BioRuby 2005

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What's BioRuby?

• BioPerl for the Ruby programmer
BioRuby updates

- **BioRuby** 0.6.2 released
  - Sim4, BLAT, Spidey parsers are added
  - Unit tests is being added by Moses Hohman
  - KEGG GLYCAN database is supported

- KEGG API 4.0 released (tested with BioRuby)
  - APIs for LIGAND, GLYCAN, REACTION databases
  - Colored PATHWAY in HTML format is available
What's coming next?

• **BioRuby** 0.6.3 will be released soon
  • Bug fixes
  • We will not continue to support Ruby 1.6
  • RubyGems for easy installation
    % gem install bioruby

• **ChemRuby** project started
  • Nobuya Tanaka (KEGG lab.)

• Financial support for developing docs/tests and integration of Bio and Chem -Ruby
Exploratory Software Project

- 1 year financial support from IPA
  - Infotech Promoting Agency, Japan

- "BioRuby + ChemRuby"
  - 4 core developers
  - documentations, unit tests
  - develop new features
  - integration of these projects

Bio(Chem)RubyHackathon every month!?
in KEGG lab,

Katayama: developing KEGG API, KEGG DAS etc.
Tanaka: developing algorithms for structure search etc.

ChemRuby

BioRuby + KEGG API

```
korg = "bsu"
serv = Bio::KEGG::API.new
list = serv.list_pathways(korg)
list.each do |path|
  pathway = path.entry_id
  fg_list = Array.new
  bg_list = Array.new
  genes = serv.get_genes_by_pathway(pathway)
genes.each do |gene|
  fg_list << "#000000"
  bg_list << exp2rgb(gene) || "#cccccc"
end
url = serv.color_pathway_by_objects(pathway, fg_list, bg_list)
serv.save_image(url)
end```

Connect seamlessly..
Open Bio Japan

• Promoting Open Bio* in Japan
  • Tutorials, documentations, mailing lists

• Japanese bioinfo developer's meeting
  • G-language, KNOB, BioRuby etc. ..

• [http://open-bio.jp/](http://open-bio.jp/)
More info?

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