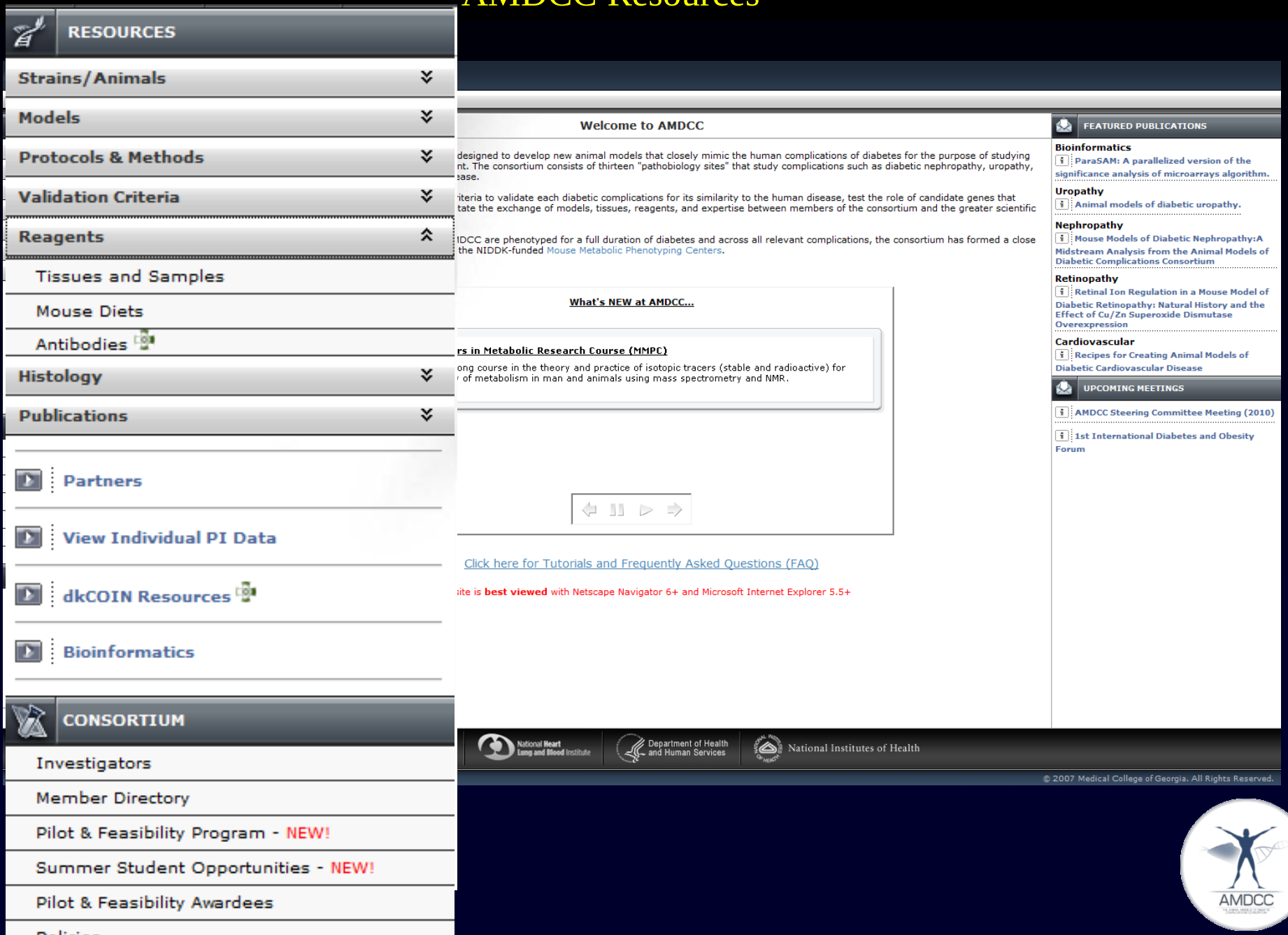
AMDCC

THE ANIMAL MODELS OF DIABETIC
COMPLICATIONS CONSORTIUM

AMDCC Resources



NIDDK Interconnectivity

Many NIDDK funded consortia: AMDCC, MMPC, BCBC, NURSA, etc.

Data collected from these consortia are diverse and contain data on molecular, cellular, metabolic, physiologic and general phenotyping characteristics.

They also provide information regarding the resources created by the consortia, e.g. antibodies, vector constructs, strains, etc.

All data collected by these consortia are effectively silos of information.

With this wealth of data has come the need to maintain and offer it to broad communities of potential users in ways that foster obtaining maximum value to catalyze new hypothesis-generation and testing, in turn, leading to paradigm-shifting advances in knowledge.

Ideally, one would like to provide seamless navigation between existing resources and databases to streamline and accelerate research through:

- Integration & simplification of access to information, reagents and data
- Dissemination of information to a wider audience than any single consortium serves
- Leverage common functionalities and reduce redundancies
- Provide rapid linkages to a host of related outside databases (NCBI, KEGG, Human Proteome)

dkCOIN
THE NIDDK CONSORTIAL INTERCONNECTIVITY NETWORK

NIDDK Consortial Interconnectivity Network

dkCOIN is a demonstration project to define and pilot approaches to providing interoperability between NIDDK supported databases.

AMDCC

dkCOIN

The NIDDK Consortial Interconnectivity Network

We envision dkCOIN, the NIDDK Consortial Interconnectivity Network, as serving the needs of basic and clinical investigators by providing seamless access to large pools of data relevant to the mission of NIDDK. The goal of dkCOIN is to develop a community-based network for integration across disciplines to include the larger DK universe of diseases, investigators, and potential users. dkCOIN seeks to interconnect

The focus of the network will be on providing both data and tools for access in a user friendly online environment to foster use of this data to inform ongoing work in laboratories and clinics as investigators seek to understand underlying mechanisms of disease and potential approaches to treatment. dkCOIN should include tools that are either readily available or easily developed and should be usable across platforms employing software

Consortium Participants

As a pilot program, the dkCOIN project includes the following participants. More information is available on the About dkCOIN page.

Animal Models of Diabetic Complications Consortium (AMDCC)

The AMDCC is an interdisciplinary consortium designed to develop new animal models that closely mimic the human complications of diabetes for the purpose of studying disease pathogenesis, prevention and treatment. The consortium consists of thirteen "pathobiology sites" that study complications such as diabetic nephropathy, uropathy, neuropathy, cardiomyopathy and vascular disease.

Visit the AMDCC website.

Beta Cell Biology Consortium (BCBC)

The mission of the Beta Cell Biology Consortium (BCBC) is to facilitate interdisciplinary approaches that will advance our understanding of pancreatic islet development and function with the long-term goal of developing a cell-based therapy for insulin delivery.

Visit the BCBC website.

National Mouse Metabolic Phenotyping Centers (MMPC)

Our mission is to advance medical and biological research by providing the scientific community with standardized, high quality metabolic and physiologic phenotyping services for mouse models of diabetes, diabetic complications, obesity and related disorders.

Visit the MMPC website.

Nuclear Receptor Signaling Atlas (NURSA)

NURSA's mission is to further the objectives of the nuclear receptor and coregulation signaling scientific community in the key areas of research and education.

Visit the NURSA website.

NIDDK National Institute of Diabetes and Digestive and Kidney Diseases

- Supported by the NIDDK
- About dkCOIN
- Contact dkCOIN
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dkCOIN Working Group

Beta Cell Biology Consortium (BCBC)

Jean-Philippe Cartailler, Ph.D.
Mark Magnuson, Ph.D.
Vanderbilt University

Nuclear Receptor Signaling Atlas (NURSA)

David Steffen, Ph.D.
Neil McKenna, Ph.D.
Baylor College of Medicine

Animal Models of Diabetic Complications Consortium (AMDCC)

National Mouse Metabolic Phenotyping Centers (MMPC)

Richard A. McIndoe, Ph.D.
Medical College of Georgia

NIDDK Staff

Kristin Abraham, Ph.D.
Olivier Blondel, Ph.D.
Arthur Castle, Ph.D.
Christian Ketchum, Ph.D.
Maren Laughlin, Ph.D.
Ronald Margolis, Ph.D.

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The NIDDK Consortial Interconnectivity Network

Phase 1: Proof of concept phase.
Develop a Metadata resource to collect information regarding what data or resources are available to the public from each consortium.

- Determine best strategy to share metadata between different systems.
- Determine where to house the dkCOIN system.
- Design flexible database to hold metadata from all consortia
- Design software to add/remove/update/search the dkCOIN system.
- Populate dkCOIN system and develop proof of concept pages in participating consortia.

dkCOIN
The NIDDK Consortial Interconnectivity Network

Phase 2: Develop a resource to collect and house actual data collected from each participating consortium. Provide a place to put data in the event a consortium site is no longer available.

- Develop policies and standards for data integration/addition.
- Augment database schema to accommodate additional consortia and actual data.
- Develop tools to access and analyze the data in the dkCOIN system.

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dkCOIN Phase 1:
Determine best strategy to share metadata between different systems.

Problem: Each of the pilot consortia use different software and systems for their websites and databases.

For example: Beta Cell Biology Consortium uses PHP
Nuclear Receptor Signaling Atalas uses Coldfusion
AMDCC/MMPC use ASP.NET

Don't want to force sites to use a specific programming language or software system to use dkCOIN.

Solution: Design the dkCOIN system to use webservices for data entry and retrieval.

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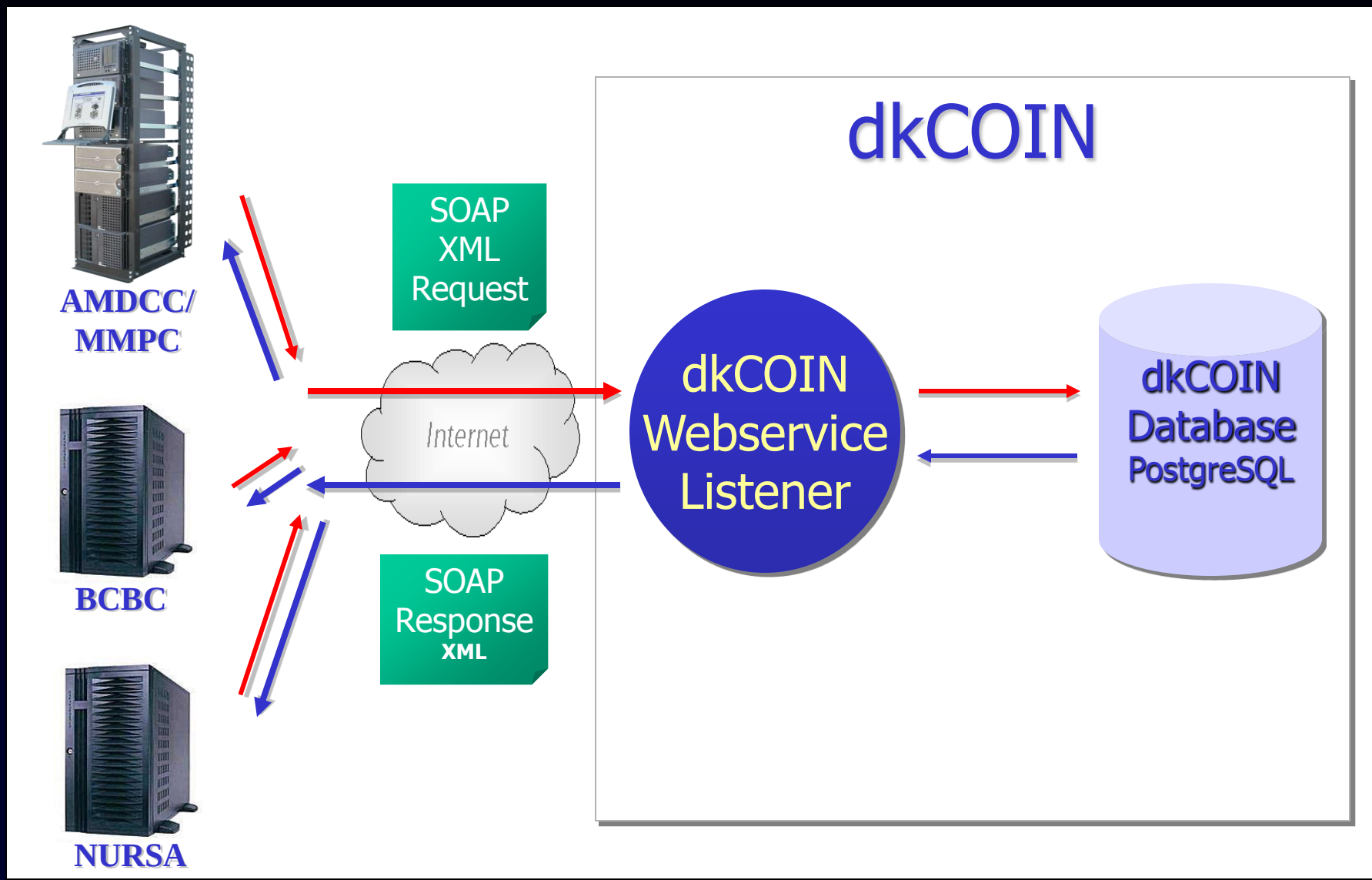
dkCOIN Webservices

Provide programmatic service for other platforms to access data using SOAP/HTTP



dkCOIN Phase 1:

Determine where to house the dkCOIN system.

Problem: As an NIDDK resource, one would want to house the dkCOIN system at a place controlled by NIDDK and not tied to a particular extramural investigator.

Solution: House the dkCOIN system using a Cloud or Grid Computing commercial service for a relatively small monthly fee.

Given the logistics of getting a Cloud computing platform paid for directly by NIDDK, we opted to house the initial system at Vanderbilt in order to get the proof of concept completed in time. However, the system was designed to be easily moved to a Cloud computing environment.

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The NIDDK Consortial Interconnectivity Network

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dkCOIN Phase 1:

Design database schema and web services for dkCOIN system.

Solution: dkCOIN database is open source PostgreSQL database.

Provides ability to store member and consortium information

Provides ability to store resource metadata (name, dbID, URL)

Provides ability to store resource types

Provides ability to connect resources to Entrez GeneID for searching

Working on adding additional Ontologies for connecting resources.

dkCOIN web services written in PHP using Zend framework.

Provides ability to:

- Login securely (Add/Delete/Update required)
- Add/Update/Delete Resources
- Search/Retrieve Resource Metadata

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The NIDDK Consortial Interconnectivity Network

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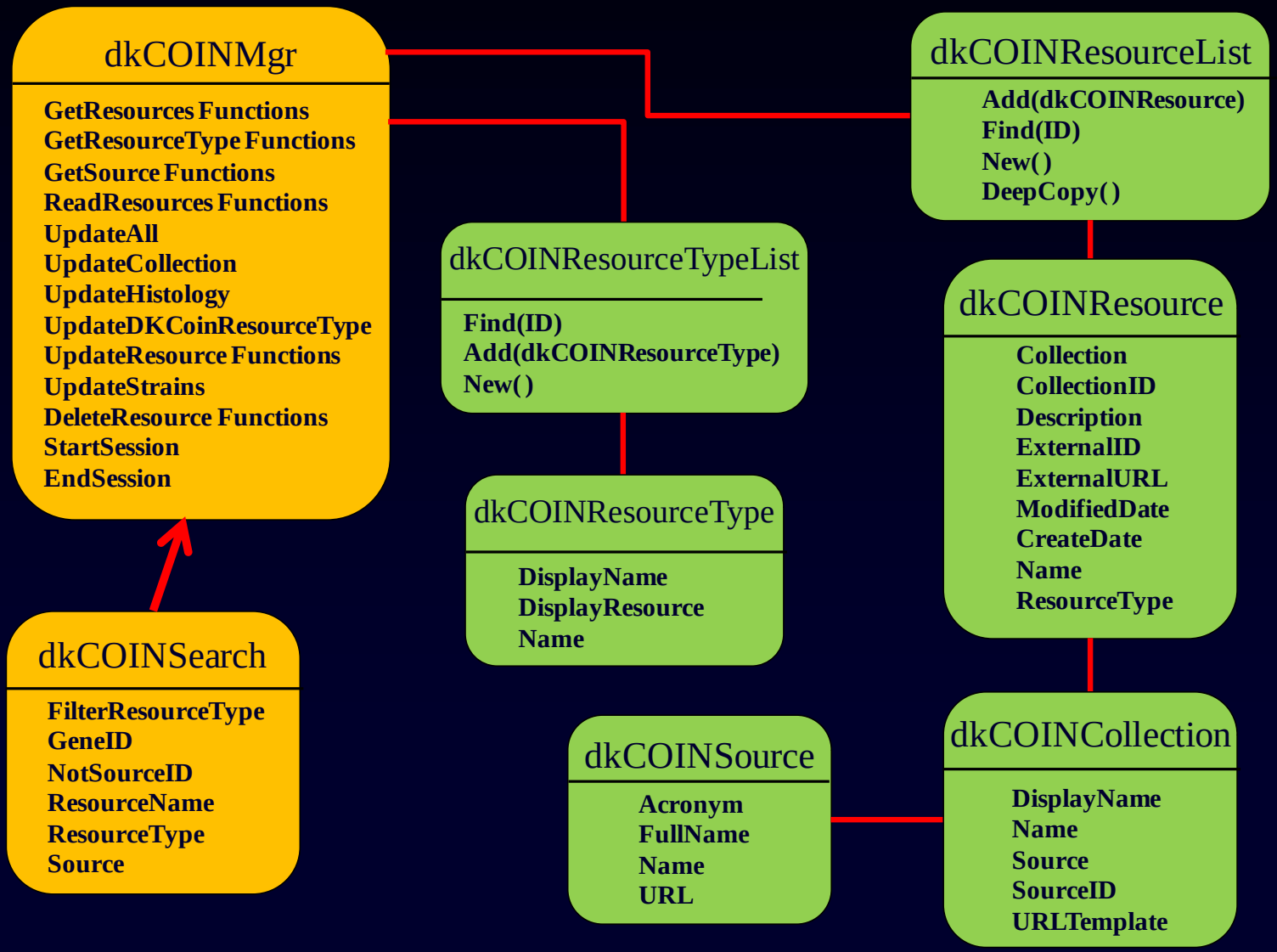
dkCOIN Phase 1:

Populate dkCOIN system and develop proof of concept pages in participating consortia.



dkCOIN Phase 1:

Populate dkCOIN system and develop proof of concept pages in participating consortia.

Resources by source:

Source Name	Count
National Mouse Metabolic Phenotyping Centers	149
Betacell Biology Consortium	331
Animal Models of Diabetic Complications Consortium	292
Total	772

Resources by type:

Resource Type	Count
Antibody	55
Adenovirus	117
ESC Line	5
Expression Study	94
Mouse Strain	231
Histology	137
Protocol	133

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The NIDDK Consortial Interconnectivity Network

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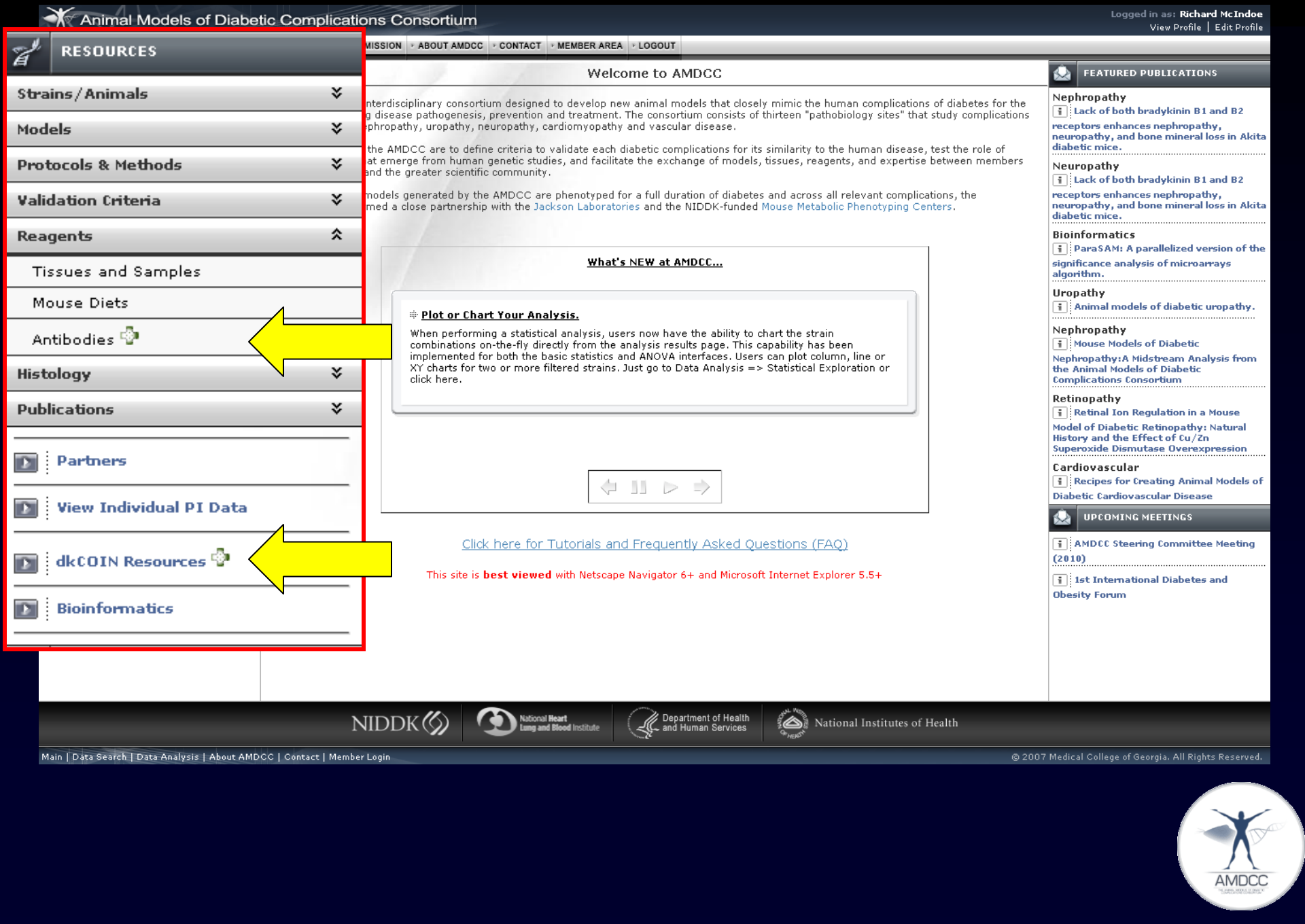
Animal Models of Diabetic Complications Consortium
Logged in as: Richard McIndoe
View Profile | Edit Profile
RESOURCES
Strains/Animals
Models
Protocols & Methods
Validation Criteria
Reagents
Tissues and Samples
Mouse Diets
Antibodies
Histology
Publications
Partners
View Individual PI Data
dkCOIN Resources
Bioinformatics
MISSION
ABOUT AMDCC
CONTACT
MEMBER AREA
LOGOUT
Welcome to AMDCC
nterdisciplinary consortium designed to develop new animal models that closely mimic the human complications of diabetes for the g disease pathogenesis, prevention and treatment. The consortium consists of thirteen "pathobiology sites" that study complications phropathy, uropathy, neuropathy, cardiomyopathy and vascular disease.
the AMDCC are to define criteria to validate each diabetic complications for its similarity to the human disease, test the role of at emerge from human genetic studies, and facilitate the exchange of models, tissues, reagents, and expertise between members and the greater scientific community.
models generated by the AMDCC are phenotyped for a full duration of diabetes and across all relevant complications, the med a close partnership with the Jackson Laboratories and the NIDDK-funded Mouse Metabolic Phenotyping Centers.
What's NEW at AMDCC...
Plot or Chart Your Analysis.
When performing a statistical analysis, users now have the ability to chart the strain combinations on-the-fly directly from the analysis results page. This capability has been implemented for both the basic statistics and ANOVA interfaces. Users can plot column, line or XY charts for two or more filtered strains. Just go to Data Analysis => Statistical Exploration or click here.
Click here for Tutorials and Frequently Asked Questions (FAQ)
This site is best viewed with Netscape Navigator 6+ and Microsoft Internet Explorer 5.5+
FEATURED PUBLICATIONS
Nephropathy
Lack of both bradykinin B1 and B2 receptors enhances nephropathy, neuropathy, and bone mineral loss in Akita diabetic mice.
Neuropathy
Lack of both bradykinin B1 and B2 receptors enhances nephropathy, neuropathy, and bone mineral loss in Akita diabetic mice.
Bioinformatics
ParaSAM: A parallelized version of the significance analysis of microarrays algorithm.
Uropathy
Animal models of diabetic uropathy.
Nephropathy
Mouse Models of Diabetic Nephropathy:A Midstream Analysis from the Animal Models of Diabetic Complications Consortium
Retinopathy
Retinal Ion Regulation in a Mouse Model of Diabetic Retinopathy: Natural History and the Effect of Cu/Zn Superoxide Dismutase Overexpression
Cardiovascular
Recipes for Creating Animal Models of Diabetic Cardiovascular Disease
UPCOMING MEETINGS
AMDCC Steering Committee Meeting (2010)
1st International Diabetes and Obesity Forum
NIDDK
National Heart Lung and Blood Institute
Department of Health and Human Services
National Institutes of Health
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AMDCC

Antibodies

Welcome to the AMDCC Antibodies page. Displayed below are the antibodies available through the DKCoin consortia.

53 antibodies retrieved.

dkCOIN Consortiums: BCBC MMPC NURSA BCBC

Antibodies	
Monoclonal Alpha cells Mouse	The monoclonal antibody HPa2 is derived from hybridoma DHCI2-2B4 The monoclonal antibody selectively reacts with a cell surface molecule on human pancreatic alpha cells. Mice were immunized with enzyme dispersed enriched islets. These cell preparations contain low levels of contaminating exocrine and ductal cells. These antibodies are currently being characterized. As such, the information included here should be considered preliminary data. It is requested that users of this antibody share data with provider as a mechanism to rapidly assist in antibody characterization.
Monoclonal Alpha cells Mouse	The monoclonal antibody HPa1 is derived from hybridoma DHCI2-2C12. The monoclonal antibody selectively reacts with a cell surface molecule on human pancreatic alpha cells. Mice were immunized with enzyme dispersed enriched islets. These cell preparations contain low levels of contaminating exocrine and ductal cells. These antibodies are currently being characterized. As such, the information included here should be considered preliminary data. It is requested that users of this antibody share data with provider as a mechanism to rapidly assist in antibody characterization.
Monoclonal Cytokeratin 7 Mouse	*Description coming soon...*
Monoclonal E-cadherin Mouse	Cross reacts with chick E-cadherin
Monoclonal Green Fluorescent Protein Mouse	*Description coming soon...*
Monoclonal Ngn3 Mouse	*Description coming soon...*
Monoclonal Nkx2.2 Mouse	Works with or without antigen retrieval. Works with immunofluorescence.
Monoclonal Nkx6.1 Mouse	Does not cross-react with human
Monoclonal Nkx6.1 Mouse	*Description coming soon...*
Monoclonal Nkx6.1 Mouse	IgG1/kappa isotype
Monoclonal Nkx6.1 Mouse	Also cross-reacts with chicken and zebrafish
Monoclonal Pancreatic duct cells Mouse	The monoclonal antibody HPd2 is derived from hybridoma DHIC3-5H10. The monoclonal antibody selectively reacts with human ductal cells in human pancreas. Mice were immunized with enzyme dispersed enriched islets. These cell preparations contain low levels of contaminating exocrine and ductal cells. These antibodies are currently being characterized. As such, the information included here should be considered preliminary data. It is requested that users of this antibody share data with provider as a mechanism to rapidly assist in antibody characterization.
Monoclonal Pancreatic duct cells Mouse	The monoclonal antibody HPd1 is derived from hybridoma DHIC2-4A10. The monoclonal antibody selectively reacts with human duct cells in human pancreas. Mice were immunized with enzyme dispersed enriched islets. These cell preparations contain low levels of contaminating exocrine and ductal cells. These antibodies are currently being characterized. As such, the information included here should be considered preliminary data. It is requested that users of this antibody share data with

URL Returned from dkCOIN

AMDCC

My Account

Welcome **Guest**

Login

Create Account

Resources

Adenoviruses (123)

Antibodies (118)

Expression Studies (98)

mESC Lines (32)

Mouse Strains (80)

Protocols (14)

Research Data (3)

Resource Tags (426)

TRAFEX (790)

Research

Research Highlights (3)

Research Networks

Research Objectives

Information

About the BCBC

BCBC Events

Branding & Logos

Career Opportunities

Health

NIH hESC Registry

Policies & Guidelines

Monoclonal Human Alpha cells raised in Mouse - Antibody (RES342 / AB2197)

Resource Access

This resource is publicly available.

Resource Tags

Alpha cells, antibody, FACS, Human, Monoclonal

Login to edit tags

Read more about tags

Request this Resource

To request this resource, refer to available repositories

Antibody Information

Antibody ID:	AB2197
Antigen:	Alpha cells
Type:	Monoclonal
Isotype:	IgM
Immunogen Source:	Whole cells
Raised In:	Mouse
Peptide:	
Source of Antigen:	Human
Cross Reacts With:	Human
Affinity Purified:	Supernatant
Purity Details:	Not provided
Positive Control:	Acetone-fixed frozen tissue sections of adult human pancreas.
Notes:	The monoclonal antibody HPa1 is derived from hybridoma DHCI2-2C12. The monoclonal antibody selectively reacts with a cell surface molecule on human pancreatic alpha cells. Mice were immunized with enzyme dispersed enriched islets. These cell preparations contain low levels of contaminating exocrine and ductal cells. These antibodies are currently being characterized. As such, the information included here should be considered preliminary data. It is requested that users of this antibody share data with provider as a mechanism to rapidly assist in antibody characterization.

Collection Options

Login to access additional resources and tools

Search:

Go

Advanced Search

Filter view by:

Antibody Type

Antigen

Investigative Team

Repository

Source Species

View all antibodies

About the Collection

About the Antibody Core

About Rainbow Mice

AMDCC

dkCoin Resources

dkCOIN is the NIDDK Consortial Interconnectivity Network and serves the needs of basic and clinical investigators by providing seamless access to large pools of data relevant to the mission of NIDDK. The goal of dkCOIN is to develop a community-based network for integration across disciplines to include the larger DK universe of diseases, investigators, and potential users. dkCOIN seeks to interconnect productive basic science consortia as a first step in moving toward development of a more comprehensive and broadly applicable dk-specific Biomedical Informatics Grid (dkBIG). This page provides an overview of the resources available from the dkCOIN project.

Resource	* Case Sensitive
Resource Type	[Any]
Source	[Any]
Genes	Click here to select genes.

Display All Resource Types

Search | Reset

dkCOIN Consortiums: BCBC MMPC NURSA

Resource	Description	Source
ResourceType: Adenovirus Construct; Items: 116		
ResourceType: Antibody; Items: 53		
ResourceType: Gene Network; Items: 83		
ResourceType: Mouse Strain; Items: 133		
129.A		National Mouse Metabolic Phenotyping Centers (MMPC)
129S6/SvEv		National Mouse Metabolic Phenotyping Centers (MMPC)
129S6/SvEvTac		National Mouse Metabolic Phenotyping Centers (MMPC)
129S/SvEv		National Mouse Metabolic Phenotyping Centers (MMPC)
129/SveJ		National Mouse Metabolic Phenotyping Centers (MMPC)
129/SveJ-Pkcb1$^{-/-}$		National Mouse Metabolic Phenotyping Centers (MMPC)
129X1/SvJ		National Mouse Metabolic Phenotyping Centers (MMPC)
A/J		National Mouse Metabolic Phenotyping Centers (MMPC)
B6.129P2-Apoe^{tm1Unc}		National Mouse Metabolic Phenotyping Centers (MMPC)
B6;129S7-Fyn^{tm1Sor}		National Mouse Metabolic Phenotyping Centers (MMPC)
B6.129S7-Ldlr^{tm1Her} /J		National Mouse Metabolic Phenotyping Centers (MMPC)
B6.129S-Neurog3{tm1(EGFP) Khk}/Mmcd	A targeted mutation at the Neurogenin 3 locus where EGFP replaces entire coding region of Neurogenin3. The basic phenotype is EGFP expression in developing endocrine cells of pancreas and in glandular regions of the stomach.	Beta Cell Biology Consortium (BCBC)
B6.129X1-Abcc8{tm1.1Mgn}	How about a description	Beta Cell Biology Consortium (BCBC)
B6.CBA-{Tg(Gcg-cre)1Herr}/Mmnc	A transgenic alteration consisting of a SacI fragment containing the glucagon promoter, inserted at SacI of pBS-beta globin-Cre, resulting in Cre expression in pancreatic lineage cells.	Beta Cell Biology Consortium (BCBC)
B6.CBA-{Tg(Ipf1-EGFP)1Herr}/Mmnc	Expression of EGFP in pancreatic precursor populations.	Beta Cell Biology Consortium (BCBC)
B6.Cg(SJL)-TgN(Nes-cre)1Kln		National Mouse Metabolic Phenotyping Centers (MMPC)
B6;D2-Tg(Ins-cre)23Herr	Recombination of floxed DNA in insulin-producing beta cells.	Beta Cell Biology Consortium (BCBC)
B6;D2-Tg(NEUROG3-cre)1Herr	All islet endocrine cells inherit a recombination event, if a segment of DNA is loxP-flanked. Transgene encoding Cre recombinase under the control of a human Neurogenin3 promoter.	Beta Cell Biology Consortium (BCBC)

Strain

FVB.BKS(D)-Lepr ^{db}/ChuaJ

SUMMARY	
Species	M. musculus
Official Name	FVB.BKS(D)-Lepr ^{db}/ChuaJ
Common Name	FVB $^{db/db}$
Description	The phenotype of this conge... that previously published on... Specifically, obese FVB-db ... that is primarily due to severe... hyperglycemia in the fed sta... insulin secretion and a mass... beta-cell mass. Obese FVB-... matrix expansion, a hallmar... Whereas the original C57BL... to the development of hypo... mass, the hyperglycemia of... severe insulin resistance wit... insulin secretory capacity fr... the phenotype varies by ge... mice, along with db mutants... (see Stock No. 000642, 000... may be useful for diabetes ... dissection of genetic control... hyperglycemia and insulin re...
Development Status	Phenotyping ongoing
Creation Method	congenic
Treatment Protocol	*Not Specified*
Maternal Strain	*Not Specified*
Paternal Strain	*Not Specified*
Background	
Breeding Type	*Not Specified*
Breeding Protocol	*Not Specified*
Breeding Generations	10
Phenotype Description	The phenotype of this congenic "FVB-db" strain varies from that previously published on other genetic backgrounds. Specifically, obese FVB-db mice show long-term hyperglycemia that is primarily due to severe insulin resistance. The hyperglycemia in the fed state persists despite escalating insulin secretion and a massive increase in pancreatic beta-cell mass. Obese FVB-db mice show evidence of mesangial matrix expansion, a hallmark of diabetic nephropathy. Whereas the original C57BLKS/J-db mice are hyperglycemic due to the development of hypoinsulinemia and loss of beta-cell mass, the hyperglycemia of FVB-db appears to be due to severe insulin resistance with continual increases in insulin secretory capacity from beta-cell mass expansion. As the phenotype varies by genetic background, these mutant mice, along with db mutants on other genetic backgrounds (see Stock No. 000642, 000697, 000699, 000700, and 000707), may be useful for diabetes research, including the dissection of genetic control of beta-cell responses to hyperglycemia and insulin resistance/sensitivity.

DATA SUMMARY

Type	Count
Investigators	1
Genomics - Modifications	1
Models	1
Experiments	4
dkCOIN Resources	2

INVESTIGATORS

Name	Institution
Matthew Breyer	Vanderbilt University

GENOMIC INFORMATION

Modification | ~~Transgene~~ | ~~Segment~~

Gene	Allele 1	Allele 2	Protocol
Lepr	point mutation - transition	point mutation - transition	*Not Specified*

MODELS

Complication	Strain	Diabetes Type	Status	Investigators

DKCOIN RESOURCES

Name	Resource Type	Source
C57BLKS/J-Lepr $^{db/m}$	Mouse Strain	National Mouse Metabolic Phenotyping Centers (MMPC)
OE.Mouse.LEPR; ObRb.CMV	Adenovirus Construct	Beta Cell Biology Consortium (BCBC)

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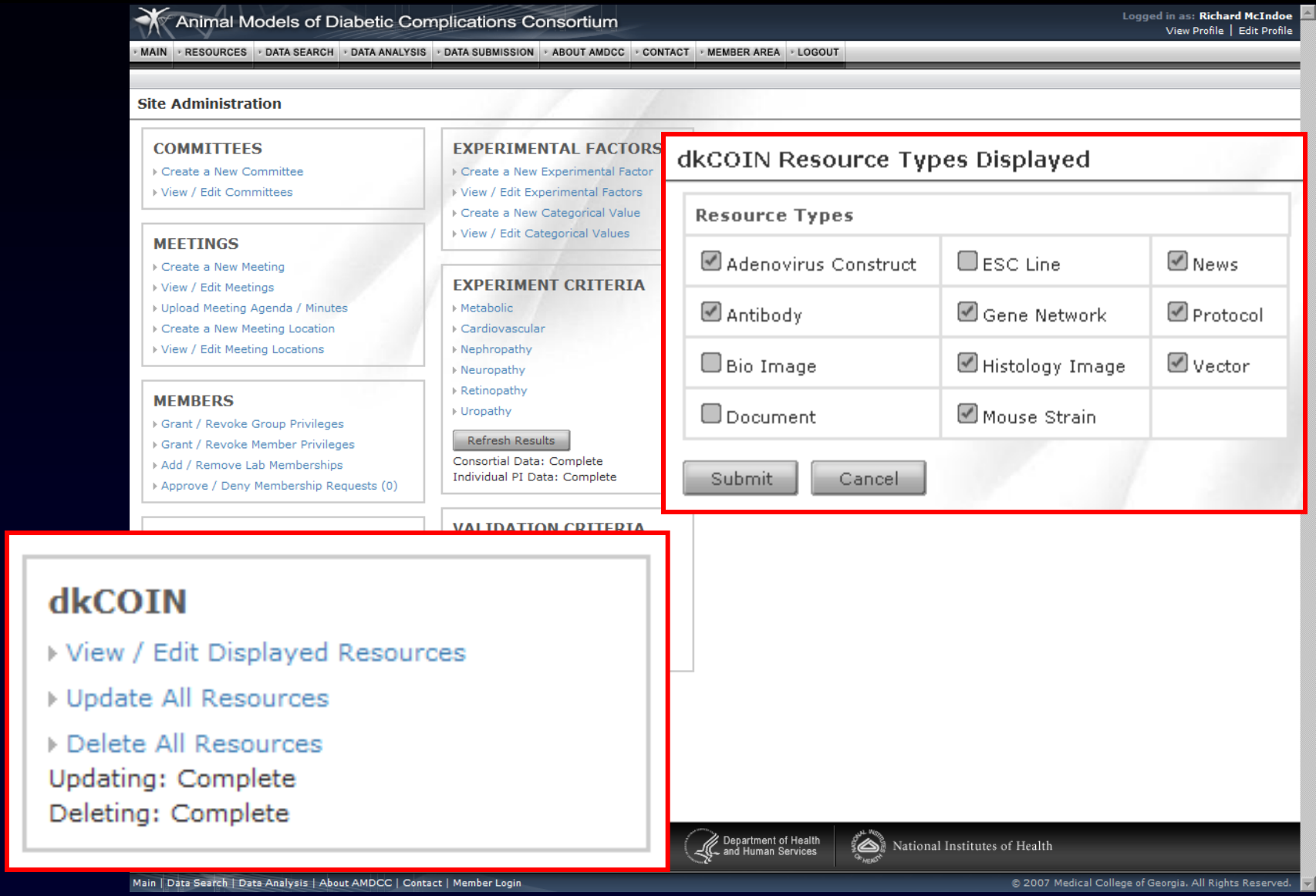
Animal Models of Diabetic Complications Consortium
Logged in as: Richard McIndoe
View Profile | Edit Profile
MAIN | RESOURCES | DATA SEARCH | DATA ANALYSIS | DATA SUBMISSION | ABOUT AMDCC | CONTACT | MEMBER AREA | LOGOUT
Site Administration
COMMITTEES
Create a New Committee
View / Edit Committees
MEETINGS
Create a New Meeting
View / Edit Meetings
Upload Meeting Agenda / Minutes
Create a New Meeting Location
View / Edit Meeting Locations
MEMBERS
Grant / Revoke Group Privileges
Grant / Revoke Member Privileges
Add / Remove Lab Memberships
Approve / Deny Membership Requests (0)
EXPERIMENTAL FACTORS
Create a New Experimental Factor
View / Edit Experimental Factors
Create a New Categorical Value
View / Edit Categorical Values
EXPERIMENT CRITERIA
Metabolic
Cardiovascular
Nephropathy
Neuropathy
Retinopathy
Uropathy
Refresh Results
Consortial Data: Complete
Individual PI Data: Complete
dkCOIN Resource Types Displayed
Resource Types
Adenovirus Construct
ESC Line
News
Antibody
Gene Network
Protocol
Bio Image
Histology Image
Vector
Document
Mouse Strain
Submit
Cancel
dkCOIN
View / Edit Displayed Resources
Update All Resources
Delete All Resources
Updating: Complete
Deleting: Complete
Department of Health and Human Services
National Institutes of Health
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Additional Website Updates

Models

Welcome to the AMDCC models page. This page will provide model phenotyping information for AMDCC members.

Please click search to display all models or use the filter options below to limit your search by investigator and/or strain name. You may also filter results by using the limitations specified by the checkboxes to the right. You can specify whether the strain name should contain or start with the search term by using the toggle buttons. The search is **not** case sensitive.

Click here to filter search results...

Summary Statistics	◉ Metabolic ○ Cardiovascular ○ Nephropathy ○ Neuropathy	Select a complication type and click 'Summary Statistics' then select the filter criteria for the analysis and click the 'Get Stats' button. Basic statistical information will be calculated for the data based on the filter criteria.
Comparative Analysis	◉ Metabolic ○ Cardiovascular ○ Nephropathy ○ Neuropathy	Select a complication type and click 'Comparative Analysis' then select the filter criteria for the analysis and click the 'Get Stats' button. An ANOVA analysis (One way or Two way) will be performed on the data based on the filter criteria.
Plotting	◉ Metabolic ○ Cardiovascular ○ Nephropathy ○ Neuropathy	Select a complication type and click 'Plotting' to plot the dataset generated from the validation criteria then select the type of chart to be generated and the filter criteria for the data to be plotted, finally, click the 'Get Chart' button.

Options: view edit

Model	Phenotyped For						Other Resources			
Jax Nomenclature	Metabolic	Cardiovascular	Nephropathy	Neuropathy	Retinopathy	Uropathy	Tissues	Reagents	Publications	Options
129(B6)-Nos3$^{tm1.1Rhrs}$/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	View	View	View	
B6.129-Ins2^{Akita} Bdkrb2^{tm1Jfh}/SmiJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	View	View	View	
BKS.Cq-m Lepr^{db}/+ +	Coming Soon	Coming Soon	Coming Soon	Complete						
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Complete	Partial	Partial	Coming Soon						
C57BL/6J	Complete	Partial	Partial	Partial						
C57BL/6J-Ins2^{Akita}	Complete	Partial	Partial	Coming Soon						
D2.129(B6)-Nos3$^{tm1.1Rhrs}$/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon						
D2.B6-Ins2^{Akita}/MatbJ	Complete	Partial	Partial	Coming Soon						
D2.Cg-Ins2 ^{Akita} Nr1h4^{tm1Gonz}/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon						
DBA/2J	Complete	Partial	Partial	Partial						
FVB.B6-Ins2^{Akita}/MlnJ	Complete	Partial	Partial	Coming Soon						
FVB.BKS(D)-Lepr ^{db}/ChuaJ	Complete	Partial	Partial	Coming Soon						
NOD/LtJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	View	View	View	
NOD/Shi	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	View	View	View	
SWR/J	Coming Soon	Coming Soon	Coming Soon	Partial	Coming Soon	Coming Soon	View	View	View	

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AMDCC

Metabolic Phenotype Data Search

Welcome to the AMDCC Metabolic Phenotype Data Search page. This page will provide model phenotyping information for AMDCC

Primary Data | Primary Data, Continued | Primary Data, Kidney | Primary Data, CV

Baseline Metabolic Phenotyping Data

C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J

Animal Age (w)	HbA1c (%)	plasma glucose (mg/dL)	plasma insulin (pg/ml)	W rodent (g)	fat body mass (g)	lean body mass (g)	%BF (rodent) (%)
4		460.29		17.34			
5							
6				19.13			
7							
8		512.67	484.56	20.54			
9							
10				21.72			
11							
12		448.94		22.24			
13							
14				22.63			
15							
16		452.44	500.44	22.89			
17							
18				22.63			
19							
20		497.33		23.51			
21							
22				23.52			
23							
24		509.65	413.72	23.85			
25							
26		551.82		21.92	3.86	18.46	17.23

18				29.76			
19							
20		169.28		29.79			
21							
22				30.43			
23							
24		198.33	1406.28	31.42			
25							
26		291.11		29.42	7.59	22.43	24.88

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AMDCC

Model	Phenotyped For						Other Resources			
Jax Nomenclature	Metabolic Get Data ↓↓↓	Cardiovascular Get Data ↓↓↓	Nephropathy Get Data ↓↓↓	Neuropathy Get Data ↓↓↓	Retinopathy	Uropathy	Histology Images	Reagents	Publications	Options
129(B6)-Nos3$^{tm1.1Rhrs}$/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
B6.129-Ins2^{Akita} Bdkrb2^{tm1Jfh}/SmiJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
B6.129-Tg(Tagln-cre/ESR1)1Feil/FdmdJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
B6.Cg-Ins2^{Akita} Gt(ROSA)26Sor$^{tm1.1(Ntn1)Abel}$	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
B6.Cg-Sod2^{tm1Shs}/Elf J	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
B6.Cg-Sod2^{tm1Shs}Tg(Tagln-cre/ESR1)1Feil/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
BKS.Cg-m Lepr^{db}/+ + Get Data →	Coming Soon	Coming Soon	Coming Soon	Data Available ☐	Coming Soon	Coming Soon				
BTBR.V(B6)-Lep^{ob}/WiscJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J Get Data →	Data Available ☑	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon			Image(s) Available	
C57BL/6J Get Data →	Data Available ☑	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon				
C57BL/6J-Ins2^{Akita} Get Data →	Data Available ☑	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon				
D2.129(B6)-Nos3$^{tm1.1Rhrs}$/J	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
D2.B6-Ins2^{Akita}/MatbJ Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon				
D2.Cg-Ins2 ^{Akita} Nr1h4^{tm1Gonz}/J Get Data →	Data Available ☐	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon			Image(s) Available	
DBA/2J Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon				
FVB(Cg)-Tg(Ins2-CALM1)26Ove Tg(Cryaa-TAg)1Ove/PneJ Get Data →	Data Available ☐	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
FVB.B6-Ins2^{Akita}/MlnJ Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon			Image(s) Available	Tissue(s) Available
FVB.BKS(D)-Lepr ^{db}/ChuaJ Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon			Image(s) Available	Tissue(s) Available
FVB.Cg-Ins2^{Akita} Nr1h4^{tm1Gonz}/J Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon	Coming Soon			Image(s) Available	
FVB.Cg-Ins2^{Akita} Nr1h4^{tm1Gonz}/J Get Data →	Data Available ☐	Data Available ☐	Data Available ☐	Coming Soon	Coming Soon	Coming Soon	Image(s) Available			
NOD	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
NOD/LtJ	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
NOD/Shi	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon	Coming Soon				
SWR/J Get Data →	Coming Soon	Coming Soon	Coming Soon	Data Available ☐	Coming Soon	Coming Soon				

AMDCC

Metabolic Phenotyping Data

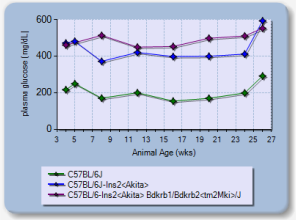
Welcome to the AMDCC Metabolic Assays page. This page will provide model phenotyping information for AMDCC members.

Download Data

Primary Data | Primary Data, Continued | Primary Data, Kidney | Primary Data, CV

plasma glucose (mg/dL)

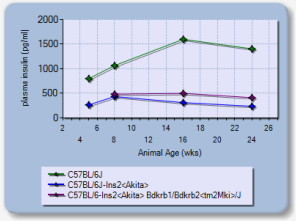
Series	Sex	N	Avg	SD
C57BL/6J	Both	124	201.07	85.71
	Female	56	185.48	73.80
	Male	68	213.91	92.44
C57BL/6J-Ins2^{Akita}	Both	134	437.25	163.85
	Female	80	351.25	134.39
	Male	54	564.67	112.57
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	120	490.78	167.06
	Female	55	373.47	152.22
	Male	65	590.05	102.09



Both | Female | Male

plasma insulin (pg/ml)

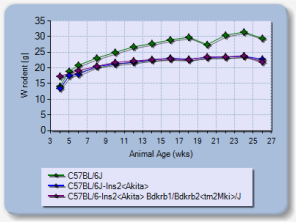
Series	Sex	N	Avg	SD
C57BL/6J	Both	60	1301.90	954.40
	Female	27	760.67	424.97
	Male	33	1744.73	1035.67
C57BL/6J-Ins2^{Akita}	Both	65	324.25	219.34
	Female	39	348.59	172.07
	Male	26	287.73	271.37
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	54	466.24	554.42
	Female	24	730.42	723.43
	Male	30	254.90	184.66



Both | Female | Male

W rodent (g)

Series	Sex	N	Avg	SD
C57BL/6J	Both	291	26.76	5.66
	Female	96	22.70	3.93
	Male	195	28.76	5.30
C57BL/6J-Ins2^{Akita}	Both	230	21.64	2.92
	Female	138	21.33	2.77
	Male	92	22.10	3.06
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	202	21.94	2.54
	Female	93	21.53	3.09
	Male	109	22.29	1.88



Both | Female | Male

fat body mass (g)

Series	Sex	N	Avg	SD
C57BL/6J	Both	18	7.59	3.00
	Female	8	6.33	1.43
	Male	10	8.60	3.51
C57BL/6J-Ins2^{Akita}	Both	19	4.09	0.94
	Female	12	4.55	0.89
	Male	7	3.31	0.30
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	17	3.86	0.83
	Female	8	4.50	0.79
	Male	9	3.30	0.23

lean body mass (g)

Series	Sex	N	Avg	SD
C57BL/6J	Both	18	22.43	4.25
	Female	8	18.05	1.55
	Male	10	25.94	1.71
C57BL/6J-Ins2^{Akita}	Both	19	18.34	1.25
	Female	12	18.06	1.13
	Male	7	18.83	1.29
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	17	18.46	1.62
	Female	8	18.34	1.50
	Male	9	18.58	1.71

%BF (rodent) (%)

Series	Sex	N	Avg	SD
C57BL/6J	Both	18	24.88	5.39
	Female	8	25.80	3.50
	Male	10	24.14	6.43
C57BL/6J-Ins2^{Akita}	Both	19	18.24	3.41
	Female	12	20.15	2.77
	Male	7	14.96	1.12
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	17	17.23	2.73
	Female	8	19.57	1.95
	Male	9	15.16	1.23

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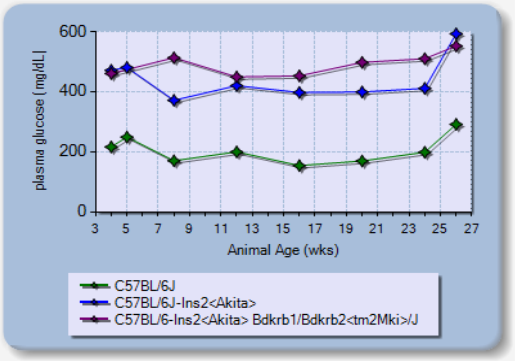
Primary Data | Primary Data, Continued | Primary Data, Kidney | Primary Data, CV

plasma glucose (mg/dL)

Series	Sex	N	Avg	SD
C57BL/6J	Both	124	201.07	85.71
	Female	56	185.48	73.80
	Male	68	213.91	92.44
C57BL/6J-Ins2^{Akita}	Both	134	437.25	163.85
	Female	80	351.25	134.39
	Male	54	564.67	112.57
C57BL/6-Ins2^{Akita} Bdkrb1/Bdkrb2^{tm2Mki}/J	Both	120	490.78	167.06
	Female	55	373.47	152.22
	Male	65	590.05	102.09



Both | Female | Male

Primary Data | Primary Data, Continued | Primary Data, Kidney | Primary Data, CV

plasma glucose (mg/dL)

Series	Sex	N	Avg	SD
C57BL/6J	Both	124	201.07	85.71
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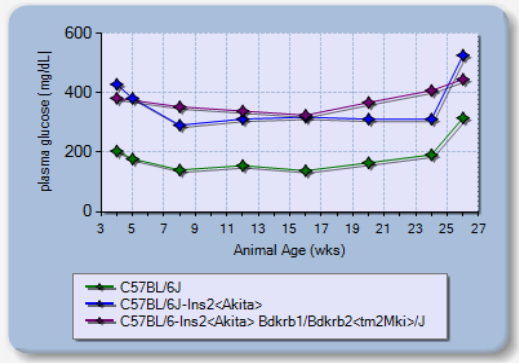

Both | Female | Male

Primary Data | Primary Data, Continued | Primary Data, Kidney | Primary Data, CV

plasma glucose (mg/dL)

Series	Sex	N	Avg	SD
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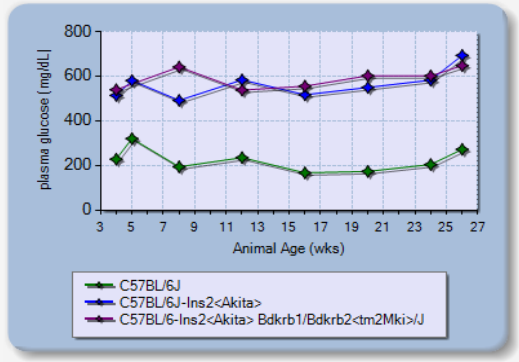
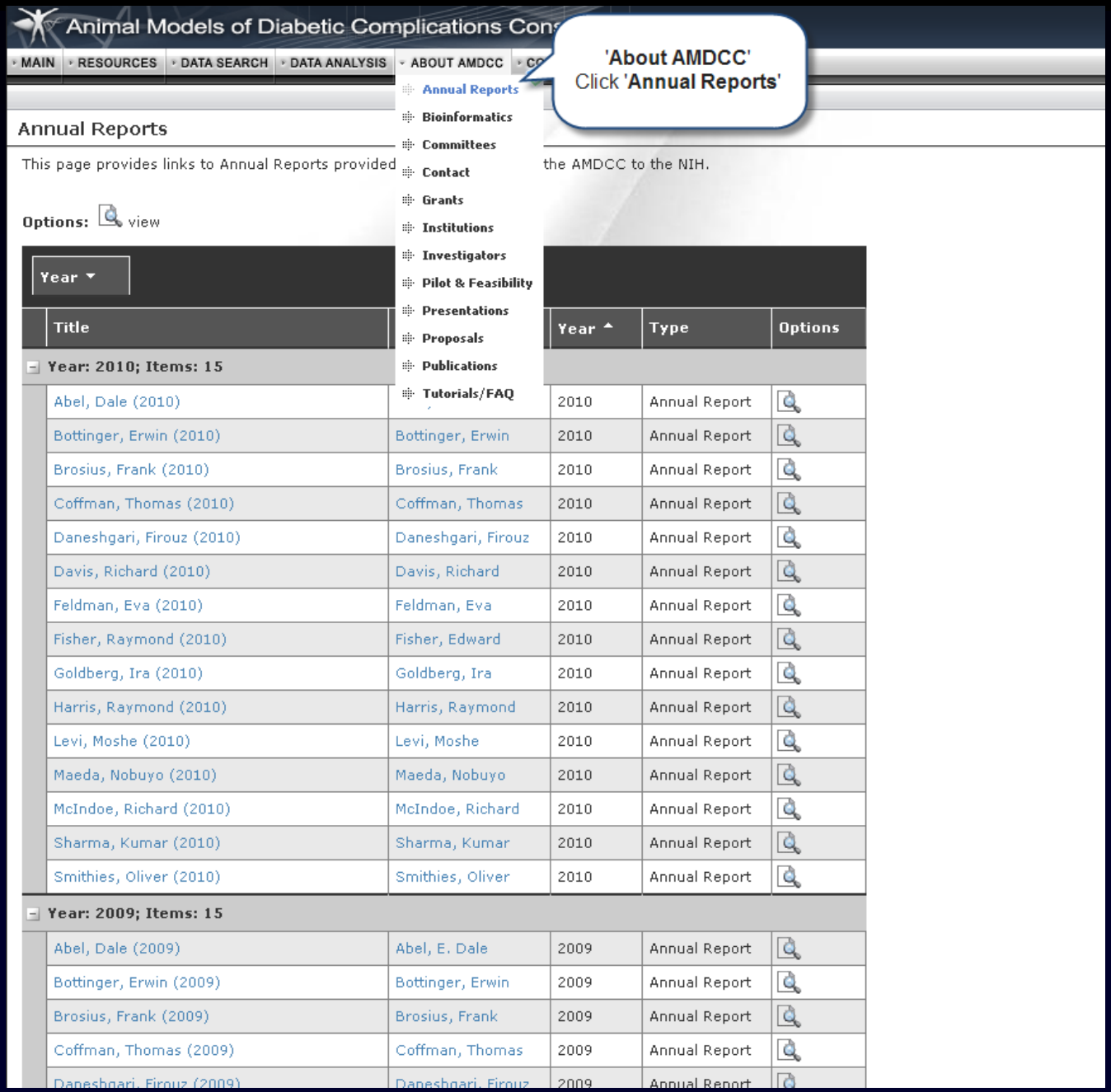


Both | Female | Male

AMDCC Annual Reports on the Website



The End

If you have any problems, questions or concerns don't hesitate to email us.
Use any of the following addresses:

General web:
amdcc_web-l@lists.amdcc.org (Listserv)

Data, assays, experiment help:
miaufiero@mail.mcg.edu (Michael Aufiero)

Website
vdoshi@mail.mcg.edu (Vishal Doshi)

External Advisory Boards (EAB)

NIH Program Staff (NIDDK, NHLBI)

Coordinating and Bioinformatics Unit (CBU)
For the MMPC/MMPC

Phenotyping data uploaded to website

Mechanistic data uploaded to website

Exchange of ideas and information

MMPC National Mouse Metabolic Phenotyping Centers

6 MMPC Centers

AMDCC THE ANIMAL MODELS OF DIABETIC COMPLICATIONS CONSORTIUM

13 Pathobiology Sites

Ideas for model generation sent to MGHC

Models shipped back to PB sites for hypothesis-driven studies

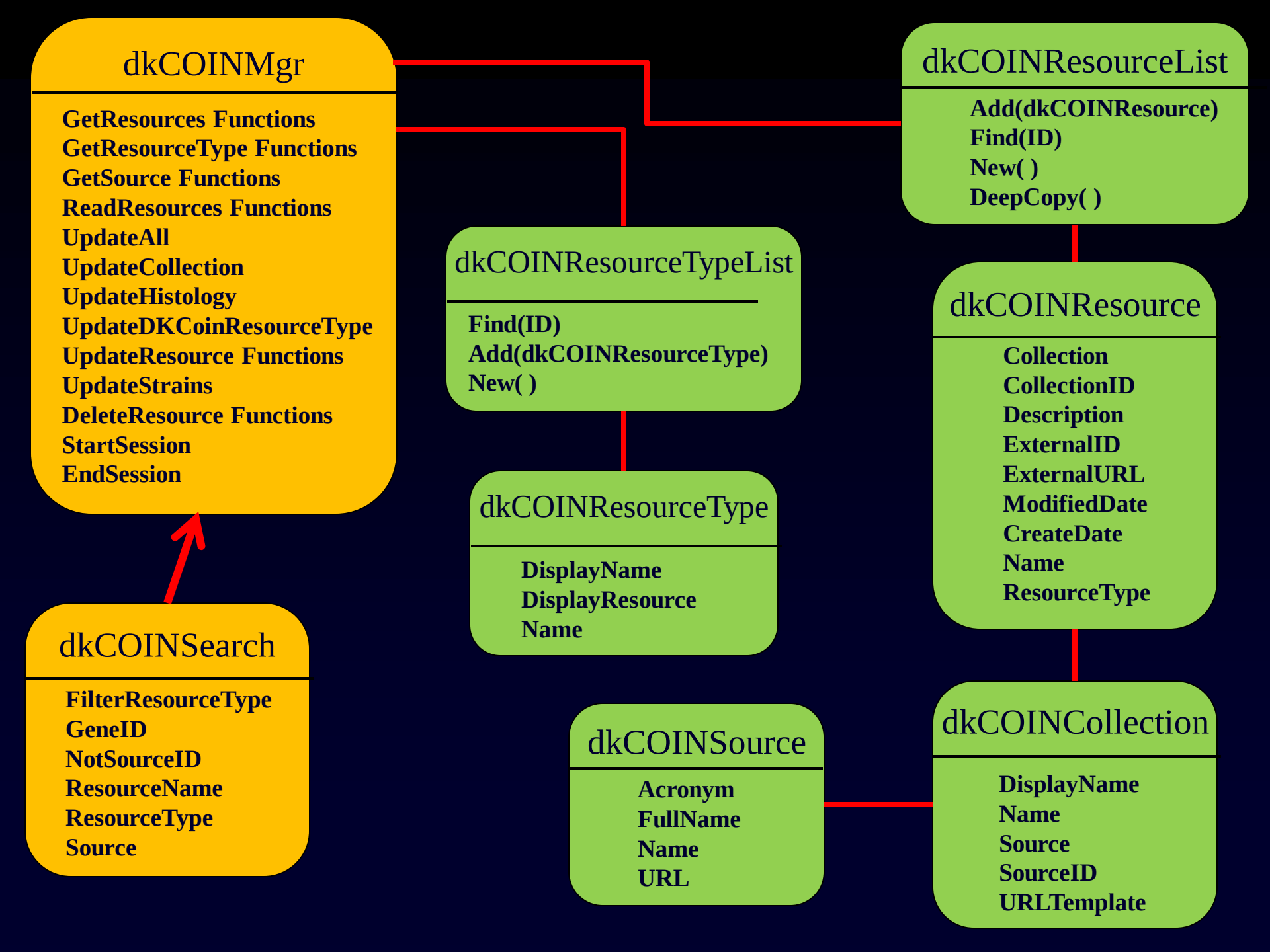
Models shipped to MMPC

Mouse Generation and Husbandry Core (MGHC)

Indicates the movement of information

Indicates the movement of mice

AMDCC


dkCOINMgr
GetResources Functions
GetResourceType Functions
GetSource Functions
ReadResources Functions
UpdateAll
UpdateCollection
UpdateHistology
UpdateDKCoinResourceType
UpdateResource Functions
UpdateStrains
DeleteResource Functions
StartSession
EndSession
dkCOINResourceList
Add(dkCOINResource)
Find(ID)
New( )
DeepCopy( )
dkCOINResourceTypeList
Find(ID)
Add(dkCOINResourceType)
New( )
dkCOINResource
Collection
CollectionID
Description
ExternalID
ExternalURL
ModifiedDate
CreateDate
Name
ResourceType
dkCOINResourceType
DisplayName
DisplayResource
Name
dkCOINSearch
FilterResourceType
GeneID
NotSourceID
ResourceName
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Source
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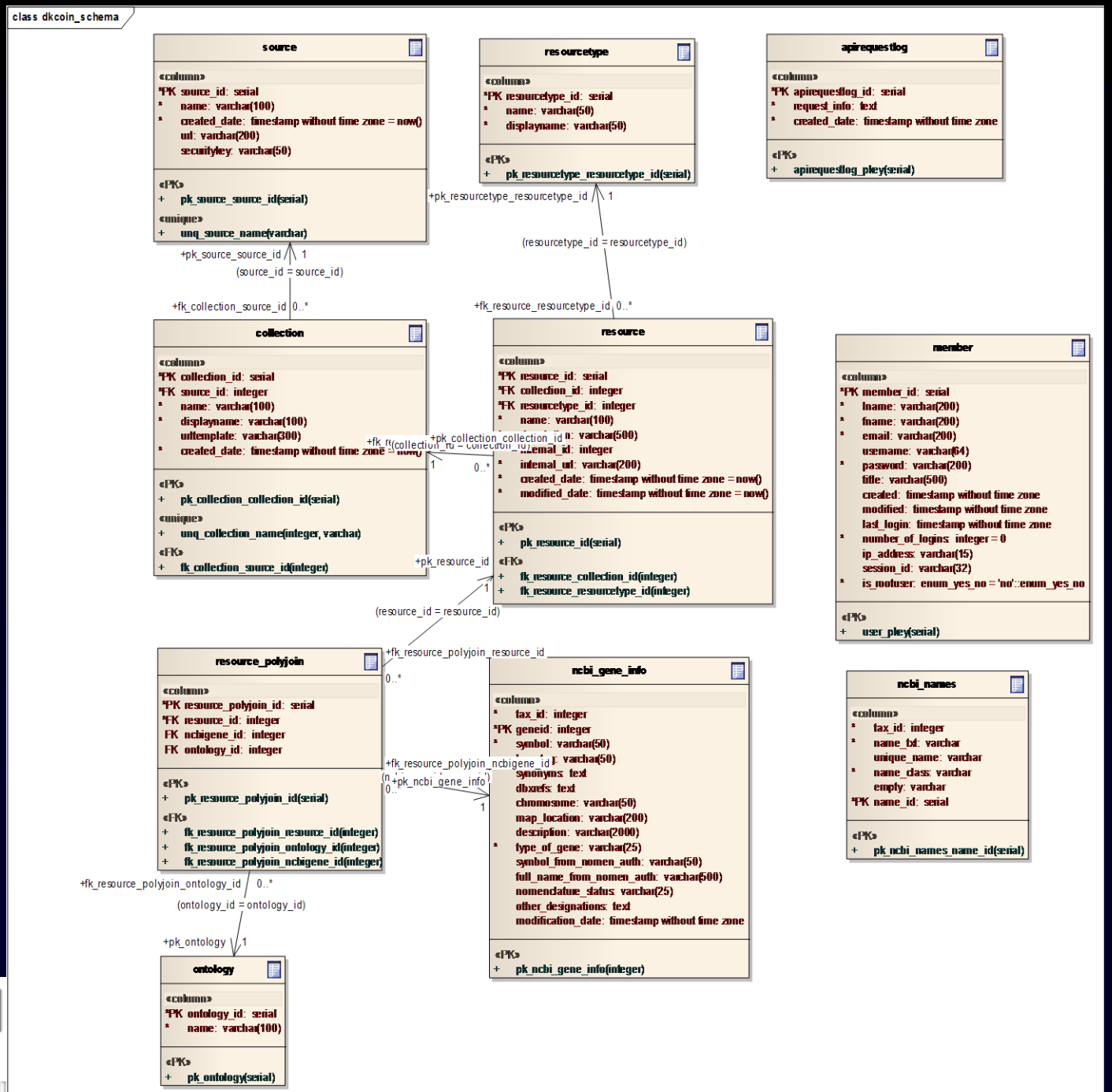
Acronym
FullName
Name
URL
dkCOINCollection
DisplayName
Name
Source
SourceID
URLTemplate


class dkcoin_schema
source
«column»
*PK source_id: serial
* name: varchar(100)
* created_date: timestamp without time zone = now()
url: varchar(200)
securitykey: varchar(50)
«PK»
+ pk_source_source_id(serial)
«unique»
+ unq_source_name(varchar)
resourcetype
«column»
*PK resourcetype_id: serial
* name: varchar(50)
* displayname: varchar(50)
«PK»
+ pk_resourcetype_resourcetype_id(serial)
apirequestlog
«column»
*PK apirequestlog_id: serial
* request_info: text
* created_date: timestamp without time zone
«PK»
+ apirequestlog_pkey(serial)
+pk_resourcetype_resourcetype_id
1
(resourcetype_id = resourcetype_id)
+pk_source_source_id
1
(source_id = source_id)
+fk_collection_source_id
0..*
+fk_resource_resourcetype_id
0..*
collection
«column»
*PK collection_id: serial
*FK source_id: integer
* name: varchar(100)
* displayname: varchar(100)
urltemplate: varchar(300)
* created_date: timestamp without time zone = now()
«PK»
+ pk_collection_collection_id(serial)
«unique»
+ unq_collection_name(integer, varchar)
«FK»
+ fk_collection_source_id(integer)
resource
«column»
*PK resource_id: serial
*FK collection_id: integer
*FK resourcetype_id: integer
* name: varchar(100)
email_id: integer
* created_date: timestamp without time zone = now()
* modified_date: timestamp without time zone = now()
«PK»
+ pk_resource_id(serial)
«FK»
+ fk_resource_collection_id(integer)
+ fk_resource_resourcetype_id(integer)
+pk_collection_collection_id
1
0..*
+pk_resource_id
1
(resource_id = resource_id)
member
«column»
*PK member_id: serial
* lname: varchar(200)
* fname: varchar(200)
* email: varchar(200)
username: varchar(64)
* passwod: varchar(200)
title: varchar(500)
created: timestamp without time zone
modified: timestamp without time zone
last_login: timestamp without time zone
* number_of_logins: integer = 0
ip_address: varchar(15)
session_id: varchar(32)
* is_rootuser: enum_yes_no = 'no'::enum_yes_no
«PK»
+ user_pkey(serial)
resource_polyjoin
«column»
*PK resource_polyjoin_id: serial
*FK resource_id: integer
FK ncbigene_id: integer
FK ontology_id: integer
«PK»
+ pk_resource_polyjoin_id(serial)
«FK»
+ fk_resource_polyjoin_resource_id(integer)
+ fk_resource_polyjoin_ontology_id(integer)
+ fk_resource_polyjoin_ncbigene_id(integer)
+fk_resource_polyjoin_resource_id
0..*
+fk_resource_polyjoin_ncbigene_id
0..*
+pk_ncbi_gene_info
1
+fk_resource_polyjoin_ontology_id
0..*
(ontology_id = ontology_id)
+pk_ontology
1
ncbi_gene_info
«column»
* tax_id: integer
*PK geneid: integer
* symbol: varchar(50)
* varchar(50)
synonyms: text
dbxrefs: text
chromosome: varchar(50)
map_location: varchar(200)
description: varchar(2000)
* type_of_gene: varchar(25)
symbol_from_nomen_auth: varchar(50)
full_name_from_nomen_auth: varchar(500)
nomenclature_status: varchar(25)
other_designations: text
modification_date: timestamp without time zone
«PK»
+ pk_ncbi_gene_info(integer)
ncbi_names
«column»
* tax_id: integer
* name_txt: varchar
unique_name: varchar
* name_class: varchar
empty: varchar
*PK name_id: serial
«PK»
+ pk_ncbi_names_name_id(serial)
ontology
«column»
*PK ontology_id: serial
* name: varchar(100)
«PK»
+ pk_ontology(serial)