Generic Biobanking Database EER Diagram (Biosys)

Study.FormsAndLinks

AK	IndexID	int
	StudyID	varchar(7)
PK	FormID	varchar(7)
	FormName	varchar(200)
	ViewName	varchar(200)
	URL	varchar(500)
	VersionNumber	char(4)
	StartDate	datetime2
	EndDate	datetime2

Study.Consent

FK	StudyID	varchar(7)
	PSCID	varchar(14)
	RenalStudy	char(3)
	Genetics	char(3)
	NonGenetics	char(3)
PK	IndexID	int

Study.Study

AK	IndexID	int
PK	StudyID	varchar(7)
	ProtocolID	varchar(20)
	StudyName	varchar(50)
	StudyDescription	varchar(500)
	CohortID	char(5)
	StartDate	datetime2
	EndDate	datetime2
	Notes	varchar(300)
	SyntaxFriendlyStudyName	varchar(50)

Recruitment.Person

FK	StudyID	varchar(7)
	NHSNumber	char(10)
	HospitalNumber	char(10)
	StudyPersonID	char(9)
	StudyPregnancyID	char(8)
	StudyFamilyID	char(10)
	GroupMembershipID	char(10)
FK	ParticipantType	varchar(50)
	FirstName	varchar(50)
	MiddleName	varchar(50)
	LastName	varchar(50)
	DateOfBirth	date
	Sex	varchar(15)
PK	IndexID	int
	PSCID	varchar(14)

Biobank.Datasource

AK	IndexID	int
PK	DatasourceID	computed (varchar(8))
	DatasourceName	varchar(50)
	DatasourceDescription	varchar(300)

Cohort.Cohort

AK	IndexID	int
PK	CohortID	varchar(5)
	CohortName	varchar(50)
	CohortDescription	varchar(300)
	StartDateTime	datetime2
	EndDateTime	datetime2
	Notes	varchar(300)

Reference.LookUpCodes

PK	LookUpID	int
	NumberValue	int
	TextValue	varchar(100)
	Label	varchar(200)
	OrderAsNumber	int
	Category	varchar(100)

Biobank.AliquotBoxPositionConversions

	StudyID	varchar(7)
	PSCID	varchar(14)
	SampleType	varchar(50)
	SampleID	int
	Barcode	varchar(25)
	Position	char(3)
	Conversion	char(3)

Biobank.SourceSample

PK	IndexID	int
	SourceSampleID	int
	SourceDerivedFrom	int
FK	DatasourceID	varchar(8)
FK	BiosysSampleID	int
	ImportDate	datetime2

Recruitment.Staff

PK	StaffID	char(20)
	FirstName	varchar(50)
	LastName	varchar(50)
	MiddleName	varchar(50)
	StaffEmailAddress	varchar(100)
	StartDateTime	datetime2
	EndDateTime	datetime2

Biobank.BoxPositionMap

	NumericPosition	int
	AlphaNumericPosition	nvarchar(255)

Biobank.BoxContents

PK,FK	BoxID	int
PK	Position	char(3)
FK	SampleID	int

Biobank.Sample

PK	SampleID	int
	SourceSampleID	int
	PSCID	varchar(14)
	CohortID	char(5)
	StudyID	varchar(7)
	Barcode	varchar(25)
FK	DerivedFrom	int
	StudyPersonID	char(9)
FK	SampleType	varchar(50)
	Volume(ml)	decimal
	Concentration(ng/ul)	decimal
	Purity(Blank 260/280)	decimal
	SampleSetName	varchar(50)
	SampleSetType	varchar(50)
	FastingDate	date
	FastingTime	time
	BottleTotal	int
	Notes	varchar(4000)
	Destroyed	bit
	CollectedBy	char(100)
	BirthType	varchar(10)
	BirthOrder	int
	ChildPersonID	char(9)

Self Join - SampleID to DerivedFrom

Person.ParticipantType

PK	ParticipantType	varchar(50)

Biobank.BoxContentsHistory

FK	BoxID	int
FK	Position	char(3)
PK,FK	StartActionID	int
FK	EndActionID	int

Biobank.Box

PK	BoxID	int
	BoxName	varchar(50)
	BoxBarcode	varchar(20)
FK	StorageLocationID	int
FK	DestinationLab	varchar(20)
	DateLabReceived	date
	NumberOfRows	tinyint
	NumberOfColumns	tinyint
	Capacity	tinyint
	Destroyed	bit

Biobank.SampleType

PK	SampleType	varchar(50)

Biobank.ActionType

AK	ActionTypeID	tinyint
PK	ActionType	varchar(50)
	SampleOnly	bit
	BoxOnly	bit
	SampleAndBox	bit

Biobank.Action

PK	ActionID	int
FK	ActionType	varchar(50)
	DateOfAction	date
	TimeOfAction	time
FK	SampleID	int
FK	BoxID	int
	Position	char(3)
	TransactionID	varchar(20)

Biobank.SampleIssues

PK	SampleIssuesID	int
FK	SampleID	int
	SampleType	varchar(50)
	SampleIssue	varchar(50)
	Note	varchar(200)

Biobank.StorageLocation

PK	StorageLocationID	int
FK	Location	varchar(20)
	Freezer	tinyint
	Rack	tinyint
	Drawer	tinyint
	BoxNumber	tinyint
	OtherPlace	varchar(50)
	NonBiBBS	bit

Biobank.CordBloodBirthType

PK	BirthType	varchar(15)

Biobank.BoxStorageHistory

FK	BoxID	int
FK	StorageLocationID	int
PK,FK	StoredActionID	int
FK	RemovedActionID	int

Biobank.Location

PK	Location	varchar(20)
AK	LocationFullName	varchar(100)

KEY

PK = Primary Key

FK = Foreign Key

iFK = implicit Foreign Key

AK = Alternative Key

— · — = Implicit entity relationship

BIOBANK
COHORT
PERSON
RECRUITMENT
REFERENCE
STUDY