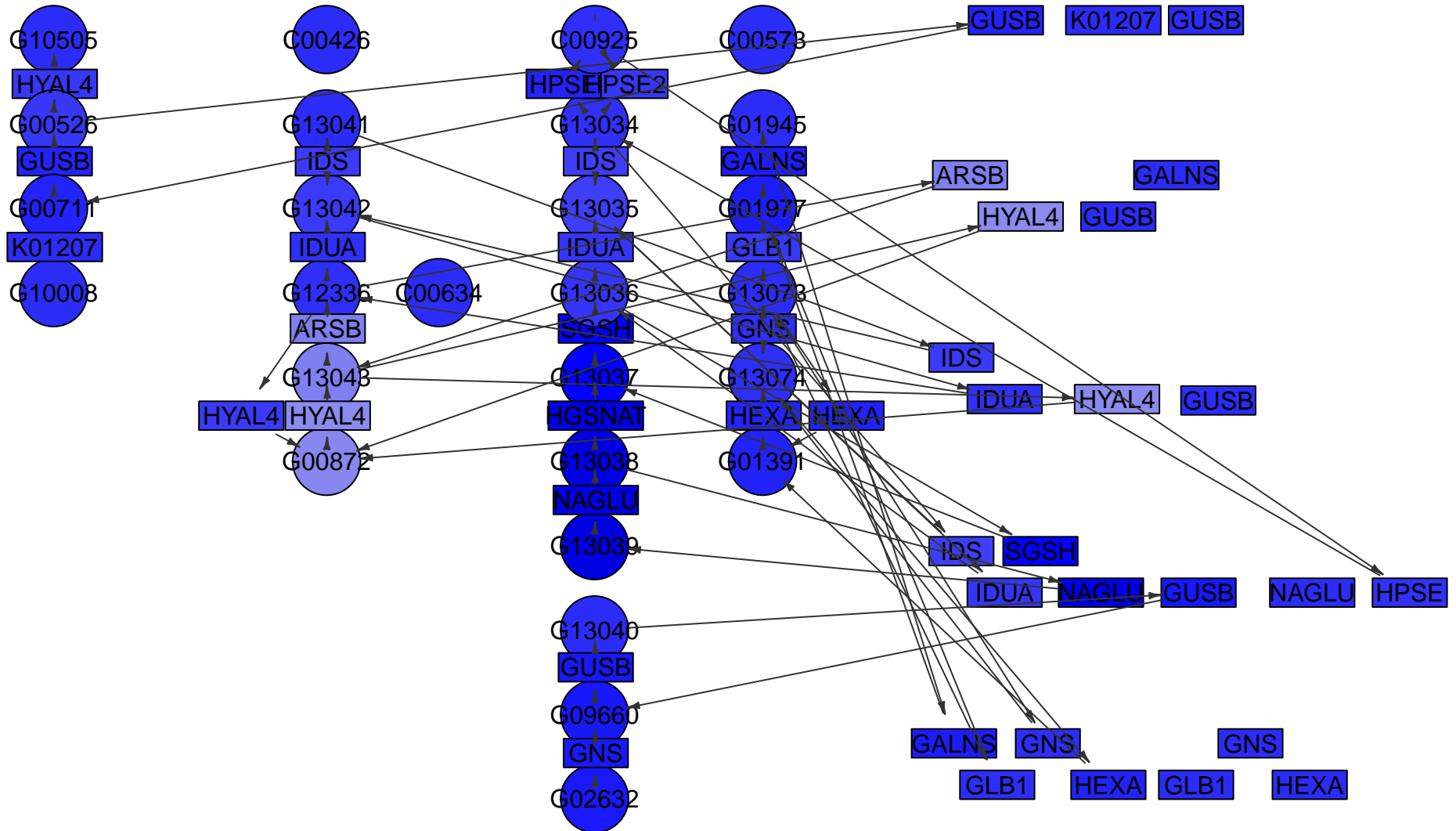
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





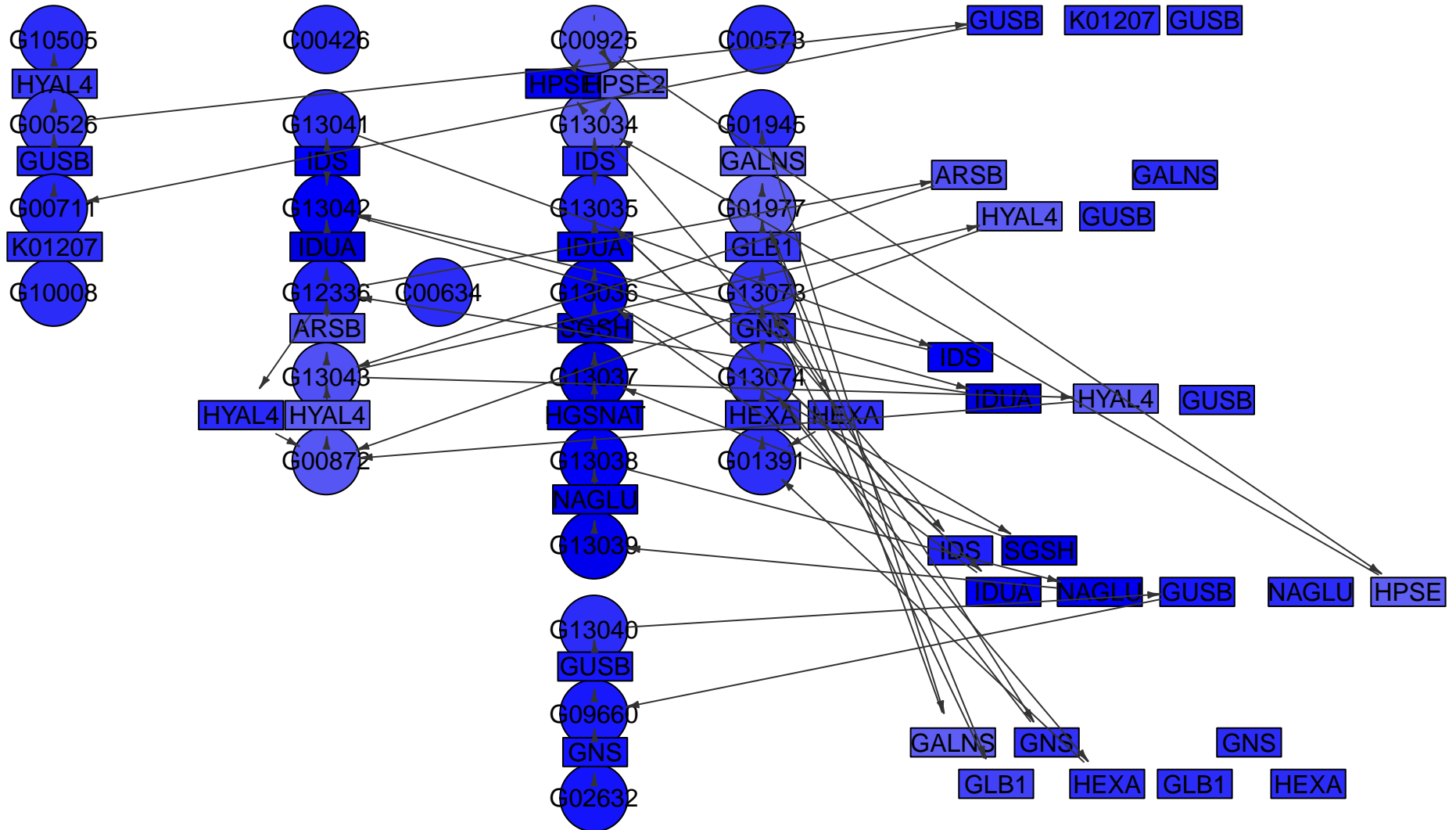
Glycosaminoglycan  
degradation  
MPI-078

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



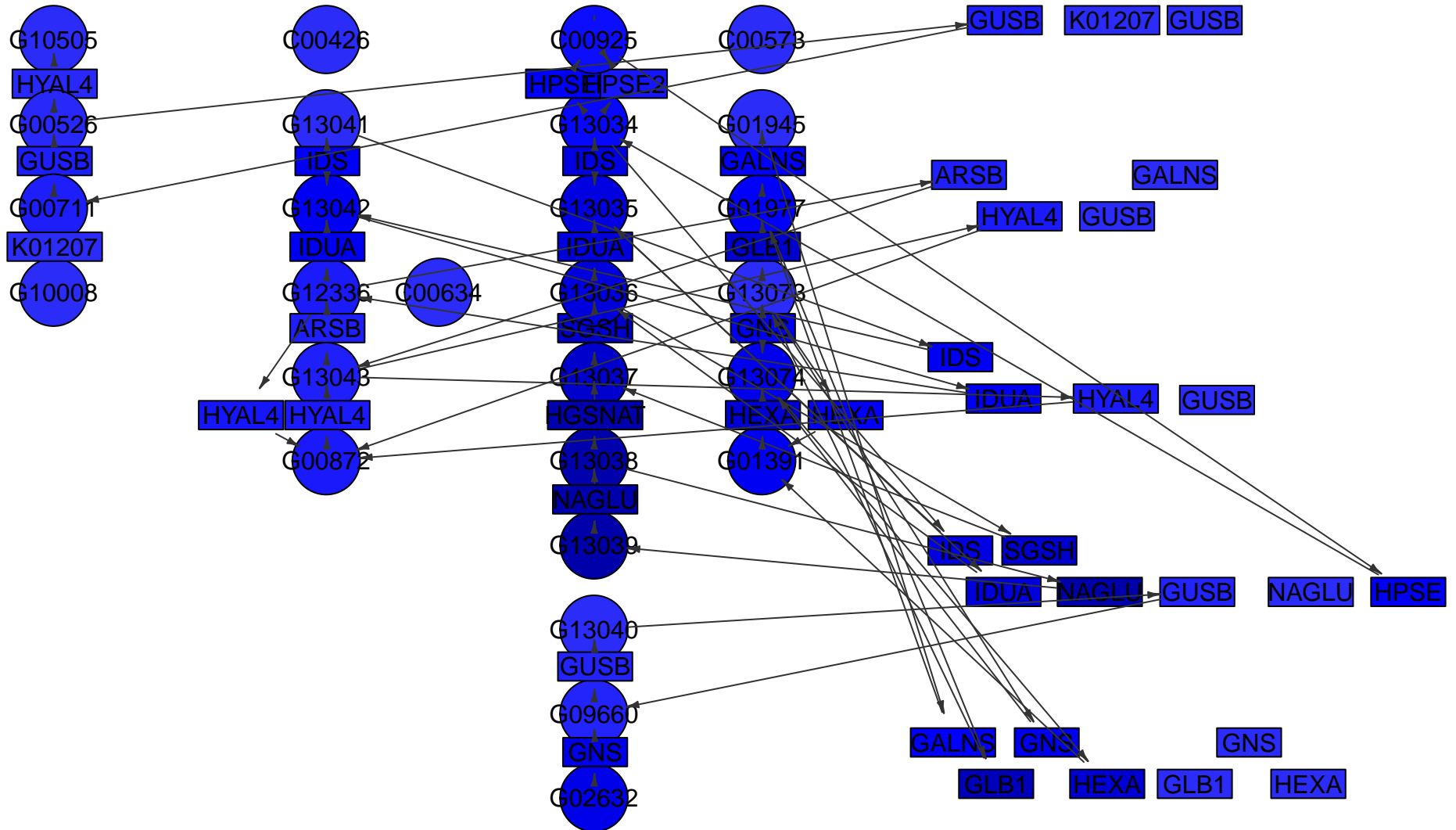
Glycosaminoglycan  
degradation  
MPI-079

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



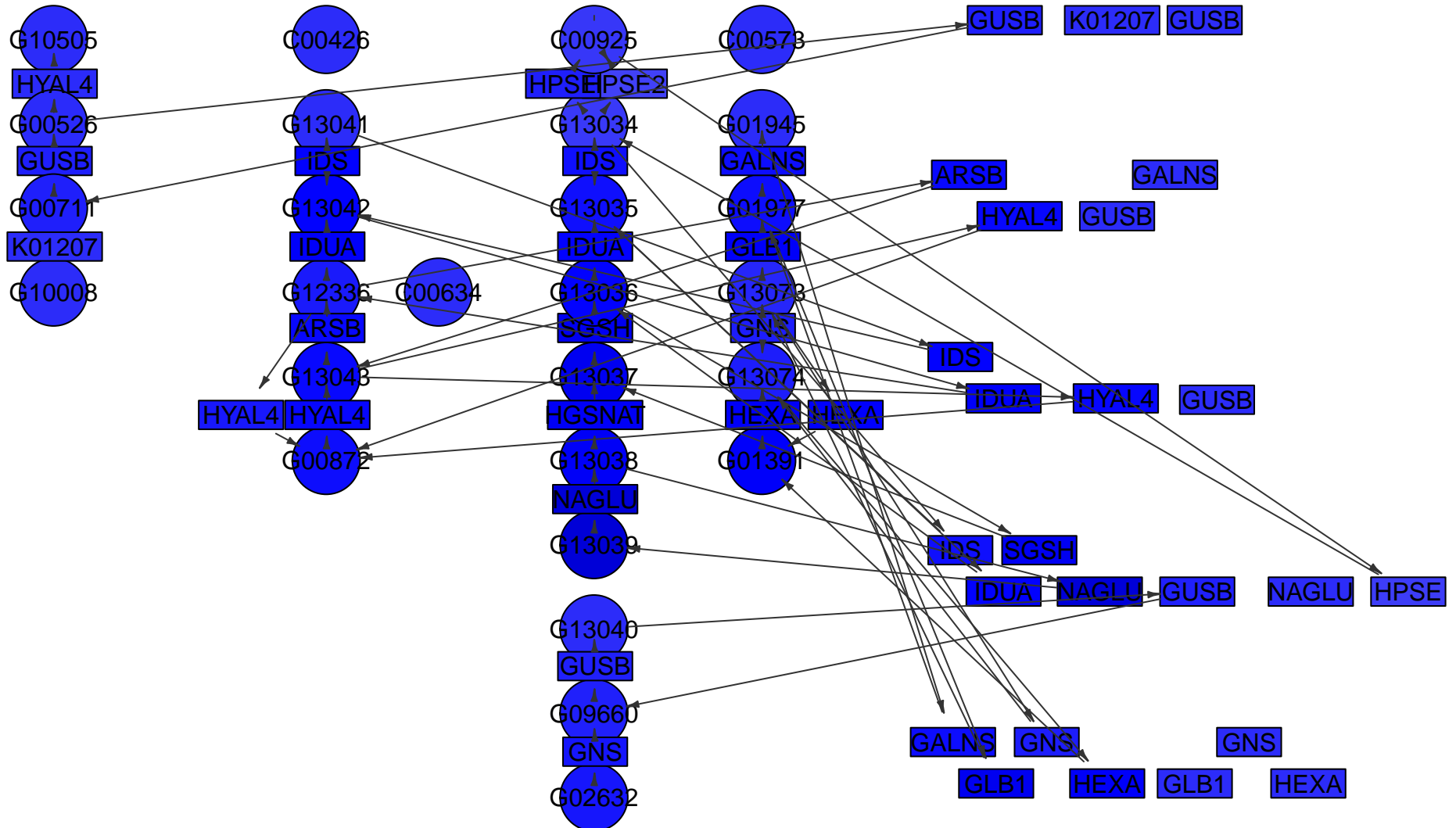
Glycosaminoglycan  
degradation  
MPI-080

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-081

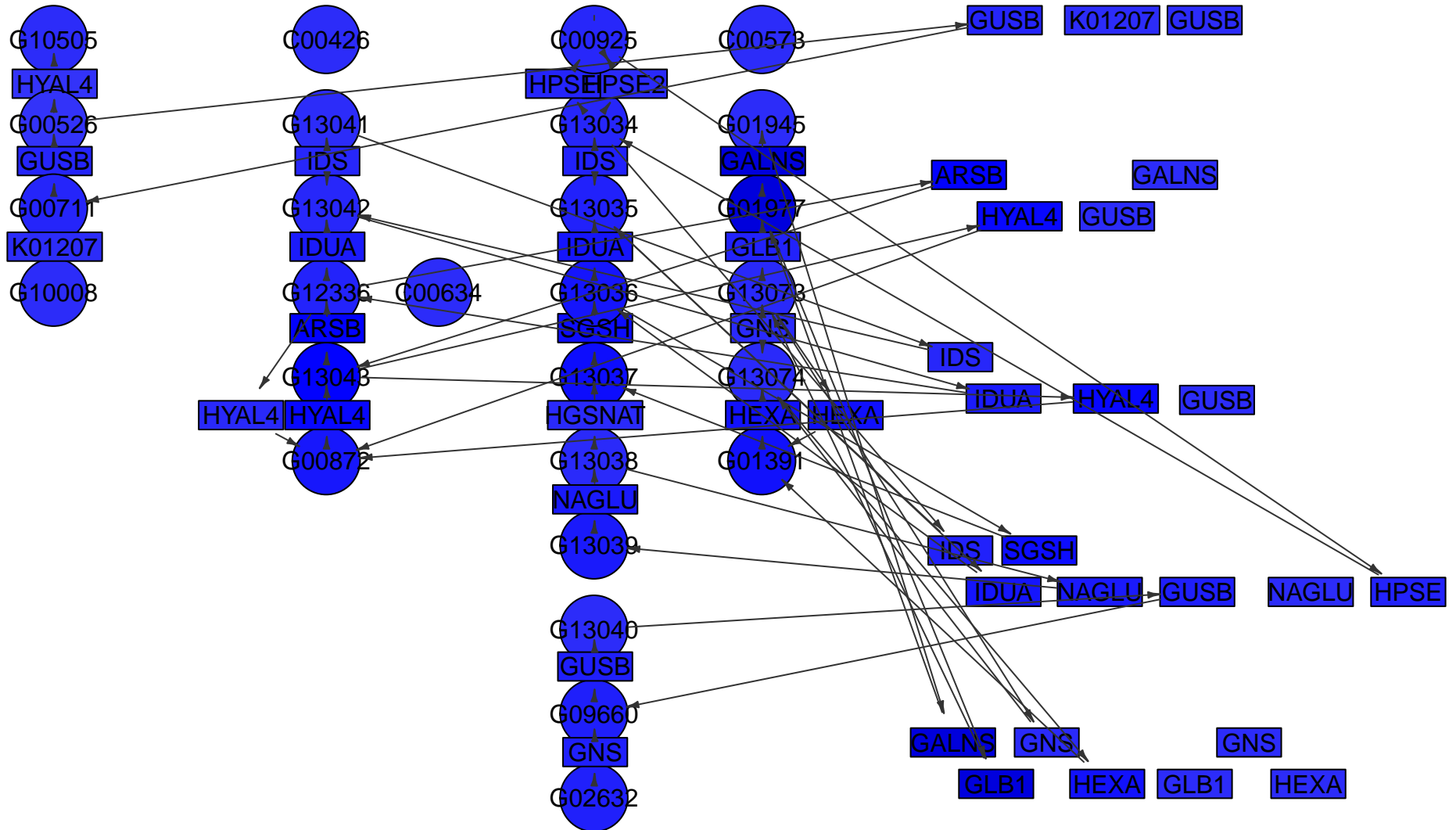
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





Glycosaminoglycan  
degradation  
MPI-084

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

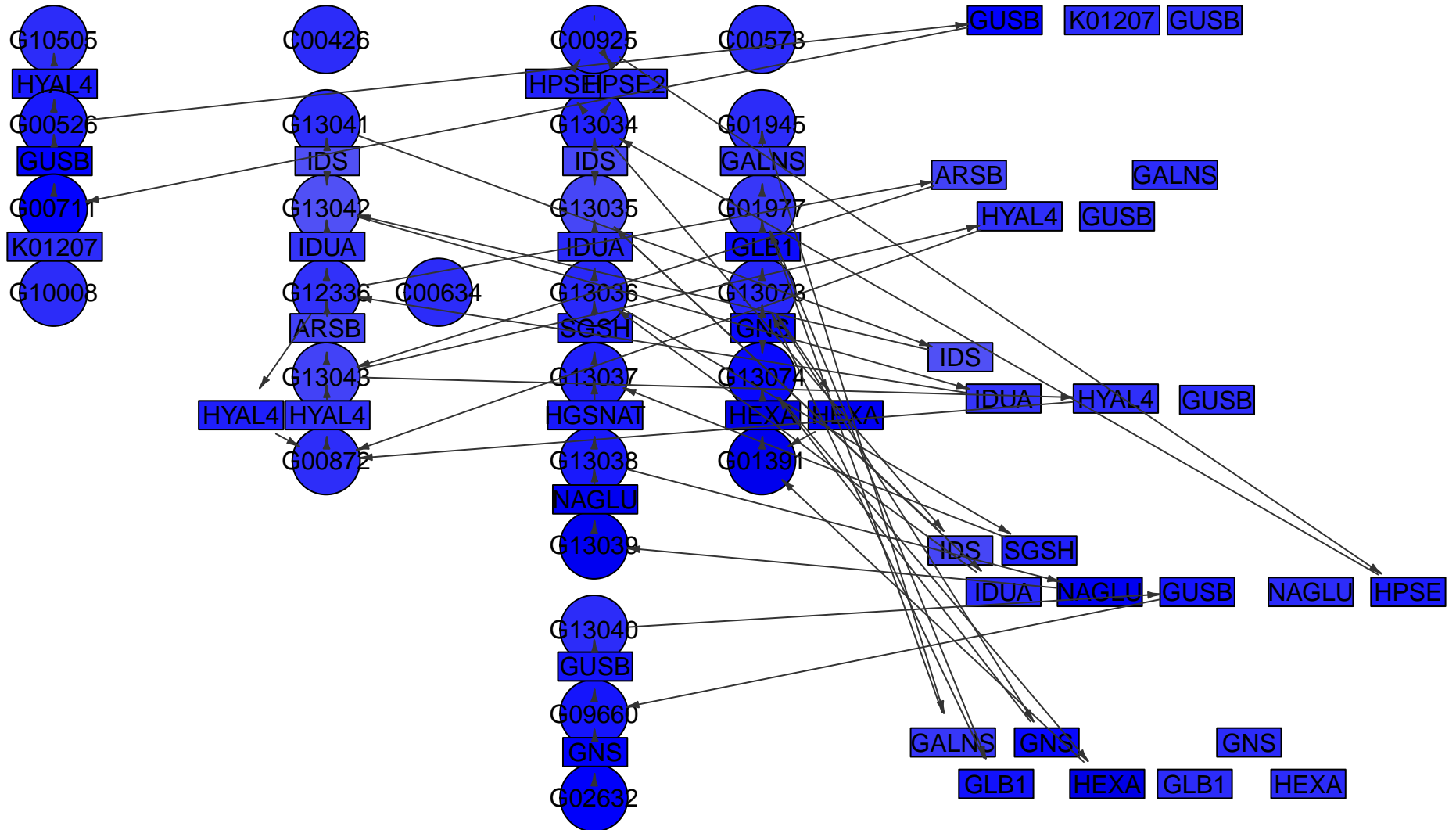






Glycosaminoglycan  
degradation  
MPI-086

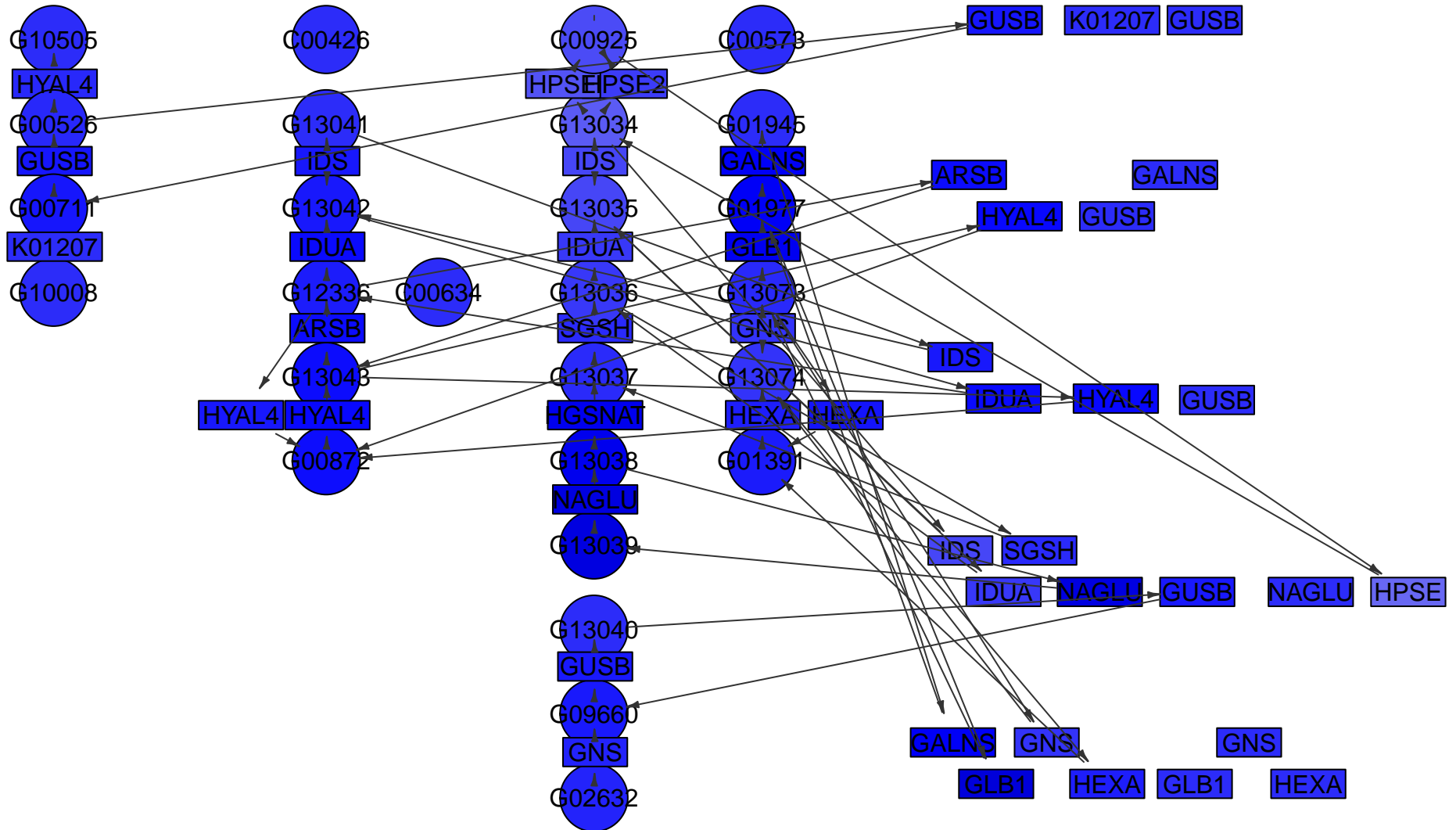
Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate





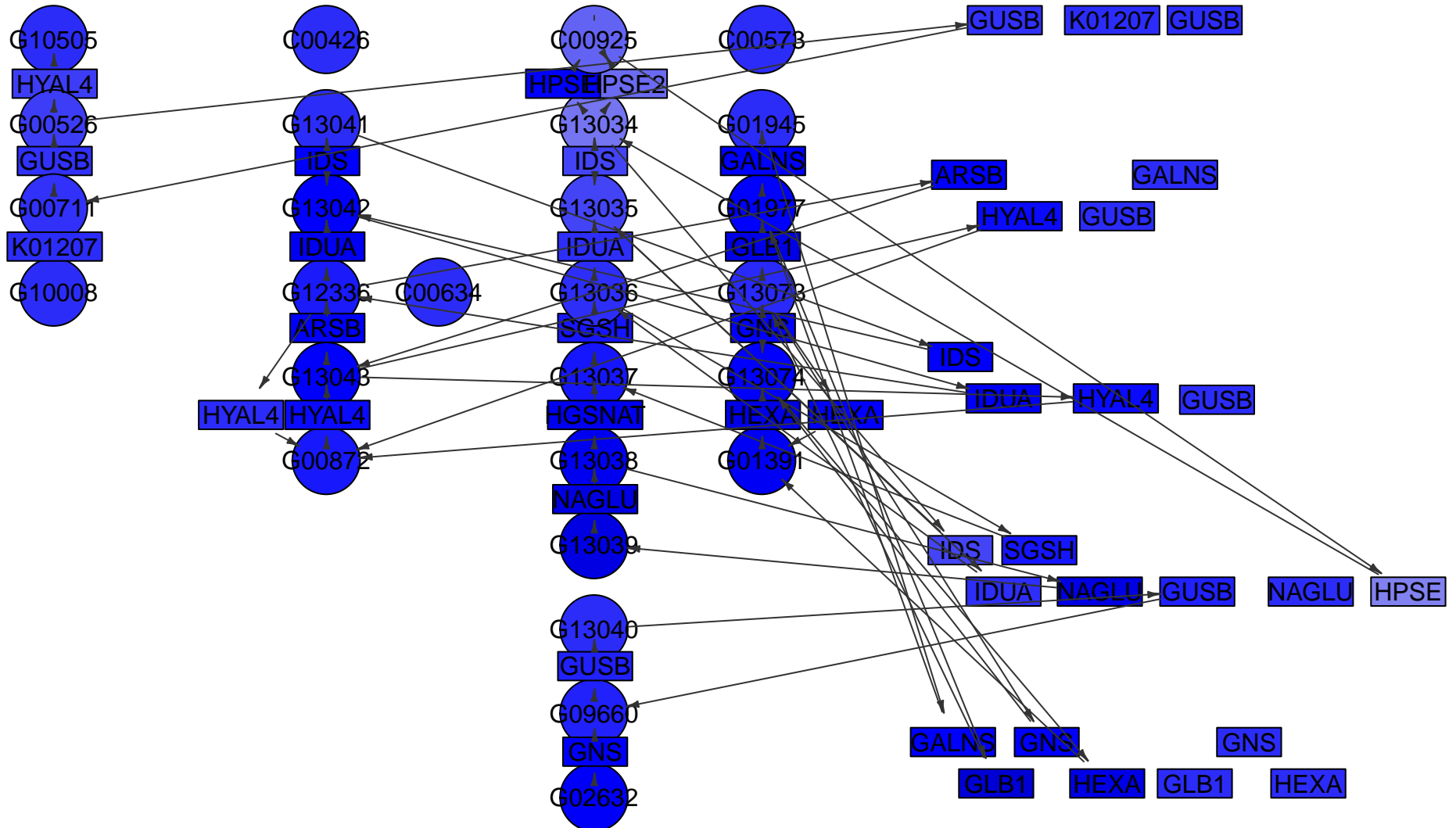
Glycosaminoglycan  
degradation  
MPI-087

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



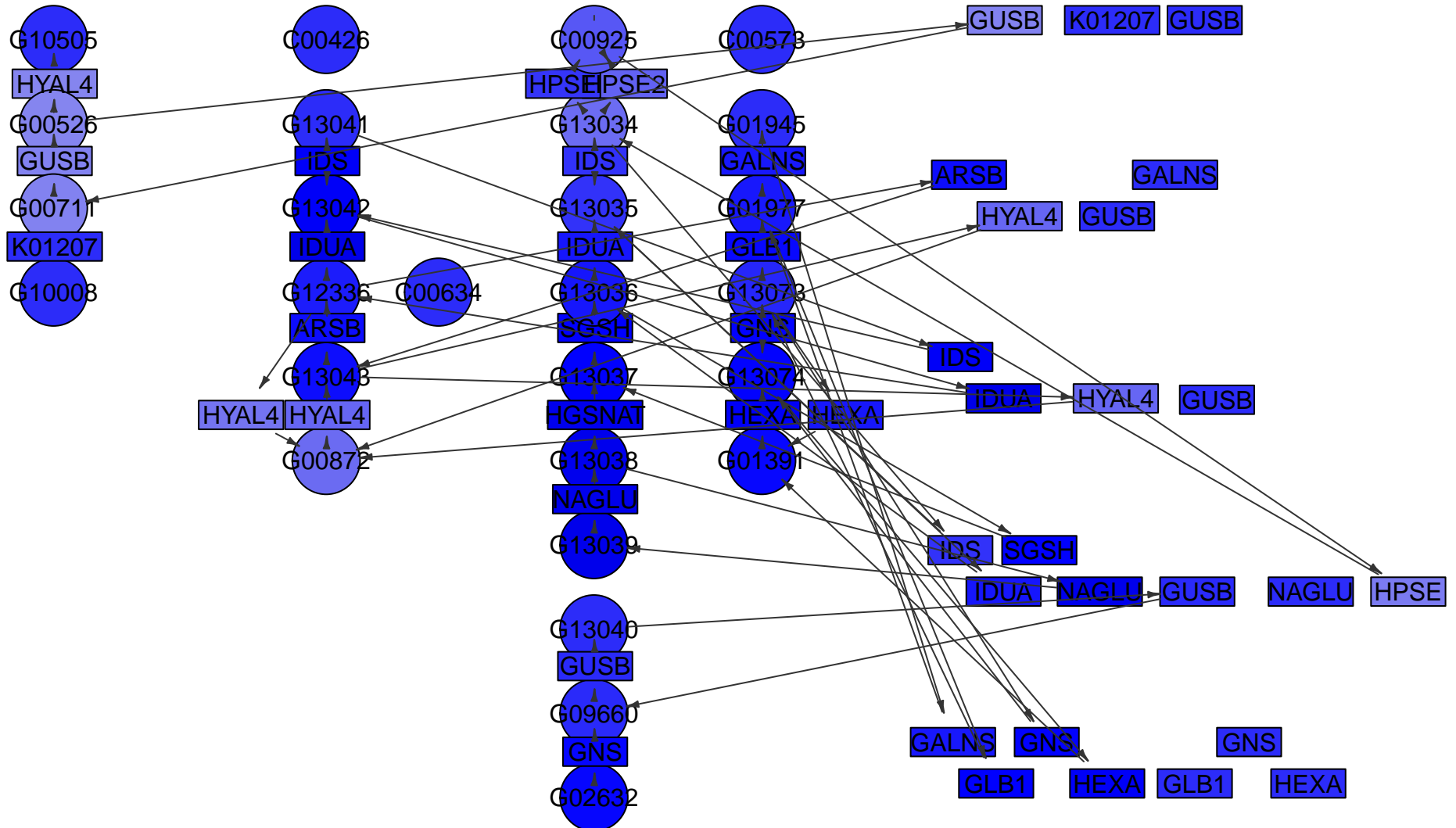
Glycosaminoglycan  
degradation  
MPI-089

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



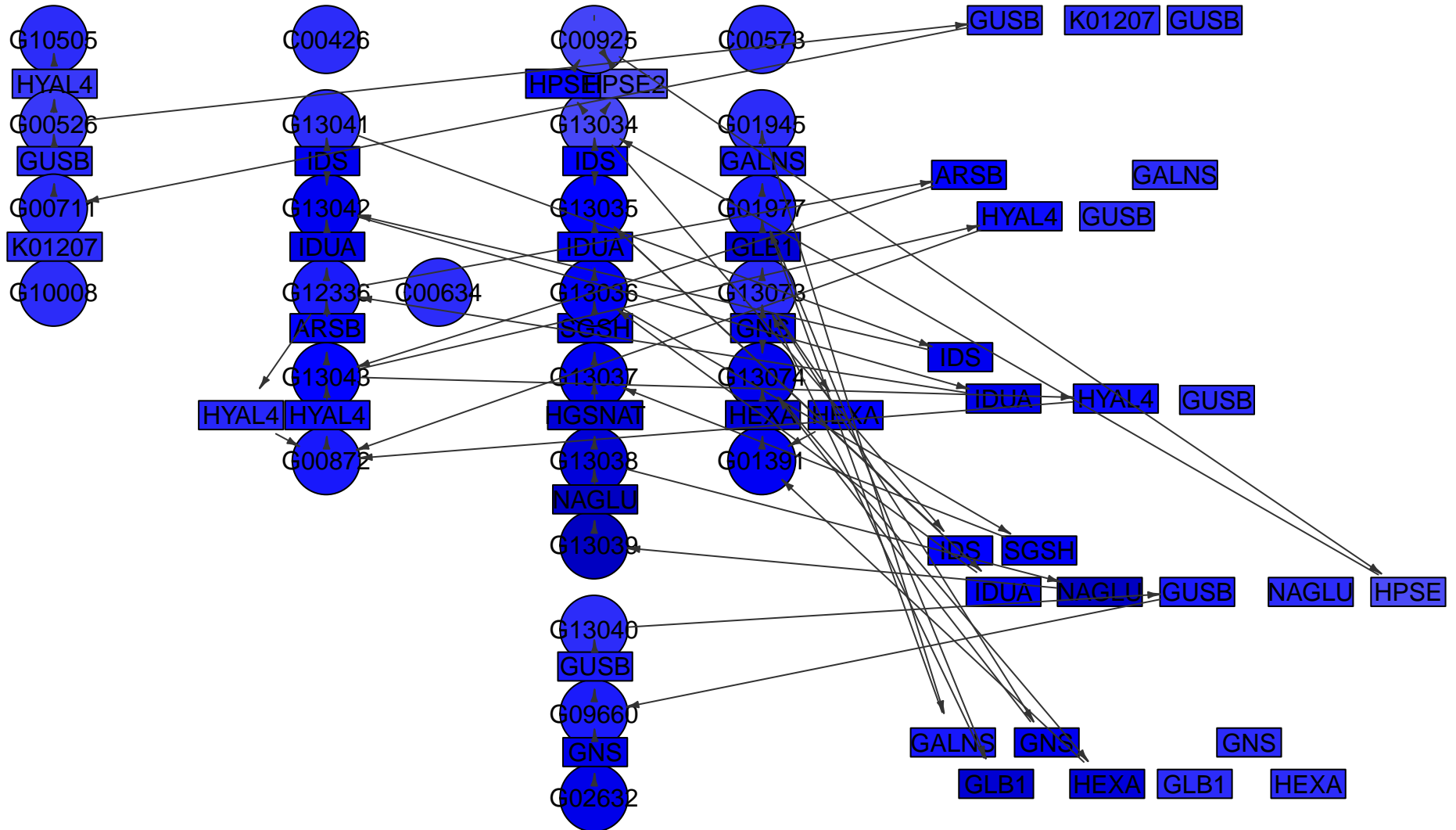
Glycosaminoglycan  
degradation  
MPI-090

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



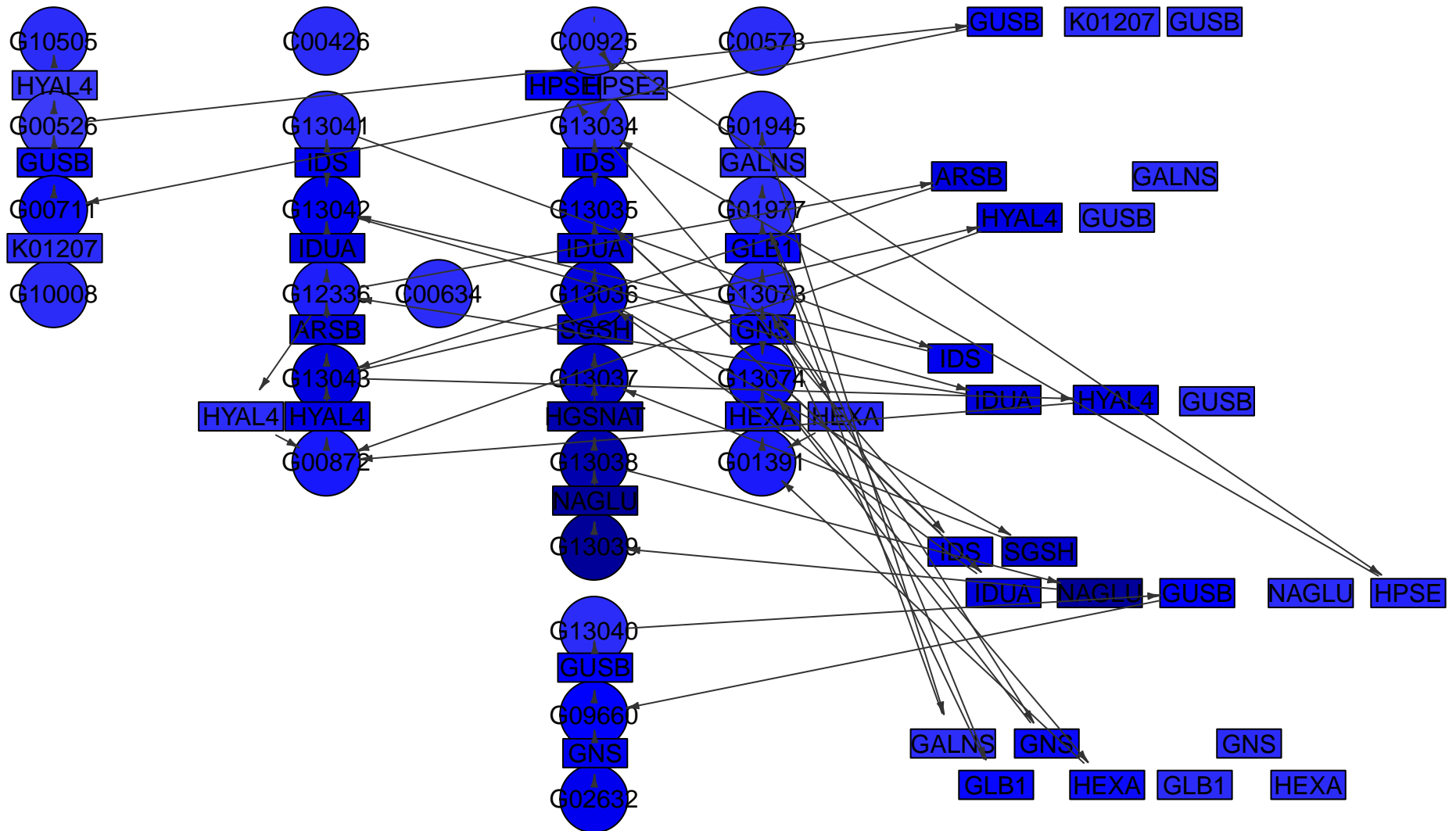
Glycosaminoglycan  
degradation  
MPI-091

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



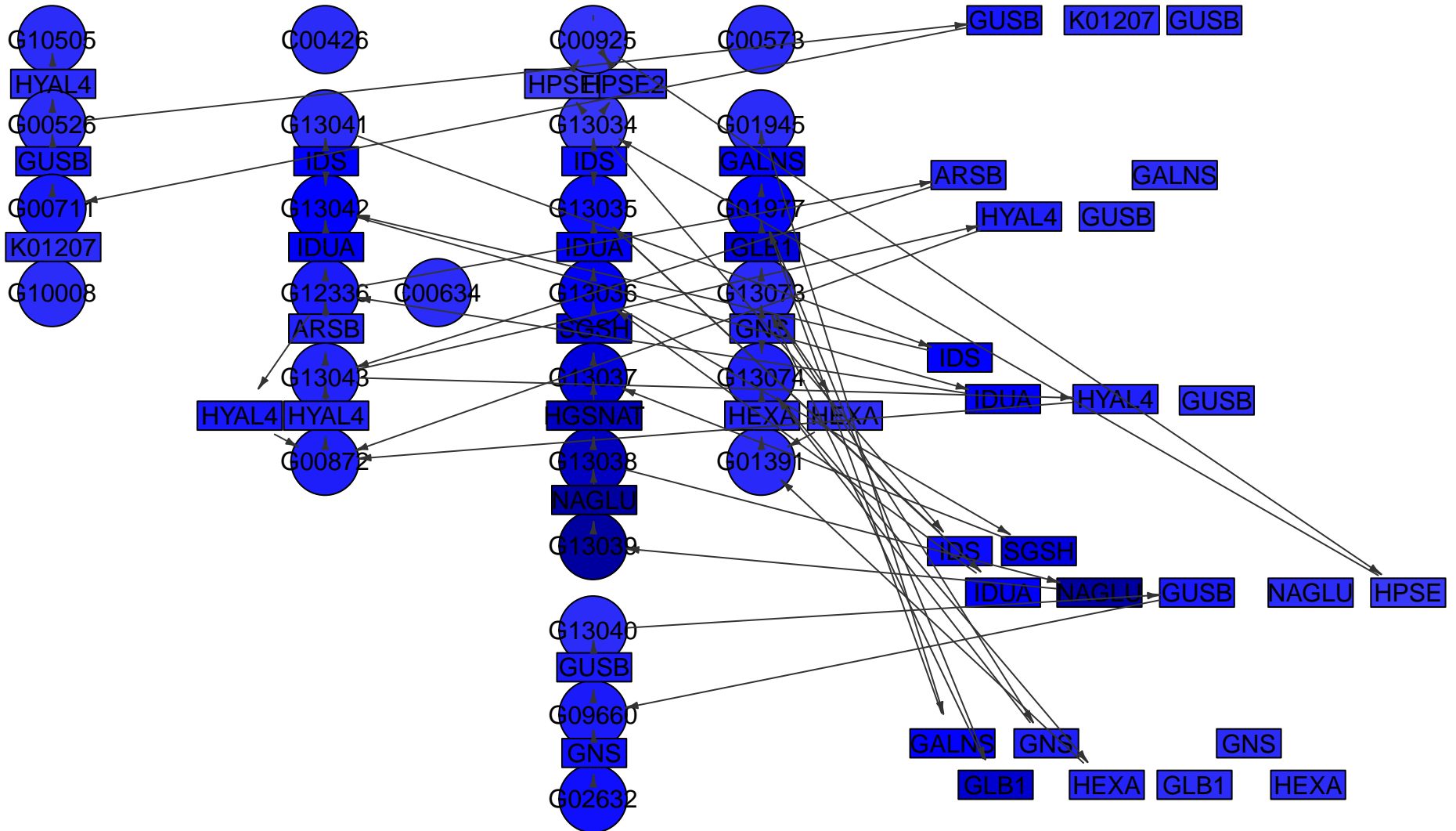
Glycosaminoglycan  
degradation  
MPI-095

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



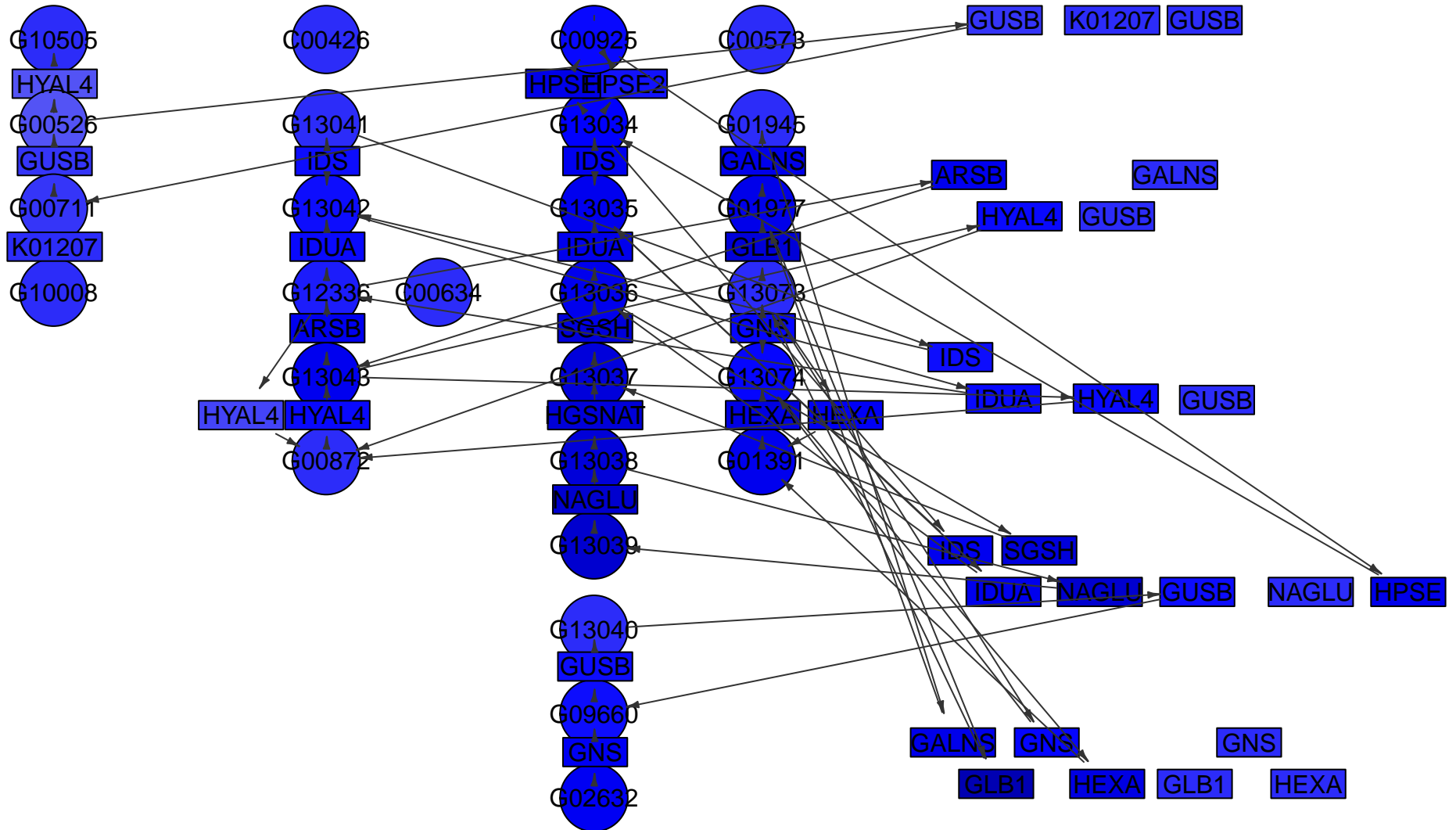
Glycosaminoglycan  
degradation  
MPI-101

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-114

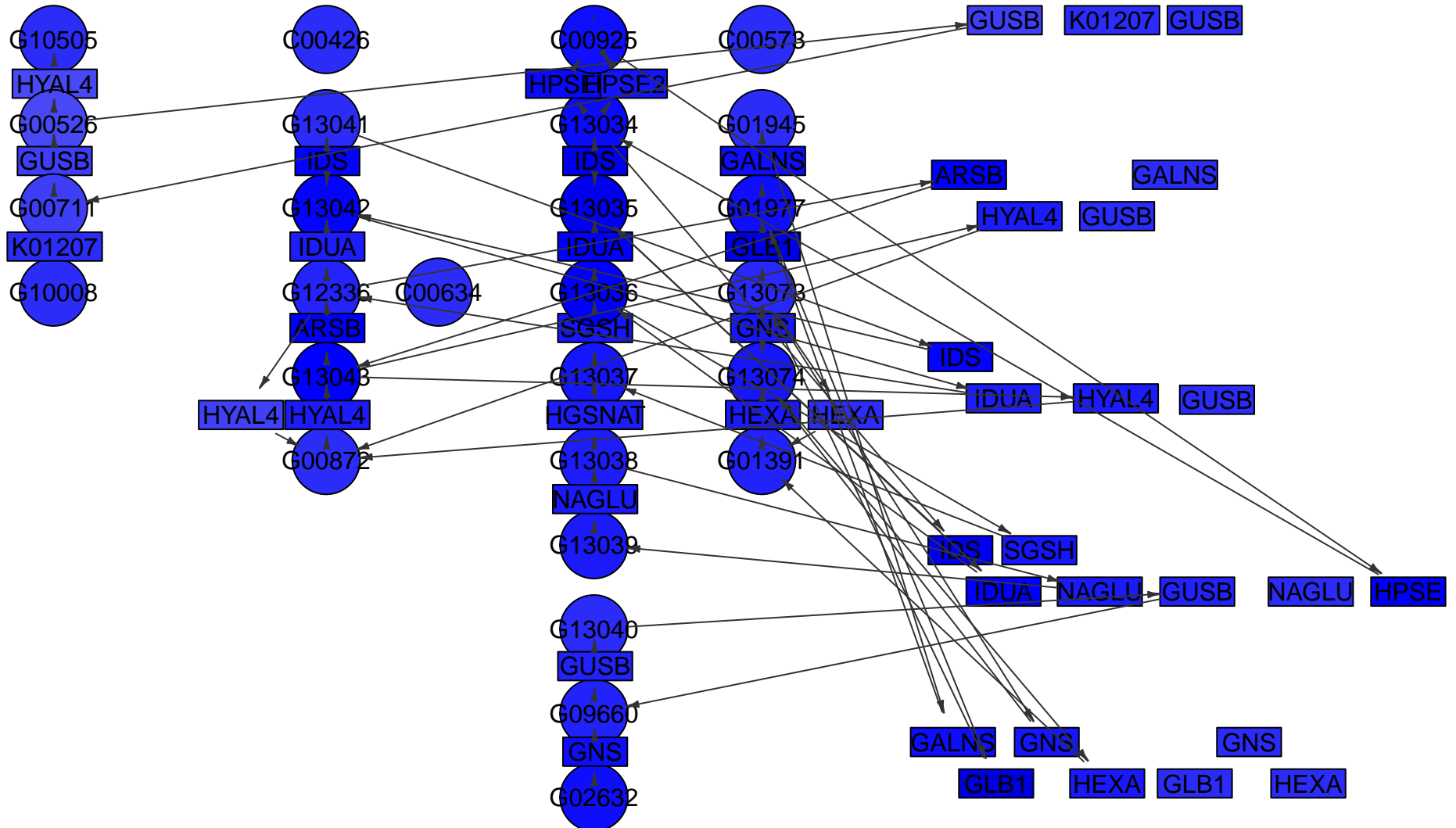
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





Glycosaminoglycan  
degradation  
MPI-123

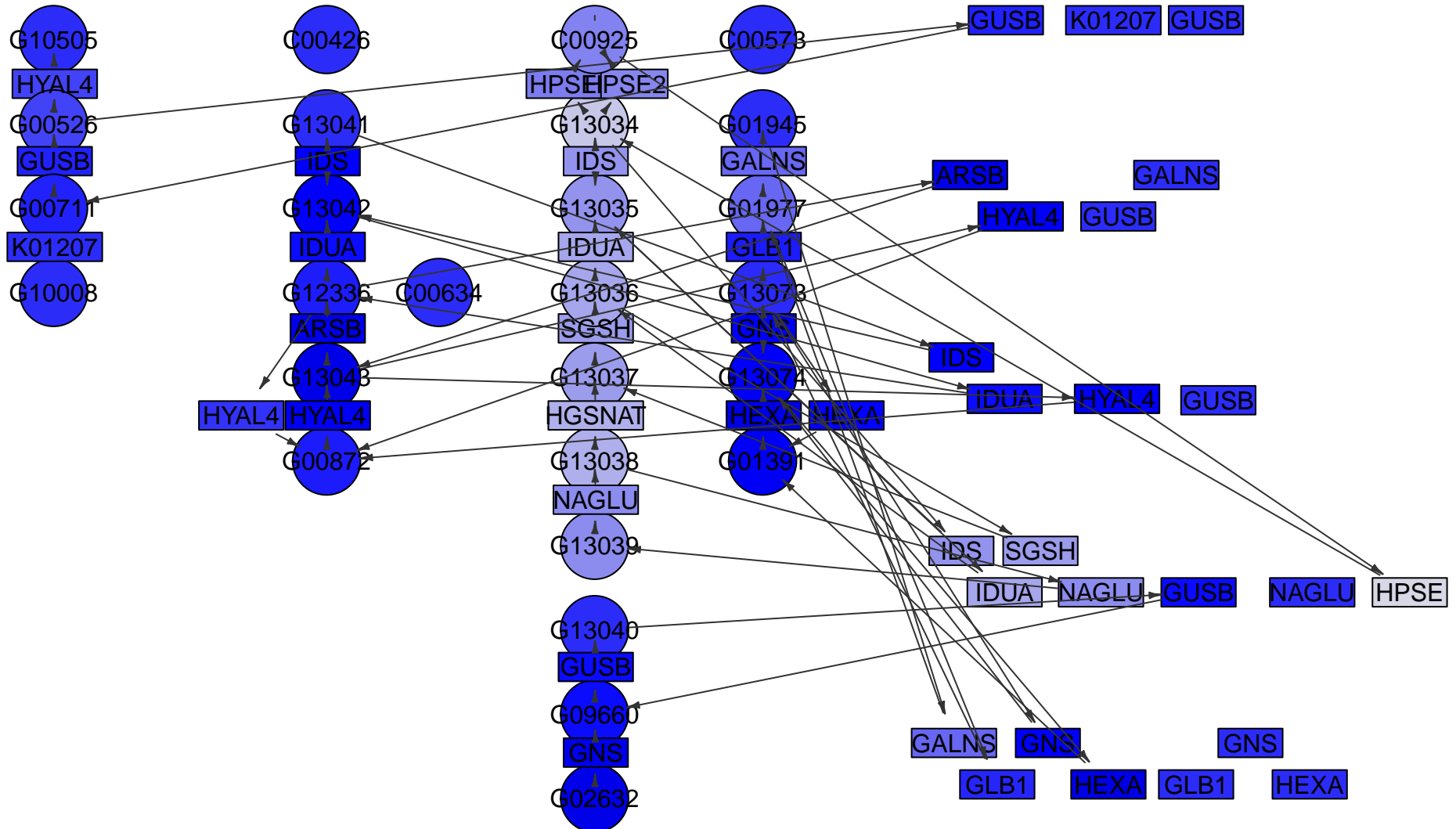
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





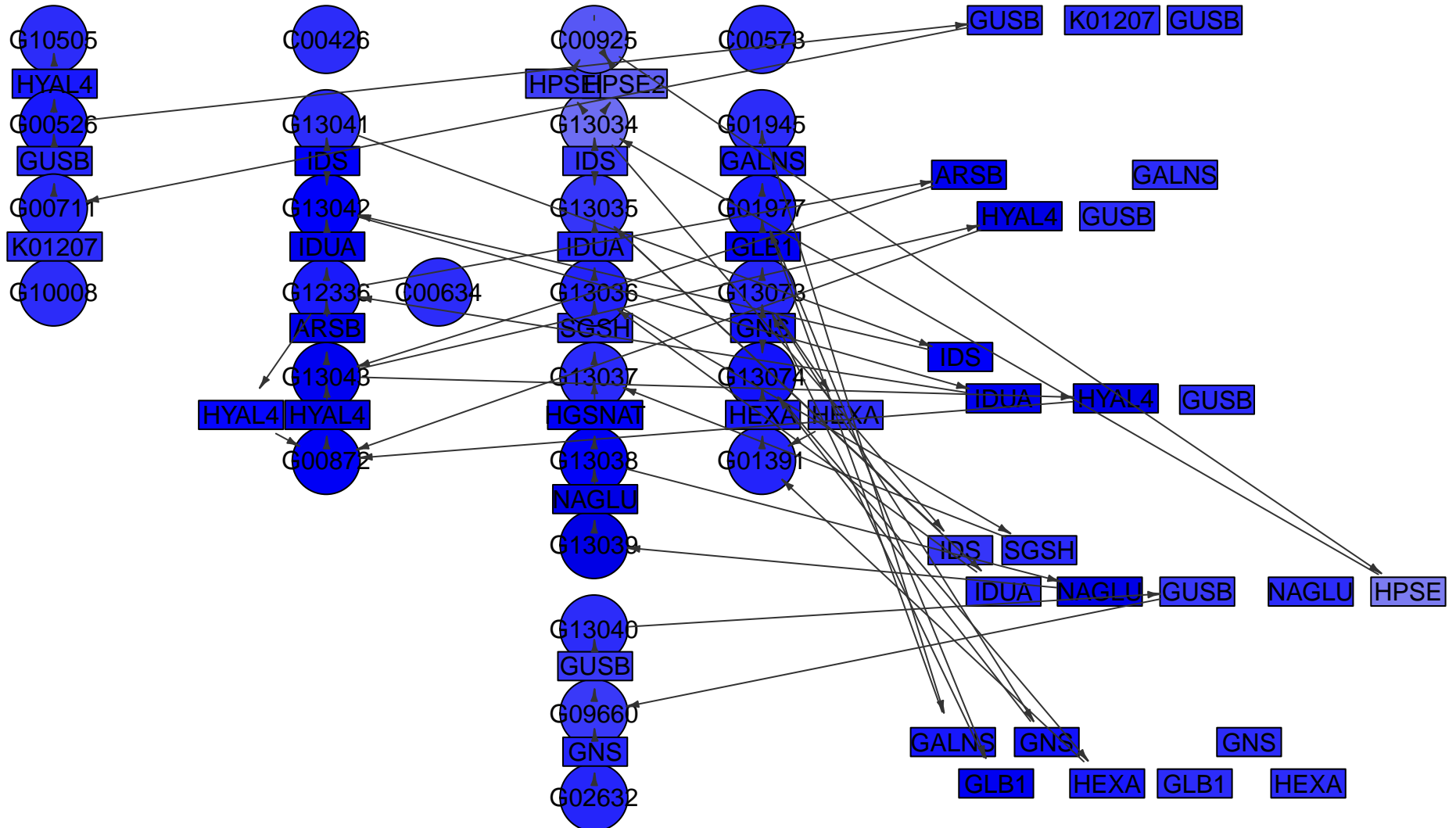
Glycosaminoglycan  
degradation  
MPI-138

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate  
Glycosaminoglycan biosynthesis - heparin sulfate / heparin keratan sulfate



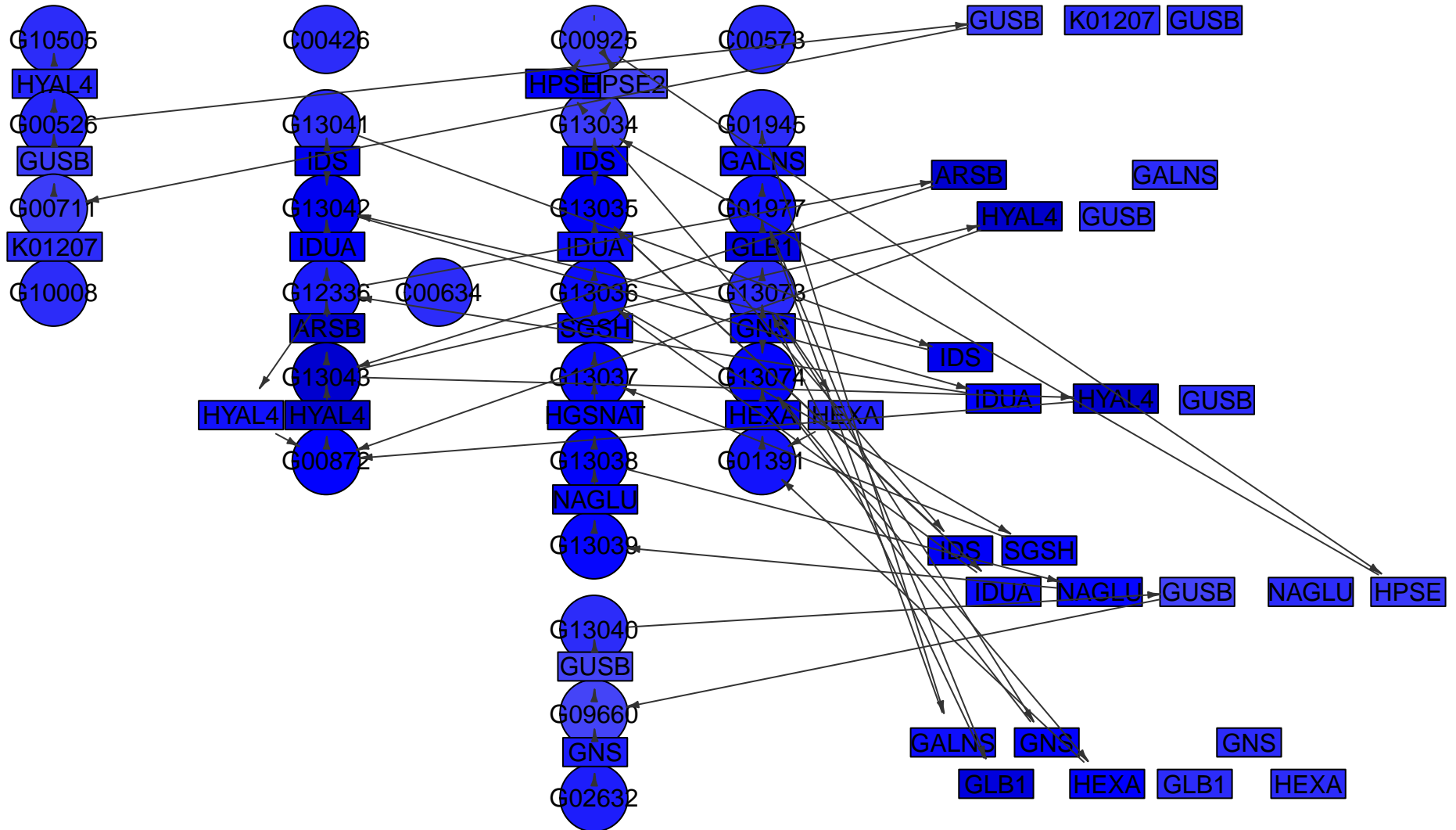
Glycosaminoglycan  
degradation  
MPI-139

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



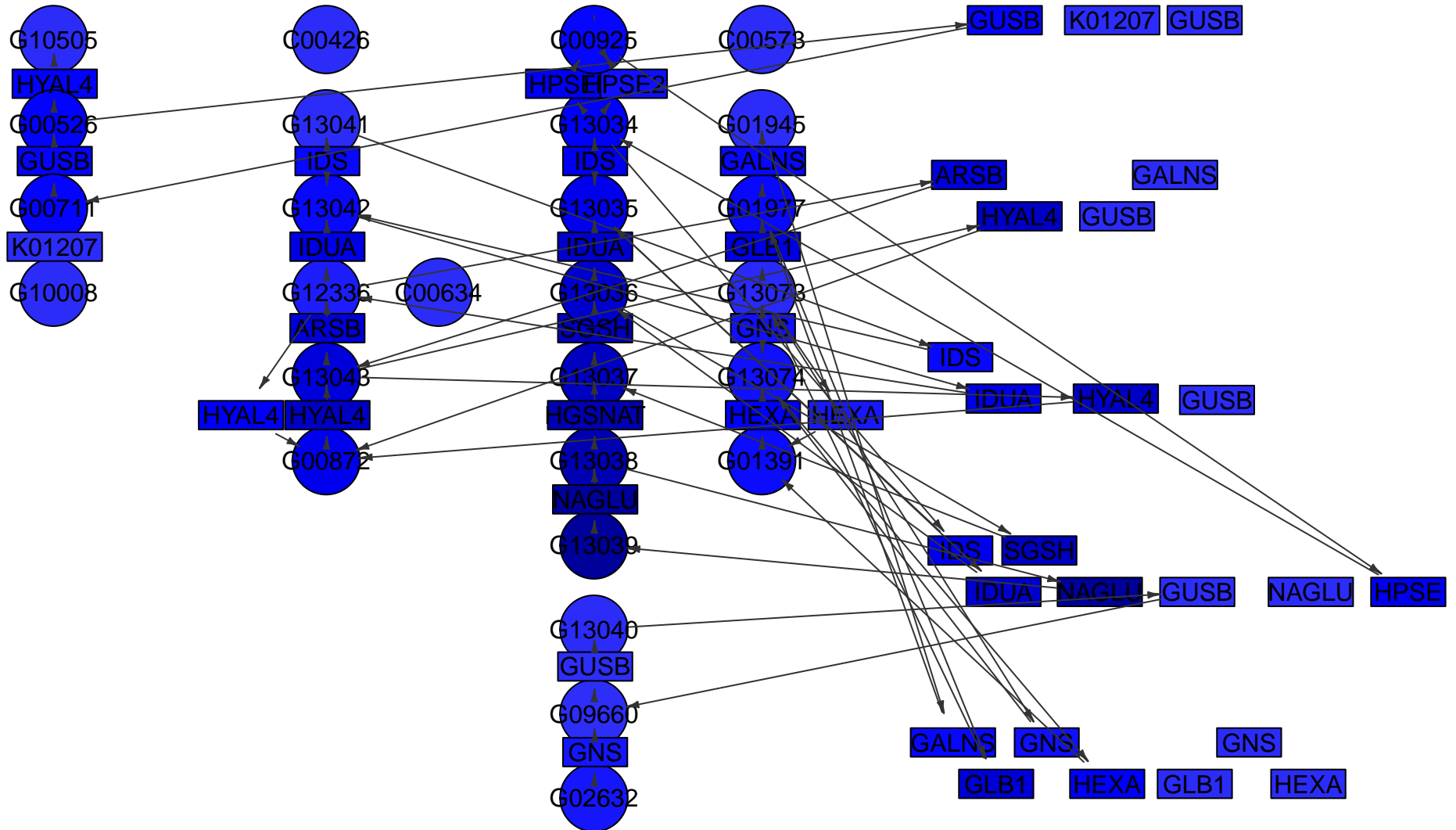
Glycosaminoglycan  
degradation  
MPI-140

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



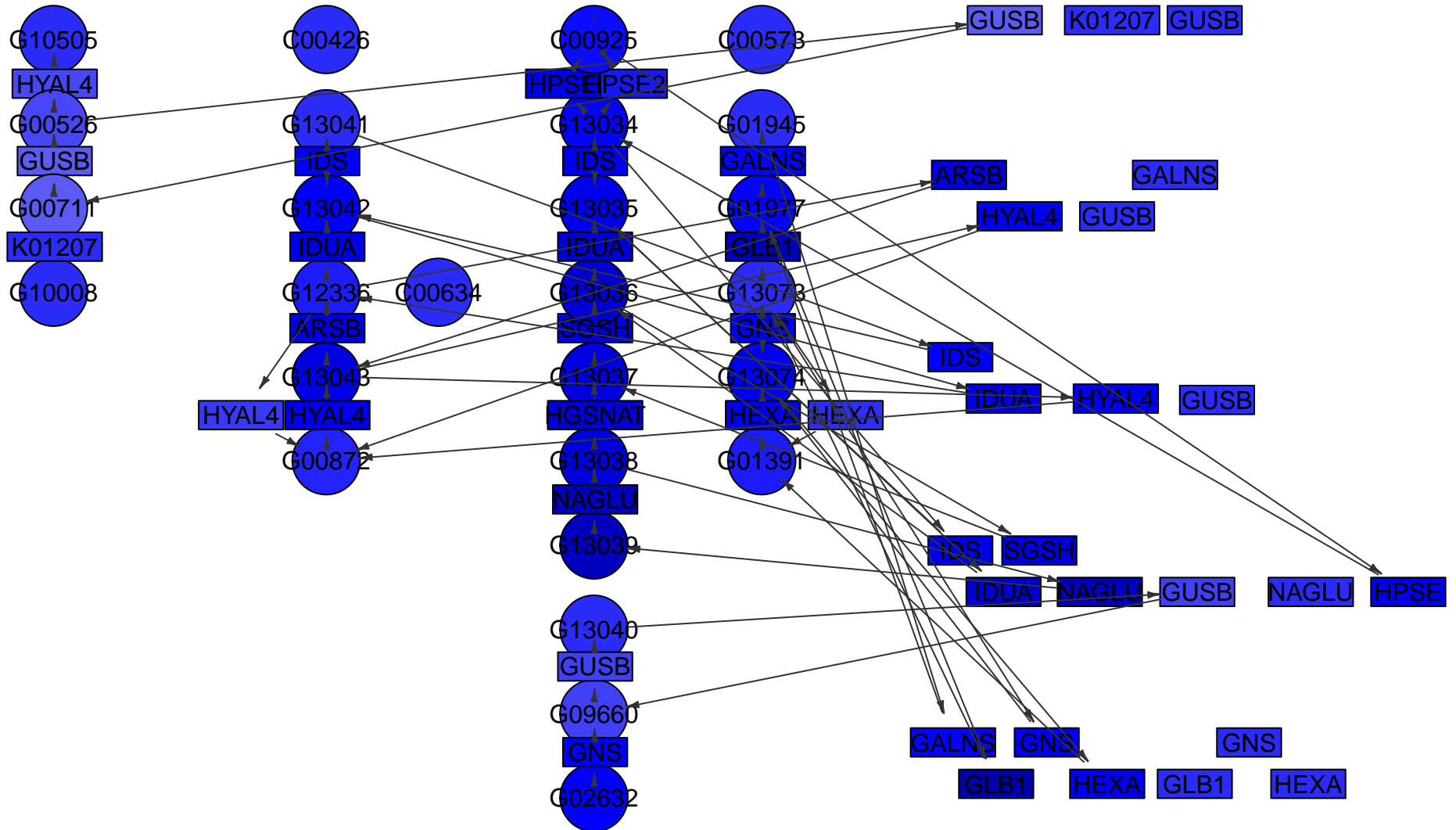
Glycosaminoglycan  
degradation  
MPI-144

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



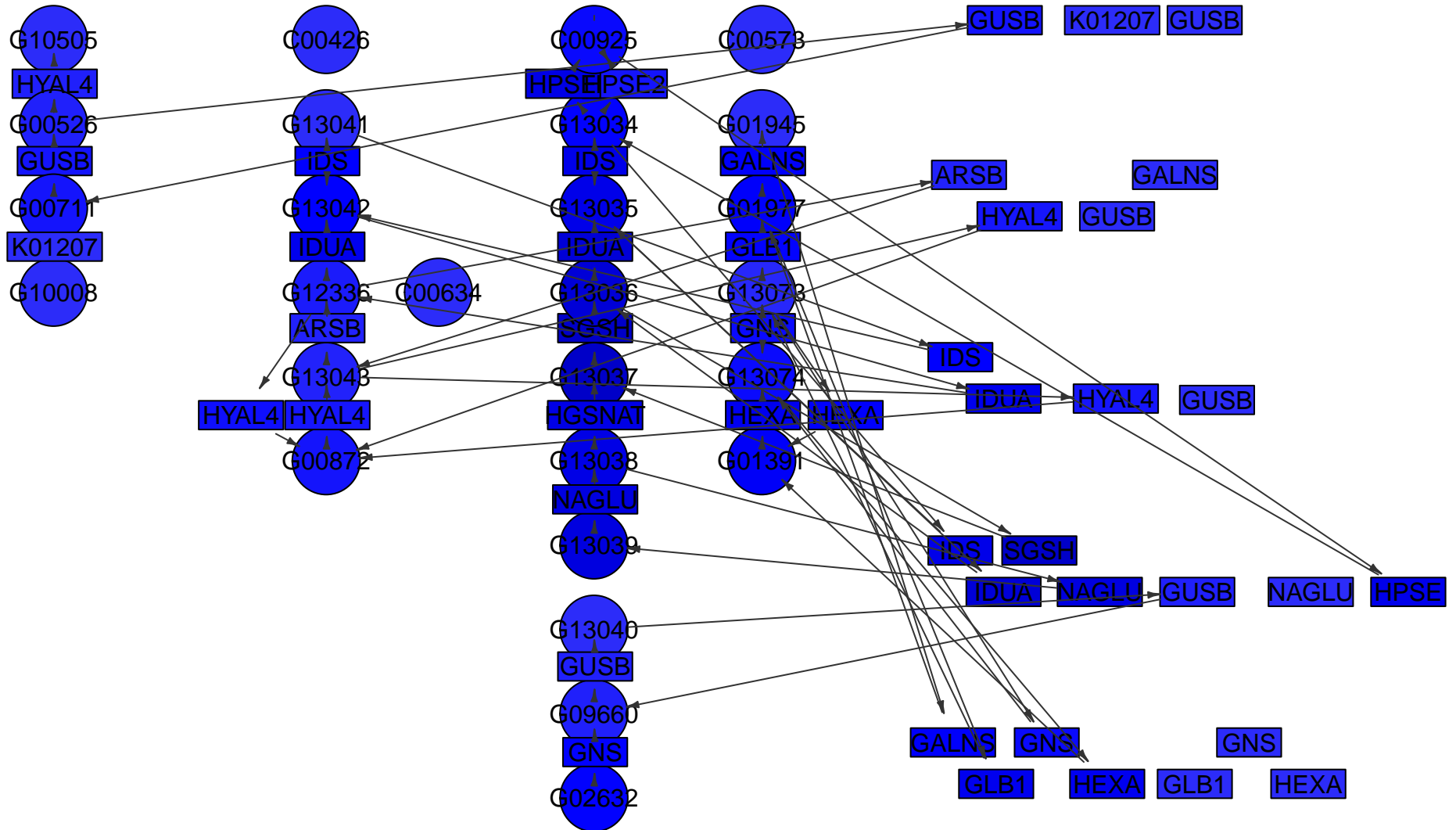
Glycosaminoglycan  
degradation  
MPI-147

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan sulfate / heparin  
keratan sulfate



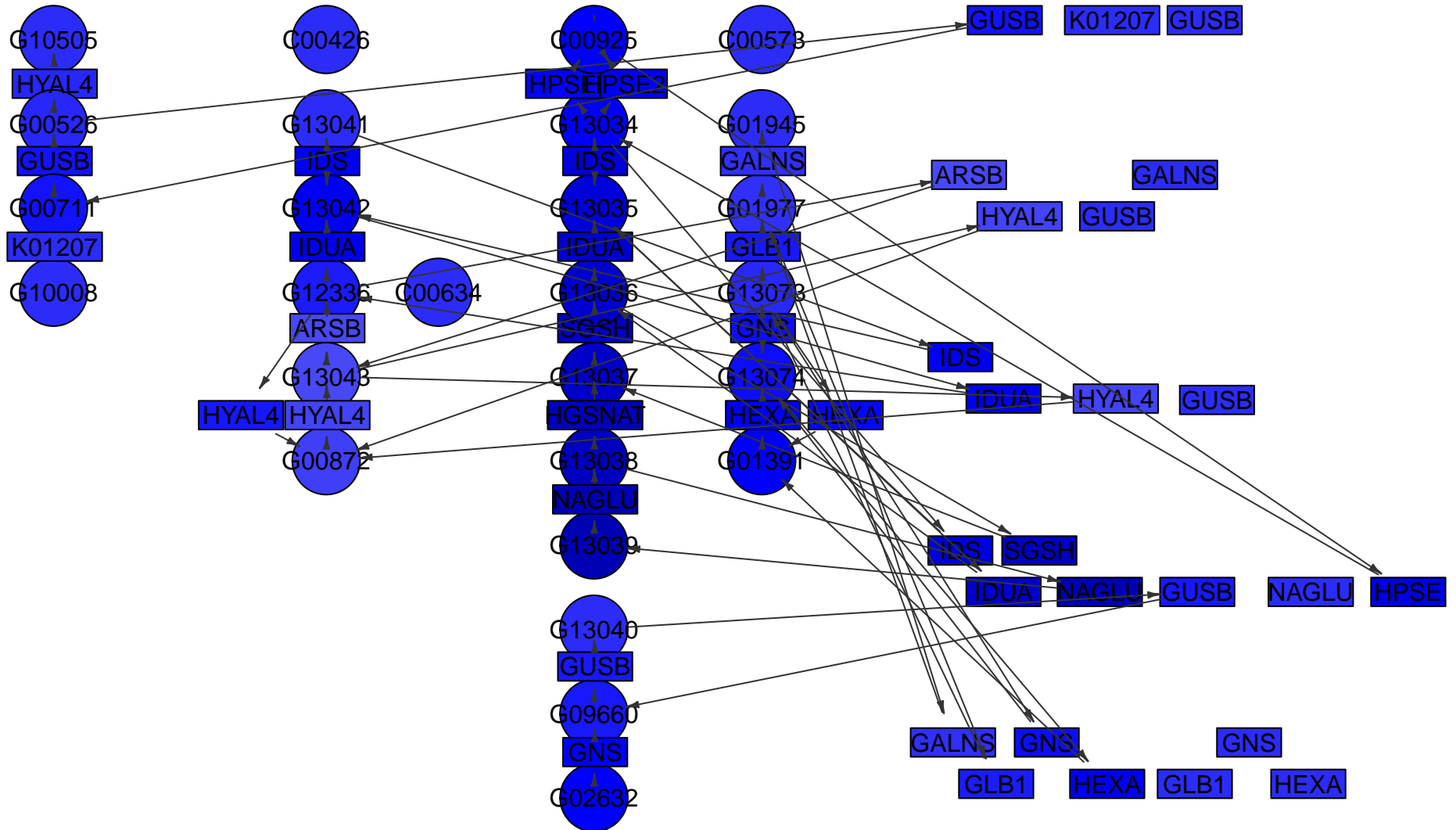
Glycosaminoglycan  
degradation  
MPI-171

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-172

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate

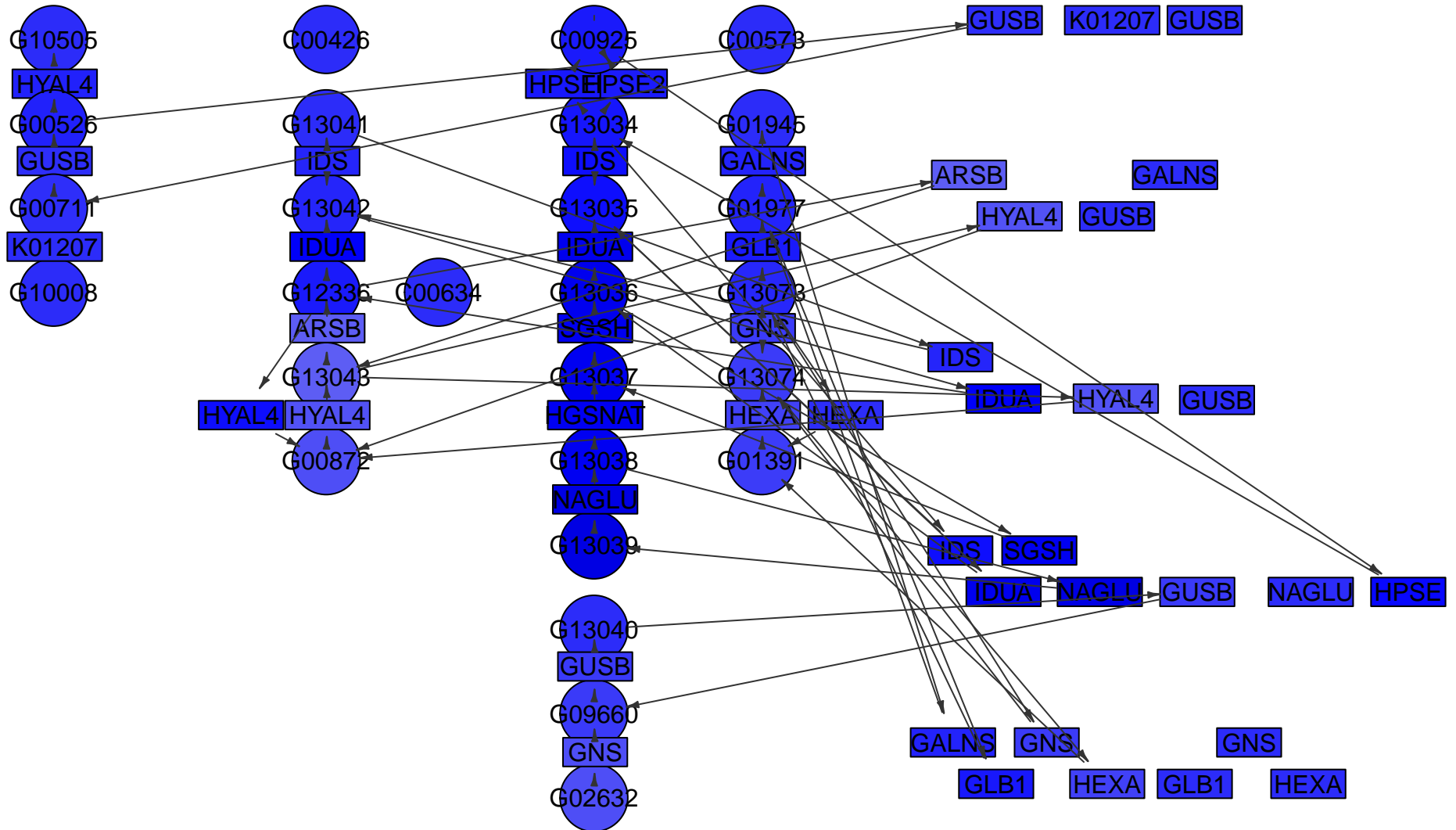






Glycosaminoglycan  
degradation  
MPI-011

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
keratan sulfate





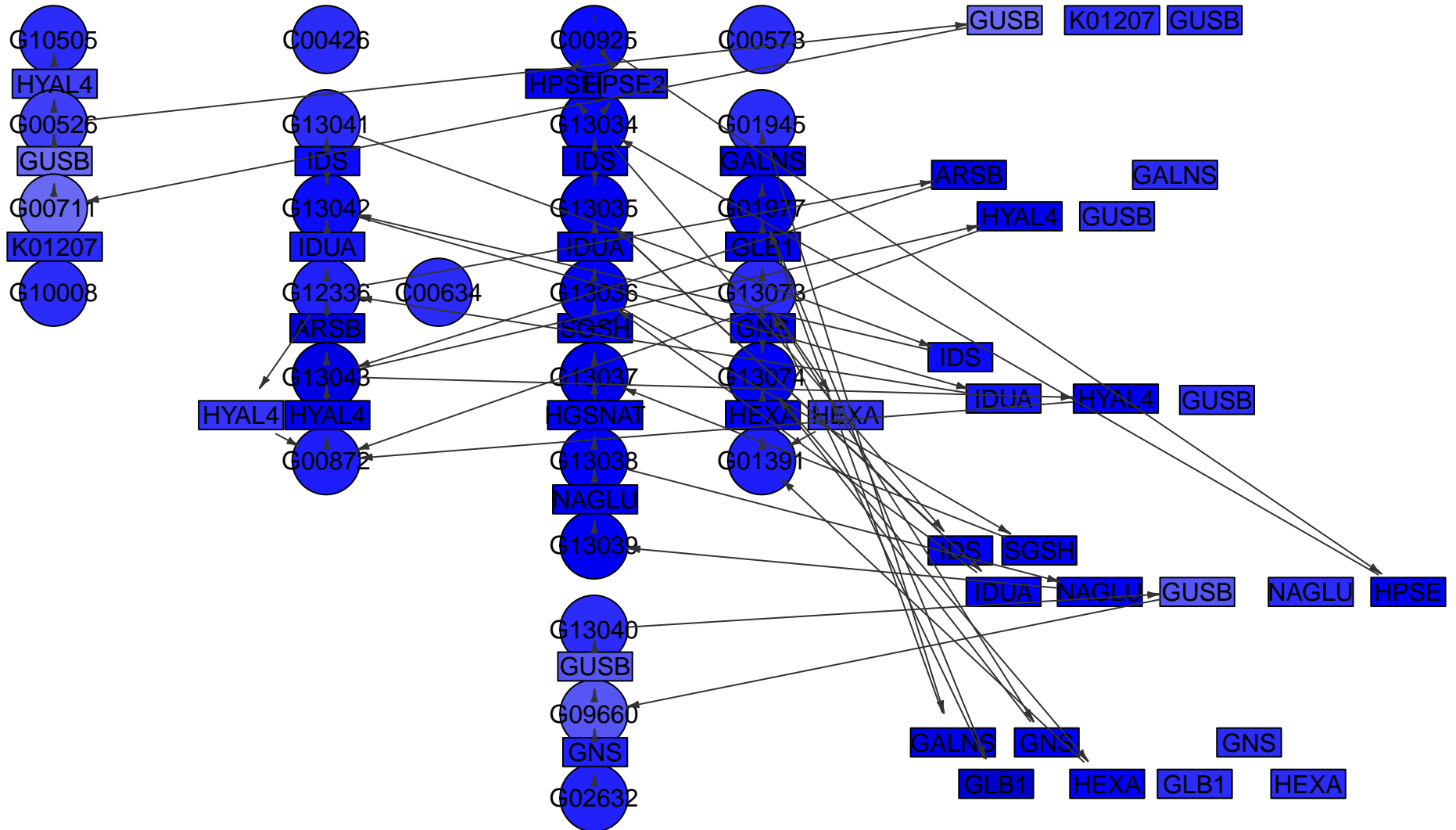






Glycosaminoglycan  
degradation  
MPI-038

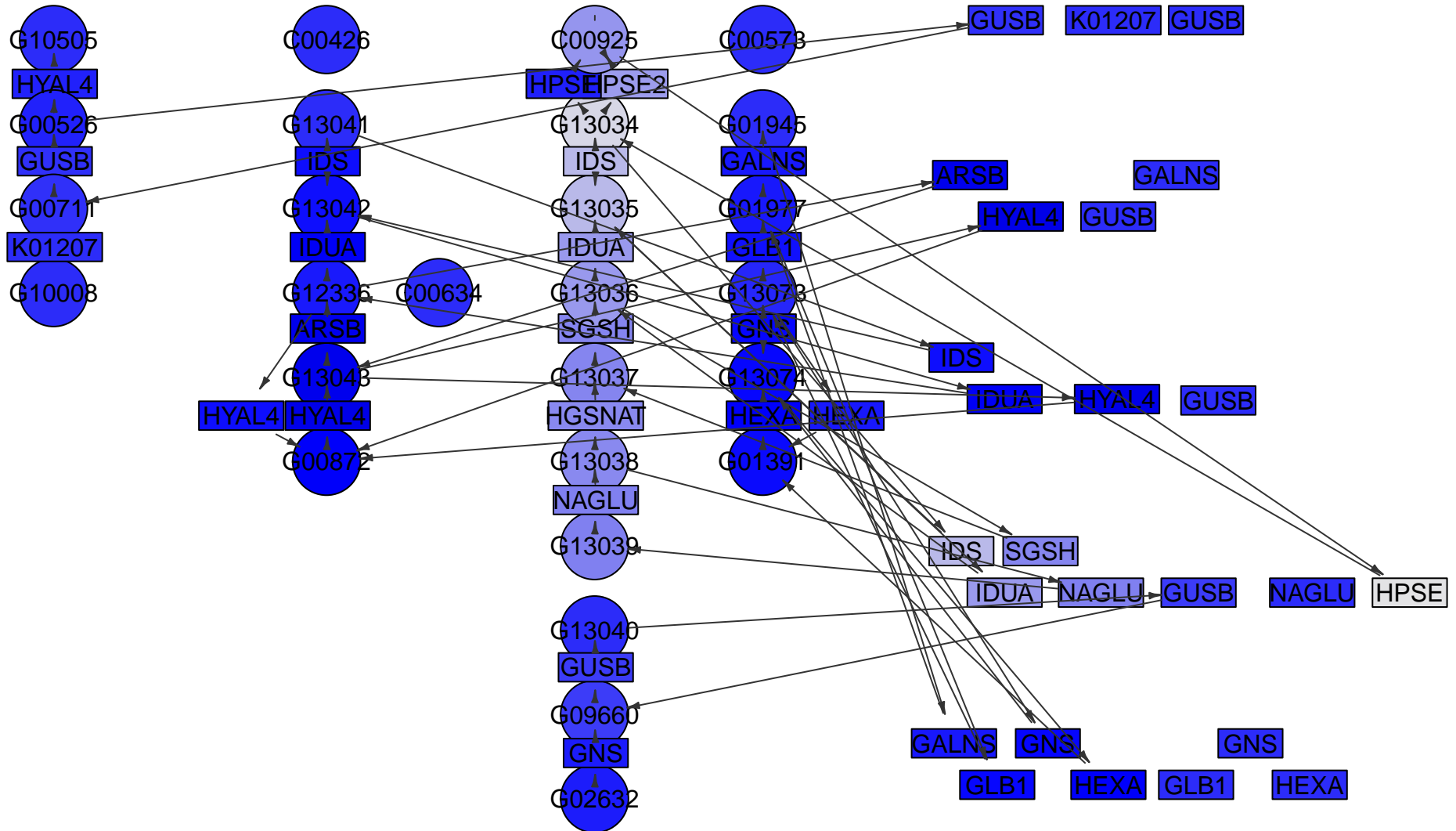
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





Glycosaminoglycan  
degradation  
MPI-041

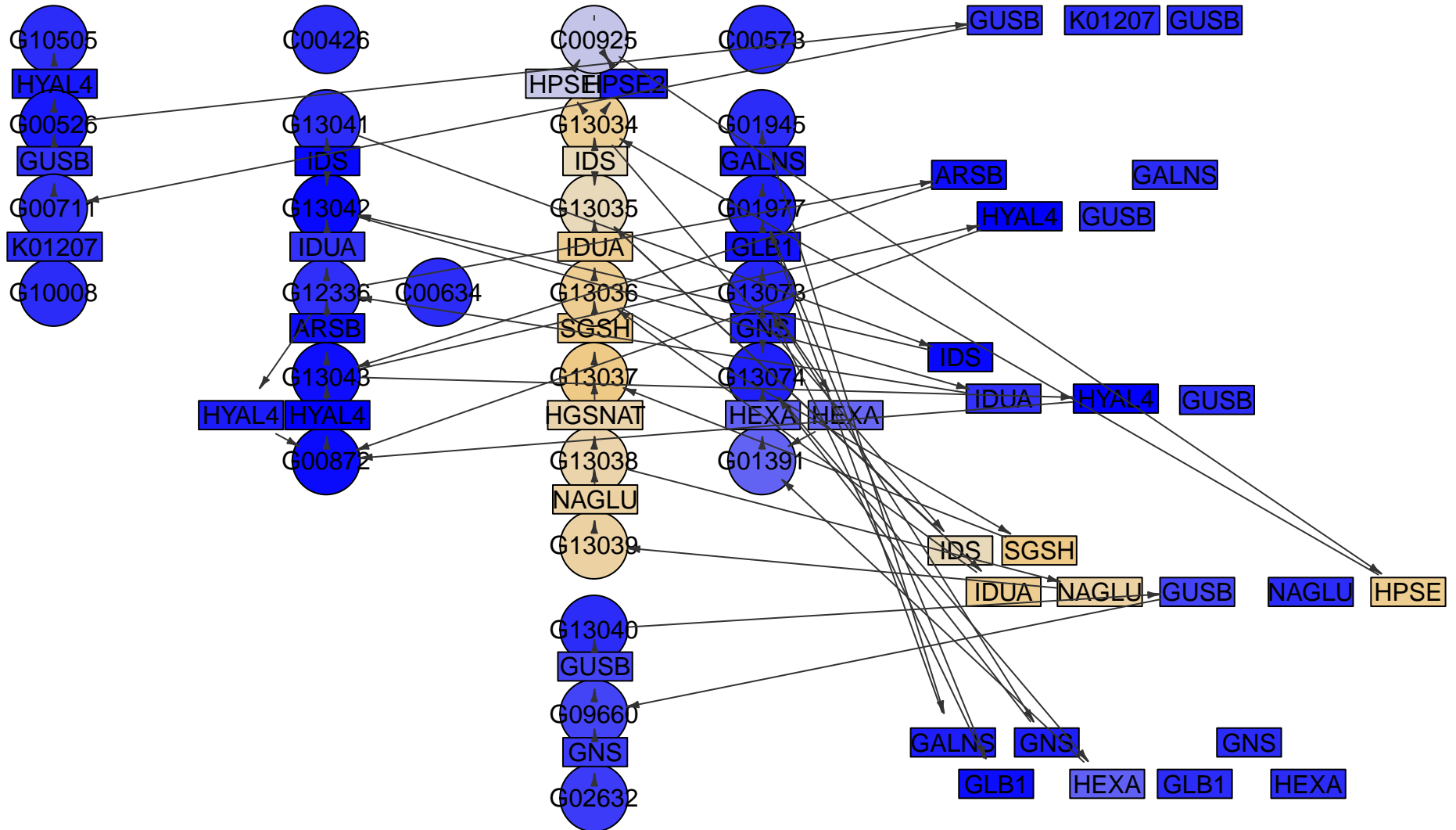
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin





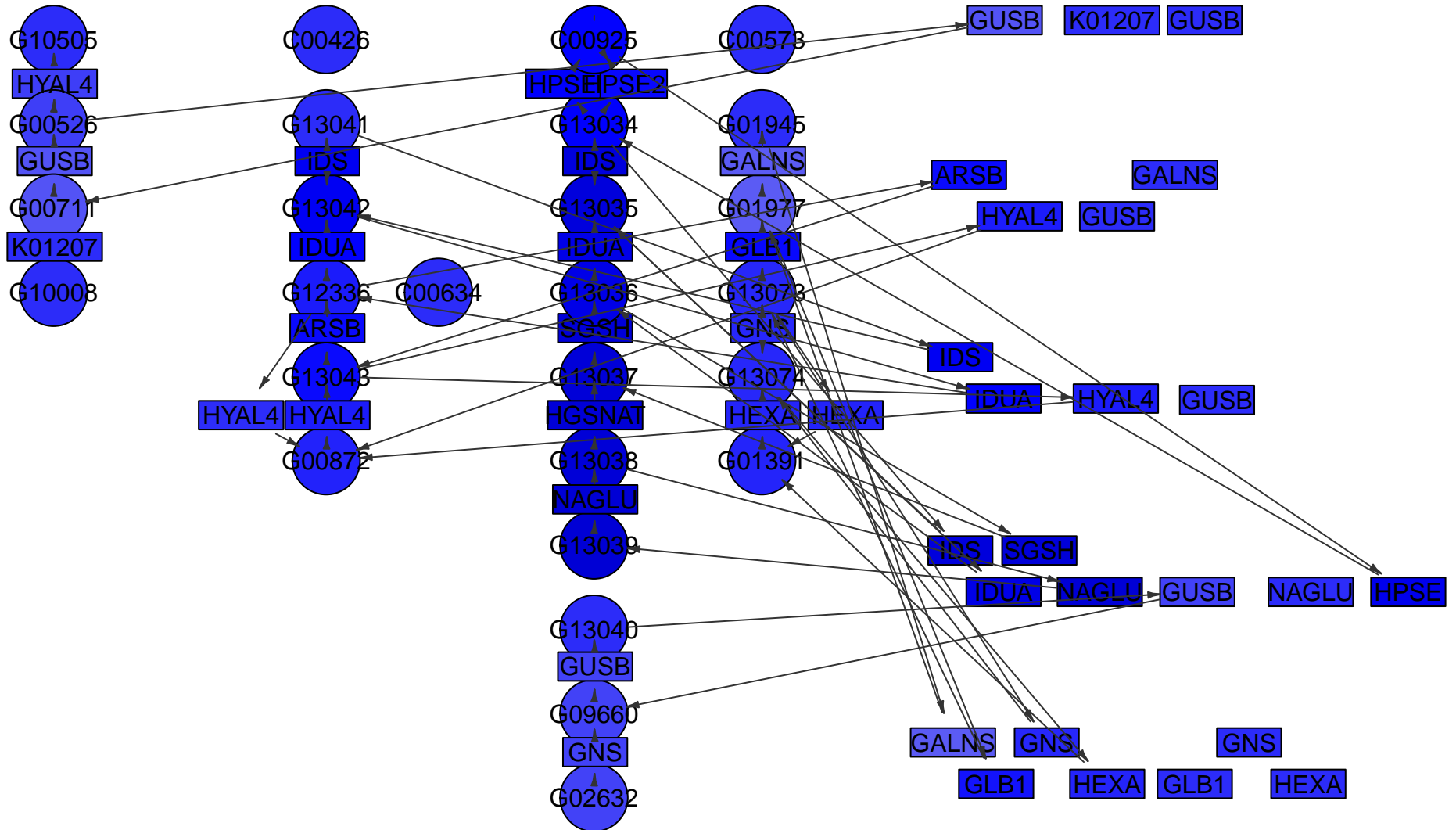
Glycosaminoglycan  
degradation  
MPI-050

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
Glycosaminoglycan synthesis -  
sulfate / heparin  
keratan sulfate



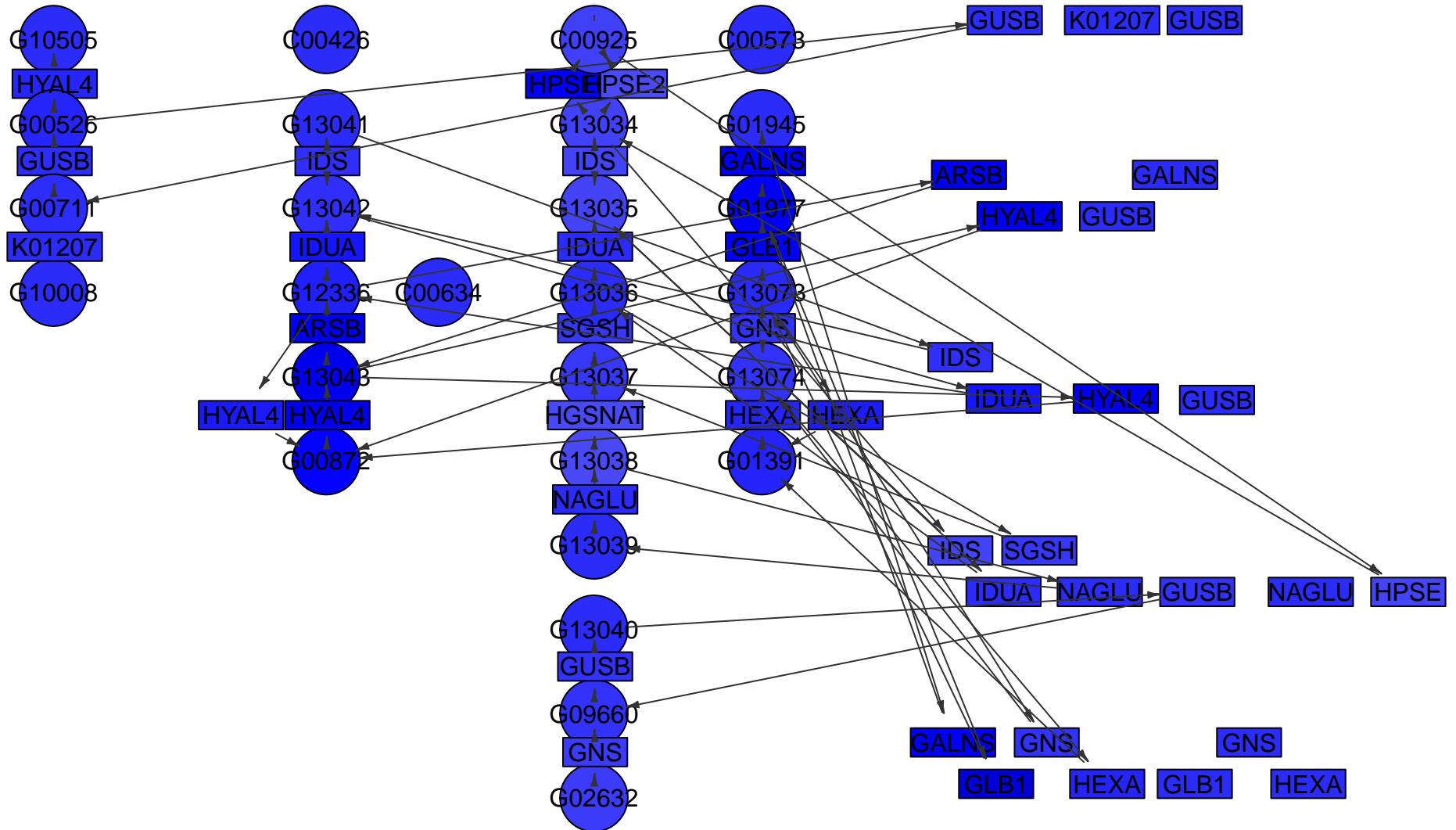
Glycosaminoglycan  
degradation  
MPI-051

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



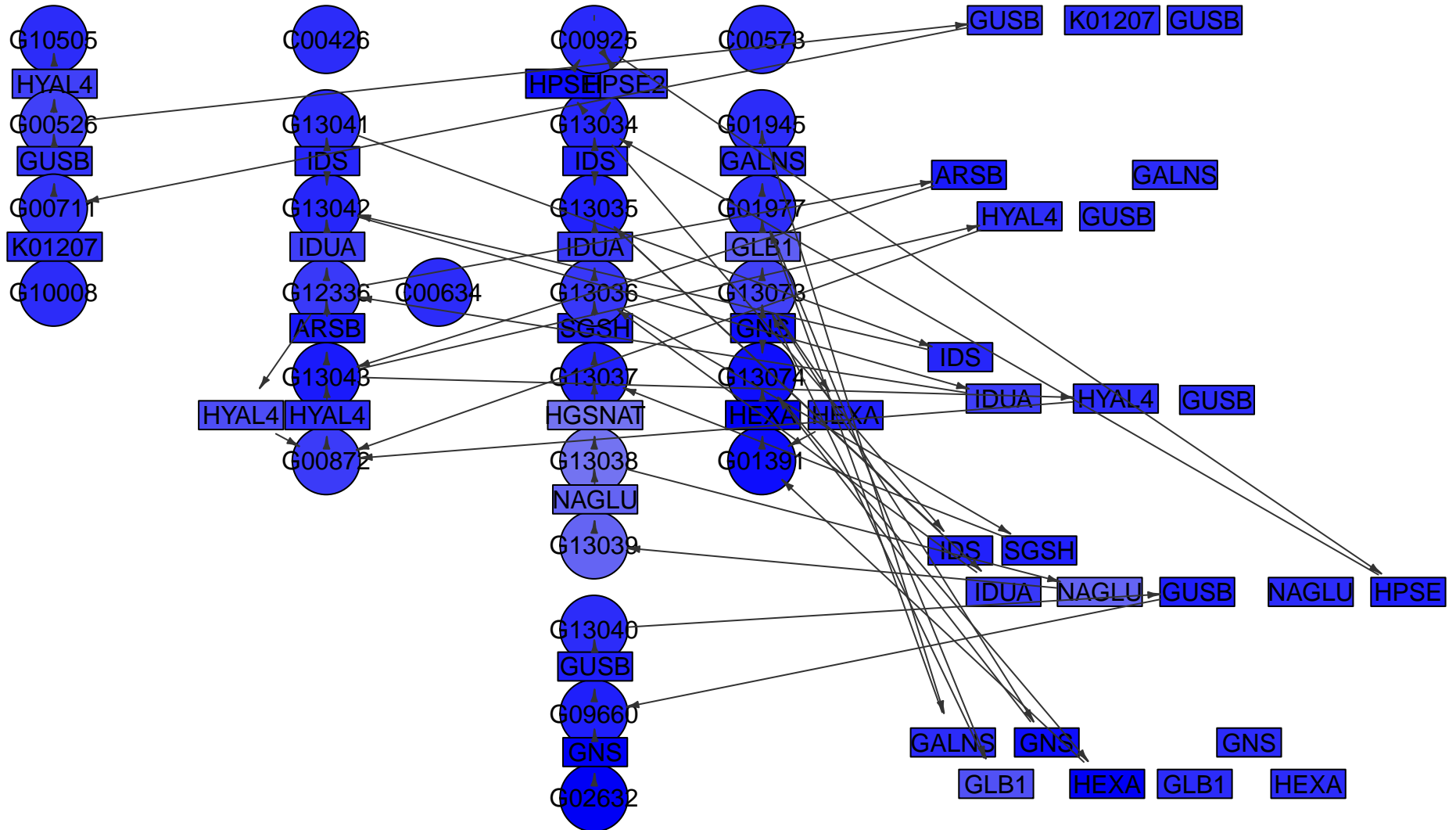
Glycosaminoglycan  
degradation  
MPI-054

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin



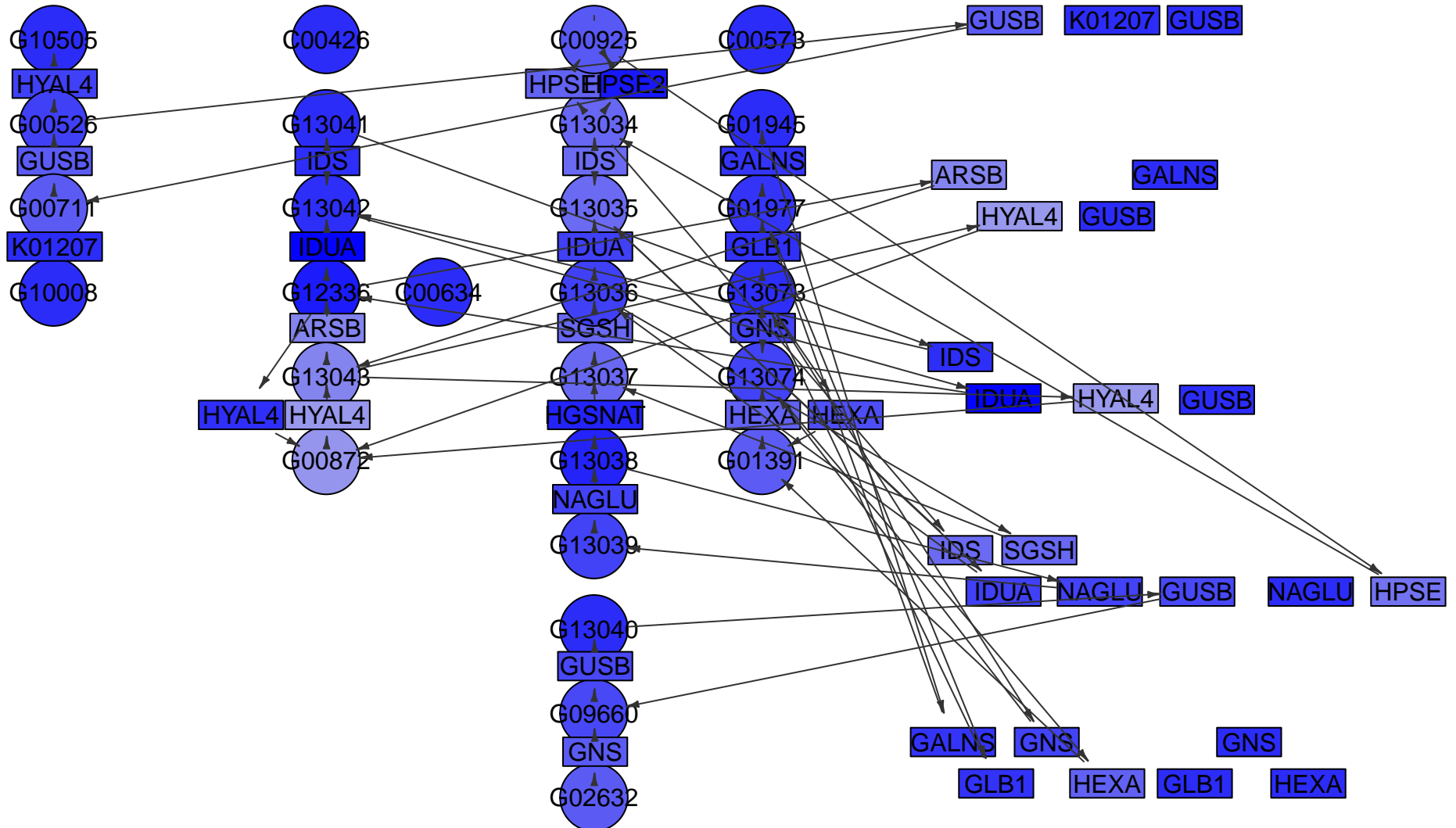
Glycosaminoglycan  
degradation  
MPI-059

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-060

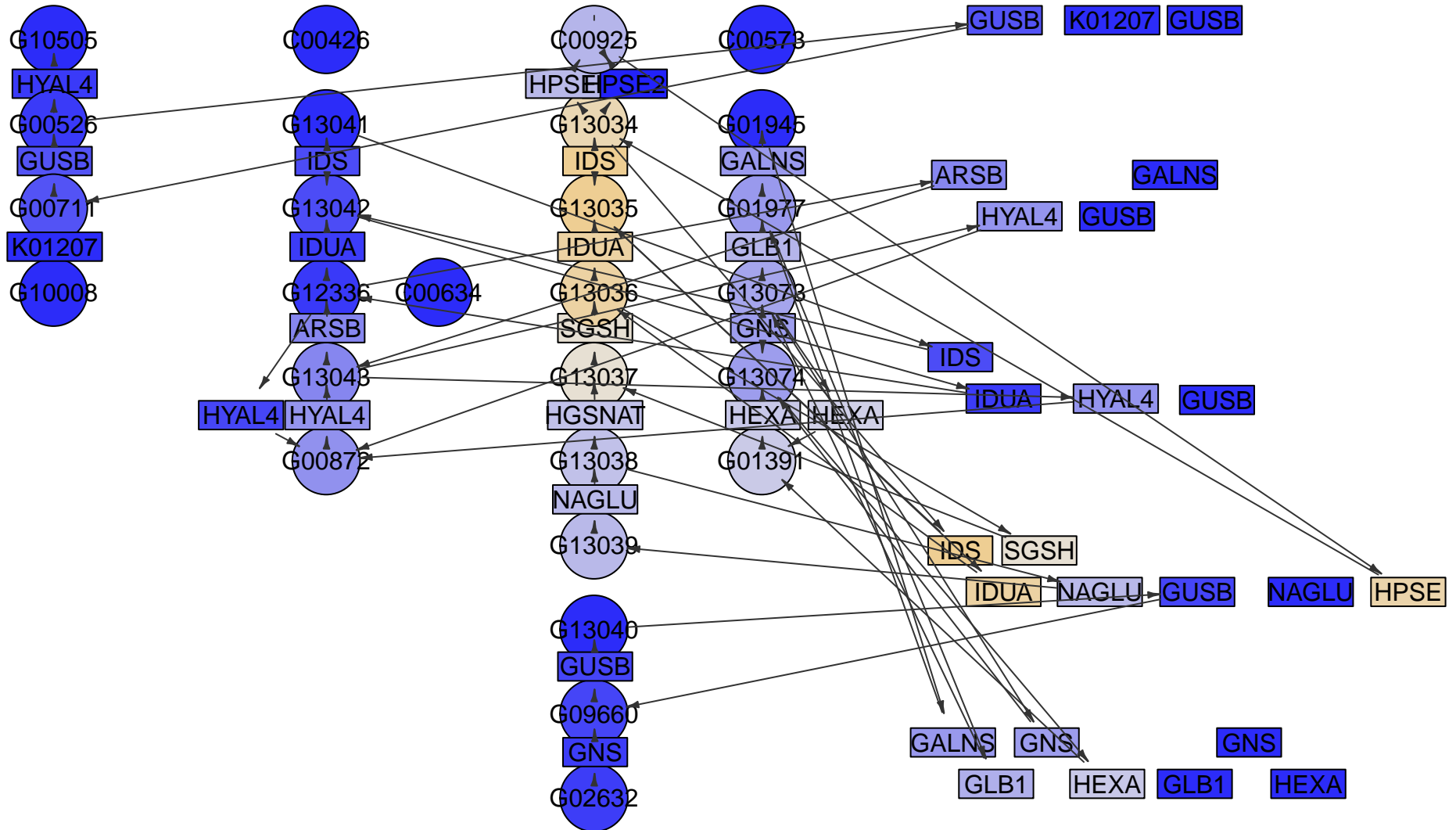
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





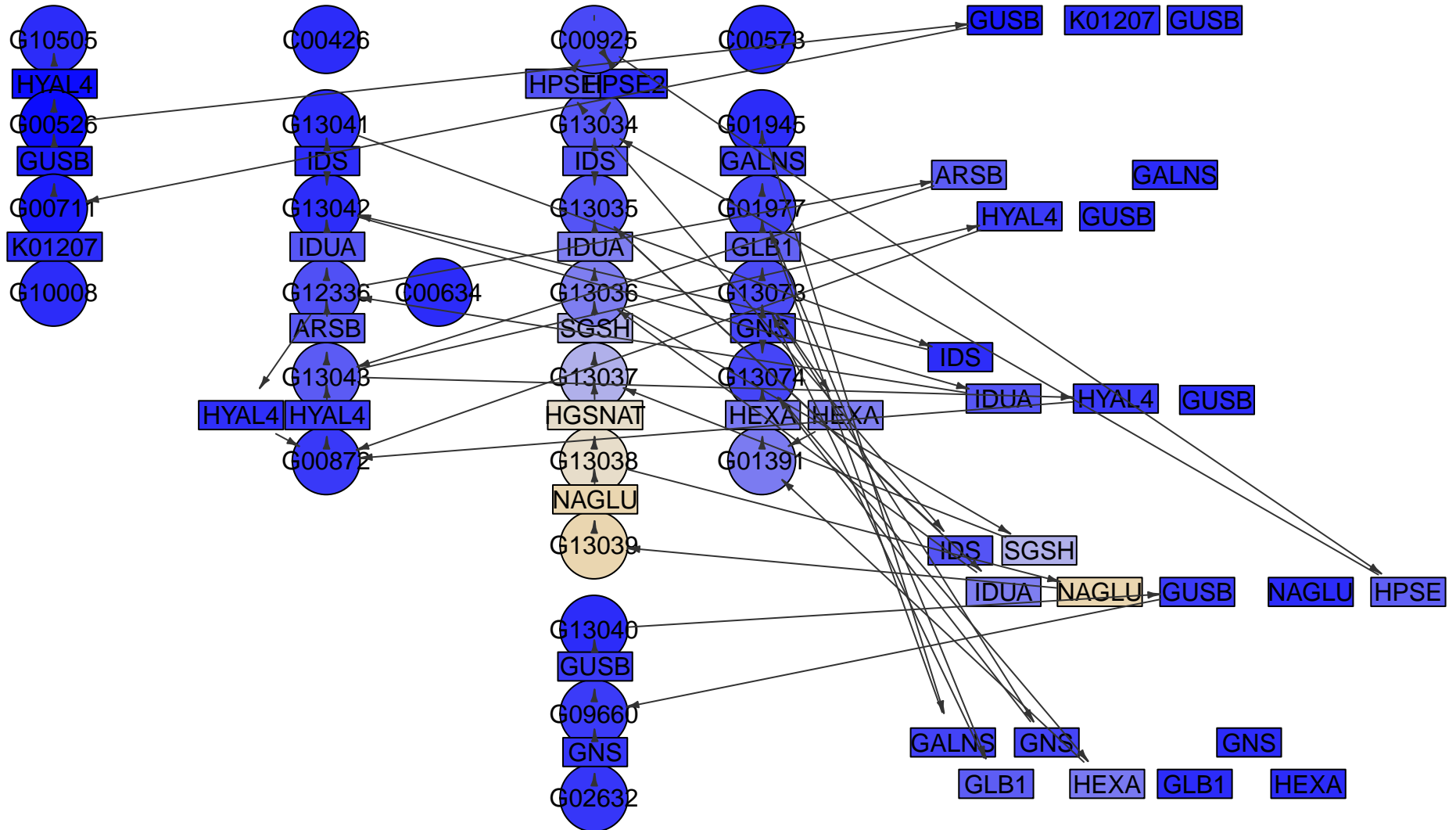
Glycosaminoglycan  
degradation  
MPI-061

Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



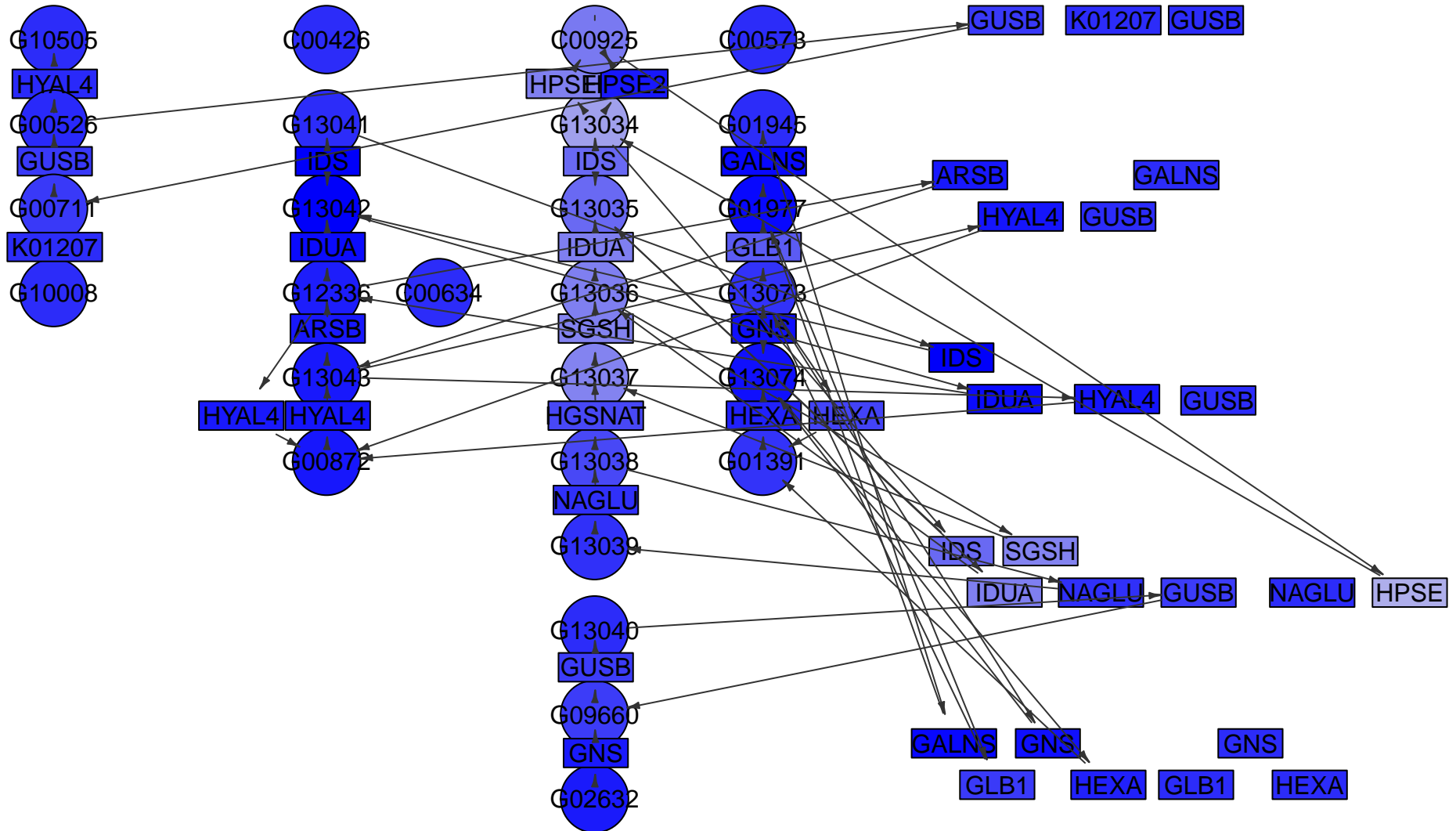
Glycosaminoglycan  
degradation  
MPI-064

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



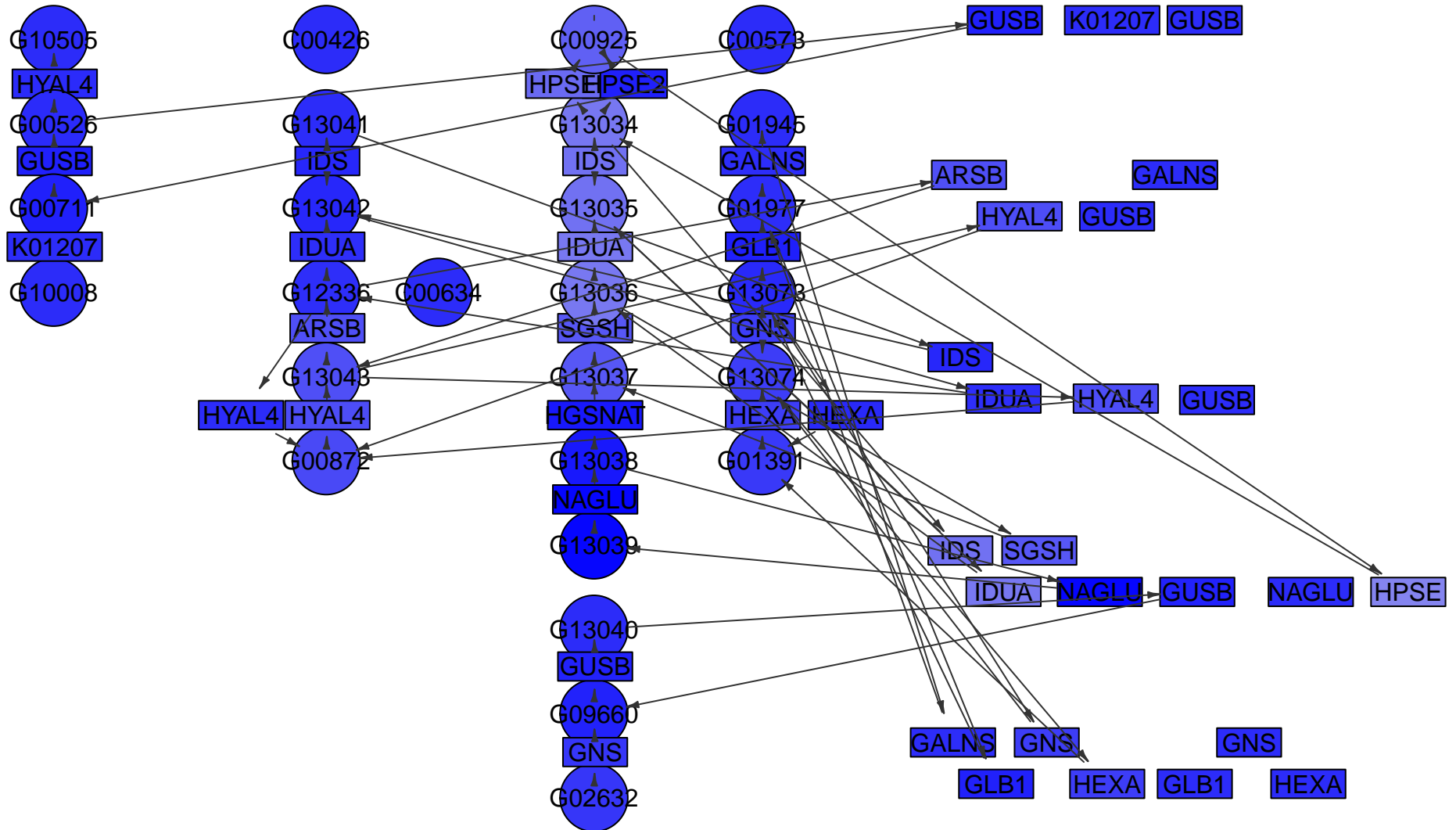
Glycosaminoglycan  
degradation  
MPI-070

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - keratan sulfate



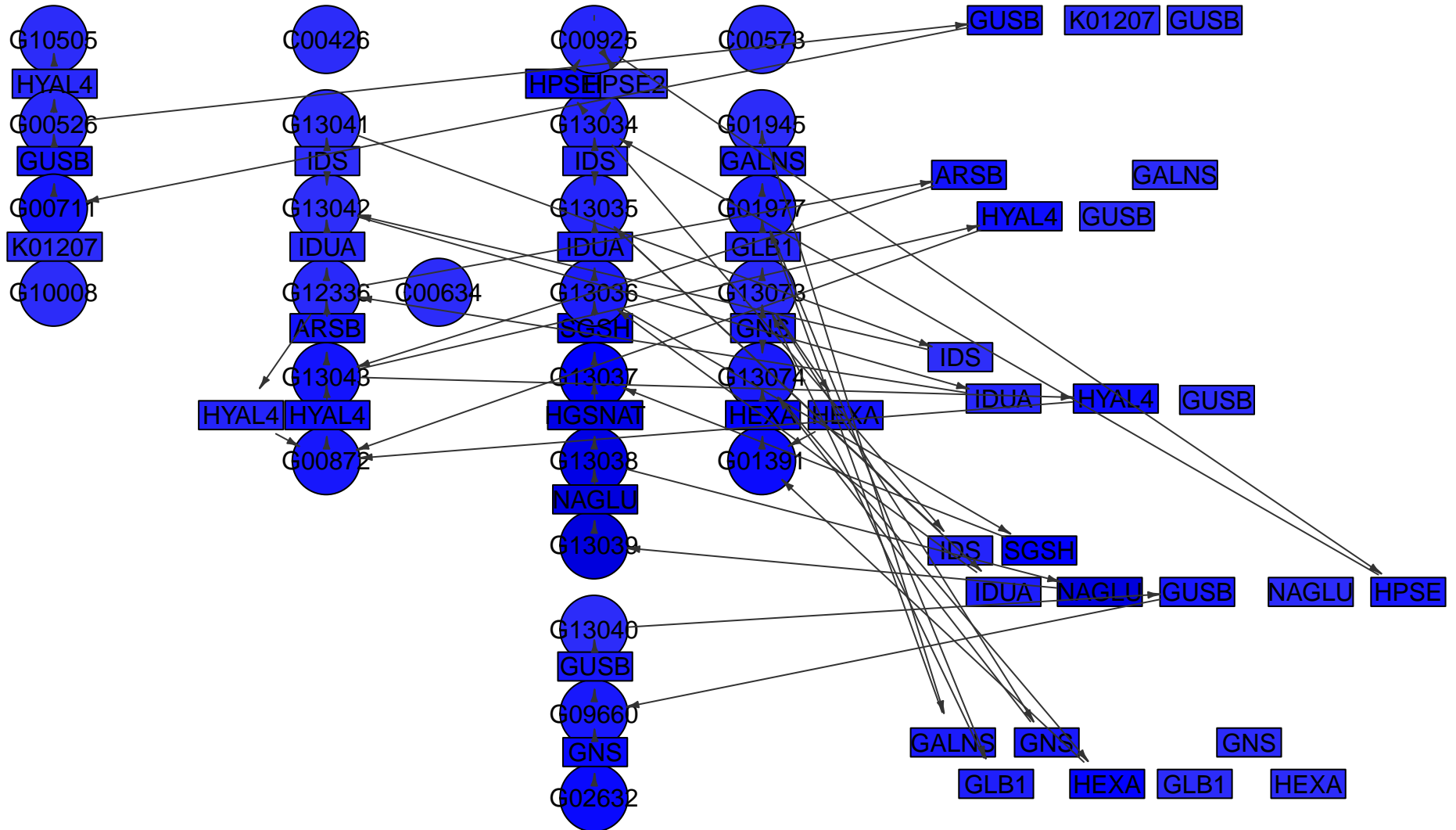
Glycosaminoglycan  
degradation  
MPI-072

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



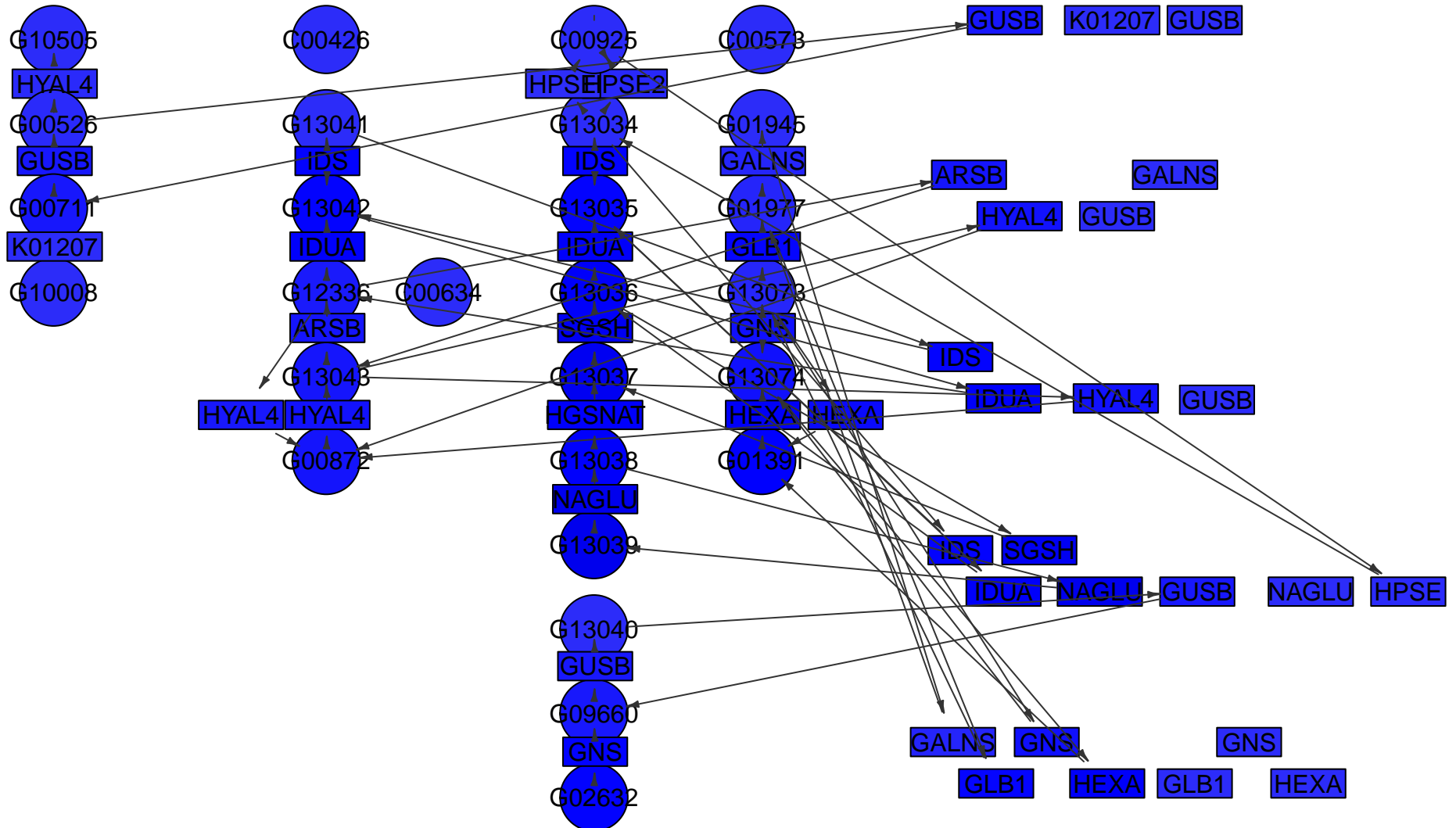
Glycosaminoglycan  
degradation  
MPI-093

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-094

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate

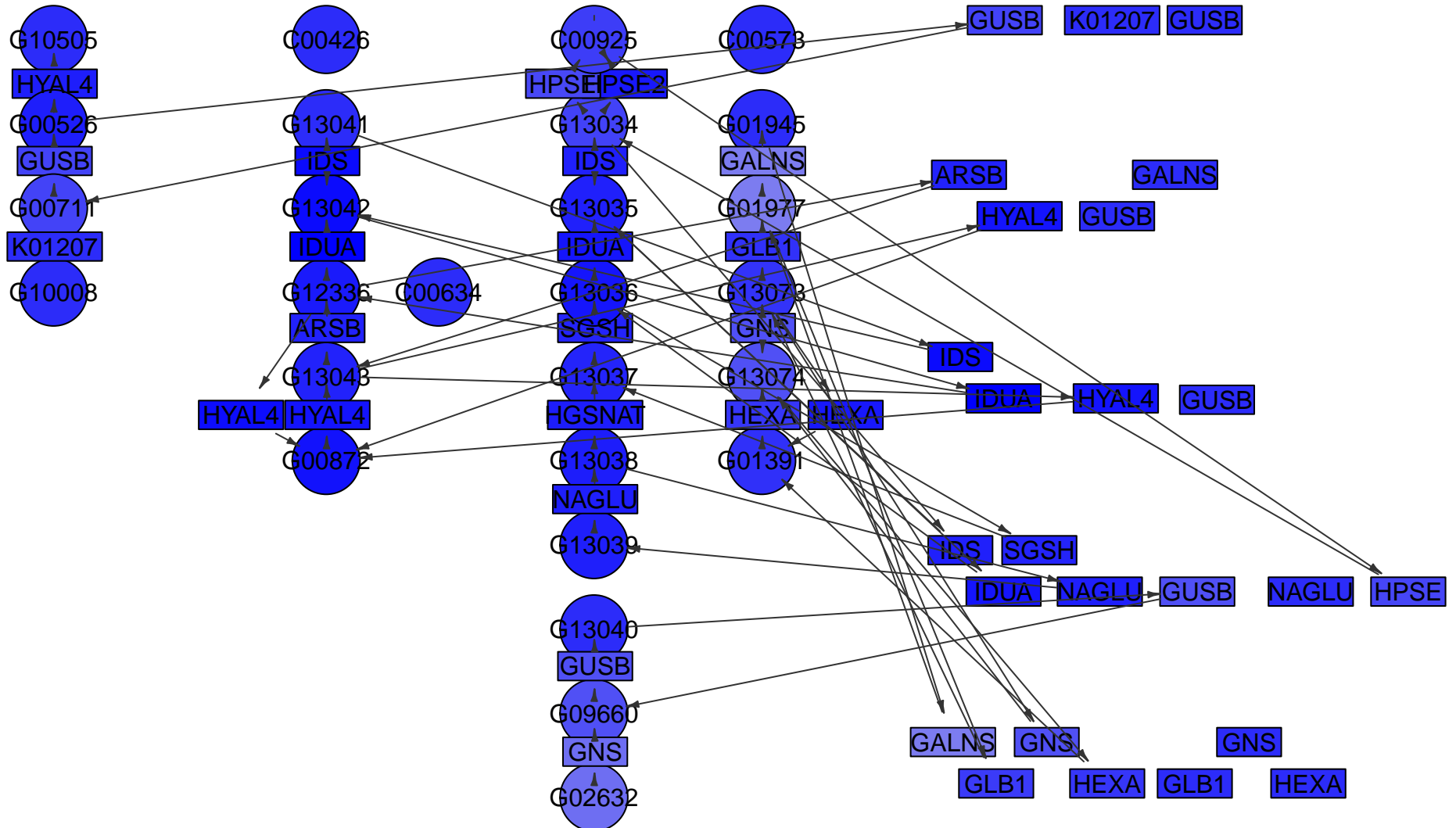






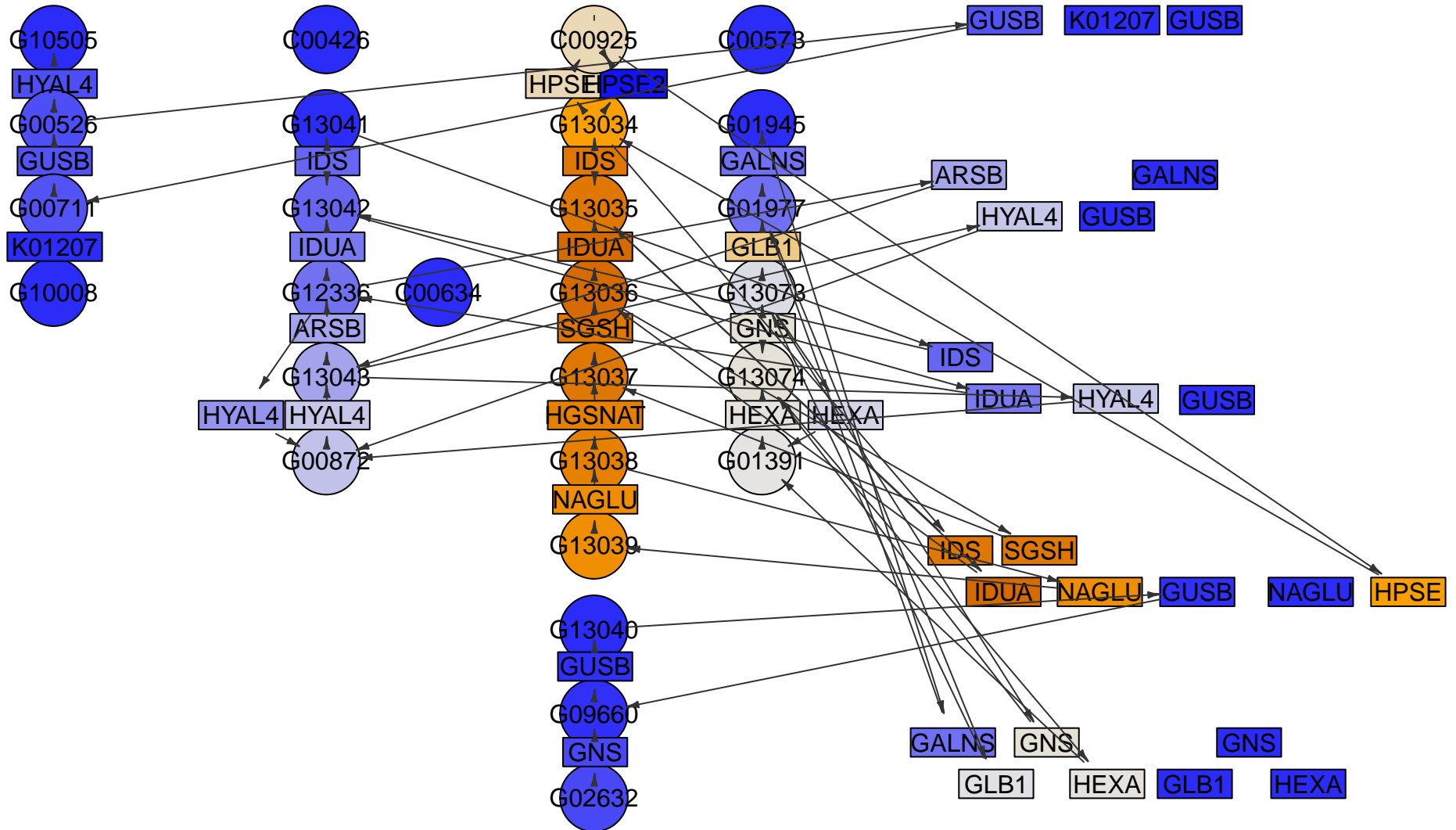
Glycosaminoglycan  
degradation  
MPI-104

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



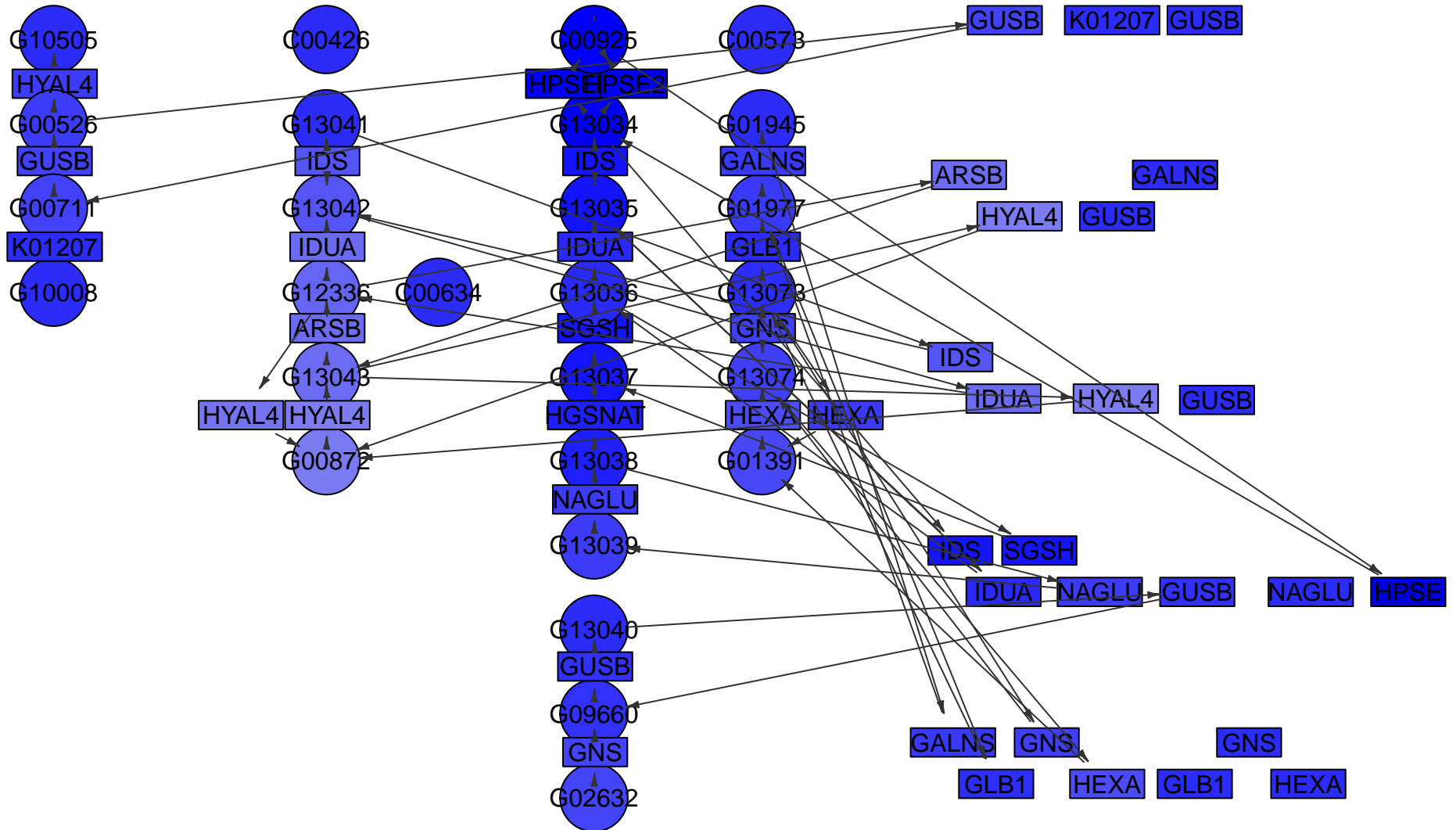
Glycosaminoglycan  
degradation  
MPI-107

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
Glycosaminoglycan synthesis –  
sulfate / heparin  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-112

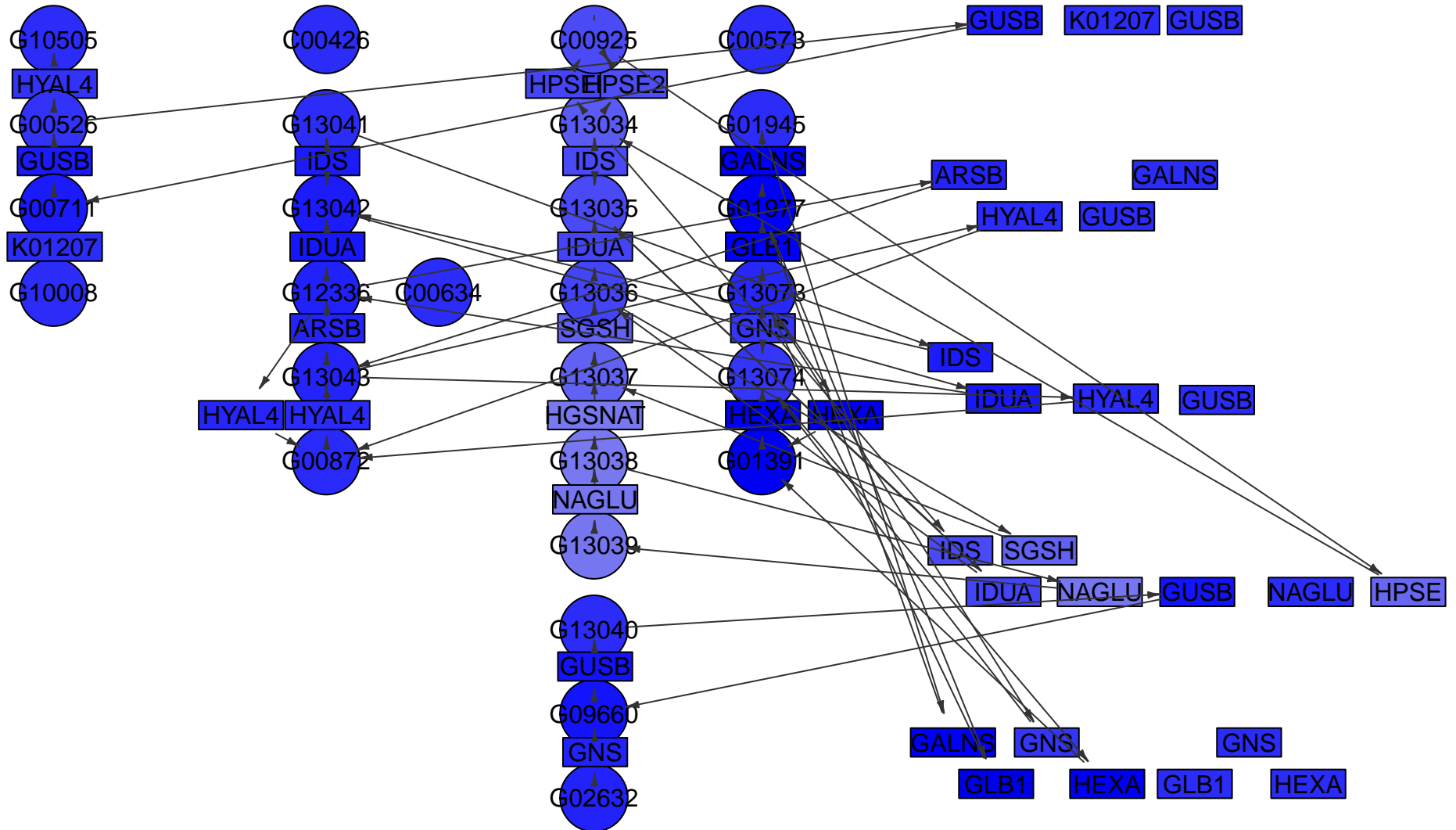
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





Glycosaminoglycan  
degradation  
MPI-117

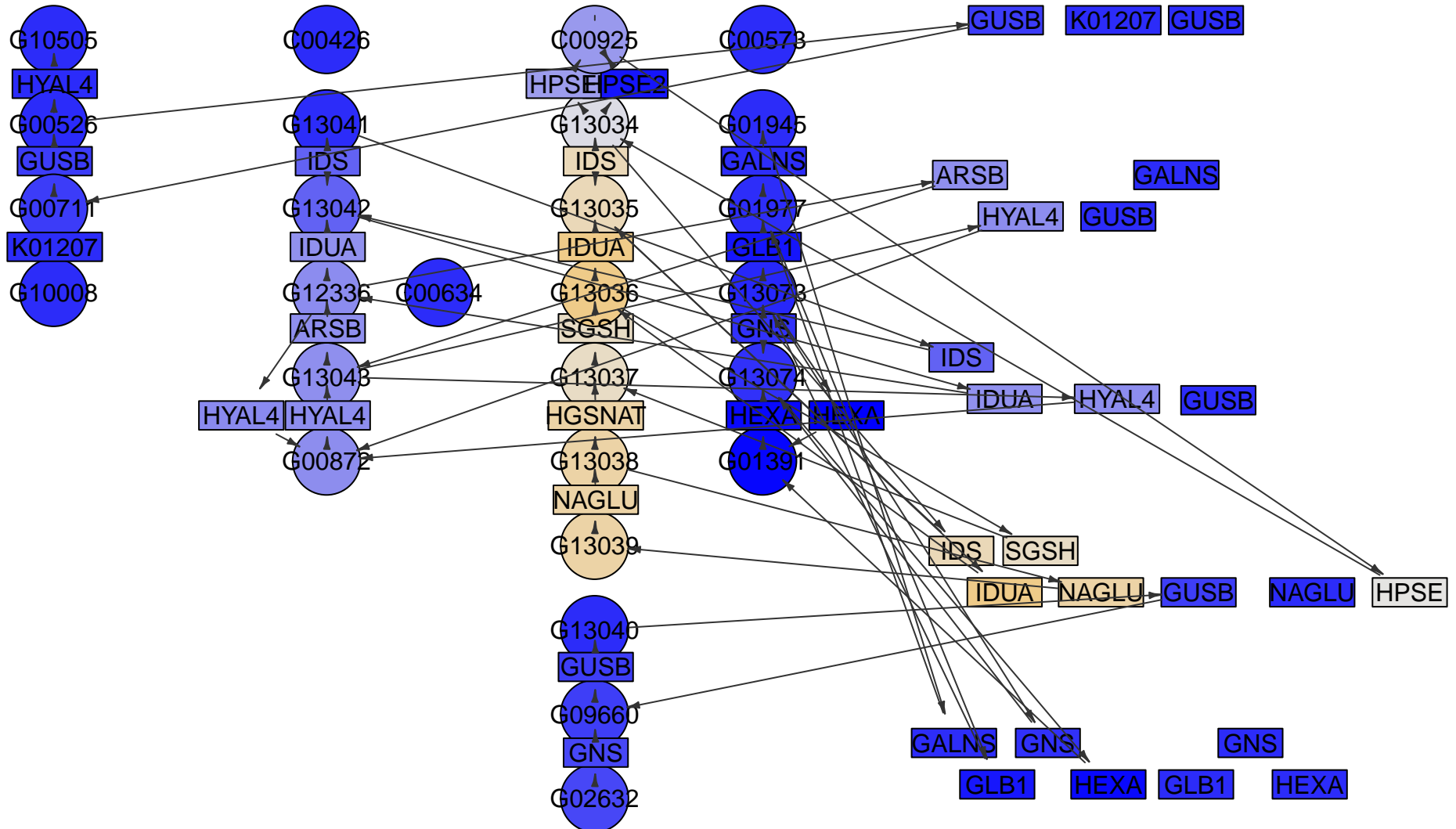
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





Glycosaminoglycan  
degradation  
MPI-121

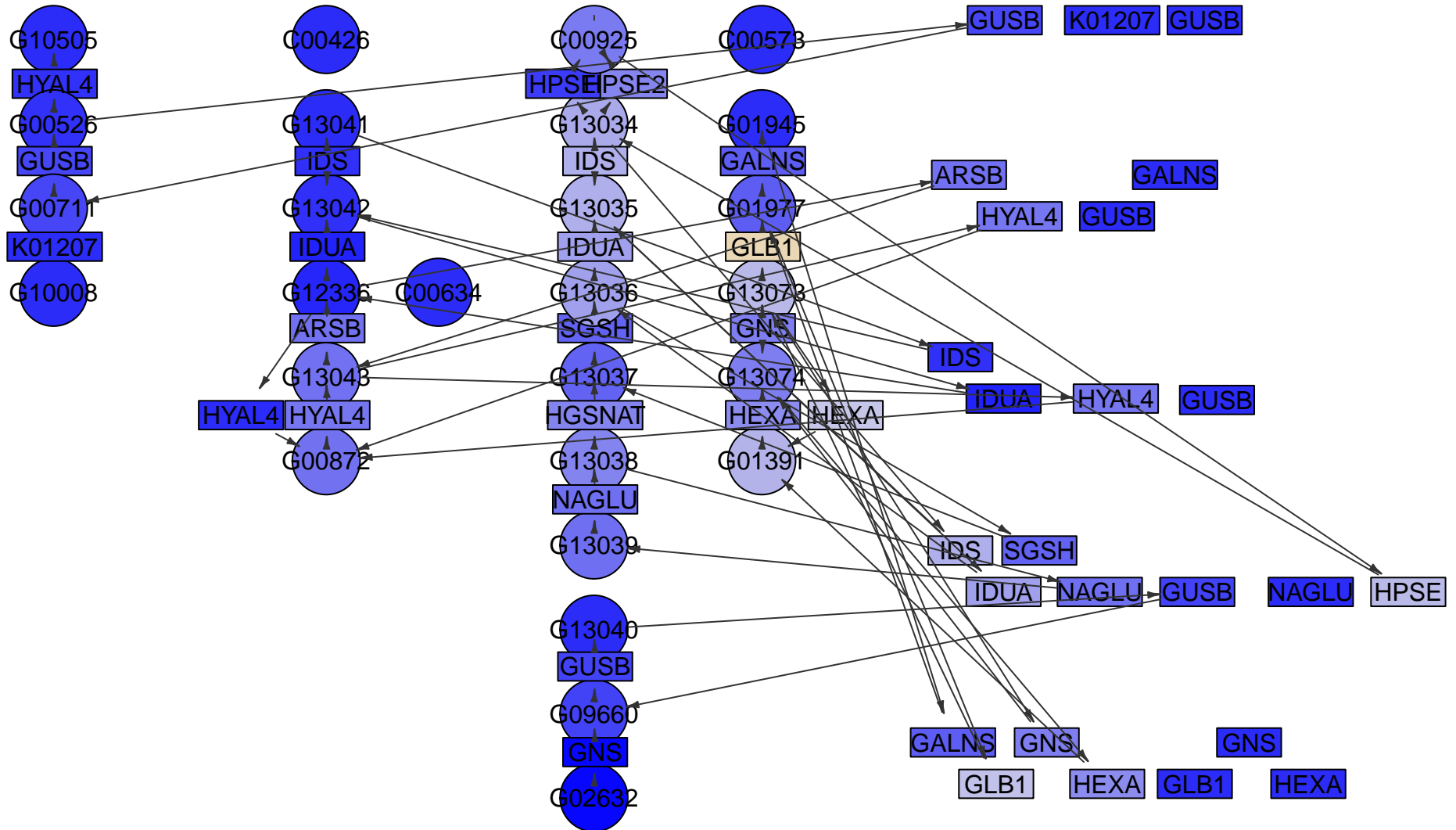
Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





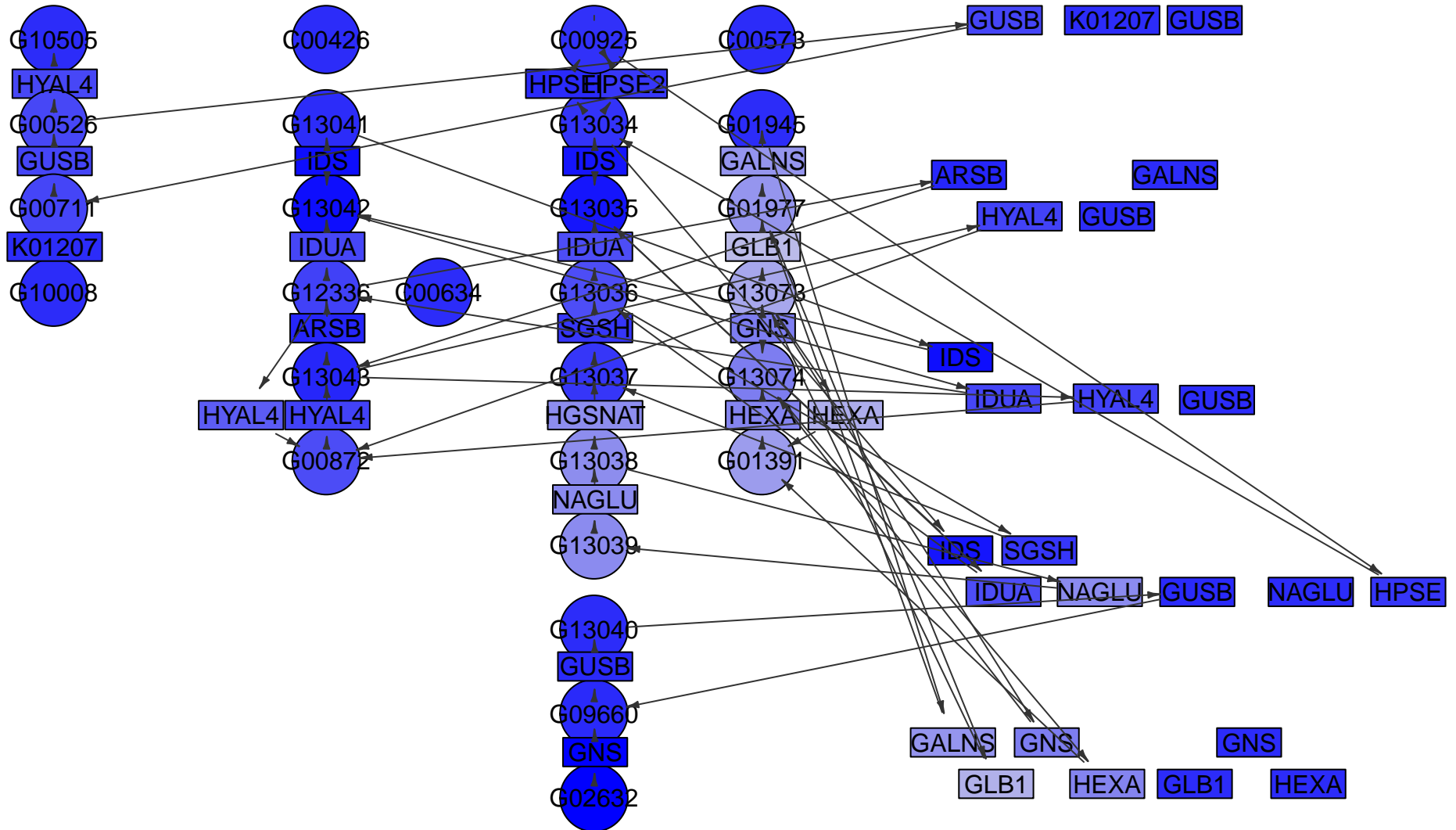
Glycosaminoglycan  
degradation  
MPI-124

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



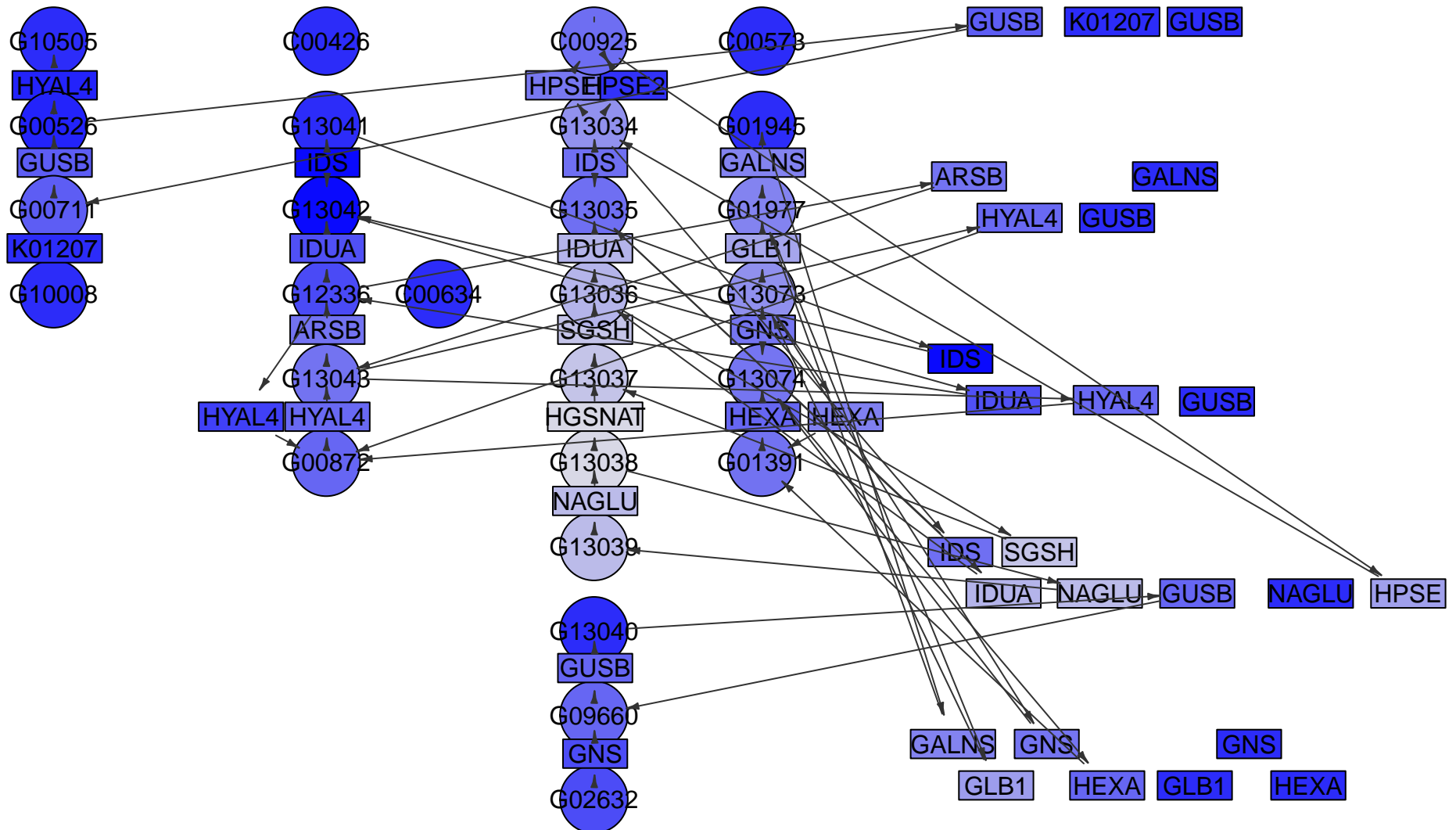
Glycosaminoglycan  
degradation  
MPI-126

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



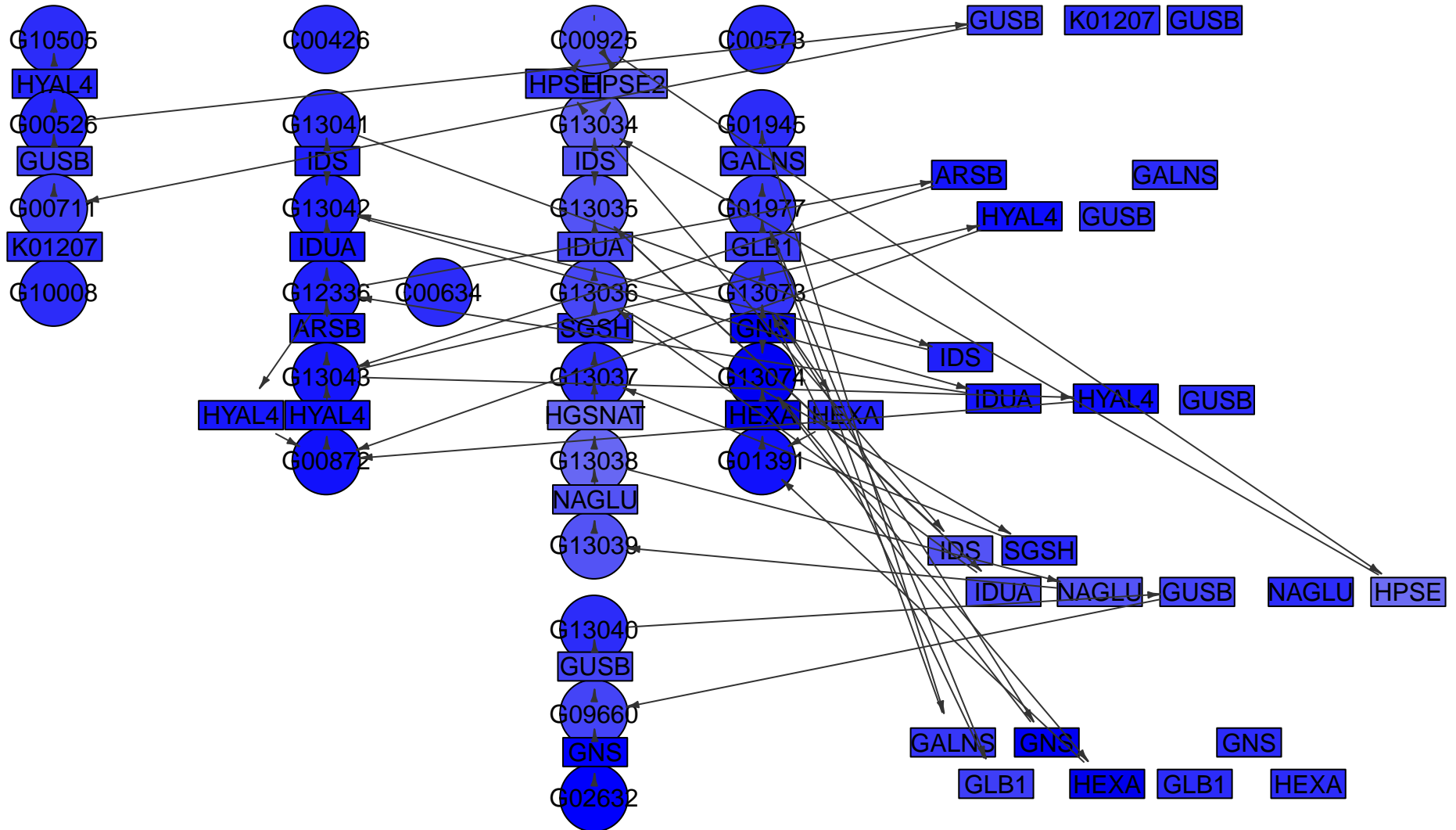
Glycosaminoglycan  
degradation  
MPI-131

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



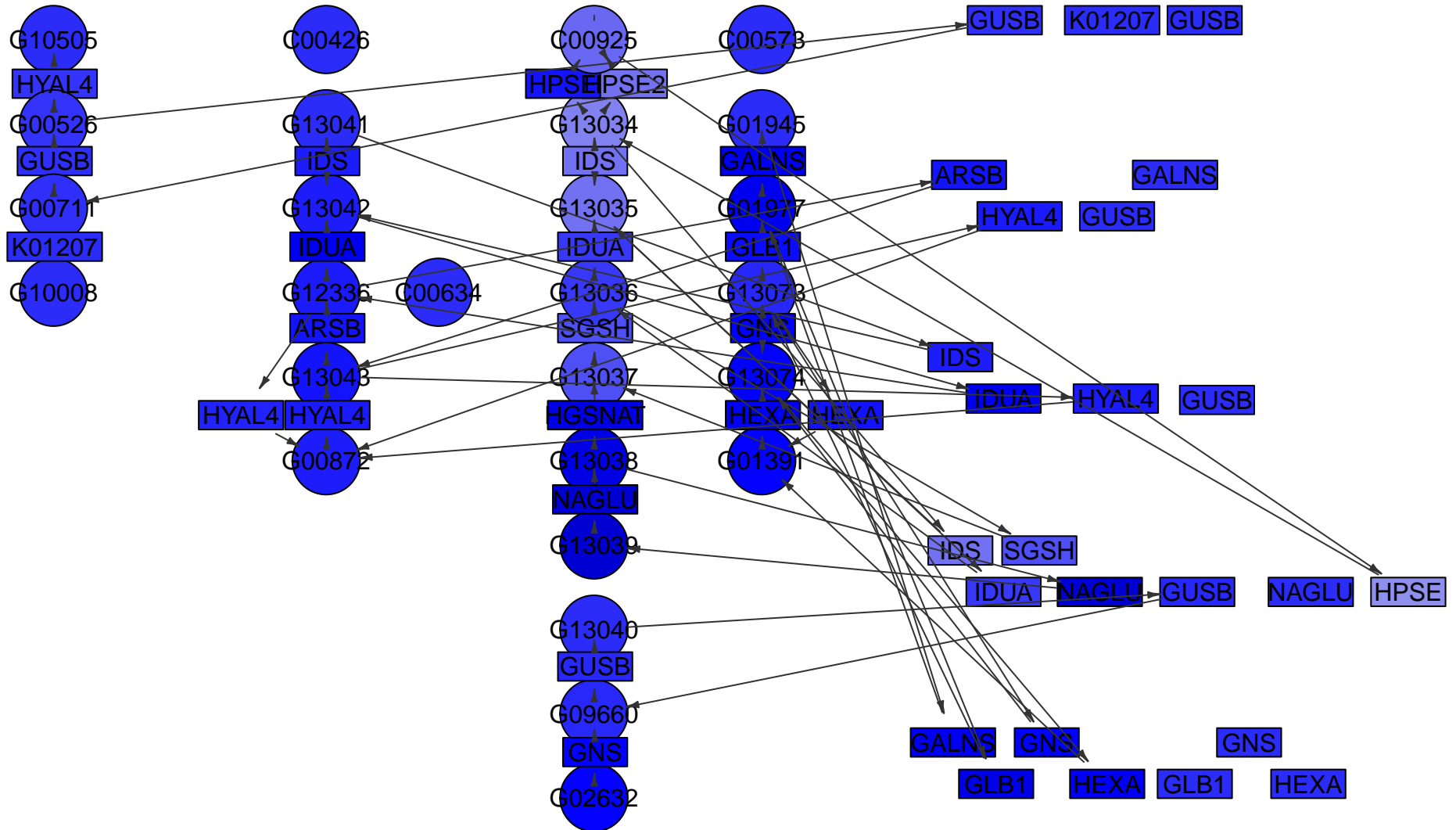
Glycosaminoglycan  
degradation  
MPI-143

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



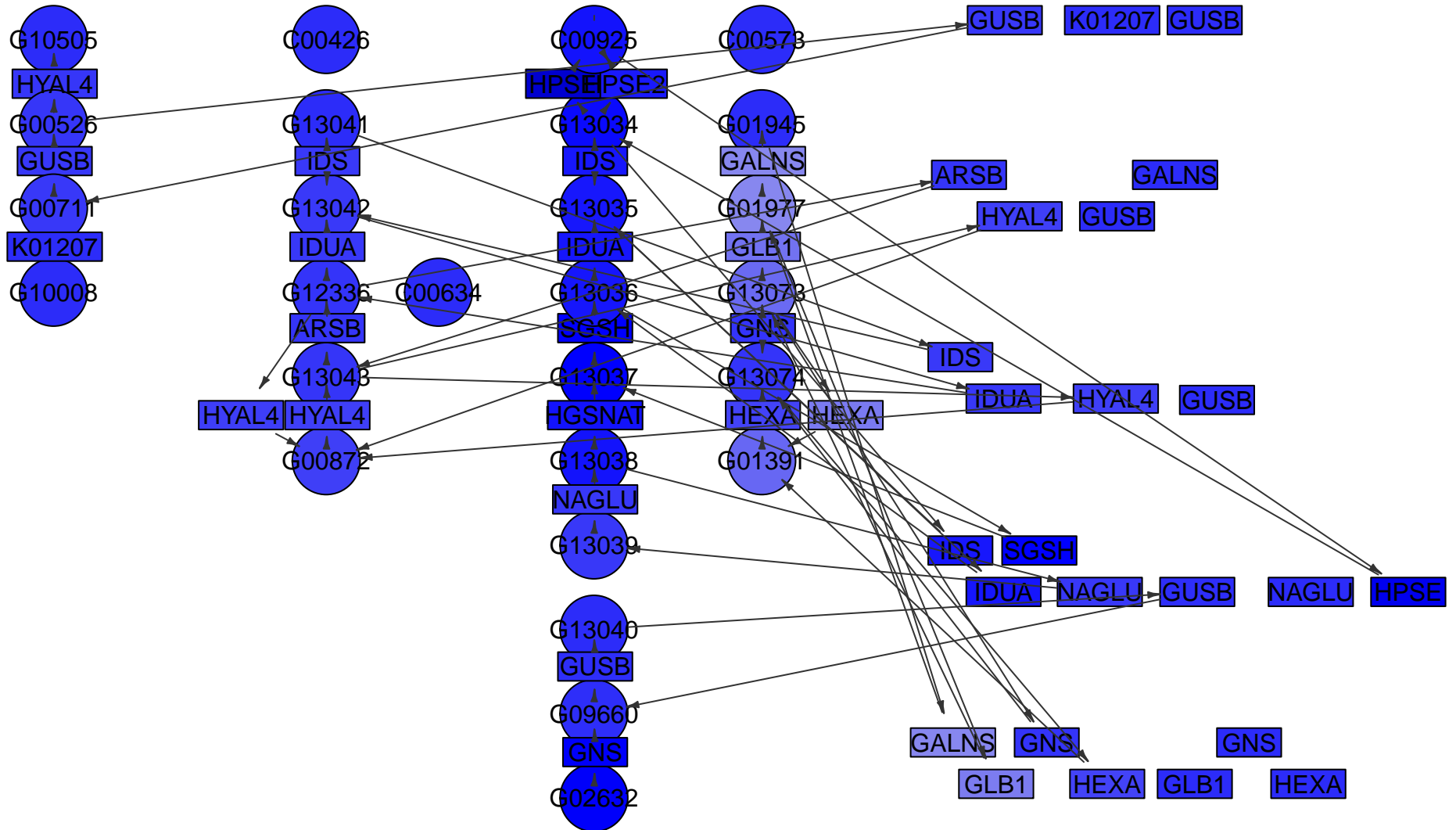
Glycosaminoglycan  
degradation  
MPI-148

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - keratan sulfate



Glycosaminoglycan  
degradation  
MPI-161

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



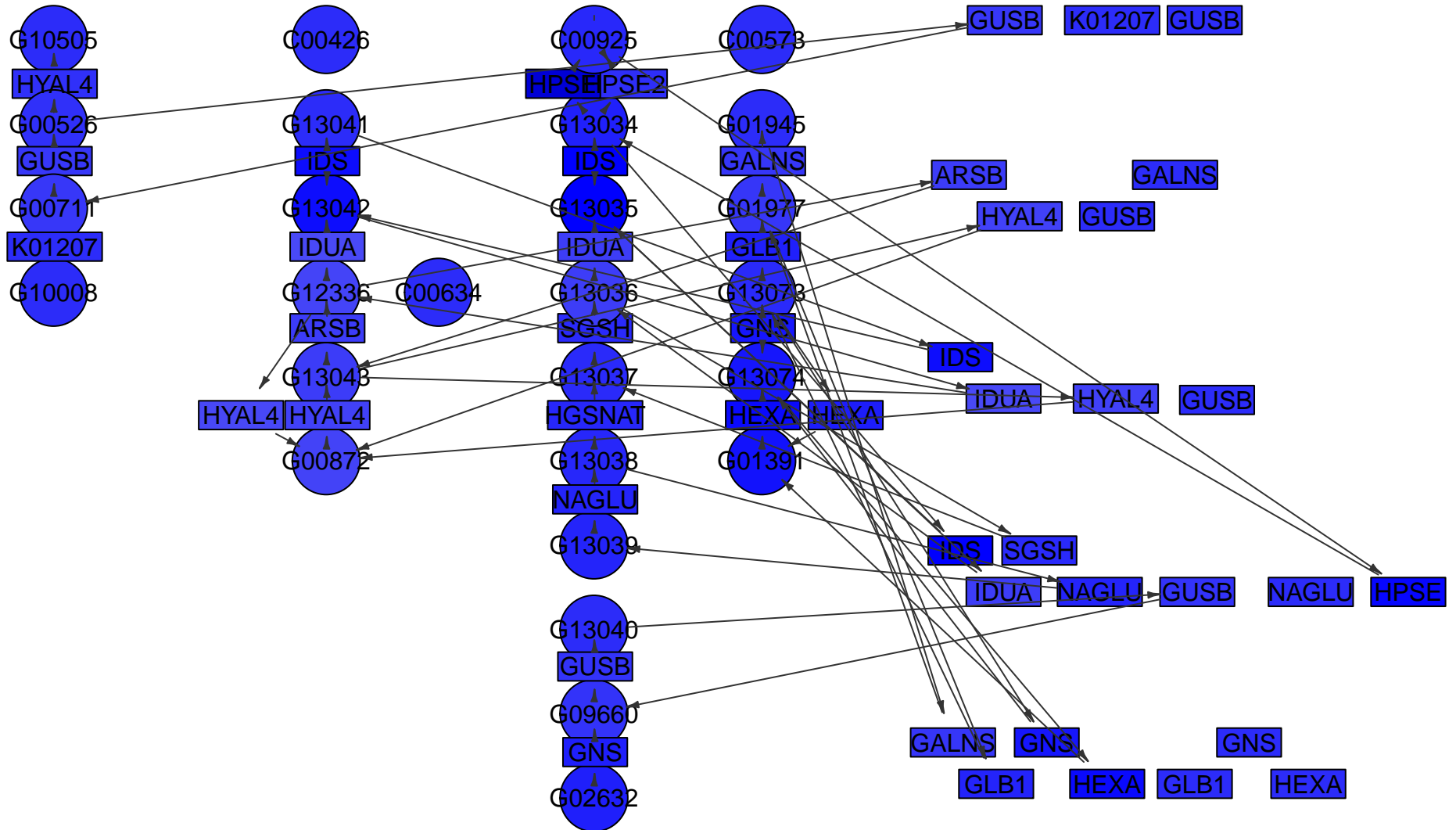






Glycosaminoglycan  
degradation  
MPI-169

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin



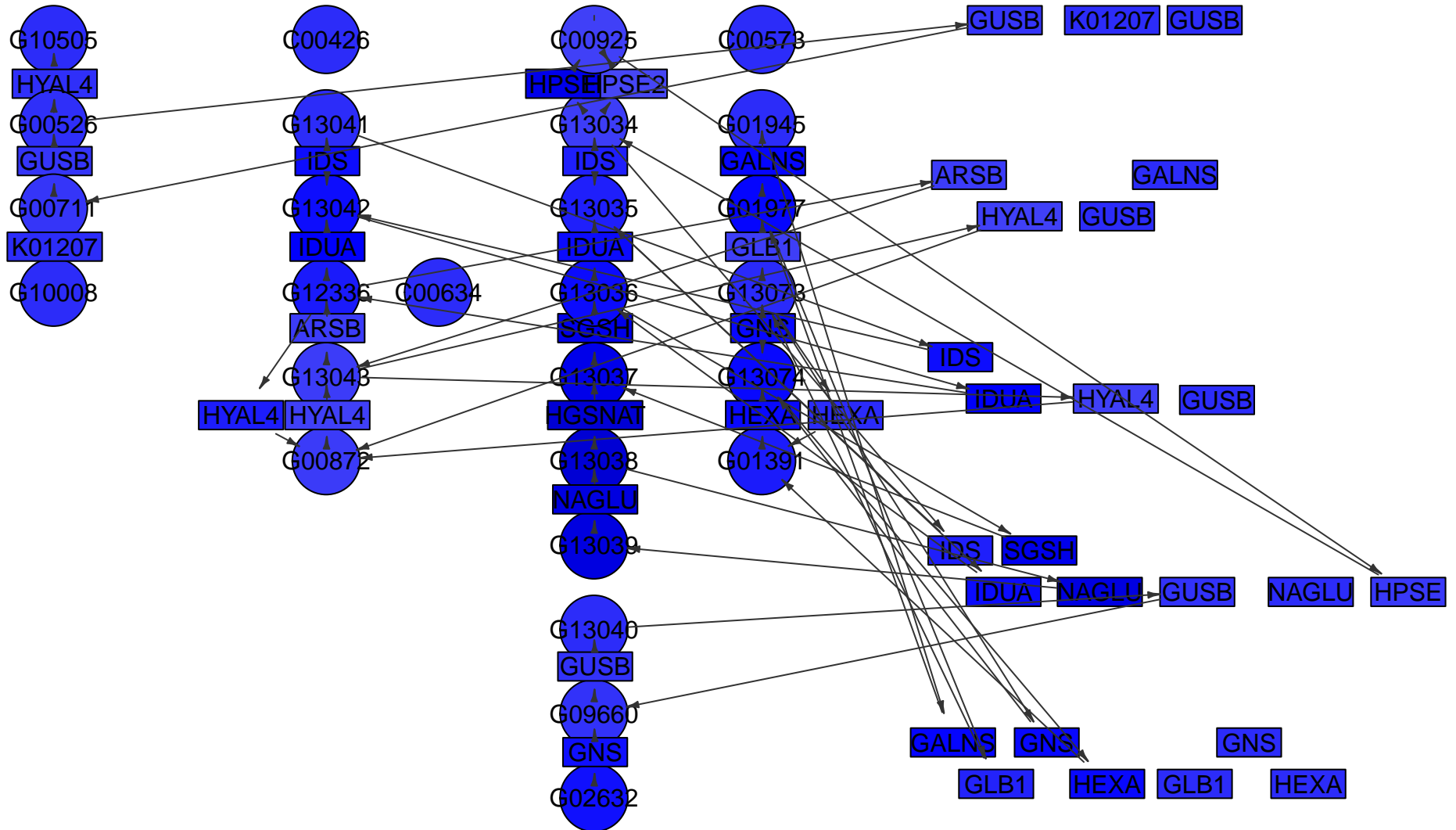






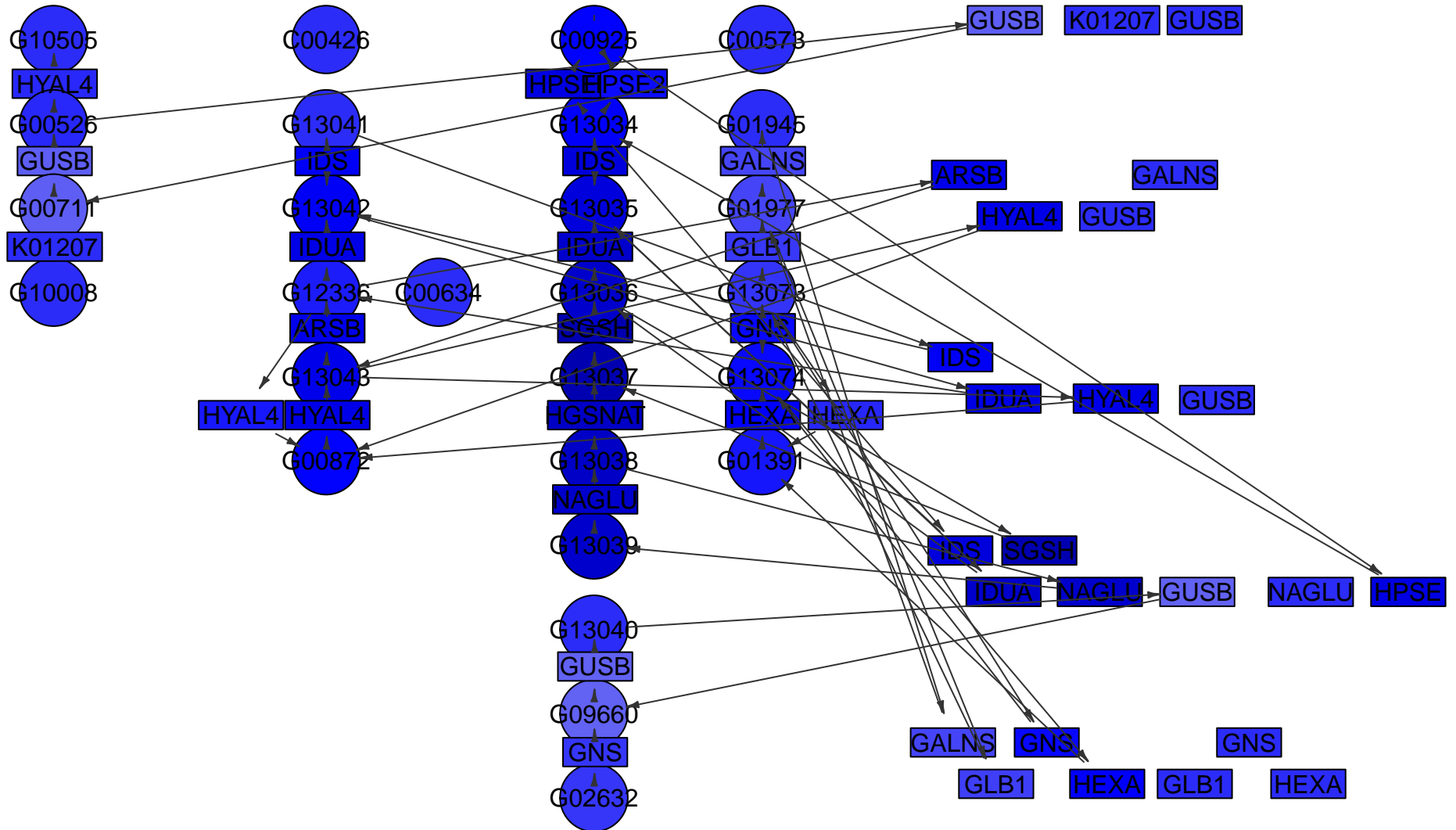
Glycosaminoglycan  
degradation  
MPI-216

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-222

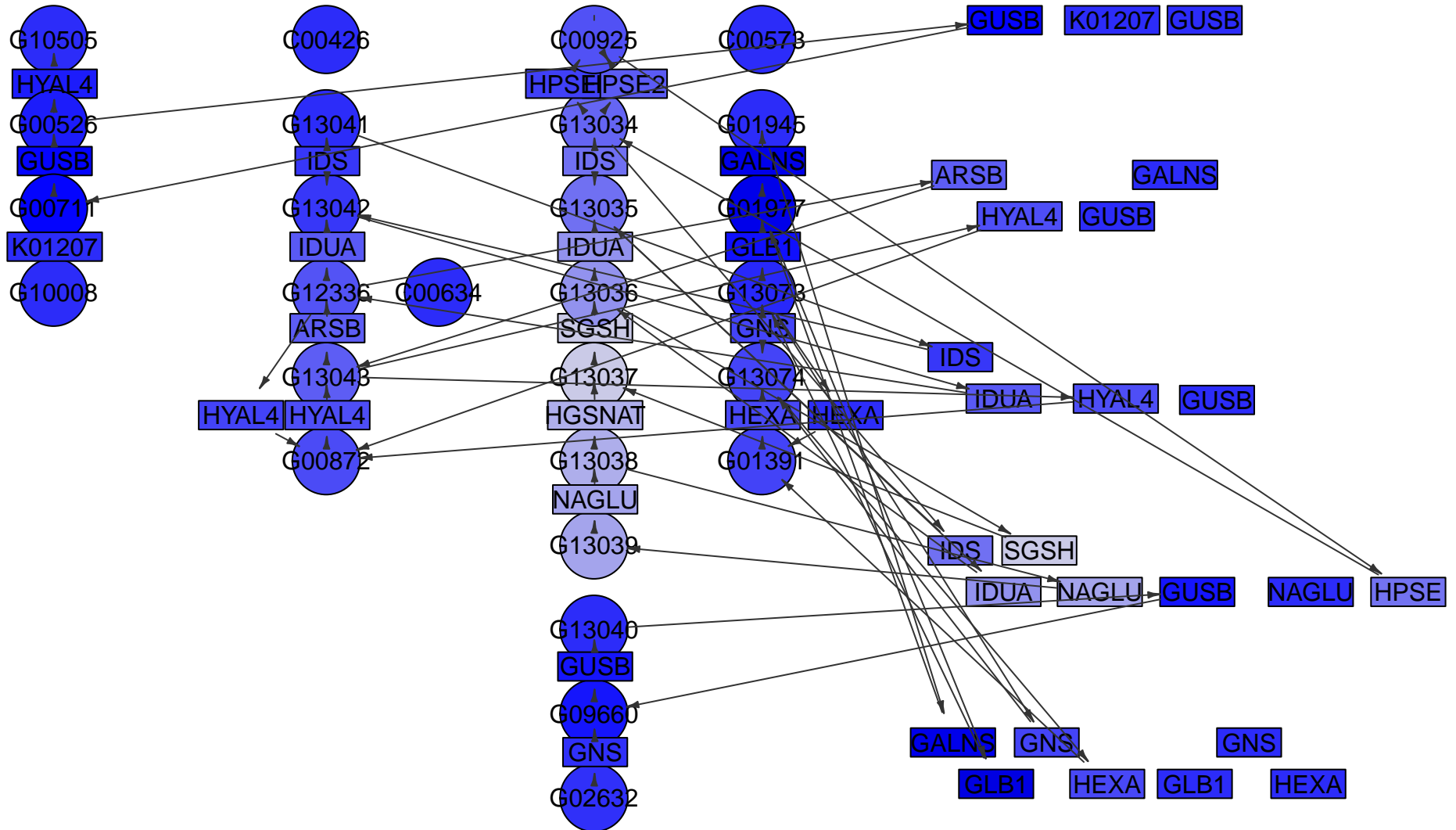
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





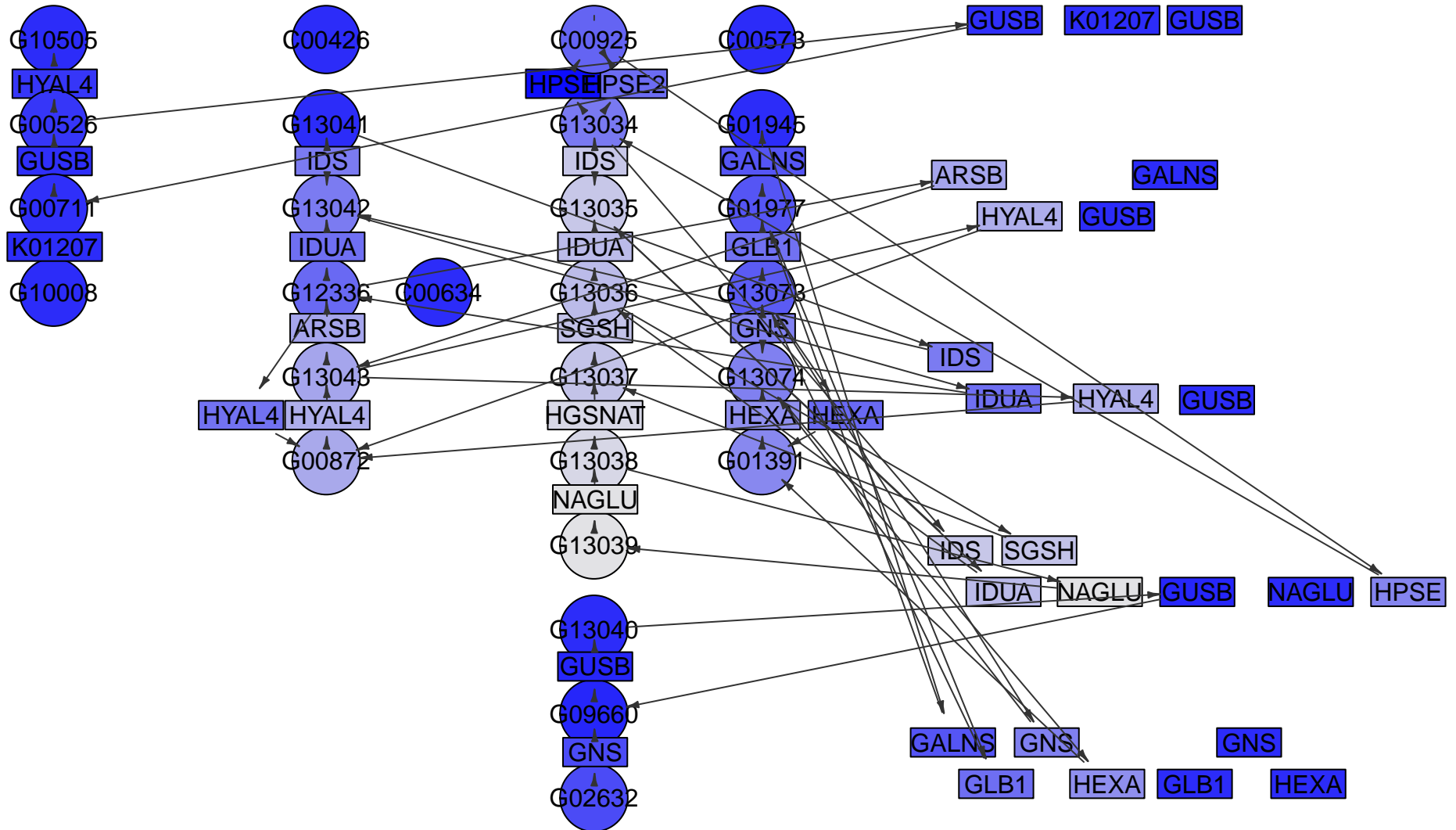
Glycosaminoglycan  
degradation  
MPI-225

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin



Glycosaminoglycan  
degradation  
MPI-242

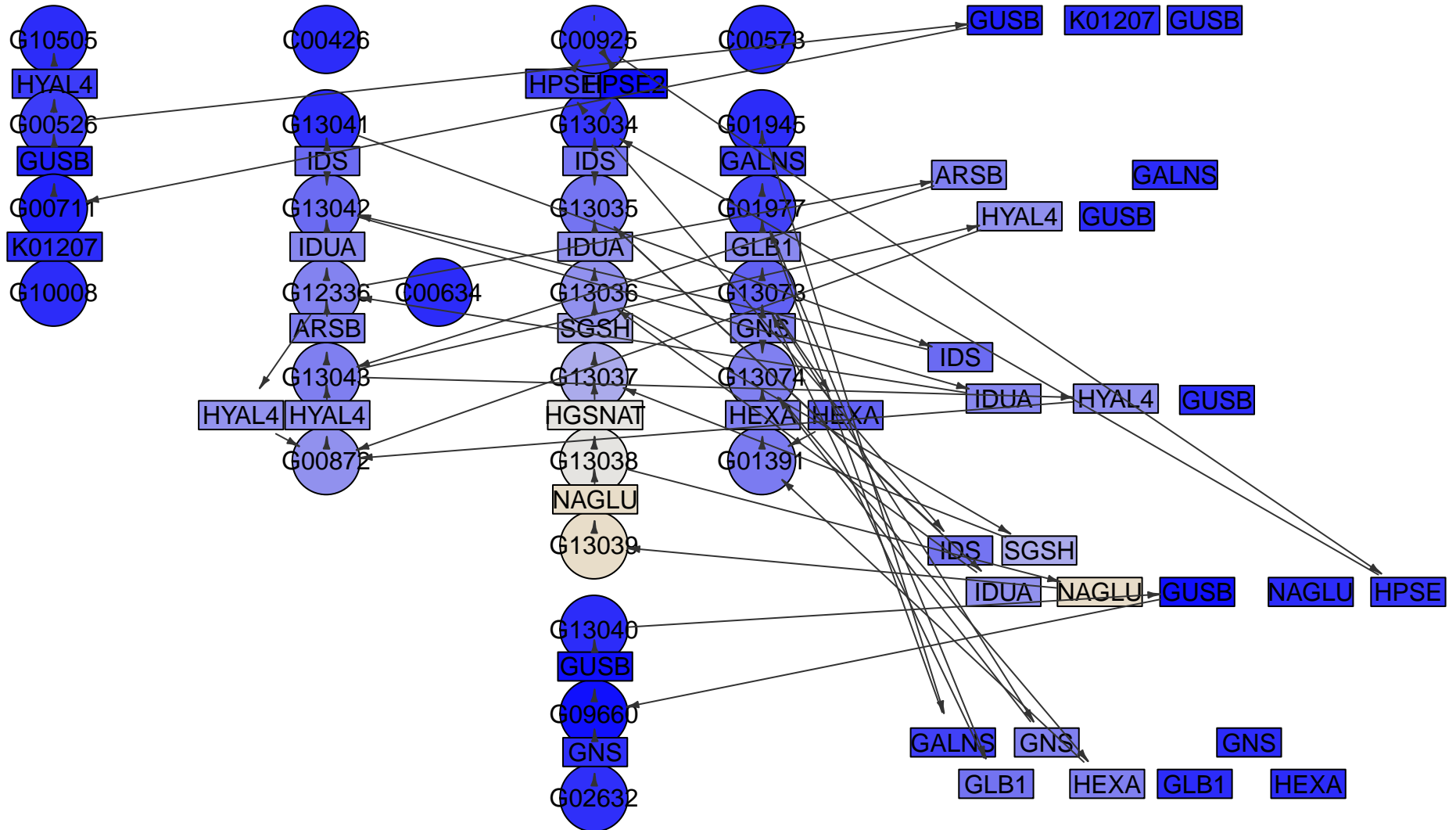
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





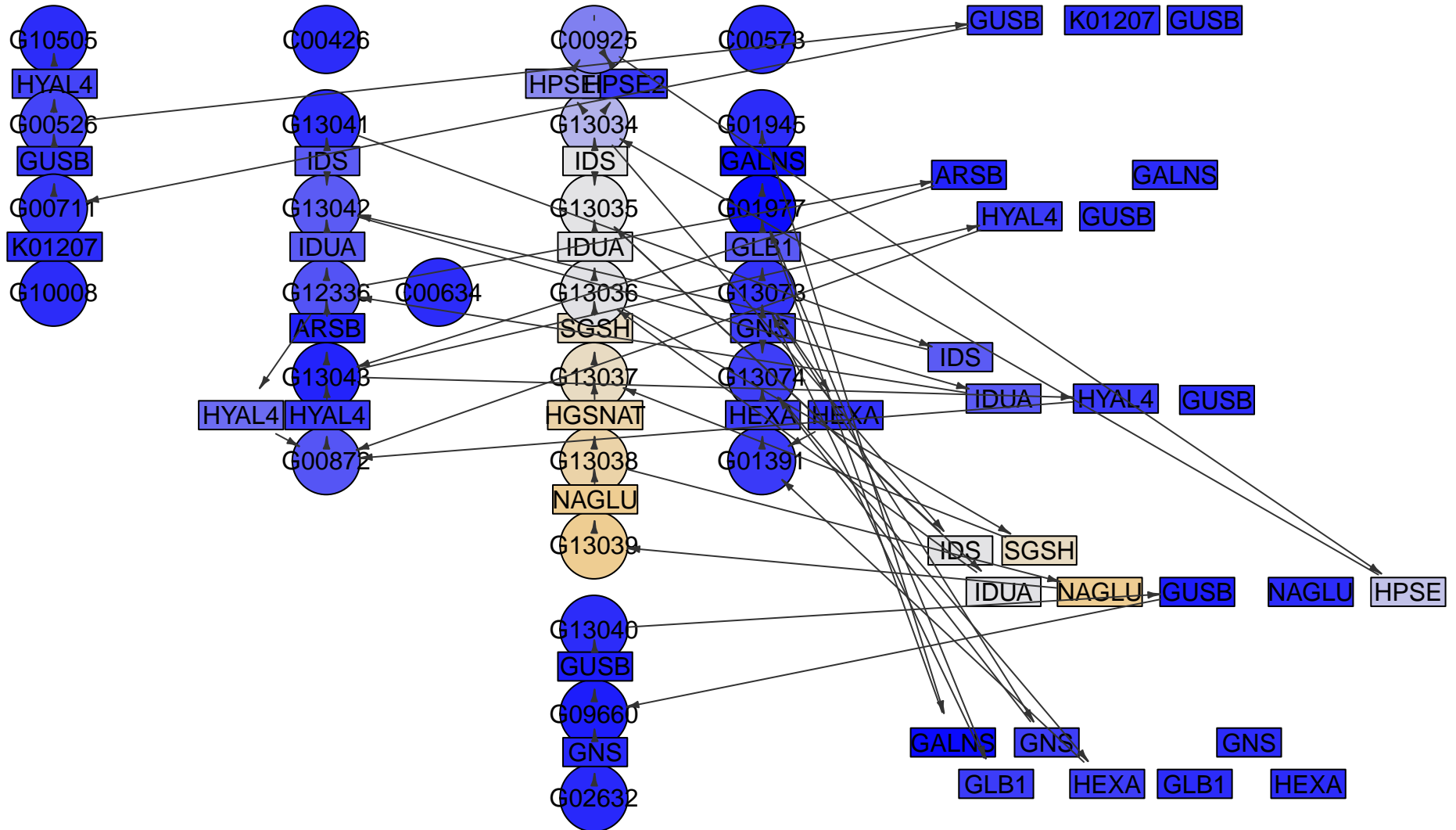
Glycosaminoglycan  
degradation  
MPI-248

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



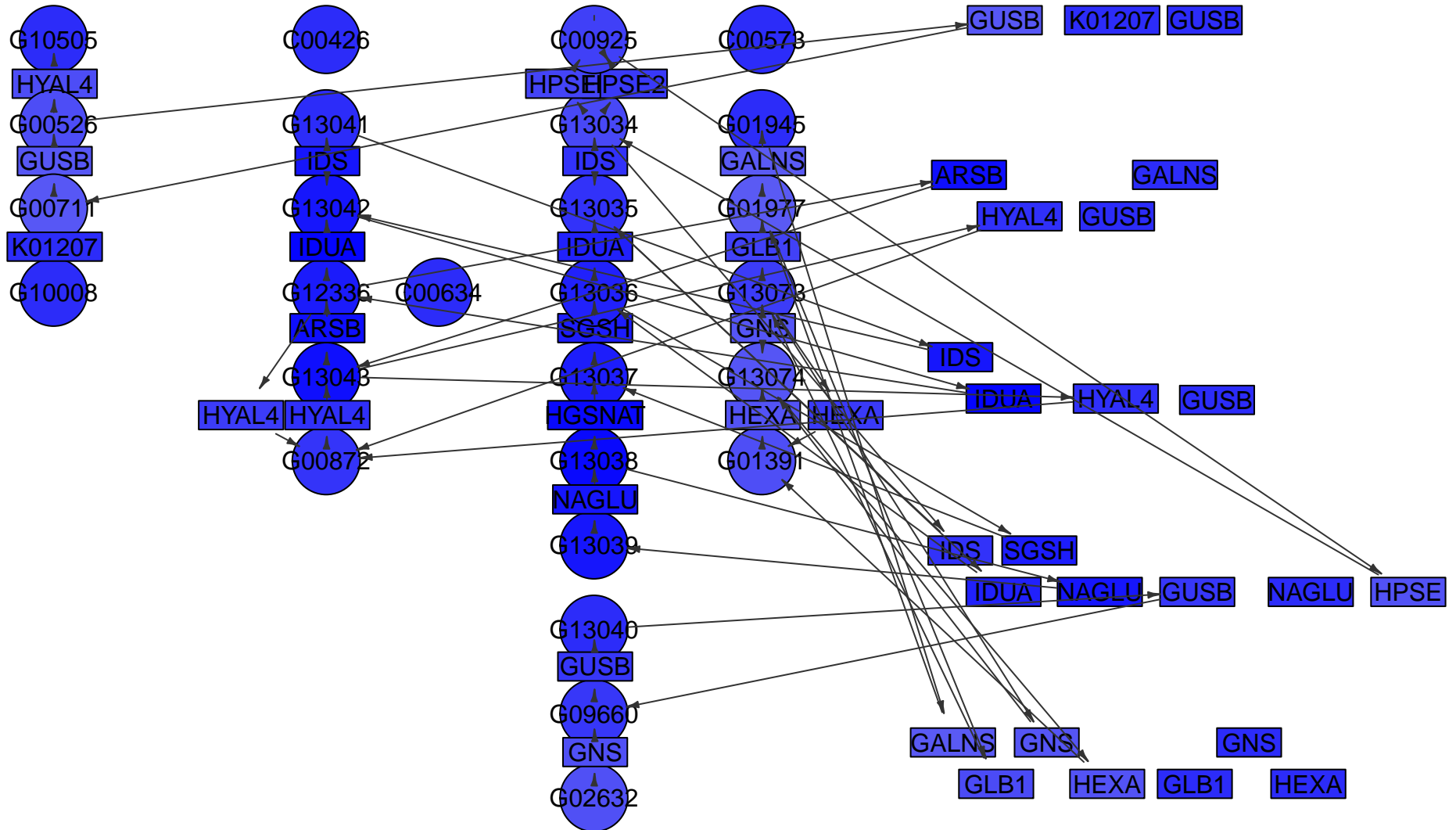
Glycosaminoglycan  
degradation  
MPI-249

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - keratan sulfate



Glycosaminoglycan  
degradation  
MPI-250

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

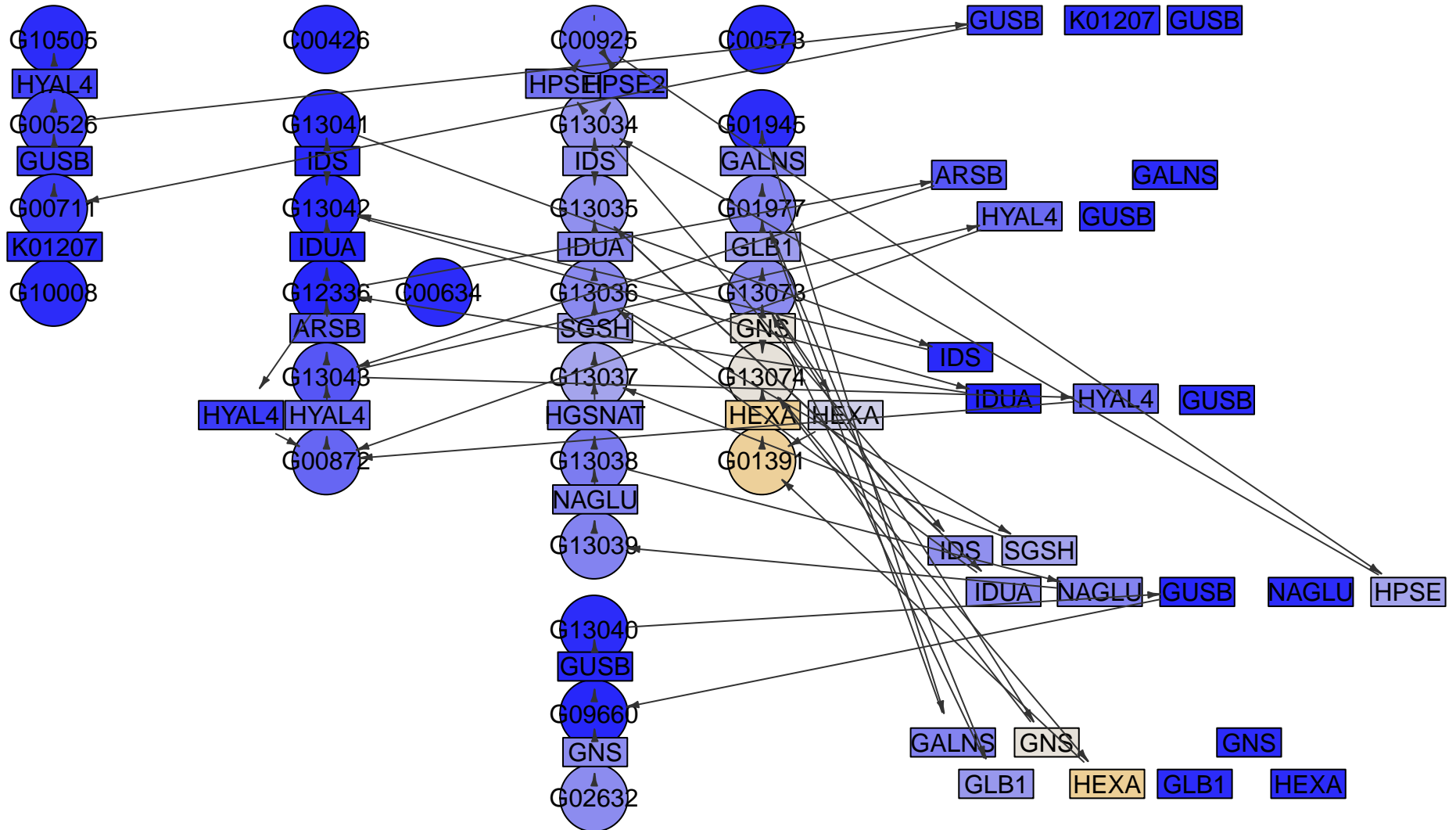






Glycosaminoglycan  
degradation  
MPI-009

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

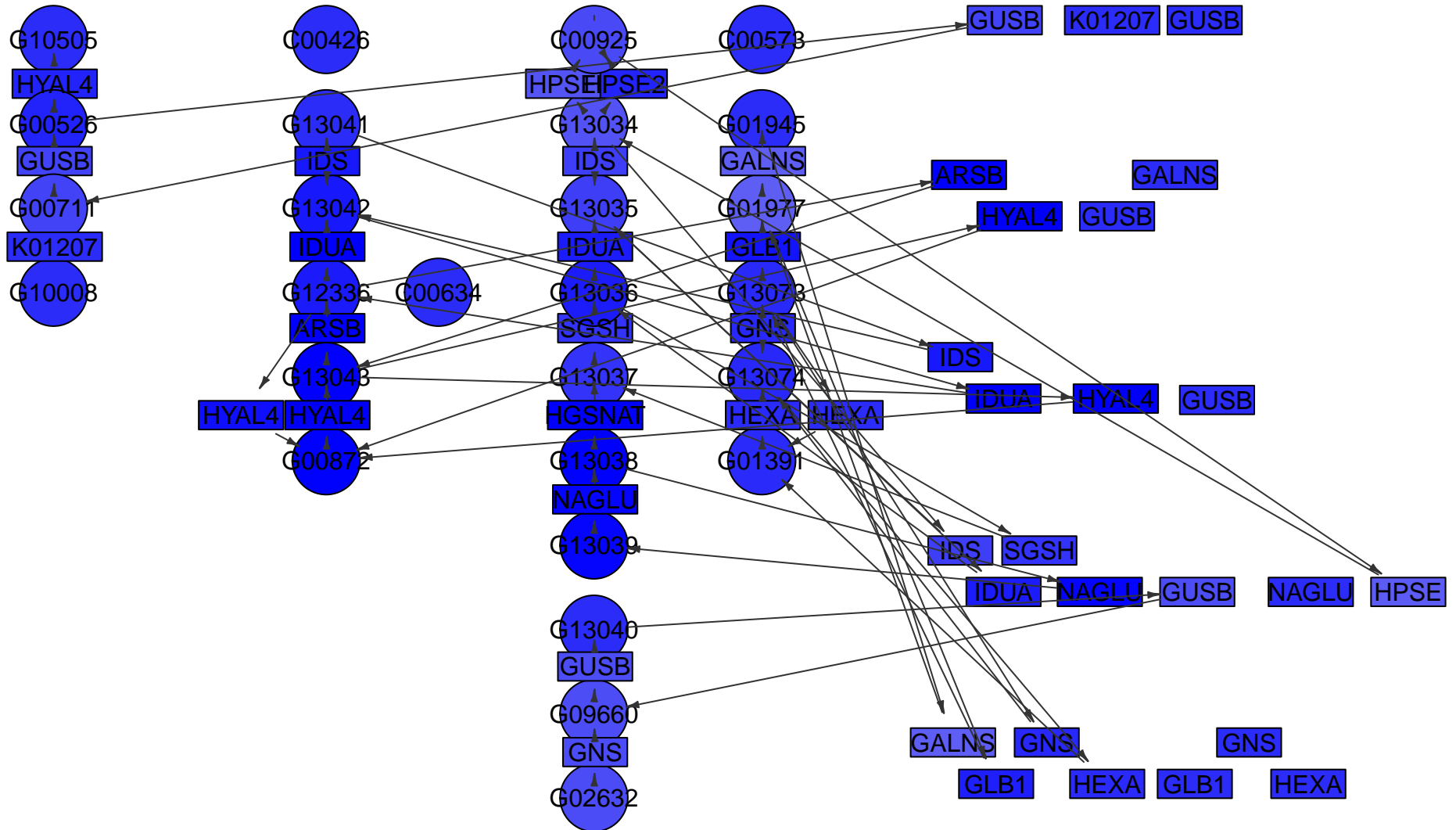






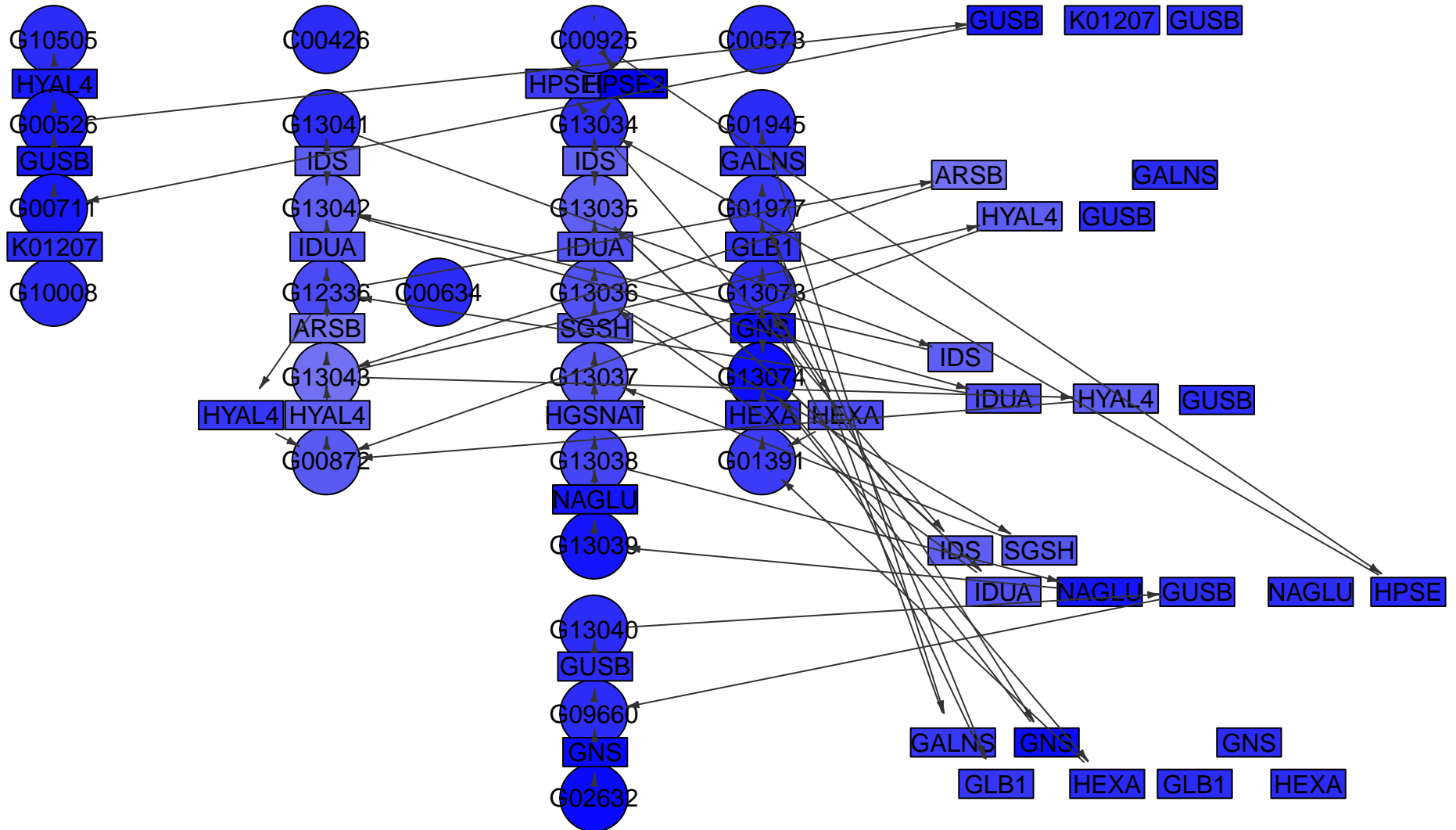
Glycosaminoglycan  
degradation  
MPI-013

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



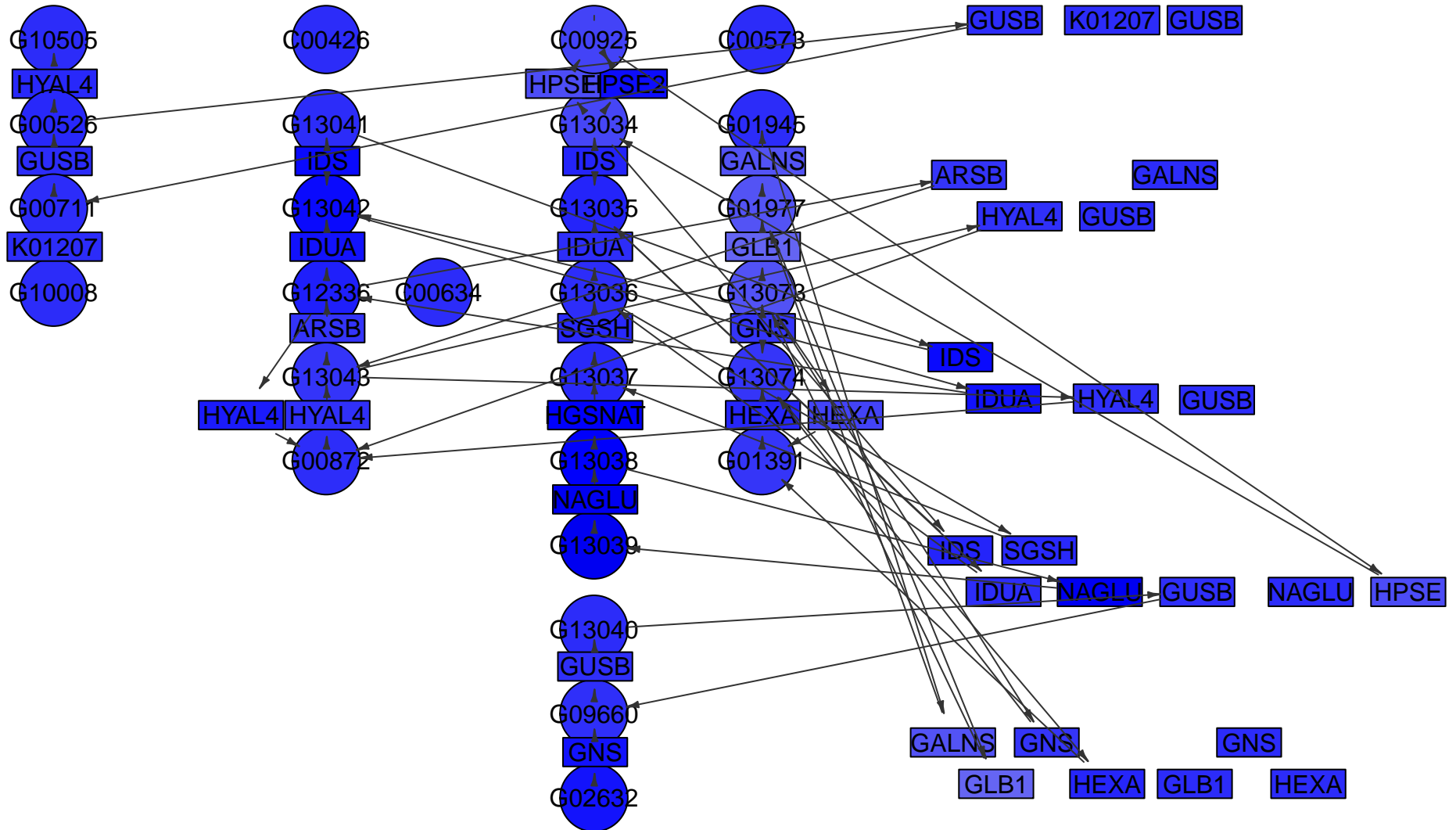
Glycosaminoglycan  
degradation  
MPI-014

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin



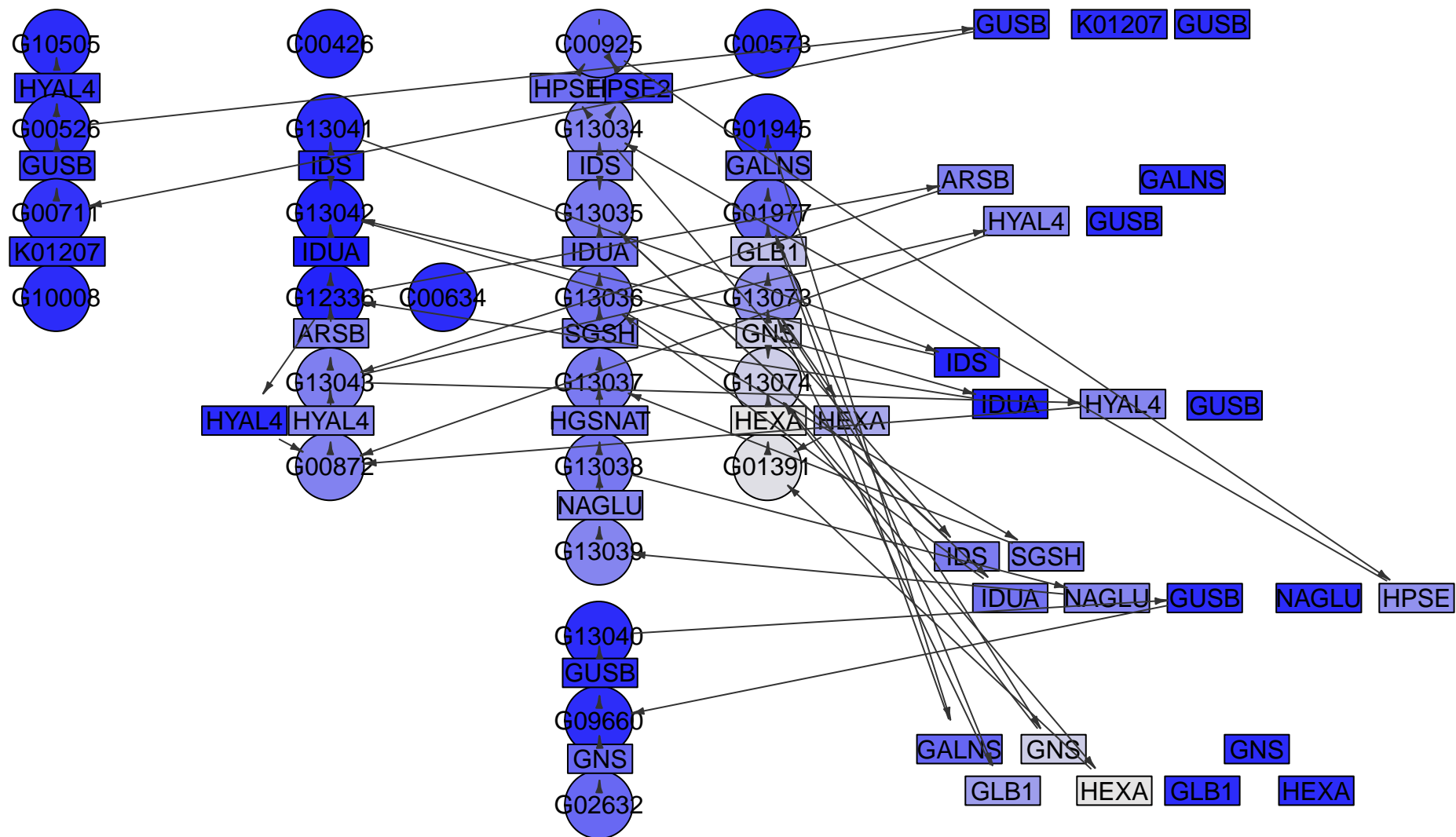
Glycosaminoglycan  
degradation  
MPI-015

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-021

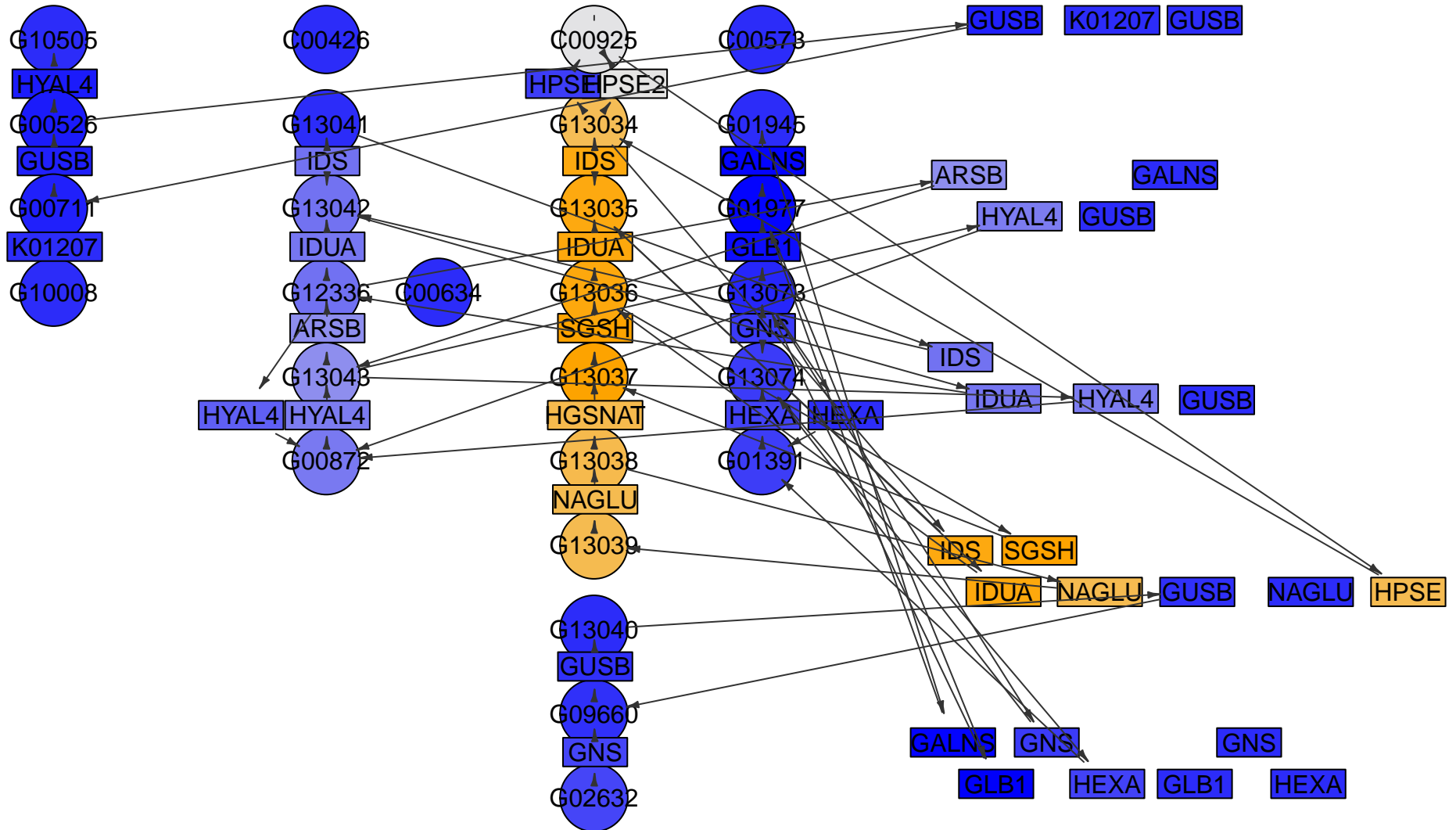
Glycosaminoglycan biosynthesis + heparan sulfate / dermatansulfate / heparinkeratan sulfate





Glycosaminoglycan  
degradation  
MPI-022

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
Glycosaminoglycan synthesis –  
sulfate / heparin  
Glycosaminoglycan synthesis –  
sulfate / heparin

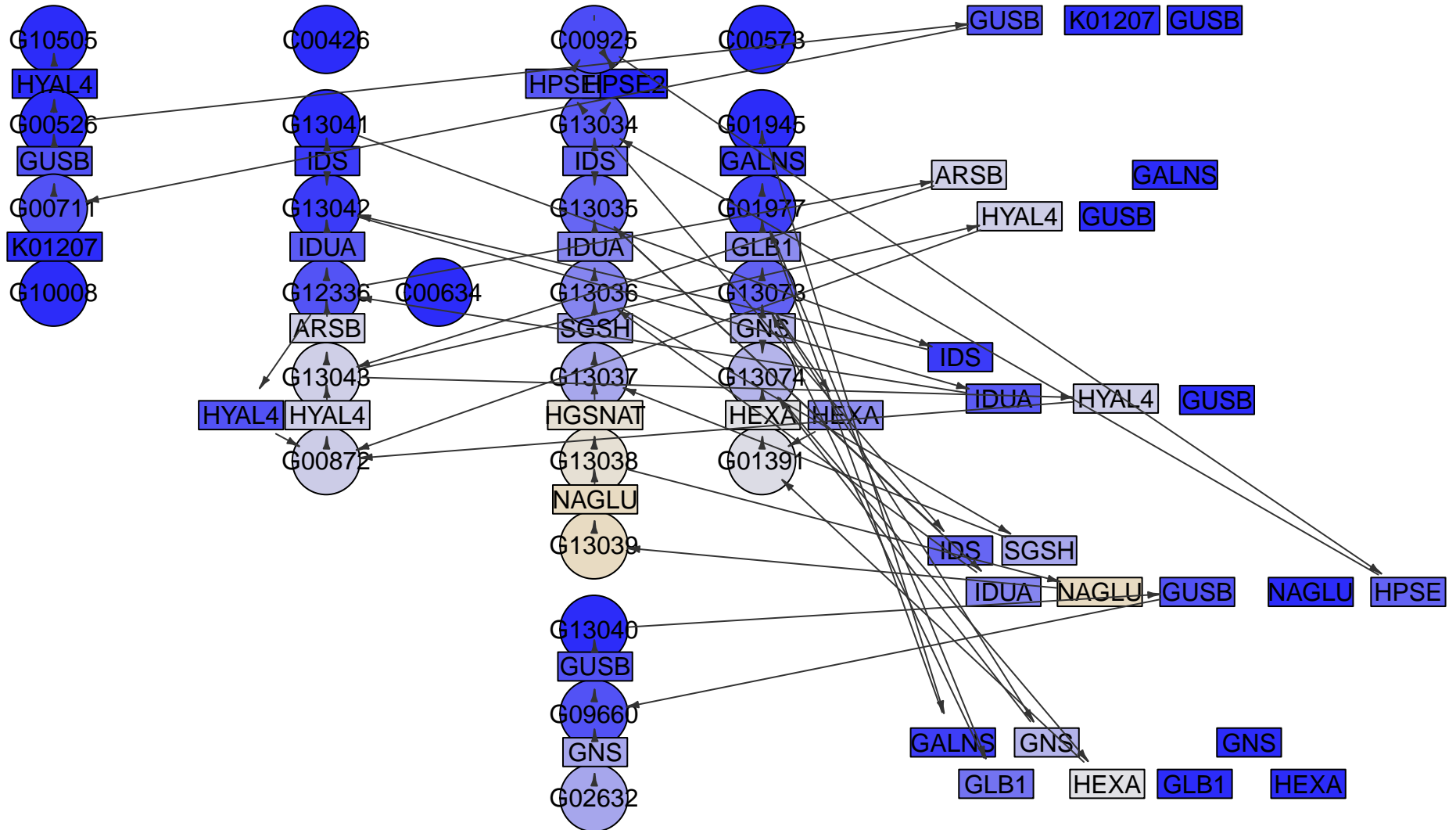






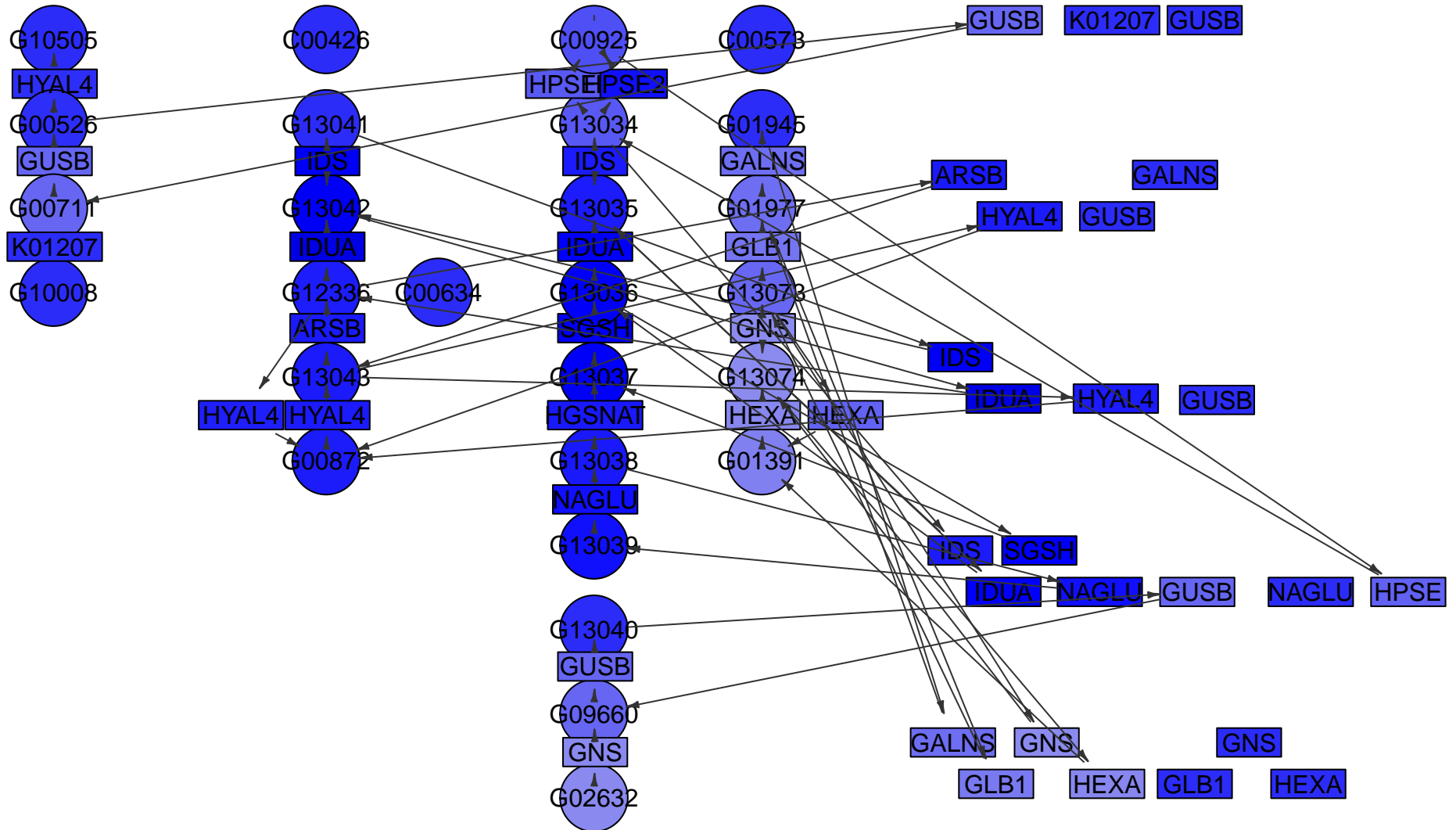
Glycosaminoglycan  
degradation  
MPI-030

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



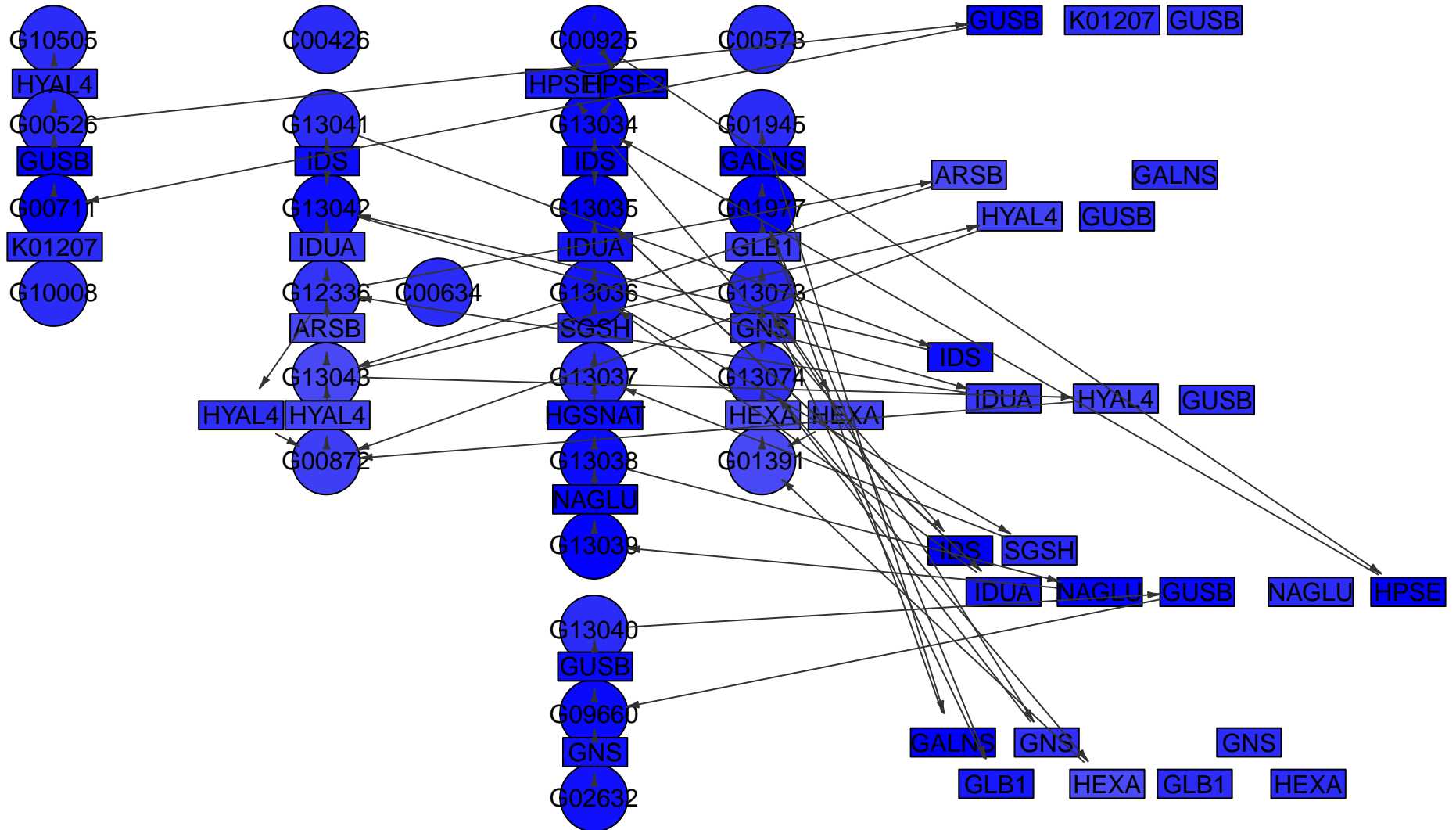
Glycosaminoglycan  
degradation  
MPI-031

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin



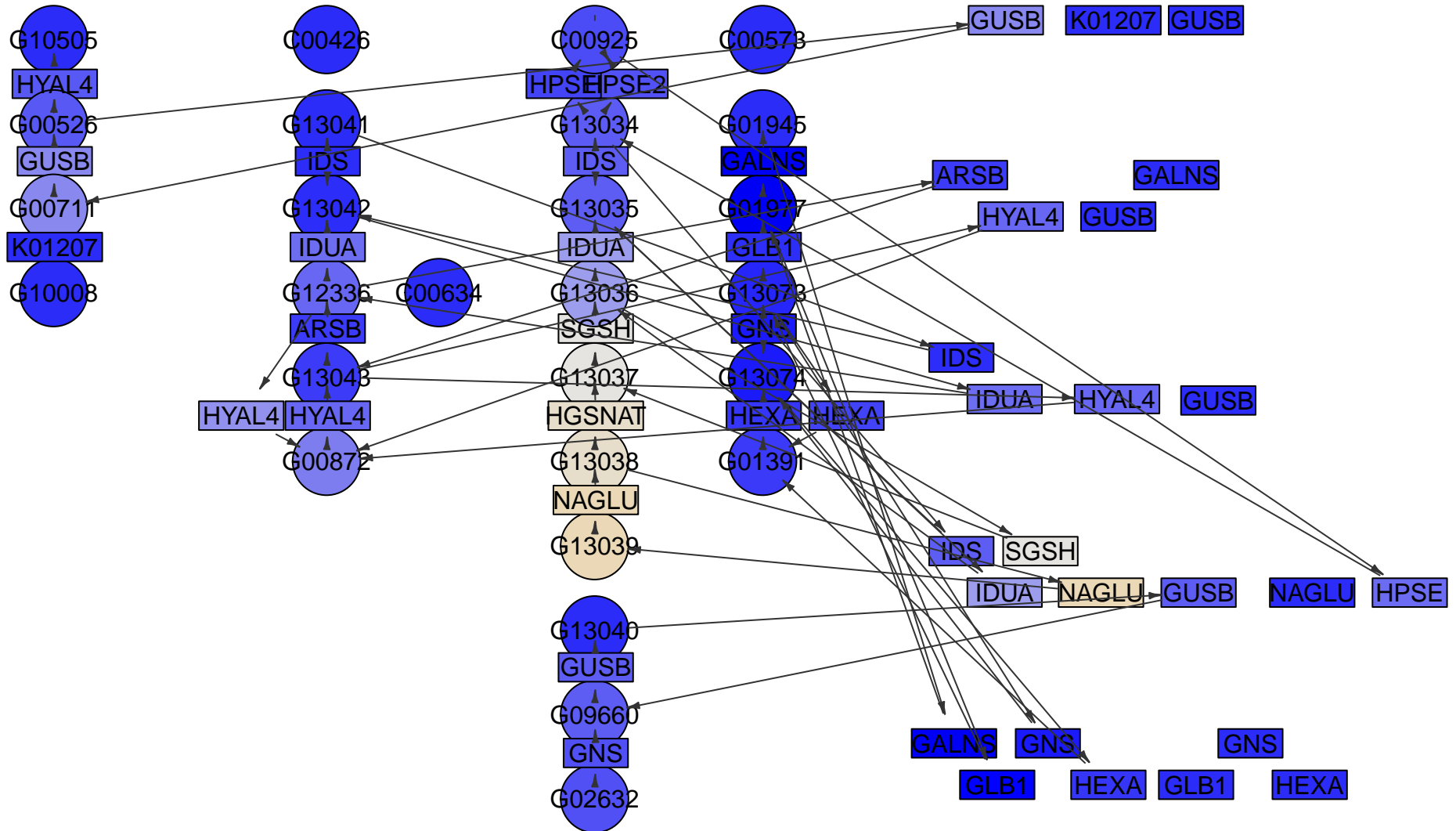
Glycosaminoglycan  
degradation  
MPI-039

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-040

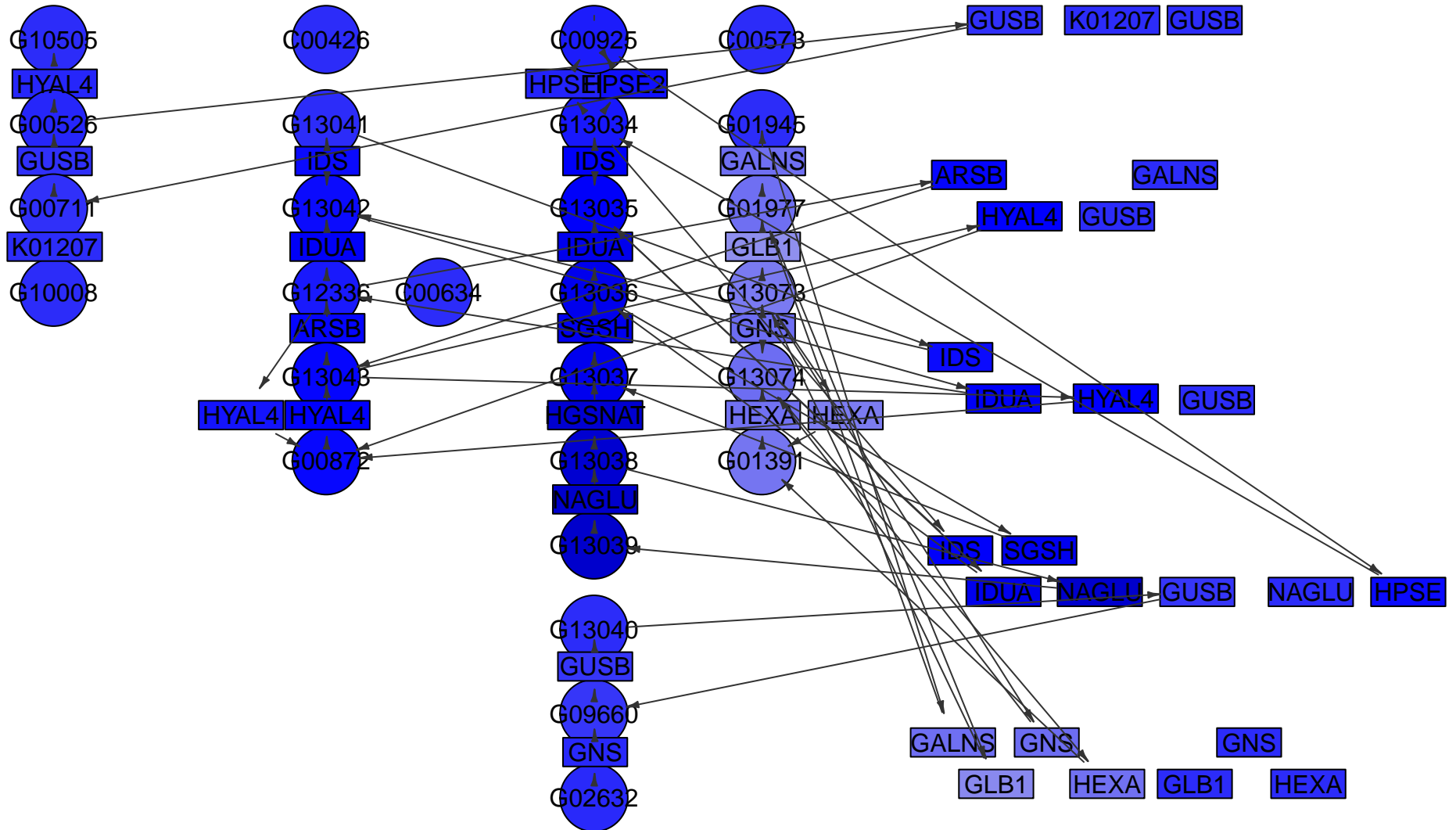
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





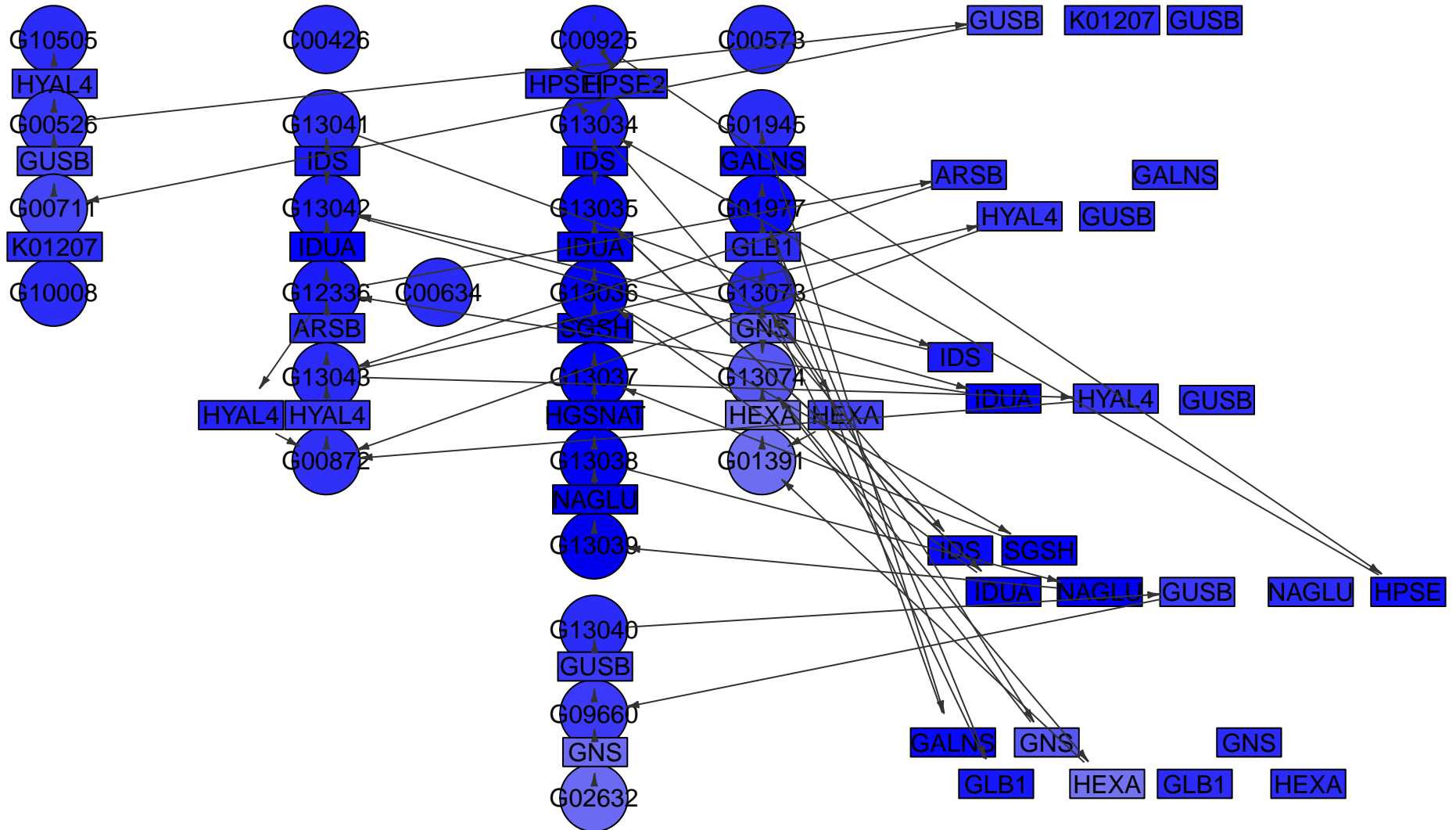
Glycosaminoglycan  
degradation  
MPI-045

Glycosaminoglycan / dermatansulfate / heparin sulfate / heparan sulfate / heparan keratan sulfate



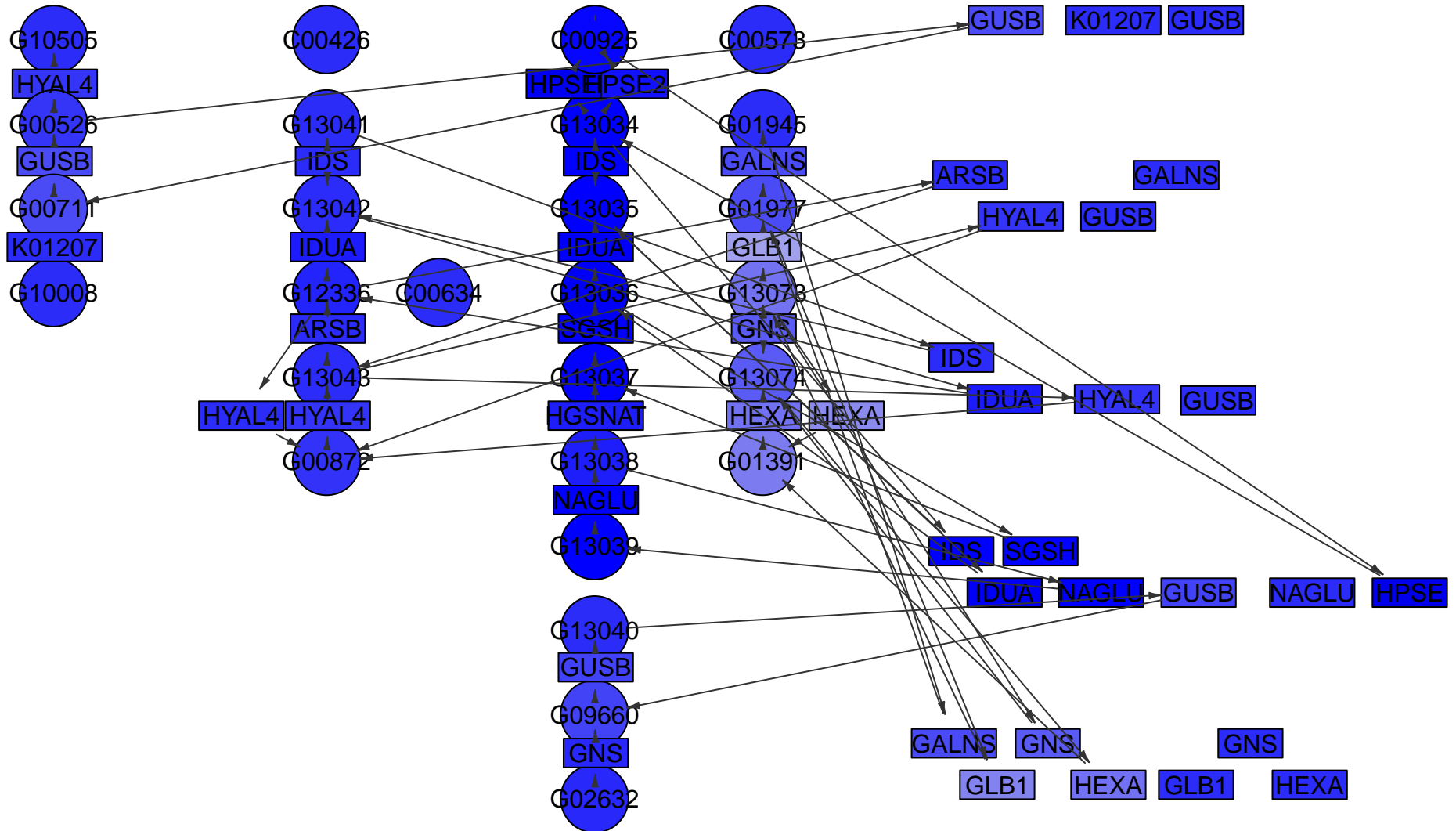
Glycosaminoglycan  
degradation  
MPI-047

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate



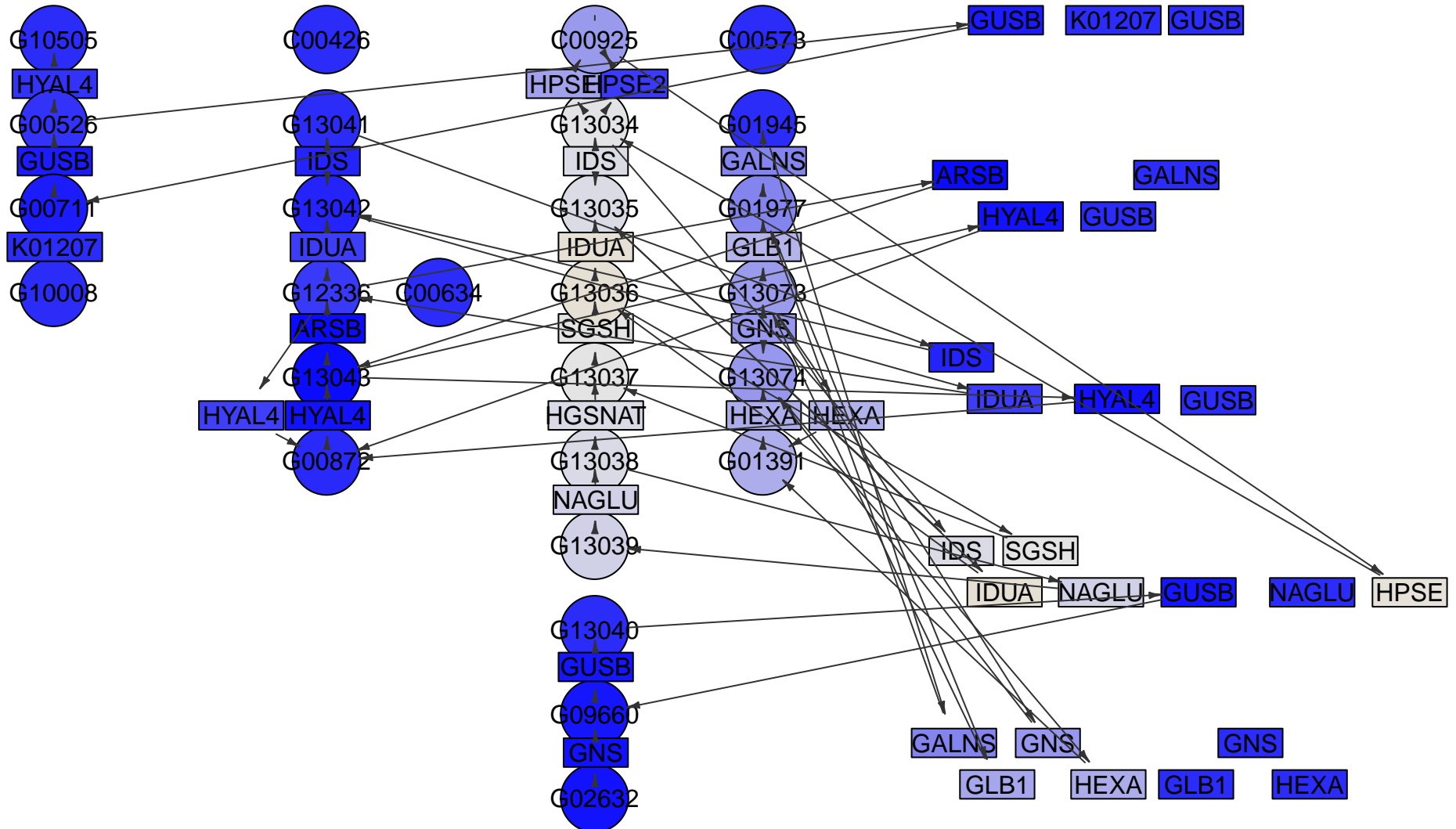
Glycosaminoglycan  
degradation  
MPI-053

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



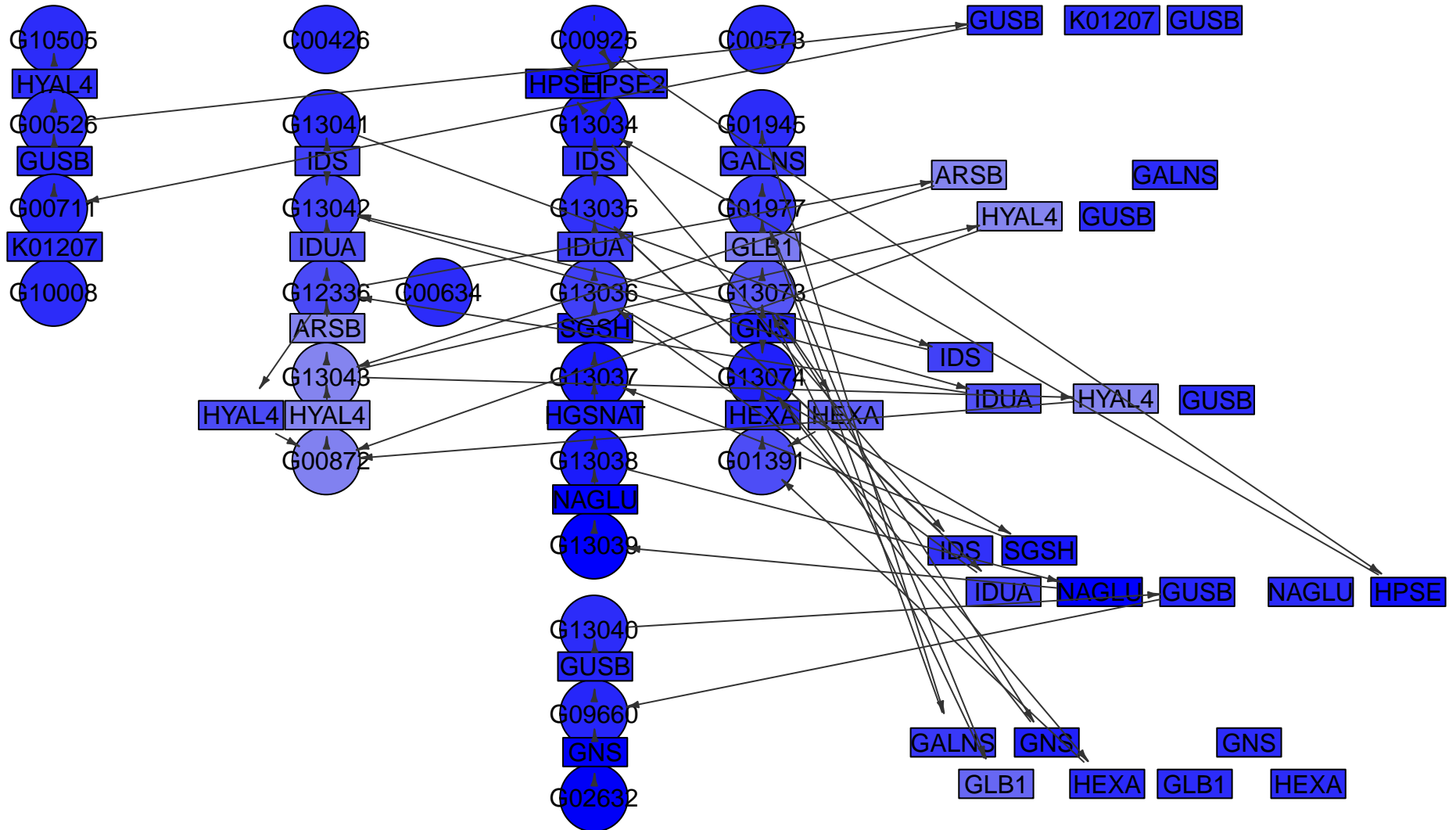
Glycosaminoglycan  
degradation  
MPI-062

Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



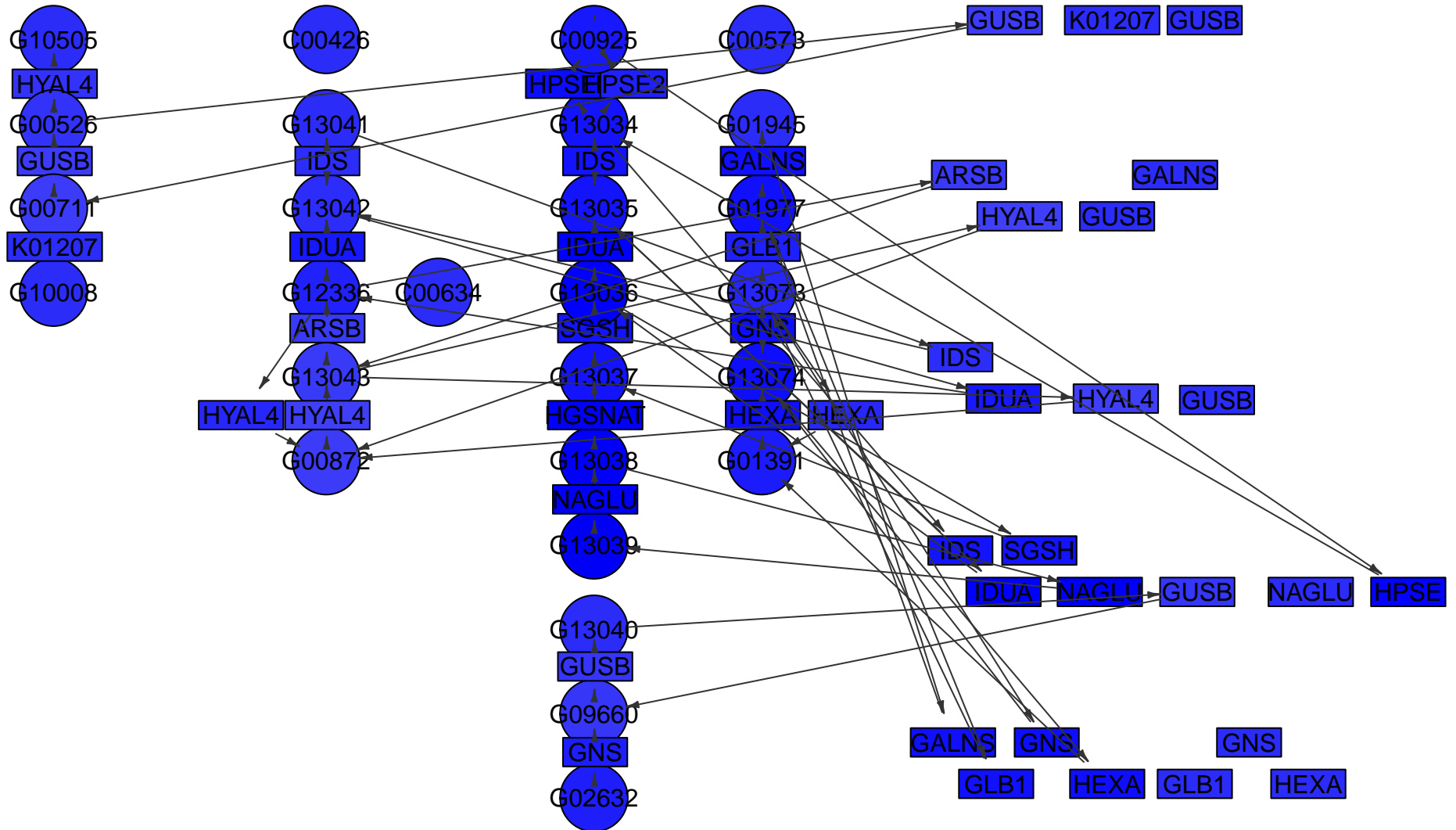
Glycosaminoglycan  
degradation  
MPI-063

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



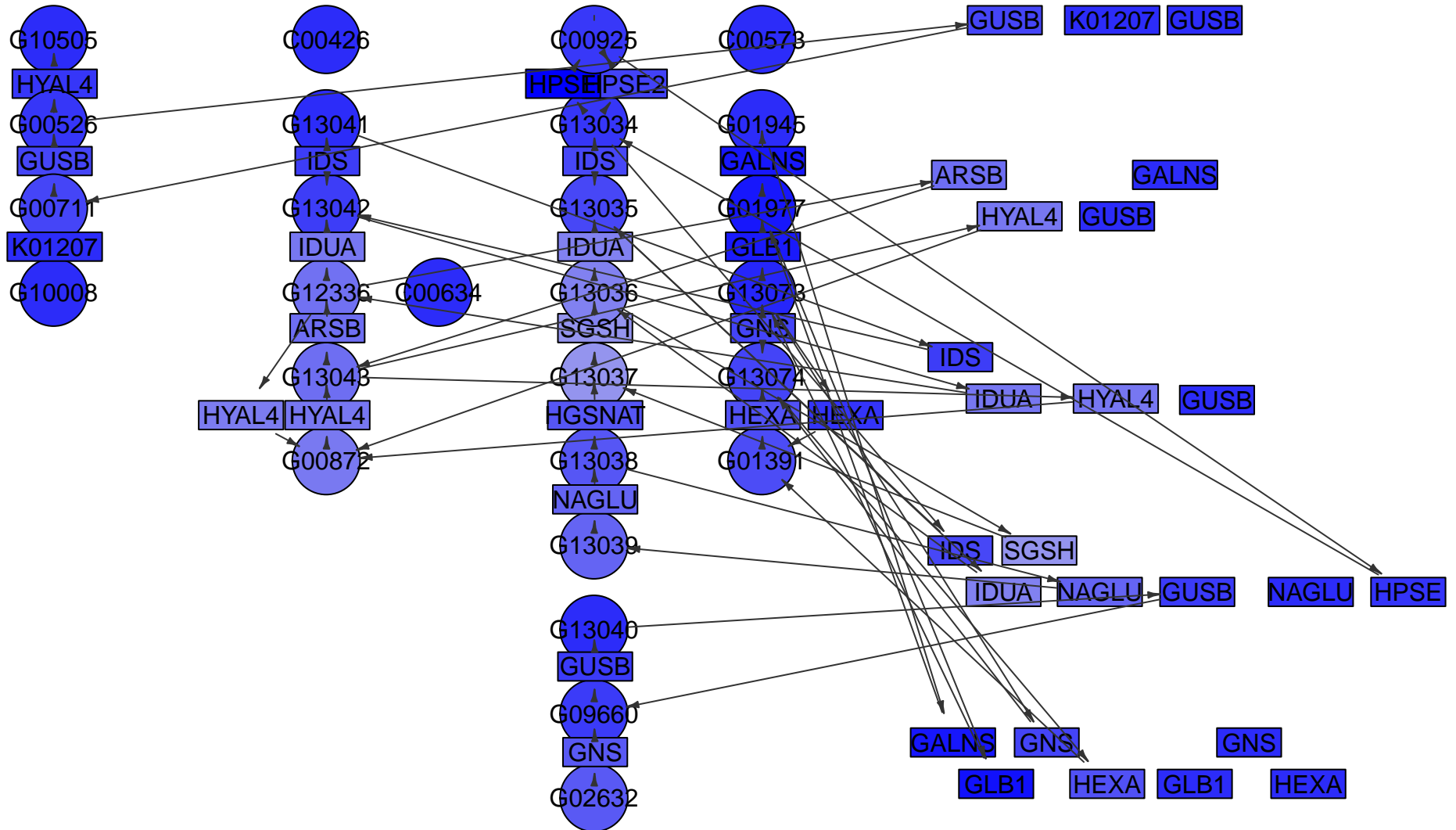
Glycosaminoglycan  
degradation  
MPI-069

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-073

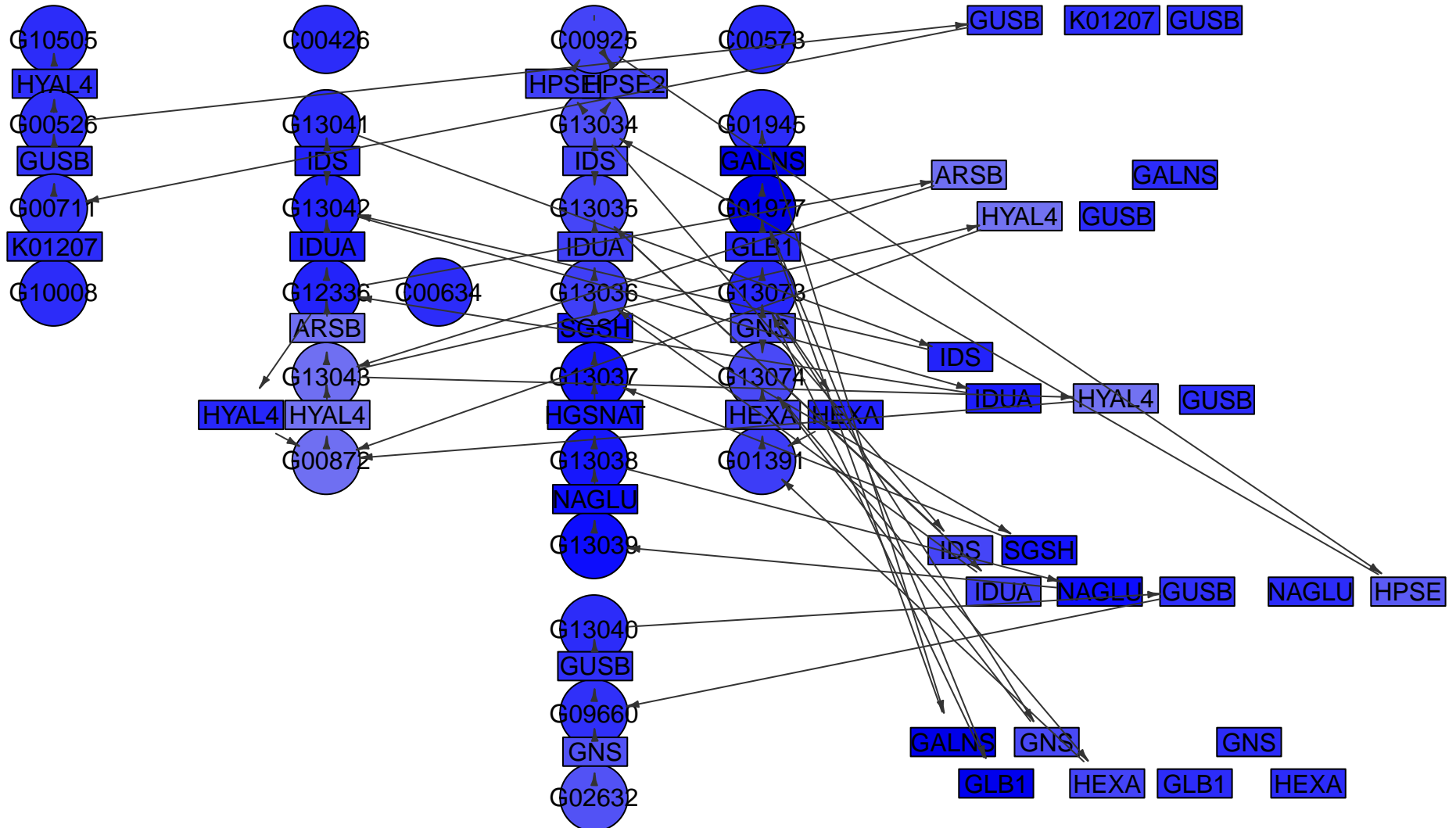
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





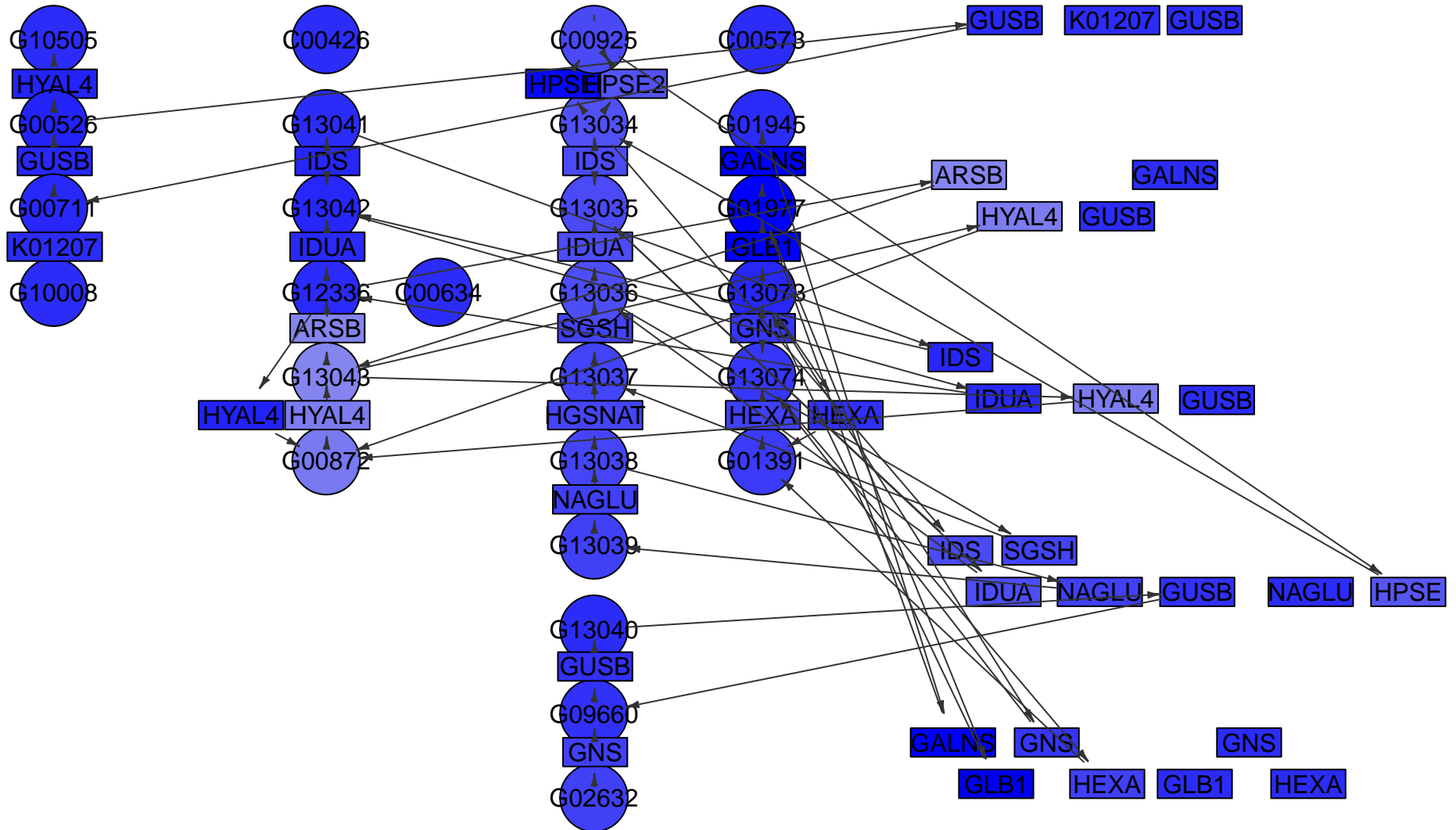
Glycosaminoglycan  
degradation  
MPI-074

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



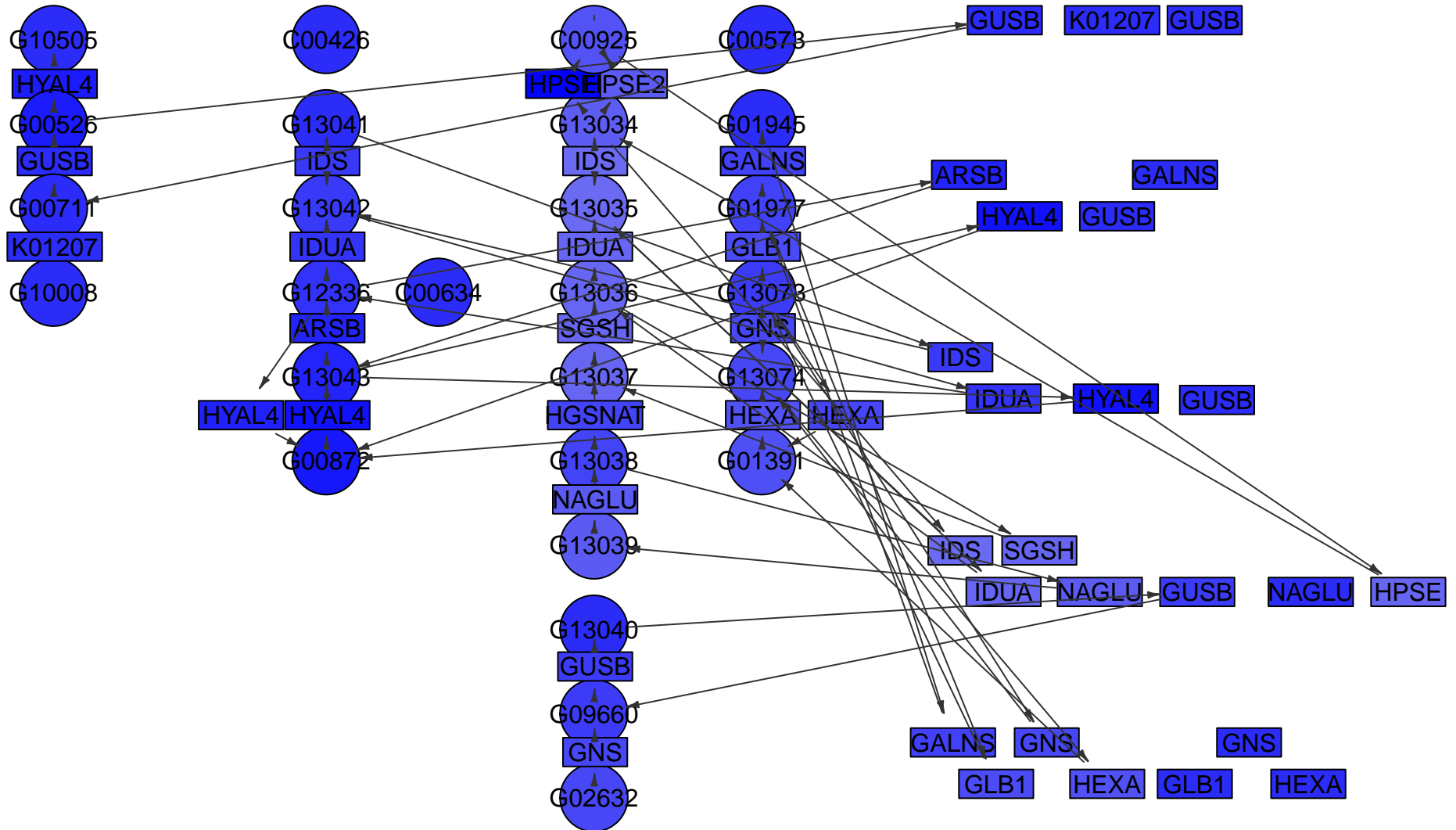
Glycosaminoglycan  
degradation  
MPI-076

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-083

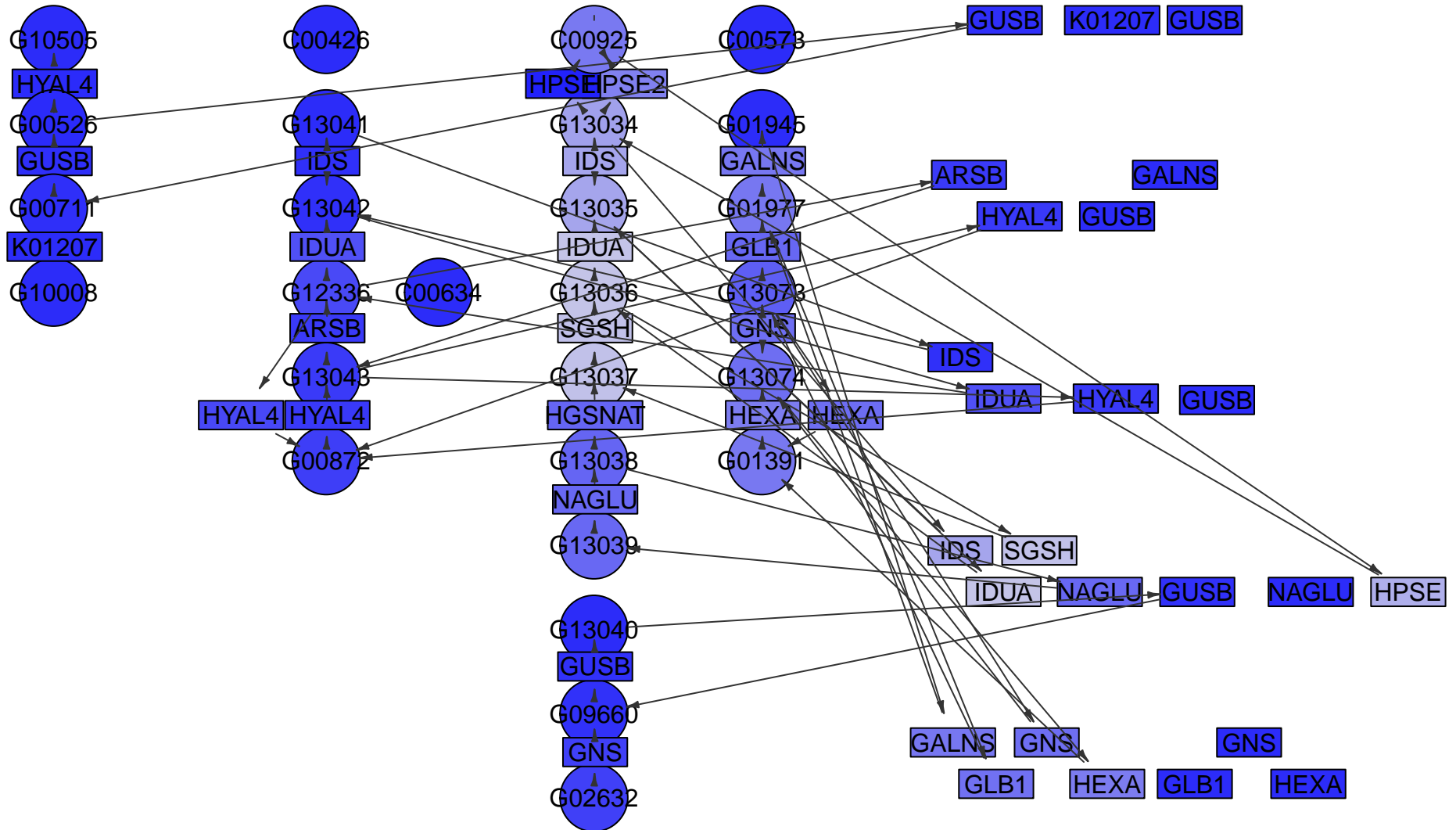
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





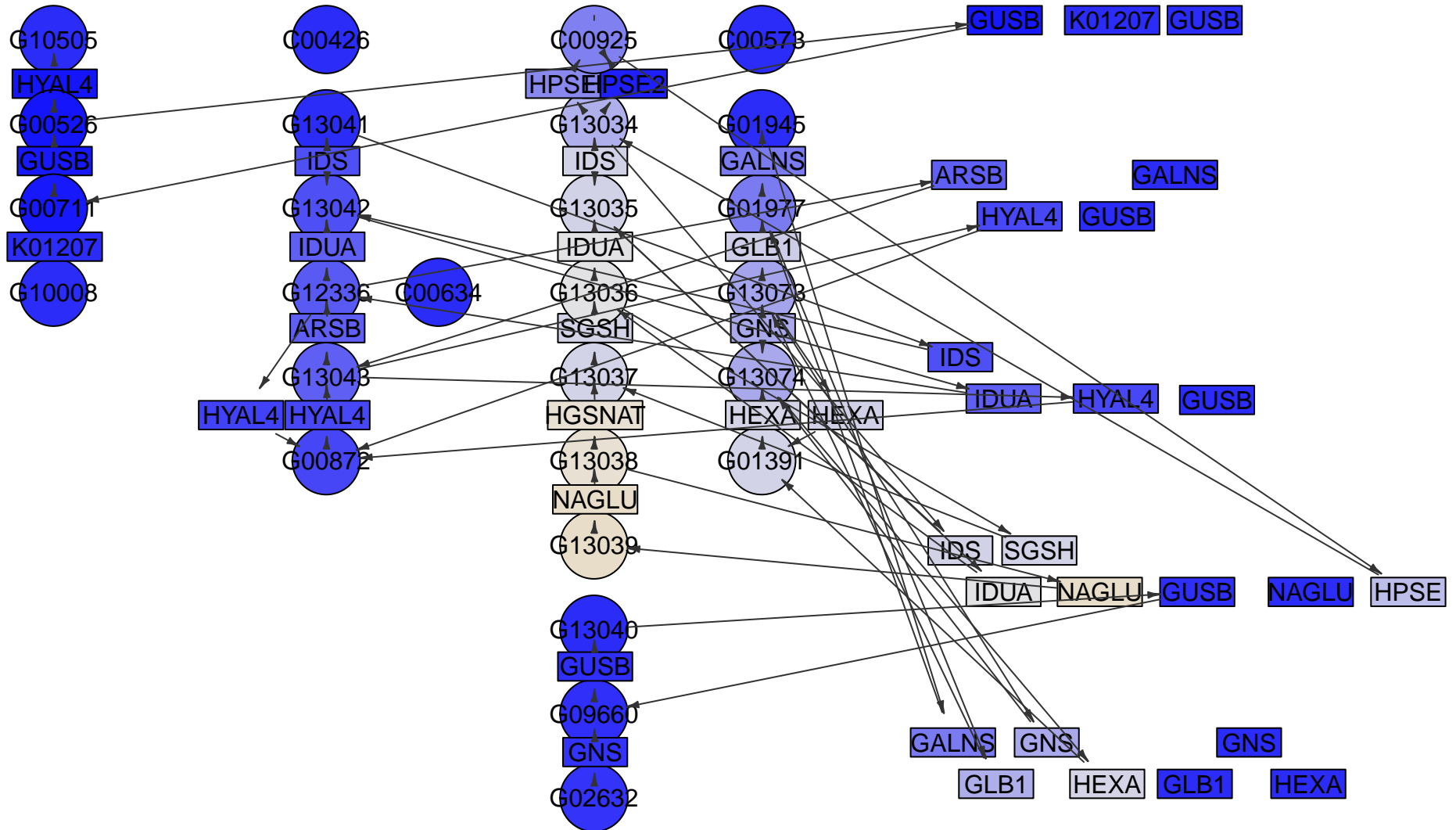
Glycosaminoglycan  
degradation  
MPI-092

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



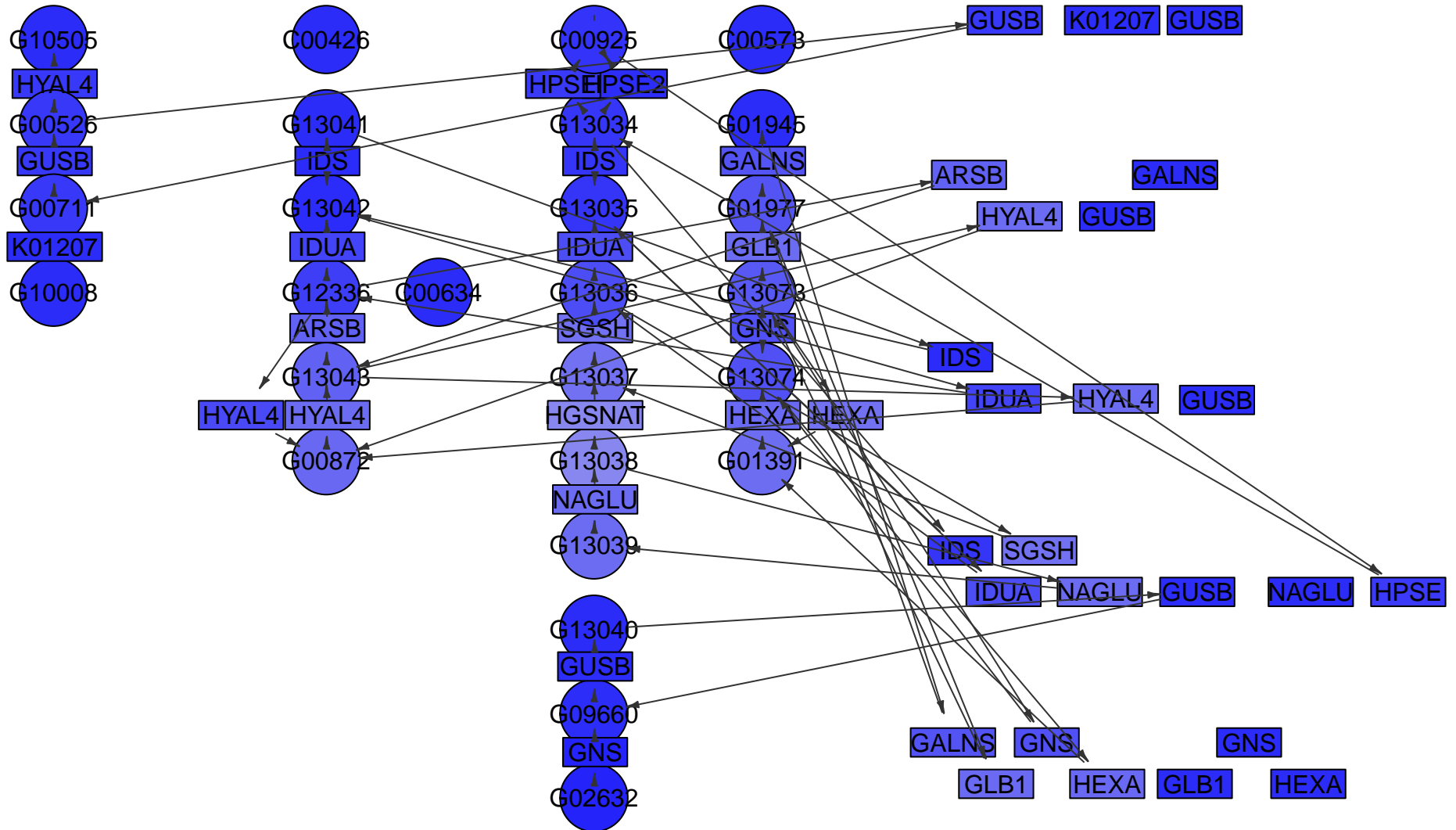
Glycosaminoglycan  
degradation  
MPI-096

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-098

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate

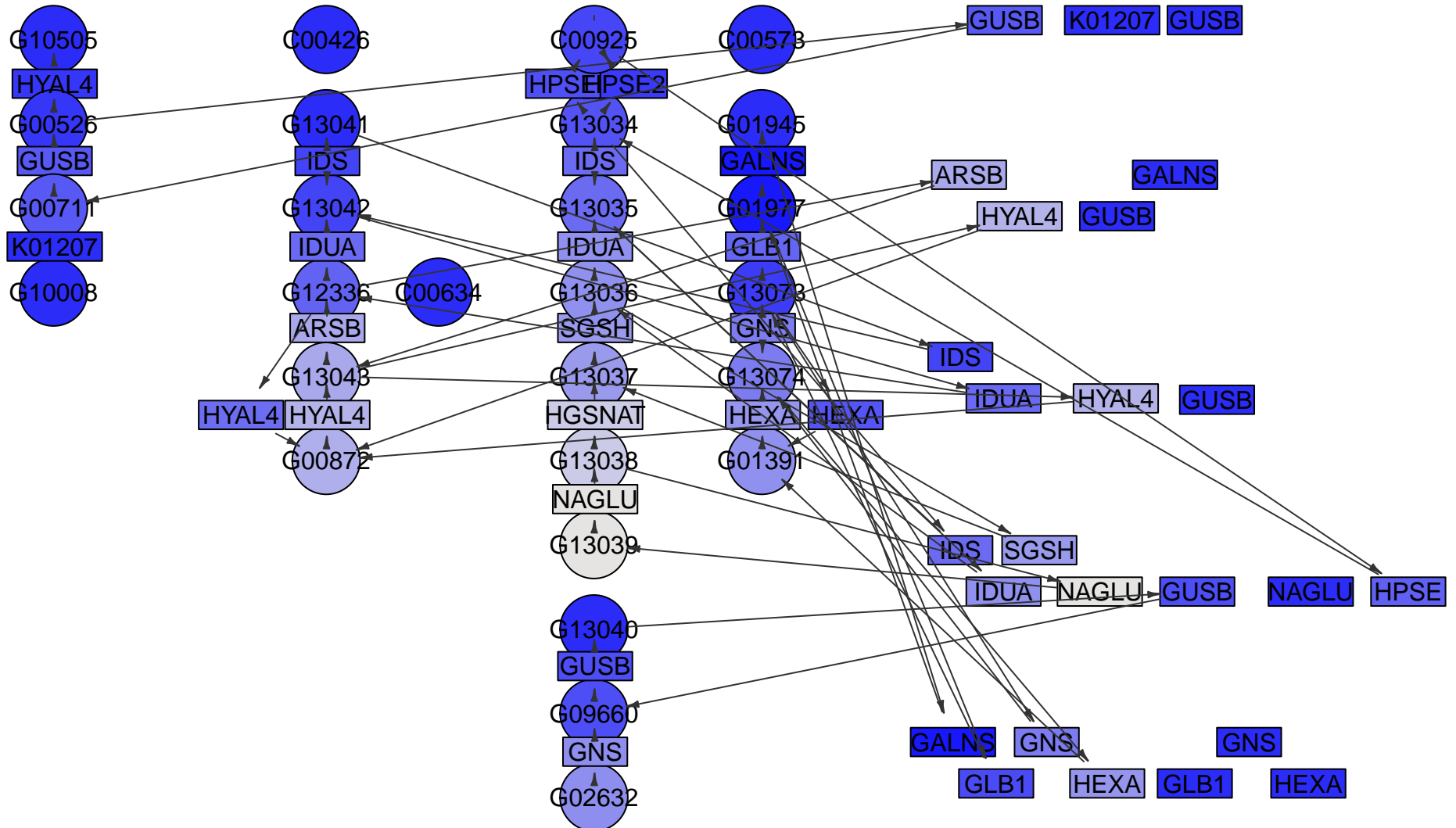






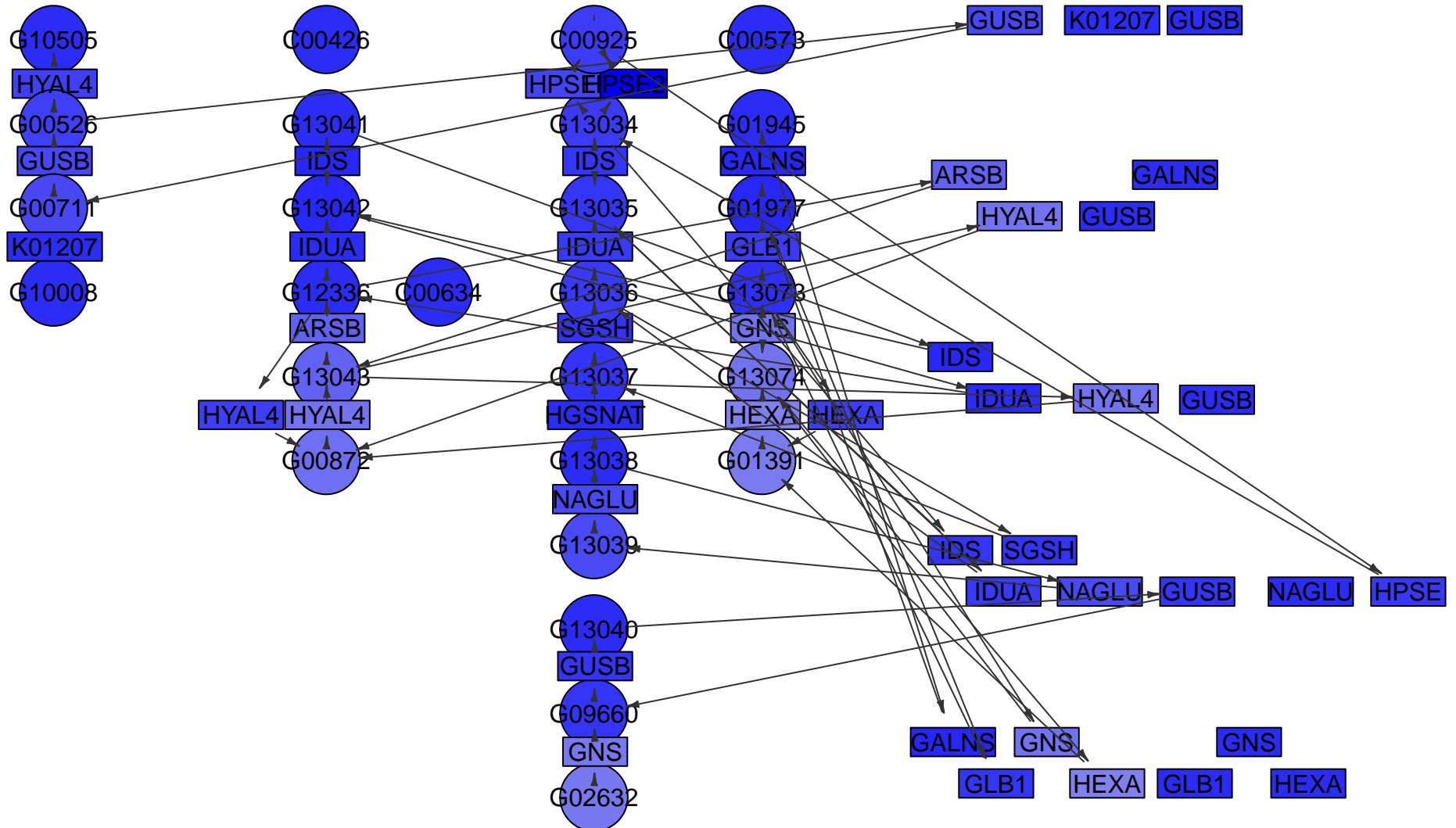
Glycosaminoglycan  
degradation  
MPI-105

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



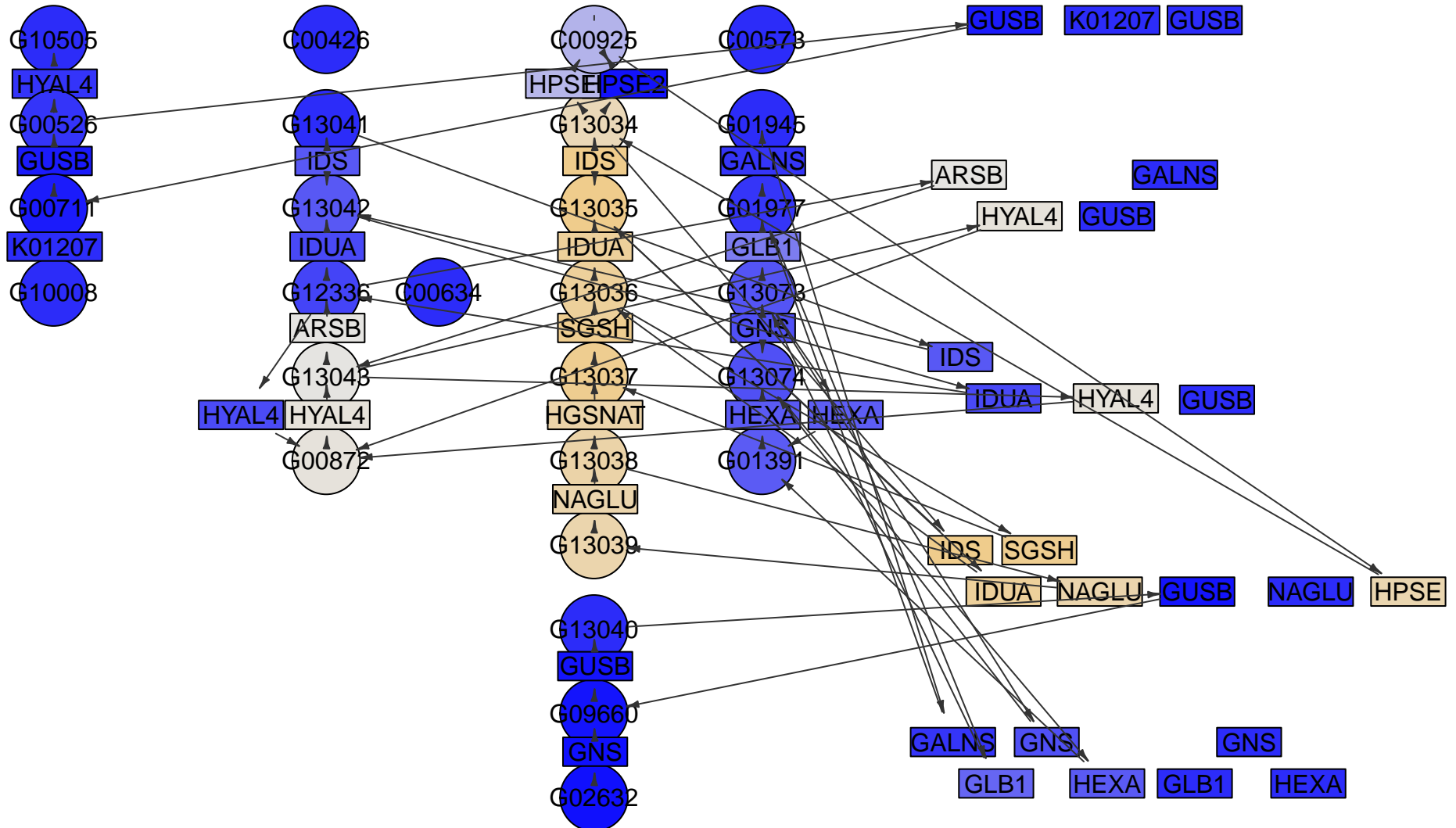
Glycosaminoglycan  
degradation  
MPI-106

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



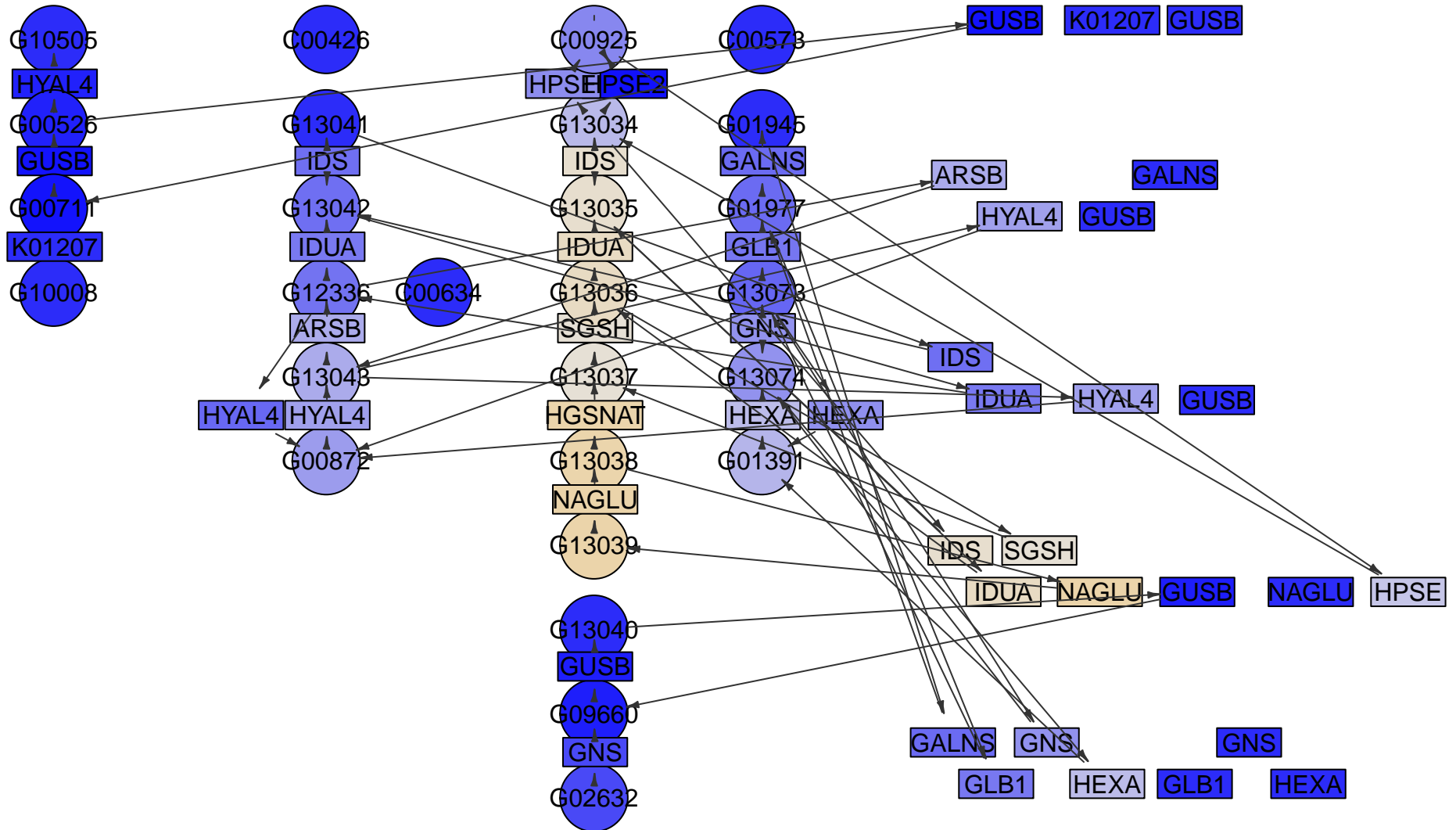
Glycosaminoglycan  
degradation  
MPI-108

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



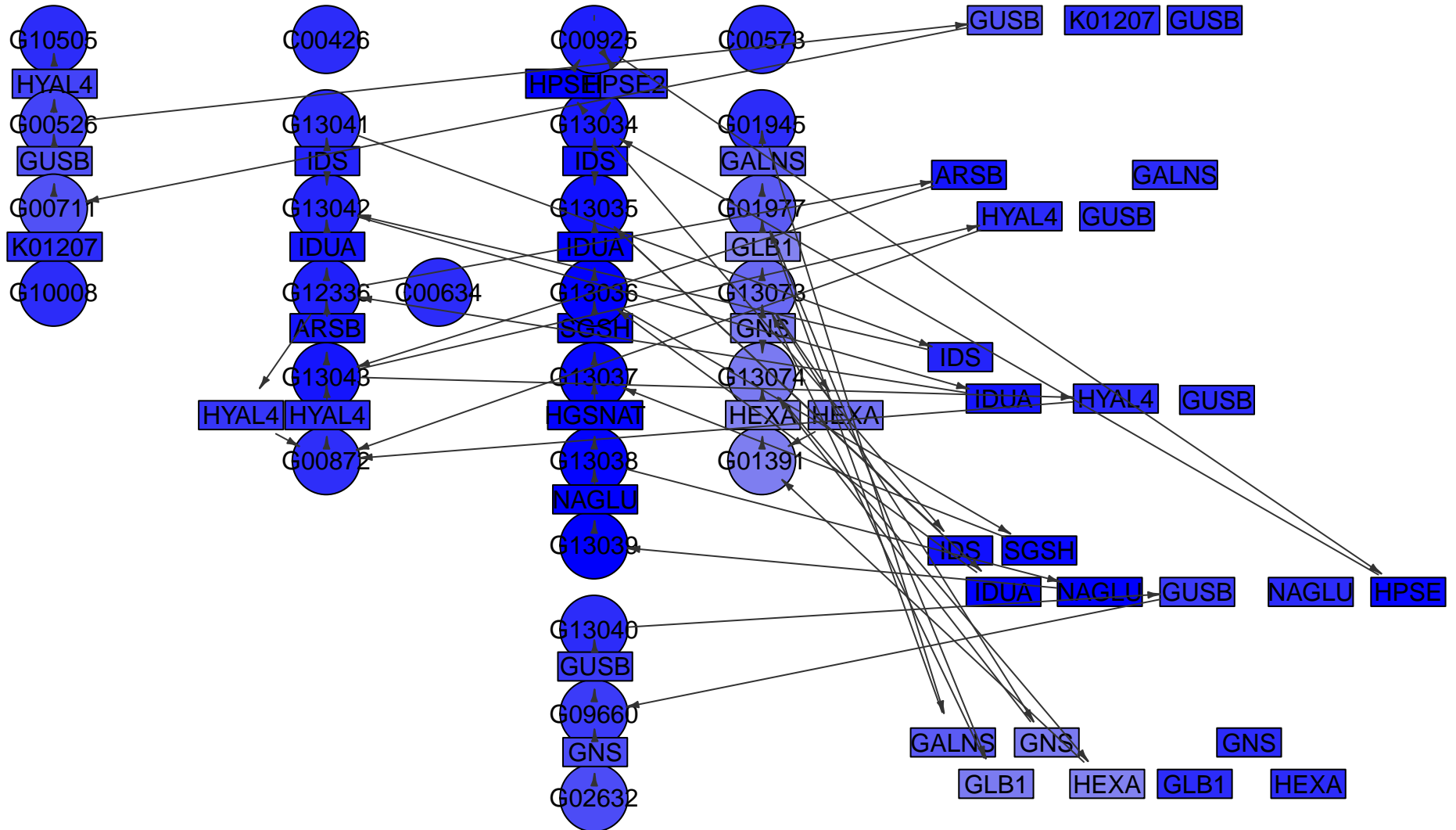
Glycosaminoglycan  
degradation  
MPI-109

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



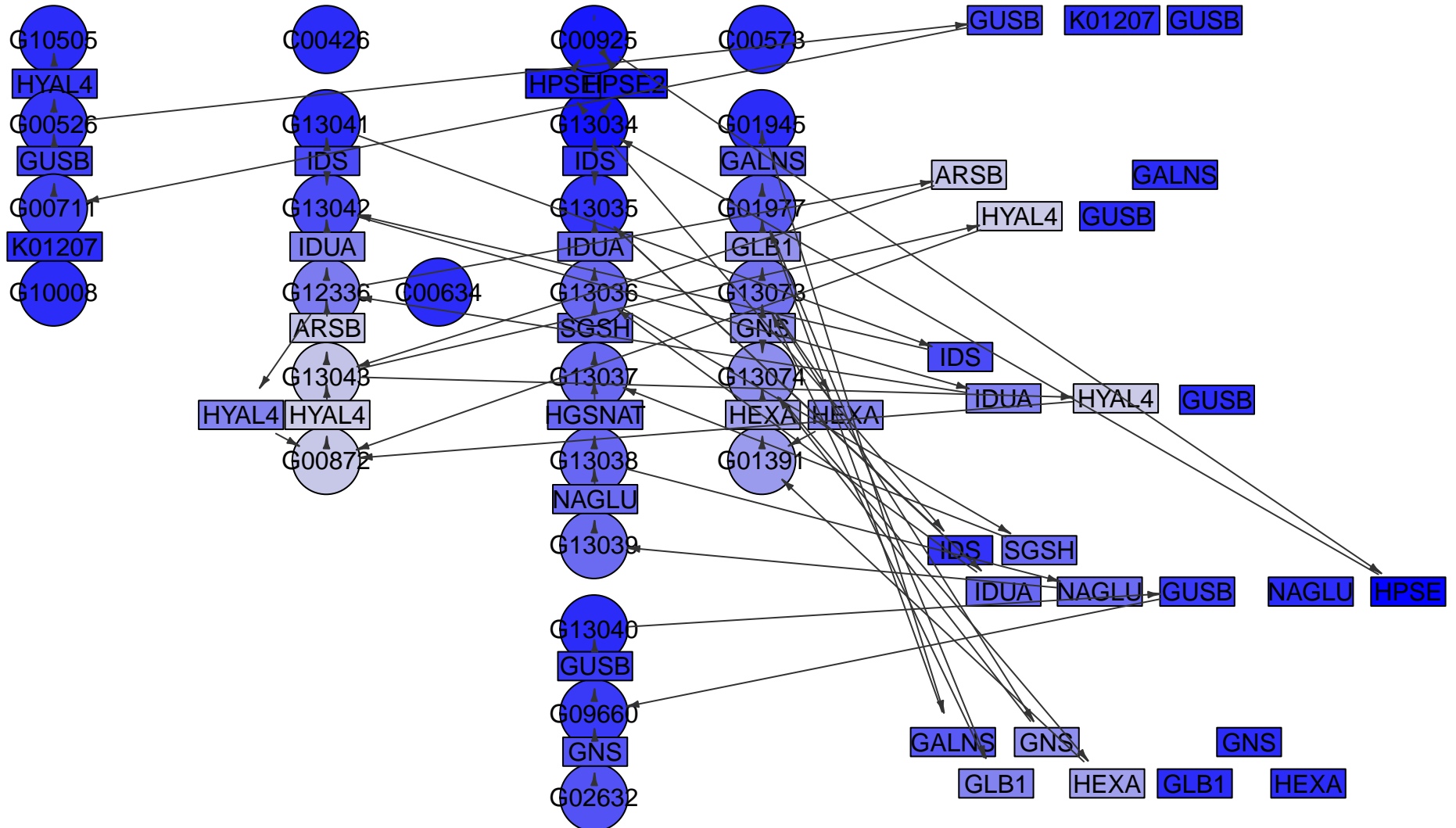
Glycosaminoglycan  
degradation  
MPI-110

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-111

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



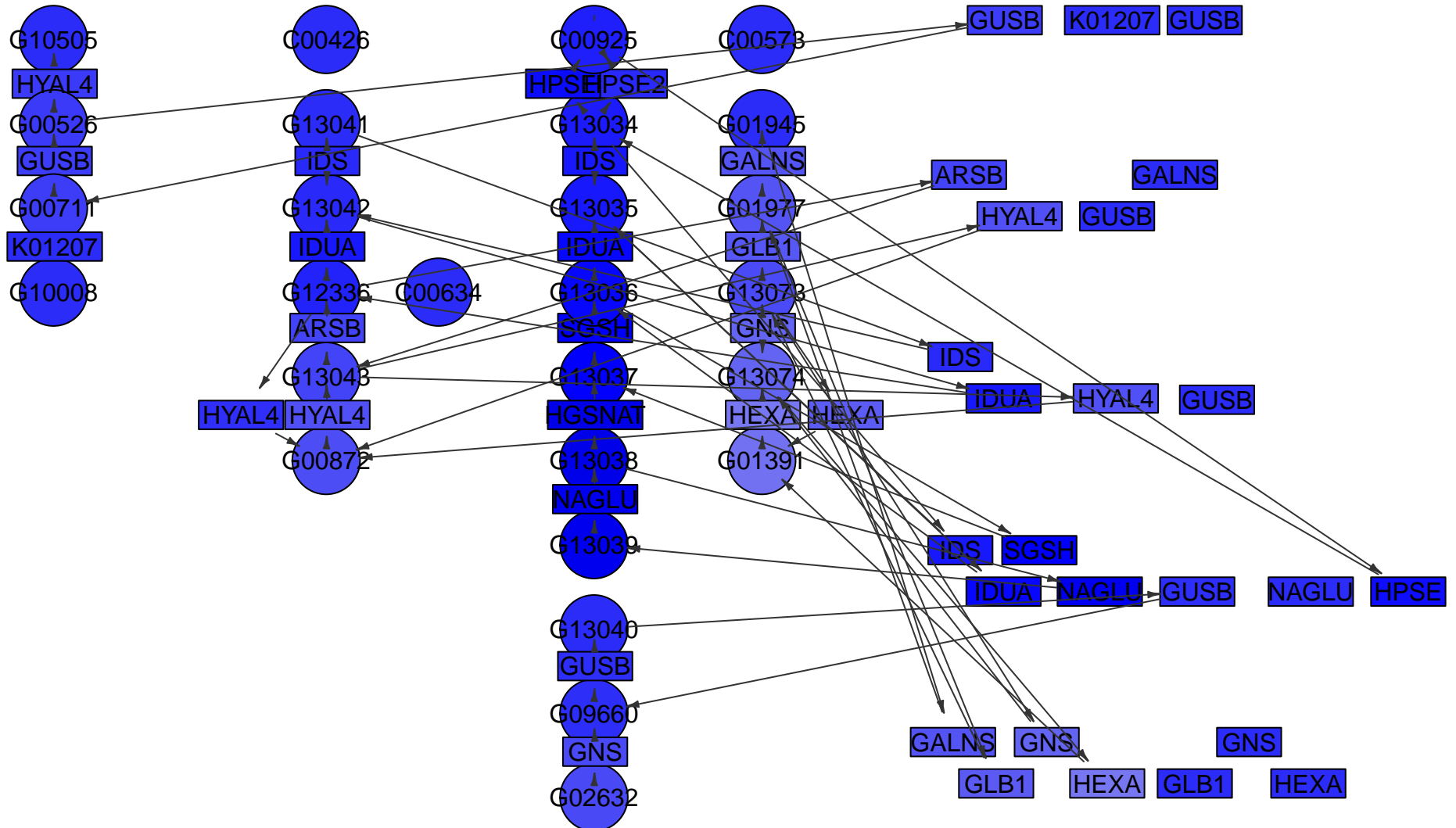






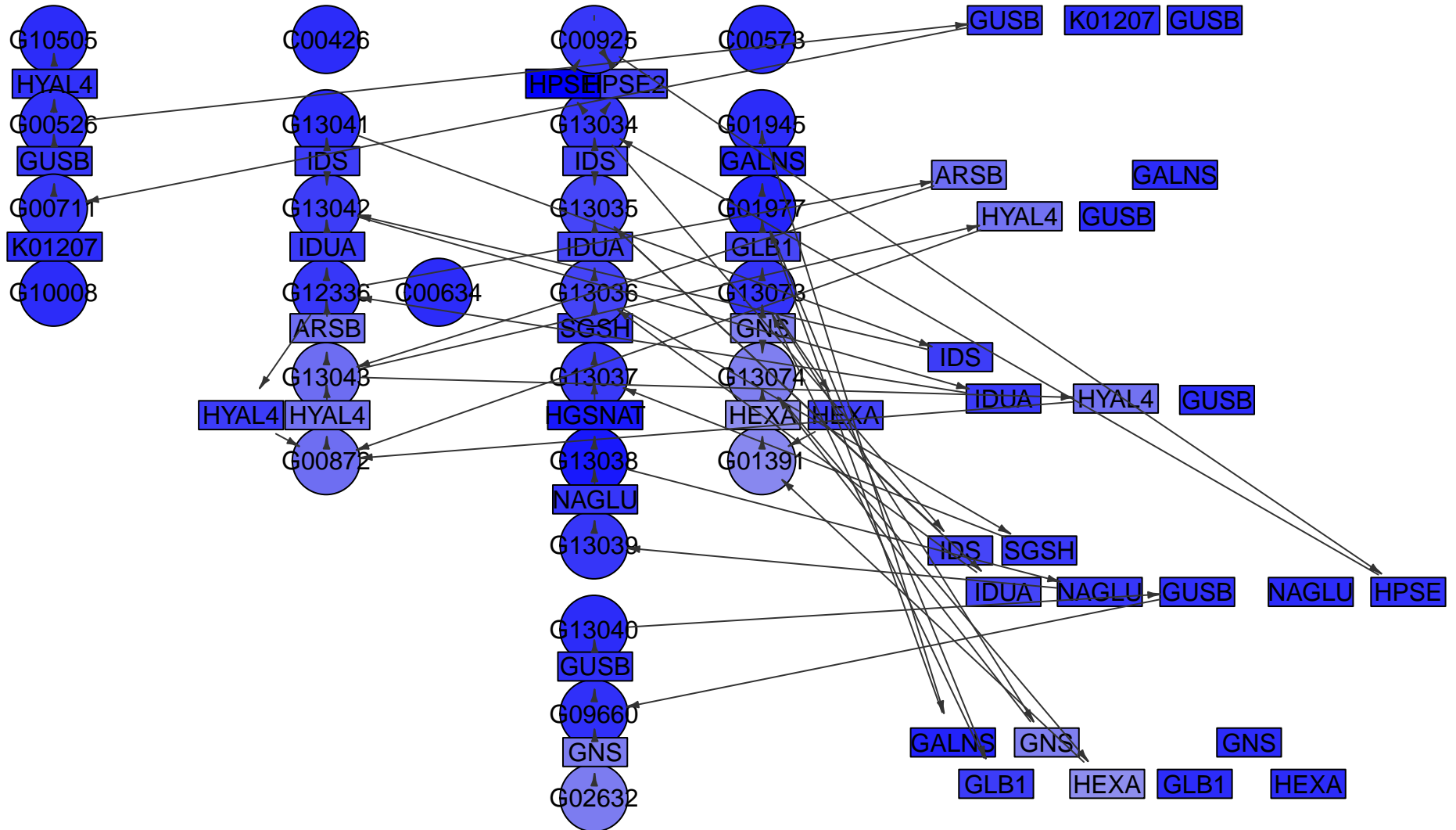
Glycosaminoglycan  
degradation  
MPI-118

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-119

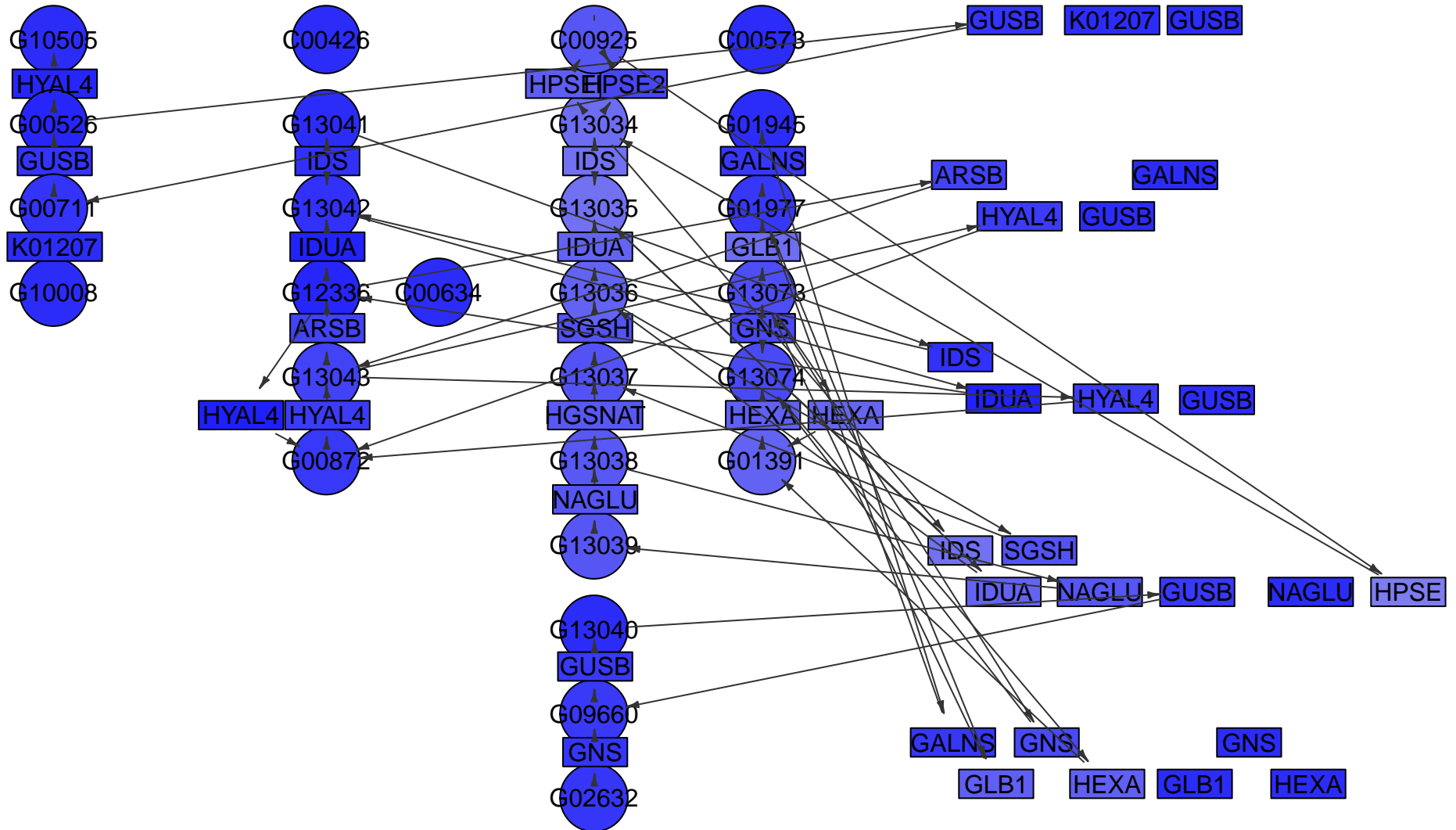
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





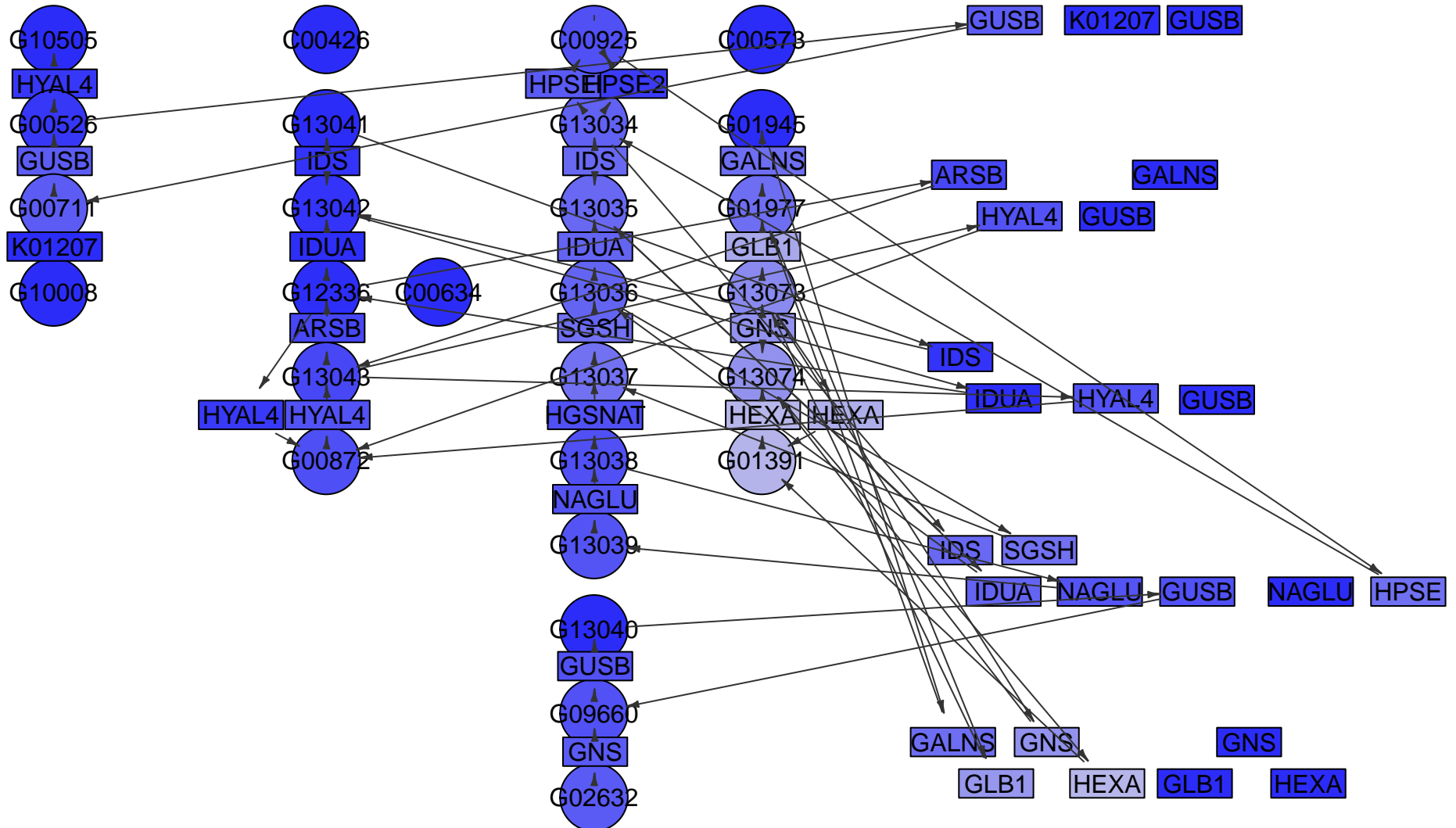
Glycosaminoglycan  
degradation  
MPI-127

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-128

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

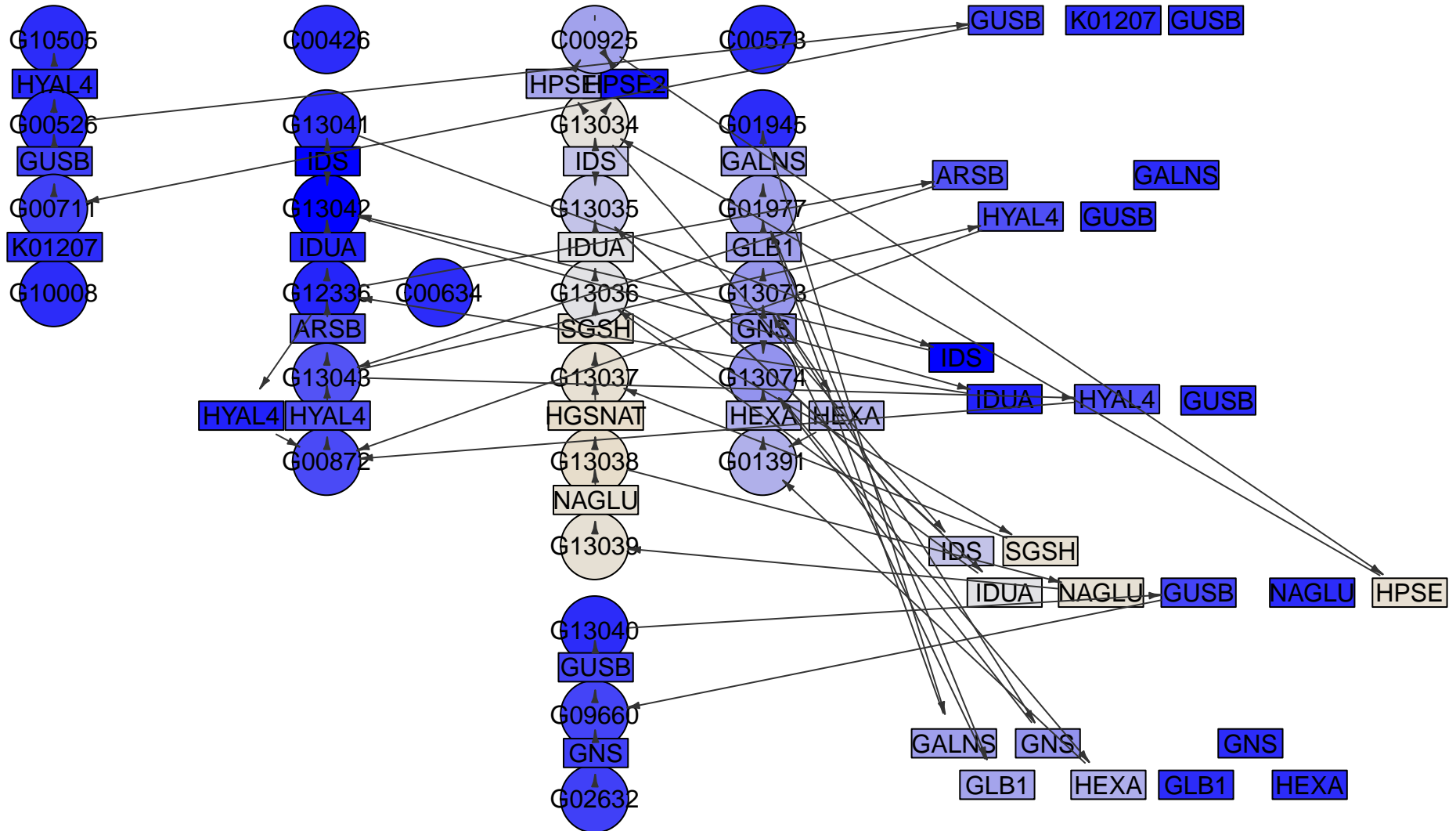






Glycosaminoglycan  
degradation  
MPI-130

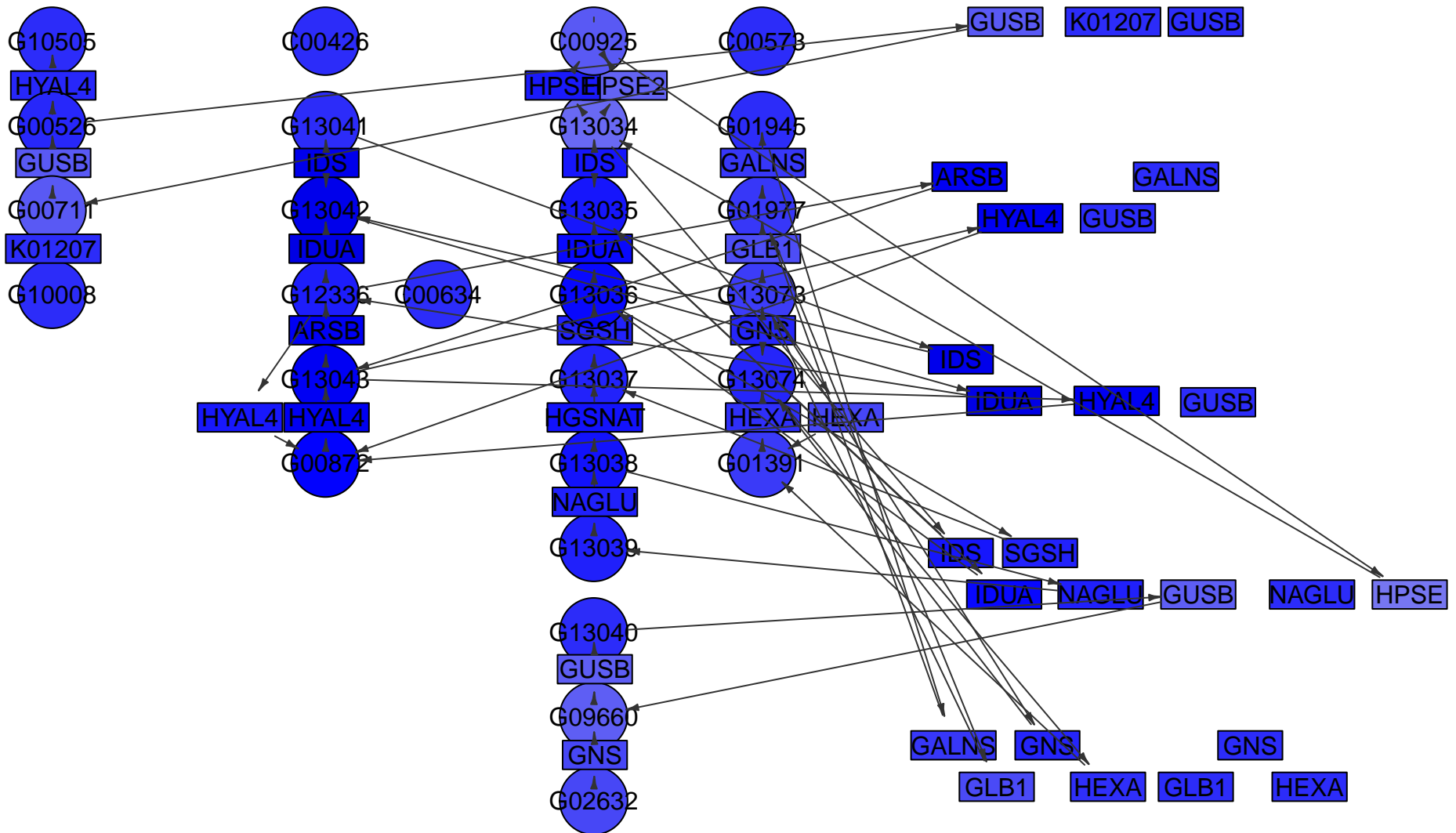
Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





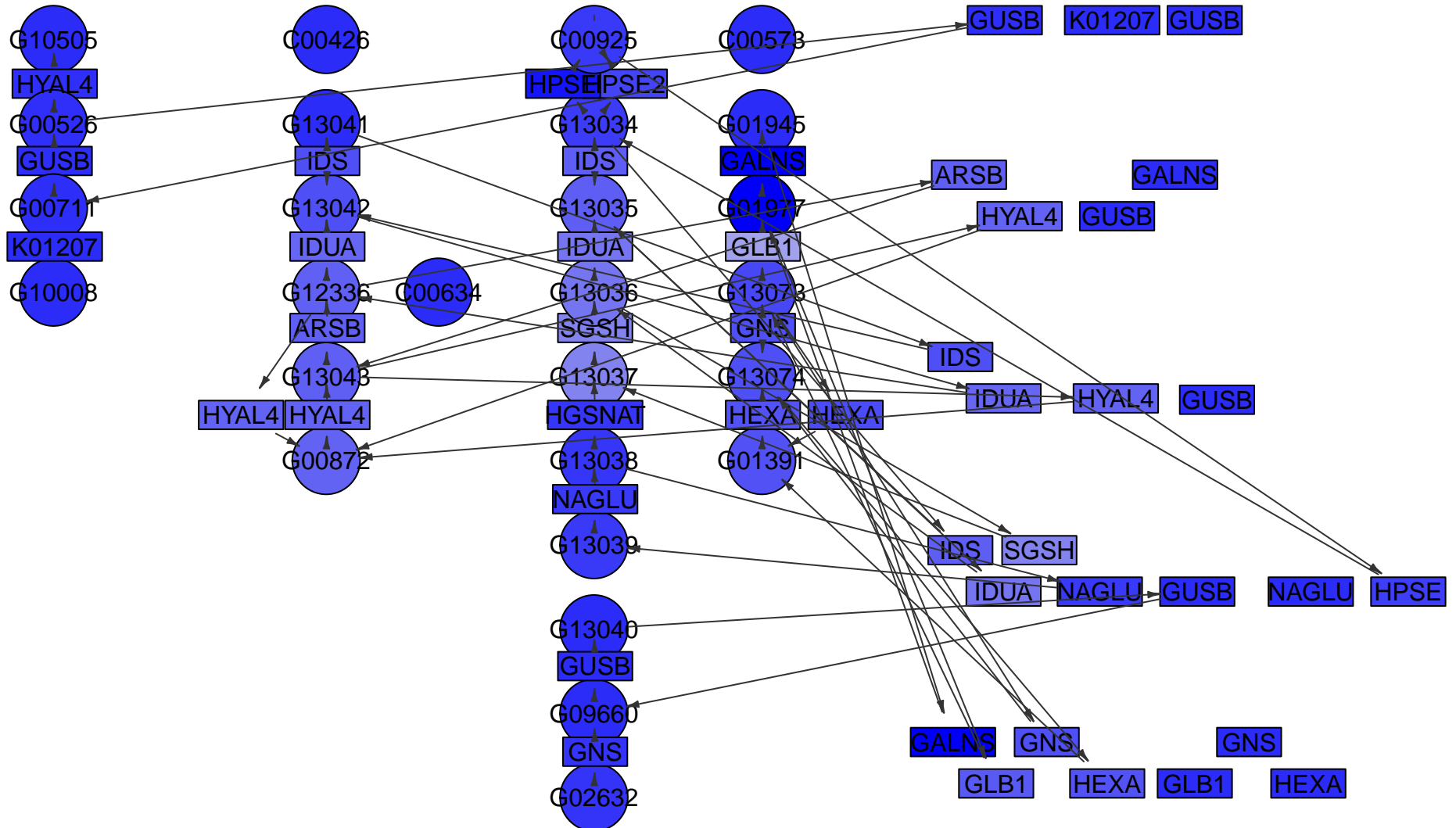
Glycosaminoglycan  
degradation  
MPI-133

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



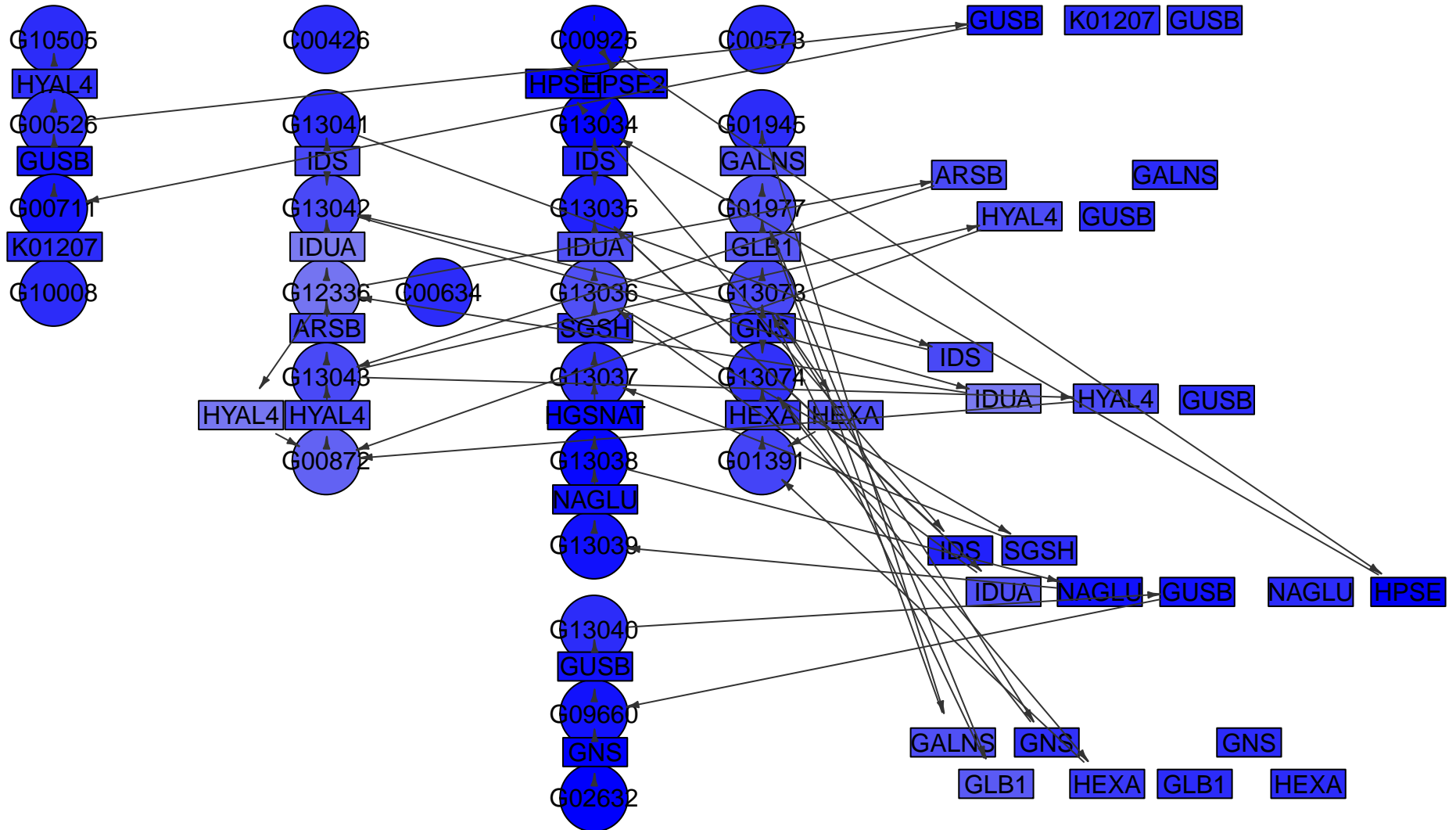
Glycosaminoglycan  
degradation  
MPI-134

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



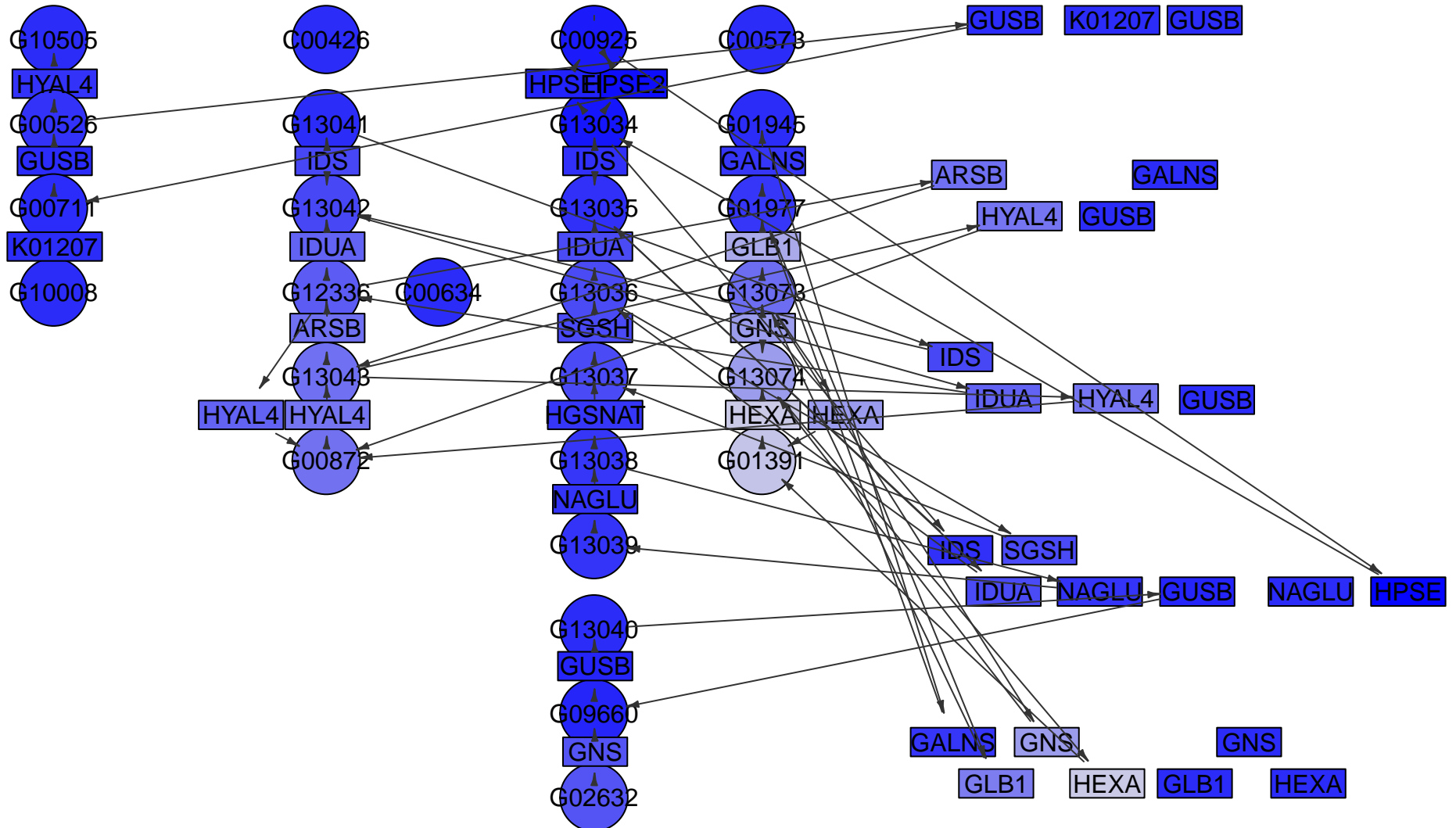
Glycosaminoglycan  
degradation  
MPI-135

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-136

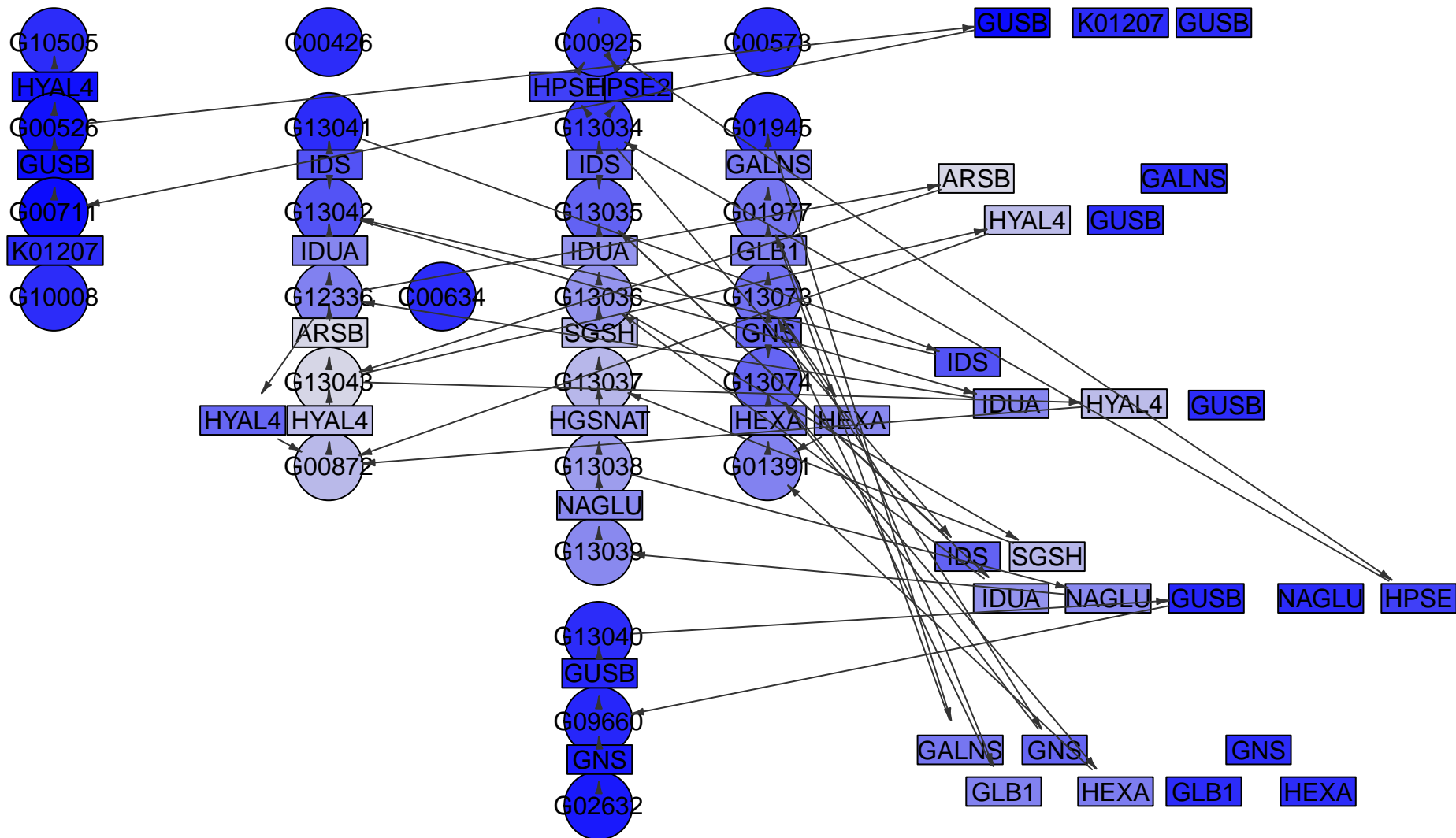
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
keratan sulfate





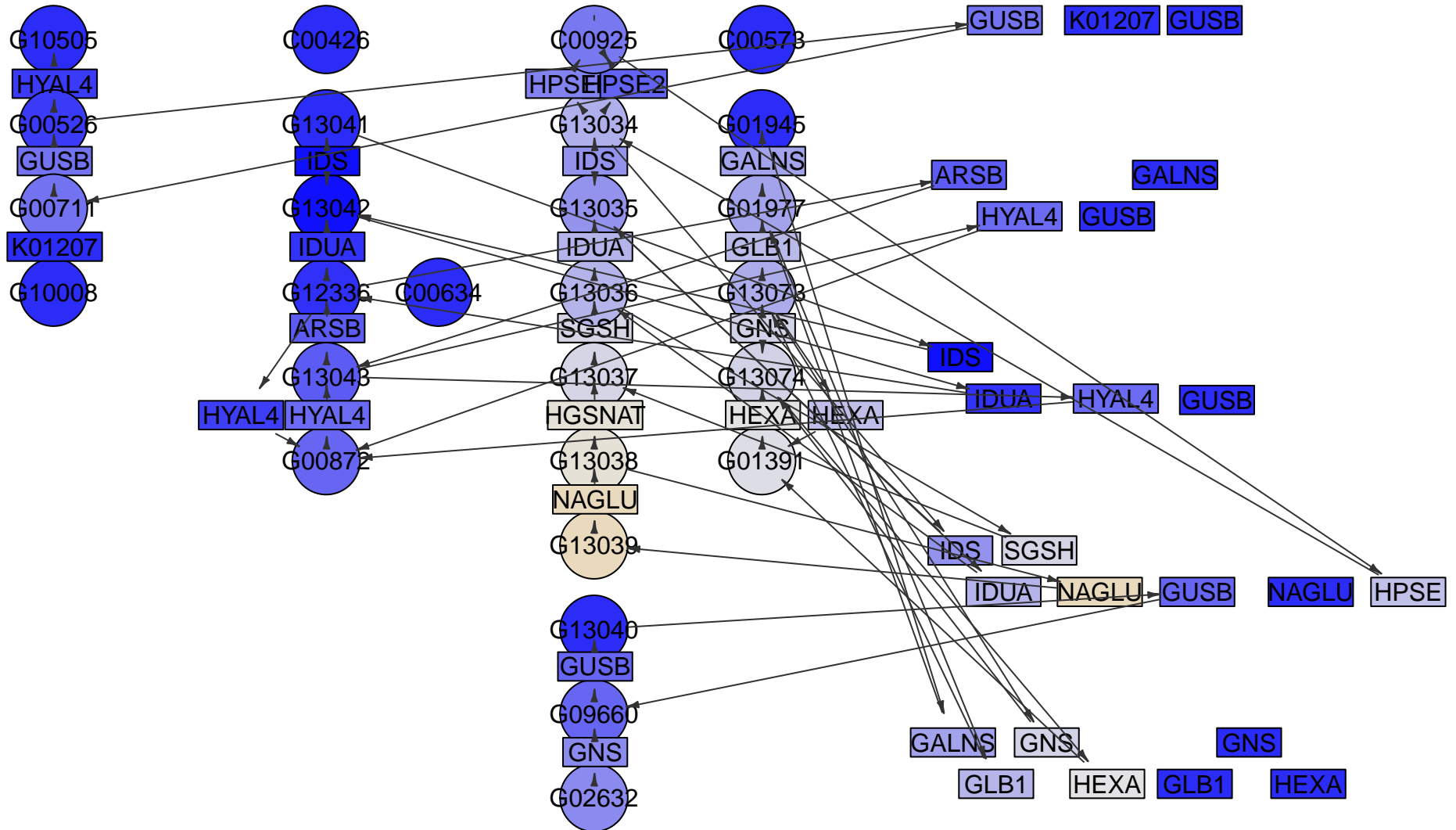
Glycosaminoglycan  
degradation  
MPI-141

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



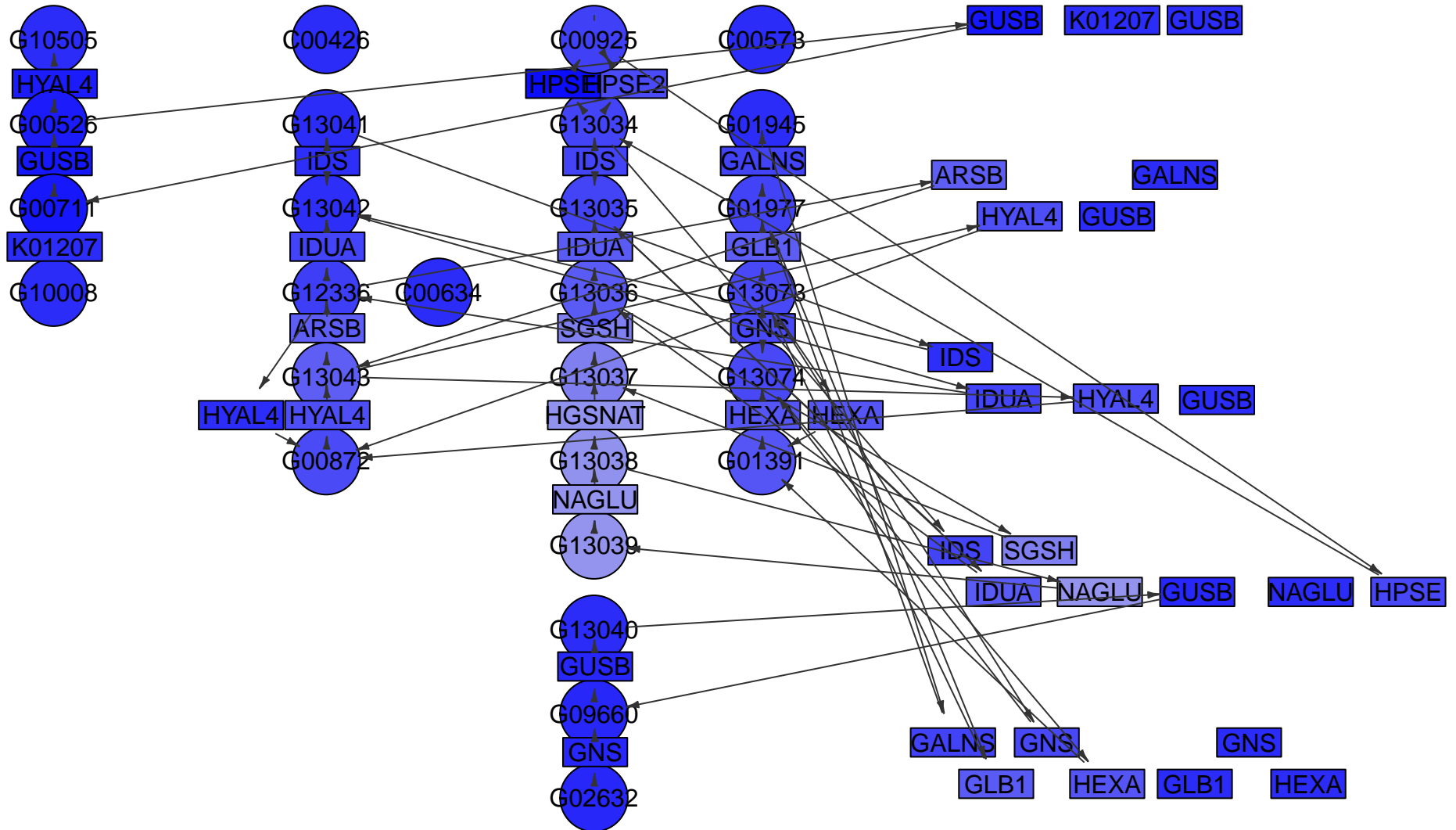
Glycosaminoglycan  
degradation  
MPI-142

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-145

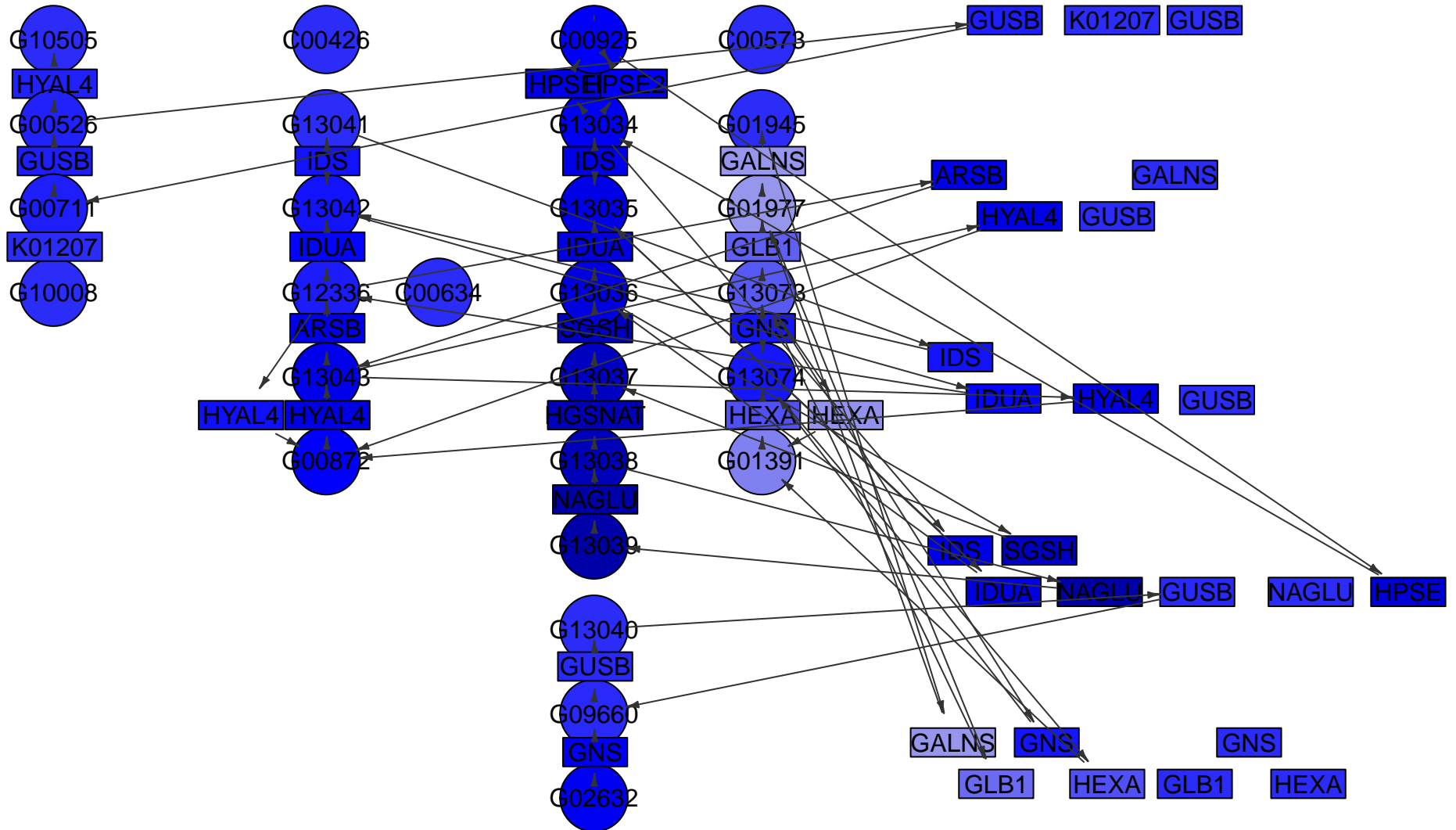
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





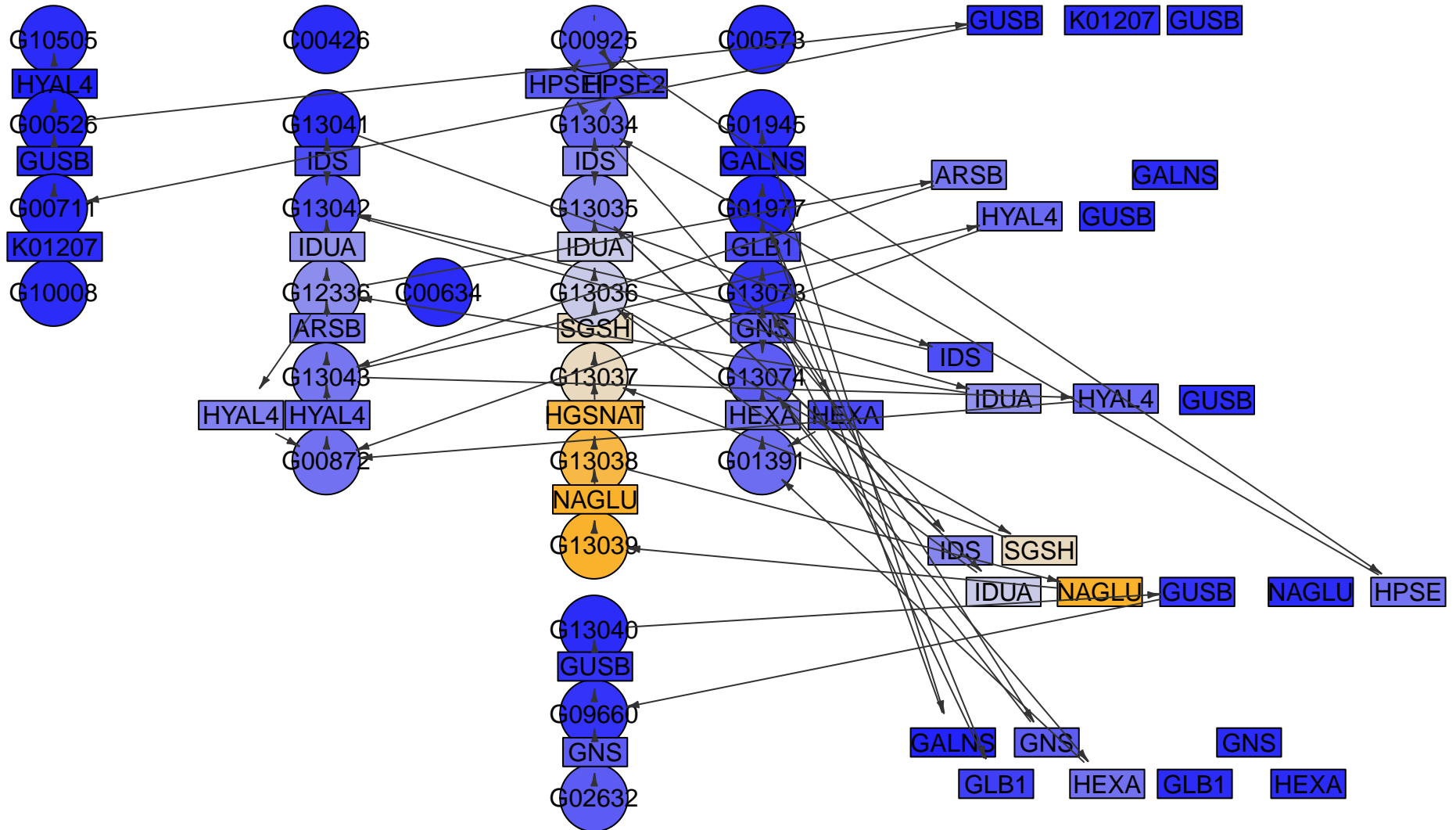
Glycosaminoglycan  
degradation  
MPI-149

Glycosaminoglycan degradation  
Glycosaminoglycan synthesis  
Glycosaminoglycan synthesis - sulfate / dermatansulfate / heparin sulfate / heparan sulfate / heparan keratan sulfate



Glycosaminoglycan  
degradation  
MPI-150

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate

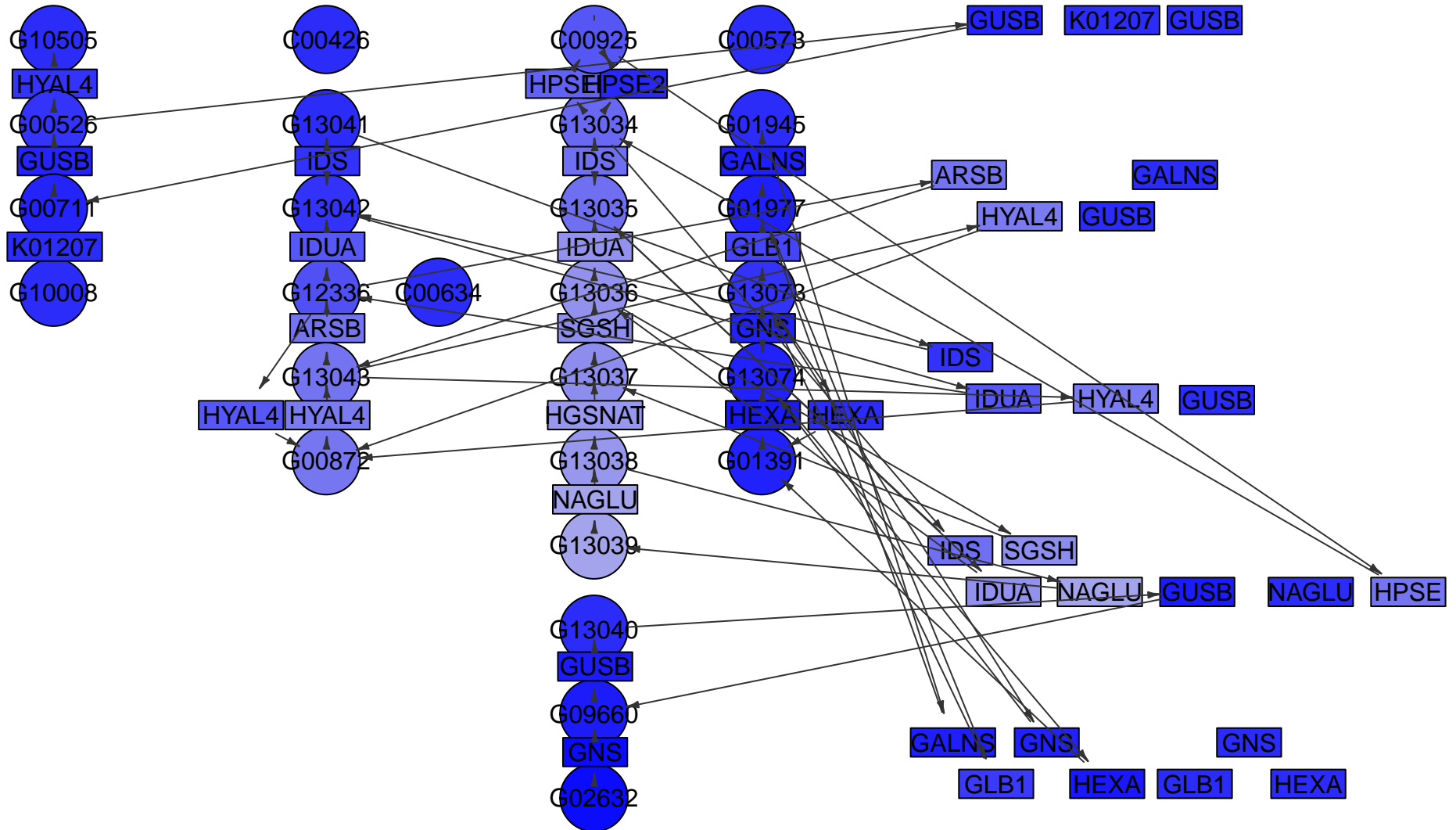






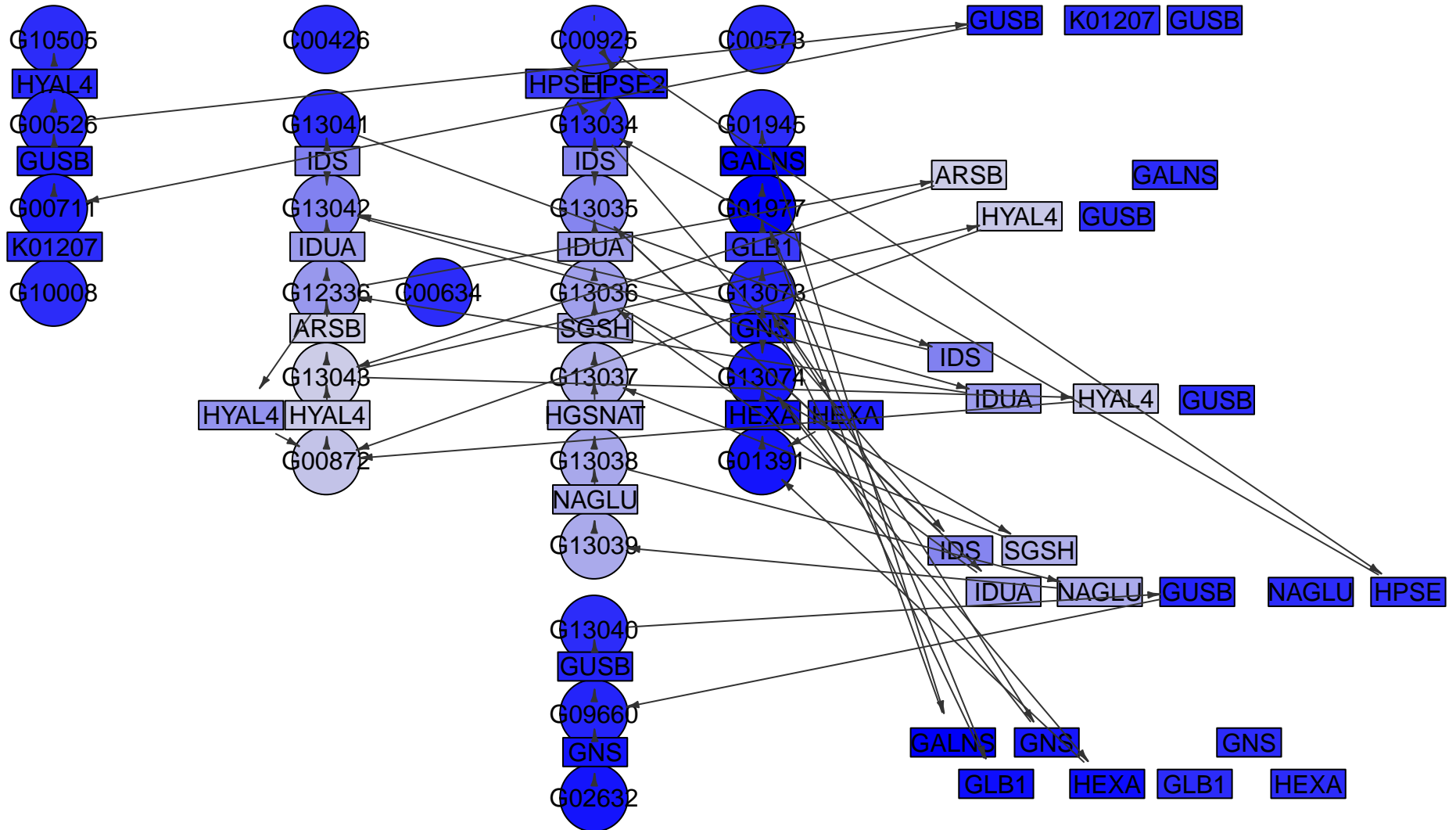
Glycosaminoglycan  
degradation  
MPI-152

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



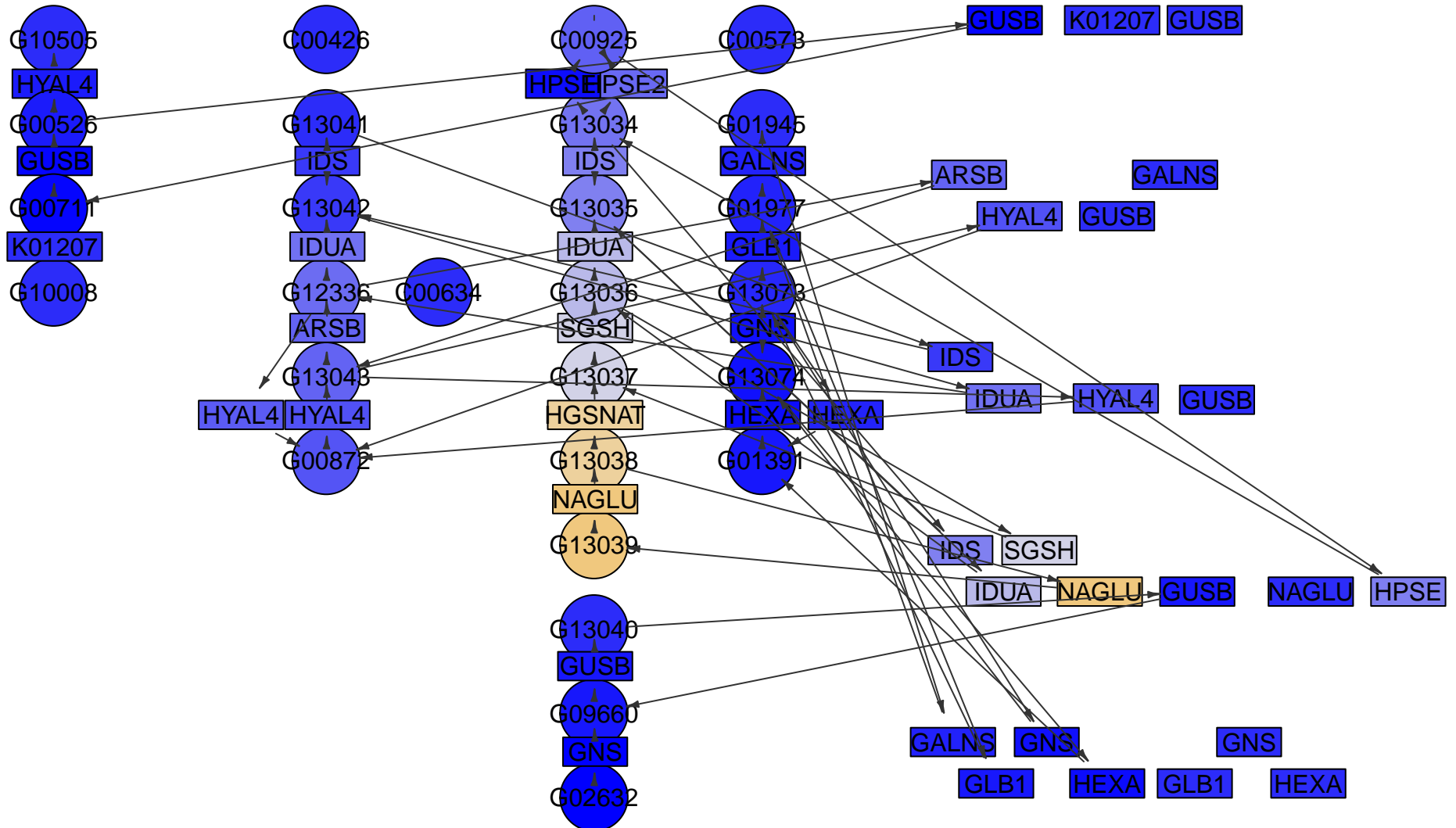
Glycosaminoglycan  
degradation  
MPI-153

Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-154

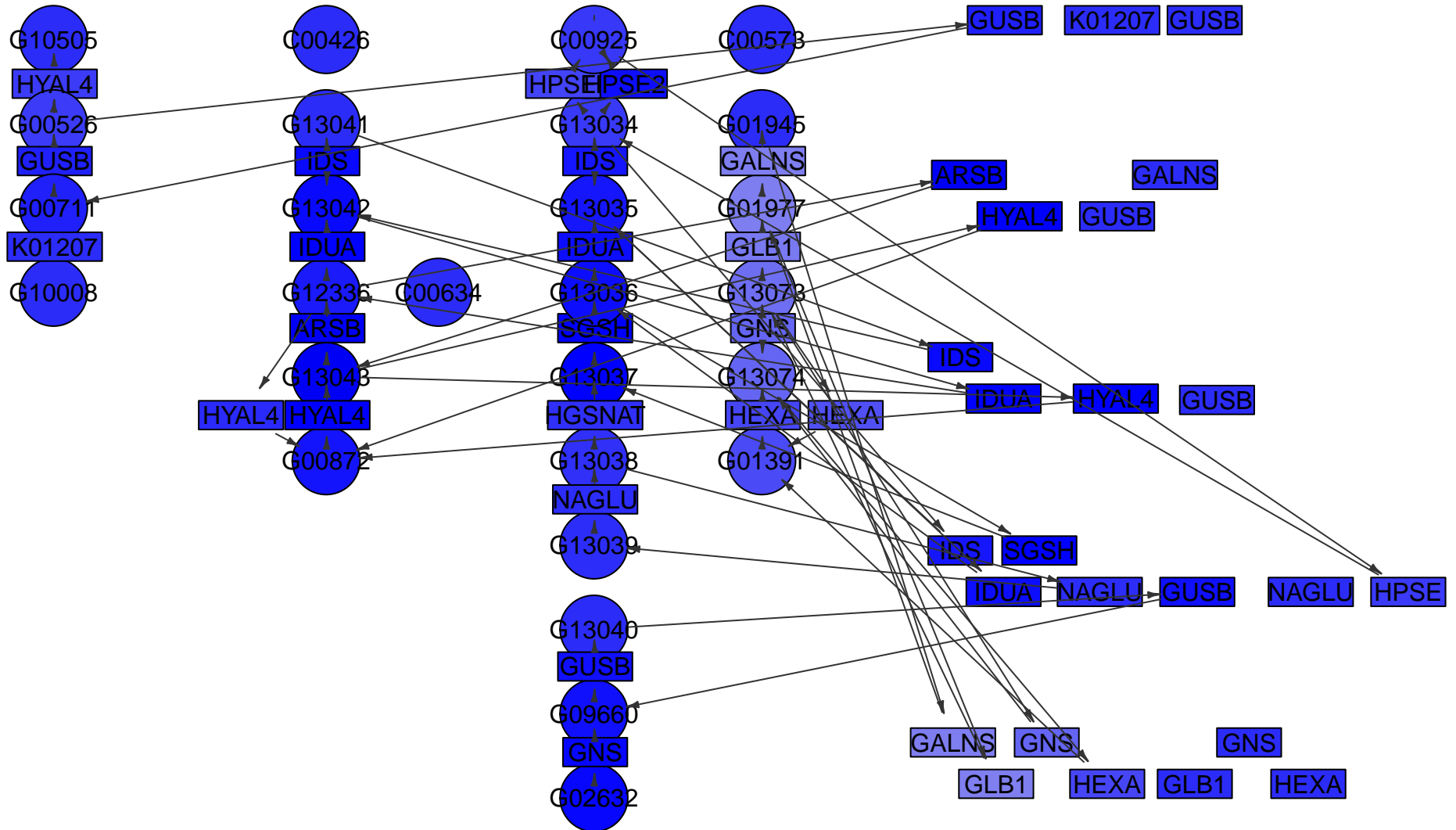
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





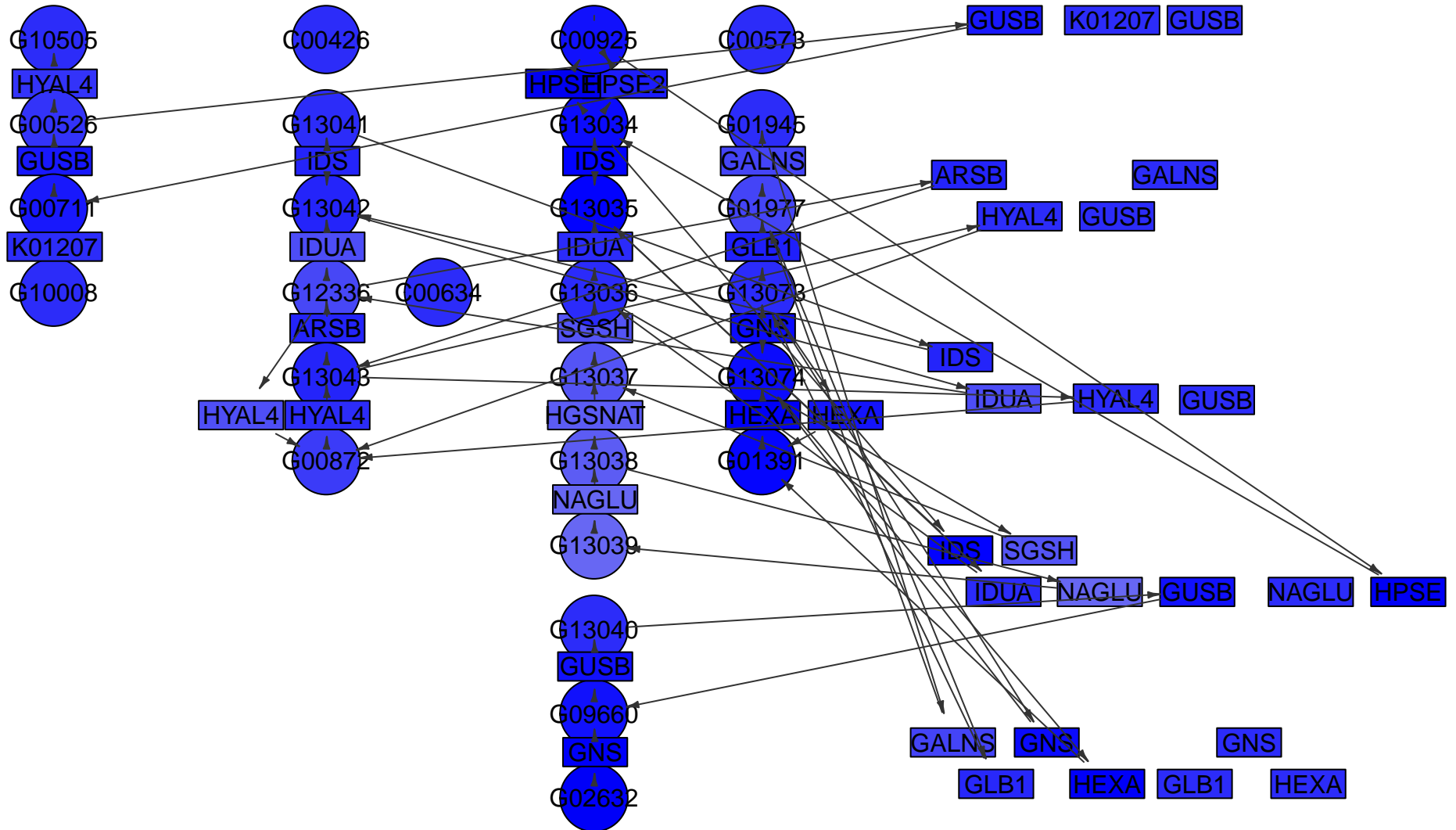
Glycosaminoglycan  
degradation  
MPI-159

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



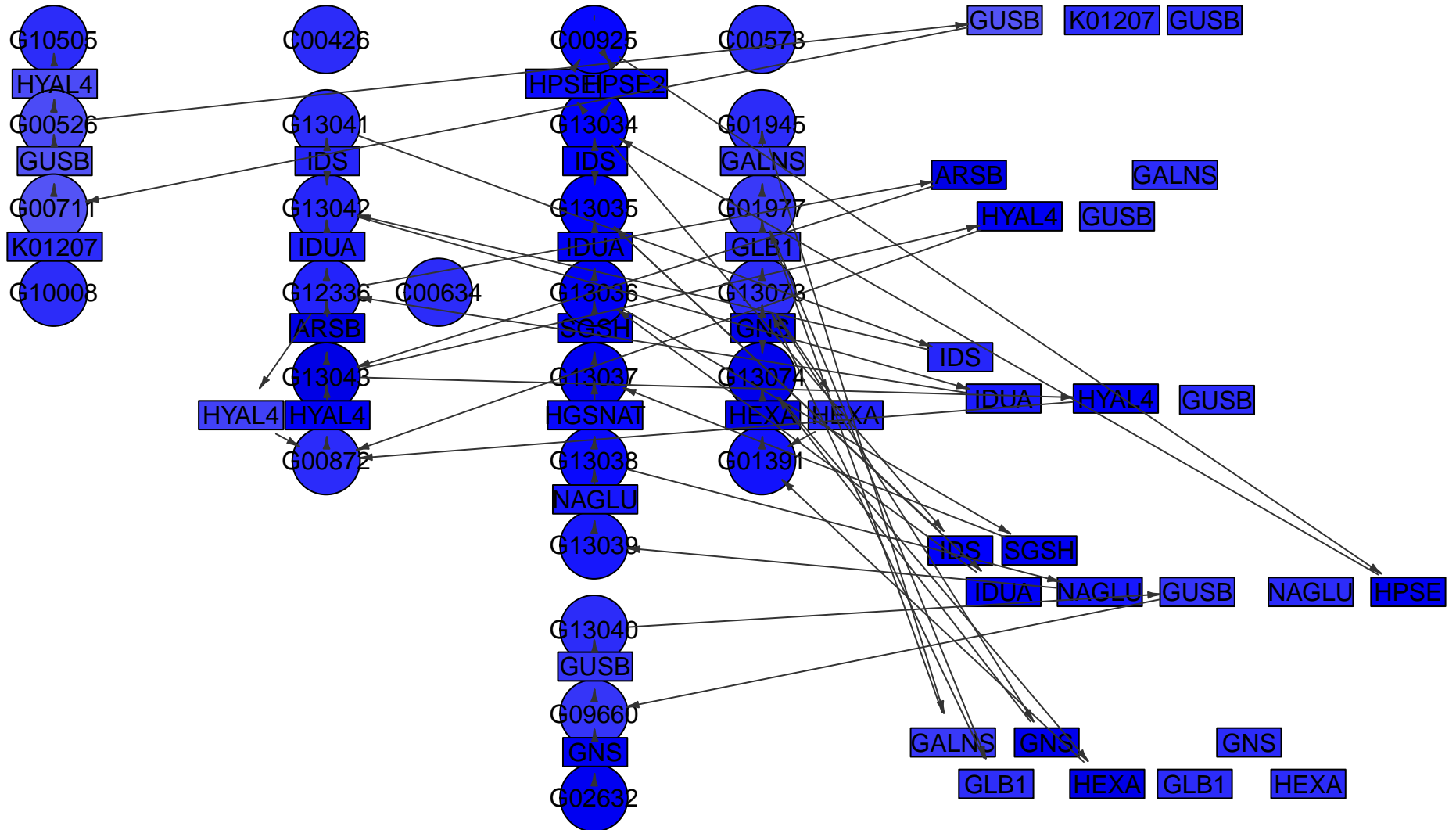
Glycosaminoglycan  
degradation  
MPI-163

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-164

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate

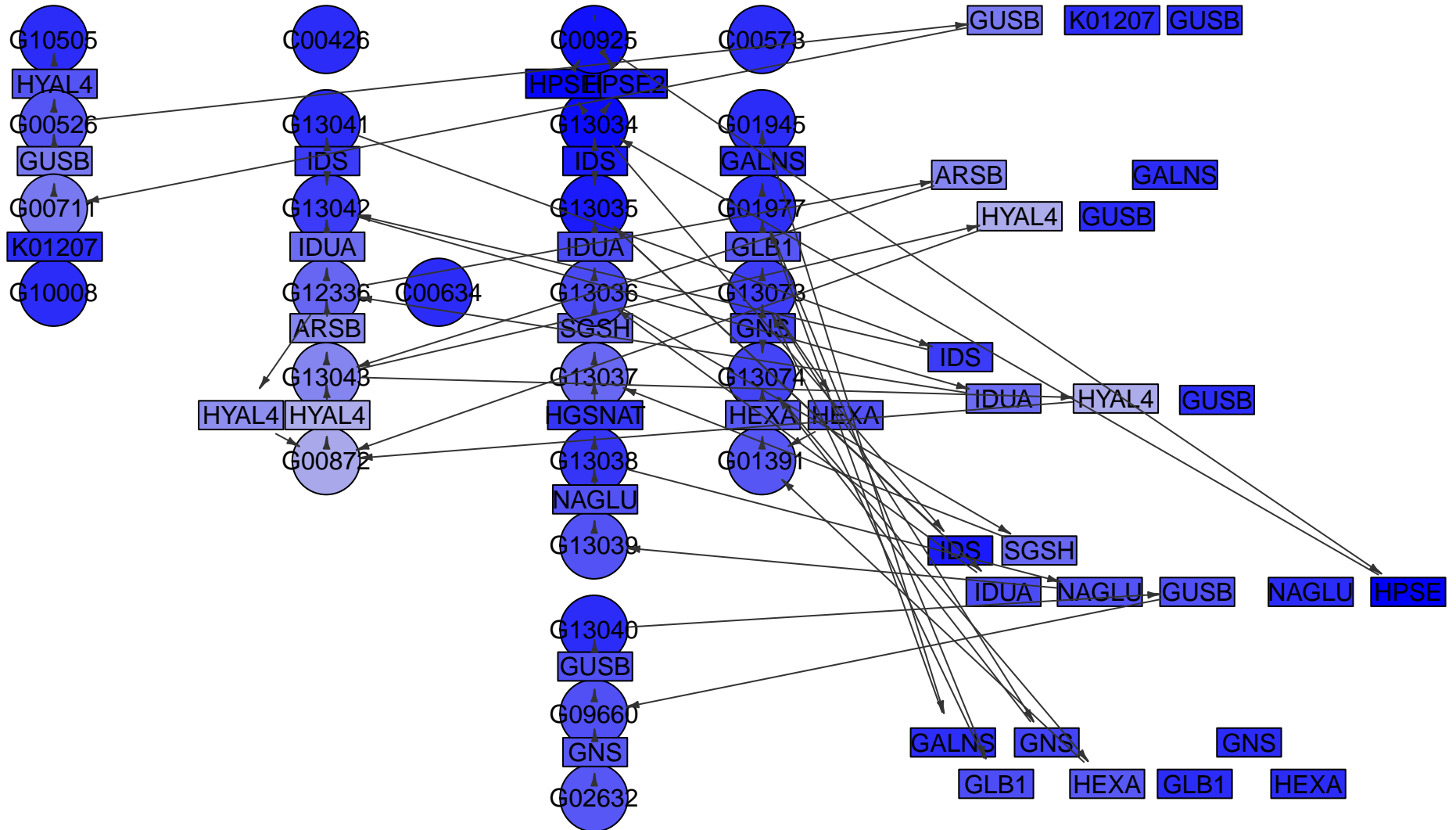






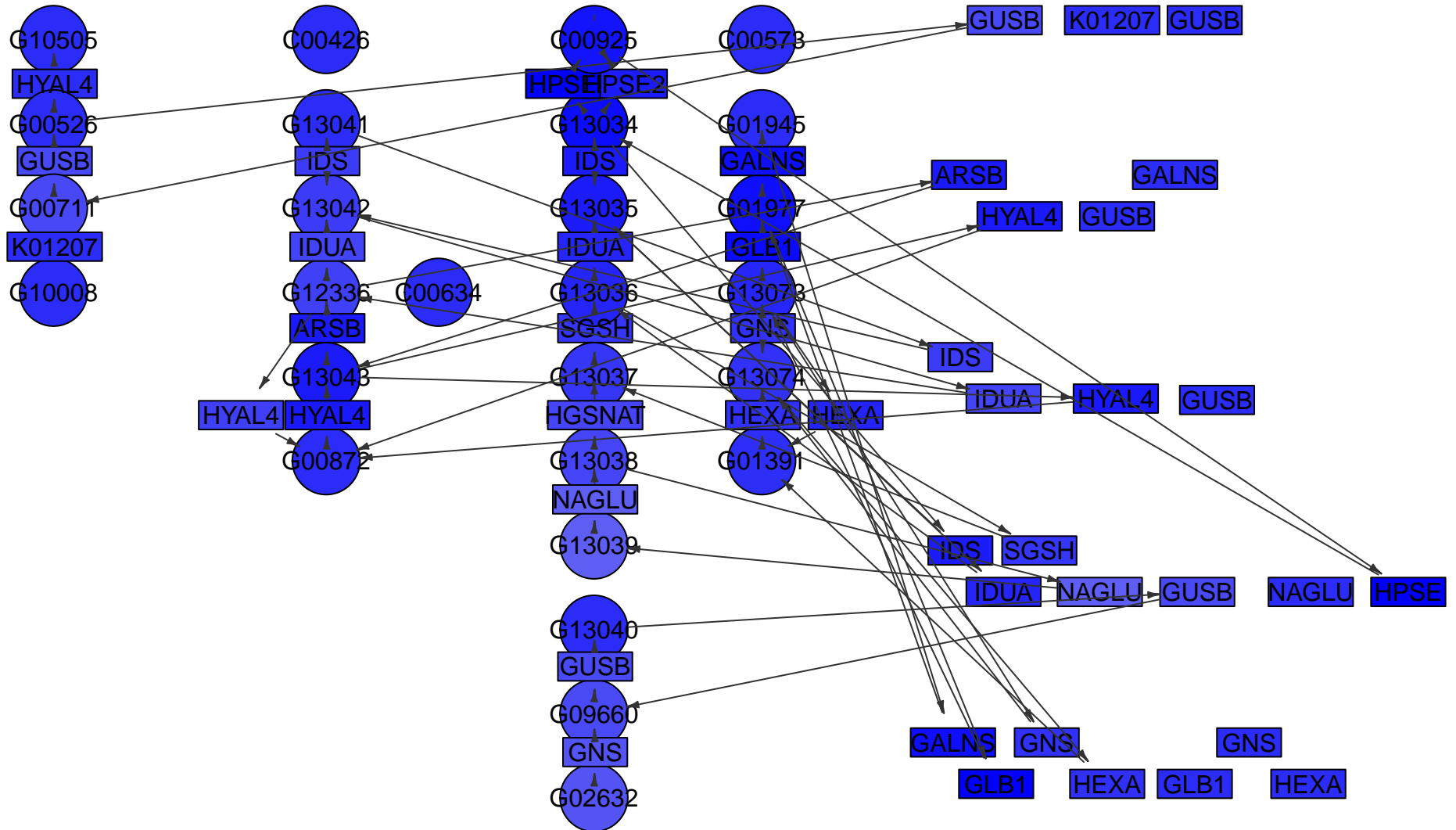
Glycosaminoglycan  
degradation  
MPI-167

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



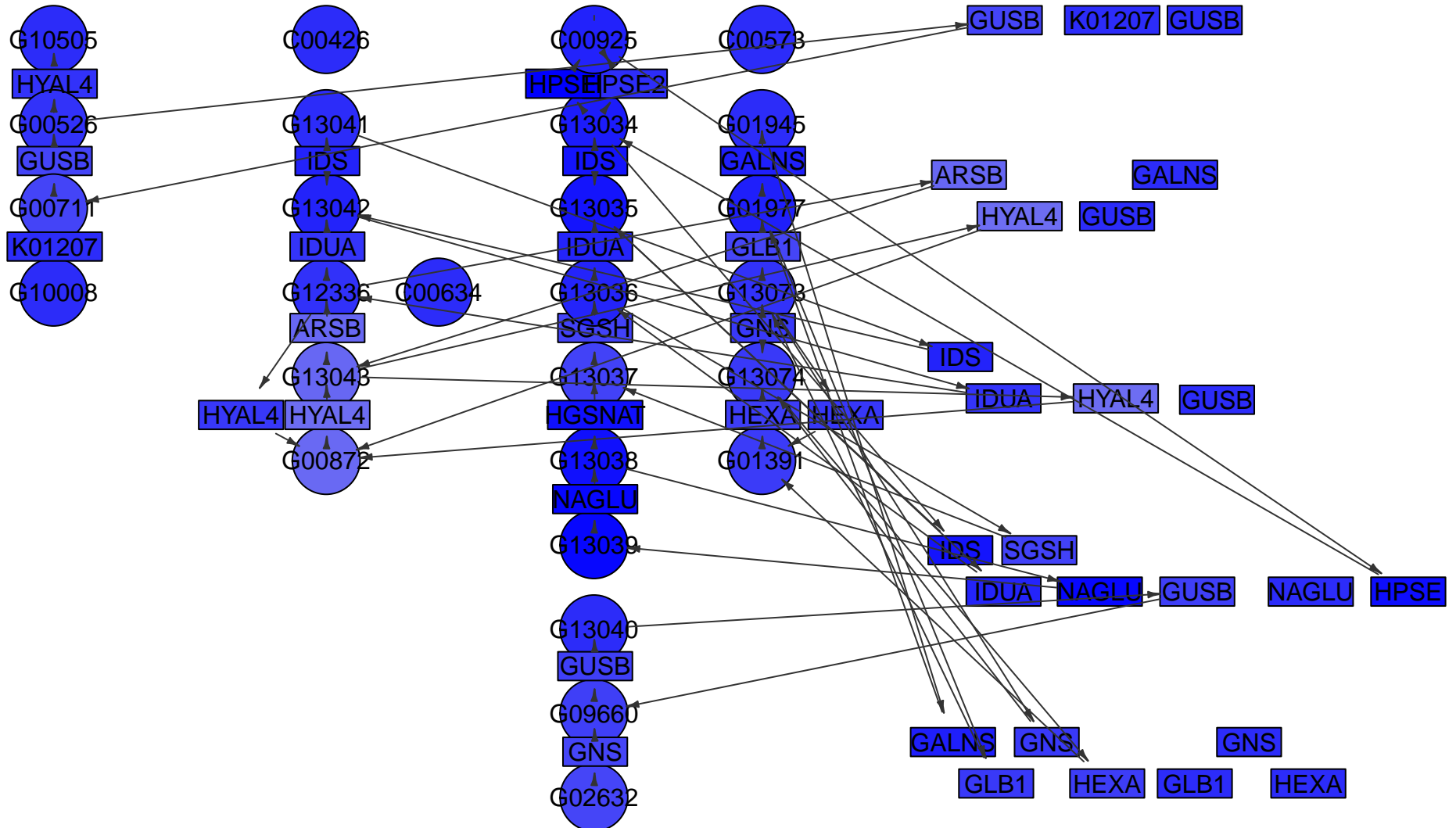
Glycosaminoglycan  
degradation  
MPI-168

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-170

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate





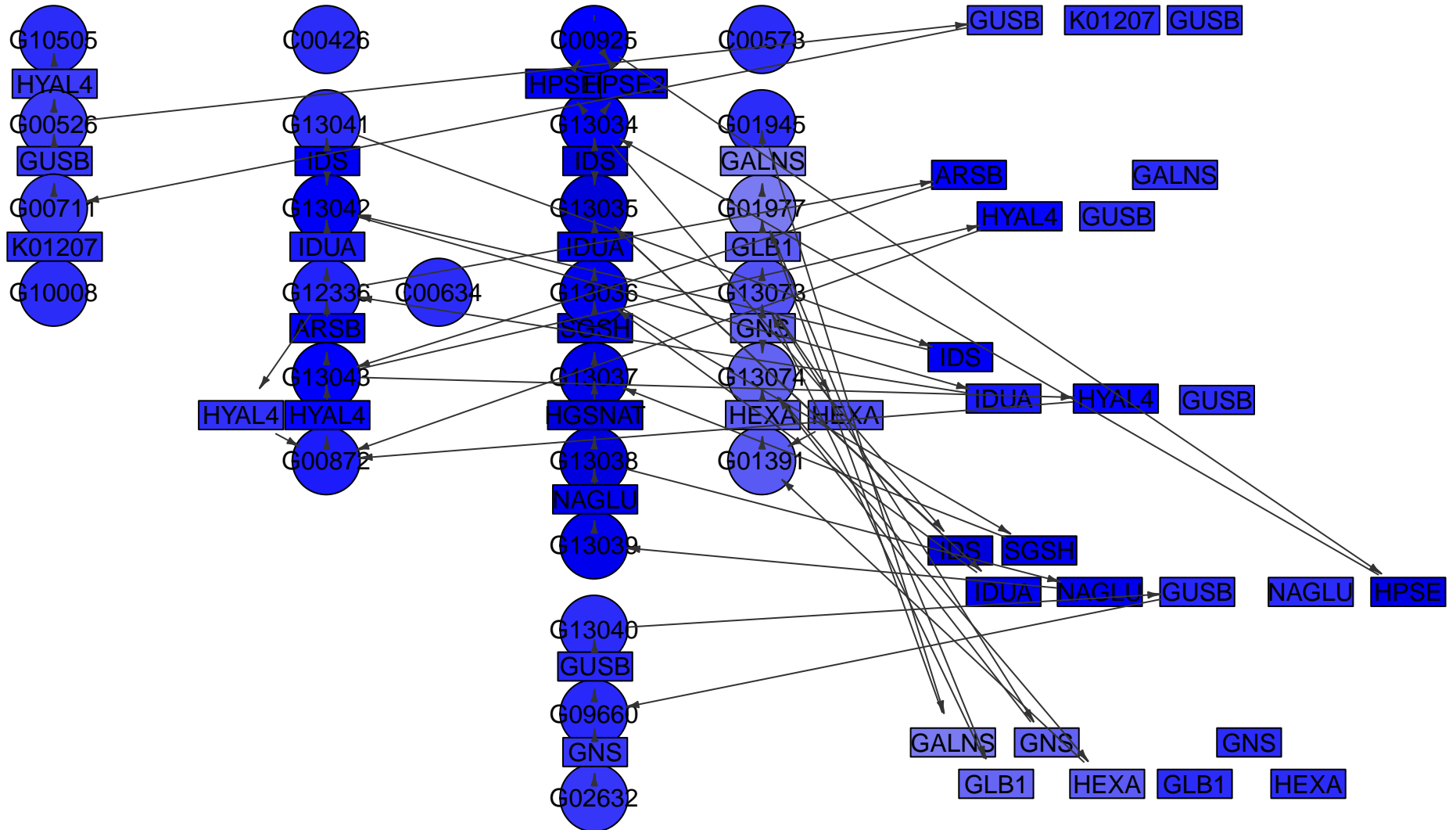






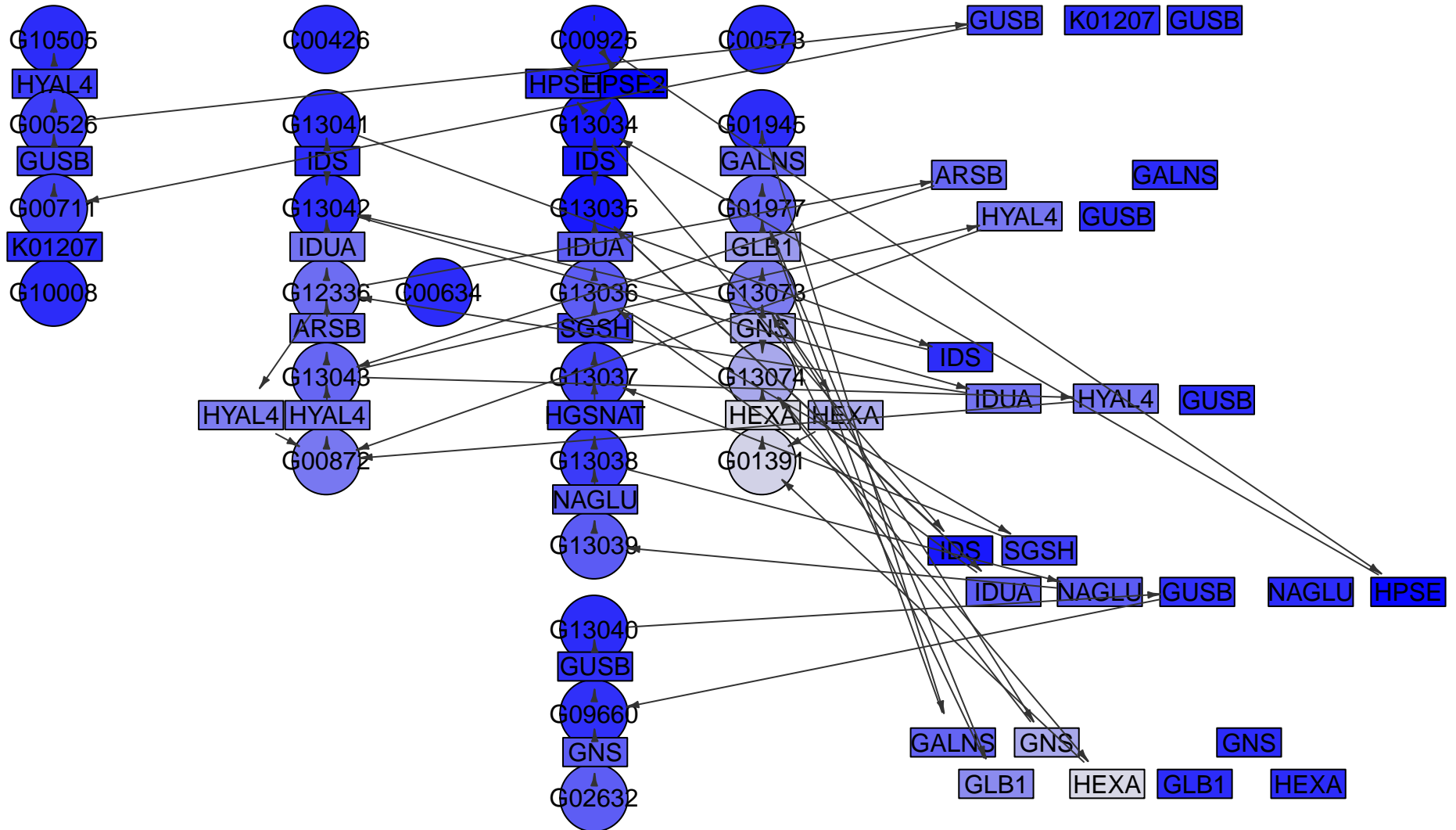
Glycosaminoglycan  
degradation  
MPI-177

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparin keratan sulfate



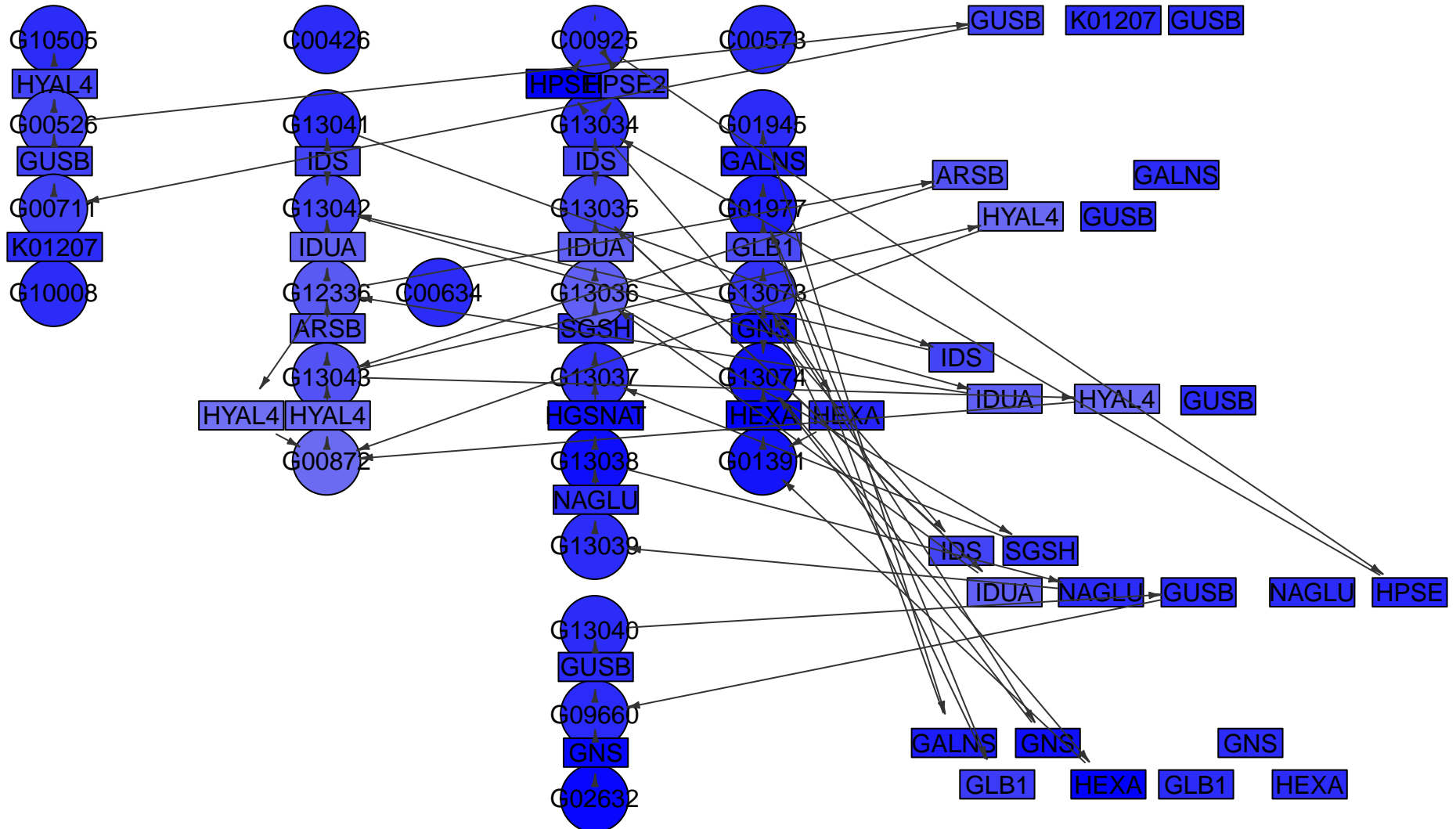
Glycosaminoglycan  
degradation  
MPI-178

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-179

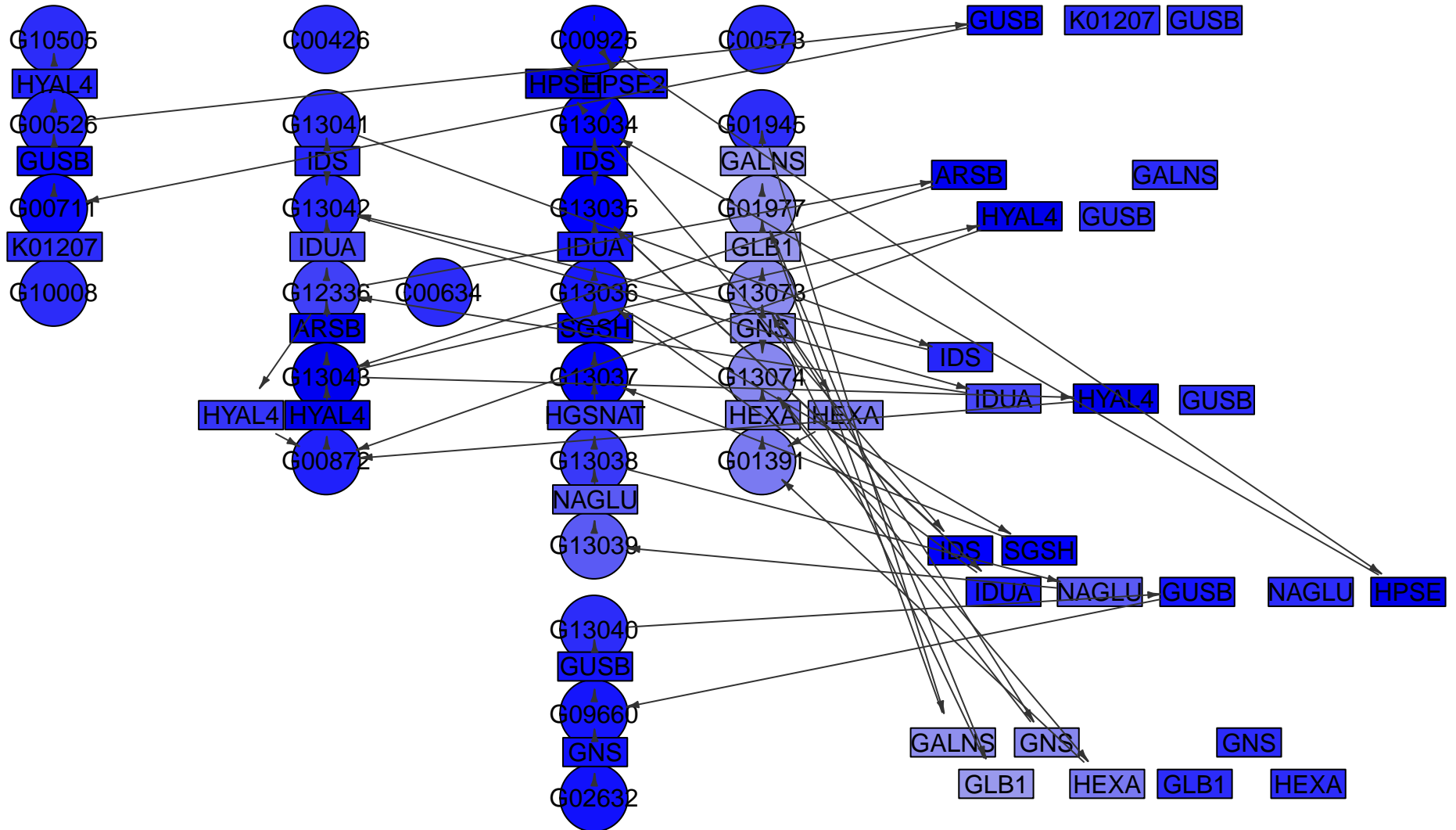
Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan sulfate / keratan sulfate





Glycosaminoglycan  
degradation  
MPI-182

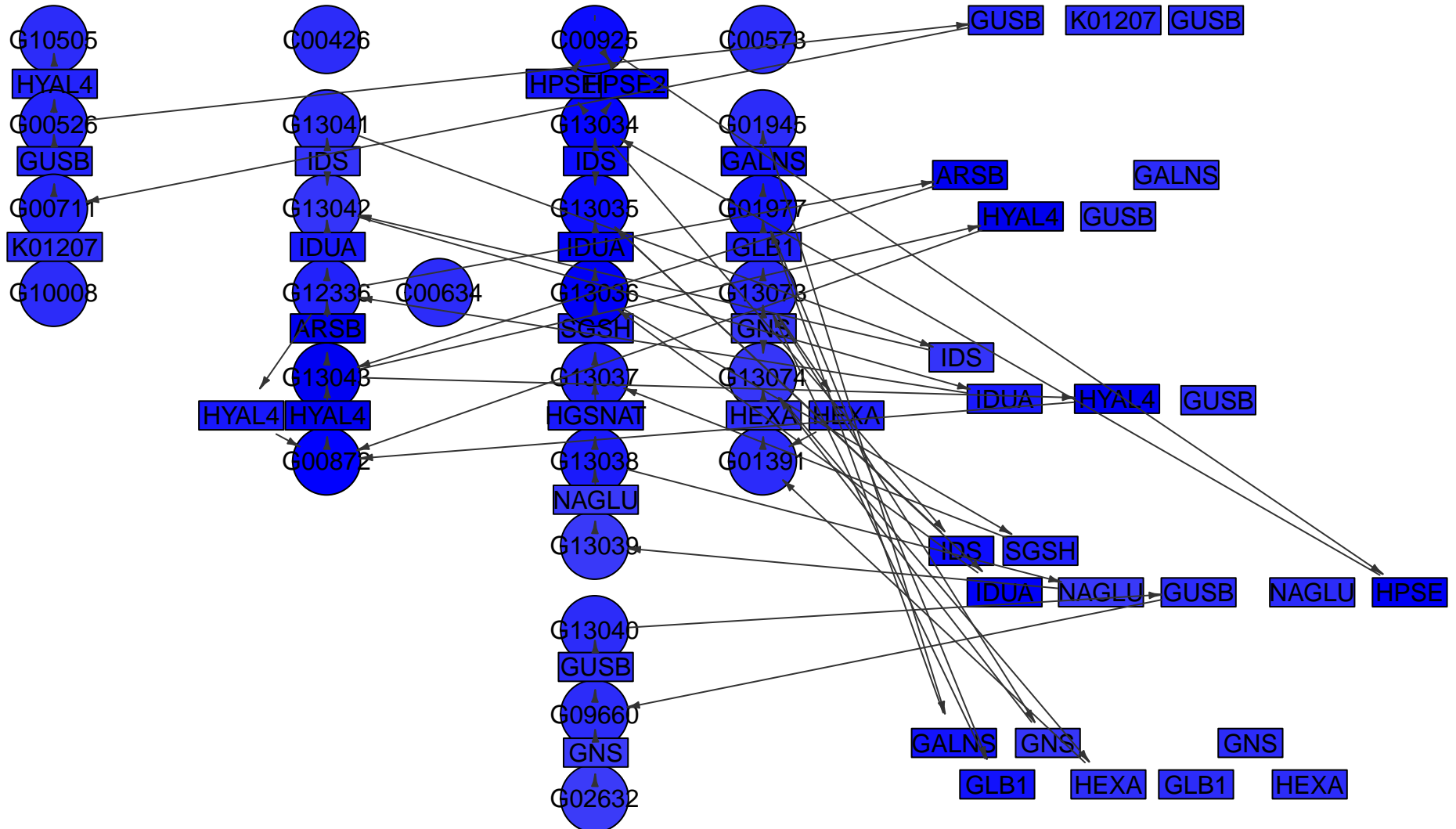
Glycosaminoglycan degradation  
Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparin  
keratan sulfate





Glycosaminoglycan  
degradation  
MPI-184

Glycosaminoglycan degradation  
Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate

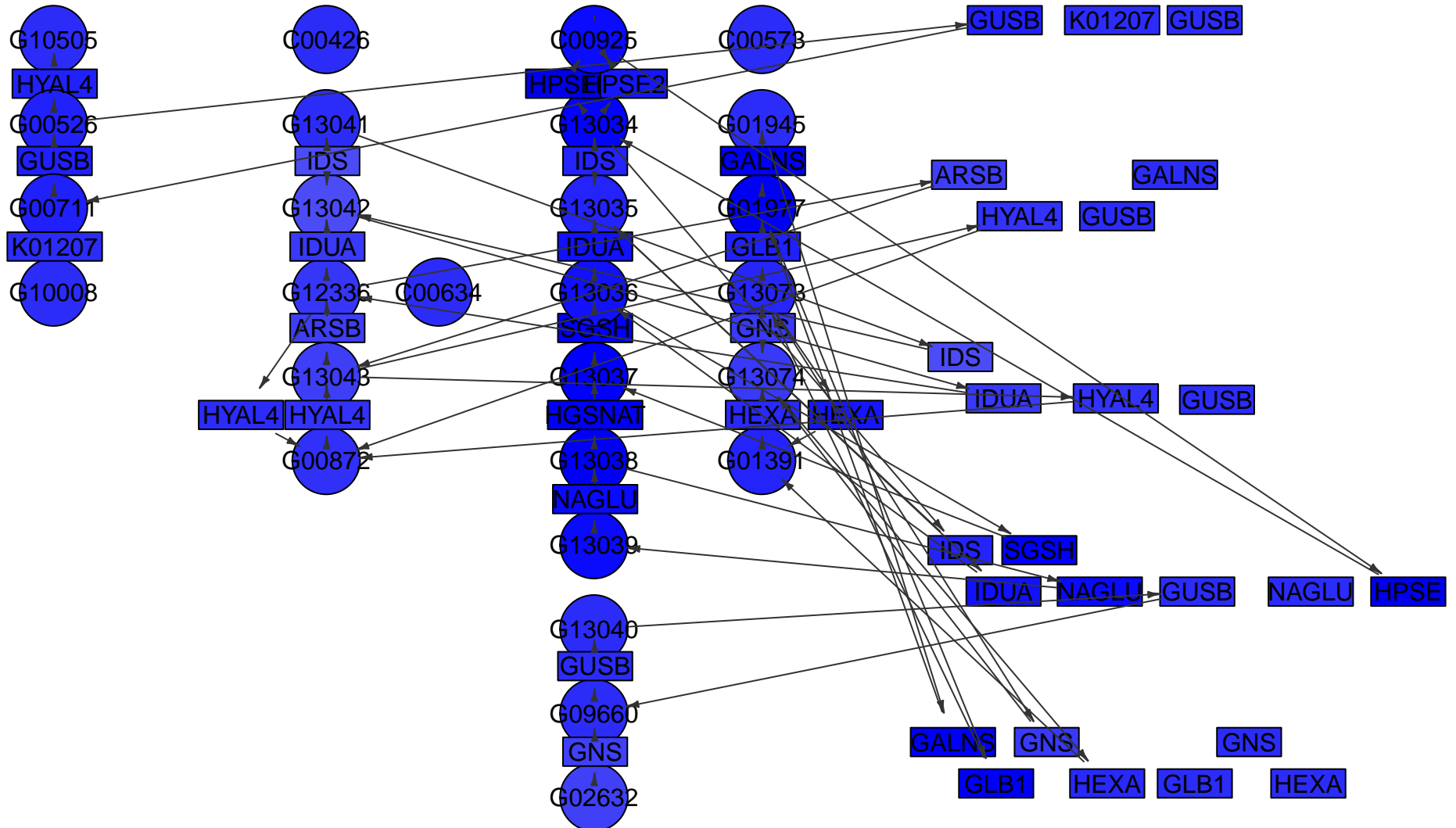






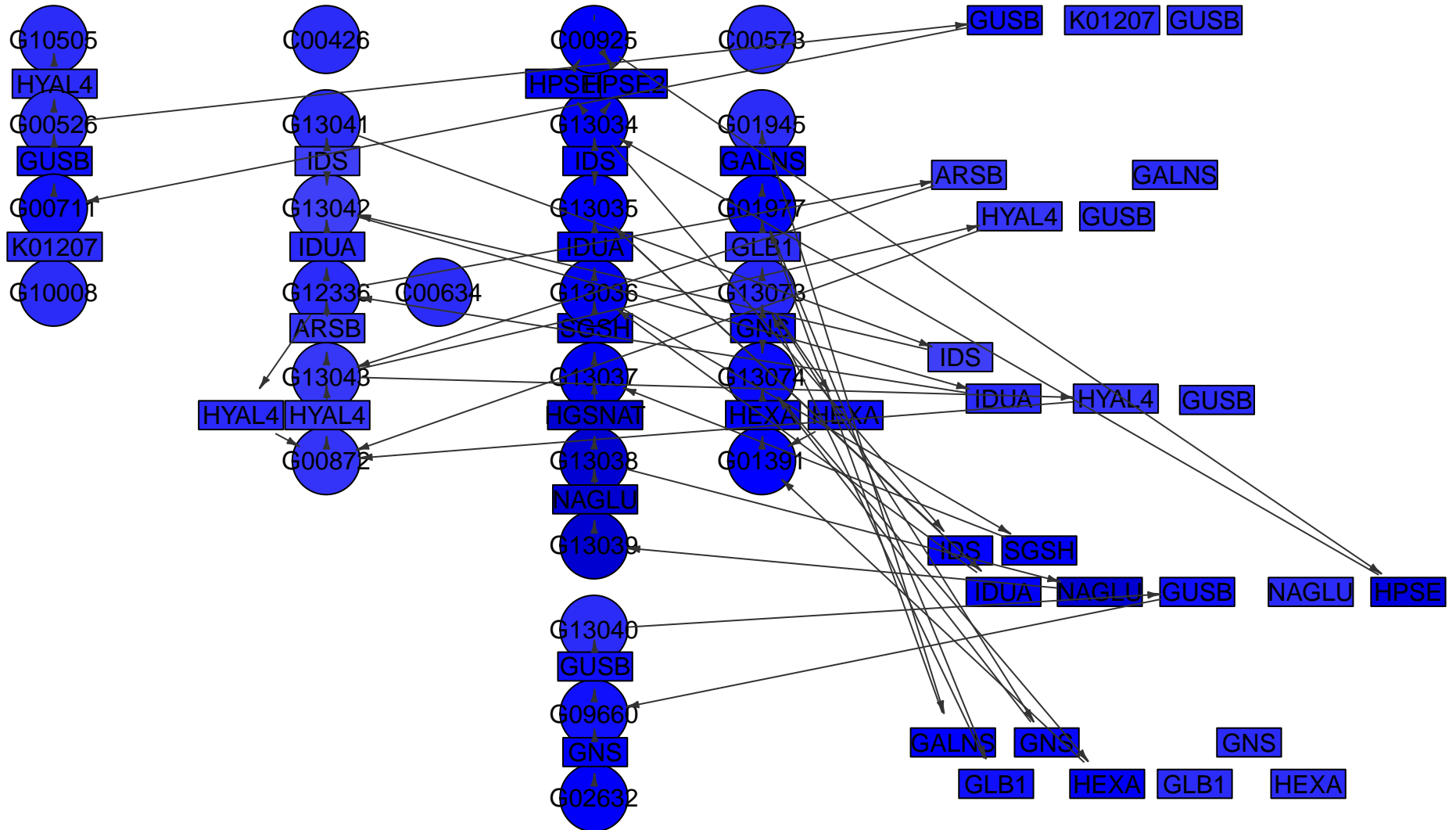
Glycosaminoglycan  
degradation  
MPI-186

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-188

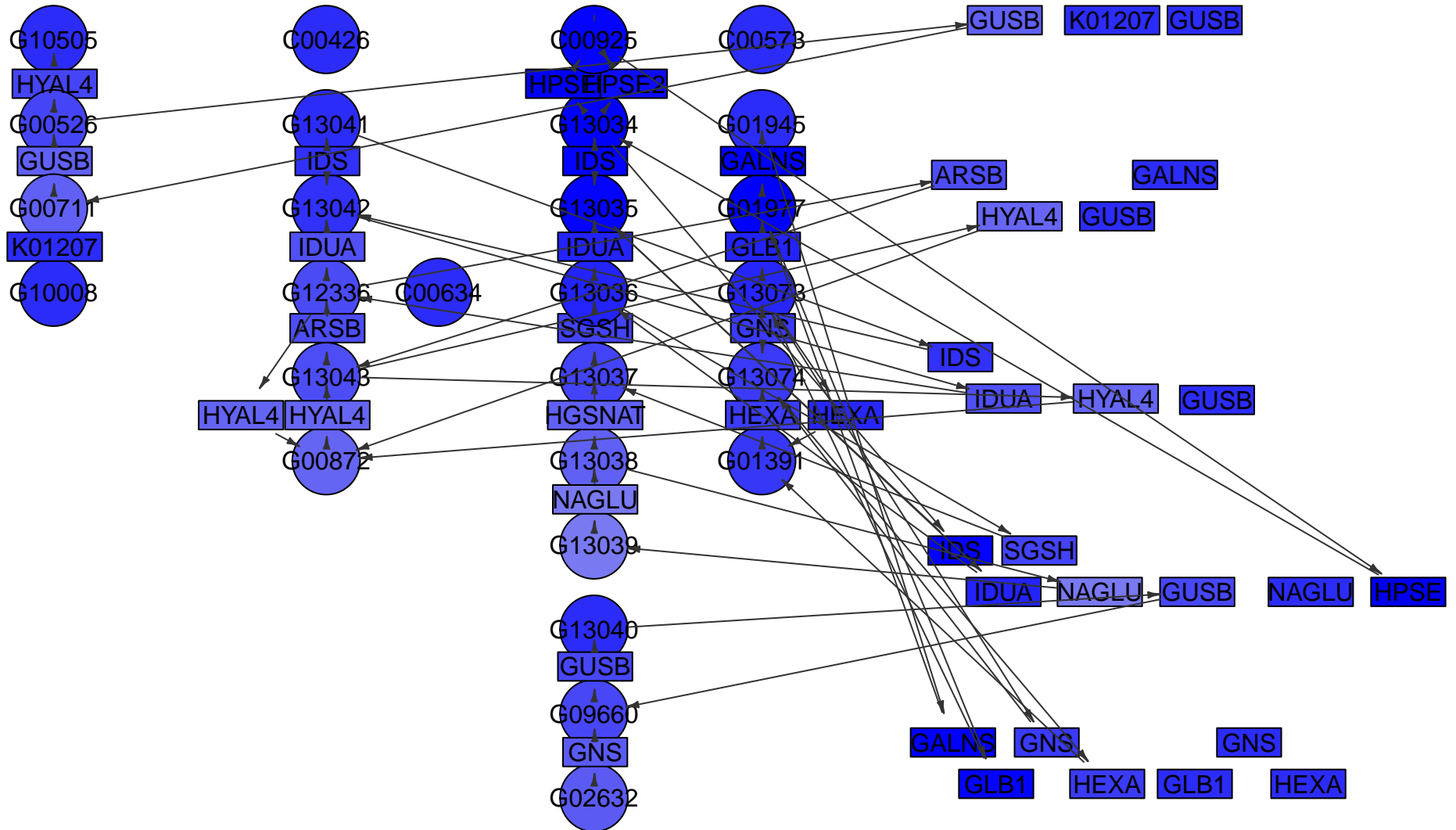
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate





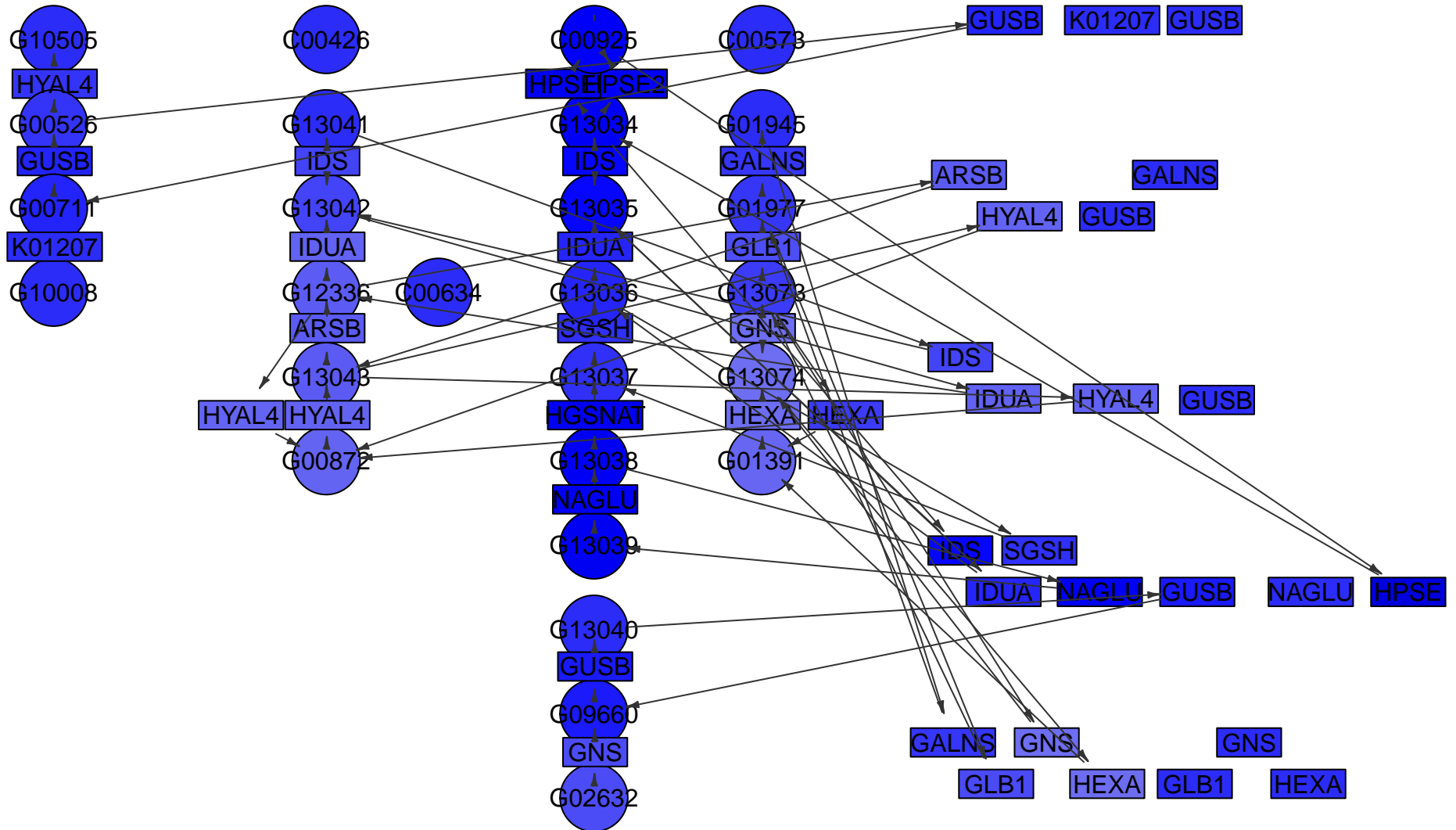
Glycosaminoglycan  
degradation  
MPI-190

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



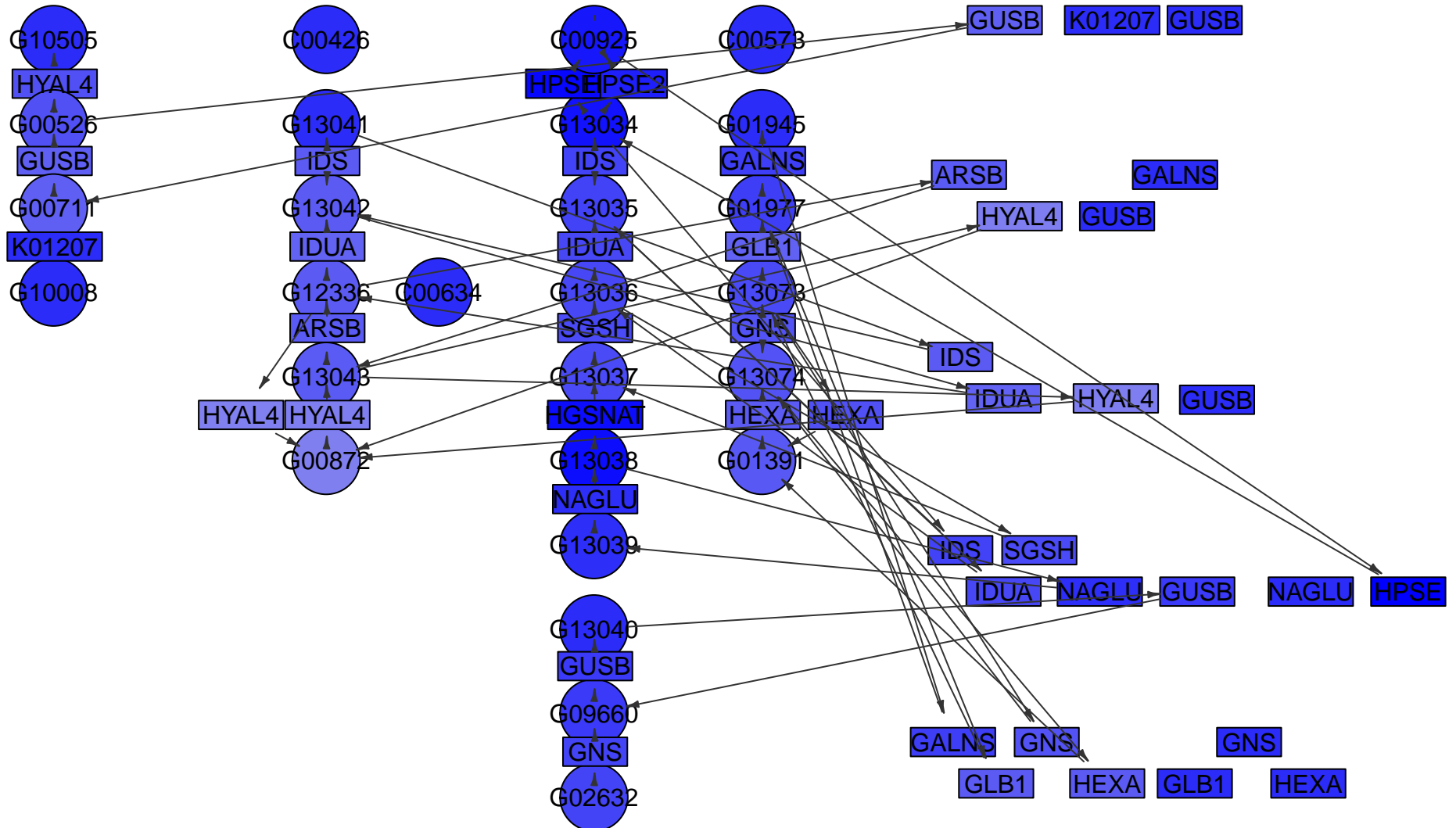
Glycosaminoglycan  
degradation  
MPI-191

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-192

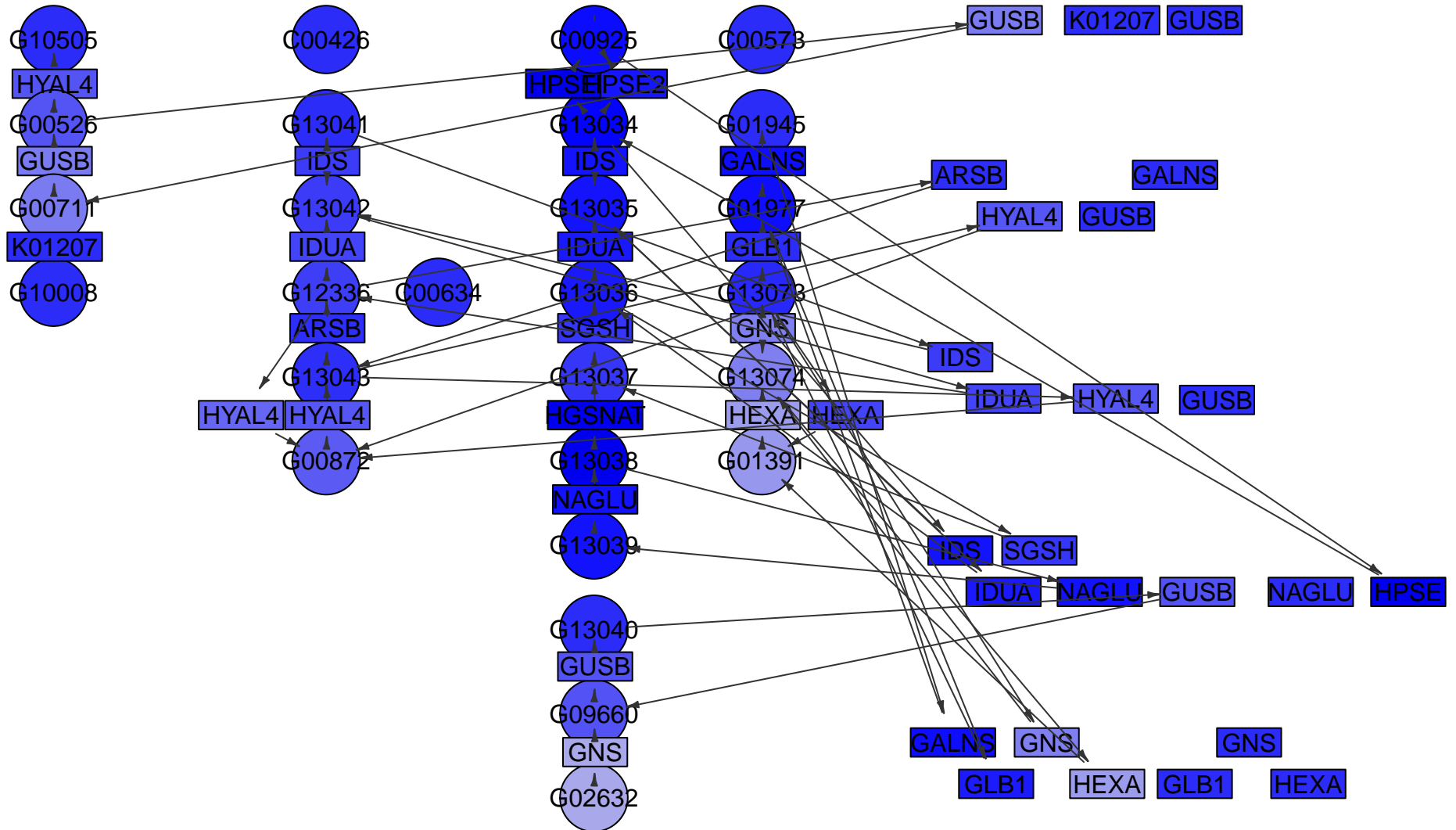
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





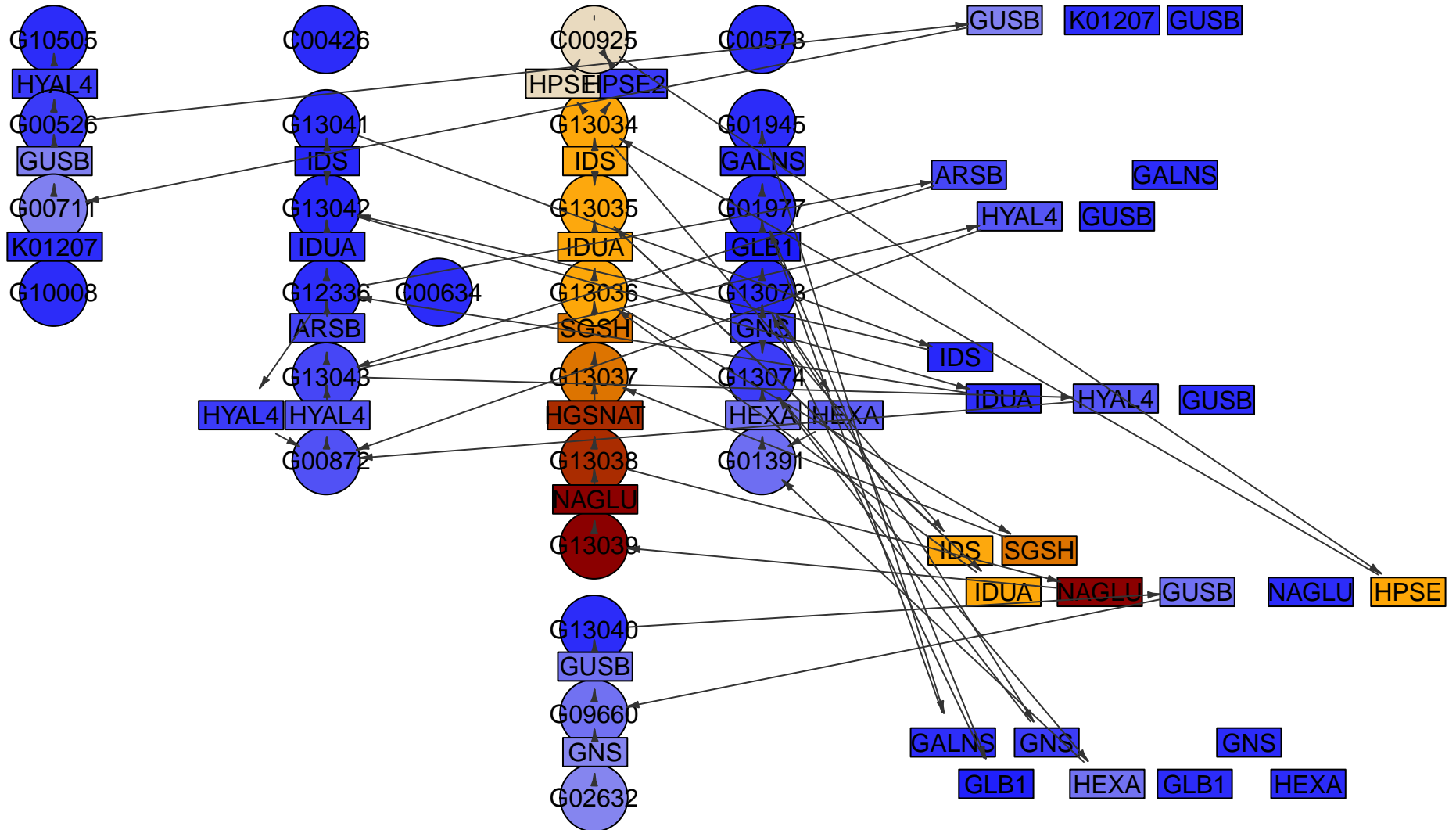
Glycosaminoglycan  
degradation  
MPI-194

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



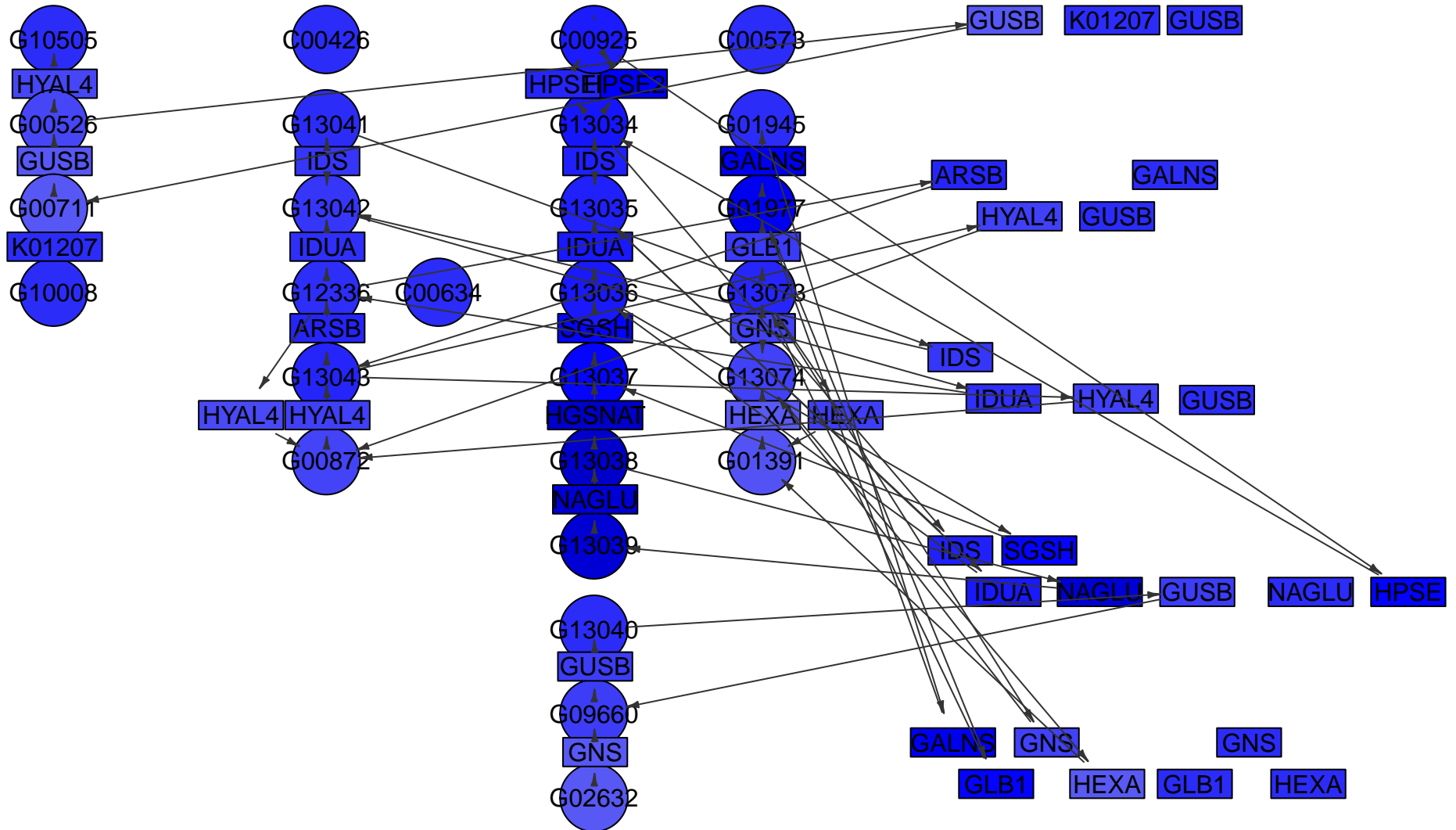
Glycosaminoglycan  
degradation  
MPI-195

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
Glycosaminoglycan synthesis –  
sulfate / heparin / keratan sulfate



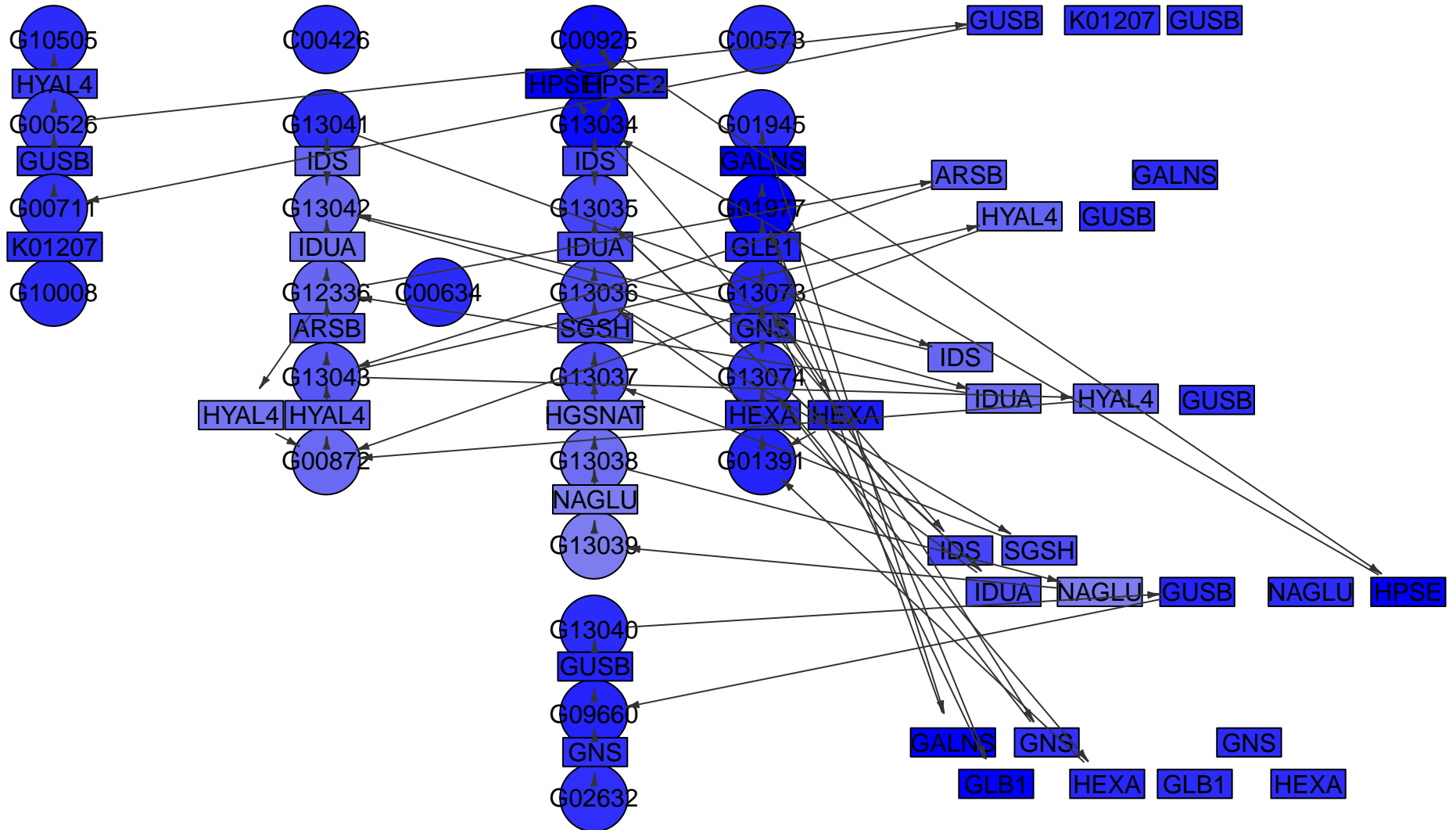
Glycosaminoglycan  
degradation  
MPI-196

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-198

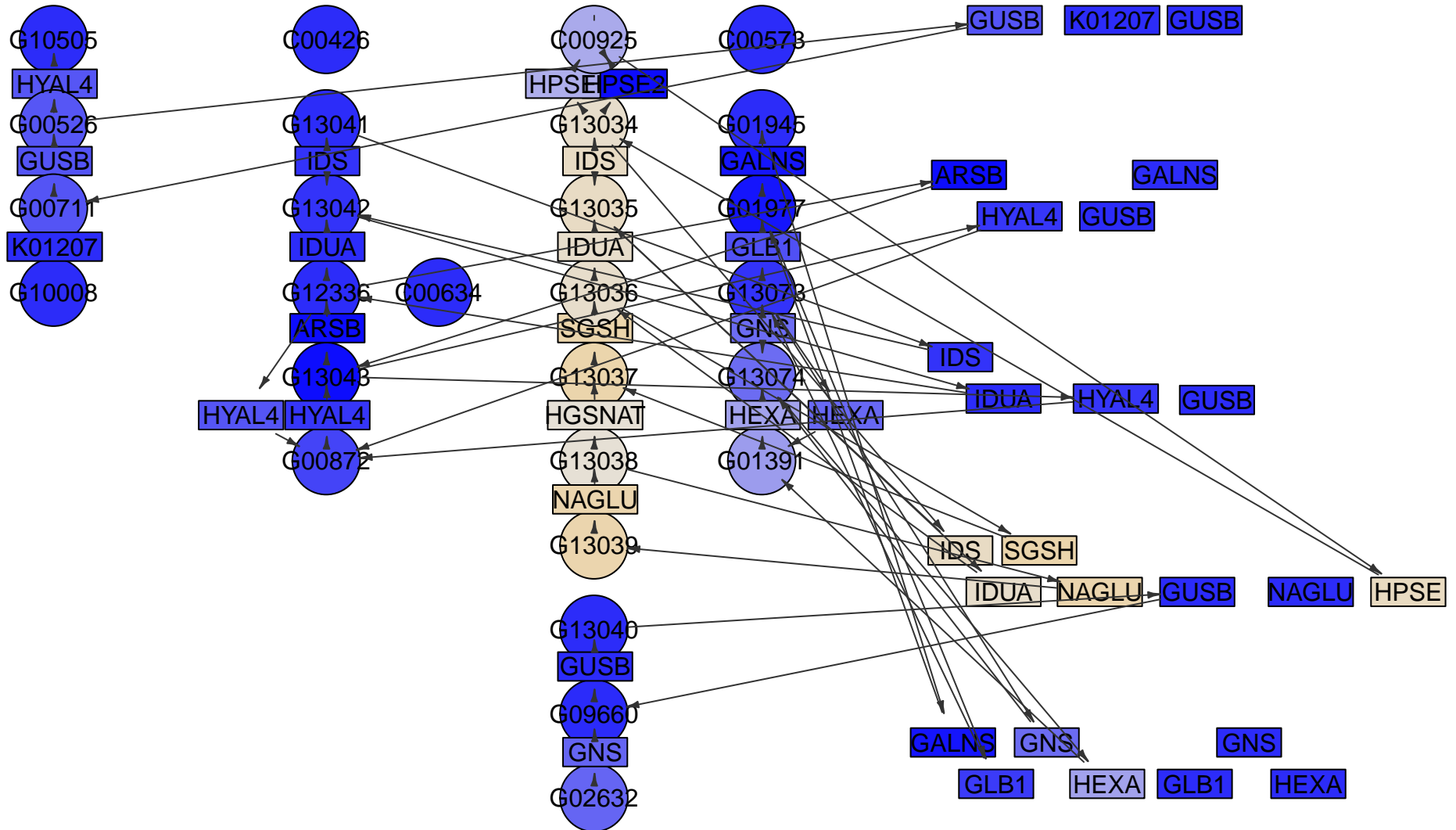
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





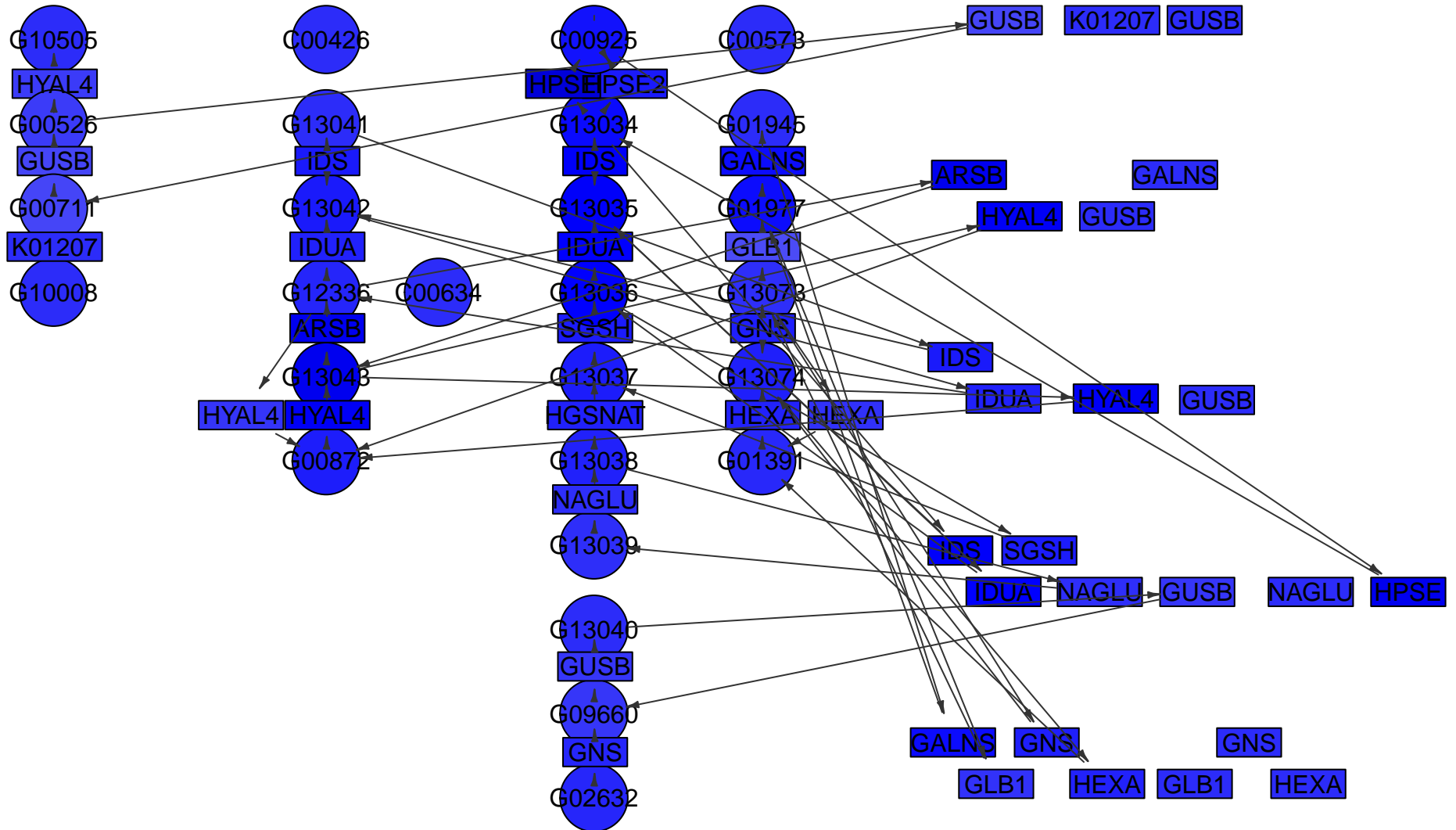
Glycosaminoglycan  
degradation  
MPI-200

Glycosaminoglycan biosynthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-201

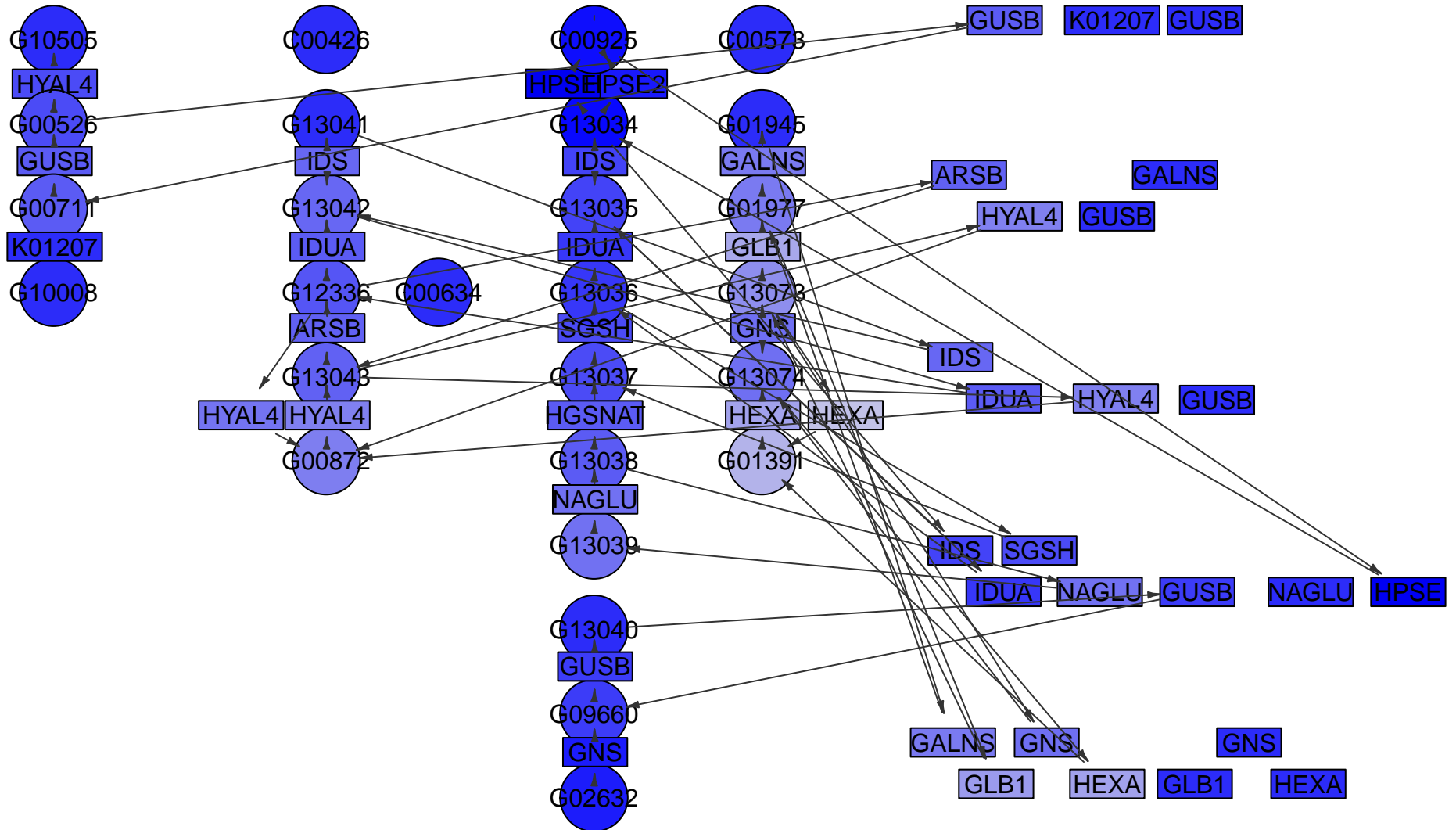
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





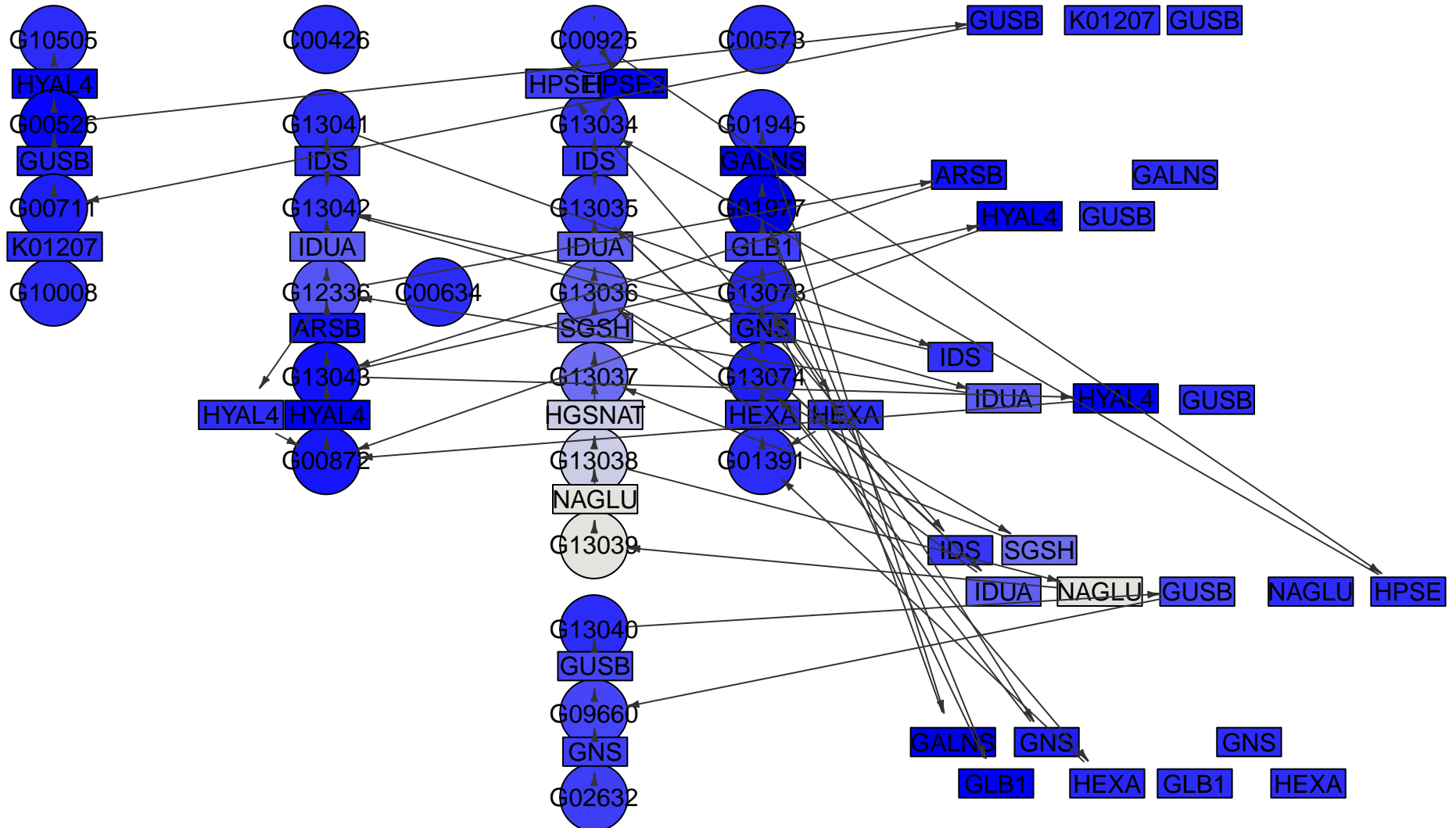
Glycosaminoglycan  
degradation  
MPI-202

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



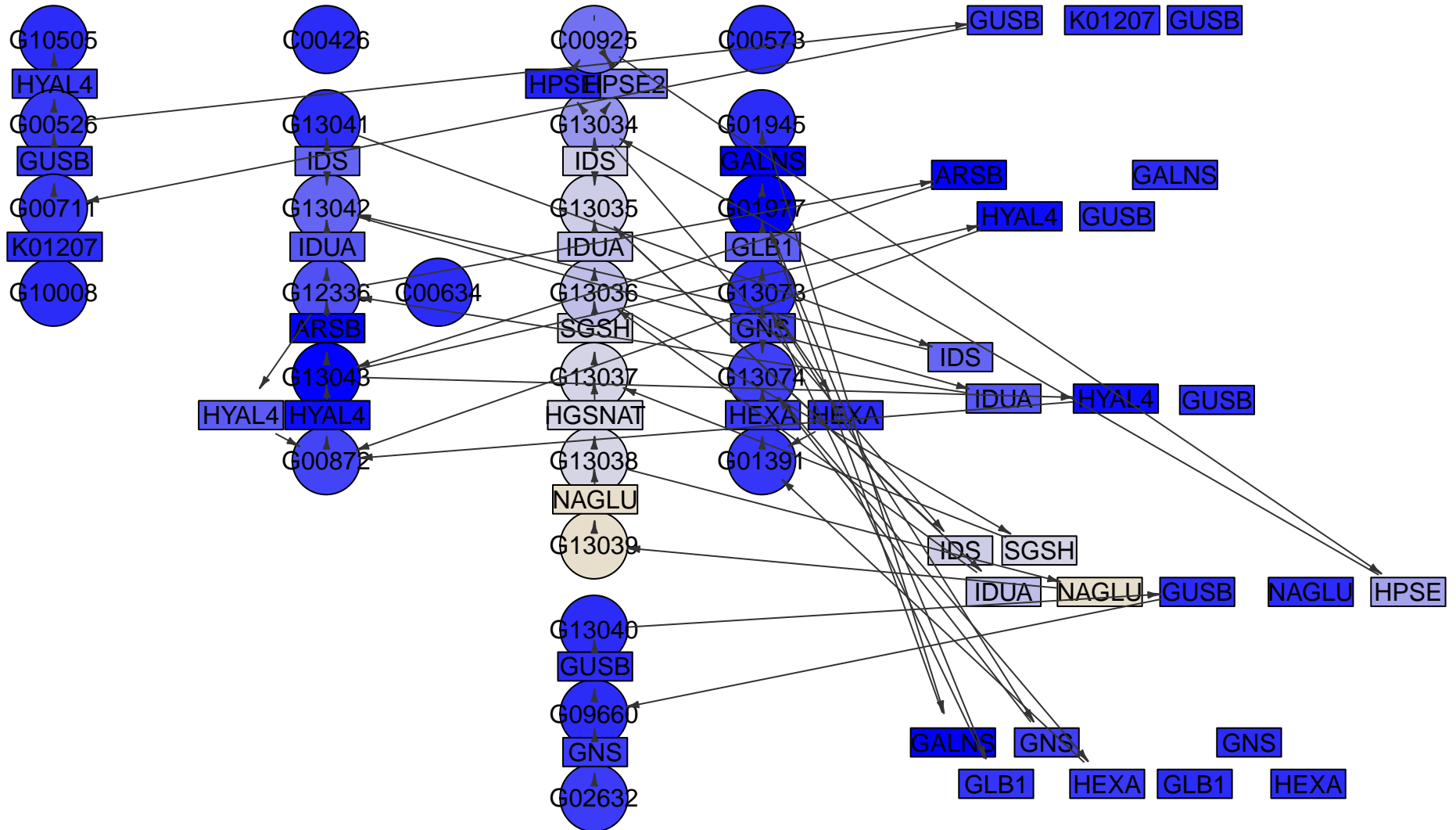
Glycosaminoglycan  
degradation  
MPI-203

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-204

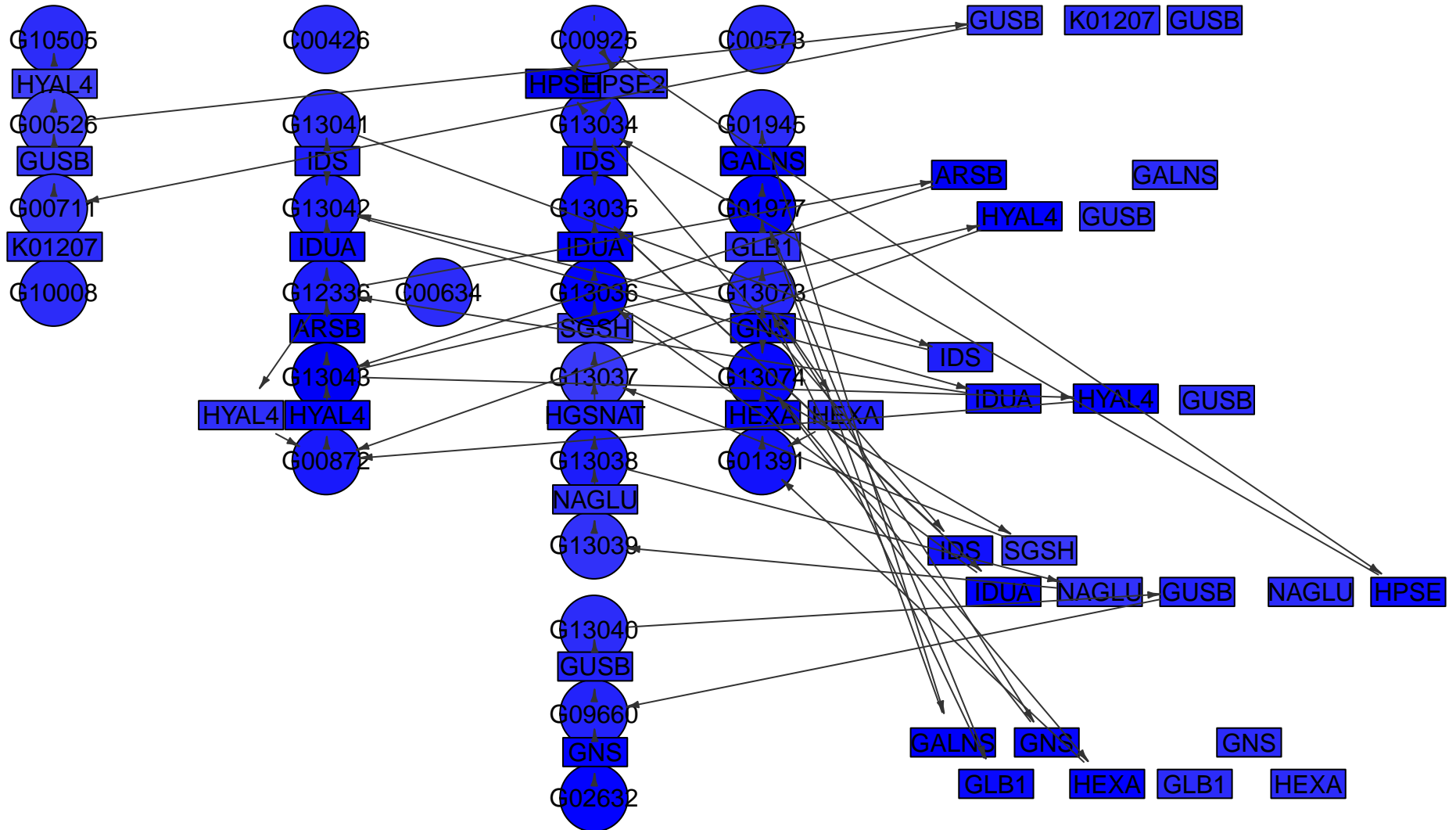
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin  
Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin





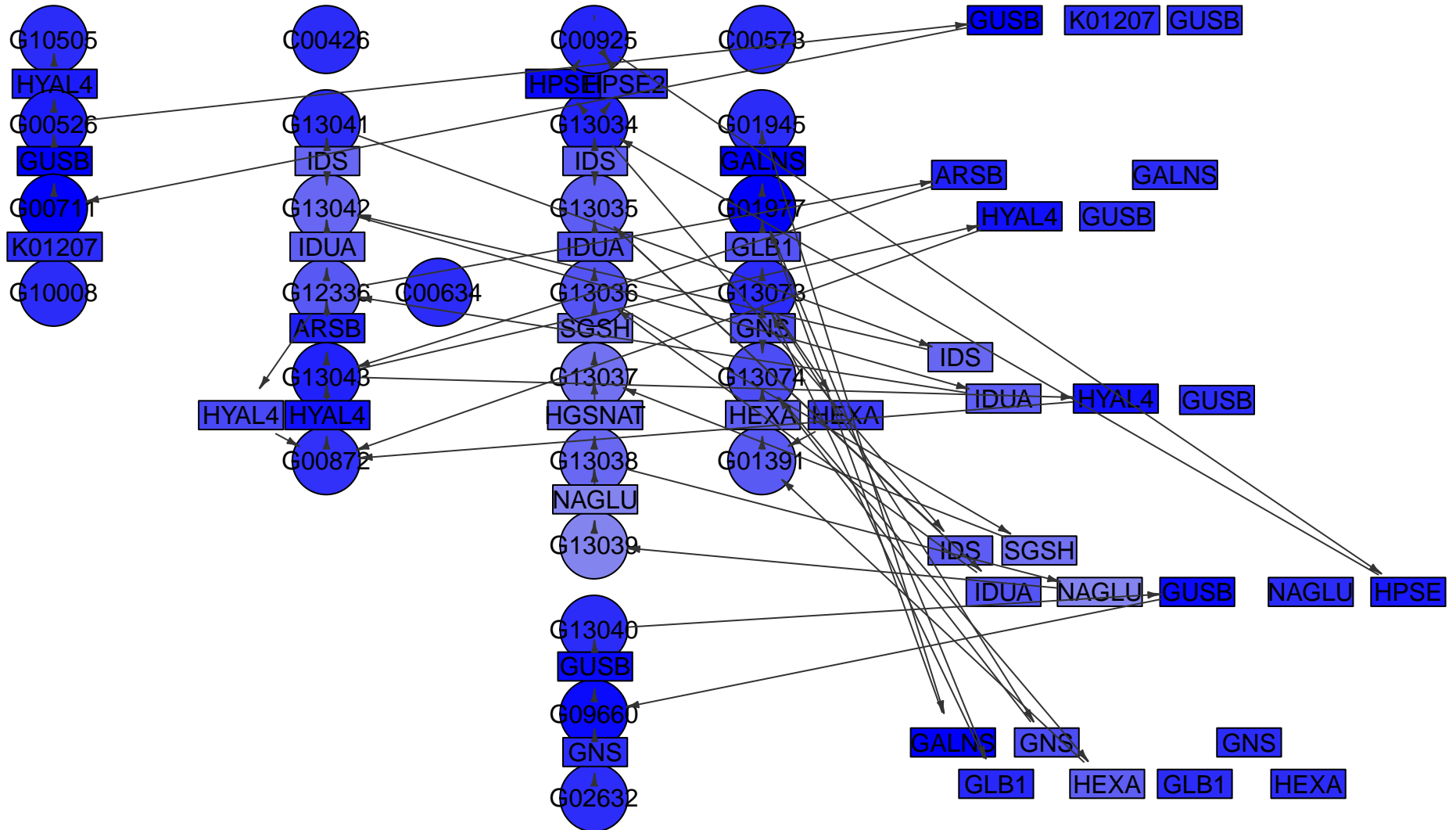
Glycosaminoglycan  
degradation  
MPI-206

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate



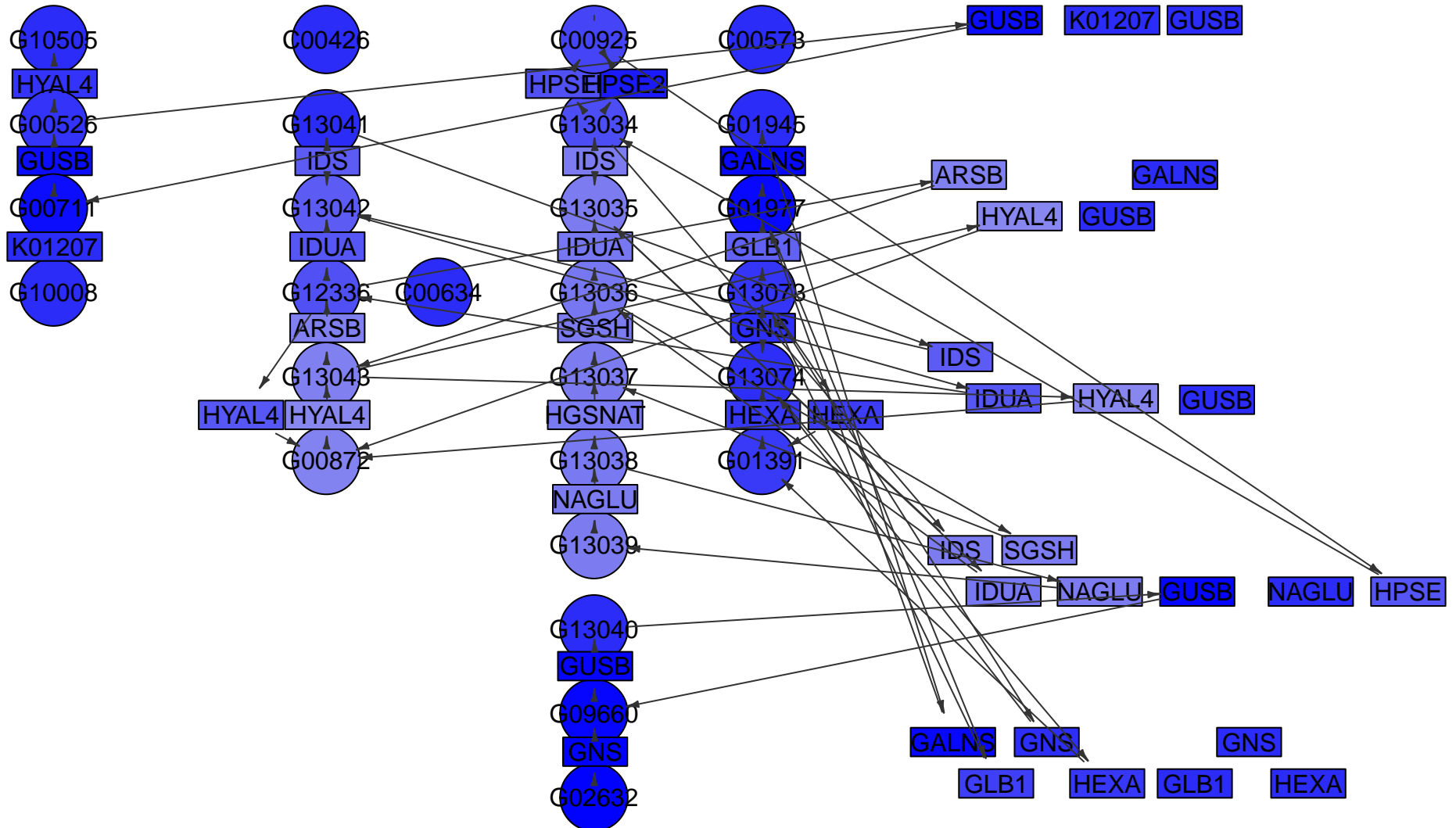
Glycosaminoglycan  
degradation  
MPI-207

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-208

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



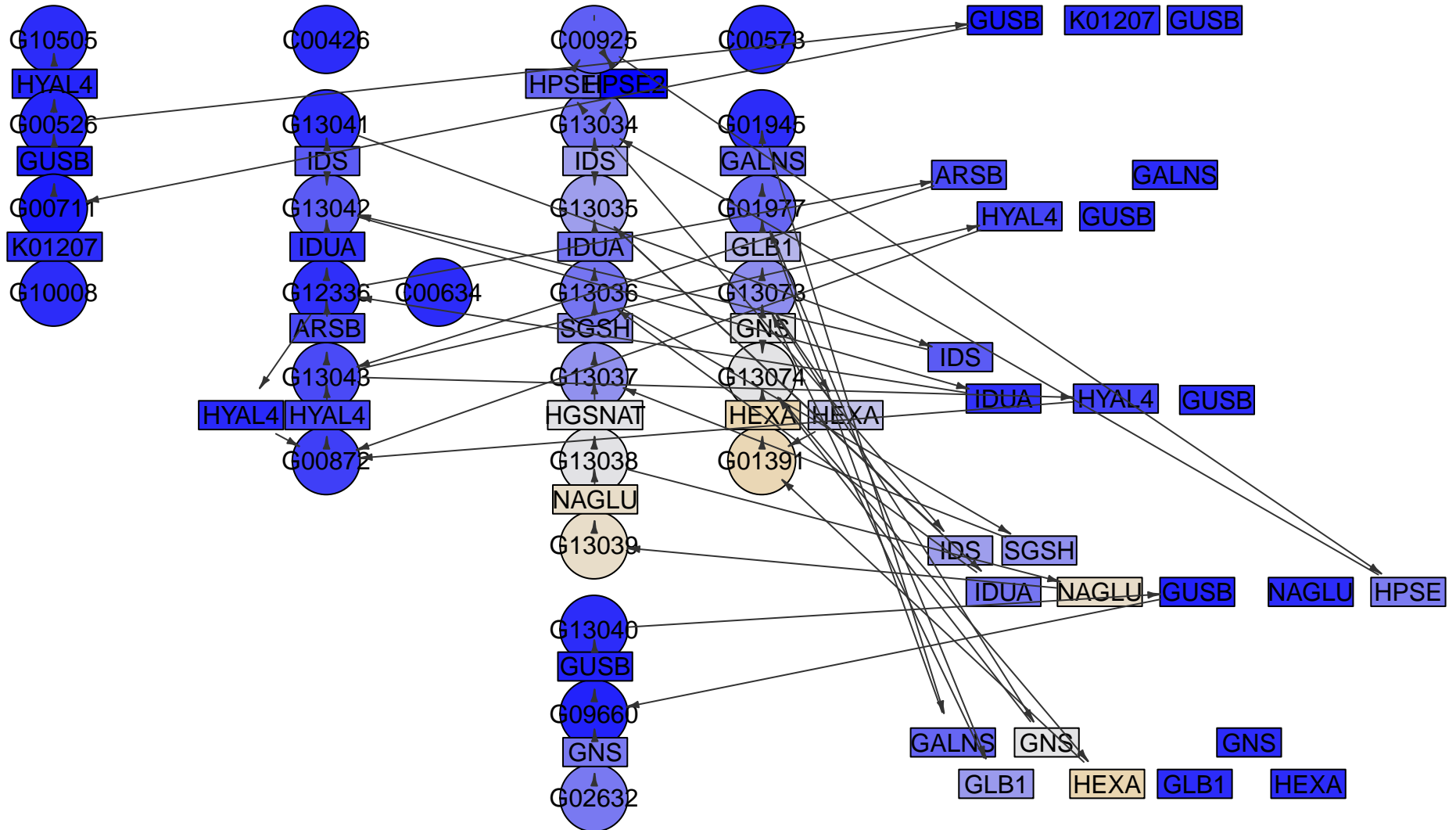






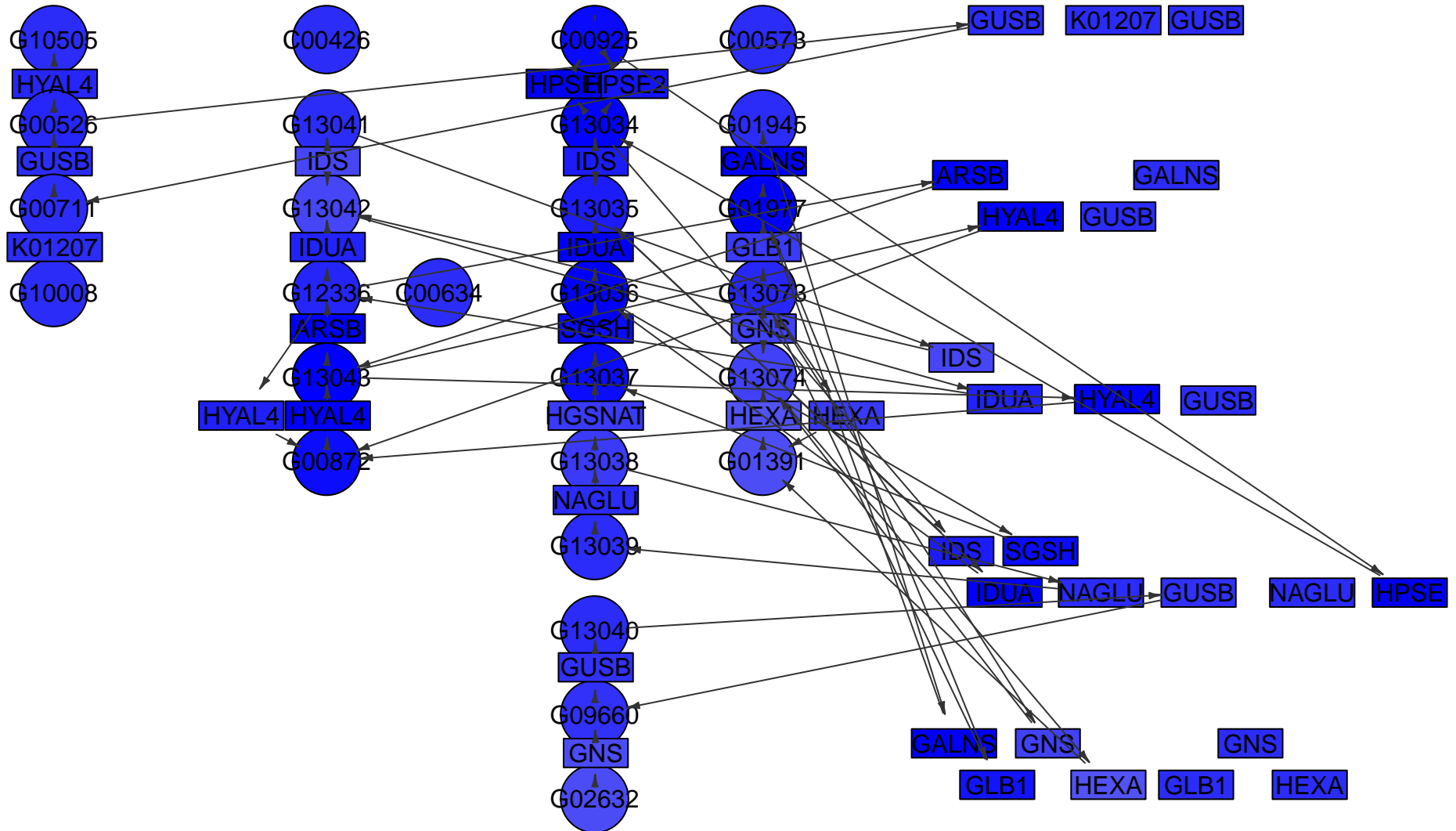
Glycosaminoglycan  
degradation  
MPI-212

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-213

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate

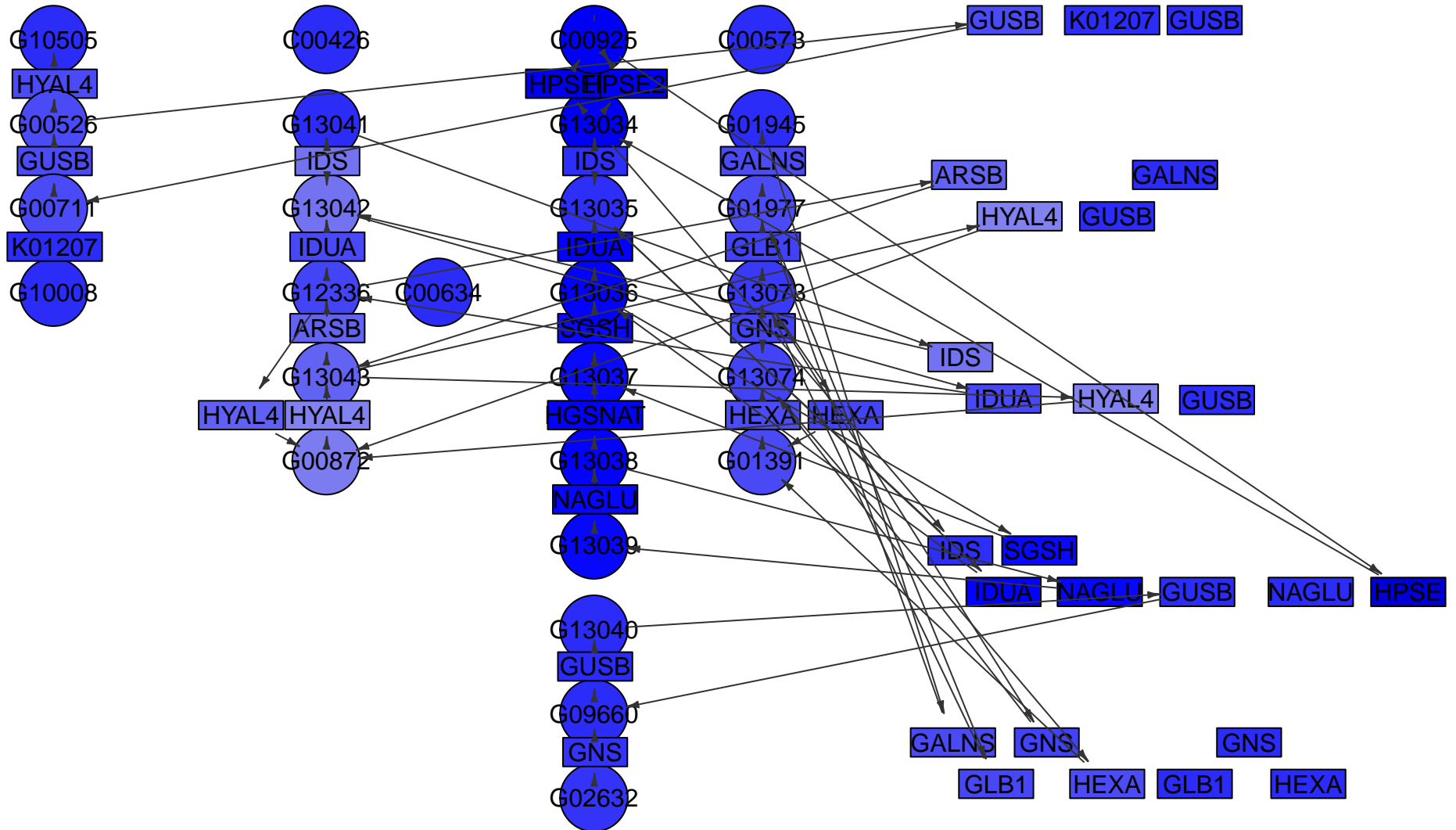






Glycosaminoglycan  
degradation  
MPI-221

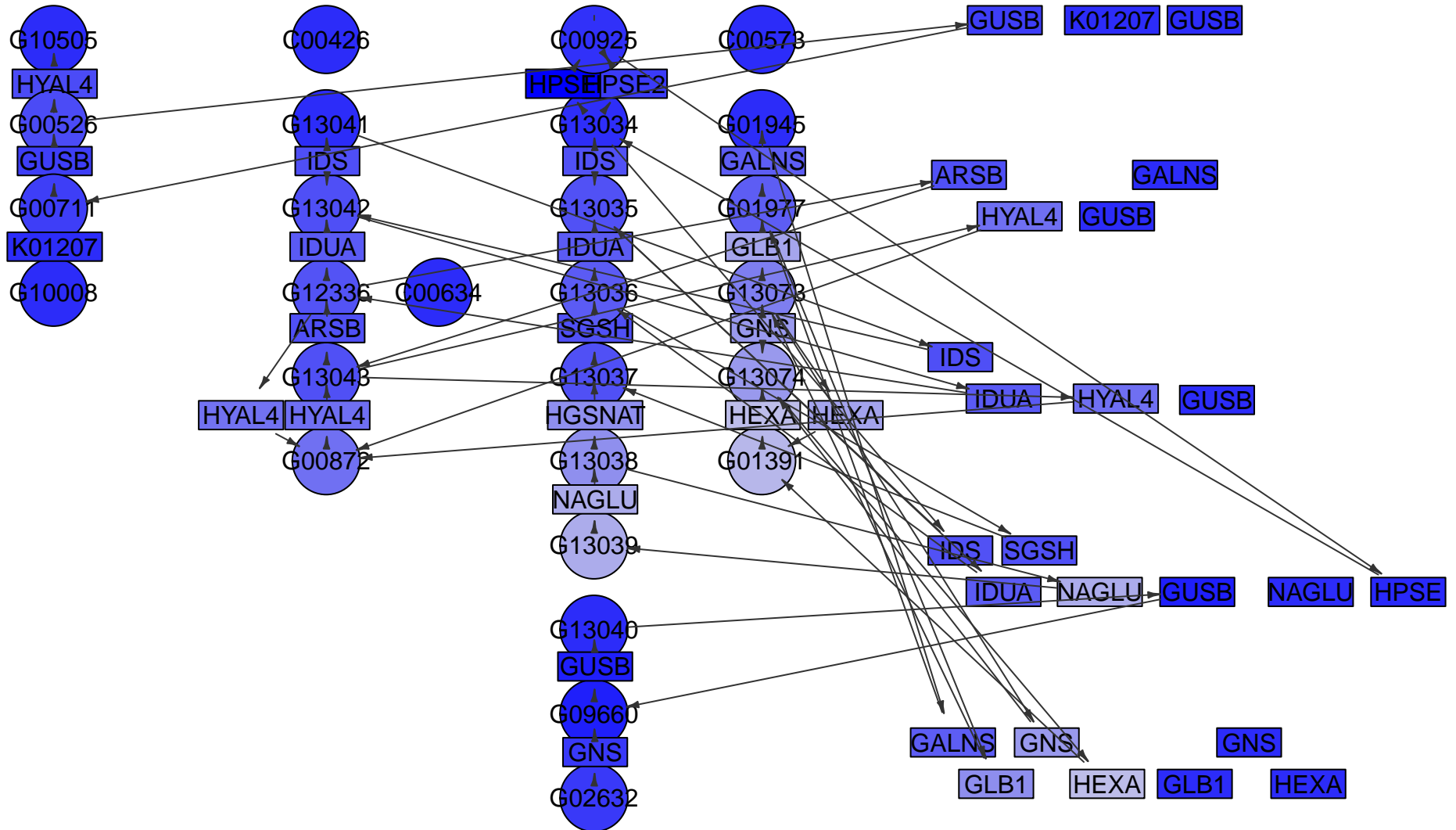
Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate





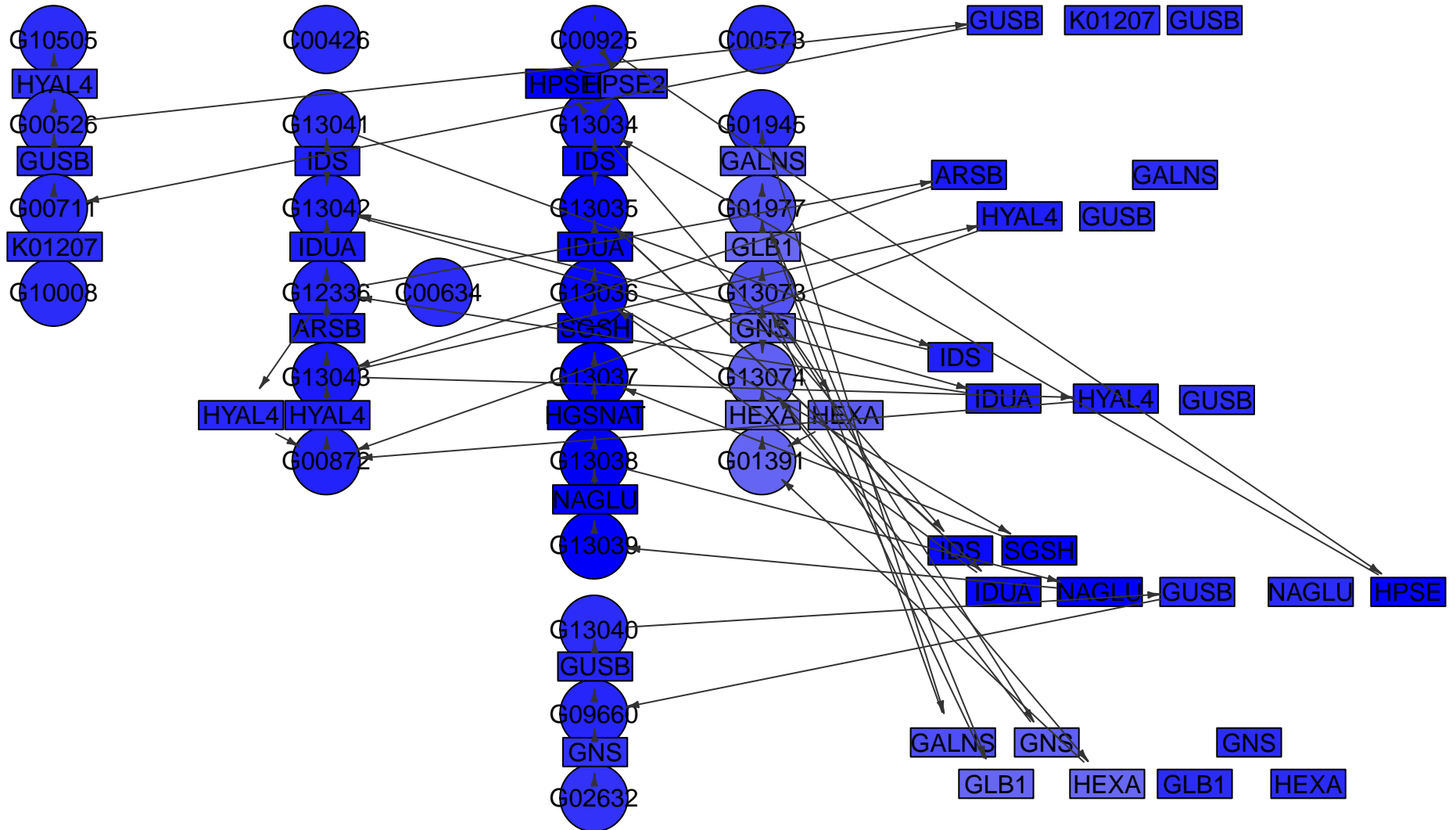
Glycosaminoglycan  
degradation  
MPI-223a

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-224

Glycosaminoglycan synthesis -  
sulfate / dermatansulfate / heparin  
keratan sulfate

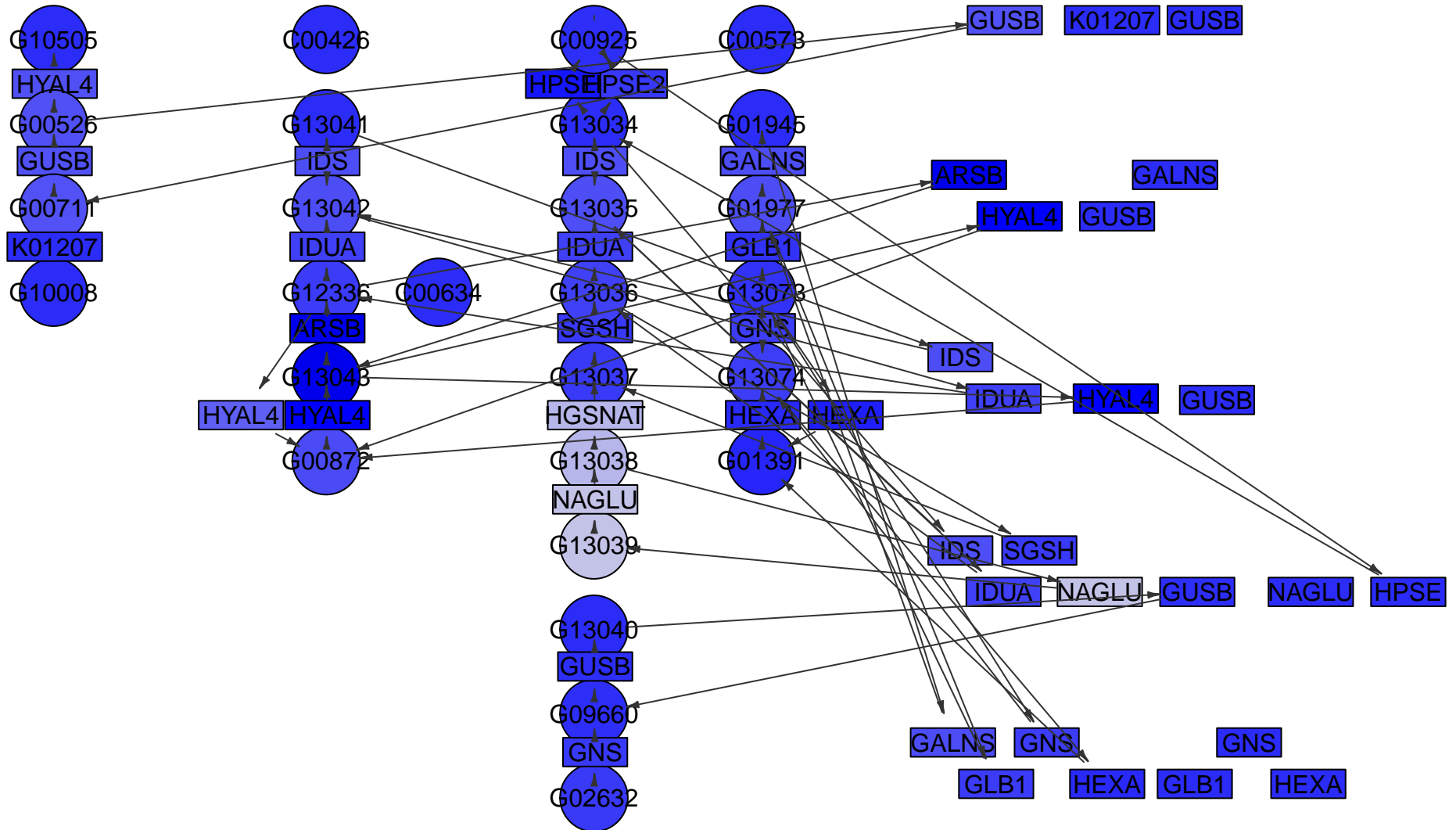






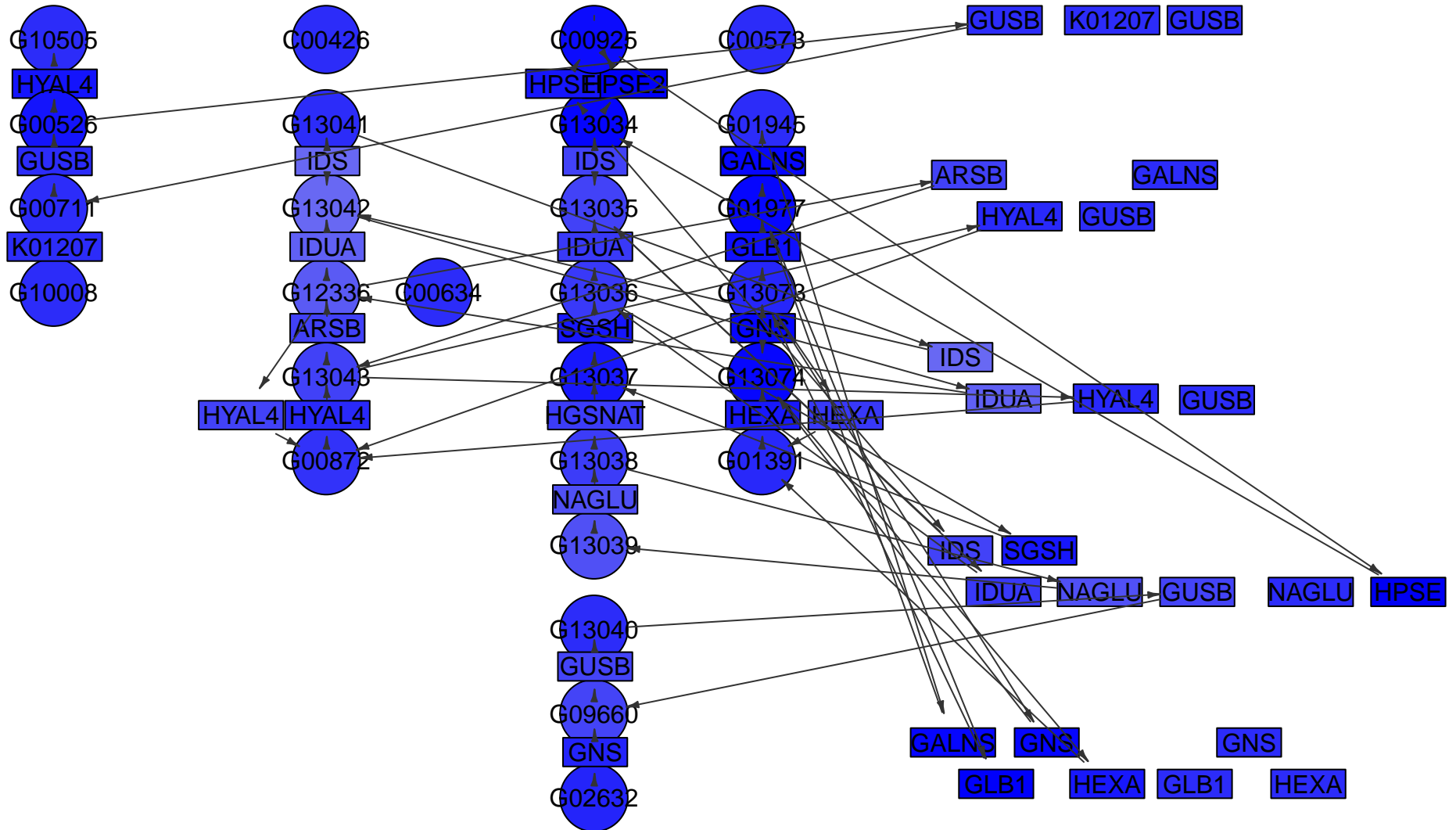
Glycosaminoglycan  
degradation  
MPI-228

Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate



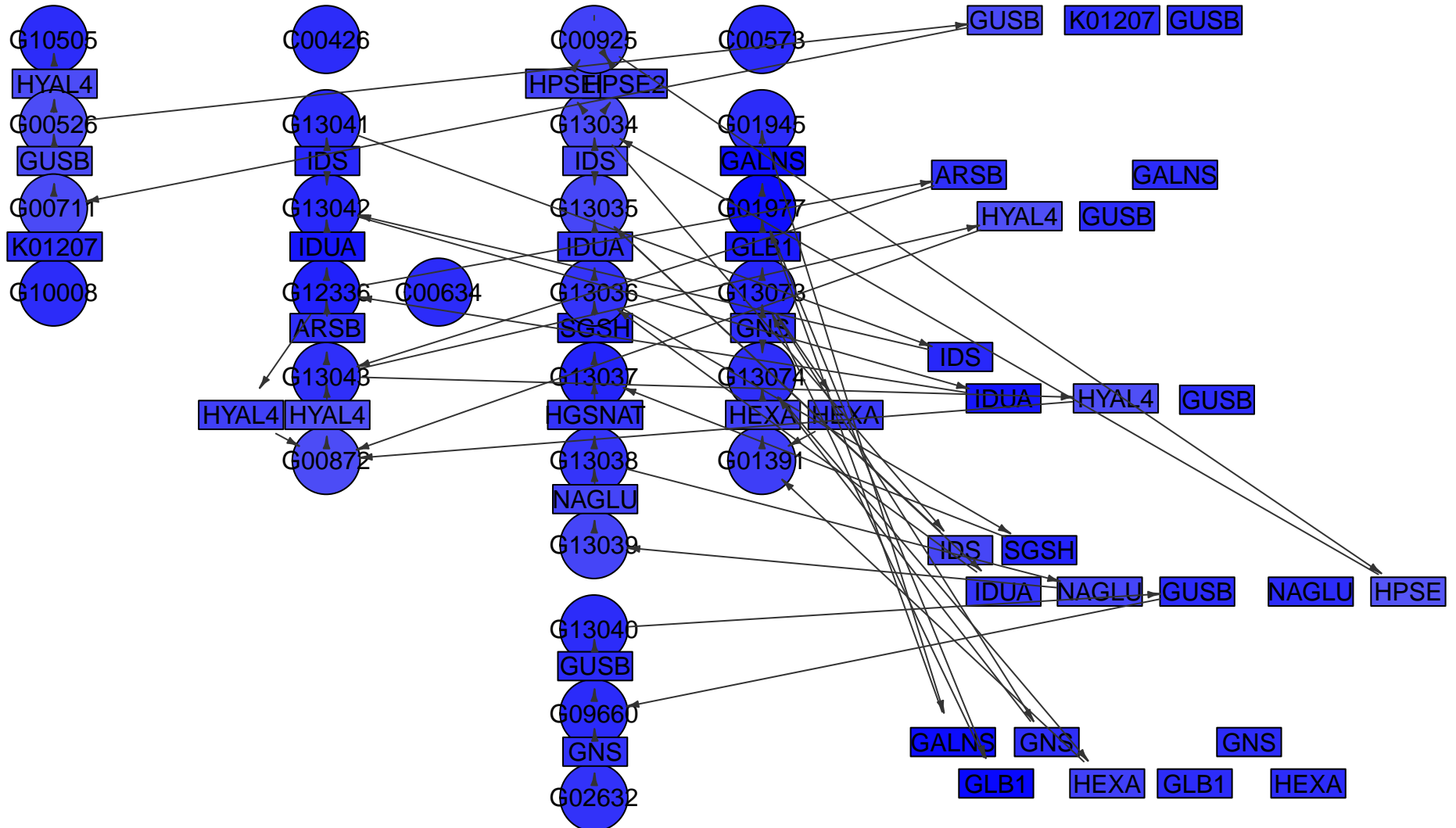
Glycosaminoglycan  
degradation  
MPI-229

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



Glycosaminoglycan  
degradation  
MPI-230

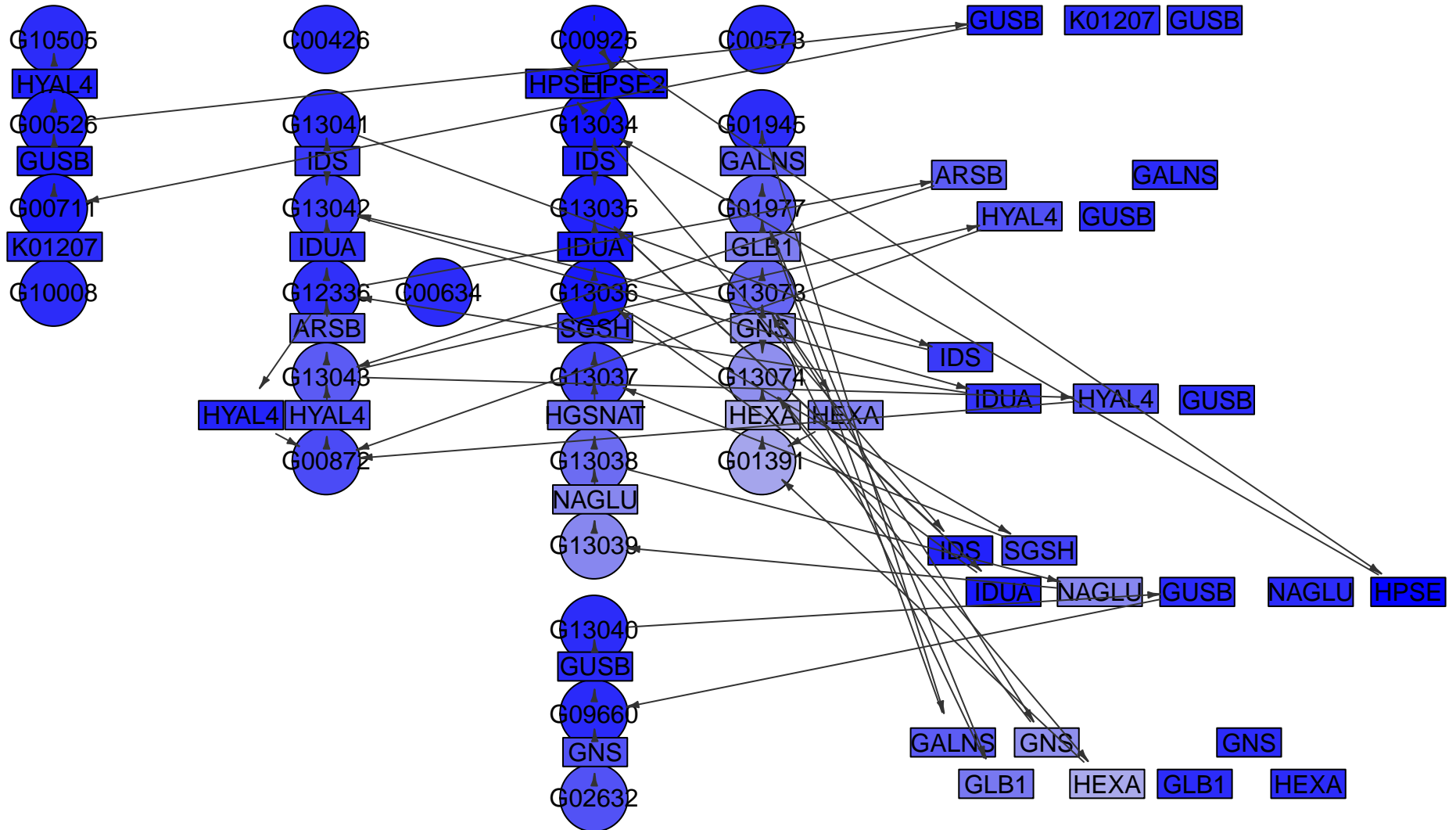
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





Glycosaminoglycan  
degradation  
MPI-231

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparinkeratan sulfate



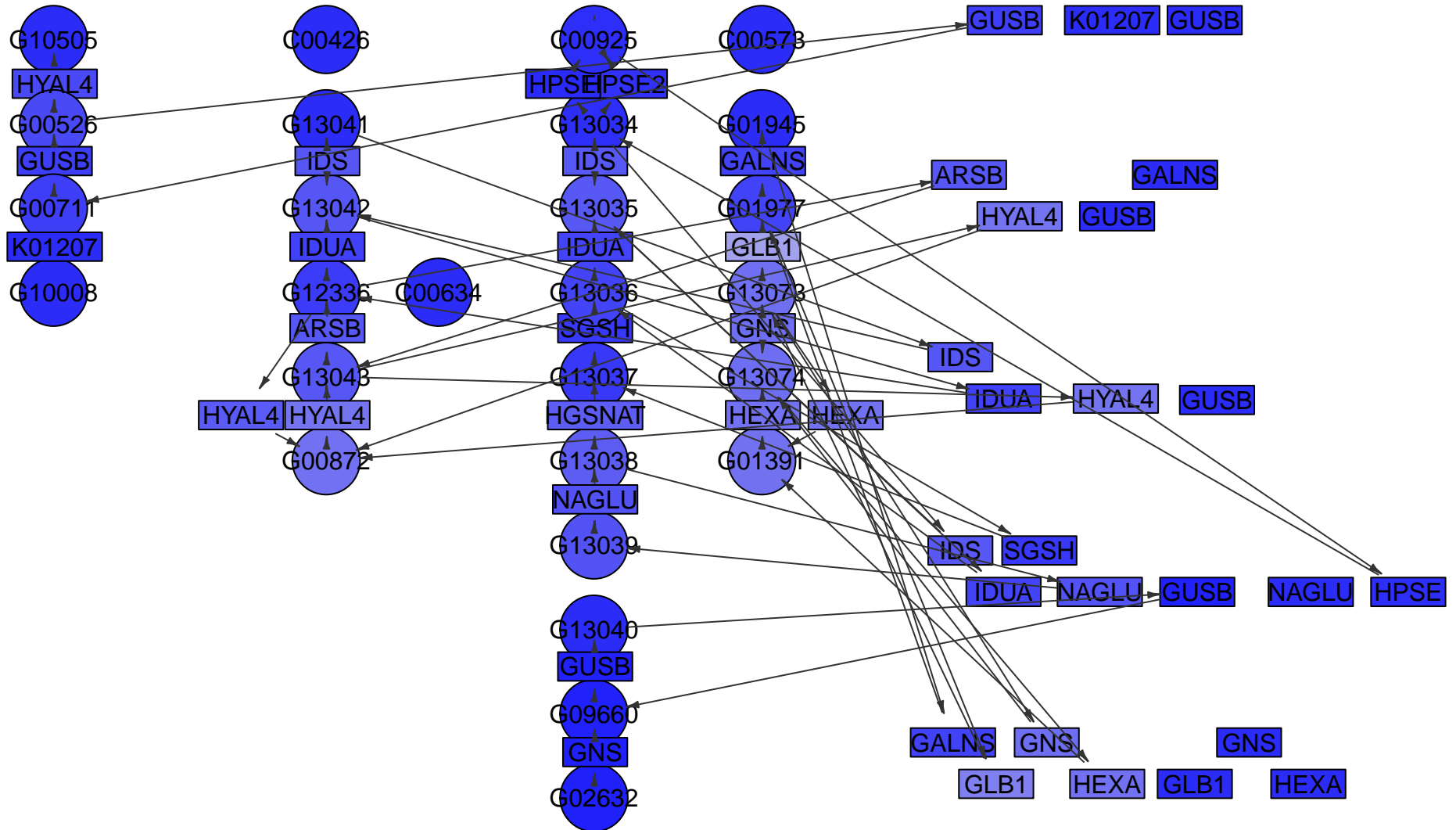






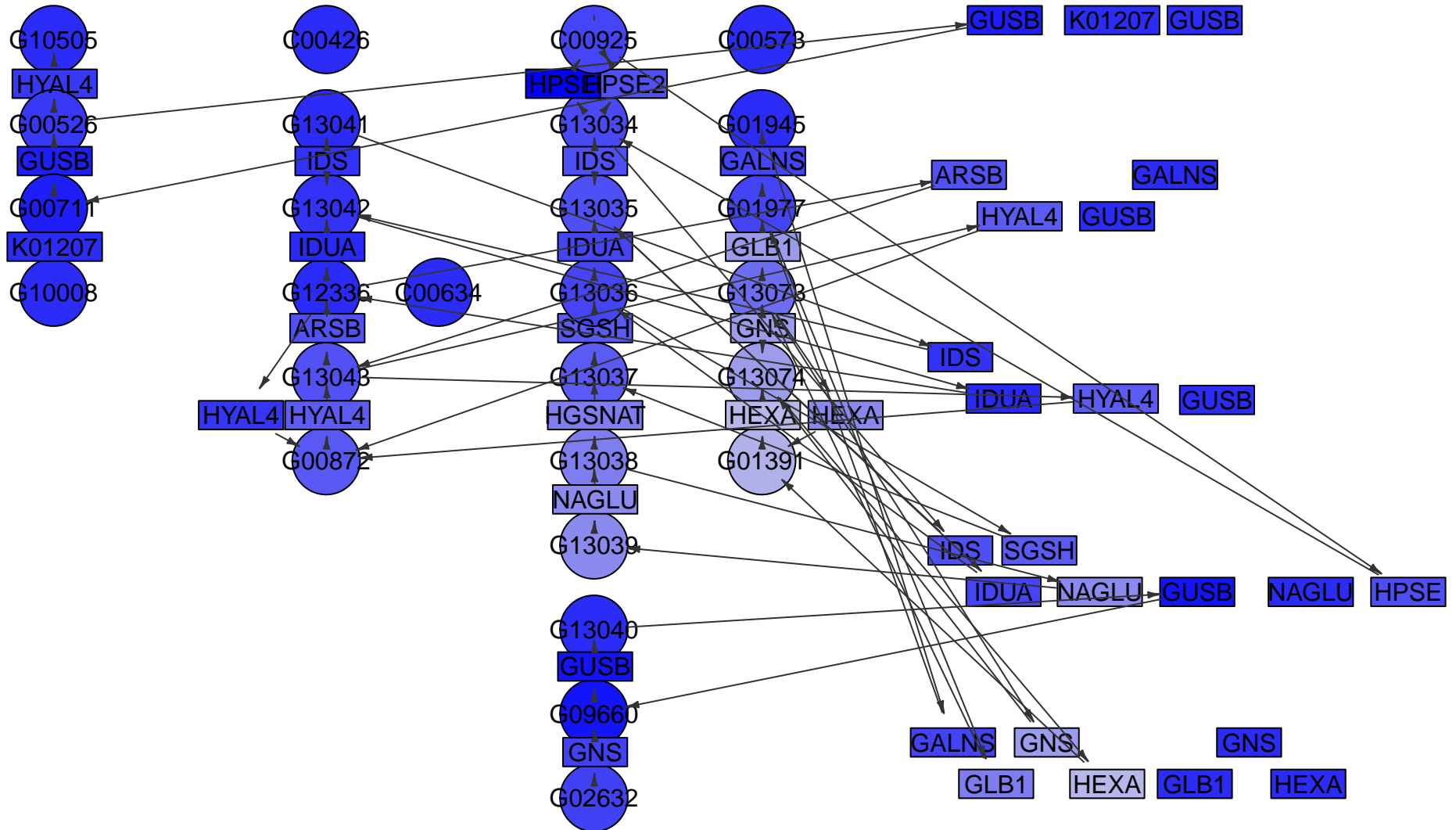
Glycosaminoglycan  
degradation  
MPI-235

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate



Glycosaminoglycan  
degradation  
MPI-236

Glycosaminoglycan biosynthesis - heparan sulfate / dermatansulfate / heparin keratan sulfate









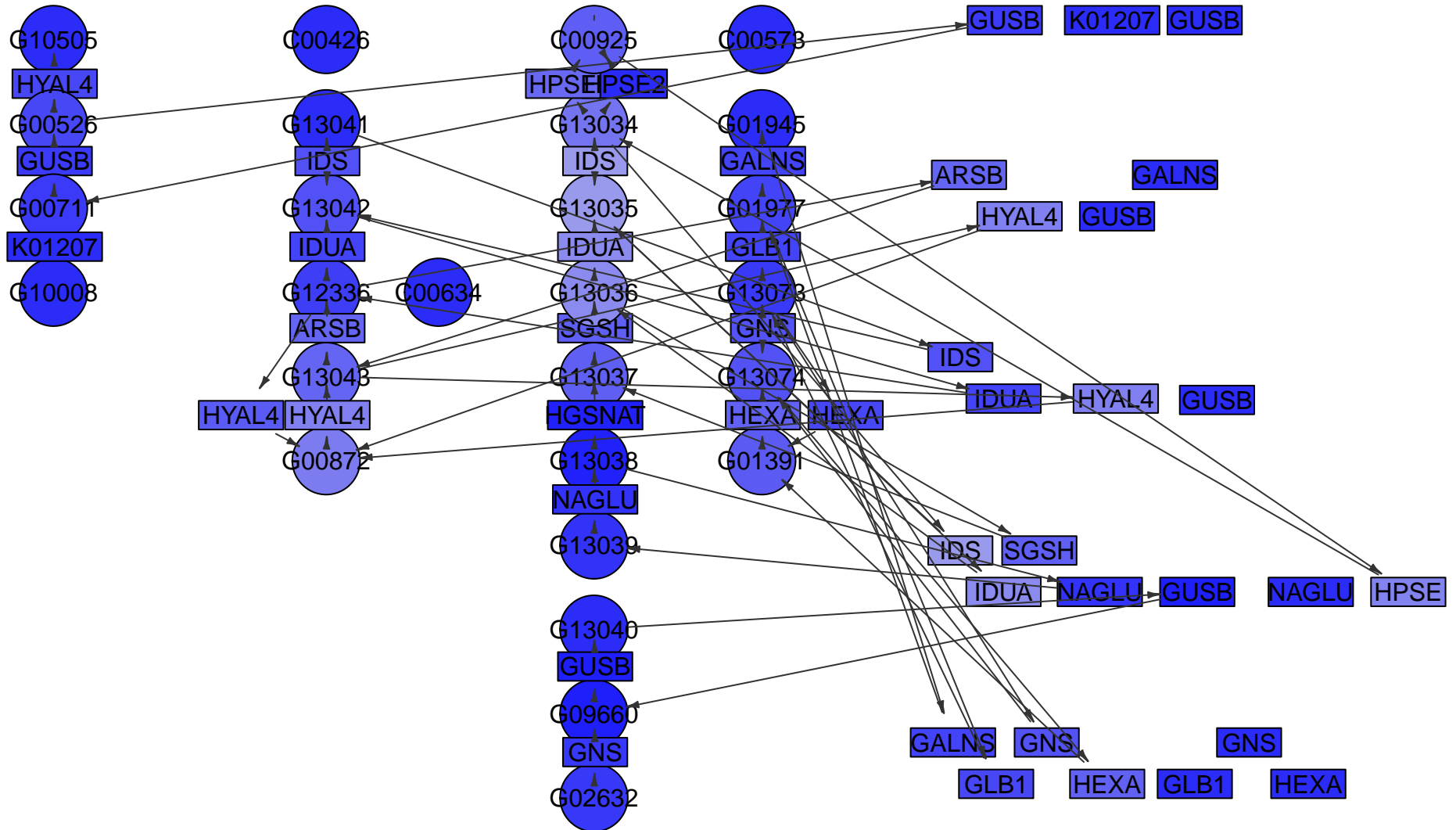






Glycosaminoglycan  
degradation  
MPI-246

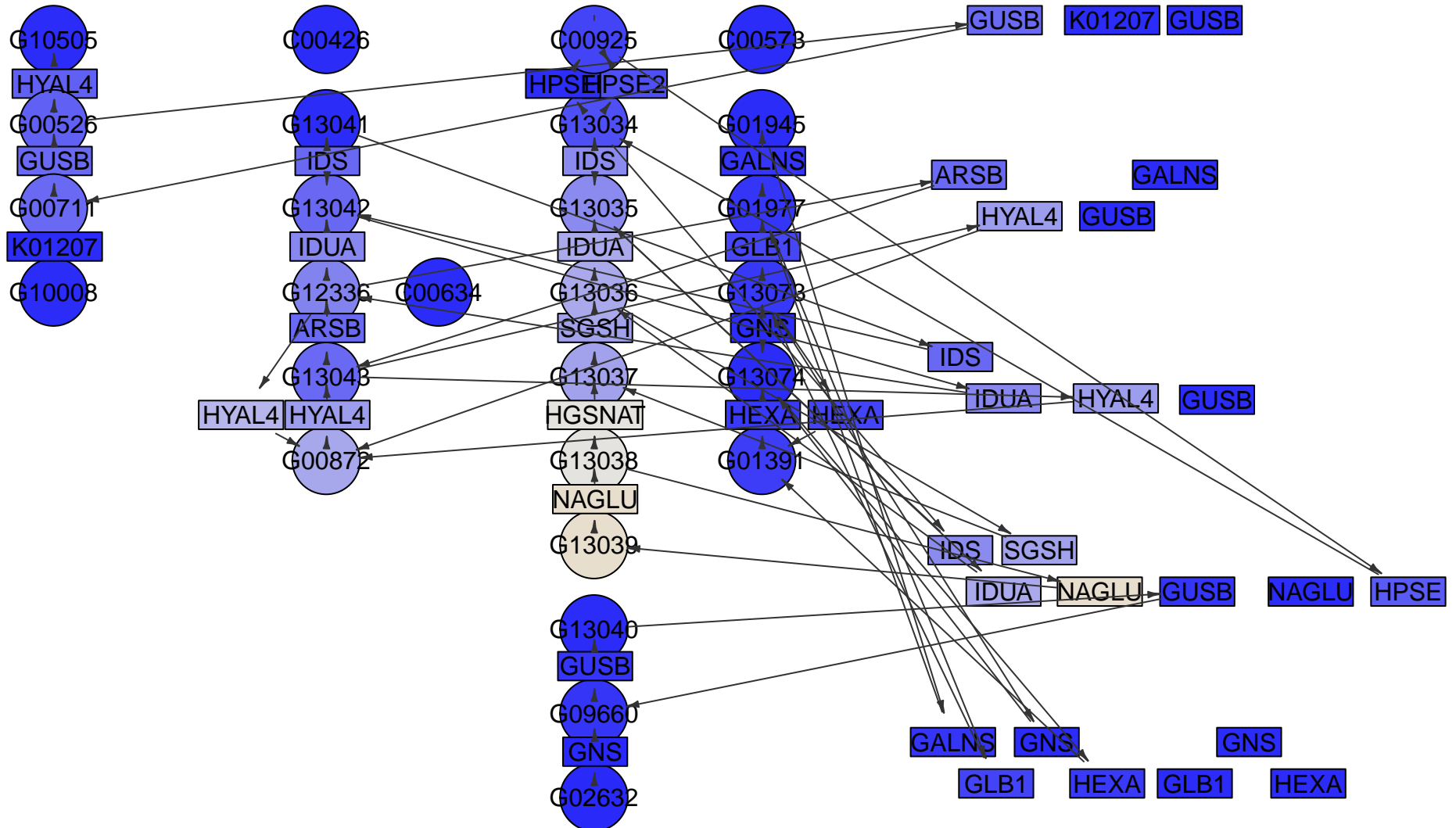
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





Glycosaminoglycan  
degradation  
MPI-251

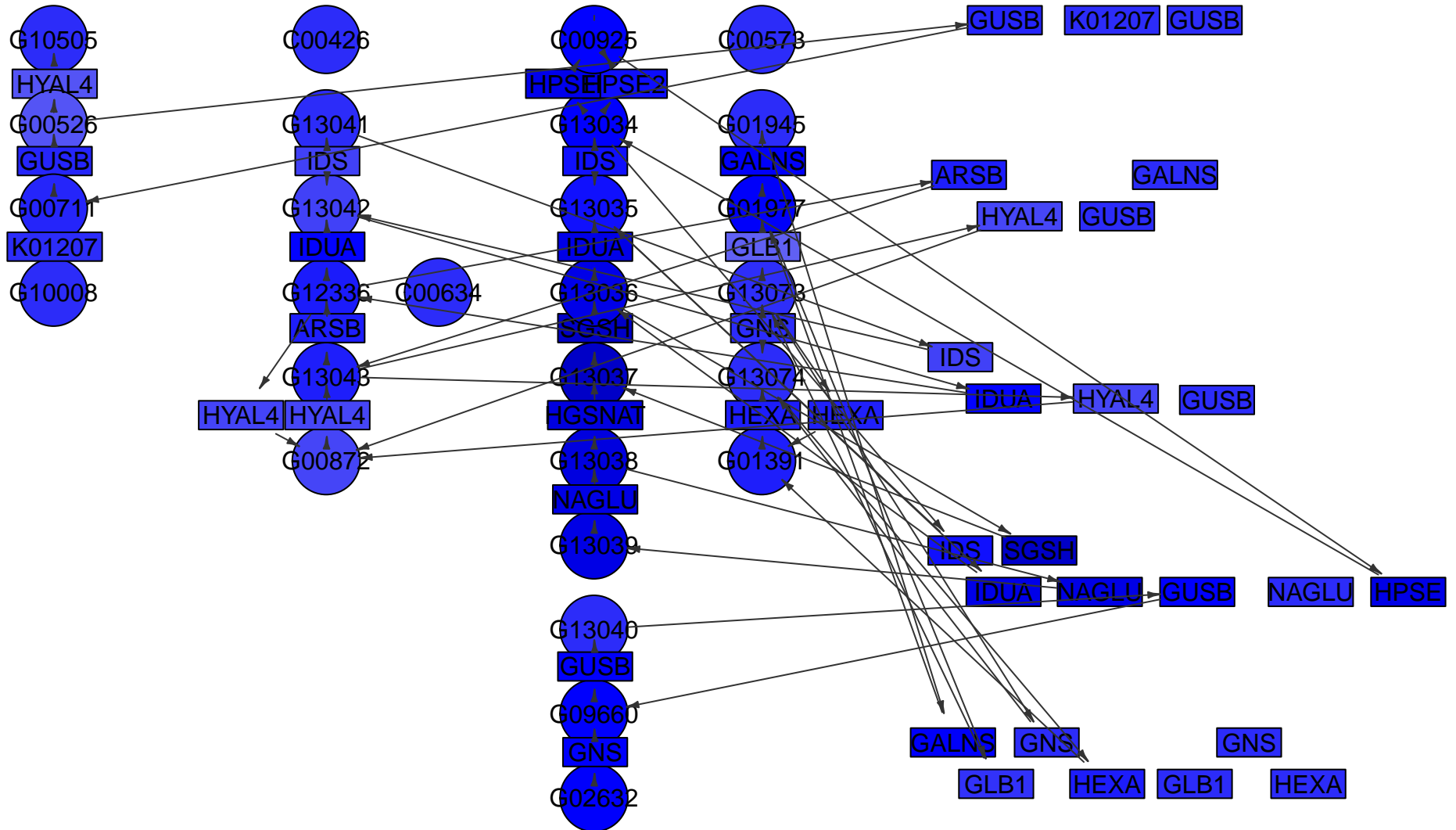
Glycosaminoglycan biosynthesis - heparan sulfate / dermatan sulfate / heparin keratan sulfate





Glycosaminoglycan  
degradation  
MPI-255

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate



Glycosaminoglycan  
degradation  
MPI-223b

Glycosaminoglycan synthesis –  
sulfate / dermatansulfate / heparin  
sulfate / heparan  
keratan sulfate

